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Turkey Managing Labor Markets Through The Economic Cycle

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TURKEY: MANAGING LABOR MARKETS THROUGH THE ECONOMIC CYCLE



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WEIGHTS AND MEASURES: Metric System

ACRONYMS AND ABBREVIATIONS

ALMP	Active Labor Market Programs
CCT	Conditional Cash Transfer
CAD	Current Account Deficit
CGF	Credit Guarantee Fund
ECA	Europe and Central Asia
EPL	Employment Protection Legislation
GCP	Green Card Program
GDP	Gross Domestic Product
GMI	Guaranteed Minimum Income
HBS	Household Budget Survey
IMF	International Monetary Fund
ISAIS	Integrated Social Assistance Information System
ISKUR	Turkish Employment Agency
KOSGEB	Small and Medium Enterprises Development Organization
LFS	Labor Force Survey
MoD	Ministry of Development
MoFSP	Ministry of Family and Social Policies
MoNE	Ministry of National Education
NEET	Not in employment, education, or training
NES	National Employment Strategy
OECD	Organization for Economic Cooperation and Development
PAYGO	Pay-as-you-go
PMT	Proxy-means Test
SILC	Survey of Income and Living Conditions
SME	Small and Medium Enterprises
SSP	Social Support Program
STW	Short-time work scheme
TOBB	Union of Chambers and Commodity Exchanges of Turkey
TUIK	Turkish Statistical Institute
UA	Unemployment Assistance
UB	Unemployment benefits
UI	Unemployment Insurance
UIF	Unemployment Insurance Fund
UIISA	Unemployment Insurance Individual Savings Accounts
UMEM	Specialized Vocational Course Centers Project
WAP	Working-age population

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OVERVIEW The Turkish economy was hit hard by the global economic crisis, but recovered fast and strong.

The economy had already started to slow down in 2007, but the global financial events of late 2008 led to a sharp contraction starting in the last quarter of 2008 until growth resumed in the last quarter of 2009. The recovery was rapid, with growth reaching 9 percent in 2010 and 8.5 percent in 2011. Turkey was among the 10 percent hardest-hit countries in 2009, but it was also one of the quickest to bounce back. With the crisis in the Eurozone and tighter monetary policies, growth has slowed over the past year and is expected to be around 3 percent in 2012 before reverting to about 5 percent over the medium term.

This study looks at how the labor market fared during the recent downturn and recovery and informs policies to manage labor markets through the economic cycle and address the jobs challenge in Turkey.

The study investigates: (i) pre-crisis labor market trends and the structural jobs

challenge in Turkey; (ii) aggregate and distributional impacts of the recent crisis, and subsequent recovery, on the labor market; and (iii) recent policy measures and existing labor market institutions in the context of observed labor market outcomes. Based on this analysis and a comparison with selected countries from around the world, the study suggests options to improve the responsiveness of policies to future crises and to adjust the policy mix through the economic cycle. Finally, the study links policies to manage labor markets through the cycle with measures to address the longer-term, structural jobs challenge in Turkey.

The jobs challenge in Turkey: Putting more human capital to use and making it more productive

Despite a remarkable upturn after the crisis, the Turkish labor market continues to be characterized by persistently low employment rates—particularly among women and youth—and low labor productivity.

Since 2009, employment growth has averaged 5.5 percent per annum, a very high rate by any standard, and over a third of newly created jobs have gone to women. Nonetheless, still less than half of the working-age population (15-64 year olds) was employed as of mid-2012 and the employment rate among working-age women was under 30 percent; the lowest in the OECD. Moreover, the employment rate today is lower than it was in 1990,

despite the long-term upward trend in real GDP. About 35 percent of youth (15-24 year olds), mostly women, are neither working nor attending school—the highest share of inactive youth among OECD countries. Job informality (defined as jobs without social security benefits) affected 42 percent of workers in 2011 (28 percent excluding the agricultural sector), contributing to Turkey’s lower labor productivity compared with the OECD and other peer countries.

Ongoing structural transformations and the large ‘stock’ of low-skilled workers are behind the jobs challenge in Turkey. Continued urbanization and labor shedding in agriculture, along with the increase in the working-age population (WAP), will continue to increase the number of (mostly) young and low-skilled workers looking for non-agricultural jobs. Although the young are becoming more educated and skilled,¹ half of the WAP still have less than basic education, accounting for 64 percent of the jobless and 65 percent of the informal. As firms strive to stay competitive in a global market, the ‘skills bar’ in formal non-agricultural sectors will continue to increase. For instance, skills are already the third most important constraint to business

¹-Turkey has virtually achieved universal primary education and increased net secondary school enrollment to 67 percent, while at the same time recording an impressive half a year of school gain in PISA scores between 2003 and 2009 (World Bank, forthcoming).

operations cited by Turkish firms.² The large supply of young and low-skilled workers and the decreasing demand for low-skilled workers will thus continue to make it challenging to increase formal employment and reduce unemployment in the non-agricultural sector.

There is ample room for policies to enhance productive employment in Turkey, and a large return from taking immediate action. Decisive policy action to enhance productive employment—putting more human capital to use and making it more productive—is needed today to take advantage of the demographic window in Turkey. Increasing female employment, in particular, could boost economic growth and reduce poverty.

Labor markets through the recent cycle

- The Turkish economy was hit hard by the crisis, which affected households mainly through reduced labor incomes—but recovery was fast and strong.
- The crisis had a relatively mild overall impact on jobs, mainly through increased unemployment.

²- Business Environment and Enterprise Performance Survey (BEEPS) for 2008.

- The increase in unemployment was explained by increased unemployment duration and job losses, but the effect on total employment was partly attenuated by increased activity rates within the household (the added-worker effect), and—employment recovered fast and strong.

- Jobs losses hit formal employees, while the informal sector served as a cushion for job losers and new entrants (mostly going to informal self-employment, including unpaid family labor in agriculture)—but formal wage sector jobs recovered strong after the crisis.

- The increase in minimum wages drove up formal sector and total earnings during the crisis, while informal workers got smaller paychecks—earnings growth slowed with the recovery but earnings inequality was further increased.

- Job losses hit men in urban areas, while women, youth and the low educated saw lower earnings—women gained jobs through the business cycle while wage inequalities rose.

- The increase in earnings offset the negative impact of the crisis on wage employment, making the wage bill grow during the crisis (albeit at a lower rate than before the crisis) and increase its share in GDP, as self-employment income (mostly informal) and profits took most of the hit from the crisis.

