TURKEY
LABOR MARKET STUDY

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TURKEY - GOVERNMENT FISCAL YEAR
January 1 – December 31

CURRENCY EQUIVALENTS
(Exchange Rate Effective as of March 20, 2006)

Currency Unit       YTL
US$1.00             1.32 New Turkish Lira

WEIGHTS AND MEASURES
Metric System

ABBREVIATION AND ACRONYMS

ALMPs
Active Labor Market Programs
BK
Bag-Kur (Farmers and Self-Employed Pension Fund)
CBT
Central Bank of Turkey
CEM
Country Economic Memorandum
CPI
Consumer Price Index
DIS
Direct Income Support
ECA
Europe and Central Asia
ES
Emekli Sandigi (Civil Servants Pension Fund)
EU
European Union
FDI
Foreign Direct Investment
GDP
Gross Domestic Product
GDR
General Directorate of Revenues
GFS
Government Financial Statistics
GNP
Gross National Product
HLFS
Household Labor Force Survey
IBRD
International Bank for Reconstruction and Development
IMF
International Monetary Fund
ISKUR
Turkish Employment Organization
MOLSS
Ministry of Labour and Social Security
NGO
Nongovernmental Organization
OECD
Organisation for Economic Co-operation and Development
PEIR
Public Expenditure and Institutional Review
SIMA
Statistical Information Management & Analysis
SIS
State Institute of Statistics
SMEs
Small and Medium Enterprises
SPO
State Planning Organization
SRMP
Social Risk Mitigation Project
SSK
Sosyal Sigortalar Kurumu (Workers Pension Fund)
UHI
Universal Health Insurance
UI
Unemployment Insurance
WDI
World Development Indicators
WPI
Wholesale Price Index
YTL
New Turkish Lira

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EXECUTIVE SUMMARY

Overview

1. Although this study focuses on the labor market in Turkey, forces outside the labor market affect job creation. Thus an effective job creation strategy will require a multi-pronged approach.

- Sustained economic growth is necessary for job creation. A sustainable macroeconomic framework, improvements to the investment climate, and investment in physical and human capital are all building blocks for growth. Rising labor productivity will provide a basis for increases in both wages and living standards.

- 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.

- Labor market reforms to encourage job creation should be complemented by measures to improve worker protection. Effective worker protection that does not impinge on job creation suggests a shift in the focus from protecting jobs to protecting workers. The measures proposed in this study seek to provide a balance between the goals of creating jobs and protecting workers.

2. This study represents one element of World Bank support in creating more and better jobs in Turkey. In addition to the analysis of labor market regulations presented in this report, the World Bank is conducting, or will shortly conduct, research in other areas relevant to employment, including the investment climate, the performance of the financial sector, linkages between education and employment, and tertiary education.

3. The findings of this report and of the related applied research are expected to contribute to the design of a comprehensive development program aimed at sustaining high growth in the economy by attracting more investment and financing while generating more and better jobs.

4. The main findings and conclusions of this study are described in the rest of the executive summary. The labor market recommendations are presented at the end of the summary in a simple matrix format.
The Labor Market: Some Key Facts

5. **Population growth has outpaced employment growth for many years in Turkey.** The working age population grew by 23 million from 1980 to 2004; however, only 6 million jobs were created (Figure 1). As a result, the employment rate (the percentage of adult population that is employed) is one of the lowest in the world. In 2004, it was only 43.7 percent. Most countries have employment rates above 50 percent; the EU-15 average was 65 percent.

6. **The labor force has been increasing at a slower pace than the adult population.** The labor force is defined as the percentage of the adult population that is either working or looking for work. One of the striking features of the labor market in Turkey is the falling labor force participation rate (Figure 1). With a large share of the adult population not looking for work, the unemployment rate—the gap between the labor force and employment—does not provide a full indicator of the slack in the labor market.

7. **Low employment rates for women of prime working age explain much of the difference in employment rates between Turkey and the EU.** As Turkey has urbanized and families have moved out of agriculture, employment rates for women have fallen significantly. As a result, women of prime working age are employed at less than half the rate in the EU-15 (Figure 2). A significant number of women who are not working are not looking for employment, a principal reason for the low labor force participation rates. The differences for men are less significant.

8. **Older workers are dropping out of the labor force.** By age 55, participation in the labor market drops considerably in both Turkey and the EU (Figure 2). The OECD employment rate for the 55–64 age-group is 51 percent, significantly higher than EU
average of 42 percent and the Turkey average of 33 percent. Fostering employment for older workers is a policy challenge in the EU, as it is in Turkey. An important factor in falling labor force participation by older workers was the elimination of the minimum retirement age in 1993.

9. **Educated young people have difficulty finding jobs.** Unemployment rates are especially high for educated young people (Table 1). Both demand and supply factors are likely to matter. The economy may not be generating jobs that can absorb educated young, but also the educated young may not be well-suited to the job market. Older workers appear to find jobs more readily than younger workers, independent of education level.

<table>
<thead>
<tr>
<th>Age group</th>
<th>Illiterate</th>
<th>No diploma</th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>15–19</td>
<td>18.0</td>
<td>27.7</td>
<td>13.7</td>
<td>29.5</td>
<td>0.0</td>
</tr>
<tr>
<td>20–24</td>
<td>17.0</td>
<td>37.5</td>
<td>16.1</td>
<td>23.4</td>
<td>38.5</td>
</tr>
<tr>
<td>25–29</td>
<td>16.3</td>
<td>14.8</td>
<td>12.2</td>
<td>12.2</td>
<td>14.8</td>
</tr>
<tr>
<td>30–34</td>
<td>13.3</td>
<td>16.7</td>
<td>10.3</td>
<td>7.1</td>
<td>5.3</td>
</tr>
<tr>
<td>35–39</td>
<td>11.4</td>
<td>16.7</td>
<td>8.1</td>
<td>5.4</td>
<td>4.1</td>
</tr>
<tr>
<td>40–49</td>
<td>7.5</td>
<td>9.5</td>
<td>7.8</td>
<td>4.6</td>
<td>2.5</td>
</tr>
<tr>
<td>50–59</td>
<td>5.0</td>
<td>4.9</td>
<td>5.9</td>
<td>5.7</td>
<td>2.2</td>
</tr>
<tr>
<td>60+</td>
<td>1.6</td>
<td>1.5</td>
<td>1.4</td>
<td>4.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Source*: Household Labor Force Survey

10. **The “jobs deficit” presents a particular challenge on the road toward EU accession.** The European Council meeting in Lisbon in 2000 adopted an employment rate target of 70 percent to be met by 2010. With a population that is still growing, Turkey will have to generate about 10 million jobs in six years to reach the current EU average employment rate in 2010, and will have to generate about 14 million jobs to reach the Lisbon target employment rate. Under current trends of GDP and employment growth, only 1.5 million jobs will be created by 2010. The targets for female employment rate and employment for workers over 55 are even more difficult. The magnitude of the jobs deficit suggests that immediate action is needed.

11. **Turkey has a large informal economy.** Approximately one in three workers in urban areas and three in four in rural areas are not registered with the social security institutions. Since much of Turkey’s formal social protection system (pensions, health insurance, and unemployment insurance) is based on membership in the social security institutions, this means that workers are not receiving these protections. While few receive pensions, health insurance, and unemployment insurance, even fewer receive the full severance pay and other protections stipulated in the employment protection legislation.

12. **The policy challenge is to foster job creation while improving worker protection.** The bulk of the new jobs will have to be generated outside agriculture and in urban areas as the structural transformation of Turkey’s economy continues. While the detailed recommendations of this study imply reforms in the labor market, the study notes the importance of a sustainable macroeconomic framework to enable growth, of
improvements in the investment climate to encourage firms, and of better education and training to better match workers and jobs. These measures should be complemented by measures to strengthen worker protection by improving access to Turkey’s formal social protection system, to mitigate the risks from unemployment, old age, and ill health.

Economy-wide Factors Affecting Job Creation

13. **The demographic transition has meant a rapid increase in the working age population over the last 20 years.** While the growth rate of the working age population peaked over the 1980–2000 period, population dynamics are very slow and the share of the working age population is projected to grow till 2040, implying that the challenge of job creation will remain pertinent. The large working age population is an opportunity to generate growth, but if these people are not employed, the future bulge in the retired population will have to be supported from lower levels of per capita income.

14. **Job creation has been only moderate since 1980, despite relatively strong economic growth.** From 1981 to 2003, six of nine comparator countries had faster employment growth than Turkey (Figure 3). Employment growth was faster in Brazil, Mexico, Argentina, and Spain, although their GDP growth was slower (suggesting that their productivity growth was slow). Both output growth and employment generation were strong in the Republic of Korea and Ireland (implying productivity gains).

15. **A key factor for the comparatively slow employment growth in Turkey has been the high starting share of agriculture.** When the largest sector is shedding workers, even relatively fast employment growth in the smaller sectors is not sufficient to generate fast overall employment growth (Table 2). This is confirmed from a study of 10 European countries from 1974 to 1991, which sought to explain poor employment performance of Spain at that time. It found that 80 percent of the long-run employment growth was explained by sectoral effects, and that the initial distribution of labor across sectors plays a crucial role in explaining cross-country differences in employment. The comparatively weaker employment performance of Turkey from 1980 to 2004 is partially
explained by the shift out of agriculture, which happened much earlier in the comparator countries.

### Table 2: Employment by Sector, 1980 and 2004

<table>
<thead>
<tr>
<th></th>
<th>1980</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment, total (15 years and over)</td>
<td>15.7</td>
<td>21.7</td>
</tr>
<tr>
<td>Employment in agriculture</td>
<td>8.4</td>
<td>7.4</td>
</tr>
<tr>
<td>Employment in industry</td>
<td>2.3</td>
<td>4.0</td>
</tr>
<tr>
<td>Employment in construction</td>
<td>0.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Employment in services</td>
<td>4.1</td>
<td>9.4</td>
</tr>
</tbody>
</table>


16. **Relative to output growth, employment growth in services from 1980 to 2003 was the slowest in Turkey of seven comparator countries.** It was slower than the countries that had slower output growth, and slower than Ireland and Korea, which had much faster output growth in services than Turkey. Employment generation in industry has been faster than the European countries. However the industrial sector had already started to shrink in these countries. Employment growth in Turkish industry has been slow relative to Brazil and Mexico, the middle-income countries in the sample. Employment growth relative to output growth was significantly higher in both these countries than in Turkey.

17. **The changing relationship between output growth and employment growth is driven by changes in productivity, but can also be affected by regulations that affect the incentives to hire workers.** Employment growth in Turkey since 1980 has trailed output growth relative to other countries. While this indicates that productivity has been increasing, the analysis in this study also indicates that the job creation performance reflects the impact of labor market regulations that reduce the incentives to hire new workers. Labor market and other regulations (the investment climate) will also affect growth.

18. **Productivity increases can slow down employment growth in the short run, but sustained job creation is not possible without productivity growth.** As the experience of Korea and Ireland indicates, rising productivity will sustain output and employment growth. The experience of Western Europe, North America, and Japan confirms that over time, increasing productivity is the basis for sustained job creation and rising standards of living. A growth accounting exercise results indicate that between 1980 and 2000, productivity growth in Turkey was somewhat better than the average for middle-income countries. Productivity increases since 2001 have been much faster. If sustained, they will put Turkey in position to grow at East Asian levels.

19. **The high volatility of growth is likely to have decreased employment growth.** A recent IMF study for Turkey found that high fiscal volatility and inflation had a strong impact on GDP. If Turkey had been able to keep inflation and fiscal volatility from 1980 to 2000 at the levels experienced from 1960 to 1980, then Turkey’s per capita GDP
growth rate would have been almost 1.2 percent faster, the findings suggest. By contrast, the analysis for this study found no statistical link between volatility and job creation. Employment levels did not change significantly during booms or crises. This finding is consistent with Turkey’s high severance costs. If firms expect economic conditions to change frequently but it is expensive to adjust their labor force, they will try to avoid hiring labor or find other ways to avoid paying the costs of firing, such as using informal workers. This latter hypothesis is supported by the observed variation in working hours, as opposed to variation in number of workers.

20. **Low wages have kept labor costs internationally competitive.** Manufacturing labor cost per unit value added, a proxy measure of labor costs relative to productivity is less than the EU comparators. While unit labor cost in manufacturing has risen from 0.21 in 1995 to 0.27 in 2004, it is still lower than in Mexico and Korea (Table 3). Analysis of the service sector, presented in chapter 2, shows that the same broad conclusion holds there as well – unit labor cost is lowest in Turkey relative to the comparator countries. While more refined measures of productivity will sharpen the conclusion, these data suggest that the cost of labor in Turkey is not the critical factor in slowing job creation relative to other countries.

<table>
<thead>
<tr>
<th>Table 3: Manufacturing Labor Cost Per Unit Value Added, 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
</tr>
<tr>
<td>Portugal</td>
</tr>
<tr>
<td>Spain</td>
</tr>
<tr>
<td>Greece</td>
</tr>
<tr>
<td>Poland</td>
</tr>
<tr>
<td>Hungary</td>
</tr>
<tr>
<td>Mexico</td>
</tr>
<tr>
<td>Korea, Rep. of</td>
</tr>
</tbody>
</table>

*Source: SIS, OECD STAN database for Turkey (2004); for Portugal, Spain, Greece, Mexico and Korea (2003); for Poland and Hungary (2002).*

21. **The minimum wage has been increasing rapidly.** The ratio of minimum to average monthly wage in manufacturing increased from 33.9 percent in 1999 to 42.1 percent in 2004. A minimum wage that is high relative to the average wage can lower formal employment levels, especially for low wage workers. Minimum wage in manufacturing is currently about 43.9 percent of the average monthly gross wages. A ranking of EU candidate, accession, and member- countries for 2004 finds the minimum wage as a proportion of average wage varied between 34 and 50 percent. Poland was below 35 percent; the Czech Republic, the United Kingdom, Hungary, and Portugal were between 38 and 47 percent; and Ireland, the Netherlands, and Malta were in range of 47 to 50 percent.

22. **Non-wage labor costs are high and may be contributing to informality.** Payroll taxes are well above the averages for middle-income countries and the OECD. A program for reducing informality would include a combination of institutional reform to improve enforcement of labor regulations and eventually lower taxes. The impact of lowering the level on formal employment depends on the elasticity of labor demand (how many workers firms are willing to hire as labor costs fall), and the incidence of the tax (the extent to which employers are able to lower wages to compensate for the tax). The higher the elasticity of labor demand and the less that employers are able to shift the tax onto workers, the greater the expected impact of lower payroll taxes on formal sector employment. Evidence from emerging economies and OECD countries suggests a wide range of possible outcomes from lowering payroll taxes. More analytical work is needed, based on adequate survey data on employment and wages by occupational category, to assess the elasticities of labor demand and supply in Turkey and inform policy making in
this area. Estimating labor demand will require detailed firm level surveys in the industry and services sectors. Estimating the labor supply functions will require the use of the household labor surveys with wage data, which were not available at the time of this study.

23. **Using fiscal policy to increase employment is limited by budgetary concerns.** Fiscal imbalances could lead to rising interest rates and slower investment and job creation. Any payroll tax reductions should be cautious and accompanied by compensatory measures to preserve the credibility of the fiscal program. A simulation of change in the value-added tax rate finds more of an impact on wages than on employment or informality. While a value-added tax reduction is initially expansionary, lower revenues increase the concerns of financial market participants about the government’s fiscal program and lead to rising interest rates, according to the simulation. One possible exception is lowering rates for the unemployment insurance fund, as the surplus is not part of general revenue.

24. **Flexible real wages have allowed labor market adjustment.** Real wages fell significantly after crises in 1994 and 2001 (Figure 4). In contrast, employment has been remarkably stable, during both booms and busts. As Turkey transitions changes to a low inflation environment and real wage adjustment becomes more difficult, flexibility in employment will become increasingly important for firms as they adjust to changing macroeconomic conditions.

**Vulnerable Groups: Women and Youth**

25. **The decline in female labor force participation that began in the 1960s has not begun to reverse itself.** A U-shaped pattern in female labor force participation is common as countries urbanize, but in Turkey the labor force participation rate for urban women has remained under 20 percent for the last 15 years. The study documents the importance of education in encouraging female labor force participation. University-educated young women have participation rates that are close to men.

26. **Availability of part-time work has led to significant increase in labor force participation in OECD countries, but not in Turkey.** The share of part-time workers remains low in Turkey. About 9 percent of female wage and salary earners worked less
than 35 hours per week. Employers and workers are not yet taking full advantage of the changes in the 2003 Labor Law that allow part-time work. (the impact of other aspects of labor regulations on female labor force participation is described in the next section).

27. **Slow job creation has affected female labor force participation.** Between 1988 and 2003, the unemployment rate for urban males fluctuated around 11 percent. Over the same period, the unemployment rate for urban females fell from 28 percent to 18 percent. This decline is consistent with a significant number of women dropping out of the labor force because of a “discouraged worker” effect.

28. **Slow job creation has particularly affected the young.** Employment in manufacturing for those aged 15–24 actually fell between 1997 and 2003, from about 1.1 million to about 900,000. Employment in services for this age group also has fallen, from 2000 onward. Clearly the impact of the crises was felt in entry-level jobs. This is consistent with an international literature that suggests that strong employment protection legislation such as in Turkey is particularly likely to affect the young.

**Labor Market Regulations and Job Creation**

29. **Current labor market regulations are implicitly designed for a labor force that consists of one full-time wage earner per family who stays in the same job for the entire working life.** High severance pay is designed to protect workers from the risk of being fired. Restrictions on temporary work are designed to prevent employers from using workers who are not covered by pensions or severance pay. The early retirement age means that high social security taxes are needed, which further induces informality. While these regulations are likely to have been effective in protecting the rights of existing public sector workers and workers in formal large private sector firms, they are increasingly ill-suited to the needs of many workers, especially women and young entrants into the labor market. These regulations are also increasingly ill-suited to firms and benefit especially firms that hire informal labor and gain an advantage over firms that prefer to follow the rules.

30. **Employment protection regulations can affect employment rates and informality even when compliance is weak, the most recent international evidence suggests.** An extensive cross-country literature based mostly on the European experience found only a modest impact of severance payments on employment rates. These regulations led to greater informality and longer periods of unemployment—but had little impact on employment. However, these cross-country regressions are subject to important methodological problems. Recent studies in Argentina, Columbia, and Peru using household level data found that severance pay regulations affect employment, even in countries where compliance is weak. Significantly for Turkey, the Peru study was able to isolate the impact of the magnitude of the dismissal costs and provides evidence suggesting that payoffs from severance reform will be higher where the current severance requirements are high, as in Turkey.
31. **High working hours in Turkey suggest that severance requirements and favorable tax treatment of overtime work are discouraging creation of new jobs.** The cost of complying with labor regulations such as those on severance pay is high by international standards. One strategy that firms can follow to minimize such costs is to increase working hours for existing workers rather than hire new workers. In this way, production can be reduced, if necessary, without incurring severance costs. Since social security payments are calculated on the basis of number of days worked rather than number of hours, firms have an incentive to use existing workers in overtime rather than hire new workers. These incentives were strengthened in the 2003 Labor Code, which allowed employers and employees in some instances to mutually agree to longer work weeks. Firms can also rely on informal labor, which does not incur some of these costs. Turkey has highest hours of work in manufacturing per week, compared with selected EU and middle-income countries (Table 4). If workers in Turkish manufacturing had worked 45 hours on average instead of 52, for example, another 500,000 workers would have been required. Severance requirements may have been particularly costly as high volatility made flexibility in the labor market particularly important. It is also likely that severance requirements have hindered foreign direct investment, since foreign investors prefer to comply with regulations.

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<th>Table 4: Hours Worked Per Week In Manufacturing</th>
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<td>Mexico</td>
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Source: Author calculations based on Eurostat; for Turkey, ILO data based on LFSs; for Mexico (ILO data based on LFSs) and Korea (ILO data based on Labor related establishment survey for 2001).

32. **The 2003 Labor Code includes important measures to encourage female labor force participation.** The most important of these is to allow part-time work, although employers and workers have not yet taken advantage of this provision in large numbers. The ban on employment of women in night shifts of manufacturing establishments has also been lifted. However, provisions extending maternity leave and requiring child care facilities in larger establishments, while designed to encourage women to work, can backfire by discouraging employers from hiring women. These changes in the law are too recent to evaluate for this study. The impact of labor law on female labor force participation should be closely monitored.

33. **The abolition of the minimum pension age in 1992 provided a significant incentive for early exit from the labor force.** Analysis of micro data from household surveys in 1994 and 2002 show a significant increase in young pensioners. While about half of all male 55-year-olds in urban areas were drawing a pension in 1994, this percentage was about 15 points higher in 2002, and 21 percent of 45-year-olds were drawing pensions. Participation rates are close to 80 percent for university-educated women in their mid-20s to mid-30s. By age 50, only one in three is still in the work force.
Turkey’s Labor Market Regulations in Comparative Perspective

34. **Severance pay in Turkey is much higher than the OECD or European average.** A worker with 20 years of service in Turkey is entitled to 20 months compensation, compared to 6 months for OECD countries, 4 months for Europe and Central Asia countries, and 10 months for middle-income countries (Figure 5). Public sector workers in Turkey are entitled to additional compensation paid out of the privatization fund. This makes public sector labor adjustment a particularly expensive proposition.

35. **High non-wage labor costs add to the cost of complying with regulations.** The combined employee-employer contribution rate on payroll taxes is 36.5 percent (pensions, health insurance, work injuries, workman’s compensation and unemployment insurance): well above the middle-income country average of 25 percent, and the OECD-20 (developed countries) average of 27.4 percent. The Central and Eastern European countries have a higher average tax rate (46.5 percent). As noted earlier, a program for reducing informality would include a combination of institutional reform to improve enforcement of labor regulations, and eventually lower taxes.

36. **Unemployment insurance (UI) premiums can be lowered.** The UI fund has been building a massive surplus that had reached the equivalent of $11 billion by mid-2005. A UI simulation model developed for this study suggests that under a variety of scenarios, including economic shocks that lead to a tripling of unemployment, the fund would still be in surplus and still allow for a reduction in contributions and easing of eligibility requirements. This suggests that there is scope for lowering this element of the high overall payroll tax.

37. **The surpluses of the UI fund are now counted in the primary fiscal surplus calculation. Lowering the UI tax will lower the primary surplus.** UI funds are set aside for risk pooling for eligible workers. They do not flow into general revenues. Since these funds are not available for government use, they are accumulating interest on t-bill holdings and continuing to grow in size. For workers, payment in excess of what is actuarially needed constitutes a tax with few benefits, since the funds are not used for debt reduction or other government expenditure and are not needed to provide benefits. This presents three options to accommodate a reduction in the UI tax rates. First, the UI fund could be removed from the calculation of the primary surplus, and compensating measures to maintain the primary surplus could be implemented. Second, the UI tax rates
could be lowered and compensating measures could be found to maintain the primary surplus with UI retained in the primary surplus calculation. Third, the primary surplus target could be lowered to accommodate the lower UI surplus. From a fiscal perspective, the second option is preferred as long as the compensating measures represent good public policy.

38. **Turkey is almost alone in the OECD in having restrictions on fixed-term workers and temporary work agencies.** Turkey and Greece allow hiring of fixed-term workers only when “objective” reasons exist, such as for seasonal work, for a specific project, or to replace a temporarily absent worker. Legally opening up the use of fixed-term contracting risks the possibility that employers will avoid the obligations of permanent contracts. However, it can also have the positive impact of shifting workers who are now informally employed into formal contracted positions. The 2003 Labor Code does allow private agencies to operate legally in labor market, but their presence is limited by restrictions on their activities. Since the use of temporary workers is reportedly common legalizing temporary work agencies will encourage a more formal labor market.

### The Impact of Employment Protection Legislation

39. **Compliance with labor law is weak in Turkey.** Many workers are not receiving the protection that is the intent of the laws. First, many workers are not members of the social security institutions; thus they are very unlikely to get severance pay benefits. Moreover, social security membership is no guarantee of receiving severance, a survey of workers and employers suggests (more details are provided below). Workers who work at large firms or belong to a trade union are more likely to receive severance payments, but only 30 percent of workers work in firms with 10 or more employees, and at most 12 percent of workers belong to unions. Labor representation is constrained by restrictive bargaining-agent rules that make it impossible for small, independent unions to represent workers.

40. **Firms use a wide variety of methods to avoid paying severance and social security requirements, a survey of workers and employers for this study confirms.** These include underreporting of wages, firing workers after 11 months of work before they become eligible for severance, requiring the signing of undated resignation letters, mutual agreement that a fraction of the required severance will be paid, and high working hours. The new Labor Code has improved the protection of workers in larger firms against unjust terminations and has made provisions for better access to dispute resolution through private arbitration (these provisions still require implementing regulations).

41. **Direct policy measures to reduce informality have had mixed success.** The Ministry of Labour and Social Security (MOLSS) and the social security institutions have inspection functions and structures. However, limited resources and the sheer number of firms means that inspection can have only a limited impact. Combining the social security institutions and creation of a combined database, creation of unique social security numbers, and increased coordination between the General Directorate of
Revenue and the Social Security Institutions are all actions under preparation by the
government that could have some impact in the medium term.

**Labor Market Reform for Job Creation and Worker Protection**

42. **The focus of employment protection should shift from protecting jobs to protecting workers.** Regulations that try to protect jobs, such as severance pay and restrictions on flexible work, benefit only those workers who already have jobs. In an increasingly competitive world, firms and workers need more flexible arrangements. Such flexibility increases the risks for workers, and it is important to have measures in place to protect workers—through unemployment insurance and measures to help them find new jobs (passive and active labor market measures). Workers would also benefit from measures to improve access to collective bargaining (in accordance with core ILO labor standards), job security and dispute resolution mechanisms.

43. **Turkey is currently implementing both approaches: protecting jobs and protecting workers.** The Unemployment Insurance Plan was introduced in 1999 and the first benefits were paid in 2002. An important institutional development for active labor market programs was the establishment of ISKUR, the national employment agency. These developments now allow a reduced focus on job protection measures such as severance, as the UI system and active labor market policies are strengthened. The 2003 Labor Code stipulated that a new severance fund would be established; however, the government and the social partners have not been able to agree on the details of such a fund. In the meantime, very high severance pay requirements remain in place.

44. **Severance requirements should be reduced.** This is arguably the most urgent labor market reform. This is a benefit that is fully enjoyed only by public sector workers and workers in the largest firms. Easing the requirements should particularly benefit young workers.

45. **Eligibility requirements should be eased to make unemployment insurance more widely available.** The system currently provides benefits to less than 4 percent of unemployed workers. Other newly established systems such as Korea have higher coverage rates (14 percent), while OECD countries range between 25 and 75 percent. An important part of the explanation is the extent of informality, which makes it difficult to support the unemployed through a formal sector system. Easing eligibility requirements would be a step in the right direction. There is a growing surplus in the UI fund. Simulation analysis suggests that the fund can afford easing eligibility requirements and reducing contribution rates.

46. **Fixed-term contracts should be allowed for economic reasons and employment agencies should be permitted to provide temporary workers to firms.** Under current regulations, fixed-term contracts are allowed only for “objective” reasons such as seasonal agricultural work. Limiting temporary work agencies restricts the use of temporary contracts. Both recommendations are likely to particularly benefit women.
47. **Alternative adjudication mechanisms should be made more widely available.** Adjudication in the courts is the only mechanism available to workers for resolving individual disputes with employers. Implementing authorization to allow private arbitration would provide more timely and efficient dispute resolution and reduce the burden on labor courts that has emerged because of the new job security rules in the Labor Code.

48. **The Turkish Employment Organization, (ISKUR) should be provided with resources to carry out active labor market policies.** A positive step in this direction is a EU technical assistance program for ISKUR to support Turkey’s ability to implement policies and services that are aligned with the European Employment Strategy. The program includes institution building through policy development and improving ISKUR’s operational performance, a grant scheme to finance Active Labor Market Programs (ALMPs), and construction of provincial offices. The remaining item on the policy agenda for ALMPs is to license private employment agencies to provide the full range of employment and training services.

49. **Administrative capacity should be strengthened by increasing the number of labor inspectors.** The social security reform that is being planned by the government includes a merging of the social security institutions, along with their databases. This should strengthen administrative capacity to monitor compliance with payroll tax requirements. These measures can be complemented by increasing the number of labor inspectors under the MOLSS.

50. **A detailed analysis of the elasticity of the supply and demand for labor should be conducted.** The study should cover different segments of the labor market and for different groups of the population to ascertain the expected costs and benefits of reducing taxes on employment for a given level of enforcement, including payroll taxes on each group and income taxes for second earners in a household.

51. **The package recommended here is balanced to meet competing needs.** Ideally, the suggested reforms should be introduced together. There is a risk that selecting one or two items and not others might not have the desired effect. However, this is an ambitious agenda and, if there is a need to prioritize, improving the flexibility of the labor market by liberalizing labor market regulations, most notably severance and other hiring and firing restrictions, is the top priority for job creation.
CHAPTER 1. OVERVIEW OF THE LABOR MARKET IN TURKEY

A. INTRODUCTION

1.1 Turkey’s labor market outcomes reflect the interaction of demographic and economic factors. Like many other developing countries, Turkey is progressing through a rapid demographic transition, which has generated a surge of youthful entrants to the labor market. While the increase in factor inputs represents a potential bounty, absorbing them quickly enough has been difficult. Meanwhile, the demographic trends have been accompanied by a transformation of a rural-agrarian society into an urban-industrial one. Cultural/institutional factors and an evolving occupational structure have led to changing roles, particularly for women, and have affected household preferences and labor force participation decisions.

1.2 In the economic sphere, Turkey abandoned a long-standing, inward-looking, statist policy framework in the early 1980s and began a transition toward a more outward-looking, market-driven development model. The change quickly turned the economy around from a prolonged crisis in the late 1970s and produced spectacular results in trade performance. However, long-standing policy failures were perpetuated in the new environment, contributing to inflation, macroeconomic instability, and weak investment. At the same time, exogenous external events, including two regional wars, economic disruptions in trading partners, and financial contagion, have dampened the economy and the labor market.