- Overall Turkey's labor market weathered the storm well relative to other middle income countries. Unlike in Turkey, formal-sector earnings fell in most countries.

Policies during the business cycle

To what extent were the observed overall and distributional impacts of the crisis and recovery on the labor market due to policies? Surely policies have some explanatory power, but exactly how much is hard to tell. The study reviews policy measures taken during the business cycle and existing labor market institutions against the observed impacts. The focus of the analysis is on employment and social protection policies.

- **The crisis was preceded by a labor market reform that reduced non-wage labor costs and set the basis for expanding active labor market programs (ALMP).** The across-the-board reduction in non-wage labor costs is likely to have prevented some layoffs during the crisis and encouraged hiring during recovery, possibly being a major contributor to the rapid pace of employment growth after the crisis.

- **But Turkey entered the crisis with stringent labor market regulations and limited protection for the unemployed.** Given the fall in formal employment, stringent regulations are unlikely to

have saved many jobs during the crisis, but may constrain job creation during recovery and in the longer term. The unemployment insurance (UI) provided limited support to job losers before the crisis due to strict qualification rules and low benefits.

• **The Government introduced a crisis-response package in 2009, including employment-related measures such as:** (i) expanded short-time work scheme (STW); (ii) expanded vocational training for the unemployed; (iii) introduction of a public works program; (iv) expanded support to SMEs; (v) time-bound measures (e.g. subsidies for hiring new female and young entrants; reductions in consumption taxes for hard-hit sectors). Although not explicitly part of the crisis-response package, statutory minimum wages were increased substantially in 2009. And there was also some response to the crisis in terms of increased spending on social assistance programs.

• **The focus of crisis-response measures on protecting the jobs of formal sector workers was an appropriate response to the disproportional reduction in formal employment,** although coverage of the STW scheme remained low. And the increased support to the unemployed (from a very low base) through ALMP allowed more job seekers to preserve and upgrade their skills at a time when the opportunity cost of training them was lower.

• **Unemployment insurance (UI) provided limited income protection for the unemployed during the crisis.**

No changes were made to the UI scheme in response to the crisis, and thus while coverage of UI increased during the crisis, it provided limited support to job losers.

• **The increase in minimum wages may have protected the income of low-wage earners in the formal sector, but possibly at the expense of job losses.** The increase in minimum wages drove up earnings in the formal sector and did not reduce earnings inequality in this sector. The minimum wage in 2009 was 71 percent of the median wage, the highest level in the OECD, and it is binding. This may have made firms resort to layoffs to adjust to the crisis more than they would have otherwise.

• **The Green Card Program (GCP) contributed to protecting healthcare utilization among poor informal-sector families during the crisis.** Although the benefit expansion was already planned as part of the Universal Health Insurance Law, a decision was made to implement it during the crisis. The scale-up of an already high-performing program to poor informal households, whose incomes declined significantly during the crisis, contributed to protecting healthcare utilization.

- **Other social assistance programs provided more limited income protection to those affected by the crisis.** Targeted transfer programs could have played a greater role in mitigating the negative impacts of the crisis on households, particularly given that (i) the coverage of unemployment insurance is low and limited to formal workers, and (ii) part of the adjustment took place through reduced informal income.

- **A number of policy measures introduced after the crisis will increase responsiveness to future crises and contribute to job creation.** These policy measures include: (i) efforts to further expand and improve ALMP; (ii) some changes related to flexible contracting and the extension of hiring subsidies; (iii) preparation of a new National Employment Strategy, which will include a focus on making labor markets more flexible while increasing the protection of workers; and (iv) measures to improve the effectiveness and responsiveness of social assistance, including the introduction of a new Integrated Social Assistance Information System (ISAIS).

Options to strengthen the management of labor markets through the cycle

Crises are rarely fully predictable, but there are measures Turkey can take to be better prepared for and responsive to them. Based on the analysis of the

impact of the crisis and policy responses in Turkey and around the world, the study suggests (i) general lessons for improving the responsiveness of labor and social protection policies to future crises and adjusting the policy mix through the economic cycle; and (ii) options to strengthen income protection policies in Turkey.

Improving the responsiveness to future crises and adjusting the policy mix through the cycle

To be most cost-effective, the policy response to a crisis needs to be timely (when needed), address the nature of the adjustment (e.g. jobs versus earnings), well-targeted to those who need support, and temporary (for as long as support is needed). How? Mostly by being prepared and then making temporary adjustments as needed and only introducing new programs as a last resort:

- Articulation of policies and institutions. Gradually converging to a system that brings together social insurance, social assistance, ALMP and labor regulations.
- Increasing reliance on social insurance, including UI, will reduce reliance on discretionary measures, and allow social transfers to be allocated to the most vulnerable.
- Making labor markets more flexible. Giving firms more flexibility in the management of human resources is

likely to encourage job reallocation during crises and job creation during recoveries.

- [Good information and analysis.](#) While it is impossible to predict the exact magnitude and nature of the impact of a crisis, early analysis of likely labor market impacts and an assessment of existing policies and institutions as well as the available fiscal space can inform the policy mix and help improve targeting in response to a crisis.

- [Increasing reliance on well-designed pre-existing programs.](#) While good information and analysis can help inform the right policy response, the best policy 'insurance' against a crisis is to have a good inventory of pre-existing programs that can be scaled up and adjusted as needed.

- [Making temporary adjustments as needed and linking them to labor market conditions.](#) Pre-existing programs, even if well-designed, may need to be adjusted to better respond to the crisis, e.g. the extension of the UI coverage period. To avoid possible moral hazard, however, these adjustments need to be made temporary by tying them to labor market conditions through a pre-defined rule and eventually by accompanying them with activation measures.

To manage labor markets effectively through the cycle, policies should aim to minimize the impact of the crisis on

workers and their families and maximize job creation during the recovery. To this end, the policy mix needs to be adjusted through the economic cycle—the availability of timely information is crucial, focusing on policies aimed at stabilizing employment and providing income protection to workers during downturns, and eventually switching to policies that facilitate job creation and activate the jobless as the economy starts recovering.

Strengthening income protection policies in Turkey

Income protection policies aim to complement self-insurance against unemployment or a fall in earnings. A well-articulated income protection system would ideally rely first and foremost on unemployment insurance (UI), complemented with unemployment assistance (UA) for jobseekers that do not qualify for UI but have formal sector attachment, public works for other jobseekers without formal sector attachment, and cash transfers not tied to job status to protect the incomes of the most vulnerable. The following discussion focuses on UI and UA:

- [Unemployment insurance: coverage and activation.](#) Increasing protection through UI goes hand in hand with reducing severance obligations. One option is to introduce pre-funded severance pay accounts, while increasing benefits and relaxing the eligibility criteria

for UI. An alternative approach is to reduce severance pay without changing the system, while expanding UI and replacing the current pay-as-you-go (PAYGO) system with Unemployment Insurance Individual Savings Accounts (UIISA). Under the current (PAYGO) system, benefits can be set up to decline with the length of the unemployment spell to provide incentives for job search. And the existing links between the receipt of UI and activation—job search and work requirements as well as (targeted) participation in ALMP—could be further strengthened. Activation conditions could be temporarily switched off during downturns and an automatic extension of the eligibility period switched on.

- Unemployment assistance: targeted complement to UI. The expansion of the current UI system can be accompanied by the introduction of a UA program for jobseekers that do not, or no longer, qualify for UI, with preference given to those who have had some formal sector attachment. To make these programs cost-effective, they would need to be targeted (on the basis of means or proxy-means), time-bound (as UI) and tied to the same activation measures as UI.

Options to enhance productive employment

Beyond the crisis, Turkey could dramatically enhance its growth

prospects with policies that address the structural jobs challenge outlined earlier. The Government is well aware of this and has made employment a top policy priority. A new National Employment Strategy is expected to be approved in the first half of 2013, covering measures to improve labor market flexibility and security, the relevance of education to market needs, the employability of vulnerable groups (including youth and women) and the link between social protection and employment. The study builds on the analysis of labor market performance during the cycle to draw inference on key policy priorities to enhance long-term productive employment—which need to be corroborated with further research.

Enhancing productive employment in Turkey would involve:

- Building the skills for work, entrepreneurship and innovation. In addition to skills, policies to boost firm growth and innovation are crucial to increasing labor productivity in Turkey. This study focuses on the skills dimension of competitiveness.

- Improving the enabling environment— labor market, investment climate and innovation—for skills to be productively used. Policies that improve the business climate are essential for firms to grow and generate employment. And innovation policies are key to putting new

ideas to use. In this study the focus is on policies that improve the functioning of the labor market.

Skills are central to enhancing productive employment in Turkey—upgrading the skills of low-skilled workers, as part of an activation package, is crucial over the medium term. The low level of skills of the WAP, the increasing demand for skills, and the demographic dividend make skills central to the jobs agenda. Skills are best acquired the first time around, but Turkey also needs to enhance the skills of existing workers in order to accelerate labor productivity growth. A large segment of the WAP is hard to employ productively and the low level of skills is the main barrier. Low-skilled workers face other barriers to productive jobs, including information, access to capital and mobility, and the availability of programs to overcome these barriers is also limited in Turkey. And often their precarious job status is reinforced by disincentives for formal employment built in social benefits.

The Turkish Employment Agency (ISKUR) plays a key role in activating low-skilled workers into productive employment. ISKUR has come a long way since 2008, increasing the coverage and quality of vocational training, introducing job and vocational counselors and linking social assistance receipts to registration in ISKUR. Going forward, ISKUR could play a key role

in activating low-skilled workers into productive employment in a cost-effective manner by:

- Reorienting services towards low-skilled workers, particularly young females.

- Designing employment support services to address multiple barriers to productive employment (in partnership with other public agencies), focusing first on more cost-effective services (employment services), complementing vocational training with life skills training, recognizing women's mobility and time constraints by complementing employment support with targeted childcare subsidies.

- Reorganizing service delivery around the new job and vocational counselors to (1) do an initial assessment of employability and profiling jobseekers into different groups; (2) direct jobseekers to the most cost-effective package of services, focusing the bulk of resources on the hard-to-employ; and (3) monitor progress, linking the receipt of benefits to progress towards finding employment.

- Designing the selection and contracting of private providers of employment support services to provide the right incentives and compensation for helping low-skilled workers find and keep productive jobs.

Functioning labor markets are essential for individuals to find and accept good jobs and for employers to find and recruit employees with the right skills. Achieving this objective will require moving towards more flexible, efficient and secure labor markets. Severance pay and UI have already been discussed above, so here we focus on flexible contracting, enforcement of labor laws and awareness-raising to reduce informality, and employment services.

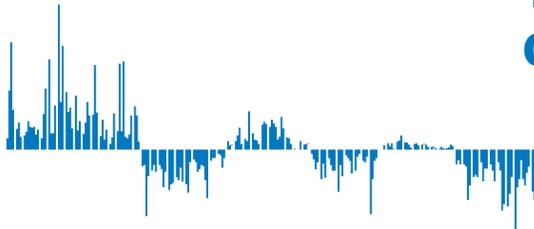
• **More flexible contracting mainly involves relaxing the rules of existing flexible contracts.** Regarding fixed/temporary contracts, the following changes could be considered: (i) opening up fixed-term contracts to all job activities and allowing temporary employment agencies to operate in all sectors/occupations; (ii) allowing several unconditional renewals of fixed-term and temporary contracts; and (iii) extending the probation period to at least the OECD average (4 months). Recent legislative changes enabled part-time workers to pay their unpaid social security contributions retroactively. However, there are still disincentives for workers to take on part-time jobs: while part-time workers contribute for days worked, a full-time worker gets credited 7 days a week, becoming eligible for a pension proportionally much faster. The contributory week could be redefined to make it more proportional to days worked.

• **Effective enforcement and awareness-raising are already reducing job informality, but incentives need to be strengthened.**

Job informality is interrelated with other forms of informality like tax evasion. Ongoing enforcement and awareness-raising measures are already reducing job informality. But these instruments do not affect the incentives for firms (particularly SMEs) to employ informal workers and for workers to be employed informally. The 2008 across-the-board reduction in employers' social security contributions is likely to have reduced informality by decreasing the 'tax' on formal jobs. Evidence from Mexico suggests that moving towards a general revenue-financed universal social security system could make job informality negligible (by eliminating the tax on formal jobs and the 'subsidy' to informal jobs) in a budget-neutral way (by reducing evasion of VAT and direct taxes). This process, however, requires careful thinking about what benefits to delink from contributions and how. Another option to strengthen incentives is to tie access to public contracts or support to SMEs to employing workers formally.