1.3 This chapter provides an overview of the demographic and structural factors that have underpinned. Turkey’s labor market performance. The main findings of this chapter are:

- A rapid demographic transition has temporarily raised population growth and skewed the age structure toward the young. The working age population is growing particularly rapidly, and large numbers of young workers have been difficult to absorb quickly into productive employment. Over the past two decades, there has been net migration into Turkey, further increasing the labor supply.
- Most of the population growth is occurring in urban areas. Combined with cultural perceptions and high fertility, it is associated with lower female labor force participation rates. Low educational attainment has also hampered women’s labor force participation. Evidence suggests that increased demand would elicit a positive supply response.
As the structure of the economy has evolved, the share of agriculture, which is low-productivity and labor-intensive has fallen, while industry and services have gained. However, the gains in industry and services came from a low base and thus were not sufficient to generate strong employment growth.

### B. Demographic Trends

1.4 Turkey has been undergoing a dramatic demographic transition. The term refers to a well-defined sequence in which mortality declines mainly because of improvements in public health and nutrition, followed by a decline in fertility. The disparity between birth and death rates in figure 1.1 indicates rapid population growth. At the outset of the figure, the crude birth rate is 50.8 per thousand and the crude death rate is 23.5 per thousand, implying population growth of 2.7 percent. Figure 1.2 shows a century of past and projected population growth in Turkey, based on the United Nation’s medium projection. Over the period, birth and death rates converge and growth slows progressively from 2.7 percent in 1950–55 to around 1.6 percent currently, to near zero in 2050.

1.5 Falling mortality during the transition centers predominantly on the very young, who are the most vulnerable. As a result, the age structure becomes skewed toward younger age ranges. In Turkey, total fertility (the number of children a woman is expected to have over her reproductive life) has already fallen from 6.9 in 1950–55 to around 2.4 currently and will reach a replacement level of slightly over 2 within the next five to ten years (figure 1.2). But the population will continue to grow beyond that point.

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1 The demographic transition was well underway at the beginning of the period covered in figures 1.1-1.3, since over the past 1,000 years or so Turkey’s average population growth rate must have been close to zero. UNFPA data are available only from 1950, but the spread between birth and death rates shown in figure 1.1 almost certainly opened up early in the 20th century.

2 In a stationary state, each woman must replace herself with a female offspring in the next generation. The total fertility rate needed for this exceeds 2 because of mortality and the slightly higher probability of male offspring.
because of a disproportionate number of women of child-bearing age and eventually will stabilize at around 100 million in the second half of the 21st century.

1.6 From an economic standpoint, the most important aspect of the transitional age distribution is a bulge in youth dependency, defined as the number of persons aged 0–14 in proportion to the population aged 15–64. In Turkey, this peaked at around 0.7 in the early 1960s and will fall progressively to below 0.3 over the next 50 years. Toward the end of this period, the elderly dependency rate will increase sharply, partly due to increasing longevity and partly due to larger numbers of people graduating from the 15–64 age range. Notably, however, elderly dependency is less costly economically than youth dependency, Bloom and Williamson (1998) find, probably because a proportion of the population over 65 continues to work.

1.7 Demographic transitions similar to Turkey’s have occurred throughout the developing world with the widespread dissemination of public health knowledge and medical technologies such as vaccines. Figures 1.3 and 1.4 graph population growth and dependency rates for Turkey, together with regional aggregates for Africa, Asia, and Latin America.3 East Asia led the way and achieved particularly rapid declines in fertility and population growth, while Sub-Saharan Africa is lagging by several decades. In Turkey’s case, both the magnitudes and timing of the transition are very similar to the other “intermediate” regional aggregates.

Migration

1.8 While Turkey’s demographic trends are typical of many developing countries, an important difference from many of them is migration. Turkey has been a center of migration since medieval times and that has continued to the present. Following an agreement between Turkey and West Germany in 1961, large numbers of unskilled, temporary migrants entered Europe as "guest workers." The relationship benefited both

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3 Classified according to UN regional definitions. All data are from the UNFPA’s medium-term projections.
Turkey, which sought an outlet for surplus population, and Germany which faced labor shortages as its economy boomed. Subsequent agreements were signed with other European countries, including Austria, Belgium, France, the Netherlands, and Sweden. Currently 3.2 million Turkish nationals live in Europe, according to one estimate (Kirisci 2003). Later, coinciding with the economic boom after the 1973 oil crisis, smaller numbers of economic migrants left for countries in the Middle East and North Africa (MENA), such as Iraq, Libya, and Saudi Arabia. At the same time, in the other direction, Turkey has had a long-standing policy of promoting immigration compatible with the Turkish national identity. Under this policy, large numbers of Balkan and other Eastern European refugees have taken up residency in Turkey, including tens of thousands of Bosnians and Kosovars in the 1990s (Kirisci 2003).

1.9 Notably, a reversal of net migration flows occurred after 1980 of sufficient magnitude to have measurably affected labor market performance. From 1970–80, around 660,000 emigrants reduced population growth on average by 0.6 percent, while from 1981–2001, 3.0 million immigrants raised growth by 0.7 percent (Council of Europe 2002). Migrants are more likely to be working age (Bloom and Freeman 1986), and hence to have a more immediate impact on labor supply—also presumably disproportionally in urban markets.

**Working Age Population**

1.10 Just as the demographic transition begins with an acceleration of growth in the younger age ranges, so the deceleration begins with the young, while older cohorts follow with a lag. Thus as the transition matures, large numbers of young adults elevate the growth rate of the working age population above that of population as a whole. For Turkey, the peak growth rate of the working age population occurred in the early 1980s, when an especially sharp surge coincided with the reversal in net migration (table 1.1). Working age population growth in the range of 2.5 to 3.0 percent is very rapid in historical perspective, though only marginally above LDCs as a whole. From 1980–2003 the total increase was 20.5 million persons, more than 80 percent of the initial level. Moreover, the age distribution within the category of the working age has also been skewed. The share of 15 to 24 year olds—that is, relatively new and inexperienced entrants to the labor force—has fallen from around 36 percent in 1980 to 30 percent currently, and is projected to decline to below 20 percent by 2050.
Demographic Transition and Economic Potential

1.11 Economic logic does not indicate whether faster sustained population growth should have a net positive or negative effect on development. A lengthy literature on the subject has alternated between population pessimists and optimists. On the one hand, positive influences could stem from scale economies in transportation and production networks, faster adoption of new technology, or stimulation of household demand. Scale economies are likely particularly relevant in the agricultural sector, where a larger population and greater population density might justify investing in capital-intensive projects such as irrigation systems. On the other hand, higher levels of youth dependency represent additional claims on household expenditure, lowering savings and shifting them to later in the life cycle. Less savings and investment imply capital “shallowing” and a lower level or growth rate of output. Economies may also face constraints in raising the growth rates of higher productivity modern sectors to absorb new workers; thus average productivity may lag (Kelley 1988; Lee, Mason, and Miller 2001). The relationship between population and economic growth is likely to depend on culture and institutions, and the nature of technology and factor markets.

1.12 By contrast, a transitional *acceleration* of population growth is more likely to have negative economic consequences, taking into account the impact of age structure on savings and investment. For Bloom and Williamson, the burden and gift phases of the demographic transition arise from a cycle in the share of working age population and per capita labor supply. Of course, the demographic gift is merely a potential. As Bloom and Williamson note, “the demographic ‘gift’ in the middle phase of the transition may or may not be realized. It represents a growth potential whose realization depends on other features of the social, economic and political environment” (p. 422).

1.13 Empirically, cross-country regressions of output growth incorporating population growth as an explanatory variable have been inconclusive. For instance, during the 1960s and 1970s, there appeared to be little relationship between population and output growth, while in the 1980s the impact was negative and significant (Kelley and Schmidt 1995;
Bloom and Williamson (1998). Bloom and Williamson test a more nuanced view, that dependency is important, by incorporating growth rates of both total and working age populations in cross-country growth regressions. They get positive coefficients for working age population growth, but negative coefficients for the total population growth, implying that unproductive, dependent populations are a drag on growth. Applying the results to East Asia, they attribute more than a third of the growth miracle of the 1970s and 1980s to the demographic shift. Kelley and Schmidt (1995) find supporting evidence in pooled regressions of GDP growth on current and 15-year lagged birth rates. The coefficients are negative on the former and positive on the latter. Looking at the implications for savings and investment, Higgins and Williamson (1997) estimate the decline in youth dependency in East Asia from 1950–90 added as much as 14 percentage points to savings rates.

For Turkey, the dependency rate—defined as the ratio of those under 15 and those over 65 to working age population—peaked at around 0.88 in 1965. Since then, it has declined to around 0.55 and will eventually reach a minimum of around 0.45 in 2020 (see figure 1.2). The decline in youth dependency is steeper—from a peak of .81 in 1965 to .45 currently and .27 in 2050. Bloom and Williamson (1998) characterize the early part of the transition as a “demographic burden,” when youth dependency rates are high. It is followed by a “demographic gift,” when working age population growth is high and the dependency rate falls.

The burden phase of the demographic transition has significant negative implications for economic growth, empirical work by Bloom and Williamson, and others, finds. Figure 1.6 applies the results to Turkey by calculating the growth impacts of total and working age population growth, using estimated coefficients from the Bloom and Williamson’s cross-country regressions. The bars indicate that Turkey passed into the gift phase of the transition in the 1970s, and became eligible for significant dividends of 1 to 2 percent per year economic growth in the 1980s and 1990s, though the potential declined after reaching a peak in the late 1980s. Without specifying a counterfactual, it is impossible to say how much of this “gift” was actually redeemed. But low and falling participation rates and at best moderate economic growth strongly suggest that much of it was not. Actual GDP growth during the period did not show a corresponding pick up after 1970 or at least did not sustain it through the 1990s (the correlation between the two series is -0.2). Taking advantage of the opportunities afforded requires appropriate policies to promote growth through investment in human and physical capital, and effective utilization of the human resources, particularly those of women (Bloom, Canning, and Sevilla 2003).

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4 A lengthy literature, dating back at least to Malthus, has alternated between “population pessimism” and “population optimism.” See Kelley (1988).

5 Bloom and Williamson (1998) estimate several variants of their basic equation incorporating different conditioning variables. The cross-country regressions are based on period averages for 1960–95 and hence do not allow for dynamic effects or timing. Instead, figure 1.6 applies their results along a time dimension. The impression in figure 1.6 that Turkey became eligible for a demographic gift in the 1970s is consistent with their interpretation of the results.
1.16 As noted, Bloom and Williamson attribute around a third of the East Asian miracle to the demographic gift. In contrast to Turkey’s experience, the correlation between the demographic gift and actual growth in East Asia was positive ($\rho = 0.6$), even allowing for the impact of the late 1990s crisis (figure 1.7). However, East Asia’s demographic transition was more sharply delineated than in other regions and the connection to economic performance more evident. In general, data limitations and differences in the timing and profiles of demographic transitions make it difficult to compare outcomes: for instance, because of the confounding influences of the oil and debt crises. But, while transitional difficulties in absorbing a sudden influx of young workers appear to have been relatively common, Turkey has yet to take advantage of the potential demographic gift.

![Figure 1.6: Turkey’s Demographic Gift, 1970-2005](image1)

![Figure 1.7: East Asia’s Demographic Gift, 1960-2000](image2)

C. URBANIZATION AND STRUCTURAL CHANGE

1.17 The share of Turkey’s urban population rose from around 20 percent in 1950 to 64 percent currently and is projected to reach around 80 percent by 2050. Because urban and rural labor markets have very different characteristics, this trend has had a significant impact on overall outcomes. Applying 1980’s rural-urban proportions to current rural and urban participation rates would raise overall labor force participation by 2.7 percentage points and female LFP by 4.6 percentage points, for instance.

1.18 Almost everywhere, the demographic transition has been accompanied by increasing urbanization. Thus while urban population shares differ markedly across developing regions, from 25 percent in Sub-Saharan Africa to 80 percent in Latin America (figure 1.8), an increasing trend is apparent in all cases. This is expected to continue for the foreseeable future, with virtually all of the world’s population growth projected to occur in urban areas, particularly in the developing world (UNFPA 1999).
1.19 Because fertility and natural population growth tend to be lower in urban areas, urbanization primarily reflects internal migration. Both “push” and “pull” factors are at work in the process, to use the terminology of Williamson (1988, 1991). Indeed, at a conceptual level it is difficult to distinguish them, for instance in the case of a small-scale agricultural producer at the margin who is highly vulnerable to price or supply shocks and seeks new opportunities in the city. As Bulutay (1995, p. 125) notes, “Those who have no security, who face abject poverty in case of crop failures, are very much anxious to have secure and permanent income even if it is very low.” Within the agricultural labor markets, various offsetting trends have likely reduced labor demand, on balance. On the one hand, cereal production has been displaced by more labor-intensive crops grown under glass. At the same time, capital intensity has risen, exemplified by a 35-fold increase in the use of tractors from 16,585 in 1950 to 581,375 in 1985 (Bulutay 1995).

1.20 Accompanying the trends in population growth and urbanization, the economy experienced a marked change in structure, in which agriculture as the primary source of output and employment was displaced by more urban-based manufacturing and services (figures 1.9 and 1.10). Agriculture was the largest employer in 1980, accounting for 9.0 million jobs or half (50 percent) of the total. By 2004, agricultural employment had declined in absolute terms, shedding 1.6 million jobs to 7.4 million or a third (34 percent) of the total.

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6Williamson suggests demographers tend to see Malthusian push factors throwing people off the land as population growth outstrips the food supply. By contrast, economists are more inclined to see pull factors attracting both labor and capital to urban centers to satisfy more highly income elastic demands for manufacturing and services outputs.
At the same time, real agricultural GNP grew by 26 percent. Despite a fall in output per capita, the sector continues to satisfy most domestic demand for crops and livestock, while continuing to supply traditional exports such as dried fruits and nuts. Industry accounted for 2.2 million jobs in 1980, 12 percent of the total, but exhibited the fastest growth over the period, adding 1.8 million jobs, to reach 4 million in 2004. The sector consists mostly of manufacturing of a wide variety of outputs for both domestic and export markets, including cement, petrochemicals, steel, textiles and clothing, automotive parts, household durables, and consumer electronics. Export-oriented automotive and electronic products have been the fastest growing categories. Services employment also showed positive growth, with employment rising from 5.9 million to 9.4 million and the share of employment rising from 33 percent to 43 percent. Tourism services are a major export earner, plus the sector also produces financial services, transportation, and trade (Riordan and others 2001; EIU 2003).

1.21 Because of gender differences in sectoral employment patterns, the structural trends have had different effects on male and female employment. They have been particularly disadvantageous for women, who are predominantly employed in agriculture (figure 1.11). Both men and women hold roughly equal shares of agricultural employment, but men dominate in all other sectors, accounting for around 80 percent of employment in industry and services and over 95 percent in construction. Thus while both men and women have been affected approximately equally by the declining role of agriculture, primarily men have gained from the increasing prominence of other sectors.

**Labor Force Participation**

1.22 Labor force participation in Turkey is exceptionally low by international standards and has been in long-term decline. The overall participation rate of 48.7 percent in 2004 was the lowest in the OECD and 21.4 percentage points below the OECD average (table 1.2). Participation and employment rates differ significantly with respect to gender and location. Rural participation rates are higher than urban and men’s are higher than women’s. Women’s labor force participation in urban areas is exceptionally low, at only 18.3 percent. For the economy overall, the male participation rate (72.3 percent) is nearly three times the female rate (25.4 percent). In urban areas, it is more than three times as high: 70.8 percent versus. 18.3 percent. Of course, employment rates are also low, though open unemployment is not particularly high, averaging 8 to 10 percent during the 1990s.
1.23 Differences with respect to gender and location partly explain the declining overall trend. These differences, in turn, reflect a range of sociological, cultural, and institutional factors (Tunali 2003; Tansel 2001). In rural areas, where agriculture dominates and home and work environments overlap to a greater extent, \(^7\) all family members are more likely to participate in productive activities. By contrast, urban households tend to be more specialized; men earn an income while women are homemakers. Greater access to education in urban areas lowers participation in younger age ranges. Lower female participation rates in the urban setting reflect social custom whereby married women are expected to devote themselves to child rearing. Interestingly, young, unmarried women with greater financial need and less onerous family responsibilities are three times more likely than married women to be in the labor force (Tunali 2003). Lower male participation rates in the 15–24 age range, particularly in urban areas, are explained by both educational choices and compulsory military service. Labor force participation trends are analyzed in detail in Chapter 3.

<table>
<thead>
<tr>
<th>Table 1.2: Labor Force Participation and Employment, 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population 15+</td>
</tr>
<tr>
<td>Thousands</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Urban</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Rural</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
</tbody>
</table>

| Memo item: OECD total | 70.1 | 65.3 |

Source: SIS, HLFS, and OECD Employment Outlook 2005. December 2004 is not strictly comparable to HLFS data.

**Human Capital**

1.24 Over the past few years, educational opportunities have expanded significantly. The system of State-provided, free primary and secondary education was extensively revised in the late 1990s, and compulsory schooling was raised from five to eight years. Higher education opportunities also grew during the 1980s and 1990s through new universities, both public and private, and distance learning programs. Enrollment in higher education, though at comparatively low levels, registered strong gains, particularly for women (Tunali 2003). Results are apparent, with the shares of illiterates and those without basic education declining, those with primary education remaining roughly constant, and shares of higher education, though still small, growing rapidly (table 1.3).

\(^7\)Turkish data count unpaid family workers as employed.
Education levels are still comparatively low by OECD or EU standards, and demand for higher education currently outstrips the capacity of the system. Overall, younger workers are more likely to report they are unemployed than older workers, independent of their level of education (unemployment rates would presumably not count those who are not looking for work because they are in school or engaged in their national service). High unemployment rates for educated workers may indicate bottlenecks in integrating educated workers into the work force, or they may indicate a mismatch between the skills provided by their schooling and labor market needs. Factoring in unemployment, rates of return to some educational programs, especially those at the university level, fell sharply over the 1990s (though the table indicates that the results over the working lives of the graduates will likely tell a very different story). The World Bank is carrying out additional research to obtain a better understanding of unemployment among educated young workers.

### Table 1.3: Educational Attainment, 1988 and 2003

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Percent of population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Population 1988 2003</td>
</tr>
<tr>
<td></td>
<td>Men 1988 2003</td>
</tr>
<tr>
<td></td>
<td>Women 1988 2003</td>
</tr>
<tr>
<td>Illiterate</td>
<td>22.9 11.7</td>
</tr>
<tr>
<td>No diploma</td>
<td>9.1 4.4</td>
</tr>
<tr>
<td>Primary</td>
<td>47.2 49.6</td>
</tr>
<tr>
<td>Lower secondary</td>
<td>8.1 9.8</td>
</tr>
<tr>
<td>Lower secondary vocational</td>
<td>0.7 0.1</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>6.0 11.1</td>
</tr>
<tr>
<td>Upper secondary vocational</td>
<td>2.7 6.4</td>
</tr>
<tr>
<td>Tertiary</td>
<td>3.2 6.9</td>
</tr>
</tbody>
</table>

Source: SIS Labor Force database.

### Table 1.4: Unemployment Rates are High for the Young and Educated (2003)

<table>
<thead>
<tr>
<th>Age group</th>
<th>Illiterate</th>
<th>No diploma</th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>18.0</td>
<td>27.7</td>
<td>13.7</td>
<td>29.5</td>
<td>0.0</td>
</tr>
<tr>
<td>20-24</td>
<td>17.0</td>
<td>37.5</td>
<td>16.1</td>
<td>23.4</td>
<td>38.5</td>
</tr>
<tr>
<td>25-29</td>
<td>16.3</td>
<td>14.8</td>
<td>12.2</td>
<td>12.2</td>
<td>14.8</td>
</tr>
<tr>
<td>30-34</td>
<td>13.3</td>
<td>16.7</td>
<td>10.3</td>
<td>7.1</td>
<td>5.3</td>
</tr>
<tr>
<td>35-39</td>
<td>11.4</td>
<td>16.7</td>
<td>8.1</td>
<td>5.4</td>
<td>4.1</td>
</tr>
<tr>
<td>40-49</td>
<td>7.5</td>
<td>9.5</td>
<td>7.8</td>
<td>4.6</td>
<td>2.5</td>
</tr>
<tr>
<td>50-59</td>
<td>5.0</td>
<td>4.9</td>
<td>5.9</td>
<td>5.7</td>
<td>2.2</td>
</tr>
<tr>
<td>60+</td>
<td>1.6</td>
<td>1.5</td>
<td>1.4</td>
<td>4.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Source: Labor Force Survey
Employment and Unemployment

1.26 The combination of demographic and structural factors have meant that population growth has outpaced employment growth for many years in Turkey. From 1980 to 2004, the working age population grew by 23 million, but only 6 million net jobs were created (figure 1.12). As a result, the employment rate (the percentage of working age population that is employed) in 2004, at 43.7 percent, is one of the lowest in the world. Most countries have employment rates in excess of 50 percent; the exceptions are largely in the Middle East. The EU-15 average in 2004 was 65 percent.

1.27 The gap between the employment rates in the EU and Turkey presents a particular challenge on the road toward EU accession. The European Council meeting in Lisbon in 2000 adopted an employment rate target of 70 percent to be met by 2010. With a population that is still growing, Turkey will have to generate about 10 million jobs in six years to reach the current EU average employment rate in 2010, and will have to generate about 14 million jobs to reach the Lisbon target employment rate. The targets for female employment rate and employment for workers over 55 are even more difficult because women and older workers are particularly likely to not be employed in Turkey. The magnitude of the jobs deficit suggests that immediate action is needed.

1.28 The labor force—the part of the working age population that is either working or looking for work—has been rising at a much slower pace than the adult population, reflecting the falling labor force participation rates for women. Not surprisingly, employment rates for women have been falling in parallel. By 2004, only one in four women aged 15–64 was employed in Turkey (figure 1.13). The figure was even lower for women in the prime working age of 25–54. A significant part of the gap between the employment rate in Turkey and the EU-15 comes from the very low employment rate for women.

Figure 1.12: Labor Force Participation and Employment has Trailed Population Growth


12 Note that those figures differ from the figures in Table 1.2 which covers the population of 15+.
women in Turkey. For men in Turkey, the employment rate in 2004 was 67.9 percent, while in the EU-15 it was 72.9 percent. By contrast, the EU-15 average for women, 57.1 percent, was more than double the Turkey average of 24.3 percent.

1.29 Figure 1.12 also illustrates how the unemployment rate—the gap between the labor force and employment—does not provide a full indicator of the slack in the labor market. With labor force participation rates falling, the labor force increases at a much slower pace than the adult population. As a result, the unemployment rate and employment rate are not mirror images of each other. The employment rate falls much faster than the unemployment rate rises. As figure 1.14 shows, the unemployment rate in Turkey did not increase between 1980 and 2000, a period when the employment rate was continuously falling.

Figure 1.13: Employment rates, Turkey and the EU-15, 2004

There are complex reasons why people who are not working might respond to surveys to say they are not looking for work. Some people are genuinely not looking for work, such as women who have responsibilities at home, or those who are in school or who choose not to work for cultural reasons. A “discouraged worker” effect is also possible. If it seems difficult to find a job, people may stop looking for work. The reverse is also possible. People who are not actively looking for work respond that they are, to receive unemployment insurance benefits, for example. Since these effects are difficult to disentangle. In setting the labor market targets discussed above, the EU Council focused on the employment rate rather than the unemployment rate. This report focuses follow suit, using the unemployment rate only when it seems particularly appropriate.
D. CONCLUSION

1.30 Slow employment generation in Turkey reflects the interaction of demographic and economic factors. A rapid increase in the working age population coincided with a structural transformation away from labor-intensive agriculture toward industry and services. Increasing trend growth of output and employment in these two latter sectors will have to form the basis for employment generation. Meanwhile, as the labor force ages and its growth rate slows, some of the pressure for rapid employment creation will ease. The rest of this report will explore some of the key factors that determine employment creation, to serve as the basis for providing recommendations for reforms in the labor market.

1.31 The next chapter examines the economy-wide factors that have impacted the demand for labor. The analysis includes a review of output growth, productivity, and employment growth as employment shifts away from agriculture and toward industry and services. The impact of macroeconomic outcomes on the labor market is evaluated and an analysis of the international competitiveness of Turkish labor is presented. The chapter also reports the results of simulations of the labor market impacts of lowering payroll taxes and VAT, taking into account economy-wide impacts. Household-level data is used in chapter 3 to drill down into selected supply side factors discussed in this chapter—female labor force participation and participation by older workers—with a focus on the impact of education. The final chapter reviews the impact of labor market regulations and institutions on the goals of labor market regulation: to encourage job creation but also to minimize risk of job loss to workers. It evaluates the effect of informality on the goal of worker protection. The chapter places Turkey’s labor market regulations and institutions in an international context, and evaluates the likely impact of these regulations and institutions on labor supply and demand, based on international experience and the analysis in the earlier chapters. This analysis provides the basis for detailed recommendations for labor market reform that will support job creation but will also provide worker protection.
CHAPTER 2. GROWTH, MACROECONOMIC ADJUSTMENT, AND LABOR MARKET OUTCOMES

A. INTRODUCTION

2.1 The demand for labor is derived from the demand for goods and services produced in the economy. Thus increasing employment is dependent on growth in the economy. Broadly speaking, growth depends on increasing productivity in the long run and macroeconomic factors in the short run. This chapter analyzes the interactions between growth, productivity, and macroeconomic adjustment on one hand and labor markets on the other.

2.2 The next section reviews the relationship between growth, productivity, and employment relative to a group of comparator countries. Turkey’s growth performance from 1980 to 2003 was reasonably good, although it fell short of best performers such as Korea and Ireland. Employment generation slowed during the period. An important element in the slowdown in employment generation has been structural change in the economy, as agriculture has lost jobs. Over the long term, productivity in Turkey has been improving. Productivity growth since 2001 has been particularly encouraging. Productivity in agriculture has been stagnant while services and manufacturing have been growing, a sectoral review finds. However, part of the increase in productivity since 2001 has been due to the increased working hours per worker rather than increased factor productivity per worker.

2.3 Section C analyzes the impact of wages and labor costs on employment. Unit labor costs (labor costs relative to productivity) are low in Turkey relative to a number of comparator countries, suggesting that labor costs are competitive. Although the unit labor cost data do not suggest unduly high labor costs, there is a concern that high payroll taxes (discussed in chapter 4) may be stifling employment and encouraging informality. There is little evidence that wage indexation is contributing to inflation inertia.

2.4 Section D reviews Turkey’s experience with macroeconomic adjustment, with a focus on employment effects. Fiscal volatility has been an important component in explaining Turkey’s growth and productivity performance, a recent IMF study finds. However, the analysis in this report is not able to find a significant statistical relationship between volatility and employment. Simulations of the impact of monetary and fiscal policy on employment also suggest that labor market adjustment takes place mostly through wages rather than employment. Given that employment has not been very flexible, flexibility in wages has been important to allow the economy to respond to changes in macroeconomic conditions. An implication of falling inflation is that labor market flexibility may require more variability in employment in the future.
B. Growth, Productivity and Employment

2.5 Turkey’s growth performance has been remarkably consistent when averaged over a two decades. As figure 2.1 indicates, GDP growth has averaged around 4 percent over 1981–2003. For the sample of countries in this study, Turkey was one of the fastest growing countries with only Ireland and Korea growing faster than Turkey.

Figure 2.1: GDP and Employment Growth 1981-2003

Source: Groningen Growth and development centre, Total Economy Database; World Bank

2.6 On the other hand, six of the nine comparator countries had faster employment growth than Turkey, even though only Ireland and Korea had faster GDP growth. Employment grew faster in Brazil, Mexico, Argentina, and Spain, though they had slower GDP growth than Turkey. For the earlier period, Turkey’s growth performance was not very good relative to the other comparators, but the employment growth was relatively good. In the later period, while GDP growth was reasonably good, employment growth was relatively weak. Korea’s remarkable ability to sustain growth led an outstanding performance on employment generation.

2.7 Why did employment in Turkey grow slowly relative to GDP from 1981 to 2003, compared to the other countries in the sample? Three factors are worth noting. The first is structural change in the economy as the population has been shifting out of low-productivity agriculture. The second is the changing relationship between productivity and employment within sectors. The third are labor market regulations and institutions. The first two are discussed below, while the third is discussed in chapter 4.

2.8 A key factor for slow employment growth has been the high starting share of agriculture. The reason is simple: when the largest sector is shedding workers, even relatively fast employment growth in the smaller sectors is not sufficient to generate fast employment growth overall. This intuition is confirmed by a study of 10 European countries from 1974 to 1991 (which sought to explain the poor employment performance of
Spain at that time). It found that up to 80 percent of the long-run employment growth was explained by sectoral effects, and that the initial distribution of labor across sectors plays a crucial role in explaining cross-country differences in employment (Marimon and Zilibotti 1998). As table 2.1 indicates, the comparator countries are significantly further along in the transition out of agriculture than Turkey.

Table 2.1: Sectoral Distribution of Employment, 1950–1990

<table>
<thead>
<tr>
<th>Country</th>
<th>Agriculture</th>
<th>Industry</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950</td>
<td>40</td>
<td>32</td>
<td>28</td>
</tr>
<tr>
<td>1970</td>
<td>21</td>
<td>41</td>
<td>38</td>
</tr>
<tr>
<td>1990</td>
<td>12</td>
<td>36</td>
<td>52</td>
</tr>
<tr>
<td>Latin America</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950</td>
<td>54</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>1970</td>
<td>42</td>
<td>22</td>
<td>36</td>
</tr>
<tr>
<td>1990</td>
<td>25</td>
<td>24</td>
<td>51</td>
</tr>
<tr>
<td>East &amp; SE Asia (excl. China)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1950</td>
<td>71</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>1970</td>
<td>54</td>
<td>18</td>
<td>28</td>
</tr>
<tr>
<td>1990</td>
<td>44</td>
<td>20</td>
<td>35</td>
</tr>
<tr>
<td>Turkey</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>63</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>1990</td>
<td>47</td>
<td>15</td>
<td>38</td>
</tr>
</tbody>
</table>

Source: Van Ark, Frankena, and Dutewe2 (2004); Turkey added.

2.9 Based on worldwide trends, it is likely that agricultural employment will continue to shrink from the current level of over 30 percent, acting as a brake on expansion of total employment. Expansion in employment must come from rapid GDP and productivity growth, as it did in Korea and Ireland.

2.10 The rising share of services in employment generation is also noteworthy. Although over 40 percent of the workforce in Europe was in manufacturing in the 1970s, that share has since declined, while the share of services has risen. In East Asia and Latin America, although there has not been a decline in the share of manufacturing, manufacturing employment growth has slowed and the share of services has risen.

2.11 These worldwide trends suggest that employment growth in Turkey must come from growth in manufacturing—and particularly services. As noted above, actual employment growth will depend on the overall growth in these sectors, as well as the relationship between productivity and employment, and labor market regulations and institutions. While it is not possible to disentangle these effects, slow employment growth with fast GDP growth suggests that incentives against hiring of labor may exist (particularly if wages have not been growing).

2.12 Employment growth in services in Turkey was slower than all the other countries in the sample, despite the fact that output growth was faster than in four of them: Brazil, Greece, Portugal, and Mexico. Both output growth and employment growth were faster in Mexico, Korea, and Ireland. Employment growth in industry in Turkey was much faster than in Spain, Portugal, and Greece, countries that have already started seeing the transition towards shrinking share of employment in industry. Employment growth in Turkey was roughly comparable to Brazil, Ireland, and Korea, and much slower than Mexico. The
comparison with Brazil and Mexico is particularly noteworthy, since they provide a comparison of output growth with industrial and wage structures that are closer to Turkey’s current situation. Both these countries showed much higher employment elasticities with respect to output growth than Turkey.

2.13 Growth is the prerequisite for employment generation and the comparison in figures 2.1-2.3 suggest that Turkey’s performance has been reasonably good, but short of best performers such as Ireland and Korea. Employment generation has not been as good. On comparing output and employment generation in services and industry (to account for slow growth due to the large share of agriculture in Turkey), employment generation has been particularly slow in services relative to growth. In industry, while employment generation has been faster than the European countries, this may be partly accounted for by their different wage and production structures. Employment growth has been slow relative to Brazil and Mexico, the middle-income countries in the sample.

![Figure 2.2: Value Added and Employment Growth in Industry (1980-2003)](image)

![Figure 2.3: Value Added and Employment Growth in Services (1980-2003)](image)

*Note: Only years for which data on value added and employment are available.*

**Productivity and Employment**

2.14 The experience of Western Europe, North America, and Japan confirms that over time increasing productivity is the basis for sustained job creation and rising standards of living. Large increases in population after the first industrial revolution in the 19th century, and again after World War II, led to large increases in the labor force. These periods also saw a rapid increase in per capita income and labor productivity, as millions of new entrants into the labor force were accommodated in higher productivity jobs. Between 1970 and 1998, twelve Western European nations increased labor productivity about nine-fold. In the United States, labor productivity increased eight times (Maddison 2001).

2.15 Table 2.2 shows the results of a growth accounting exercise that estimates the contribution of physical and human capital accumulation and productivity to growth. For the period 1961–2000 as a whole, Turkey’s performance is similar to the group of upper-middle-income countries. During 1961–80, capital accumulation and productivity growth
was faster in the upper-middle-income countries, generating faster per capital GDP growth. However, during the worldwide slowdown from 1981 to 2000, the positions reversed, with Turkey generating faster productivity growth through both physical capital accumulation and productivity gains.

2.16 Turkey’s performance from 2002 to 2004 is striking. If sustained, it will put Turkey in a position to achieve growth and employment performance similar to Korea or Ireland (shown in figure 2.1). While these figures show low contributions of physical capital accumulation and high human capital accumulation, the particularly low figures for physical capital accumulation may represent a measurement problem. But even allowing for some measurement error, it is a strong performance. Sustaining this performance will be the key to generating employment growth over the next twenty years for Turkey.

Table 2.2: Growth Accounting, 1961–2000

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per capita GDP</td>
<td>Total factor productivity</td>
<td>Physical capital</td>
</tr>
<tr>
<td>Turkey</td>
<td>2.33</td>
<td>0.92</td>
<td>1.77</td>
</tr>
<tr>
<td>Upper-middle-income countries</td>
<td>2.45</td>
<td>0.97</td>
<td>1.76</td>
</tr>
<tr>
<td>All countries</td>
<td>1.98</td>
<td>0.73</td>
<td>1.56</td>
</tr>
<tr>
<td>Turkey</td>
<td>2.32</td>
<td>1.10</td>
<td>1.69</td>
</tr>
<tr>
<td>Upper-middle-income countries</td>
<td>3.07</td>
<td>1.41</td>
<td>2.01</td>
</tr>
<tr>
<td>All countries</td>
<td>2.62</td>
<td>1.07</td>
<td>1.92</td>
</tr>
<tr>
<td>Turkey</td>
<td>2.35</td>
<td>0.73</td>
<td>1.86</td>
</tr>
<tr>
<td>Upper-middle-income countries</td>
<td>1.83</td>
<td>0.53</td>
<td>1.51</td>
</tr>
<tr>
<td>All countries</td>
<td>1.33</td>
<td>0.37</td>
<td>1.20</td>
</tr>
<tr>
<td>Turkey</td>
<td>7.6</td>
<td>5.3</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: IMF staff calculations. The table covers 73 countries for which Bosworth and Collins (2003) provide physical and human capital stock data. GDP data are from the Penn World Tables (6.1).

2.17 Over the long term, productivity growth will be essential to generate employment growth. In the medium and short term, however, there can be a trade-off between productivity growth and employment. The sources of labor productivity can be attributed to two processes, according to a convenient typology. One is structural change, as resources, including labor, are moved from low-productivity to high-productivity sectors. The shift out of low-productivity agriculture into high-productivity manufacturing and then services has been important for generating productivity growth. The second mechanism is productivity growth within sectors. Both processes can lead to imbalances and adjustment costs as some people lose jobs and others find them. In the aggregate, the relationship between growth, productivity, and employment has varied across countries and over time (Van Ark, Frankema, and Dutweede 2004). Some countries have seen fast growth in GDP, productivity, and employment Others have seen slow GDP growth but relatively fast employment growth (and thus low labor productivity growth—not a sustainable situation).
2.18 Figure 2.4 shows the evolution of a commonly used measure of aggregate labor productivity, value added per worker. (A related measure, value added over labor costs, is used in the next section for an international comparison.) Conceptually, value added per worker can be thought of as the result of a combination of capital accumulation and total factor productivity.

2.19 Agricultural productivity is low and has been rising very slowly. Productivity in industry and services rose steadily through the 1980s, but then became volatile as the economy hit by a number of shocks. Industrial productivity started to decline in 1998, and with the crisis in 2001, hit levels reached in the early 1990s, before starting to recover. By 2004, industrial productivity had recovered only to the 1998 levels. Productivity in services followed a roughly similar path. Labor productivity in industry has not increased very much since 1993, and has closely tracked output. This indicates that employment does not change with the business cycle. Firms keep the number of workers roughly constant and adjust in other ways (such as increasing working hours to respond to changes in demand for output).

2.20 Employment has grown fastest in services and is now the largest sector in Turkey (figure 2.6). Industry has grown slowly, while agriculture has shrunk. Taken together, figures 2.5 and 2.6 indicate that the sectoral relationship between productivity and growth is positive. In the sectors where productivity has grown, employment has also grown. While productivity growth in agriculture has been very slow, employment has declined. (The increase in agricultural productivity probably comes from the decline in employment rather than an increase in total factor productivity.)

2.21 Sectoral productivity for manufacturing and services confirm the results from the analysis of total factor productivity: a sharp rise after the crisis of 2001. However, as will be discussed in chapter 4, working hours have increased in Turkey since 1995. Part of the increased productivity has come from increasing working hours rather than increasing productivity. Using data on actual working hours from manufacturing workers to construct a productivity index, figure 2.7 compares productivity per worker and per working hour.
2.22 Except for 1997, productivity in industry when measured using an index based on hours worked has been lower than when using a per worker index. While there has been a strong recovery from the depths of the 2001 crisis, labor productivity in industry had recovered only to the 1993 levels. The sources of productivity growth are complex, and include investments in physical and human capital, labor and product market regulations, and the international environment. One source of the remarkable increase in measured TFP productivity is actually an increase in labor intensity. Workers are working more hours.

C. LABOR COSTS, WAGES AND EMPLOYMENT

2.23 From an economic perspective, explanations for slow employment growth often start with labor costs. Are high labor costs constraining the demand for labor? Real wages in manufacturing fell significantly following the 2001 crisis, and have only recently started to recover (figure 2.7). However, an assessment of the impact of wages on employment should be relative to productivity.

---

10 A widely cited measure of productivity is from the quarterly manufacturing surveys of SIS. These are based on per person productivity, and reveal a picture somewhat similar to figure 2.7. They also have the advantage of allowing more frequent monitoring of productivity developments. However, the manufacturing surveys are based on a relatively small sample of larger firms and thus are not as comprehensive as the measures presented in figures 2.5 to 2.7, which are based on the National Accounts and Labor Force Surveys.
2.24 Measuring the individual productivity of particular firms is often difficult, but labor costs should be low enough to generate profit. The approach taken here is to compare unit labor costs: the ratio of labor costs to value added across countries. Table 2.3 shows Turkey in a strong competitive position vis-à-vis the other comparators despite some recent erosion. Economy wide, Turkey’s value added at $14,239 in 2004 was relatively low, but so was labor compensation at $3,654. Calculating the ratio of these two figures gives labor cost per unit value added of 0.26, the lowest in the group and substantially less than the other EU and accession comparators. Turkey’s nearest competitors were Greece and Mexico, but particularly in manufacturing Turkey had a significant edge.

Table 2.3: Labor Costs and Competitiveness
per employee, in current US $

<table>
<thead>
<tr>
<th></th>
<th>Value added per employeea</th>
<th>Compensation per employee</th>
<th>Unit Labor Cost</th>
<th>Total economy</th>
<th>Agriculture</th>
<th>Manufacturing</th>
<th>Servicesb</th>
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<td>14,239</td>
<td>683</td>
<td>3,654</td>
<td>0.21</td>
<td>0.26</td>
<td>2.4</td>
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<td>11,411</td>
<td>14,832</td>
<td>0.52</td>
<td>0.56</td>
<td>0.9</td>
</tr>
<tr>
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<td>47,162</td>
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<td>25,153</td>
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<td>39,550</td>
<td>9,924</td>
<td>14,260</td>
<td>0.35</td>
<td>0.36</td>
<td>0.4</td>
</tr>
<tr>
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<td>11,167</td>
<td>3,753</td>
<td>5,574</td>
<td>0.48</td>
<td>0.50</td>
<td>0.6</td>
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<td>Hungary</td>
<td>10,834</td>
<td>18,389</td>
<td>5,787</td>
<td>9,713</td>
<td>0.53</td>
<td>0.53</td>
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</tr>
<tr>
<td>Mexico</td>
<td>8,366</td>
<td>14,751</td>
<td>2,700</td>
<td>5,098</td>
<td>0.32</td>
<td>0.35</td>
<td>1.1</td>
</tr>
<tr>
<td>Korea</td>
<td>22,857</td>
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<td>11,887</td>
<td>12,138</td>
<td>0.52</td>
<td>0.50</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

Notes: a. Value added at basic prices. b. Including public services. C. Compound average annual growth.
Source: OECD STAN database for all countries except for Turkey; SIS for Turkey
For total economy: Turkey (2004); all other countries (2003), except Poland (2002); For sectors: Turkey (2004); Portugal, Spain, Greece, Mexico and Korea (2003); Poland & Hungary (2002).

2.25 However, the increase in Turkey’s labor cost in manufacturing and services—2.8 percent and 3.7 percent respectively from 1995 to 2004—was substantially higher than any
of the other competitors and underscores the need to maintain a competitive macroeconomic environment, in particular by stabilizing the real effective exchange rate, which appreciated by 25 percent over the period. In addition, it is notable that Turkey’s favorable competitive position is underpinned by low wages. They are around two-thirds of the nearest competitor, Mexico, on average. That indicates there is considerable scope to raise living standards by achieving faster growth in both wages and productivity. Note that the definition of labor costs includes wages and salaries plus all employers’ social contributions (reviewed in chapter 4). The relatively low unit costs of labor in Turkey suggest that cost of labor is not a constraining barrier to expanding employment, particularly in manufacturing. The implications of the possible impact of a cut in non-wage labor costs are discussed below.

Non-wage Labor Costs, Employment, and Informality

2.26 Chapter 4 presents data on payroll tax rates and finds that these taxes as a share of average wages are high in Turkey relative to the OECD countries. The relatively high payroll tax rates (which include pension, health insurance, and unemployment insurance) have prompted concerns that these taxes may be restricting employment and encouraging activity in the informal sector.

2.27 The actual impact of lowering payroll taxes on employment and formality is likely to depend on the structural characteristics of the labor market: the elasticity of labor demand (how many workers firms are willing to hire as labor costs fall) and the incidence of the tax (who actually pays the tax, rather than who is supposed to pay). 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.

2.28 The unemployment rate, the degree of informality in the labor market, and the extent to which the minimum wage affects the informal sector are all factors that could affect the extent to which the employer’s contributions to payroll taxes are actually paid by workers. Econometric studies of Argentina, Chile, and Mexico suggest that 20 to 70 percent of the employer’s contribution is actually paid by workers through lower wages. On combining these estimates with labor demand elasticity estimates for Latin America, Heckman and Pages (2004) suggest that a 10 percent increase in non-wage labor costs can lead to a decline in employment rates of 0.6 to 4.8 percent. These estimates do not take into account indirect effects. If lowering tax rates has relatively little direct impact on employment but raises wages for workers, then as workers spend the extra income that could increase production and thus increase employment. The studies cited by Heckman and Pages are significant because they are based on analysis of panel data at the individual level. A number of studies, mostly of OECD countries, use cross-country regressions on macro data to investigate the relationship between employment and tax rates. These studies also find a wide range of elasticities – between -0.11 and -0.55. A more recent study of EU-8 countries (World Bank EU-8, 2005) finds elasticities between 0.5-0.8, suggesting a
strong negative impact of the tax wedge on employment. There is, however, some possibility of bias in these estimates relying on macro data, although it is not clear in which direction any bias might go. In any case, further investigation is warranted, preferably relying on micro data.

2.29 Further empirical work to guide policy is a high priority. This analytical work should be based on comprehensive survey data on employment and wages by occupational category, to assess the elasticities of labor demand and supply in Turkey and inform policy making in this area. Estimating labor demand will require detailed firm level surveys in the industry and services sectors, which are not being carried out. Estimating the labor supply functions will require the use of the household labor surveys with wage data, which were not available at the time of this study. Any reductions in payroll taxes should be cautious and accompanied by compensatory measures to preserve the credibility of the fiscal program.

**Volatility and Employment**

2.30 The economic volatility that has been a prominent feature of Turkey’s economic history can disrupt employment generation directly, and also by disrupting growth. The cross-country evidence does not provide clear evidence as to the impact of volatility on growth. In a cross-country sample of 92 developing and developed countries from 1960 to 1985, Ramey and Ramey (1995) demonstrate a robust negative correlation between growth and volatility, which persists even when other conditioning variables are introduced, such as investment and public expenditure. However, Rancierre, Tornell, and Westerman (2005) find that countries that have had occasional crises have grown faster than countries with stable financial conditions. (The two findings are not inconsistent. A country can experience growth volatility without experiencing a crisis.)

2.31 A recent IMF study of Turkey (Mody and Schindler 2004) finds that the higher fiscal volatility and inflation had a strong impact on growth for 1980–2000, relative to 1960–80. Fiscal volatility is a measure of changes in government expenditure that is not caused by the business cycle. The findings suggest that if Turkey had been able to keep inflation and fiscal volatility over 1980–2000 at the 1960–80 level, then Turkey’s per capita GDP growth rate would have been close to East Asian levels.

2.32 Some support for this finding comes from figure 2.9, which divides the period 1980–2003 into three-year, non-overlapping intervals and plots the average and standard deviation of growth in each period. The correlation between the two series in the figure is -0.82. However, correlation

| Table 2.4: Correlations of Private Investment Rate and Macroeconomic Variables |
|-----------------|-----------------|-----------------|
| GDP growth volatility | 0.32            | 0.12            |
| CPI inflation volatility | -0.18          | -0.52           |
| REER level volatility     | 0.42            | 0.37            |
| Real interest rate volatility | -0.14          | -0.27           |

Notably, calculating the correlation using year-over-year GDP growth finds a much lower correlation because of substantial volatility within each of the three year intervals.
is not causation. The relationship may be saying nothing more than that slower growth tends to result from sudden downward spikes rather than smooth variations in trend growth. One possible causal link is through investment. Some researchers report a negative association between volatility and capital. However, the connection between investment rates and volatility is at best weak, which is striking in light of the amplitude of the cycles shown in table 2.4.

2.33 With regard to a more direct impact of volatility on employment growth, data limitations make it difficult to reach definitive conclusions. Using Turkish data from 1980–2002 (with or without 2000 in the sample), this study introduced various measures of volatility into regressions seeking to explain employment, employment growth, or elasticity in terms of output growth or other macroeconomic indicators, either on their own or interacted with other right-hand variables. Regressions were estimated at both aggregate and sectoral levels. In no case did impacts appear to be particularly significant. As to more direct impacts of volatility on hiring decisions, transactions costs might suggest the outcome would be a reduction in labor demand, but only if the transaction costs in the labor market outweigh those in adjusting the capital stock.

Figure 2.8: GDP Growth and Volatility

2.34 This study also examined whether employment fell exceptionally strongly during and after crisis years, but this also failed to yield any conclusive results (table 2.5). Crisis years are shown in bold in the table. Because of timing or lagged responses, output shocks tend to be reflected in the labor market the next year.\textsuperscript{12} Thus to see the response of the labor market to crises in 1994 and 2001, one needs to look at 1995 and 2002. There is little to suggest that employers have restructured and laid-off workers during crises. For instance, in 1994 GNP fell by 6.1 percent while employment continued to grow. That may partly reflect a tendency for agriculture to act as a social safety net, as indicated by a sharp increase in agricultural employment. However, employment elasticities in industry and

\textsuperscript{12} The contemporaneous correlation between GNP and employment growth is –0.56. The correlation between GNP lagged one year and employment growth is +0.15.
services are not out of line with historical norms. In 2001, GNP fell by 9.5 percent, while employment in 2002 fell by just 0.8 percent. In this case, employment in industry and services continued to grow despite sharp declines in output in these sectors. While employment in agriculture fell, the elasticity was not exceptionally high. The construction sector—which accounts for only 5 percent of GNP and employment—shed a significant number of jobs in 2001 and 2002, though this is more likely related to the aftermath of late 1990s construction boom than any short-term volatility.

Table 2.5: Employment and Output Growth in Crisis Periods

<table>
<thead>
<tr>
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<td></td>
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</tr>
<tr>
<td>- Employment</td>
<td>-5.4</td>
<td>-9.8</td>
<td>12.1</td>
<td>3.0</td>
<td>2.0</td>
<td>-5.0</td>
<td>2.0</td>
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<td>-6.0</td>
<td>7.5</td>
<td>-2.4</td>
<td>2.0</td>
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<td>- Employment</td>
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<td>-6.8</td>
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<tr>
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<td>3.6</td>
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<td>5.1</td>
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<tr>
<td>- GNP</td>
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<td>-6.2</td>
<td>7.4</td>
<td>6.5</td>
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</tr>
</tbody>
</table>

Source: SIS, HLFS

2.35 The finding that economic crises in Turkey do not appear to have led to large-scale layoffs is consistent with the results in chapter 4 that employment protection legislation in Turkey is very strong by international standards. The literature discussed in chapter 4 suggests, however, that such legislation also makes it less likely for firms to hire workers in the first place. The intuition is clear. If firms know that it is expensive to fire workers when economic conditions turn unfavorable, they will avoid hiring them when economic conditions are favorable.

Wages, Inflation, and Employment

2.36 Wages can be a source of inflation inertia when there is a high degree of backward indexation of wages (Agenor 2004). Turkey has been experiencing high inflation since the 1970s, and the persistence of inflation is consistent with a high degree of backward indexation in wages. However, Chapter 4 notes indicate that collective bargaining agreements cover a relatively small proportion of the work force, about 700,000 workers, almost all of them in the public sector.

2.37 With such a small percentage of the work force covered by collective bargaining agreements, little is known about the extent and nature of indexation in the economy. A recent IMF study (Celasun and McGettigan 2004) uses a structural price setting model to test the importance of inflation expectations. The study finds that inflation expectations are forward-looking rather than backward-looking, and are heavily influenced by fiscal variables. Shiller (1997) reports that contracts, including labor contracts in Turkey, are not indexed to inflation but rather of short duration. Both findings are consistent with the
conclusion that backward-looking wage indexation is not a source of inflation inertia in Turkey.

2.38 The minimum wage in Turkey is seen as a mechanism to provide a reasonable standard of living for the poorest workers. However, a minimum wage that is high relative to the average wage can lead to lower employment levels. The relationship between minimum wage and employment is particularly complicated in economies where on the one hand, the minimum wage requirement is not enforced for all workers, and on the other hand, the minimum wage serves as a signal to the informal sector. Whether the adverse employment effect of a high minimum wage is offset by non-compliance is an open empirical question.

2.39 Minimum wage in Turkey has been increasing rapidly. The ratio of minimum to average monthly wage in manufacturing increased from 33.9 percent to 42.1 percent between 1999 and 2004. Currently, the minimum wage in Turkey is 43.9 percent of the average monthly gross wage in manufacturing (2005Q1). By contrast, a ranking of EU candidate, accession and member countries for 2004 (Eurostat 2004) finds the minimum wage as a proportion of average earnings in industry and services varied between 34 and 50 percent. Poland was below 35 percent, the Czech Republic, the United Kingdom, Hungary, and Portugal were between 38 and 47 percent, while Ireland, the Netherlands, and Malta were in the range of 47 to 50 percent.

### Table 2.6: Ratio of Minimum to Average Wage

<table>
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<tr>
<th>Country</th>
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<tr>
<td>Poland</td>
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</tr>
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<td>Czech Rep.</td>
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<tr>
<td>UK</td>
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<tr>
<td>Hungary</td>
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</tr>
<tr>
<td>Portugal</td>
<td>40.7</td>
</tr>
<tr>
<td>Netherlands</td>
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</tr>
<tr>
<td>Ireland</td>
<td>50.0</td>
</tr>
<tr>
<td>Malta</td>
<td>49.0</td>
</tr>
</tbody>
</table>

Source: Eurostat, minimum wages as a proportion of average monthly earnings in industry and services; Netherlands, Poland, Portugal—2003.

a. For Turkey: Author calculations. Average gross minimum wage as percentage of average gross wage in manufacturing industry (private).

### Macroeconomic Policy and Employment

2.40 The impact of monetary and fiscal policies on labor market outcomes such as employment and wages can be difficult to predict. This is particularly true in economies like Turkey where the need to continuously refinance the debt means that financial markets responses to government policy will have macroeconomic and labor market impacts. Here, simulations from a computable general equilibrium model are used to simulate the impact of two policies: an increase in the central bank’s policy rate, and an increase in the value added tax (VAT) rate.

**Simulating an Increase in the Policy Interest Rate**

2.41 The Central Bank of Turkey expects to move to inflation targeting in 2006. However, there is a concern that monetary policy that targets inflation can have perverse effects in a high-debt economy with a high proportion of debt denominated in foreign currency and market concern about debt sustainability. An increase in the policy interest rate can lead to a decrease in inflation by decreasing aggregate demand, output, and inflation, or through a real appreciation, which would decrease inflation directly and also by decreasing aggregate demand. If, however, rising interest rates lead to concerns about
the probability of default and hence to a real depreciation rather than appreciation, and higher inflation, then fiscal policy might be more suited to control inflation (that is, fiscal dominance would prevail). Blanchard (2004) estimates these channels for Brazil and argues that in 2002, fiscal dominance prevailed and the monetary policy would not be effective in targeting inflation. This study simulates the outcomes for Turkey.

2.42 The simulation finds that in response to a 5 percent rise in the interest rate, the inflation rate is reduced significantly in the short run by almost 4 percent, with a maximum reduction of 9 percent over the medium run, stabilizing around a fall of 5.5 percent in the long run. Interest rate policy is effective in reducing inflation. Increased (lending) interest rates affect the real economy through two channels: reduced investment demand, and increased costs of working capital. The first channel directly reduces demand for private formal sector investment goods. Combined with the reduction in formal sector disposable income and consumption, this leads to strongly reduced demand for private formal sector goods compared to other sectors of the economy and falling GDP. Over the financial side, banks’ net worth is negatively affected by the increasing cost of central bank funding. However, it is positively affected by the increasing bond and lending rates.

2.43 The nominal exchange rate appreciates by around 10 percent in the medium run and 6 percent in the long run, closely mirroring the domestic price level. The required primary surplus/GDP ratio increases sharply, reaching a maximum of 5.6 percentage points above the base line path. The fixed budget constraint requires that bond financing is maintained at base run levels while bond interest payments rise sharply. The government budget deficit is closed through declining transfers to households. With declining transfers, real disposable income of formal sector households decline by around 12 percent in the short run.

2.44 The burden of adjustment falls on formal sector labor. In addition to the decrease in government transfers, real wages fall for skilled workers and to a lesser extent for unskilled workers. As was the case with the payroll tax cut, the adjustment takes places mostly through wages rather than employment. However, unemployment increases slightly—more so for skilled labor with reduced demand—and wages decline. There are smaller declines in agricultural and informal sector wages, leading to a narrowing of wage differentials. These wage differentials leads to reduced migration between the sectors. With the increase in interest rates, there is a sharp increase in the earnings of rentiers and profit earners.

2.45 These results suggest that a disinflation attempt based on a rise in official interest rates increases the probability of default. This occurs essentially because increase in interest rates has a contractionary effect, which translates into lower tax revenues, and hence lower credibility. These results are consistent with those derived by Blanchard for Brazil with a somewhat different mechanism. These results suggest that inflation targeting might have perverse effects in the current Turkish context. A caveat is that the model assumes that credibility depends on fiscal policy. An alternative is to model credibility as dependent on monetary policy: for example, by making credibility depend on the difference between expected and actual inflation. Such a mechanism is likely to reduce the impact of the contraction on the probability of default.
Simulating an Increase in the Value Added Tax Rate

2.46 Fiscal adjustment has been the cornerstone of Turkey’s stabilization and crisis recovery program. Turkey has achieved a relatively high primary surplus each year and this has underpinned the growing credibility of the program. However, there has been concern about the quality of fiscal adjustment. One source of this concern is the argument that revenue adjustments are less sustainable than expenditure adjustments, which are more likely to be reversed; and that Turkey has relied on increased revenue adjustment. Another is the view that a reliance on revenue measures such as high tax rates is inhibiting growth and encouraging informality. The mechanisms through which these adjustments might work is illustrated through a simulation of a 2.5 percent increase in the value added tax (VAT).

2.47 The tax rate increase raises the inflation rate significantly in the short and medium run by around 3.6 percent, before returning to baseline levels as GDP contracts. First, the tax rate increase leads directly to increasing prices for formal sector goods. This tends to lower demand for formal sector goods and lead to lower production. The increase in government revenue improves credibility and leads to a decrease in government bond rates by 1 percent in the short run and reaches a maximum reduction of 8 percent in the medium run. The reduction in interest payments leads to rising household transfers and permits a long-run reduction in the primary surplus of around 2.4 percent of GDP. Incomes of formal sector households rise, while rentiers’ income falls with the fall in bond rates.

2.48 The nominal exchange rate depreciates by 13 percent in the medium run, and by 10 percent in the long run, following the increase in the general price level. Although the real exchange rate appreciates somewhat, the contraction in GDP leads to a reduction in domestic absorption and hence a slight improvement in the current account balance. Despite the improvement in the credibility of government’s program and lowering of bond rates, the exchange rate depreciation increases the domestic currency value of foreign
currency loans. The domestic risk premium increases through this balance sheet effect, and lending rates increase.

2.49 The combination of an increasing lending rate and tax-induced price increases of formal sector investment goods reduces investment demand strongly in the short run. Lower levels of investment lead to lower production capacity and reduce the marginal product of other factors of production in the private formal sector. However, the increasing credibility of fiscal policy reduces the impact of this effect in the medium and long run. The credibility of fiscal policy increases because increasing tax revenues lowers the debt-to-tax revenues ratio, leading to a lower probability of default (in the modeling context). Overall, GDP contracts by only 0.3 percent in the long run.

2.50 The reduced demand for formal sector goods leads to an increase in unskilled unemployment of about 2 percent. The share of the informal sector does not increase, as the adjustments take place on wages. Real wages in the formal sector fall, particularly for skilled employment, while wages in the informal sector rise. The wage differential between formal and informal sectors declines, and migration to the formal sector declines.

2.51 A clear implication of the simulations on payroll taxes and VAT, as well as the sluggish employment response to macroeconomic volatility, is that flexibility in the labor market has been through wage adjustments. This was possible in a high inflation environment because real wage cuts were easier to disguise. They were also easier to justify in the aftermath of crises. Going forward, as inflation falls to levels not seen in 30 years, it will be more difficult to generate real wage adjustments. This suggests a macroeconomic case for a legal framework that makes it easier to achieve employment adjustments in response to macroeconomic conditions. Chapter 4 suggests that this will also increase employment.
Conclusions

2.52 Sustaining growth is the key to long-term employment generation. A comprehensive job creation strategy would include measures that supported all three components of growth: physical capital accumulation, human capital accumulation, and productivity growth.

2.53 In the medium term, structural change will affect the relationship between productivity and employment as workers move out of low productivity sectors such as agriculture. The relationship between growth and employment can also be affected over the medium term by labor market legislation and institutions, as firms react to their environment. The impact of labor market regulations and detailed policy recommendations is the subject of chapter 4.

2.54 Labor costs are sufficiently low relative to productivity to keep labor in Turkey internationally competitive. Chapter 4 notes that non-wage costs are relatively high in Turkey. This has raised concerns that these high non-wage costs may be restricting employment and encouraging informality. Simulating the impact of lowering payroll taxes found that the impact is mostly on wages rather than employment. Lowering the payroll tax raises formal sector wages and reduces unemployment only slightly. There is little or no impact on the share of the informal sector in employment.

2.55 A recent IMF study finds a strong link between fiscal volatility and growth. However, this study is not able to find a link between volatility and employment. This would be consistent with employers adjusting to changing economic conditions not by hiring or firing, but rather through real wage adjustments. Both macroeconomic volatility and strong labor regulations encourage wage rather than employment adjustments.