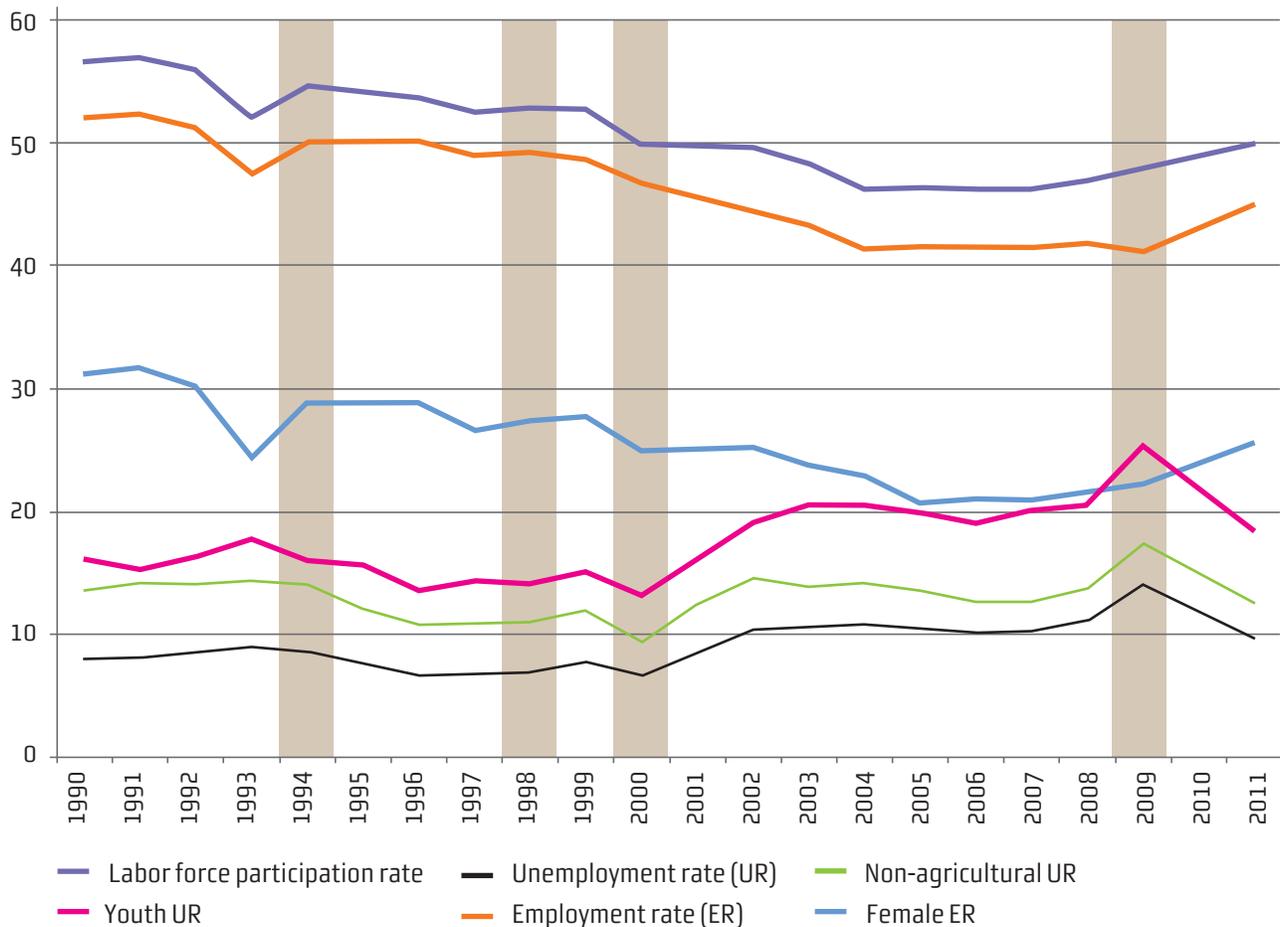
1. PRE-CRISIS LABOR MARKET TRENDS AND THE JOBS CHALLENGE IN TURKEY



Putting more human capital to use and making it more productive is crucial for growth

1. The performance of the labor market after the crisis has been remarkable, but employment rates have remained stubbornly low. Employment has been growing at an outstanding 5.5 percent per annum since the last quarter of 2009. Despite this remarkable upturn, the share of the population 15 years of age or older working was only 45.2 percent by the second quarter of 2012 (seasonally-adjusted), down from 52 percent in 1990, making it the lowest employment rate in the OECD (19 percentage points below the OECD average)³ (Figure 1 and Figure 2). This downward trend is in sharp contrast with the long-term upward trend in real GDP and largely unaffected by crisis and recovery episodes, except for the recent post-crisis period when the employment-to-growth elasticity increased to 0.72 (from 0.34 between the first quarter of 2005 and the third quarter of 2008). Unemployment rates have increased somewhat from around 8 percent in 1988 to 9 percent by the

³-The comparison with the OECD average is done defining employment in the working-age population (15-64 year olds) in 2010: 46 percent for Turkey and 65 percent for the OECD average.

FIGURE 1**Activity rates have been stubbornly low over time****(Long-term trends in labor market outcomes: 1990-2011)**

Source: TUIK and authors' calculations.

second quarter of 2012 (seasonally-adjusted),⁴ increasing during crisis periods and decreasing afterwards.

2. Employment rates are particularly low among women and youth. Despite the remarkable 8.1 percent average annual growth in female employment after the crisis (more on this later), only

⁴ When defined relative to the working-age population, the figures for Turkey and the OECD are 12.1 percent and 8.8 percent in 2010, respectively.