2.56 Using fiscal policy for employment generation, or reducing informality, is limited by the rigidity of employment and budgetary concerns. A simulation of the impact of adjusting the VAT rate found that the impact is greater on wages than on employment, and there is little effect on informality. If it is not accompanied by compensating fiscal measures, there is an impact on the probability of default. Monetary policy choices also have labor market implications. Raising the policy interest rate (as might be required under an inflation targeting framework) might raise the risk of default as long as credibility is dominated by fiscal policy rather than monetary policy. This would also have adverse effects on employment.

2.57 Labor market flexibility has been achieved through wage adjustments. Going forward, such adjustments will become difficult as inflation falls. A legal framework that allows more employment flexibility will facilitate macroeconomic adjustment (in addition to employment growth, as will be argued in chapter 4).
CHAPTER 3. LABOR MARKET TRENDS

A. INTRODUCTION

3.1 This chapter uses household labor force surveys collected between 1988 and 2004 to drill down into some of the labor market dynamics identified in chapter 1. Following a discussion of the data, Section C reviews evolving trends in labor force participation over the period, with a focus on establishing patterns of entry to and exit from the labor force, and examining how these have been changing over time. Particular attention is paid to the impact of the change in pension rules in 1993. Section D appraises the changing structure of the work force, with the shift from agriculture to industry and services, as well as the growing informality in the labor market. Section E provides, for the first time, a discussion of the evolution of wages based on nationally representative household surveys. Key patterns by sector, age, education, and gender are reviewed, as is an analysis of how the returns to labor have been evolving over time. Concluding remarks are provided in the final section.

B. DATA SOURCES AND LIMITATIONS

3.2 The primary data sources for the analysis in this chapter are Household Labor Force Surveys (HLFS) conducted nationwide by the Turkish Statistical Institution (TURKSTAT). HLFS data were collected biannually (in April and October) from 1988 to 1999 and quarterly since 2000.13 Major improvements in the quarterly HLFS include the use of a moving reference week, a larger sample, an expanded sample frame that allows regional representation, and a rotating panel design. However, some shortcomings are also evident. First, the expanded sample frame may have introduced a break between the old biannual and the new quarterly series. This requires caution in time-series analyses. Second, since information is not collected about employment and unemployment spells, only limited information for analyzing labor market dynamics is available. The exploitation of the panel dimension of the HFLS awaits a better understanding and resolution of the attrition problems.14

3.3 The HLFS questionnaires rely on standard ILO definitions. Select tabulations based on the HLFS data may be obtained from the web page of the SIS. This chapter uses the web-based tabulations (especially in Section D) as well as micro data from seven biannual rounds (1988 October, plus both rounds of 1989, 1994, 1999) and 12 quarterly

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14 For an examination of the attrition problems, resulting from people dropping out of the panels, and summary information of transition rates, see Tunali and Baltaci (2003).
rounds (2000–02) of the HLFS. Except for the 1988 October data set, only the raw HLFS micro data (that is, the data without the population weights) were available to us.\(^{15}\)

3.4 A major limitation of the HLFS is the lack of wage information after 1989. The Household Income and Distribution Survey (HIDS) conducted nationwide in 1994 provides detailed information on income by source, but the labor market questions are not the same as those in the HLFS. The Household Budget Study (HBS) conducted nationwide in 2002 constitutes the first attempt to collect monthly labor market and income data using a unified methodology, over the entire year. Unfortunately, the sample size of the HBS is considerably smaller.

3.5 Arguably the biggest data shortcoming is the dearth of time-series data on wages.\(^{16}\) This report relies on cross-section earnings data at three points in time to paint a broad picture of the changes that took place during the post-reform era. The early observations are from the 1988 and 1989 HLFS, which were collected before the boom in real wages that occurred over 1990–92. The mid-way observations come from the 1994 HIDS. The earnings data from this survey were collected retrospectively in January 1995, for the calendar year 1994. During the first three months of that year, the Turkish lira lost 70 percent of its value against the U.S. dollar over mounting concerns about the government’s handling of public sector borrowing. The last observation is from the 2002 HBS. The inherent difficulties in comparing these data limit the conclusions that can be drawn from this analysis. As wage data from the Labor Force Surveys become available, more detailed analysis will be possible.

C. LABOR FORCE PARTICIPATION

3.6 An important feature of the Turkish labor market is the low and declining level of labor force participation. This subsection establishes the broad patterns of participation/non-participation and uses Household Labor Force Survey data to detect where changes have been taking place.

3.7 Participation behavior captures responses of individuals to constraints and incentives that they face in the labor market. Consequently, examination of the collective responses of identifiable groups conveys information about the evolution of the labor market for the distinct groups of individuals. The discussion that follows takes a life-cycle view and examines the changing nature of the transition from school to work, the variations in the period of attachment to the labor market, and the link between exit behavior and retirement laws. Since location of residence and education influence perceptions and define the employment opportunities that individuals face, the discussion stratifies the data by these observables to gain additional insights.

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\(^{15}\) The weights get revised frequently as improved population projections become available.

\(^{16}\) The available series come either from establishment surveys (directed to firms that employ 10 workers or more in manufacturing), or State employees. These are available in the form of crude averages. Special surveys offer more detailed information (such as sex, age, education, tenure) but coverage is not much broader. Additional information on the establishment surveys and a brief summary of the patterns as of 2001 may be found in Tunah (2002).
Labor Force Participation Trends

3.8 The analysis begins by placing Turkey’s labor force participation patterns in international perspective, following the discussion of employment trends in chapter 1. Table 3.1 compares Turkey’s participation rates in 2004, overall and by age and sex groupings, with OECD European members and with all OECD countries, for people from ages 15–64. Turkey’s aggregate participation rates are far below those in other OECD countries. Turkey’s rate of 51.5 percent is the lowest of the 28 countries included in the OECD tables. Hungary, the next lowest, has a rate almost ten points higher (60.5 percent). This largely reflects the extremely low participation rate of women in the Turkish labor force: 27.0 percent, which is about half of the OECD norm. This low percentage for women holds in all age categories, but is most striking in the prime-age group (25–54 years), where only about 3 in 10 Turkish women are active, compared to nearly 7 in 10 in other OECD countries. These female participation rates reflect differences between Turkey and most other OECD countries in terms of the division of labor by gender and marriage patterns.

3.9 While the overall male participation rate in Turkey is also below OECD averages, the difference is relatively small, especially in comparison with European member countries. However, the decline in male activity in the 55–64 age group is much more significant in Turkey than in other countries.

<table>
<thead>
<tr>
<th>Table 3.1: Labor Force Participation Rates (LFPR) Turkey and other OECD countries, 2004 (in percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LFPR, all persons aged 15–64</strong></td>
</tr>
<tr>
<td>Men, 15–64</td>
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<tr>
<td>Women, 15–64</td>
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<tr>
<td>LFPR, ages 15–24</td>
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<td>Men, 15–24</td>
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<td>LFPR, ages 25–54</td>
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<td>LFPR, ages 55–64</td>
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<td>Men, 55–64</td>
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<tr>
<td>Women, 55–64</td>
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</tbody>
</table>

*Source: OECD Employment Outlook 2005 (annex tables B and C).*

3.10 The two key issues emerging from the international comparison are the very low participation rates of women and early exit of older (especially male) workers from the labor market. Understanding these observations is important for understanding Turkey’s low activity rates. These factors will be discussed further below.

3.11 Trends in Turkey’s participation rates from 1988 to 2004, including separate rates by sex and location, are presented in figure 3.1. The rates in this figure are based on the HLFS and pertain to all people 15 years of age and older. The overall pattern has been a

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17 The inclusion of people aged 65 or more reduces the participation rate somewhat. In 2004, the rate for 15 to 64-year-olds was 51.5 percent, compared to 48.7 percent for all people 15 or over.
secular decline, with the aggregate rate falling 8.8 points, from 57.5 percent to 48.7 percent. This is part of a much longer trend in declining participation, going back at least to the 1960s.\footnote{Turkey’s participation rate was 88 percent in 1960, 75 percent in 1970, and 71 percent in 1980, according to data collected by the OECD. These early figures are based on Census information, which yields higher participation rates than the HLFS. However, the trend is indisputable.} This long-term pattern, including the most recent 16-year period shown in the figure, is very closely linked to the transformation of agriculture away from small-family farming which is characterized by labor-intensive technology and very high participation, and the emergence of an urban economy where participation has been more selective (especially for women), both because of labor supply choices and because of limited employment opportunities.

3.12 In addition to the overall decline in labor force participation, three observations can be made from the historical patterns illustrated in Figure 3.1. First, participation rates have decreased significantly (at least 7 points) for three of the four gender-location categories. The exception is urban females, whose participation has remained at a constant, and very low, rate throughout the period. Second, rural participation has consistently been higher than urban participation. Third, the male-female differential has been much greater in urban than rural areas.

3.13 Two additional comments deserve mention regarding female participation trends. First, one might have expected that the participation of women would have increased over this period, especially in urban areas. This static picture belies two favorable developments that are generally associated with increasing female participation: improvements in educational attainment, and reductions in fertility (especially in urban areas). However, urban female unemployment rates started very high in 1988 and
decreased steadily over time, falling from 28 percent to 18 percent by 2004.\textsuperscript{19} During this same period, the unemployment rate for urban males fluctuated around 11 percent. The decline in the unemployment rate for urban females is consistent with women dropping out of the labor force due to a “discouraged worker” effect. Examination of the composition of the urban labor force suggests that while women with lower levels of education were discouraged by high unemployment rates and quit searching, younger and better-educated women joined the labor force. Second, the decline in the participation of rural women is associated with developments in agriculture and specifically the decline of small-family farming.

\textit{Age Participation Profiles}

3.14 To establish the broad patterns of entry to, and exit from, the labor force for the sub-populations under consideration, age profiles of participation can be examined. Figure 3.2 presents profiles for people aged 15–65, conditional on location and gender, using HLFS data for 1989 and 2002. Each point in these profiles can be interpreted as the average LFPR for a particular age.\textsuperscript{20}

3.15 Looking first at the 2002 profile (upper panel), the rural-urban and male-female differentials noted above are evident. However, it is the shapes of the curves that reveal entry and exit differences. These provide evidence that participation in rural areas, compared to urban areas, begins and peaks earlier, and lasts longer. This reflects the predominance of agriculture in rural areas and the patterns of participation in agricultural activities. Looking at men, note the initial similarity in the shapes of the urban and rural curves (albeit with a slight lag in the former and a slightly higher peak) until about age 40, when the participation of urban males drops off much more steeply. By age 55, about half of urban men are no longer active—after almost universal participation in their early 30s. At age 55, on the other hand, over 75 percent of rural men are still active.

3.16 Figure 3.2 also illustrates differences in male-female participation, beyond the obvious differential in magnitude. Compared to females, the pace of entry (time between age of initial and peak entry) is considerably slower for males. Although virtually all men eventually join the labor force, there is substantial variation in age of entry because of differences in educational attainment and timing and length of military service. This is true both for both urban and rural men. By contrast, only a fraction of females ever enter the labor force, but most who do enter at a young age. The profiles for women are relatively flat, especially in rural areas. In urban areas, those who do enter the labor force often leave upon marriage.\textsuperscript{21}

\textsuperscript{19} Tunali (2003, chapter 5) analyses the unemployment data and makes this point.
\textsuperscript{20} These and other profiles included in this report are locally weighted smooth curves that have been obtained using the Lowess command in STATA 8, with the bandwidth set at 0.4.
\textsuperscript{21} These are well-known patterns, which have been established in earlier studies. See for example, Dayiöglu (2000); Kasnakoğlu and Dayiöglu (1996); Tunali (1997, 2003 Ch.4); Tunali and Başlevent (2003). Supporting evidence is provided below.
3.17 A comparison of the two panels of figure 3.2 shows how entry and exit patterns have changed over the past 15 years. This reveals two important developments. First, entry to the labor force has slowed over time. This is attributable to the impact of lengthening of years of schooling. As continuation rates from eight years of primary to high school and beyond are likely to improve further, the downward drift of the left tail can be expected to continue for some time. Second, attachment of the working age...
population to the labor force has weakened. Compared to other OECD countries, working careers in Turkey are now extremely short. In urban areas, this may be at least partly attributable to the 1992 round of liberalization of retirement policies, an issue that will be pursued below. To the extent that these policies matter, the recent increase in the legal retirement age should result in a delaying of exit in the years ahead. It might take the full 20-year transition period for the high plateau in urban participation rates to extend until 58 to 60 years of age.

Figure 3.3: Age-Participation Profiles by Education, Urban Males, 2002 and 1989

Urban Turkey, 2002 -- Males

Urban Turkey, 1989 -- Males
3.18 The last dimension of labor force participation examined in this section concerns the role of education. It is well known that educational attainment influences labor supply behavior. Figures 3.3 and 3.4 illustrate age profiles of participation conditional on education.
education for urban men and women, respectively, for 2002 and 1989.\(^{22}\) Four levels of education are shown: \(^{23}\)  primary or less (illiterates, literates who do not hold a diploma, plus those who completed five years of primary school prior to the basic education reform); \(^{24}\)  middle school (graduates of both general and vocational lower secondary schools before the basic education reform, plus graduates of eight years of basic education in the case of 2002); \(^{24}\)  high school (graduates of both general and vocational high schools), and university (graduates of two-year and four-year programs, as well as post-graduate degree holders).\(^{25}\)

3.19  The participation profiles of males in urban areas indicate that time of entry into the labor market varies by educational attainment (figure 3.3). Participation rates converge around age 30, but then diverge soon after. Participation rates of males with less than university education begin to decline after age 35. University-educated males exit later than others, although decline sets in around the minimum retirement age (43 years). Participation gradients observed for young males also reflect compulsory military service.\(^{26}\) The profiles in 2002 and 1989 are generally similar, with one significant exception. Poorly educated males (primary or less) have a much slower pace of entry in 2002, suggesting that entry for unskilled workers has become increasingly difficult over time.

3.20  Figure 3.4 shows the age-participation profiles of urban females in 2002 and 1989. The role of education is more important than it was in the case of urban males. Participation profiles shift up substantially with more education, and forcefully capture the participation-enhancing influence of better educational attainment. Lifecycle effects are clearly visible, except for the least educated. It is interesting, and unexpected, that the

\(^{22}\)  The focus is exclusively on urban areas because the link between education and labor force participation is less evident in rural, largely agricultural regions.

\(^{23}\)  The three-tier education system in Turkey has been undergoing changes. Until the passage of Law No. 4306 in 1997, the primary level consisted of five years of elementary school. Starting with the 1998–99 school year, compulsory education was extended to eight years of basic education by combining elementary school with what used to be termed middle school. As part of 1997 reform, vocational middle schools ceased to exist. The secondary level consists of a minimum of three years of general or vocational high school, plus one or two years of language preparation in schools where the medium of instruction is a foreign language. Law No. 4702, enacted in 2001, provides the framework for extending basic education to 12 years. Since the 8+4 year structure called for major curriculum reforms, its implementation has been delayed. The tertiary system includes two-year higher education programs oriented toward vocational education and four-year programs that provide university degrees. Many universities have both types of programs and also grant graduate degrees.

\(^{24}\)  Up to an including 1999, the middle school category does not include anyone with eight years of basic education. The youngest in the 2002 sample (ages 15–17) are the first beneficiaries of the reform.

\(^{25}\)  In the 2002 sample, those with a masters degree account for 5 percent of those with higher education. Among the remainder, a third have two-year degrees, while two-thirds have four-year degrees. Gender differences are minuscule. Assuming that it took two years to get the masters, the average individual in the university category had 15.1 years of education in 2002. The earlier surveys do not provide information on the breakdown. However, the share of diploma holders from two-year and post-graduate programs was very low in 1989, and increased gradually over time.

\(^{26}\)  Employers are likely to shy away from investing in employees who will have to quit and serve in the military, so the jobs that are available for young males are not very desirable. Evidently poorly educated males do not have much choice, and enter the labor market anyway. Males with middle or high school education appear to be more selective—or least desirable, as viewed by employers.
variation in the age-specific labor force participation rates is highest among the best educated. University-educated women have participation rates in the 80 percent range between their mid-20s and mid-30s. Then exit rates are quite striking. By age 50, only about one in three is still in the labor force. Evidently, educated women are more likely to be attracted to the labor market, but conditional upon entry, are not likely to remain attached for a long time.

D. STRUCTURE OF EMPLOYMENT

3.21 Many of the changes in labor force participation are closely related to the evolution in the structure of employment from 1988 to 2004. This subsection relies on the HLFS database on the SIS website to characterize the changes in the composition of employment over the period by sector, type of workplace (including public vs. private), and by formal vs. informal status (whether covered by social security). The data were collected bi-annually between 1988 and 1999, but throughout the year starting with 2000. Thus the possibility of a break in the employment series between 1999 and 2000 should be kept in mind.

Employment by Sector

3.22 Turkey has experienced significant changes in the industrial structure of employment, as noted in chapter 1. The shifts in the overall shares between 1989 and 2004 are shown in figure 3.5 for four sectors: agriculture (including hunting, fishing and forestry); manufacturing (including electricity, gas, water, and mining and quarrying); construction; and services. In 1989, agriculture accounted for 47 percent of total employment while services were second at 32 percent. The share of manufacturing was 16 percent and construction was 5 percent. As discussed, agriculture’s share has dropped dramatically over this period, and was down to 34 percent in 2004. Services have now become the largest employer, with 43 percent of total employment. The share of manufacturing went up slightly (2 points, to 18 percent), while construction’s share remained constant.

3.23 Over the 16-year period, there was a net loss of around 850,000 jobs in agriculture. According to the first HLFS conducted in October 1988, employment in Agriculture was close to 8.3 million workers. It increased by nearly 0.9 million between 1988 and 1991, then decreased by about 1.4 million between 1991 and 1993, but recovered and reached around 8.9 million workers in 1999. Starting with 2000, the impact of the cutback in agricultural subsidies was felt. In 2004, agricultural employment was around 7.4 million.

3.24 During this period, 1.2 million new jobs were added in manufacturing and 3.7 million in services. Nearly half a million jobs were added in the construction sector during the 1990s boom. The average rate of increase was approximately 100,000 per year between 1990 and 1993 and 20,000 jobs annually between 1993 and 1999. The toll of the crash of 2001 was a loss of about 400,000 jobs in two years, leaving the sector with about 47,000 fewer jobs in 2003 than in 1988. However, this was more than offset in 2004, when around 64,000 jobs were created in this sector.
Employment by Age

3.25 An examination of the employment patterns by age group, including how these have differed by sector, reveals useful clues about the evolution of Turkey’s labor market structure. Four age groups are considered: entry to employment (15–24 years), early-career (25–34 years), mid-career (35–44 years), and late-career (45 and above). From 1988 to 2003, overall trends in the employment levels and shares of these groups reflected demographic trends and, in the case of early entrants, education reforms. The number and share of early entrants decreased substantially, falling from 26 percent of total employment in 1988 to only 18 percent in 2003. With demographic developments, early- and mid-career employment increased. The shares for these two groups grew from 27 percent to 33 percent and 21 percent to 25 percent, respectively; almost the entire gain was among males. The number and share of late-career workers also increased.

3.26 Looking first at agriculture, there is clear evidence of the aging of that sector’s workforce. This is what one would expect with a declining, traditional sector. Employment in agriculture for the 15–24 year-old workers has been decreasing steadily since the mid-1990s. The post-1999 losses recorded in agriculture are predominantly entry-level jobs, with some loss also by early-career workers. In 1988, early entrants, together with late-career workers, had the lion’s share of agricultural employment (30 percent and 34 percent, respectively). By 2003, the former group accounted for only 18 percent, while the latter had the largest share (40 percent).
3.27 The aging of the agricultural workforce would be expected to go hand-in-hand with rural-urban migration, which tends to disproportionately involve the young. However, the decline in rural labor force participation rates, including among the early-entrants (figures 3.1 and 3.2) suggests that a significant portion of the rural population, and young rural residents failed to exercise the migration option. Entry-level manufacturing jobs for males have been disappearing steadily since 1997. Furthermore, males in the 15–24 age bracket did not benefit from the construction boom of 1990–99. Overall, services did a better job of generating entry-level jobs, but over 200,000 such jobs were lost from 2000 to 2003.

3.28 Turning to the older age groups, between 1988 and 2003 the growth in early-career jobs was exclusively in manufacturing and services. The increases were substantial (61 percent and 76 percent, respectively), with males benefiting more than females. Employment for mid-career and late-career workers also expanded in these two sectors, but at slower rates. The increase registered over the 15-year period was substantially lower in manufacturing (42 percent and 20 percent for mid- and late- career workers, respectively) compared to services (74 percent and 46 percent, respectively). The bulk of the expansion in these two sectors occurred after 1993 (especially in the case of late-career workers). For all three groups, the growth rate in manufacturing slowed down after 1999, while job expansion in services was faster after 1999.

Informality in the Labor Market

3.29 The informal-formal distinction is often made on the basis of registration in the social security system. This analysis relies on coverage information obtained from the HLFS and interprets the evidence on covered employment in light of the participation and employment patterns discussed earlier. To this point, this chapter has considered all types of employment. However, since public provision of social security is primarily directed at urban wage and salary (W&S) earners, the analysis in this subsection is restricted to this category of employment, which includes both regular and casual wage and salary workers. According to the 2004 HLFS, W&S workers comprised 72.2 percent of the employed urban workforce (50.8 percent of overall employment) and, among urban W&S earners, 72 percent were registered with a social security institute (70 percent of all W&S earners).

3.30 Age-social security coverage profiles for 2002 and 1989, broken down by broad education categories, are shown in figure 3.6 for males and figure 3.7 for females. This clarifies the roles attributable to education, gender, and age, and helps reveal how these have changed over time.

27 There are three major publicly administered social security institutions in Turkey. These are the Social Insurance Institution (Sosyal Sigortalar Kurumu, or SSK), which is open to private sector employees and workers in the public sector; the Retirement Fund (Emekli Sandığı, or ES), which covers civil servants, and Bağ-Kur (BK), which is a fund for the self-employed. It is possible for individuals who work for pay to self-insure via BK. Hence this analysis does not distinguish between types of coverage. Chapter 4 discusses the social security system in more detail.

28 According to HLFS 2000-2002, individuals who work for pay comprise 71 to 73 percent of the workforce. However, only 48 to 50 percent of all employed individuals have social security coverage.
3.31 Education emerges as a key variable in determining the likelihood of social security coverage. Individuals with primary-school education or less, who comprise a majority of W&S workers are especially disadvantaged. The higher one is on the educational ladder, the higher is the likelihood of coverage. At the point at which the 2002 profiles peak for males (around age 40), almost all W&S workers with university education are covered. This share declines as educational attainment falls. As Figure 3.6 indicates, about one-third of men with primary education or less still do not have coverage at the peak of their profile. The education differential is even larger for women. Coverage is almost universal for the university-educated at the peak point, but the majority of women with primary school or less are uncovered (figure 3.7). Education also matters in determining how quickly workers find a job that offers social security coverage. The profiles in figures 3.9 and 3.10 show that, with each higher level of educational attainment, the number of years decreases between entry and the peak point of coverage.

3.32 Some gender differences are apparent. First, compared to their male counterparts, young (age < 25) females are more likely to hold jobs that provide coverage. This is especially true for young women with more schooling (high school or university). However, less educated females are less likely to move into jobs in the covered sector over the course of their work lives. This pattern is clear in the profiles after the age of 25 for men and women with primary education or less.

3.33 It is important to note that all age-coverage profiles have shifted down over time. This lends credence to the view that the informal sector has been expanding. In 1989, nearly all female W&S workers who had middle school education or better were able to obtain social security coverage before participation peaked. But over time, the situation has deteriorated. The deterioration was across the board for the less educated (middle school or less) W&S earners. In the case of those with university education, the decline in coverage was especially sharp between 1999 and 2002. Late career workers were hurt the most, followed by new entrants.

3.34 It is tempting to attribute the low labor force attachment of individuals in the 40 to 65 age group to the generosity of the social security system. However, there are several difficulties in reaching this conclusion. First, the low-participation patterns pertain to all types of employment, while public provision of social security is primarily directed at wage and salary workers. Second, the HLFS instrument does not seek information on the coverage status of non-participants who have past work experience. Thus, a direct link cannot be established between exit behaviour documented earlier and coverage, using the HLFS. Other data sources are examined next, to supply the missing evidence.

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29 In reconciling these profiles with the low aggregate social security coverage rates reported earlier, it is worth remembering that large numbers of W&S earners have low education. In October 1988, 65 percent had primary school or less. While the educational attainment of the workforce has improved considerably, this share was still 44 percent in 2002.
Figure 3.6: Age-Social Security Coverage Profiles by Education, Urban Male Wage and Salary Workers, 2002 and 1989

Source: Author calculations using HLFS data
Figure 3.7: Age-Social Security Coverage Profiles by Education, Urban Female Wage and Salary Workers, 2002 and 1989

Source: Author calculations using HLFS data
3.35  More direct evidence on possible explanations for labor force exit behavior, and particularly the role of the pension system, is shown in figure 3.8. Based on micro data from the HIDS in 1994 and the HBS in 2002, this figure draws age-retirement profiles for these two years. These profiles indicate the percentage of people in each sex-location category receiving public pension benefits at every age. These percentages are affected by retirement provisions of the public social security system, which have undergone a number of changes in the period under consideration in this chapter (box 3.1).

### Box 3.1: Changes in Retirement Rules

During the period under investigation, several changes took place in the retirement age. Law No. 3246, which was passed in 1986 and remained in effect until 1992, had a minimum age threshold of 55 for females, and 60 for males, and a minimum premium payment equivalent to 5,000 days of work. Law No. 3774, which was passed in February 1992, replaced the minimum age stipulation by a minimum period of attachment to the social security system (set at 20 years for females and 25 for males). It left the premium payment requirement unchanged. The most recent change came in August 1999, with Law No. 4447. The minimum age thresholds were reinstated, respectively at 58 (female) and 60 (male) years of age. Furthermore, the premium payment requirement was raised to the equivalent of 7,000 days of work. Legal challenges to the constitutionality of the new law were not resolved until May 2002, when revisions to the grandfather clauses extended the transition period to 18 years for females, and 22 for males.

3.36  The age threshold for full retirement in Turkey has been implicated as being one of the most generous in the world. The 1992 legislation effectively brought down the minimum retirement age to 38 for females, and 43 for males. The steep gradients displayed by the male profiles in figure 3.3 represent the rapid increases in the number of pension beneficiaries as workers move through the prime-age category and into older worker status. Among males residing in urban areas in 2002, those drawing retirement pensions account for 21 percent of 45 year-olds, 64 percent of 55 year-olds, and 78 percent of 65 year-olds. The figures are quite high for men in rural areas as well. As a comparison of the two panels in figure 3.8 indicates, the percentages receiving pension income were quite a bit lower in 1994. Pair-wise inspection of figures 3.2 and 3.8 reveals that after age 45, the age-specific participation and retirement rates of males typically add up to one, and only occasionally to more than one. Arguably, this establishes the link between the generous age threshold for retirement and early exit of males from the labor market.

3.37  Female retirement profiles are relatively flat, but these must be interpreted alongside the participation profiles in figure 3.2. That figure shows that the urban labor force participation rate for 45 year-old females was around 17 percent in 2002, and about 8 percent for 55 year-olds. The 2002 retirement profiles show that 10 percent of 45 year-old urban females, and 18 percent of 55 year-olds, had retirement income in 2002. When

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30 To draw the age-retirement profiles based on the HIDS 1994, an individual was classified as “‘retired” if he/she listed a positive amount in response to the question on retirement pay from the State (section 5.C, question 73.1). Cash transfers from the State recorded in HBS 2002 include pension, tax return, old age income, unemployment pension, orphan and widower pension, and disability (war veteran) pension. The 2002 age-retirement profiles are based on the first item only (section 8.B, question 8.75.a).

31 The link can be tightened by using the participation information in HIDS and HBS. Note, however, that the definition of participation in these data sets is not the standard ILO one.
these shares are compared with the incidence of labor force exit for urban women at these ages, it is clear that those drawing retirement income account for the lion’s share of inactive women who worked in the past. This suggests that generous retirement age provisions provide the incentive to exit early.

Source: Author calculations based on the HIDS in 1994 and the HBS in 2002
E. STRUCTURE OF EARNINGS

3.38 Examination of the structure of earnings serves several purposes. Since wages influence labor supply decisions, the examination can yield additional insights about the determinants of participation behavior. Age profiles of earnings indicate how labor market experience is rewarded. Comparisons of profiles by educational attainment reveal the returns to schooling. The evolution of relative wages suggest where productivity increases may be occurring, as well as holding important clues about fundamental changes in labor markets. Examination of changes in relative earnings over time (broken down by sector, education, gender, and position in the lifecycle) helps one assess the earnings implications of the structure of the economy.

Age-Earnings Profiles

3.39 Age-earnings profiles are shown in figure 3.9 for males and figure 3.10 for females. Monthly labor market earnings are plotted as a function of age, conditional on education. The four broad education categories used previously in this chapter are used again. The earliest profile, for 1989, is based on the monthly earnings information collected from two different cross-sections during the April and October rounds of the 1989 HLFS (roughly 12,000 observations each). The second, for 1994, is based on annual earnings information collected retrospectively from a single cross-section in the 1994 HIDS (roughly 21,000 observations). To arrive at monthly earnings, the annual figures were simply divided by months worked during the year. The most recent profile is based on the 2002 HBS, and relies on information collected every month from different representative cross-sections of individuals (roughly 7,000 observations). There are some data comparability issues associated with these different cross-sectional estimates. Important developments in the economy can affect single-year estimates as well. In all surveys, the sample used is for urban full-time workers in nonagricultural industries. To avoid outlier problems, the data were trimmed by excluding the lowest 1 percent and the highest 1 percent of the earners. To ensure comparability, all earnings data were deflated using the regional CPI, with 1994 as the base year.32 The scales of the vertical axes are the same for both males and females, and are denominated in 1,000 (1994) TL.

3.40 The broad patterns are similar to what has been observed in many market economies. The profiles broken down by education diverge over time, with better-educated workers earning more than less-educated workers. Earnings rise with age, but typically at a decreasing rate and often with an eventual decline in late career. The positive slope during early- and mid-career reflects increasing productivity over time (some of this is due to learning by doing; some is due to training; some is due to changing jobs and finding a better match). Some deviations from this broad pattern are discernible in some of the profiles of university-educated workers. The sustained rise in (average) earnings, without a downturn, is attributable to selectivity of retirement on earnings growth potential. Presumably the individuals in this category who retire early are the ones with negative earnings growth potential, while those who continue to work expect earnings growth. Put differently, high-productivity educated workers have longer careers.

32 In adjusting for inflation, this study had to rely on two separate series: CPI (1987=100) and CPI (1994=100). The series based on the 1987 basket overlaps with the series based on 1994 basket, a feature which allows a test of the continuity. Tunali and Erdoğan (1997) give a favorable assessment.
Figure 3.9: Age-Earnings Profiles by Education, Male W&S Workers, 1989, 1994, and 2002

Source: Author calculations using HLFS data for 1989, HIDS data for 1994 and HBS data for 2002
Figure 3.10: Age-Earnings Profiles by Education, Female W&S Workers, 1989, 1994, and 2002

Source: Author calculations using HLFS data for 1989, HIDS data for 1994 and HBS data for 2002
3.41 Looking first at the results for men, figure 3.9 indicates that, with a few exceptions, the profiles generally shifted upward from 1989 to 1994, but then had shifted down in 2002. However, what is most interesting in the profiles are their shapes: that is, what they reveal about lifecycle earning patterns and how these are changing. In the case of male university-educated workers, the emergence of the sustained increases (no downturn) is clear in the 1994 and 2002 data. The profiles for this group are more S-shaped than the traditional convex earnings profile. The slopes are steep in 2002 and, especially, 1994, in the profiles of university-educated workers in their first 10 years in the labor market. The other three male groups exhibit more classic convex profiles. Unlike the highly educated men, the average peak in earnings for these groups has been between late 30s and late 40s, depending on the particular education category and the year. The poorest educated (primary only) generally reach maximum earnings earlier than the other two groups.

3.42 Turning to females (figure 3.10), it should be noted that some profiles are truncated because sample sizes are too small to plot data points for many age-education combinations for older women. Where this is the case, it is due to very low participation rates. As with men, university-educated females have had continually rising profiles (with the exception of a very slight downturn in 1994 by age 50). Again, this reflects the productivity-related selection effect on labor force exit. Figure 3.10 also indicates that the differential between the well- and poorly educated groups had widened by 2002. The profiles for university- and high school-educated women shifted upward through the period, while the middle school and primary groups rose between 1989 and 1994 but then fell in 2002. Note how flat the profiles are for the primary-educated group, indicating that these women receive very little return to experience.

**Earnings Differential Trends over Time**

3.43 To observe how earnings differentials have changed over time, the household survey data were used to compare cross-sectional earnings estimates from the late-1980s, mid-1990s, and early 2000s. These estimates are derived from the same databases used to draw the age-earnings profiles. However, it should be noted that the 1989 mean earnings are based on unweighted HLFS data. While the use of unweighted estimates does not alter the overall story, weighted and unweighted estimates do vary. In some cases, the late 1980s estimates are buttressed with the weighted means from the October 1988 HLFS. In all cases, estimates are for mean monthly earnings for nonagricultural wage and salary workers in urban areas.

3.44 Figure 3.11 presents the evolution of overall mean earnings. Means are shown for both all urban wage and salary workers and for full-time W&S earners between 15 and 65 years of age. Differences between the two populations are very small because very few workers are outside the 15–65 age range and/or work part-time. The cross-section means repeat the aggregate patterns over time seen in the age-earnings profiles. Real earnings increased during the early period. Between 1989 and 1994, they rose 31 percent for all wage-earners and 30 percent for full-time earners, 15–65 years old. Real earnings

---

33 This was despite the fact that the economy shrunk by 6 percent in 1994 in GDP per capita terms.
declined between 1994 and 2002, falling 13 percent for all workers, and 12 percent for full-time workers, 15–65 years old). Over the entire 1989–2002 period, real earnings grew very modestly (14 percent for both).

Figure 3.11: Mean Monthly Earnings for Urban Wage and Salary Workers

(1000s of 1994 TL)

Source: HIDS 1994

3.45 Table 3.2 summarizes the trends over time in mean earnings for men and women, and the gap between the two. Men seem to have fared better than women over the period, although the strength of this conclusion does depend on whether 1988 or 1989 is taken as the starting point. Considering all W&S workers first, mean male earnings increased by 22 percent between 1988 and 2002 and 17 percent between 1989 and 2002. Female earnings increased by 12 percent when 1988 is the benchmark but by just 1 percent from 1989. Among full-time earners between 15 and 65, the 1989–2002 growth rates were also higher for males (16 percent vs. 10 percent), but the 1988–2002 rates were very similar (22 percent and 21 percent). As the table indicates, male-female earnings gaps have widened, but again the magnitude depends on the starting point. The latest estimates indicate that female employees earn between 78 and 83 percent of men, depending on whether all W&S earners are considered or only full-time workers. The major deterioration in relative earnings for women occurred between 1989 and 1994.
### Table 3.2: Trends in Mean Monthly Male and Female Earnings, Urban Wage and Salary Workers, 1988, 1989, 1994, and 2002

<table>
<thead>
<tr>
<th></th>
<th>All wage and salary earners</th>
<th>Full-time W&amp;S earners, 15–65 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>1988 (Oct)</td>
<td>4,893</td>
<td>4,175</td>
</tr>
<tr>
<td>1989</td>
<td>5,072</td>
<td>4,600</td>
</tr>
<tr>
<td>1994</td>
<td>6,811</td>
<td>5,357</td>
</tr>
<tr>
<td>2002</td>
<td>5,958</td>
<td>4,668</td>
</tr>
</tbody>
</table>


<sup>a</sup> Calculated as mean female monthly earnings divided by mean male earnings.

3.46 Figure 3.12 shows trends in earnings by sector for full-time urban wage and salary employees between 15 and 65 years. To highlight inter-sectoral relative wage differentials, sector figures are shown as a ratio of the aggregate mean earnings for all nonagricultural industries. The major development concerned the relative deterioration of construction. In the late 1980s, construction was a relatively high-wage sector. In the 1990s and early in this decade, however, relative wages in construction declined considerably. According to the 2002 survey, construction workers were earning only 72 percent of the all W&S earners, well below the level of the other two major sectors. From 1989 to 2002, earnings in construction fell by 17 percent. Gains occurred until 1994, but, real earnings decreased by 29 percent between 1994 and 2002. Relative earnings increased slightly in manufacturing, from .90 in 1989 to .96 in 2002, while average services earnings remained 5 to 6 percent above the all-industry average throughout the period. Both these sectors experienced strong real earnings gains (37 percent and 29 percent for manufacturing and services, respectively) from 1989 to 1994, before declining by about 11 percent each between 1994 and 2002.

3.47 Figure 3.13 shows mean earnings by age group for urban full-time wage employees. For each group, the familiar pattern repeats of increases in the late 1980s and early 1990s and declines after 1994. Wage trends became more positive with age. The older categories (35–44 years and 45–65 years) had the largest gains between 1989 and 2002 (18 percent for each group). This was due to relatively large increases in the first five years of this period, when the 35–44 and 45–65 year-olds had earnings growth of 35 percent and 31 percent, respectively. Young workers (15–24 years) had the worst earnings record, experiencing a real decline of 10 percent between 1989 and 2002. This group benefited the least from the wage gains between 1989 and 2004 (only 12.3 growth) and was hurt the most from the wage declines between 1994 and 2002 (19 percent loss). As a result, mean youth earnings in 2002 were just half (50 percent) of the average for all workers, down from 63 percent in 1989.

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<sup>34</sup> There is some discrepancy between the weighted 1988 estimates, which show mean construction earnings 16 percent higher than aggregate earnings, and the unweighted 1989 figures, which show construction wages at par with aggregate earnings. For a relatively small sector like construction, weighting can make a significant difference.
Figure 3.12: Relative Mean Monthly Earnings by Sector, Urban Full-Time Workers, 15-65 Years, 1988, 1989, 1994, and 2002


1Mean monthly earnings in sector divided by aggregate mean monthly earnings (all non-agricultural).

3.48 These results, together, suggest that returns to age/experience could have increased over the period. However, it is likely that selectivity effects have also come into play. As discussed earlier in this chapter, labor supply changes have occurred at both ends of the lifecycle. Longer schooling has delayed labor force entry for many young people, while weaker attachment has resulted in earlier exit for older workers. Since it is young people with higher earnings potential who are likely to have delayed labor force entry to extend schooling, this may have depressed mean earnings for the 15–24 group as educational attainment increased over the period. Meanwhile, mid- and late-career workers with high earnings capacity have stayed in the labor market. It would be necessary to control for these supply changes to confirm that returns to experience have increased.

3.49 Finally, consider earnings trends by education. Figure 3.14 compares relative earnings in 2002 by educational attainment. It illustrates the large differentials. Workers with primary education or less earned 72 percent of the average wage. For the middle-school, high school, and university groups, this percentage was 86 percent, 106 percent, and 186 percent, respectively. As the chart shows, education differentials for men were very similar to the overall pattern. However, differentials in 2002 for women were much larger than they were for men. University-educated women earned 3.67 times more than primary-educated women and 3.31 times more than women with middle-school. The corresponding differences for men were 2.67 and 2.26. These ratios reflect the very low
earnings for poorly educated women. They also explain the strong correlation between education and female labor force participation discussed earlier.

Figure 3.13: Mean Monthly Earnings by Age Group, Urban Full-Time Workers, 15-65 Years, 1988, 1989, 1994, and 2002


3.50 What has happened to education differentials over time? The answer differs somewhat depending on whether 1988 or 1989 is used as the starting point (table 3.3). Using the October 1988 survey as the benchmark, the overall story highlights the real earnings losses of the most poorly educated, with an earnings decline of almost 1 percent over the entire period. All of the other education groups had some real earnings growth, with high school-educated workers enjoying the greatest increases. However, the picture changes if the 1989 survey is used as the starting point. In this case, the earning trend by education takes an inverted-U shape, with basically no change over the period for the primary and university groups, and some earnings growth for the two intermediate groups. The reason for these different stories is that the 1989 mean earnings for the high-school and university groups are much higher than the (October) 1988 means (14 percent and 18 percent, in real terms). This seems to be an artifact of the data (one series weighted and the other not), since it is not plausible that these differences reflect actual wage trends, given the much slower growth in earnings observed over the rest of the data period.

35 The difference between the 1988 and 1989 estimates do not seem to be due to weighting in one year and not the other. If the two years are compared using unweighted data, earnings for full-time urban workers with high school and university education increased by 15 percent and 18 percent, respectively.
In any event, table 3.3 shows that the real earnings deterioration between 1994 and 2002 affected workers in all education groups. The magnitude of the loss did decline as schooling increased but the differences were not large (ranging from -20.4 percent for primary-educated to –14.0 percent for university-educated).

Table 3.3: Percentage Change in Mean Monthly Earnings by Educational Attainment, Urban Full-Time Workers, 1988 and 1989 to 2002

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>21.1</td>
<td>21.1</td>
<td>21.1</td>
<td>21.1</td>
</tr>
<tr>
<td>Primary</td>
<td>-0.9</td>
<td>1.2</td>
<td>24.5</td>
<td>27.2</td>
</tr>
<tr>
<td>Middle school</td>
<td>12.9</td>
<td>8.8</td>
<td>38.8</td>
<td>33.8</td>
</tr>
<tr>
<td>High school</td>
<td>27.6</td>
<td>11.6</td>
<td>48.9</td>
<td>30.3</td>
</tr>
<tr>
<td>University</td>
<td>16.0</td>
<td>-1.4</td>
<td>34.9</td>
<td>14.6</td>
</tr>
</tbody>
</table>

In any event, table 3.3 shows that the real earnings deterioration between 1994 and 2002 affected workers in all education groups. The magnitude of the loss did decline as schooling increased but the differences were not large (ranging from -20.4 percent for primary-educated to –14.0 percent for university-educated).

The trends in earnings by education for men closely resemble the overall picture, again because of the dominance of males in the aggregate labor force. However, a more linear pattern is evident among female workers. Women with low levels of educational attainment (primary or middle school) have suffered substantial real earnings losses since the late 1980s. This is true regardless of whether 1988 or 1989 is used as the starting point (figure 3.15). On the other hand, high school- and university-educated women have experienced a growth in real wages, although the magnitude of the increase differs depending on the starting point for the analysis.
F. CONCLUSION

3.53 Over the past 15 years, economic, social, demographic, and policy developments have altered how the labor market functions in Turkey. This chapter has drawn on the household surveys to document and understand these trends. Although there are limitations in the data, especially for investigating labor market dynamics and compensation trends, the analysis has been able to identify and analyze a number of developments in three areas: labor force participation, employment structure including social security participation, and earnings.

3.54 Labor force participation rates have been on a long-term decline in Turkey and are now considerably lower than rates in any other OECD country. The most important reason is the extremely low participation of women. This development is closely tied to the structural change in the economy from agriculture to industry and services. While women had a clear productive role in the traditional small family-farm, they seem much less able to integrate into the urban workforce and are experiencing falling participation rates. This is occurring despite increases in educational attainment and decreases in fertility. University-educated women are the only segment of the adult urban female population with substantial labor force participation. Falling unemployment rates for women but not for those without a commensurate increase in employment rates suggests that women have been particularly affected by “discouraged worker” phenomenon. The impact of the 2003 Labor Code has yet to have a discernable impact on women’s participation.

3.55 The impact of the 1993 law that eliminated the minimum wage for retirement has significantly affected labor force participation for older workers. Among males residing in urban areas in 2002, 21 percent of 45-year-olds and 64 percent of 55-year-olds were drawing pensions.
3.56 The structural change out of agriculture has been the most dominant demand-side trend in the labor market. Between 1989 and 2004, agriculture lost around 850,000 jobs and its share of total employment fell from 47 percent to 34 percent. Manufacturing and services have been the growth sectors, with services accounting for the large majority of net new employment. Despite the growth, however, job creation in the cities has not been robust enough to absorb the new entrants and potential migrants from rural areas. It is striking to note that urban employment of young people has been essentially stagnant since 1997, with more losses after the crisis. The private sector has accounted for virtually all employment gains in the period analyzed in this chapter, although public sector employment has not fallen off. A final observation about employment structure concerns the pension system. Using social security coverage as the indicator, the analysis finds that education is closely tied to formality. Nonetheless, despite rising educational attainment, coverage has declined over the past 15 years.

3.57 The analysis of wages and earnings has relied on three data points: the late 1980s, the mid-1990s, and 2002. Caution is appropriate in interpreting the findings since the surveys have not used uniform methodologies. The overall picture is one of small real earnings gains over the past 15 years, with all the growth in the first sub-period (late 1980s to 1994). From 1994 to 2002, real earnings declined. Overall, men have fared better than women, with a widening of the wage differential between the two, especially in the late 1980s and early 1990s. The wage data suggest that returns to experience have been increasing. Workers 35 years of age and older have had the largest wage gains since the late 1980s, while young people (under 25 years) have in fact, experienced deteriorating earnings. However, there is a selection issue involved; more young people are delaying entry to the labor market to extend schooling, while declining numbers of older workers remain attached to the labor force. It is likely that high- or potentially high-productivity workers are overrepresented in both groups. Finally, the earnings data indicate that returns to education are substantial, even more so for women than for men. This largely explains the female labor force participation patterns noted above. It is not possible to draw definitive conclusions on trends in returns to education over the period under investigation. For some groups, returns seem to have increased, but not for others. The limited wage data make it difficult to investigate this further.
CHAPTER 4. LABOR MARKET REGULATIONS AND INSTITUTIONS

A. INTRODUCTION

4.1 This chapter focuses on labor market regulations and institutions, defined broadly to include statutory regulations, collective bargaining, and active and passive labor market programs. These arrangements help workers manage risks associated with unemployment, underemployment, and low wages/incomes: together, they constitute the social protection framework for workers. These arrangements need to be assessed according to the adequacy of protection they provide and also their impact on job creation, especially in the formal sector, and productivity growth.

4.2 The context for this chapter has been established in this report. Turkey’s labor market is characterized by low employment rates, reflecting relatively high unemployment and declining labor force participation rates. Wage growth is slow because of low labor productivity. Both labor market regulations and the tax wedge created by high social security contributions establish disincentives for formal sector job creation. The informal labor market is large and growing. Consequently, a large share of the active labor force – including the most vulnerable – does not have access to any formal protection instruments, such as real coverage under the Labor Code, trade unions, or participation in one of the social security plans.

4.3 Addressing these issues requires a consideration of both labor market regulation and social security, as there are important interactive effects between the two. In recent years, Turkey has introduced some important changes in both areas, most notably with the implementation of Unemployment Insurance and the new Labor Code (Act 4857) in 2003. However, this study’s analysis of Turkey’s social protection framework for workers leads to the conclusion that further reforms are needed. This involves transferring some protection for workers from “inside the firm” (by continuing with efforts to make the labor market more flexible) to offering better protection to workers “outside the firm” (by strengthening unemployment insurance and enhancing employment services offered by ISKUR and private providers). Such a reform strategy can be characterized as shifting the emphasis from protecting jobs to protecting workers. This will improve incentives for employment creation, encourage formality, and broaden the coverage of formal social protection for workers.

4.4 The next section will briefly discuss the concepts underpinning social protection for workers, including the distinction between providing protection within the firm or outside the firm. Section C considers the key issue of access of Turkey’s workers to formal social protection

36 In any event, additional reforms will need to be implemented as Turkey moves toward compliance with European Union norms. Adopting and implementing the EU acquis related to labor market regulation and employment policies will have important consequences for the functioning of labor markets. For a discussion, see Taymaz and Ozler (2003).
instruments. Section D discussed labor market regulation, the primary instrument for protecting workers within the firm. Section E turns to instruments for worker protection outside the firm: unemployment insurance and active labor market programs. The final section of the chapter summarizes the analysis and offers broad reform options.

B. CONCEPTUAL FRAMEWORK

4.5 Social protection for workers refers to arrangements in place to help workers manage labor market-related risks, including unemployment, underemployment, low incomes, disability and threats to health. Risk management is the organizing concept for the World Bank’s social protection strategy. For many of the concepts underlying the discussion in this section, see the Bank’s social protection strategy paper (World Bank 2001). How effectively these risks are managed has important implications for the welfare of workers and their families. Obviously, certain types of workers and their family members (including the poorly educated, children, youth, and some women) are particularly vulnerable to such risks. Moreover, in many countries, these workers have less access to risk-management instruments than others. Social protection instruments for workers should allow for wide coverage, reasonable protection, and financial affordability and sustainability, while encouraging job creation, especially in the formal sector, as well as productivity growth.

4.6 Social protection instruments can come from various sources, including families, communities, NGOs, unions, market mechanisms, and government. They can also be targeted at different moments: either before (ex ante) or after the risk (ex post). Table 4.1 presents examples of risk management instruments and arrangements that can be available to workers to manage risks related to unemployment, underemployment, and low earnings.

4.7 This figure illustrates a range of instruments and highlights the point that social protection is a comprehensive concept that goes well beyond traditional notions of government transfers. Some instruments are intended to reduce risks in the first place. For example, individuals can invest in their human capital to increase their productivity and employability. In some cases, unemployment or low earnings cannot be avoided, especially for vulnerable workers. In this event, individuals and their families can mitigate the negative consequences through self-insurance (holding a second job, for example) or cope with the consequences (such as by consuming savings, or putting other family members to work). However, individual instruments, by themselves, cannot provide sufficient protection to workers. Access to employment—and thus reduced risks of unemployment—will be enhanced where public policies (along with appropriate market instruments) ensure that the labor market functions well. Government-sponsored social security, including unemployment insurance, can be of key support in helping workers mitigate labor market risk. Effective active labor market programs and social assistance can help workers cope with unemployment and support them in preparing for reintegration into the labor market.

37 Risk management is the organizing concept for the World Bank’s social protection strategy. For many of the concepts underlying the discussion in this section, see the Bank’s social protection strategy paper (World Bank 2001).

38 This is especially true where major economic downturns take place (or, in the language of social risk management, where shocks are co-variant), as has occurred in Turkey. In economic crises, vulnerable workers tend to suffer major welfare losses in countries without well-functioning public interventions and policies. East Asia provides a good example during the financial crisis of the late 1990s where Korea, with a stronger public policy, was able to support workers more effectively than other affected countries (Betcherman and Islam 2001).
4.8 While individual actions are important, this chapter is concerned with government policy and the role of public instruments. The key public instruments, emphasized in bold type in table 4.1, provide the substantive focus for the discussion that follows.\(^{39}\)

### Providing Social Protection to Workers: Inside or Outside the Firm?

4.9 Broadly speaking, policy makers can directly provide risk management instruments to workers in two ways: *within the firm*, through statutory regulation (labor law); and *outside the firm*, through State-sponsored employment programs (active and passive). The former approach is based on the notion of “protecting jobs” through employment protection laws (EPL): that is, restrictions on how labor contracts can be initiated and terminated and how labor can be deployed on the job.\(^{40}\) The latter is based on “protecting workers” by offering them various types of support, including unemployment benefits and reemployment services through active labor market programs, in the event of job/income loss.

4.10 Middle- and high-income countries use a combination of the two approaches, although there are differences in what this combination is and in the overall level of support through

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\(^{39}\) However, public policies should reflect and fit well with other types of social protection that come from informal and market-based instruments. To take one example from the table, public ALMP and training policies must be developed in conjunction with the existence/capabilities of a private sector in these areas.

\(^{40}\) Regulation of the labor market can also occur through collective bargaining. Although collective bargaining is a process that directly involves employers and workers, the extent and outcomes of bargaining are significantly influenced by public policy through industrial relations law and its application.
public policies. Figure 4.1 maps these approaches for OECD countries. The “inside firm” scores are based on the strictness-of-EPL indicator calculated by the OECD (2004) and “outside firm” scores are based on expenditures on active and passive programs as a percent of GDP (data from OECD 2004).41

Figure 4.1: Approaches Used by OECD Countries to Provide Social Protection for Workers

<table>
<thead>
<tr>
<th>Inside firm</th>
<th>Outside firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher</td>
<td>Lower</td>
</tr>
<tr>
<td>Higher</td>
<td>Lower</td>
</tr>
</tbody>
</table>

Source: OECD 2004 and authors’ estimations

4.11 Countries in southern Europe rely most heavily on employment protection regulations (lower-right quadrant). Turkey is the most extreme case, with the highest employment protection index (tied with Portugal) and very low reliance on active and passive employment policies. Northern European countries also tend to have relatively strong employment protection (though more moderate than the southern European ones), along with relatively high expenditures on programs to support workers outside the firm (upper-right quadrant). Countries with Anglo-Saxon traditions have low levels of protection both inside and outside the firm (lower-left quadrant). Denmark is the only country to combine strong protection outside the firm with moderate levels of employment protection (upper-left quadrant).

41 The “outside firm” score for Turkey has been estimated by the author.
4.12 These different approaches to worker protection have strengths and weaknesses. Table 4.2 provides a stylized characterization of the implications of being in different quadrants of figure 4.1. This table is based on the dominant findings from the literature on labor market regulation and institutions and shows the general tradeoffs involved in different approaches. As a general rule, middle-income countries tend to be in the lower right quadrant (see figure 4.1). Many such countries, including Turkey, would benefit from changing from a nearly exclusive reliance on protection inside the firm to more protection outside the firm: that is, from a shift upward and to the left. The relatively successful labor market performance in Denmark—the only country in the upper-left quadrant—provides support for considering reforms in this direction.42

4.13 However, like any stylized characterization, the observations in table 4.2. are not always found in every study and in every country. The impact of different institutions and policies clearly depends a lot on national factors such as history and culture, and on how well the policies are implemented. In the case of employment protection, for example, many countries have strict rules on paper but only limited enforcement, thus weakening the impacts of these regulations. Turkey is a case in point.

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42 The Danish model has been labeled a “flexicurity” approach. It has received positive grades from the OECD (2004, p. 98): “Overall, the Danish model of ‘flexicurity’ has proved to be rather effective in guaranteeing sufficient dynamism in the labour market, while keeping unemployment low and facilitating transitions to employment. It is worth noting that this model rests on more than just the combination of moderately-low EPL with strong emphasis on ALMP; in addition, generous unemployment benefits play a key role in ensuring adequate income security and low unemployment costs for job losers.” The Danish approach is summarized in OECD (2004, box 2.6).
C. ACCESS OF WORKERS TO FORMAL SOCIAL PROTECTION INSTRUMENTS

4.14 The labor market risks examined in this chapter relate to unemployment and low earnings leading to poverty. Various formal instruments have been established to support workers in managing these risks, including labor legislation, a framework for collective representation and bargaining, unemployment insurance, and active labor market programs.

4.15 This section addresses an overarching question: what access do Turkey’s workers have to these formal instruments? A brief analysis, based on the 2002 Household Incomes and Expenditures Surveys (HIES) and the 2004 Household Labor Force Survey (HLFS), indicates that access is an important problem. Most of the workforce receives no protection from labor law, unions, and collective bargaining, or from social security (specifically, unemployment insurance) or other government employment programs. This limited access is due to two factors: Turkey’s economic structure, which still has a large traditional sector, and low compliance within the modern sector. These compliance problems are related to high costs of meeting labor law and social security obligations, as well as weak enforcement and administrative capacity.

Limited Coverage

4.16 Historically, formal labor laws and industrial relations and social security programs have been designed for wage and salaried workers in urban, industrial settings. Like many countries at a comparable stage of development, the structure of Turkey’s economy and labor force is only partially suited to such instruments. Although the structure of the economy is changing with modernization, about 45 percent of the labor force is still in rural areas and 40 percent is engaged in agriculture.

4.17 As table 4.3 illustrates, this translates into an employed workforce where about half (50.8 percent) the workers are wage and salary employees. The self-employed and unpaid family workers—traditionally not covered by labor laws or social security—together account for 44.5 percent of total employment. Turkey is unusual in having a social security plan (Bag Kur) for the self-employed (including tradesmen, artisans, and those in agriculture). However, coverage is inherently difficult with these categories of employment and, not surprisingly, Bag Kur’s active membership of slightly more than 3 million members represents only a small fraction of the non-wage and salaried workforce.

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>in thousands</th>
<th>% distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>All wage/salary employees</td>
<td>11,079</td>
<td>50.8</td>
</tr>
<tr>
<td>Regular employee</td>
<td>9,279</td>
<td>42.6</td>
</tr>
<tr>
<td>Casual employee</td>
<td>1,800</td>
<td>8.3</td>
</tr>
<tr>
<td>Employer</td>
<td>1,020</td>
<td>4.7</td>
</tr>
<tr>
<td>Self employed</td>
<td>5,388</td>
<td>24.7</td>
</tr>
<tr>
<td>Unpaid family workers</td>
<td>4,303</td>
<td>19.7</td>
</tr>
<tr>
<td>Total employed workforce</td>
<td>21,790</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: SIS, HLFS March, 2005

43 The primary quantitative analysis using the HIES relied on the 2002 survey. While the 2003 survey became available in the final stages of preparing this report, there was not time to update the analysis.
44 Low capacity for delivering formal social protection is also relevant here. The best example of this concerns provision of employment services and other ALMPs. This is discussed below, in the section on ALMPs.
45 According to 2003 figures provided by Bag Kur (the Farmers and Self-Employed Pension Fund), actively insured members included about 2.4 million tradesmen and slightly over 900,000 members in agriculture.
What percentage of the employed force is covered by the various formal protection instruments? In the case of legislation to regulate the labor market, it is not possible to get direct measures. The Labor Code (Law 4857) is intended to cover all businesses and employees, with certain exceptions. Some of these exceptions (such as sea and air transport) exist because other statutes apply. However, others exceptions appear to exist because labor law is deemed inappropriate for labor regulations. Small, family-based agriculture and handicraft establishments and domestic services are examples. In the end, then, the reach of labor market regulation is essentially for the half of the employed workforce that is represented by wage and salaried employees. Incomplete compliance, especially in small- and medium-size enterprises, further reduces this coverage (see discussion below).

To some extent, the low incidence of collective bargaining reflects the restrictive rules regarding the authorization of bargaining agents under the 1983 Collective Labor Agreements, Strikes, and Lockouts Act (Act 2822). This legislation imposes two requirements on a workers’ organization to qualify as the authorized bargaining agent in a workplace or group of workplaces. First, it must represent at least 10 percent of the total employed in the relevant industry. Second, it must represent at least 50 percent of the employees in the workplace(s). The original intent of this “double criteria” was to create more order in an environment that was characterized by an extremely fragmented labor movement, with large numbers of small unions with little capacity to represent workers effectively in negotiations with employers. However, Turkey’s industrial relations system has matured considerably over the past quarter-century. Accordingly, the rationale for the 10 percent industry criterion has weakened. The main effect now is to constrain the choices workers have to determine how they will be represented. Small, independent unions are effectively precluded from becoming bargaining agents, with the playing field tilted toward unions associated with the large confederations, especially TURK-IS

In addition, the “double-criterion” rule does not comply with one of the ILO core conventions: No. 98 on the Right to Organize and to Bargain Collectively. Although Turkey ratified this convention in 1952, the ILO continues to note that the 10 percent rule must be eliminated if Turkey is to meet the voluntary collective bargaining standard. Moreover, the EU has also indicated that compliance with the ILO core labor standards will be expected as part of Turkey’s application. The need to revise the worker representation rules is regularly noted in the EU progress reports.

More tangible evidence is available for the other formal sources of labor protection: trade unions and collective bargaining and social security. There were 2.95 million union members in Turkey, according to the July 2005 labor statistics of the Ministry of Labour and Social Security. However, it is acknowledged—including by the labor movement—that active (dues-paying) union membership is considerably lower. According to the 2002 HIES, slightly less than 1.3 million workers reported being trade union members. This represents 12 percent of all wage and salaried employees and about 5 percent of the total employed labor force. Unionization is essentially a public sector phenomenon in Turkey. Only 4 percent of private sector wage employees are union members, compared to 28 percent in public enterprises and 51 percent in government (2002 HIES). Moreover, even among active trade union members, only about 700,000 are covered by a collective agreement.