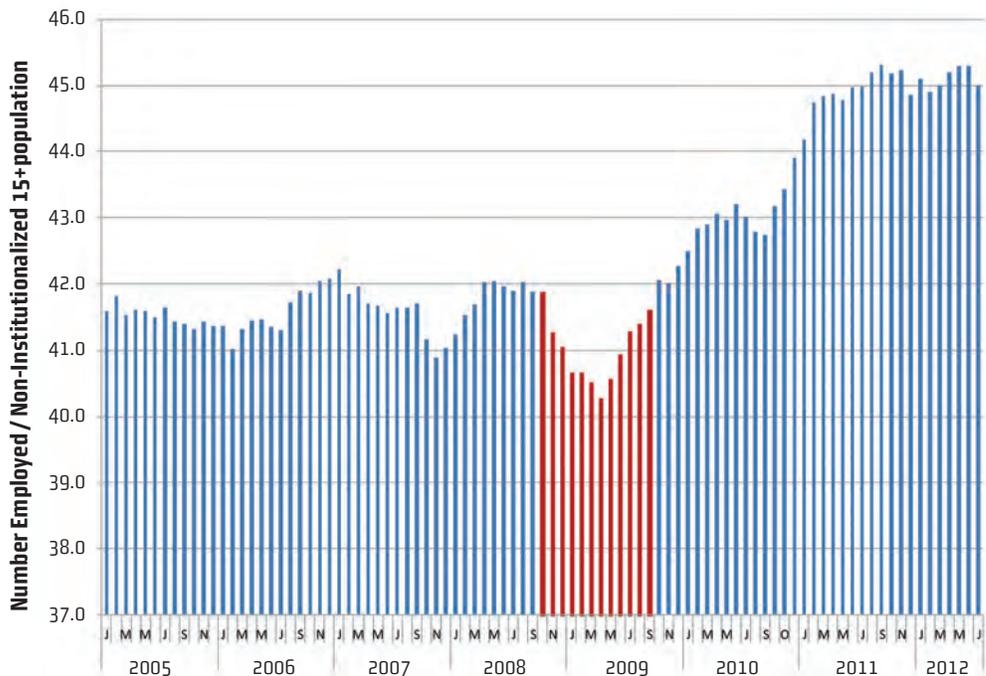
26 percent of women 15 years of age and older were working on average during the first 7 months of 2012, down from 31 percent in 1990, making it by far the lowest employment rate in the OECD.⁵ The youth unemployment rate (15-24 year olds) has consistently been double the overall figure, being in general

⁵ The comparison with the OECD average is calculated defining employment in the working-age population (15-64 year olds) in 2010: 26 percent for Turkey and 57 percent for the OECD average.

FIGURE 2 (Continued)

Recent trends in leading labor market indicators, 2006-2012

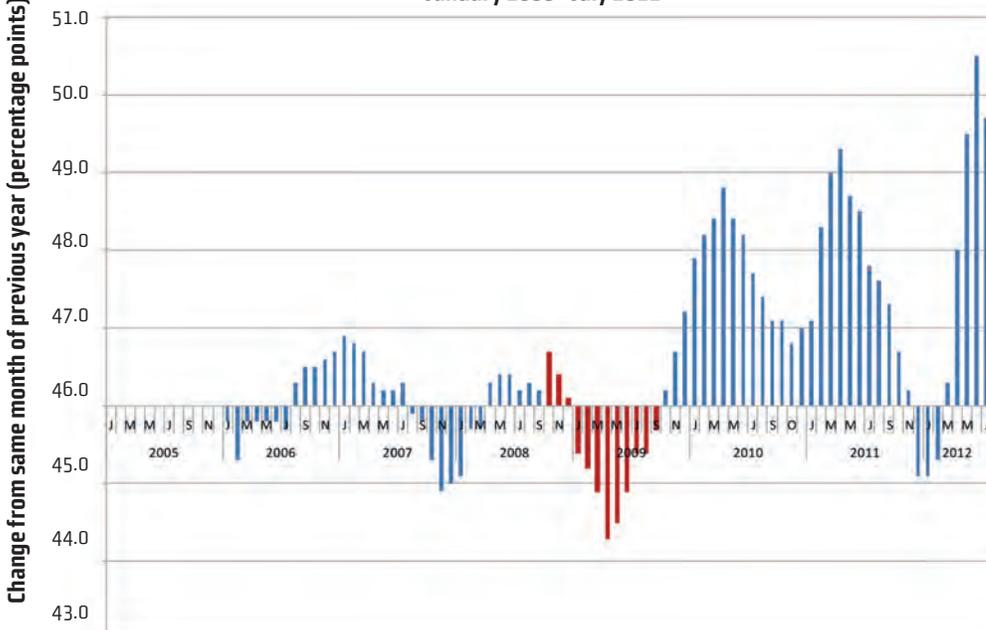
Seasonally - Adjusted Employment Rate in Turkey, January 2005 - July 2012



Levels

EMPLOYMENT RATE

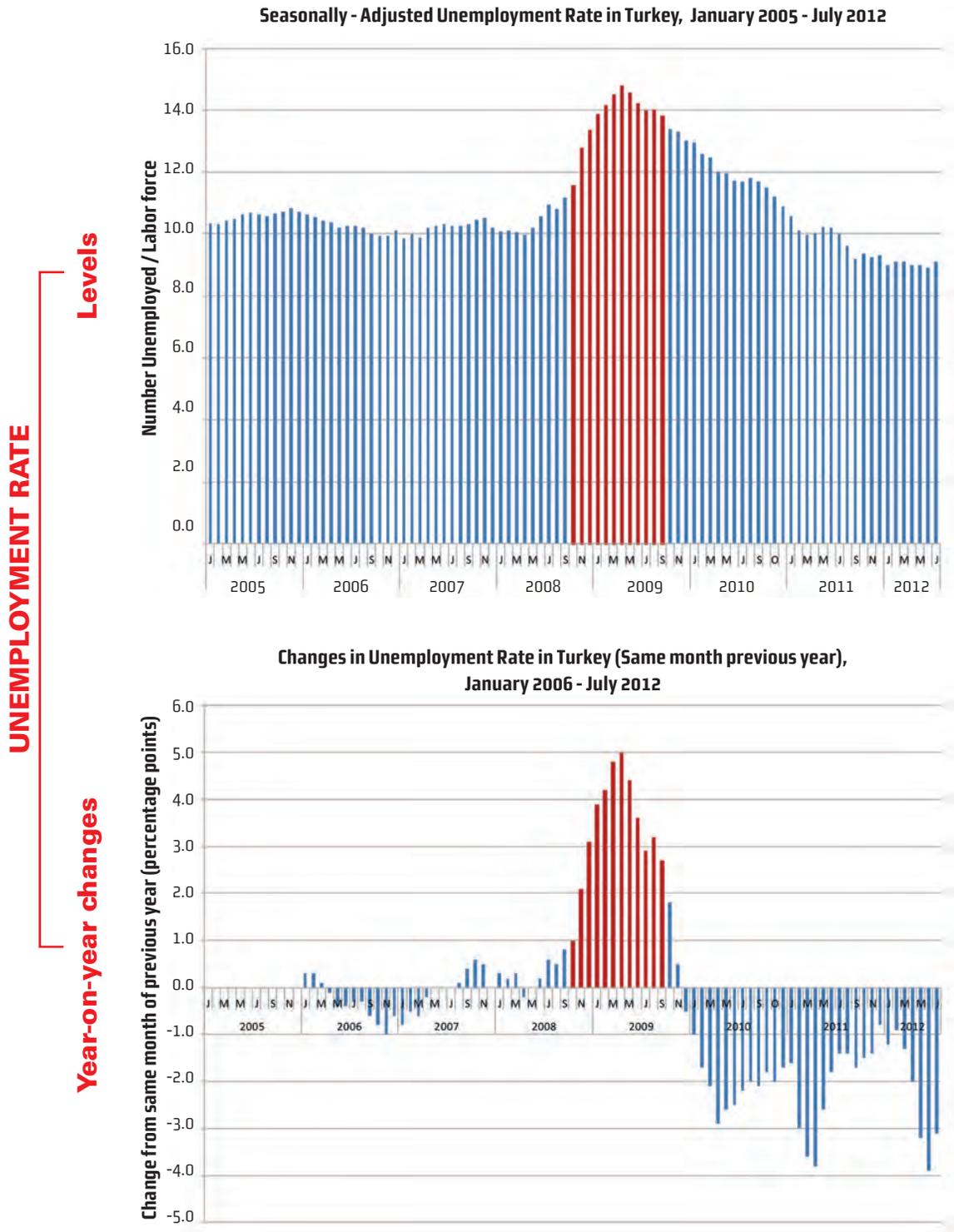
Changes in Employment Rate in Turkey (Same month previous year), January 2006 - July 2012



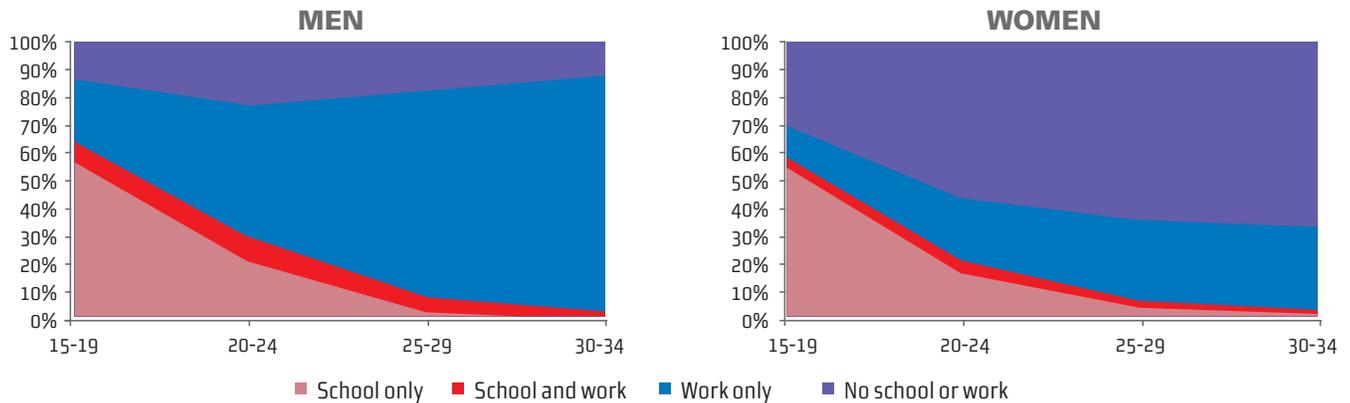
Year-on-year changes

FIGURE 2 (Continued)

Recent trends in leading labor market indicators, 2006-2012



Source: TUIK (Labor Force Survey data) and authors' calculations.

FIGURE 3**The long transition to work for youth****(Distribution of activities in 2010, by age and gender)**

Source: TUIK (Labor Force Survey data) and authors' calculations.

more sensitive to the business cycle. Even more importantly, about 35 percent of youth were neither in employment nor in education or training (NEET), the largest share among OECD countries (Figure 3). This is mainly driven by idle young females (45 percent). And while the share of idle men peaks at ages 20-24 to then come down (as the share of working men increases), the share of idle women increases through life—indeed, most women do not make the transition from school to work.

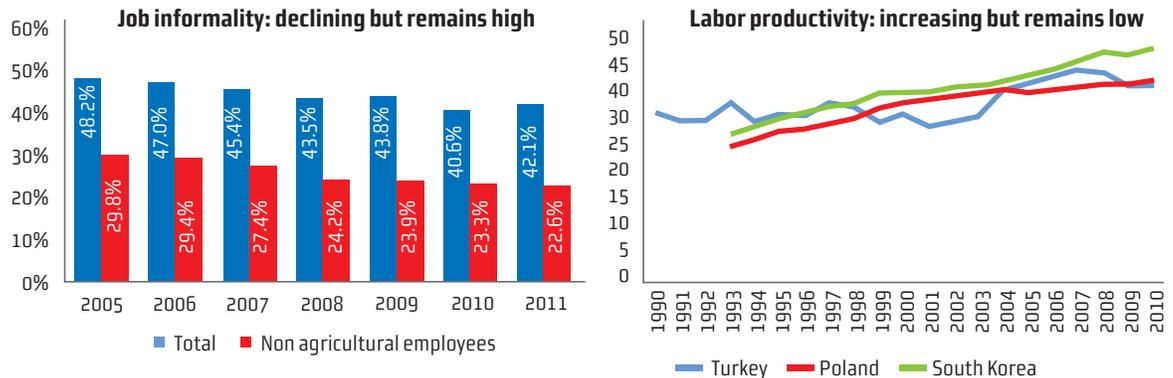
3. Job informality has come down remarkably, but it remains high, contributing to low levels of labor productivity. Job informality (defined as jobs without social security benefits) among 15-64 year old workers has come down remarkably from when it was first measured in 2005 (48 percent), but it still affects 42 percent of workers in 2011 (Figure 4). Most informal workers are in agriculture—

the processes of urbanization and agricultural shedding have been the main drivers of the decline in job informality, although there are many informal workers in non-agricultural sectors (28 percent). And informality affects women disproportionately: 58 percent of employed women work in the informal sector (unpaid family worker in agriculture is the main category). High job informality contributes to low labor productivity in Turkey, which is about 40 percent of the productivity level in the US, similar to Poland and below South Korea, countries that started from a lower base (Figure 4).⁶

⁶ There is a significant wage gap between informal and formal workers even after controlling for their characteristics. These differences are likely to be caused, at least in part, by productivity differentials between these sectors. There are also large differences in total factor productivity (TFP) between formal and informal firms even after controlling for firms' and entrepreneurs' characteristics (World Bank 2009a).