It should be noted that this “double criteria” applies only to the bargaining agent role of unions and does not prevent them from carrying out other worker representation functions.

The government has proposed new rules, including lowering the 10 percent threshold to 5 percent. However, the ILO has indicated that any double criterion would remain non-conforming with Convention 98.
### Table 4.4: Membership in Social Security Institutions, 2003

<table>
<thead>
<tr>
<th>Membership status</th>
<th>Number of workers</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered</td>
<td>10,205,000</td>
<td>48.3</td>
</tr>
<tr>
<td>Social Security Institution (SSK)</td>
<td>5,551,000</td>
<td>26.2</td>
</tr>
<tr>
<td>Retirement Fund (ES)</td>
<td>2,177,000</td>
<td>10.3</td>
</tr>
<tr>
<td>Bag Kur</td>
<td>2,455,000</td>
<td>11.6</td>
</tr>
<tr>
<td>Private institutions</td>
<td>22,000</td>
<td>0.1</td>
</tr>
<tr>
<td>Not registered</td>
<td>10,944,000</td>
<td>51.7</td>
</tr>
<tr>
<td>Total employed workforce</td>
<td>21,149,000</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: Labor Force Survey*

#### 4.22
Depending on the data source (HIES for 2002 and HFLS for 2003), between 42 percent and 48 percent of the employed labor force was covered under one of the social security institutions. The higher estimate comes from the Household Labor Force Survey, while the lower one is based on the HIES. Using the HLFS, table 4.4 shows membership by institution. As expected, coverage is higher in urban areas (67 percent) than in rural areas (27 percent).

#### 4.23
Figure 4.2 provides a disaggregation of the 11.5 million unregistered workers. This number is composed of three groups, each accounting for roughly one-third of the total: unpaid family workers, the self-employed, and wage and salary employees (regular and casual). Unpaid family workers are not traditionally covered by formal social security plans. As noted, the self-employed are the traditional clientele of *Bag Kur* and are inherently a difficult population to get high coverage rates. However, higher coverage among wage and salaried employees should be possible. About one-third (33 percent) of these employees are not registered in a social security plan, according to the 2004 HLFS data. Not surprisingly, this “non-coverage” percentage is especially high among casual employees (92 percent). But it is still significant among regular
employees; 21 percent report that they are not registered in social security. The large number of 
uncovered workers reflects both the nature of the labor force (large shares of unpaid family work 
and self-employment) and only partial compliance in that part of the economy where 
participation rates should be high.

4.24 There are two additional points of concern about social security coverage. First, the 
registration rates overstate the real level of compliance, since many registered workers are only 
partially covered. About 55 percent of employees enrolled in SSK (the Workers Pension Fund) 
are insured on the basis of the minimum earnings level, suggesting that reporting partial salaries 
is a common practice. Second, the social security data reveal a decline in coverage rates over the 
past half-decade. After increases in the early and mid-1990s, the percentage of registered 
workers peaked in 1998. Since then, this share has declined about 3 percentage points, which is 
consistent with other data indicating informalization of the labor market.48

4.25 Another aspect of the access issue is 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 duality is illustrated in table 4.5, which presents simple correlation coefficients for 
social security coverage, trade union membership, and employment in a workplace of 10 or more 
employees. This last variable is meant to proxy coverage under the Labor Code. As the matrix 
shows, each of these three indicators of formal social protection is strongly correlated with 
significant positive coefficients.

4.26 Analysis shows that there are strong associations between access to formal instruments 
and poverty and overall welfare. The poverty rate for workers with social security is much lower 
two to eight times, depending on the plan) than for workers who are not registered. Similarly, 
the poverty rate for non-union workers is three times the rate for union members.49 Earnings are 
much higher for workers registered in social security institutions than for nonregistrants and for 
trade union members than for nonmembers.50

Table 4.5: Correlation Coefficients Among Union Membership, Social Security Coverage, and Employment in a Workplace with 10 or More Employees1

<table>
<thead>
<tr>
<th></th>
<th>Trade union membership</th>
<th>Coverage under social security*</th>
<th>Employed in workplace with 10+ employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade union membership</td>
<td>1.00</td>
<td>.33*</td>
<td>.65*</td>
</tr>
<tr>
<td>Coverage under social security</td>
<td></td>
<td>1.00</td>
<td>.43*</td>
</tr>
<tr>
<td>Employed in workplace with 10 employees</td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

Source: Author calculations based on HIES 2002
1. Correlations calculated for all employed workers.
2. Includes coverage under SSK, ES, Bag Kur, or a private institution
* Pearson correlation coefficient significant at the 0.01 level.

4.27 These observations on poverty and earnings are due both to the effectiveness of formal 
instruments in helping workers manage risk and a greater likelihood for higher-productivity

48 The data on coverage come from the ILO Bureau of Statistics website (www.ilo.org/stat).
49 These figures come from the 2002 HIES and are cited in Braithwaite (2004).
50 According to the 2002 HIES, for all wage and salaries employees, mean monthly earnings (cash and in-kind) for 
members of a social security institution were 510 million TL, compared to 210 million for nonmembers. Trade 
union members had mean monthly earnings of 680 million TL while the mean for nonmembers was 360 million.
workers to find jobs with protection. While these two effects have not been disentangled, what is important for the discussion is the selection bias in access to formal instruments like social security, trade unions, and labor code protection. Table 4.6 shows how males, prime-age workers, and workers with higher levels of education are disproportionately represented in jobs with these formal instruments. In other words, workers with characteristics that make them more inherently vulnerable (women, young and old workers, and the unskilled) tend to be in jobs with no formal protection.

Compliance

4.28 The problem of non-compliance was explored in a series of World Bank-sponsored focus group discussions held in mid-2003. Employers and workers identified various forms of non-compliance:

- Some employees contended that employers were not fully paying social security contributions (for example, regular workers were registered as casual, or workers were unregistered). This is consistent with the fact that the majority of employees in SSK (around 55 percent) are registered at the minimum contribution rate.
- Employees are sometimes entering, leaving, and reentering jobs to avoid severance obligations.
- Employers are outsourcing to employees, who are asked to operate as independent contractors.
- Overtime may be unregistered and unpaid.
- Employees are asked to resign rather than being dismissed, in order to avoid severance obligations.
- Employees are let go before one year to avoid severance.
- Perception that the courts have limited capacity to solve employment disputes

| Table 4.6: Worker Access to Formal Protection Instruments, by Sex, Age, and Education, 2002 |
|-------------------------------------------------|-----------------|-----------------|-----------------|
| Percent of workers with access                 | Workplace of 10+ employees |
| Trade union members                           | Social security |
| Males                                         | 12.8            | 50.9            | 34.2            |
| Females                                       | 7.4             | 24.7            | 19.4            |
| <25 years old                                 | 2.9             | 27.1            | 26.3            |
| 25–44                                         | 14.5            | 52.1            | 37.1            |
| 45–54                                         | 16.9            | 38.6            | 17.6            |
| 55–64                                         | 2.9             | 28.8            | 11.7            |
| 65+ years                                     | 1.2             | 21.4            | 4.6             |
| 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: HIES 2002.

4.29 These problems are largely due to the high costs of complying with labor laws and social security obligations and institutional weakness relating to enforcement and administration.

51 This is based on five focus group discussions held in Istanbul in June 2003. These discussions were targeted at full-time workers, adult women, laid-off workers, casual workers, and employers.
Costs of Compliance

4.30 The costs of complying with social security and labor laws are high in Turkey. Turkey’s employment protection rules, such as severance pay requirements, are among the strictest in the OECD. This is costly for employers. At the same time, payroll taxes are also high by international standards. This creates incentives for partial or non-compliance and thus contributes to further informalization.

4.31 Payroll taxes in Turkey finance social insurance programs covering the contingencies of old age, disability, death, survivorship, short-term sickness, maternity, work injuries, medical expenses, and unemployment insurance. Currently, the combined employer-employee contribution rate ranges from 35.5 to 41.0 percent of payrolls: 20 percent for pensions and related insurance; 11 percent for sickness and maternity; 3 percent for unemployment insurance; and 1.5 to 7.0 percent for work injuries (rates vary by industry).\(^{52}\) In a study of 150 countries, Turkey’s contribution rates were compared with average rates by region and by national income level (Vroman and Brusentsev 2005). Of the eight regions considered, only Central and Eastern European (CEE) countries have a higher average tax rate (46.5 percent); all others are well below Turkey (ranging from 14.3 percent in Central America and the Caribbean to 28.4 percent in the OECD-20).\(^{53}\) Turkey’s rate significantly exceeds the 25.0 percent average contribution rate for middle-income countries.

4.32 One widely used indicator of the weight of taxes on labor is the “tax wedge.” This is defined as income taxes and combined employer-employee social insurance contributions as a percentage of total labor compensation (wages plus employer contributions). In Turkey, payroll taxes account for about 70 percent of the overall levy and tax wedge.\(^{54}\) The OECD (2004) calculates these tax wedges for a number of family-type and wage level combinations. The results for 2004, comparing Turkey with other OECD member countries, are summarized in table 4.7. Two sets of comparisons are made: with the complete group of 30 OECD countries (OECD-30) and with the 9 middle-income member countries (OECD-9). Data for Turkey are

Table 4.7: Average Tax Wedges\(^a\) for OECD Countries by Family Type and Wage Level, 2004

<table>
<thead>
<tr>
<th>Family Type</th>
<th>Single, no children</th>
<th>Single, 2 children</th>
<th>Married, 2 children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wage Level(^b)</td>
<td>67% APW 167% APW</td>
<td>67% of APW 100 - 0 100 - 33 100-67 44-0</td>
<td></td>
</tr>
<tr>
<td><strong>OECD methodology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank in OECD-30</td>
<td>41.8 42.7 44.4</td>
<td>41.8 42.7 42.2 42.2 41.3</td>
<td></td>
</tr>
<tr>
<td>Rank in OECD-9 (middle-income countries)(^c)</td>
<td>5 12 12 1</td>
<td>1 1 1 5</td>
<td></td>
</tr>
<tr>
<td><strong>With CC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank in OECD-30</td>
<td>39.0 40.0 41.5</td>
<td>39.0 38.3 38.7 39.2 35.3</td>
<td></td>
</tr>
<tr>
<td>Rank in OECD-9 (middle-income countries)(^c)</td>
<td>9 14 15 1</td>
<td>4 3 6</td>
<td></td>
</tr>
</tbody>
</table>


\(^a\) Income tax plus employee and employer contributions less cash benefits; \(^b\) As percentage of average production wage. In married family types wage level for each adult; \(^c\) Czech Rep., Greece, Hungary, Korea, Mexico, Poland, Portugal, Slovak Rep., and Turkey

52 Historically, these payroll taxes were levied on earnings between a minimum and maximum level. These have been abolished in 2004.

53 This grouping includes 14 continental European countries (outside CEE) and the six English-speaking OECD-member countries.

54 Note that payroll taxes dominate income taxes, with the latter averaging 12 percent.
calculated in two ways: using standard OECD methodology; and taking into account the consumption-based credit (CC), which is implicit tax relief in form of a credit against personal income tax (PIT) for documented expenditure on basic items such as food, accommodation, and health. Turkey’s average tax wedge is relatively constant regardless of marital status, presence of children, or wage level. This is in contrast to most member-countries, where taxes (and cash benefits) are used as an instrument of social policy, with lower rates levied on families with children and below-average earners. As a result, Turkey’s relative position varies, depending on family status and earning levels. In the cases of single individuals and married couples with no children, Turkey’s tax burden on labor is not in the very highest ranks (5th to 12th position in OECD-30). Adjusted for the effect of the consumption credit, Turkey ranks even lower (9th to 15th). However, for singles and families with children, Turkey’s taxes on labor are among the highest in OECD. This is particularly relevant for low-wage workers (both singles and families) with two children. For example, for a low-earner single parent with two children (earning 67 percent of the average wage), income taxes and combined social insurance charges in Turkey account for 41.8 percent of total labor compensation: 5.9 percentage points higher than in Sweden and 6.4 percentage points higher than in Poland, the next two countries with highest taxes on labor. For couples with two children (both single-earner at average wage, and one earner at average wage and the other earner at 33 percent of average wage), Turkey also has the highest labor taxes in the OECD-30, as well as the OECD-9 middle-income subgroup.

4.33 However, adjusted for the effect of consumption credit, there is a reduction in the tax wedge, which varies depending on the share of consumption credit in overall tax income. While the effect is relatively moderate for the higher-income categories (because for these workers the amount of the consumption credit is relatively small compared to total taxes paid), the reduction is significant for predominant low-wage categories, such as one-earner families with two children receiving APW or minimum wage (43.9 percent of the average monthly gross wage in manufacturing). Though the international comparison for the latter group is not possible, the adjustment of 6 percentage points is considerable, mitigating the overall effective tax wedge.

4.34 Turkey’s high tax rates, levied largely due to the need to finance social insurance programs, create a disincentive for the formalization of employment. While other OECD countries have reduced tax levies for low-wage work and for earners in families with children, Turkey has not. Thus relative to these countries, the tax regime in Turkey is acting against the entry of less-skilled, lower-productivity workers and second earners (often women) into the formal labor market.

4.35 Clearly, from an employment perspective, it would be attractive to consider how this level of taxation, especially on low-wage work, could be substantially reduced. The large and rising deficits in all three social security institutions imply that this is a policy option for the longer term as the social security reform brings the system towards fiscal balance. In the shorter term, strengthening institutions and administration will be a more realistic option for improving coverage, both for social insurance and for labor law.

55 Most OECD countries offer some explicit tax relief both per person and in respect to dependents. These are taken into account in OECD calculations. Turkey does not provide any explicit relief, but it does provide implicit relief in the form of a consumption credit.
4.36 Even without reducing taxes, governments can increase compliance through various institutional and administrative means. The most direct is to strengthen enforcement capabilities through workplace inspections. The Ministry of Labour and Social Security (MOLSS) and the social security institutes have inspection functions and structures. However, the reach and effectiveness of these services has been limited by insufficient capacity and other factors.

4.37 MOLSS carries out inspections on occupational health and safety and on social aspects of workplaces. Under the latter category, which is the more relevant one for this report, inspectors are responsible for a number of labor laws, including the Labor Code, the Trade Union Act, and the Collective Bargaining Act. Activities include both general inspections, carried out by rotation or randomly, and investigations, which respond to complaints.

<table>
<thead>
<tr>
<th>Table 4.8: Social Inspections carried out by MOLSS Inspectors, 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2002 data</strong></td>
</tr>
<tr>
<td>Number of inspectors for social inspections</td>
</tr>
<tr>
<td>Total number of social inspections</td>
</tr>
<tr>
<td>Of which:</td>
</tr>
<tr>
<td>General/control</td>
</tr>
<tr>
<td>Investigative</td>
</tr>
<tr>
<td>Total number of workers covered in social inspections</td>
</tr>
<tr>
<td>Of which in:</td>
</tr>
<tr>
<td>Ankara region</td>
</tr>
<tr>
<td>Istanbul region</td>
</tr>
<tr>
<td>Elsewhere</td>
</tr>
<tr>
<td>Findings on social security violations</td>
</tr>
<tr>
<td>Number of workplaces</td>
</tr>
<tr>
<td>Number of uninsured workers</td>
</tr>
<tr>
<td>Administrative fines under infringements of Labor Code (1475)</td>
</tr>
<tr>
<td>Number of workplaces</td>
</tr>
<tr>
<td>Number of infringements</td>
</tr>
<tr>
<td>Amount of fines recommended</td>
</tr>
<tr>
<td>Cases reported to courts under infringements of Trade Union Law (2821)</td>
</tr>
<tr>
<td>Number of workplaces</td>
</tr>
<tr>
<td>Number of infringements</td>
</tr>
</tbody>
</table>


4.38 Table 4.8 summarizes statistics on social inspections from the 2002 Activity Report of the Labor Inspection (MOLSS 2003b). As the right-hand column indicates, the resources allocated to social inspections carried out by the Labor Inspection are small and the coverage of the inspections is very limited. A disproportionately large share of the activity appears to be around the capital (although it should be noted that the Ankara region covers 22 provinces). MOLSS inspections seem much less likely to reach other areas. The responses for the coverage comments are from wage and salaried employees from the HIES, enterprises on the SSK list, and for the trade union-related infringements, the MOLSS estimates used for presenting union

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56 These data for 2002 were the most recent available to the World Bank at the time this report was finalized. In 2004, the number of social inspections had decreased to 29,993 (cited from comments provided by the General Directorate of Inspections, MOLSS, July 25, 2005).
memberships statistics.\textsuperscript{57} Three-quarters of MOLSS inspections are in response to complaints. Almost all of these are about wage-payment problems, overtime, and hours.

4.39 SSK can conduct random or annual inspections to verify registration levels and contributions. However, in the past few years, inspectors have been undertaking inspections only in response to complaints. The number of workplaces inspected by SSK has been around 30,000 per year. The number of SSK inspectors was 272 in 2004, down from 333 in 2001.\textsuperscript{58} SSK inspection managers indicated that the number of workplace inspectors needed to double to adequately carry out their role. MOLSS inspectors can also check on social security compliance.

4.40 While inspection must play a key role in enforcement, the sheer number of firms (especially small firms) in an economy creates limits on the impact inspection can have. Some countries have achieved some success through other institutional strategies, including better tax administration, coordination between tax-collecting agencies (including unique identifiers), public information campaigns, and financial incentives to encourage coverage.\textsuperscript{59} Two developing countries with interesting approaches to extending coverage are Korea and Bulgaria. Their experiences are summarized in boxes 4.1 and 4.2.

\begin{boxedtext}
\textbf{Box 4.1 : Extending Coverage: Bulgaria’s Approach}

Bulgaria has an active tax administration whose effectiveness is enhanced by utilization of electronic records, unique individual identifiers for firms and workers, and standard programs to verify consistency of reporting. It is now in the midst of a multi-year reform of both tax collections and benefits administration, which will include the establishment of a unified revenue collection authority, created through a merger of the collection functions of the general taxation department (GTD) of the Finance Ministry and payroll tax collections administered by the National Social Security Institute (NSSI). Historically, NSSI has had a strong collection system and will bring considerable expertise to the combined revenue collection authority. With the merger, payment of personal income taxes and payroll taxes will be made through a single withholding form.

Unlike many other countries, including Turkey, the GTD and the NSSI identify and routinely receive contributions from large numbers of the self-employed. More than 800,000 are known to both tax administrations, in a country with a total labor force of 3.5 million. One element of this effective tax registration record is to enroll new firms when they register as new business entities. Another is the use of a single tax identification number for firms (the Bulstat number) and a single personal identification number for workers.

To improve collections from industries and occupations known to be prosperous (signaled by average wages), Bulgaria now administers a system with differentiated minimum monthly contributions—an approach adopted from Spain. Proponents indicate that it has raised total contributions.

Another factor improving wage reporting is a requirement that employers have labor contracts with employees and be able to produce the contracts during tax inspections. Extensive efforts to register labor contracts took place during 2002 and 2003. The number of registered persons increased by 400,000 on net basis (600,000 new registrations, less purging of 200,000 inactive records). This replaced a system where employers and workers could collude to control the reporting of wages for tax purposes, with the frequent result that only the minimum wage was reported.

Finally, routine cross-checks between amounts reported for individuals and establishment totals are in place. Establishment totals for taxable wages can be compared with the sum of all wages for individual taxpayers at the establishment. This helps to ensure reporting accuracy. Also, targeting algorithms are used to identify likely situations (industry, occupation) where underreporting of wages and taxes is most prevalent.

Source: Vroman and Brusentsev (2005).
\end{boxedtext}

\textsuperscript{57} In other words, the analysis has not included segments of the labor force that are inherently informal (the self-employed, unpaid family workers, and so on), or enterprises not captured by SSK.

\textsuperscript{58} These figures are cited from written comments prepared by the SSK Insurance Inspection Board to the World Bank, July 22, 2005.

\textsuperscript{59} OECD (2004) reviews some innovations in member-countries in these areas that have led to some success in promoting covered employment.
Box 4.2: Extending Coverage: The Republic of Korea’s Approach

Korea represents an interesting case of a country trying to expand access to formal social insurance, through both universal coverage rules and institutional reforms to encourage participation. In 1995, Korea introduced the Employment Insurance System (EIS), including unemployment insurance and active labor market services. The EIS was initially limited to workers in firms with at least 30 workers (32 percent of all wage earners). During the 1997–98 financial crisis, it was expanded to cover workers in all firms. In addition to extending the coverage rules, a task force was established within the government to diagnose other factors that might be inhibiting coverage. These factors included whether explicit costs of compliance (such as tax rates and job security provisions) were too high relative to benefits; whether administration of the system could be simplified; whether the costs and benefits of UI participation could be better publicized; and whether the enforcement system could be made more efficient. In response, a number of institutional steps were taken.

- Cross-checking systems were instituted to facilitate information-sharing among different social insurance agencies and tax offices.
- The EIS was advertised intensively in the media so that firms and workers were better informed.
- Registered firms, especially small firms with newly hired and reported workers, were treated generously when they applied for subsidy programs under the EIS.
- Canvassers visited workplaces to give guidance to employers and workers about participating in the EIS. Once new firms were registered, they were labeled as “UI insured.”
- A monitoring task force evaluated the performance of local social insurance offices and awards were given. Staff attended training workshops and bonus programs were instituted to reward local staff in local social insurance offices. Study tours were set up to visit best practice social insurance institutions in other countries.

Although the coverage had been expanded to all firms with wage employees, this still represented less than half of all employment because of the large numbers of temporary and daily workers in Korea who were largely still outside the system. These workers constitute about 80 percent of total unemployment. In 2004, regulations were changed again so that all workers, including temporary and daily workers, are now to be registered. Information reporting procedures were simplified for these flexible workers. The different administrative elements of the UI administration (collection agencies, employment information offices, employment service offices, and so on) were coordinated so that the system can adjust to the special needs of these workers and firms hiring them.

D. PROTECTION INSIDE THE FIRM: LABOR MARKET REGULATION

4.41 Legislators around the world typically intervene to regulate labor markets to redress uneven market power between labor and capital, discrimination, insufficient information, and inadequate insurance against risk. Labor market regulation has primarily been seen as an instrument for providing social protection and industrial justice to workers. At the same time, however, labor laws and regulations can have significant impacts on labor market performance. The challenge for any country is to find a formula that protects workers while encouraging growth of jobs and productivity.

4.42 Labor market regulations can cover a wide range of areas, including the establishment and protection of universal worker rights, the protection of vulnerable groups of workers, principles for determining compensation, working conditions, and the initiation and termination of the employment relationship. This section focuses on the last of these: hiring and firing rules. These are known as “employment protection legislation” (EPL) and cover:

- the kinds of contracts permitted
- the conditions under which workers can be terminated for “economic reasons”\(^{60}\)
- requirements for severance and advance notice of termination
- rules for mass layoffs
- redundancy procedures.

4.43 These employment protection arrangements are often characterized along a continuum of ranging from rigid to flexible, and from protective to unregulated. A stylized characterization of this EPL continuum is presented in box 4.3.

<table>
<thead>
<tr>
<th>RIGID OR PROTECTIVE</th>
<th>FLEXIBLE OR UNREGULATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed-term contracting restricted</td>
<td>Unrestricted fixed-term contracting</td>
</tr>
<tr>
<td>Temporary agency work restricted</td>
<td>Unrestricted temporary agency work</td>
</tr>
<tr>
<td>Employer dismissal rights restricted</td>
<td>Unrestricted dismissal rights</td>
</tr>
<tr>
<td>Substantial severance and advance notice required</td>
<td>No severance or notice required</td>
</tr>
<tr>
<td>Substantial administrative requirements for layoffs</td>
<td>Simple administrative procedures</td>
</tr>
</tbody>
</table>

4.44 As box 4.3 indicates, employment protection rules provide job security in two ways: by restricting the ability of employers to hire workers on an explicitly non-permanent basis; and/or by restricting employer freedom to terminate regular workers for economic reasons. The general idea behind both types of employment protection is to make dismissal costly to the employer. This corresponds to the “inside firm” approach to protecting workers, which was introduced

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\(^{60}\) “Economic” reasons include business-related causes for termination (shrinking markets, increasing competitiveness, and so on). This class of terminations stand in contrast to dismissals for “noneconomic” reasons such as discrimination, union organizing, or job performance.
earlier in this chapter. As noted, the inside firm score for a given country in figure 4.1 is based on its EPL score, which covers the dimensions included in box 4.3.

4.45 Controversies surround employment protection regulations because of sharp differences in views about the costs and benefits of these policies. One perspective sees restrictions on nonpermanent hiring and on employer dismissal rights as providing important social protection for workers. An opposing perspective emphasizes the fact that these regulations raise the cost of labor and thus discourage job creation and favor more privileged “insiders” (Freeman 1993; Betcherman, Luinstra, and Ogawa 2001).

4.46 Various approaches have been used to measure EPL at the country level. This section assesses Turkey according to two methods: one used by the OECD, based on largely qualitative ordinal scores for different aspects of EPL; and the other from Heckman and Pages (2004), which estimates the expected cost to an employer of dismissing a permanent worker for economic reasons. Both methodologies, when applied to the previous Labor Code (Act 1475), indicated that Turkey was among the strictest countries in terms of employment protection rules. The analysis below examines whether the new Labor Code (Act 4857), approved in 2003, has changed this assessment.

**Labor Code Reform**

4.47 Like many labor law reforms, the 2003 Labor Code was a controversial piece of legislation with a complex history. In 2001, recognizing that the 1971 Law 1475 did not adequately reflect a modern labor relations environment, MOLSS formed a tripartite “Scientific Council” of university professors to prepare a new labor law. The council’s draft was submitted to the legislature in 2003 but was strongly criticized by the unions because of provisions on job security, flextime, and flexible forms of employment. In the meantime, the Job Security Act was passed just before the November 2002 elections, though it never went into effect. This law was written to strengthen protections for employees against unjust (abusive) dismissals in firms with 10 or more employees. Not surprisingly, it was received unfavorably by employers.

4.48 The eventual Labor Code (Act 4857), passed in May 2003 and put in force a month later, was intended to be a compromise. The bill brought to the Grand National Assembly included both flexible work arrangements and employment protection provisions from the tripartite commission’s draft law and the Job Security Act, respectively. However, late in the legislative process, these were moderated as a result of union and employer lobbying. Provisions to allow flexible employment (subcontracting, temporary help) were weakened. The job security protections were revised to apply only to enterprises with at least 30 employees.

4.49 In any event, Act 4857 did introduce some important regulatory changes. One has been to create a legal framework for flexible forms of employment. Part-time and fixed-term contracts were placed on an equal legal footing with full-time and indeterminate forms of employment. Flexibility was introduced in terms of working time. Collective dismissals were regulated in detail for the first time.

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61 This description of events and the ensuing summary of the major reforms in the 2003 Labor Code are based on Sural (2003).
62 Three members of the commission were appointed by the government, three by employers (TISK), and three by labor confederations (one each from Turk-Is, Hak-Is, and DISK).
The introduction of flexible working arrangements is likely to have been particularly important for women. Act 4857 also lifted the ban on employment of women in night shifts of manufacturing establishments. However two provisions designed to support women may have inadvertently increased incentives to not hire women. Paid maternity leave lasts for a total of 16 weeks, and can be extended to six months without pay. Establishments that employ 100–150 female workers must provide a nursing room, while establishments that employ more than 150 female workers must provide a day care facility for preschool children. The impact of these provisions on female employment should be monitored.

In the area of job security, a number of significant innovations were introduced that are intended to protect covered workers from unjust dismissals and that allow for disputes to be resolved through either adjudication in the labor courts or—when the parties are willing—through private arbitration.63 The number of labor disputes has increased because of these new job security arrangements. For this reason, it is important to fully implement the option for the parties to pursue private arbitration. Otherwise, the burden on the labor courts will be unreasonable and the parties will not be able to count on timely resolution of their disputes. Unfortunately, the regulations required on private arbitration have not been issued yet.

While the new Labor Code has introduced some important changes, it does not fundamentally change a number of aspects of employment protection that go into the calculation of EPL ratings for Turkey. This is evident in table 4.9, which summarizes the situation both before and after the passage of the new code in terms of the key dimensions of employment protection used in the OECD and Heckman-Pages scoring methods.64

### Measuring and Comparing Turkey’s EPL

Before assessing Turkey’s current EPL in a comparative context, it should be noted that conclusions from cross-country analysis should be drawn with some caution.65 First, national settings can matter a great deal in terms of explaining how a particular regulation is implemented and what its effect is likely to be. Second, while scoring methods typically focus on labor codes and other legal instruments, EPL arrangements can also be established through collective agreements, industry practice, or through some other non-statutory mechanism. Third, the enforcement of legislation and its interpretation in the courts can have an important impact on how the labor market is actually regulated.

### OECD Method

The OECD (1999, 2004) calculates strictness of EPL according to 18 indicators of employment protection in three areas: dismissal regulations for permanent or regular workers; regulations of fixed-term contracts and temporary agency work; and regulations governing collective dismissals.66 These indicators are expressed either in units of time (months of severance, for example) or on ordinal scales designed for specific indicators. They are based on the provisions of labor laws and decrees although, in some cases, they can be derived from prevailing practice. Each indicator is scaled between 0 and 6, with a higher value indicating a greater degree of employment protection. Summary scores for each of the three EPL areas are

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63 This threshold applies to an employer with at least 30 employees in the same industry, even where a particular workplace has less than 30 employees. The increased job security provisions also only apply for indeterminate employees with at least six months in the workplace.

64 This list includes most, though not all, of the indicators used in the OECD calculation. It does cover the indicators used by Heckman and Pages, who include severance pay and notice periods.

65 For a discussion, see OECD (1999) and Bertola, Boeri, and Cazes (2000).

calculated as weighted averages of the relevant individual indicators. Finally, an overall EPL measure is calculated as a weighted average of the three summary scores. In the case of these summary and overall scores, the 0–6 scale is used.

### Table 4.9: Treatment of Selected Aspects of Employment Protection Before and After Passage of the 2003 Labor Code

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedures for notification of dismissal</td>
<td>Written notice to employee. Notification to Ministry of Labour and regional directorate (under Unions Act)</td>
<td>No change</td>
</tr>
<tr>
<td>Notice period for no-fault dismissals of indeterminate employees (by tenure)</td>
<td>2 weeks if tenure &lt; 6 months 4 weeks if tenure 6–18 mos. 6 weeks if tenure 18 mos.– 3 years 8 weeks if tenure &gt; 3 years</td>
<td>No change</td>
</tr>
<tr>
<td>Severance pay for no-fault dismissals of indeterminate employees</td>
<td>After one year of tenure, 30 days salary for each year of service (with ceiling equal to retirement bonus for highest-ranking civil servant)</td>
<td>No change</td>
</tr>
<tr>
<td>Economic reasons as a valid reason for dismissal</td>
<td>Yes</td>
<td>No change</td>
</tr>
<tr>
<td>Compensation for unfair dismissal</td>
<td>For abusive dismissal, 3 times wage for notice period For discriminatory dismissal, minimum annual basic wage</td>
<td>For abusive dismissal, no change (for workers in enterprises with &lt;30 employees) For discriminatory dismissal, no change (for all workers) Dismissal without a valid reason (for workers in enterprises with 30+ employees): Reinstatement + wage for the unworked period (at most four months’ wage). If not reinstated: compensation equaling to at least 4 months’ wage and at most 8 months’ wage</td>
</tr>
<tr>
<td>Definition of collective dismissal</td>
<td>10+ workers in enterprises with 20–100 workers At least 10% of workers in enterprises with 101–300 At least 30 workers in enterprises with 300+ employees</td>
<td>No change</td>
</tr>
<tr>
<td>Notification requirements for collective dismissals</td>
<td>Labour Placement Office 30 days notice</td>
<td>Labour Placement Office and regional directorate No change on period of notice Principle put into law</td>
</tr>
<tr>
<td>Valid cases for fixed-term contracts</td>
<td>Limited to “objective” conditions: where work is of fixed duration (not in law but principle adopted by court)</td>
<td>Principle put into law</td>
</tr>
<tr>
<td>Maximum number of fixed-term contracts</td>
<td>Unlimited for valid cases (not in law but principle adopted by court)</td>
<td>Principle put into law</td>
</tr>
<tr>
<td>Temporary agency work</td>
<td>No legal provision for temporary agencies Temporary labor relations existed in practice</td>
<td>No change on temporary agencies Temporary legal relations legalized but only within same holding</td>
</tr>
</tbody>
</table>
The 1999 OECD Employment Outlook presented complete EPL scores for 26 member countries. At that time, Turkey came out with the second strictest overall employment protection, following only Portugal. How has the 2003 Labor Code affected Turkey’s EPL score and ranking? The 2004 Employment Outlook has updated these scores, incorporating new statutory developments in all countries. Table 4.10 presents the results. It also includes two other EU member countries (Estonia and Slovenia) that are not OECD members.67

Table 4.10: Summary Indicators of EPL for OECD and Selected EU Accession Countries, 2003

<table>
<thead>
<tr>
<th>Country</th>
<th>Regular employment</th>
<th>Temporary employment</th>
<th>Collective dismissals</th>
<th>Overall EPL strictness/(change from 1999)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portugal</td>
<td>4.3</td>
<td>2.8</td>
<td>3.6</td>
<td>3.5 (-0.2)</td>
</tr>
<tr>
<td>Turkey</td>
<td>2.6</td>
<td>4.9</td>
<td>2.4</td>
<td>3.5 (nc)</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.3</td>
<td>4.0</td>
<td>3.8</td>
<td>3.2 (nc)</td>
</tr>
<tr>
<td>Spain</td>
<td>2.6</td>
<td>3.5</td>
<td>3.1</td>
<td>3.1 (+0.1)</td>
</tr>
<tr>
<td>Greece</td>
<td>2.4</td>
<td>3.3</td>
<td>3.3</td>
<td>2.9 (-0.6)</td>
</tr>
<tr>
<td>France</td>
<td>2.5</td>
<td>3.6</td>
<td>2.1</td>
<td>2.9 (+0.1)</td>
</tr>
<tr>
<td>Sweden</td>
<td>2.9</td>
<td>1.6</td>
<td>4.5</td>
<td>2.6 (nc)</td>
</tr>
<tr>
<td>Norway</td>
<td>2.3</td>
<td>2.9</td>
<td>2.9</td>
<td>2.6 (-0.1)</td>
</tr>
<tr>
<td>Estonia</td>
<td>3.1</td>
<td>1.4</td>
<td>4.1</td>
<td>2.6</td>
</tr>
<tr>
<td>Belgium</td>
<td>1.7</td>
<td>2.6</td>
<td>4.1</td>
<td>2.5 (nc)</td>
</tr>
<tr>
<td>Germany</td>
<td>2.7</td>
<td>1.8</td>
<td>3.8</td>
<td>2.5 (-0.1)</td>
</tr>
<tr>
<td>Italy</td>
<td>1.8</td>
<td>2.1</td>
<td>4.9</td>
<td>2.4 (-0.7)</td>
</tr>
<tr>
<td>Slovenia</td>
<td>2.9</td>
<td>0.6</td>
<td>4.9</td>
<td>2.3</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3.1</td>
<td>1.2</td>
<td>3.0</td>
<td>2.3 (nc)</td>
</tr>
<tr>
<td>Austria</td>
<td>2.4</td>
<td>1.5</td>
<td>3.3</td>
<td>2.2 (-0.2)</td>
</tr>
<tr>
<td>Poland</td>
<td>2.2</td>
<td>1.3</td>
<td>4.1</td>
<td>2.1 (+0.2)</td>
</tr>
<tr>
<td>Finland</td>
<td>2.2</td>
<td>1.9</td>
<td>2.6</td>
<td>2.1 (nc)</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>3.5</td>
<td>0.4</td>
<td>2.5</td>
<td>2.0 (-0.5)</td>
</tr>
<tr>
<td>Korea, Rep. of</td>
<td>2.4</td>
<td>1.7</td>
<td>1.9</td>
<td>2.0 (nc)</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>3.3</td>
<td>0.5</td>
<td>2.1</td>
<td>1.9 (nc)</td>
</tr>
<tr>
<td>Denmark</td>
<td>1.5</td>
<td>1.4</td>
<td>3.9</td>
<td>1.8 (nc)</td>
</tr>
<tr>
<td>Japan</td>
<td>2.4</td>
<td>1.3</td>
<td>1.5</td>
<td>1.8 (-0.1)</td>
</tr>
<tr>
<td>Hungary</td>
<td>1.9</td>
<td>1.1</td>
<td>2.9</td>
<td>1.7 (+0.2)</td>
</tr>
<tr>
<td>Switzerland</td>
<td>1.2</td>
<td>1.1</td>
<td>3.9</td>
<td>1.6 (nc)</td>
</tr>
<tr>
<td>Australia</td>
<td>1.5</td>
<td>0.9</td>
<td>2.9</td>
<td>1.5 (nc)</td>
</tr>
<tr>
<td>Ireland</td>
<td>1.6</td>
<td>0.6</td>
<td>2.4</td>
<td>1.3 (+0.1)</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1.7</td>
<td>1.3</td>
<td>0.4</td>
<td>1.3 (+0.5)</td>
</tr>
<tr>
<td>Canada</td>
<td>1.3</td>
<td>0.3</td>
<td>2.9</td>
<td>1.1 (nc)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.1</td>
<td>0.4</td>
<td>2.9</td>
<td>1.1 (+0.1)</td>
</tr>
<tr>
<td>United States</td>
<td>0.2</td>
<td>0.3</td>
<td>2.9</td>
<td>0.7 (nc)</td>
</tr>
</tbody>
</table>


a. This table summarizes results using the OECD methodology. Scores range from 0–6, with higher scores indicating a greater degree of protection. Methodology is summarized in the text and described in detail in OECD (2004, annex 2.A1).

b. A positive number indicates a higher index and greater employment protection in 2004 compared to 1999. No change in the index is indicated by “nc”. Comparisons are not available for Estonia and Slovenia.

The updated results indicate that the new Labor Code has had little effect on Turkey’s EPL strictness, when assessed on the basis of the OECD methodology. The overall rating of 3.5 is unchanged, leaving Turkey, along with Portugal, with the most protective employment protection rules. Turkey’s ranking is primarily due to legislation governing the use of temporary

67 The EPL index for these two was calculated by Riboud, Sanchez-Paramo, and Silva-Jauregi (2002).
and fixed-term contracts, which is the most restrictive of all countries. In terms of job protections for regular employees, Turkey ranks tied for ninth among the 30 countries included in the table. Turkey’s regulations regarding collective dismissals are relatively flexible, with an index score that is tied for twenty-fourth place among all countries.

**Heckman-Pages Method**

4.57 The Heckman-Pages (2004) index measures employment protection as the cost of complying with regulations in dismissing a regular worker for economic reasons. Unlike the OECD method, it does not consider regulations that affect the use of non-permanent contracts. However, it is a theoretically strong approach in that it estimates the monetary costs associated with complying with job security regulations.

4.58 This measure computes the expected average cost (present value) at the time of hiring to the firm for dismissing a regular worker for economic reasons. This cost is measured in terms of the number of months of salary that would be required. It takes into account advance notice and severance costs, considering future dismissal probabilities and legal grounds for dismissal. This cost of job security, \( JS_{jt} \), for country \( j \) at time \( t \) is based on the following (simplified) formula:

\[
JS_{jt} = AN_{j,t} + ID_{j,t} + SenP_{j,t},
\]

where \( AN_{j,t} \), \( ID_{j,t} \), and \( SenP_{j,t} \) represent advance notice costs, indemnity (severance) costs, and seniority pay, respectively. The \( AN_{j,t} \) term is the discounted cost of future advance notice, weighted by the probability that a worker will be dismissed after \( i \) periods with the firm. The \( ID_{j,t} \) term is the discounted cost of future indemnities (severance obligations), weighted by the probability of dismissal after \( i \) periods with the firm. This term also takes into account the probability that economic reasons are considered a just cause for dismissal and the mandated indemnity in the event of unjust cause dismissal. The \( SenP_{j,t} \) term captures the cost of seniority pay, mandated in a few Latin American countries, which requires employers to make a payment upon termination, regardless of cause.\(^68\)

4.59 Figure 4.3 presents the results of this measure of employment protection, comparing Turkey with different regions of the OECD and Latin America. These scores come from Heckman and Pages (2004 table 3). For all countries except Turkey, they refer to the situation in 1999. Turkey’s job security measure applies to 2004, but the value was not changed by the passage of the new Labor Code. Recall that this indicator measures job security in terms of the number of monthly wages required to comply with regulations. At just under four months, the cost of compliance in Turkey is higher than all OECD countries, except for Portugal. It is higher than the average cost in each of the OECD regions, including southern Europe. The figure shows that Turkey’s score is more than double the all-OECD average and far above the Anglo-Saxon and northern European averages. However, Turkey is significantly below the Latin American average.

\(^68\) For details on the calculation of this job security cost, including how dismissal rates and discount rates are set, see Heckman and Pages (2004).
Fourth methods lead to the conclusion that Turkey’s employment protection rules are strict when compared with other OECD countries. There is a large literature that tries to estimate the impact of EPL in OECD countries and particularly in Europe. Table 4.11 summarizes the research findings.

Table 4.11: Impacts of Employment Protection Regulations

<table>
<thead>
<tr>
<th>Groups benefiting</th>
<th>Fixed-term and temporary agency work</th>
<th>Terminating regular employees for economic reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>Somewhat lower</td>
<td>Somewhat lower</td>
</tr>
<tr>
<td>Labor force participation</td>
<td>n.a.</td>
<td>Somewhat lower</td>
</tr>
<tr>
<td>Unemployment</td>
<td>Insignificant</td>
<td>Insignificant</td>
</tr>
<tr>
<td>Unemployment duration</td>
<td>Longer</td>
<td>Longer</td>
</tr>
<tr>
<td>Non-standard employment</td>
<td>n.a.</td>
<td>Probably higher</td>
</tr>
<tr>
<td>Informal employment</td>
<td>Higher</td>
<td>Higher</td>
</tr>
<tr>
<td>Job creation</td>
<td>Lower</td>
<td>Lower</td>
</tr>
<tr>
<td>Job destruction</td>
<td>Lower</td>
<td>Lower</td>
</tr>
<tr>
<td>Labor turnover</td>
<td>n.a.</td>
<td>Lower</td>
</tr>
<tr>
<td>Job tenure</td>
<td>n.a.</td>
<td>Longer</td>
</tr>
<tr>
<td>Groups losing</td>
<td>Women, youth</td>
<td>Prime-age males, skilled, Women, youth, unskilled</td>
</tr>
</tbody>
</table>


n.a. Not applicable.

Labor Market Impacts of Employment Protection Legislation

4.60 Both methods lead to the conclusion that Turkey’s employment protection rules are strict when compared with other OECD countries. There is a large literature that tries to estimate the impact of EPL in OECD countries and particularly in Europe. Table 4.11 summarizes the research findings.

4.61 According to the cross-country evidence, the impacts on employment and unemployment levels are modest and, in the case of unemployment, often statistically insignificant. However, the empirical findings are much stronger for the dynamic effects—on labor turnover and job
tenure, job creation and destruction, and unemployment duration—and on the types of jobs created. More flexible employment arrangements are likely to facilitate adjustment to macroeconomic shocks. Many of these results, however, are subject to problems common to cross-country regression studies, and Heckman and Pages (2004) note that they should be treated with caution.

4.62 For Turkey, there is a further reason to be cautious in interpreting these results. They are largely based on results from European and OECD countries, where compliance with regulations is better and the size of the informal sector is not as large. In this context, recently available evidence from Latin America on the impact of EPL in countries with similar labor market structures as Turkey becomes important. For the first time, the Latin American evidence also present evidence from actual change in employment protection legislation. Since there has been relatively little change in EPL in the OECD, the cross-country regressions were trying to estimate the impact of ELP exploiting cross-country differences.

4.63 The studies from Latin America\textsuperscript{69} include data from Columbia and Peru, the only two countries where the cost of terminating workers fell. (In Panama and Venezuela, the reduction in indemnities was partly offset by increases in the cost of severance pay.) Importantly, the studies use panel data for individual country studies. The studies in Argentina, Columbia, and Peru all find that severance pay has significant impact on employment rates. Significantly for Turkey, the Peru study was able to isolate the impact of the magnitude of the dismissal costs and found that the magnitude of the regulation does matter, suggesting that payoffs from severance reform will be higher where the current severance requirements are high. The introduction of temporary contracts in Argentina induced an increase in hiring and a substitution away from long-term employment toward temporary employment. While temporary contracts promote flexibility in the labor market, they reduce firm attachment and incentive to invest in workers.

4.64 While it is difficult to empirically isolate the impacts on Turkey’s labor market, there is one piece of evidence that is suggestive that EPL is affecting employment. Average working hours in Turkey are high (table 4.12), even relative to Korea, traditionally known as a country with long working hours. Further, working hours in Turkey have been increasing, while working hours in European counties have been falling. These high working hours suggest that severance requirements are a hindrance to job creation. The cost of complying with labor regulations such as on severance pay is high by international standards. One strategy that firms can follow to minimize such costs is to increasing working hours for existing workers, rather than hiring new workers. This permits reductions in production if needed, without incurring severance costs. The incentives not to hire new workers are strengthened because social security taxes are calculated on number

\begin{table}
\centering
\caption{Hours Worked Per Week In Manufacturing}
\begin{tabular}{|l|c|}
\hline
& 2004 \\
\hline
Turkey & 52.1 \\
EU-15 & 38.5 \\
Greece & 42.7 \\
Portugal & 39.6 \\
Spain & 38.9 \\
Ireland & 39.1 \\
Czech Rep. & 40.3 \\
Estonia & 40.1 \\
Hungary & 40.3 \\
Latvia & 42.0 \\
Lithuania & 39.2 \\
Poland & 41.8 \\
Slovenia & 40.3 \\
Bulgaria & 40.7 \\
Romania & 41.8 \\
Mexico & 45.0 \\
Korea & 48.0 \\
\hline
\end{tabular}
\end{table}

\textsuperscript{69} Summarized in Heckman and Pages (2004).
of days worked rather than hours. Firms can also substitute rely on informal labor where some of these costs are not incurred. Insights can be gained from the substantial international literature that examines how variations in employment protection rules across countries affect indicators such as employment, unemployment, labor force participation, etc.  

4.65 Overall, strict rules to protect job security, like Turkey’s, tend to create a duality in the labor market. They increase the stability of existing jobs but at a price: more long-term unemployment and non-participation in the labor force and less opportunity for regular employment in the formal sector. This tends to increase the vulnerability of certain groups of workers, including women and youth, who are less likely to get these “good” jobs. Many of these workers will be relegated to the informal sector or out of the labor force. These findings from the international literature are consistent with labor market characteristics in Turkey.

Improving Labor Market Outcomes through EPL Reform

4.66 The most important factors in determining the high overall EPL score for Turkey (relative to comparator countries) are the restrictions on the use of temporary and fixed-term workers and the requirements for severance payments for regular workers (see table 4.8).

4.67 Easing regulations in these two areas would enhance the dynamism of the labor market, create incentives for formal sector job creation, increase labor force participation of certain groups, including women, and encourage compliance with the law. These potential gains must be weighed against the weaker job security that would result for the minority of the workforce that currently benefits from strong protection. But a stronger safety net outside the firm through unemployment benefits and active labor market program would provide an alternative—and more broadly effective—mechanism for achieving social and employment objectives.

Temporary Agency Work and Fixed-term Employment

4.68 The issue of temporary work agencies is controversial in Turkey. During the recent period of labor reform, no agreement could be arrived at regarding a legal framework providing for such agencies to operate. During the past decade, the overall trend in the OECD has been to extend the legality of these agencies. Greece is the most recent country to introduce this type of reform. As table 4.13 indicates, Turkey is now one of only two countries in the OECD where temporary work agency employment is illegal.

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70 This comparative research does face various methodological challenges. First, accurately measuring EPL, as it actually exists “on-the-ground” is difficult given the problems in capturing the effect of compliance and legal interpretation. Second, there are many factors independent of, or operating in conjunction, with EPL that can impact labor market performance. Disentangling these effects and isolating the role of job security regulations can be problematic.

72 The new Labor Code does provide for “temporary labor relations” to allow employers to transfer employees temporarily within the same “holding.”
Table 4.13: Legal Framework for Temporary Work Agency Employment in 2003, OECD Countries

<table>
<thead>
<tr>
<th>No restrictions</th>
<th>Legal with restrictions</th>
<th>Temporary work agency employment illegal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Austria</td>
<td>Mexico</td>
</tr>
<tr>
<td>Canada</td>
<td>Belgium</td>
<td>Turkey</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>France</td>
<td></td>
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<tr>
<td>Denmark</td>
<td>Germany</td>
<td></td>
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<tr>
<td>Finland</td>
<td>Italy</td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>Japan</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>Korea, Rep. of</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>Netherlands</td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>Norway</td>
<td></td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>Poland</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>Portugal</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>Spain</td>
<td></td>
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<tr>
<td>United Kingdom</td>
<td></td>
<td></td>
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<tr>
<td>United States</td>
<td></td>
<td></td>
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</tbody>
</table>


4.69 The key legal dimensions regulating fixed-term employment include defining the situations when it is valid, and any limitations on the number of successive contracts and their accumulated duration. The definition of valid reasons is especially important. All countries allow fixed-term contracts where “objective reasons” exist: that is, where the nature of the assignment assumes an end date (whether seasonal, for a specific project, to replace a temporarily absent worker, and so on). Some countries—and only Turkey and Greece in the OECD—permit only fixed-term contracts in these cases. Others have no restrictions allowing the possibility for employers and workers to conclude fixed-term contracts in any situation. Still others are somewhere in between, allowing for fixed-term contracts in some (though not all) cases where there is no “objective reason.” Here, too, there is a general international trend toward loosening restrictions.

4.70 Legally opening up the use of fixed-term contracting runs a risk of encouraging employers to use this form of employment to avoid the obligations of permanent contracts. However, it also can have the positive effect of shifting workers who are now in casual employment relationships (without a contract) into more formal contracted positions. If Turkey’s substantial severance requirements were to be moderated, as discussed below, then the incentives for avoiding permanent contracts in legitimately long-term employment relationships would be minimized and formalization of casual employment could turn out to be the more significant effect.

4.71 The pools of workers in fixed-term/temporary contractual relationships and in casual (uncontracted) relationships are relatively similar. In both, women, young workers, old workers, and the poorly educated are overrepresented to relatively similar degrees. These data suggest that casual employment and fixed-term employment are largely substitutable. Whether workers and employers contract in one of these forms or the other depends on economic and legal factors.

4.72 While the pools may be similar, there are major differences in access to formal social protection for each of these two groups. According to the 2002 HIES, almost half (46.7 percent) of fixed term/temporary contracted workers are covered under one of the social security plans, while the corresponding figure for casual workers is only 8.8 percent. Loosening the legal framework for fixed-term contracting, specifically by extending the definition of valid reasons, would shift some of the casual and uncovered workforce into formal contracted relationships.
Severance Pay

4.73 Severance pay is a prominent issue in labor market regulation reform in Turkey. It is also controversial. While committing to change, the drafters of the 2003 Labor Code could not come to a consensus on severance pay. The new Code (Transitory Article 6) states that a fund for severance pay will be established but that existing benefits under Law 1475 will remain until such a fund becomes effective. The government has made some proposals regarding a severance fund, but these have not been acceptable to the social partners.

4.74 Under the arrangements that still prevail, regular workers qualify for severance payments after one year of service and for certain categories of termination. These include worker resignation for just cause and dismissal initiated by the employer for reasons other than worker misconduct. Workers laid off for economic reasons and workers qualifying for old-age pension are eligible for severance payments. The payment is set at a level equal to one month of pay (at the last gross daily wage rate) for each year of service. A ceiling is placed on the amount a worker can receive. This ceiling is established as the annual amount of the retirement bonus of the highest state official subject to the Civil Servants Act.

4.75 Anecdotal evidence suggests that compliance with severance requirements is only partial. Focus group comments from both employers and employees revealed a number of practices that are used to avoid payments (see paragraph 4.28). As a result, the protection offered to workers from severance pay is less, and probably considerably less, than the requirements would suggest. This is at least partly due to the fact that the costs of compliance are high. This is certainly true when Turkey’s arrangements are viewed from an international perspective, as both the OECD and Heckman-Pages measures indicated.

4.76 Figures 4.4 and 4.5 compare Turkey’s severance requirements with the averages for countries grouped according to income level and region. (For the purposes of these comparisons, Turkey is considered to be an “upper-middle” income country and in Eastern Europe/Central Asia.)

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Figure 4.4: Minimum Number of Months of Employment for Severance Pay Eligibility, by Income Level and by Region

Source: Holzmann, Iyer, and Vodopivec (2003) for regional averages, with Turkey added.

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73 This section has benefited from Sural (2003) and background work undertaken by Hur (2004).
74 For more details on the severance arrangements, see Sural (2003).
Workers who have worked in state-owned enterprises and lost their jobs because of privatization and related reasons in the law, are entitled to a second termination payment, called “job loss compensation.” This is paid out of the privatization fund and is in addition to statutory severance payments or eligible unemployment insurance benefits. The amount of compensation depends on years of service and final wages.\(^{75}\) Between 1995 and 2002, compensation was paid to about 15,000 workers (ISKUR 2003).

Reform options on severance pay can follow along one of two lines: modifying the existing parameters, or fundamentally changing the architecture of income support for unemployed workers.

Under the first scenario, the major objectives of reforms would be to bring Turkey’s severance arrangements into line with those in comparable countries. This involves both the amount of prior employment required for eligibility and the level of payments. As figure 4.5 illustrates, Turkey’s 12-month eligibility requirement for prior employment is well below comparable counties. Requirements are about 21 months in upper-middle income countries, just under 20 months in Eastern Europe, and about 40 months in the OECD. Turkey’s one month pay per year of service (without a ceiling) is also at the top end, both for countries of its income level and for OECD and other European countries. While such reforms would reduce severance payments for covered workers, it should be noted that the severance features were designed before unemployment insurance was introduced. Now, with this additional source of protection in the event of unemployment (essentially serving the same segment of the labor force), a rationale exists for reassessing severance.\(^{76}\)

The other possible reform to be considered under the first scenario would be whether severance payments should be part of the wage guarantee fund that is being established under the

\(^{75}\) Under Law 5398 introduced in June 2005, job loss compensation is now twice the net minimum wage.

\(^{76}\) This study has already established the high degree of correlation between presumed compliance with labor law and access to formal social security (table 3).
Unemployment Insurance (UI) Fund.\textsuperscript{77} This could allow for workers to receive at least some severance in the event of employer liquidation, bankruptcy, etc. The attractiveness of such a proposal would depend on whether the 1 percent from current UI employer contributions targeted for the wage guarantee fund could also cover any severance liabilities as well.\textsuperscript{78}

4.81 A more fundamental reform would be to create fully funded individual accounts to provide income support to workers who have lost their jobs. This would involve transforming and integrating the current severance system and the UI Fund. While many design issues would need to be worked out, the general framework—which has been implemented in some other countries—would include:

- Employee or combination employee-employer contributions to individual worker accounts, which are transferable across enterprises.
- Access to accounts on becoming unemployed; probably only when separation is involuntary
- In some versions, part of contribution (roughly 0.5 to 1 percent) to go to a pooled UI fund for unemployed workers who exhaust their accounts (see Chile example, below).
- On retirement, unused funds in individual account transferred to pension account.

4.82 Box 4.4 describes these types of reforms in Austria and Chile. These two countries have recently converted traditional severance plans and UI systems to individual accounts, with quite different designs.

**Box 4.4: Severance Reforms in Austria and Chile**

In 2003, Austria converted its severance pay to a fully funded, contributory system. The reform extended entitlement to workers with short tenures and removed obstacles to worker mobility, granting full portability and allowing the accumulation of benefits from the beginning of the employment spell. Employers pay a contribution of 1.5 percent of the payroll to each individual worker. Resources are held in a central account and invested in the capital market. Laid-off workers with job tenure of three or more years can withdraw accumulations from their accounts, or keep them and claim them upon retirement. (Those who separated voluntarily and those with tenures below three years are denied the right of immediate withdrawal.)

In 2002, Chile introduced a new unemployment insurance system that combines social insurance with self-insurance. Workers and employers both pay contributions. Unemployment contributions are split between individual accounts and a common, solidarity account, which is also partly financed by the government. This has reduced employers’ severance payment obligations, which are being partly replaced by the new unemployment insurance system. The system is effectively funded with individual accounts managed by a freestanding administrator selected through a competitive tender. To stimulate reemployment, benefit recipients first draw resources from their own accounts, and when they deplete these, they draw from the solidarity account. Withdrawals from individual accounts are triggered by separation from the employer, regardless of the reason. Withdrawals from the common fund are triggered by insufficient resources in individual accounts. Claimants must satisfy the usual eligibility conditions under unemployment insurance (not working and being available and searching for job), but are limited to two withdrawals over a five-year period. Benefits are linked to past earnings, with a declining schedule.


\textsuperscript{77} Under this wage guarantee, unpaid wages would be covered for up to three months.

\textsuperscript{78} Korea has included severance in its Wage Guarantee Fund.
E. PROTECTION OUTSIDE THE FIRM: UNEMPLOYMENT BENEFITS AND ALMPs

4.83 The directions for EPL reform put forward in the previous section would bring Turkey’s hiring and severance arrangements in line with norms in the OECD and other middle-income countries. Formal job security protections for those who are covered would be reduced. However, the more moderate regulations would reduce disincentives to formalize, increase compliance, and would bring more workers under the protection of the Labor Code and social security. In any event, scaling down protection inside the firm should be accompanied by improved protection outside the firm. This strategy, discussed in general terms in section 2, would involve enhancing the effectiveness of passive and active programming. Currently, the unemployment insurance system and Active Labor Market Programs (ALMPs) do not offer enough support to the labor force.

Unemployment Benefits

4.84 The unemployment insurance (UI) system was established in 1999 with the passage of Law 4447. Collection of premiums began in mid-2000 and the first benefit payments were made in March 2002. The system covers workers registered with SSK and does not include civil servants or the self-employed. Funds are collected by SSK and transferred to ISKUR, which implements the program. The legal framework for the system follows the standard OECD blueprint. It is mandatory, covering all industries and occupations. Benefit levels are earnings-related. Entitlement duration is tied to previous employment history; and benefits are mostly financed by employer and worker contributions. One important deviation from the OECD model is a simplified monitoring of continuing eligibility. This is primarily dictated by the large informal sector and limited capacity of employment offices to monitor the current status of recipients, including their job search behavior. Informality and low capacity distinguish Turkey—and many other countries at similar levels of development—from industrialized countries. These characteristics need to be reflected in the design and implementation of UI programs in developing countries. For a comparison of the Turkish UI system with those in transition countries, see Appendix D.

- Initial eligibility requirements. To qualify, the unemployed worker must have separated involuntarily; register at the local employment office; and have worked in covered employment (in which insurance premiums have been paid) continuously for 120 days preceding the termination of employment, and for 600 days in the preceding three-year period. The work history condition is particularly strict, when compared with OECD countries and with the transition countries.

- Continuing eligibility requirements. Beneficiaries lose their entitlement if they find a formal job (are found to be registered in SSK); refuse training offered by ISKUR; or fail to provide required documentation to ISKUR. Unlike OECD and many transition countries, continuing eligibility does not require recipients to be available for and actively seeking work. In most of these countries, State employment offices conduct this monitoring. Given the weak administrative capacity of these offices and the large informal sector in Turkey, a case can be made to waive these conditions, at least in the short- to medium-term.

- Benefit levels. Benefits are set at 50 percent of net earnings (from the average of the previous four months). The ceiling for benefits is the official minimum wage for workers above 16 years of age. Unemployment benefits are tax free.

79 This section is based on Vodopivec (2004).
• **Benefit duration.** The maximum potential duration of unemployment benefit payments is 180 days for those with 600–899 days of covered employment in the previous three years; 240 days for those with 900–1079 days; and 300 days for those with 1,080 days or more of covered employment. After intermittent employment spells (those that do not qualify the worker for a benefit), the recipients can collect an unemployment benefit for the unused period during a previous unemployment spell.

- **Financing.** Since 2002, the contribution rate has been set at 4 percent (2 percent paid by employers, 1 percent by workers, and 1 percent by government).  