FIGURE 4

High job informality contributes to low labor productivity



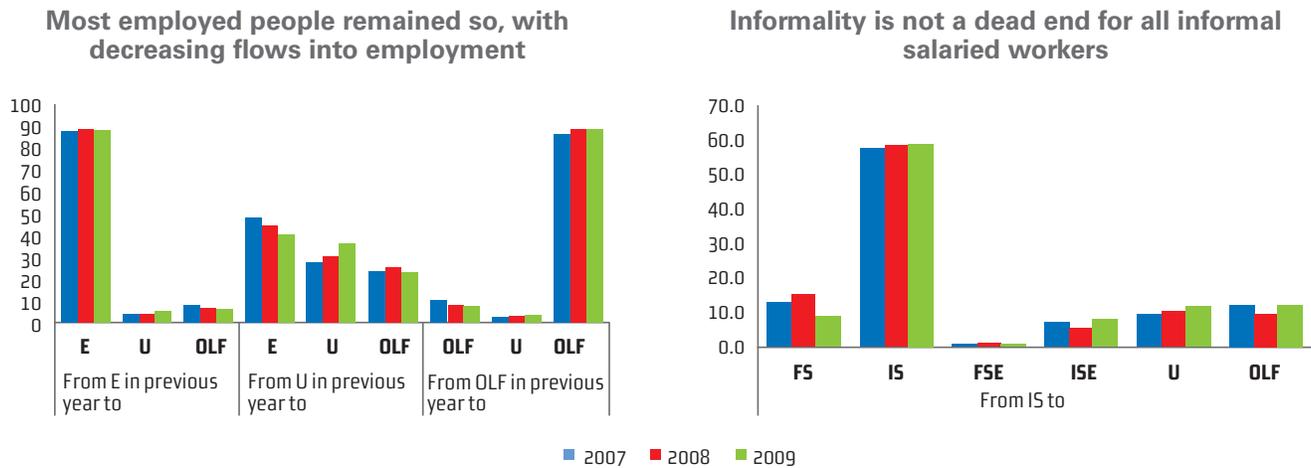
Source: TUIK (Labor Force Survey), OECD and authors' calculations. Labor productivity is measured relative to the US.

4. The labor market was rather static prior to the global crisis despite rapid growth. Figure 2 shows the absence of any trend in employment and unemployment during the pre-crisis period. The analysis of labor market transitions confirms this static picture: about 90 percent of workers that were employed in a given year remained employed the next year (Figure 5). About half of the unemployed remain jobless the next year, and about 90 percent of the inactive remained inactive. If anything, there seemed to be a declining flow from unemployment and inactivity to employment before the crisis. There was also very limited movement across types of employment and sectors. There was, however, some movement into services from other sectors and a sizable flow from informal to formal wage employment, suggesting that the informal sector is not necessarily a dead end for everybody (see Table A1 for all labor transitions).

5. Structural transformations and the large 'stock' of low-skilled workers are behind the jobs challenge in Turkey.

Continued urbanization and shedding of labor in agriculture, along with the increase in the working-age population (WAP), will continue to increase the number of (mostly) young and low-skilled workers looking for non-agricultural jobs (Figure 6). It is important to note, however, the stalling of agricultural shedding since 2006, which is explained by higher food prices and the added-worker effect during the crisis (more on this later). Although youth are becoming more educated and skilled,⁷ half of the WAP still have less than basic education, accounting for 64 percent of the jobless and 65 percent of the informal. As firms

⁷ Turkey has virtually achieved universal primary education and increased net secondary school enrollment to 67 percent, while at the same time recording an impressive half a year of school gain in PISA scores between 2003 and 2009 (World Bank, forthcoming).

FIGURE 5**A static labor market before the crisis, with some flows from informal to formal jobs**

Source: TUIK (Survey of Income and Living Conditions) and authors' calculations (also see Tansel and Oznur-Kan 2011). E: Employed; U: Unemployed; OLF: Out of the labor force; FS: Formal salaried; IS: Informal salaried; FSE: Formal self-employed; ISE: Informal self-employed.

strive to stay competitive in a global market, the 'skills bar' in formal non-agricultural sectors will continue to increase—skills are already the third most important constraint cited by Turkish firms.⁸ The large supply of young and low-skilled workers and the decreasing demand for low-skilled workers will thus continue to make it challenging to increase formal employment and reduce unemployment in the non-agricultural sector.