**Coverage and Financial Trends**

4.85 The two main (and related) issues regarding the performance of the UI system to date concern the limited coverage and the growing fund surplus.

4.86 Coverage. Figure 4.6 shows the number of UI recipients and the total amount of benefits paid since the system started making payments. As expected, the number of recipients rose steeply through 2002 and in early 2003, as qualified claimants came on stream, after meeting the 600-day eligibility period. Coverage then reached a plateau at around 60,000 before rising modestly in the first four months of 2004. The latest figures received by the World Bank indicate that the number of beneficiaries is now just over 90,000.

![Figure 4.6: Number of UI Recipients and Amount of Benefits, March 2002 to April 2004](in billion TL)

1. Left-Source: Vodopivec (2004), from ISKUR.

80 Initially, the contribution rate was set at 7 percent of the worker’s gross wage (3 percent paid by employers, 2 percent by workers, and 2 percent by government).
4.87 The limited coverage of the plan to date is a concern. Less than 4 percent of the unemployed workers are getting benefits. This is especially troublesome if an overall reform strategy is to offer workers better protection outside the firm. Without substantial increases in coverage, the UI system will remain very marginal. Coverage rates in other countries are typically much higher than Turkey’s. In five transition countries reviewed in the late 1990s, UI coverage as a percentage of all unemployed workers was between 25 and 50 percent (Vodopivec, Worgotter, and Raju 2003). In OECD countries, coverage is in the 25 to 75 percent range.\footnote{81} In developing countries with recently introduced UI systems, the coverage rate is considerably lower, but still well above Turkey’s. For example, the latest estimate is about 14 percent for Korea and about 8 percent for Hong Kong.

4.88 What would explain Turkey’s very low coverage? First, there is the compliance issue, discussed earlier in this chapter. Many workers eligible to be registered in SSK are not registered because of high contribution rates and the lack of enforcement mechanisms. Second, unemployed workers who are registered in SSK may not be claiming unemployment benefits because they were not involuntarily laid off; they did not meet the qualification period; or they did not apply to ISKUR.

4.89 Regarding the first possibility, MOLSS data indicate that the large majority of job separations in the formal sector are due to reasons that would not qualify for unemployment insurance benefits (table 4.14). In past four years, only about 15 percent of separations were registered as dismissals, which is generally the basis for UI eligibility. About 41.7 to 50.6 percent of job separations were classified as resignations. On the face of it, these data are not what would be expected, given the slack labor market and relative scarcity of formal sector jobs. Rather, they suggest that the substantial severance obligations create incentives for firms to induce resignations rather than formally lay off workers. (Recall that the focus groups suggested that this occurred regularly.) This is a very plausible hypothesis for explaining an important part of the low coverage of UI.

### Table 4.14: Job Separations by Main Reason 2001 - 2004

<table>
<thead>
<tr>
<th>Reasons for separation</th>
<th>2001</th>
<th></th>
<th>2002</th>
<th></th>
<th>2003</th>
<th></th>
<th>2004</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number</td>
<td>% distribution</td>
<td>number</td>
<td>% distribution</td>
<td>number</td>
<td>% distribution</td>
<td>number</td>
<td>% distribution</td>
</tr>
<tr>
<td>Dismissals(^1)</td>
<td>227,039</td>
<td>15.3</td>
<td>193,425</td>
<td>13.5</td>
<td>190,038</td>
<td>12.1</td>
<td>144,198</td>
<td>9.7</td>
</tr>
<tr>
<td>Voluntary separations (resignations)</td>
<td>616,829</td>
<td>41.7</td>
<td>668,235</td>
<td>46.7</td>
<td>797,491</td>
<td>50.6</td>
<td>727,151</td>
<td>48.9</td>
</tr>
<tr>
<td>End of temporary or seasonal work</td>
<td>138,732</td>
<td>9.4</td>
<td>138,941</td>
<td>9.7</td>
<td>128,934</td>
<td>8.2</td>
<td>152,993</td>
<td>10.3</td>
</tr>
<tr>
<td>Other reasons</td>
<td>497,307</td>
<td>33.6</td>
<td>429,453</td>
<td>30.0</td>
<td>460,130</td>
<td>29.2</td>
<td>462,008</td>
<td>31.1</td>
</tr>
<tr>
<td>Total - All Job Separations</td>
<td>1,479,907</td>
<td>100.0</td>
<td>1,430,054</td>
<td>100.0</td>
<td>1,576,593</td>
<td>100.0</td>
<td>1,486,350</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\(^1\) Includes mass dismissals, noticed termination of contract (just cause), temporary job stoppage due to force majeure and workplace closing

4.90 Even for workers who were formally dismissed, it is likely that a significant number were ineligible for benefits because they did not meet the long qualification periods.

\footnote{81} These estimates apply to countries with UI systems alone. Where unemployment benefits are available through both UI and unemployment assistance, coverage rates are higher.
4.91 Registration at an employment office is the final condition for eligibility. Figure 4.8, which compares HLFS unemployment estimates with registration data from ISKUR, indicates that most unemployed workers do not register. In 2004, for example, registered unemployment was 811,949, while 2004 aggregate unemployment was 2.5 million. Moreover, the figure shows that the gap between registered and total unemployment has increased substantially over the past decade. In 1993, registered unemployment represented 39.5 percent of total unemployment. By 2004, this share had decreased to 32.5 percent. Various reasons may explain this gap, and the fact that it is growing. In any case, workers reporting that they are unemployed in the HLFS may not have enough incentive to register as unemployed because they may be actually working in the informal sector and/or they do not perceive that there will be benefits from registering. This latter point could mean that workers are not aware of unemployment benefits, are ineligible to receive them, are not aware of any other ways in which they can be helped by the employment offices, or find that the cost of getting to an employment office is too high.

4.92 *Financial performance of the fund.* The surplus of the fund is the other major issue with the current UI system. Throughout the history of the plan, the two main revenue components—contributions and returns on the fund’s financial investments—have vastly exceeded the current expenditures of the fund (figure 4.7). By June 2005, these reserves amounted to over 15 billion YTL (over $11 billion).
4.93 In order to make projections about the UI Fund and to assess the implications of possible parametric reforms, this study carried out a series of simulations using the World Bank’s unemployment insurance simulation model (UISIM). This model projects outcomes for key financial and other system variables based on input data regarding contributors, beneficiaries, and rules of the system, as well as macroeconomic and labor force variables. Further details on the model are available in Vodopivec (2004) and in Appendix A.

4.94 The simulations include a base scenario and a set of alternative scenarios to capture the effects of possible changes to key parameters and changes in macroeconomic conditions. Simulations are run out to 2022. In particular, the base case simulation assumes that key parameters of the system remain as they were in April 2004. As for macroeconomic parameters, the base scenario assumes real yearly interest rates (the rate applied to the UI reserve fund) of 8.0 percent in 2003, declining by 0.5 percent yearly until it reaches an equilibrium rate of 4.0 percent in 2011. Note that inflation is dealt with implicitly, as the model works with real values of financial variables. Under the base case, real GDP is assumed to grow at a 5 percent rate during the simulated period. Real wage growth is assumed to be 5.8 percent in 2005, and then gradually declines to reach an equilibrium range of 3.0 to 3.2 percent by 2013.

4.95 Under each of the alternative scenarios except the “combined reform,” only one parameter is modified, while the others retain their base values. Under the combined reform scenario, described below, several parameters change simultaneously. This scenario captures a set of parametric reforms that the authors believe would be desirable for the optimal utilization of the UI Fund in providing social protection for unemployed workers. All these alternative

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82 The model takes into account the following system information: data about the structure of UI recipients and level of benefits refers to December 2003; the number of recipients refers to 12-month average ending with April 2004; information about the contributors to the system refers to the first four months of 2003; and information about the value of the UI reserve fund refers to June 2004.

83 These GDP and real wage growth rate assumptions are the same as those used for the latest pension and health simulations made by the World Bank for Turkey.
scenarios assume the introduction of reforms in January 2005, with the changed parameters assumed to prevail indefinitely. The one exception is the “economic shock” scenario, where the shock is assumed to last for three years. Note that all alternative scenarios are “expensive” relative to the base case, in that expenditures will increase and/or revenues will decrease.

4.96 The simulations have tested the following alternative scenarios:

- **Economic shock** – The inflow into unemployment and the receipt of UI benefits is tripled over a three-year period (from January 2005 to December 2007) and then returns to the original, base level.

- **Easing eligibility** – The inflow into the receipt of UI benefits is doubled in January 2005 and remains at that level indefinitely; parametrically, this could be attempted by easing initial qualification requirements.

- **Reduced contribution rate** – The combined rate is reduced for an indefinite period in January 2005 from the current 4 percent to 2 percent.

- **Combined reform** – This scenario, which reflects a set of recommendations from this report, includes the following assumptions:
  a) cutting the UI contribution rate in half (so that employers contribute 1 percent and workers and government contribute 0.5 percent each), starting in January 2005
  b) easing of initial eligibility requirements to 12 months of employment over a 24-month period instead of the current requirement of at least 600 days over three years (specifically, it is assumed that because of this change, the inflow doubles in two years starting from January 2005 and stays at that level thereafter)
  c) de-linking the unemployment benefit ceiling from the minimum wage and establishing the target ceiling of 35 percent of the average private sector wage (for modeling purposes, the level of benefits is assumed to increase 5 percent over the base variant starting January 2005).
  d) increasing the amount of expenditures on active labor market programs, specifically, assuming that these expenditures start from zero in December 2004 and linearly increase to 0.2 percent of GDP by December 2009.

4.97 Appendix B is summarizing the results of the simulations. The panels show the results under each scenario for the UI fund reserve, what contribution rates would be required so that revenues equal expenditures, the number of UI recipients, and the share of UI benefits in GDP.

4.98 Since the returns to the fund are such an important element in the UI fund’s financial position, a series of simulations was also carried out under a reduced interest rate assumption, where the rate was set to decrease by 2 percent per year until it reaches 2 percent (in 2006) and then stays at that level. Appendix C presents the simulation results for the different scenarios under this assumption.

4.99 The simulations of the system’s revenues and expenditures indicate the following:

- **Value of the UI fund.** For all scenarios, the value of the UI fund continues to increase throughout the simulated period. The most important determinant of such a strong performance under all scenarios is the high real interest rate, coupled with the large initial reserves. Indeed, under a reduced interest rate scenario, the growth of the UI reserve stock is slower, with the fund’s values reaching 18.5 quadrillion TL under the combined reform
scenario, and 36 quadrillion TL under the base scenario by December 2022 (Appendix C, panel C1).

- **Required contribution rates.** This measure pertains to the contribution rate needed for current contribution-based revenues to equal current expenditures, as a percentage of expenditures. It thus separates out the effects of revenues earned by investing accumulated reserves. The simulations show that the contribution rate under the base scenario strongly “overshoots” the revenues. The actual required contribution rate under this scenario is only 22 percent of the current rate (combined 4 percent of wages). However, in other scenarios, requirements to fund expenditures are much closer to existing contribution rates (Appendix C, panel C3).

- Under the combined reform scenario, the required contribution rate to match expenditures exceeds the one assumed by the scenario (2 percent of wages) starting January 2005 and continues to increase until 2008, thereby widening the gap between current benefit expenditures and revenues generated via contributions. The required contribution rate however, remains unchanged between 2008 and 2022, stands at 80 percent (20 percent less than the current rate). Remembering that the combined scenario calls for a large increase of expenditures on active labor market programs, the above simulations show that the contribution rate assumed by the scenario does not generate enough contribution-based revenues to cover both unemployment benefits and these expenditures. But as shown above, the accumulated reserves of the fund is also taken into account, the financial viability of the UI Fund is never jeopardized.

4.100 The simulations show that the financial viability and sustainability of the UI system is far from being jeopardized by any of the reforms considered. Financial sustainability inevitably is an issue when a country introduces a new social security program, such as UI. In the absence of historical guidance, program designers need to make difficult judgments about how unemployment insurance will affect labor market behavior, including participation, turnover, and job search. Program parameters, including contribution rates, eligibility and qualification rules, and benefit levels and durations, may or may not be optimal or even internally consistent. As a result, later adjustments to program rules may well be necessary.

4.101 The current “overshooting” of revenues is counterproductive and calls for reforms. This is also recognized by the government, which is now considering a reform package to UI. Included in the proposals under discussion were easing of eligibility rules to 450 days of covered employment in the past three years, with at least 120 days in the last year and increasing the benefit ceiling to twice the net minimum wage.

4.102 The combined reform scenario attempts to include a number of changes that would take advantage of opportunities associated with the current financial situation to improve the social protection provided by unemployment insurance. In addition to addressing the fund’s accumulated reserves, reforms should also consider how coverage can be extended to a larger proportion of the labor force. These two objectives are complementary since policy proposals that encourage plan participation—such as easing eligibility—can be expected to increase the draw on the fund. Easing eligibility merits serious consideration since Turkey’s current rules are very stringent, by international standards.

4.103 The other issue on the spending side is to use the fund for things other than meeting UI claims. The government introduced a wage guarantee fund financed through UI employer contributions (legal framework established with adoption of amended Labor Code 2003). Whether severance payments should also be guaranteed through this fund might be considered.
As simulated in the combined reform scenario, the UI fund can also be used for financing an enhanced portfolio of active labor market programs. This option is part of the UI reform package proposed by ISKUR in 2005. As discussed in the next section, Turkey’s ALMP capacity is low for a country at its stage of development. While the cost-effectiveness of ALMPs has a mixed record, Turkey’s labor market performance would benefit from strengthening capacity in this area, especially regarding basic employment services. More intense access to these services can help unemployed workers find employment. All these options need to be carefully considered in light of labor market disincentives they may produce, their cost-effectiveness, and administrative and technical capacity.

4.104 Finally, Turkey might consider a reform strategy that goes beyond the modification of existing parameters and more fundamentally changes the architecture of income support for unemployed workers. This would involve transforming and integrating the existing severance and UI systems into fully funded individual accounts to provide income support to workers who have lost their jobs. The framework for this innovation and some recent examples were discussed in section D.

**Active Labor Market Programs**

4.105 Active labor market programs include a wide range of activities: public works, micro-credit and other forms of self-employment support; wage and employment subsidies; training and retraining; and employment services, including job placement, counseling, and labor market information. ALMPs can increase the quality of labor supply (for example, through retraining); increase labor demand (through direct job creation); or improve the matching of workers and jobs (through job search assistance).

4.106 OECD countries have a long experience with active labor market programs. Northern European countries, in particular, have relied on ALMPs. Belgium, Denmark, Finland, France, Germany, Ireland, the Netherlands, and Sweden all spend at least 1 percent of GDP on these programs (OECD 2004). However, evaluations indicate that ALMPs do not always have the desired impacts on employment and earnings of participants. Betcherman, Olivas, and Dar (2004) reviewed 159 scientific evaluations of different active labor market programs, primarily in OECD countries but also in developing and transition economies. This analysis demonstrated that there has been a wide range of results, with some programs demonstrating positive labor market effects and others showing either no impact or even negative effects. The results for each type of ALMP are summarized in table 4.15.

4.107 The impact evaluations show that program design and the context in which the program operates matters a great deal. In order to maximize the benefits of ALMPs, industrialized countries are now emphasizing the following in their employment strategies:

- Increased reliance on job search assistance
- Integrated services (one-stop window/guichet unique) so that clients can receive information, counseling, and access to services from a single source
- An increasing reliance on private delivery of services (for training, employment services, and public works, for example)
- Closer partnership with employers and communities to ensure that programs respond to market conditions
- Employment subsidies and tax benefits to encourage low-skill workers to take low-pay jobs
“Profiling” of unemployed clients to identify those likely to need employment services or retraining. In some countries, program participation (based on profiling) is an obligatory condition to qualify for unemployment benefits.

Increased emphasis on program evaluation and allocation of resources on the basis of evaluation results.

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Summary of overall impact</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment services</td>
<td>Generally positive impacts on employment and earnings. Costs relatively low, so cost-benefit ratio usually positive.</td>
<td>Programs have most positive impacts when economy is good. Impact limited where lack of labor demand.</td>
</tr>
<tr>
<td>Training for unemployed</td>
<td>Positive impacts on employment but no overall effect on earnings in developed countries.</td>
<td>Program effectiveness benefits from on-the-job training and employer involvement. Women often seem to benefit more than men. Programs have most success when economy is good.</td>
</tr>
<tr>
<td>Retraining for workers in mass layoffs</td>
<td>Often no positive impact on employment and earnings, but there are exceptions.</td>
<td>Better results may be achieved with integrated training and employment services.</td>
</tr>
<tr>
<td>Training for youth</td>
<td>Very negative impacts on employment and earnings in developed countries, though some positive impacts in developing countries (Latin America).</td>
<td>Youth employment problems more effectively addressed through earlier, education-related interventions. Successful programs require intensive services and thus are costly.</td>
</tr>
<tr>
<td>Wage/employment subsidies</td>
<td>Overall negative impacts on employment and earnings.</td>
<td>Recent evaluations in developed countries more favorable (welfare-to-work programs). Programs may be more effective when combined with training.</td>
</tr>
<tr>
<td>Public works</td>
<td>Overall negative impacts on future employment and earnings.</td>
<td>Can be effective as a short-term safety net for the poor but generally not as program to improve future LM prospects.</td>
</tr>
<tr>
<td>Microenterprise/self-employment assistance</td>
<td>Not enough labor market-oriented evaluations to determine overall employment and earnings impacts.</td>
<td>Very low take-up. Some evidence of positive impacts for older, better-educated individuals. Better results when advisory services accompany financial aid.</td>
</tr>
</tbody>
</table>

Source: Betcherman, Olivas, and Dar (2004).

ALMPs in Turkey

4.108 Compared to other OECD countries and many middle-income countries, Turkey has a very limited experience and capacity in the area of active labor market programs. Starting in the mid-1990s, some initiatives were introduced, funded largely by the World Bank. These initiatives are reviewed in ISKUR (2003) and European Union (2003).
4.109 ISKUR’s responsibilities include job brokering (matching job seekers with vacancies); providing employment services and training; implementing other ALMPs; improving the employment prospects for the disabled and ex-convicts; administering the unemployment insurance program; compiling and disseminating labor market data; and regulating private employment agencies. To enhance the institutional capacity of ISKUR and to support Turkey’s ability to implement policies and services aligned with the European Employment Strategy, the European Union has introduced a technical assistance program for an ALMP strategy in Turkey. This program includes institution building through policy development and improving ISKUR’s operational performance, a grant scheme to finance ALMPs, and developing model employment offices.

4.110 It is difficult to pinpoint all of the public resources directed to different ALMPs because there are various sources. Vocational training, including apprenticeship training, is under the responsibility of the Ministry of National Education and implemented by public and private institutions, enterprises, municipalities, NGOs, and ISKUR. KOSGEB administers programs for the self-employed and small businesses, and the World Bank supports the financing of ALMPs for laid-off workers and workers registered with ISKUR under the Privatization Social Support Project. However, as table 4.16 indicates, ISKUR has very few funds available for financing ALMPs. Total ISKUR expenditures in 2003 were 42 trillion TL ($US30 million) and as the table indicates, only a small part of this involves direct allocations to program delivery.

<table>
<thead>
<tr>
<th>Category</th>
<th>Expenditure (trillion TL)</th>
<th>Distribution in percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff salaries, benefits, etc.</td>
<td>25.8</td>
<td>61.7</td>
</tr>
<tr>
<td>Office expenses</td>
<td>5.2</td>
<td>12.4</td>
</tr>
<tr>
<td>Labor training programs</td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Services for disabled and ex-convicts</td>
<td>0.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Social assistance program</td>
<td>7.8</td>
<td>18.7</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>2.6</td>
<td>6.2</td>
</tr>
<tr>
<td>Total</td>
<td>41.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: ISKUR.

4.111 In addition to the limited capacity of ISKUR to design and implement an active labor market policy, private employment agencies do not yet have an important function in the labor market. As noted above, these agencies are playing an increasingly important role in many countries in the OECD and elsewhere. The 2003 Labor Code authorizes private agencies for the first time. ISKUR is responsible for licensing and supervision. However, these agencies can be licensed only to do job matching and not the full range of employment and training services. As a result, there have been very few applications. As of June 2005, only 67 private agencies were licensed.
F. CONCLUSION

4.112 This chapter has considered the access of the labor force to formal protection instruments and the effectiveness of these instruments. This has enabled consideration of both labor market regulation and social security, and the linkages between the two. Policy makers must take a comprehensive view of these linkages, understanding how labor market regulations, including severance pay, interact with social security arrangements. The thrust of reforms should be to rethink how the social protection of workers can be provided while creating incentives for formal employment creation.

4.113 A major issue is the limited access of Turkey’s workers to formal protection, including labor laws, collective bargaining, and social security. In part, this low coverage reflects the nature of the economy, which has a large agricultural sector and a high (and growing) degree of informalization. It also reflects low compliance, both in terms of enforcing labor laws and registration in social security plans. The coverage problems are due, at least in part, to the high costs of complying with social security and labor. Payroll taxes are high by international standards, especially for low-wage earners and workers in families with children. The employment protection rules are costly as well.

4.114 Turkey has relied upon strong labor regulations to protect workers from unemployment and other labor market risks. Different methodologies show that its employment protection rules are among the highest in the OECD and neighboring transition countries. The 2003 Labor Code introduced modifications in a number of areas, but did not alter this fundamental observation. Loosening regulations on flexible hiring and on severance obligations—to bring them more in line with arrangements prevailing in comparable countries—would have favorable employment effects, especially for vulnerable categories of workers who are now largely excluded from the formal sector. It would also ease compliance problems. With these arrangements, a minority of the workforce would have less protection than currently, and this group would be inclined to oppose the kinds of reforms suggested. However, a stronger safety net outside the firm through an unemployment insurance system with much wider coverage and through enhanced active labor market programs would provide a more broadly effective strategy.

4.115 The logic of a reform strategy should be to transfer some degree of social protection from “inside the firm” through protective regulation to protection “outside the firm” through passive and active employment policies: in other words, to evolve from primarily protecting jobs to protecting workers. An effective and financially sustainable unemployment insurance system is a cornerstone. With this in place, labor market regulations can be made more flexible, thereby encouraging job growth.

4.116 Reforms to unemployment insurance should focus on extending the coverage of the system well beyond the current level of approximately 3 percent of the country’s unemployed workers. This can be done by easing eligibility and, perhaps, increasing the generosity of the system. The effectiveness of the system would be enhanced by strengthening the employment services, under the responsibility of ISKUR that can provide assistance to UI recipients in finding jobs. The vast surplus in the UI fund creates an opportunity to consider reforms that could extend coverage. This study’s modeling simulations show that the UI fund easily remains financially viable and sustainable under any realistic scenario. This would include a cut in payroll taxes to finance UI. Over the longer run, more moderate employment regulations and
more effective active and passive programs could encourage compliance and broaden the base of the formal labor force. This would then create the dynamics to further lower payroll taxes.

4.117 More fundamental reforms could also be considered that look at the income protection of unemployed workers in a comprehensive way, linking the reform of UI (and pensions) to the reform of severance pay. This could be done by converting severance pay into funded, contributory savings accounts with the option of providing unemployment support from such accounts.

**Box 4.5: Labor Market Reforms in Spain**

Temporary employment contracts were introduced in Spain in 1984 and quickly came to account for most new jobs. However, aggregate labor market performance in Spain through the mid-1990s remained poor, with the unemployment rate reaching 21 percent in 1997. In 1997, reforms were introduced to encourage permanent employment, particularly for vulnerable groups.

- A new permanent contract was established with lower firing costs for groups particularly likely to be unemployed (youth, workers above 45, long-term unemployed), with lower required social security contributions (between 20 and 60 percent).
- The possibility of individual dismissals (which carry lower severance costs) was extended. Justification for dismissal was broadened from disciplinary reasons to economic reasons.
- An agreement was reached with social partners to avoid renegotiation of wage settlements at different bargaining levels.

The reforms encouraged employment growth. The unemployment rate fell by almost 6 percent in little more than two years. Almost a million new permanent contracts were signed, two-thirds of which were subsidized. However, the share of temporary contracts did not fall, and the annual gross budgetary cost was around 0.3 percent of GDP in 1998 and 1999. The social security subsidy may have gone to jobs that would have been created anyway. An econometric study found a moderate employment elasticity for young men (between -0.31 and -0.56) and little effect for women and older workers.

Appendix A: the UISIM model

The objective of the unemployment insurance simulation model (UISIM) is to calculate:
- expenditures implied by the introduction of unemployment insurance (UI) systems, or changes in expenditures implied by changes of the parameters of such systems
- revenues generated by the UI system, given predetermined contribution and coverage rates
- contributions rates needed to cover the UI system expenditures, or changes in contribution rates implied by the changes of the parameters of the UI system.

The model thus supports the following main types of simulations:
- introduction of the UI system, allowing for alternative scenarios and providing sensitivity analysis
- changes in the parameters of the UI system (such as initial UI eligibility, the length of potential eligibility, benefit level, including minimum and maximum benefits, change of the rule of indexation of the benefits)
- changes in financing regarding the compliance with and coverage of the UI system
- impact of changes in macro parameters (GDP growth, inflation, and interest rate) on the performance of the UI system.

The main features of the model, and the assumptions on which it rests, are as follows:
- The model is of accounting nature; it does not include any behavioral effects.
- The unit of observation is a month.
- The model allows both a flow and stock method of determination of labor market stock variables (employment, unemployment, and labor force), as well as unemployment benefit recipients. Under the stock method, the distribution of unemployment by the duration of unemployment may be inconsistent across time. While the flow method generates internally consistent distributions of unemployment, it may produce dynamically unstable outcomes. Thus it is an empirical matter which method is chosen.
- Modeling of unemployment survival: it is assumed that the survival function (or, equivalently, the hazard rate of exit from unemployment) is approximated with an exponential (or Weibull function). The first one is determined with one parameter, and the second one with two.

The program is written in Visual Basic in an Excel Spreadsheet platform. It is constructed to be applicable for a diversity of UI programs and powerful enough to provide accurate estimates for numerous UI variables.

Data Sources

The UISIM model requires data on labor force, UI information (data on recipients and the system participation and benefit rules), and macroeconomic parameters as input information. (The data needed for the simulation of the Turkish system are based on the following sources:
- The National Employment Office (ISKUR) provided data on recipients and the level of benefits of the UI system, as well as on the system’s rules and parameters.
- The Social Security Agency (SSK) provided data on the number of contributors and the level of their wages.
- The State Institute of Statistics (SIS) provided data on the labor force participation.
- The Undersecretariat of the Treasury of the Prime Ministry provided data on macroeconomic parameters.

Appendix B: Results of the UI Simulations

Value of Unemployment Insurance Fund Reserves

Unemployment Insurance Fund Reserves (years)
Appendix C: Results of the Simulations with Reduced Real Interest Rates

The following results are obtained by keeping all scenarios as described in the text, except for the interest rate assumption. The interest rate decreases by 2 percent per year until it reaches 2 percent (in 2006), and then stays at that level. The source for all the panels is Vodopivec (2004).

Value of Unemployment Insurance Fund Reserves

Unemployment Insurance Fund Reserves (years)
Contributions Required

Year

% of Current Contributions


Turkey - Base
Turkey - Shock
Turkey - Easing of eligibility
Turkey - Reduction of contributions
Turkey - Combined reform
Turkey - Combined reform + shock
## Appendix D: Characteristics of Unemployment Benefit Systems, Turkey and Transition Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Date</th>
<th>Reference period</th>
<th>Required minimum employment record</th>
<th>Maximum duration of benefits</th>
<th>Relation to individual’s gross earnings</th>
<th>Unemployment benefit levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>1999</td>
<td>3 years</td>
<td>600 days (and 120 days in last year)</td>
<td>180–300 days</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1998</td>
<td>12 months</td>
<td>9 months</td>
<td>12 months</td>
<td>60%&lt;sup&gt;a&lt;/sup&gt;</td>
<td>85%</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>1998</td>
<td>3 years&lt;sup&gt;b&lt;/sup&gt;</td>
<td>12 months</td>
<td>6 months</td>
<td>50%&lt;sup&gt;a&lt;/sup&gt; first 6 months</td>
<td>none (but 70% of MLS if not employed before)</td>
</tr>
<tr>
<td>Estonia</td>
<td>2001</td>
<td>24 months</td>
<td>12 months</td>
<td>12 months</td>
<td>50%&lt;sup&gt;a&lt;/sup&gt; in the first 100 days, of the receipt, 40% thereafter</td>
<td>85%</td>
</tr>
<tr>
<td>Hungary</td>
<td>1997</td>
<td>4 years</td>
<td>90 days</td>
<td>360 days</td>
<td>65%&lt;sup&gt;b&lt;/sup&gt;</td>
<td>140% of minimum age pension</td>
</tr>
<tr>
<td>Latvia</td>
<td>1993</td>
<td></td>
<td></td>
<td></td>
<td>90% of minimum wage (70% for new entrants)</td>
<td>150 percent of the average wage</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1993</td>
<td></td>
<td></td>
<td></td>
<td>70%, later reduced to 60% and 50%</td>
<td>140% of minimum age pension</td>
</tr>
<tr>
<td>Poland</td>
<td>1997</td>
<td>18 months</td>
<td>1 year</td>
<td>18 months</td>
<td>Flat rate amount paid at 378,2cz</td>
<td>none</td>
</tr>
<tr>
<td>Romania</td>
<td>1998</td>
<td>1 year</td>
<td>1 year</td>
<td>9 months&lt;sup&gt;c&lt;/sup&gt;</td>
<td>50–60% for 9 months</td>
<td>76–92%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>1997</td>
<td>3 years</td>
<td>12 months</td>
<td>12 months</td>
<td>60% first 3 months</td>
<td>none</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1998</td>
<td>18 months</td>
<td>9–12 months</td>
<td>24 months</td>
<td>70% first 3 months</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60% following 3 months&lt;sup&gt;c&lt;/sup&gt;</td>
<td>300%</td>
</tr>
</tbody>
</table>


<sup>a</sup> Minimum and maximum, expressed in % of minimum wage

<sup>b</sup> Not required if enrolled in a training course.

<sup>c</sup> Recipients can receive a supplement for each family member to raise the average income per family member to 80 percent of the gross minimum wage.
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Eurostat. 2004. “Minimum Wages: EU Member States, Candidate Countries and the US.” Eurostat,


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