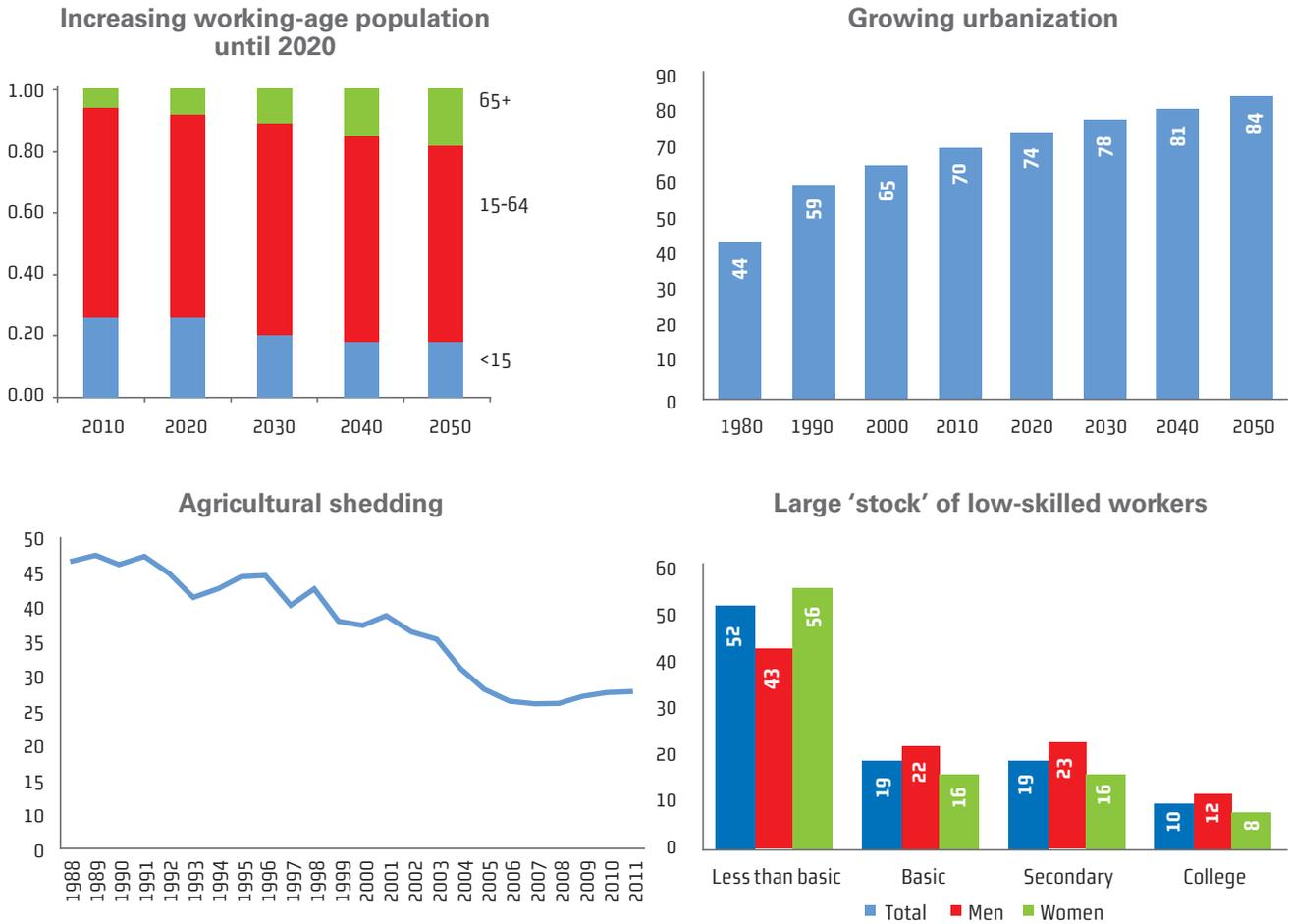
6. Women will continue to be disadvantaged in the labor market, but the downward trend in female employment may be reversing.

Although the gender gap in education has been significantly reduced, today's stock of working-age women are less educated than men. Unpaid agricultural family work is still the main economic activity for

working women (35 percent), jobs they lose access to as rural families move to cities or away from agriculture while facing limited job opportunities in the non-agricultural sector. Indeed, urbanization and agricultural shedding are the main drivers of the decline in female employment over the last two decades (despite increased education, reduced fertility and delayed marriage), while low education is the main explanatory factor for low female employment in urban areas (World Bank 2010a). The decline in female employment rates came to a standstill in 2005, and while the increase during the crisis may well be due to an added-worker effect (more on this later), the remarkable increase thereafter may be indicating a change in the trend. Indeed, other countries have gone through a similar experience, as forces driving up female employment end up offsetting the effects of urbanization and agricultural shedding (World Bank 2011b).

⁸ Business Environment and Enterprise Performance Survey (BEEPS) for 2008.

FIGURE 6
A number of structural factors behind long-term challenges



Source: TUIK (Labor Force Survey), UN (urbanization, population projections) and authors' calculations.

7. There is ample room for policies to enhance productive employment in Turkey, and a large return from taking immediate action. Decisive policy action to enhance productive employment—putting more human capital to use and making it more productive—is needed today to take advantage of the demographic window. Increasing female employment could boost economic growth and reduce poverty: increasing

the share of women who work full time by just 6 percentage points could increase income by 7 percent and reduce poverty by 15 percent (World Bank 2010a). Section 5 discusses some policy options to enhance productive employment in Turkey.



2. LABOR MARKETS THROUGH THE GLOBAL CRISIS AND RECOVERY



Data and methodology

1. The analysis of the impact of the crisis on labor market outcomes is based on the comparison of growth rates during the crisis with growth rates before the crisis.⁹ Comparing growth rates rather than levels makes it possible to isolate the impact of the crisis from prior trends in labor market outcomes. In particular, the impact of the crisis on a given labor market indicator is calculated as the difference between the average growth rate of that indicator during the crisis (i.e. year-on-year changes) and its average growth rate before the crisis. The pre-crisis period goes from the first quarter of 2006 until the third quarter of 2008. Extending the pre-crisis period to 2006 mitigates the influence of the rapid increases in food and fuel prices in 2007 and 2008—the Turkish economy started to slow down in 2007. GDP growth rates turned negative from the last quarter of 2008 until the third quarter of 2009, defining the crisis period. Thus the post-crisis period starts in the last quarter of 2009. The study also looks at the degree of recovery from the crisis by looking at how much of the pre-crisis levels of labor market outcomes has been recovered post-crisis (i.e. the ratio of the level of a given labor market

⁹-The methodology used in this study follows closely Khanna et al. (2011) and Cho and Newhouse (2011).

indicator in the last available quarter and the average pre-crisis level).

2. The study also looks at the differential impact of the crisis across types of workers.

Worker characteristics include gender, age (youth, 15-24 year olds, versus working-age adults, 25-64 year olds), education (secondary education or more versus less than secondary education) and location (urban versus rural). A quasi-panel of 16 cells combining the four worker characteristics is constructed. Crisis impacts are then calculated for each cell using the above methodology. Finally, these impacts are regressed on binary indicators for each characteristic. This methodology provides estimates of the impact of the crisis on, for example, the employment rate of men relative to women holding other characteristics constant. The differential degree of recovery is analyzed by regressing the recovery ratios for each cell on binary indicators for each characteristic. These regression results are complemented with estimates of crisis impacts (recovery ratios) for each group of workers (e.g. men versus women) to help interpret the direction of the impacts (recovery ratios) for each group.

3. The main source of data for the analysis in this study is the Labor Force Survey (LFS).

The impact analysis for employment rates, labor force participation rates and unemployment rates is based on LFS monthly figures

and presented in Table 1. Table 1 also includes the impacts of the crisis on GDP, household income and the transition rates between basic labor market states: employment, unemployment and inactivity.¹⁰ GDP data comes from TUIK while data on household income and labor transitions come from the Survey of Income and Living Conditions (SILC), an annual nationally representative rotating panel survey of households for 2006-2010. The analysis for different types of employment and sectors is based on quarterly LFS data and presented in Table 2. Table A1 includes impacts on transitions across sectors. Results for different types of workers are in Table A3 (crisis impacts) and Table A4 (degree of recovery).

The Turkish economy was hit hard by the crisis, which affected households mainly through reduced labor incomes, but recovery was fast and strong

4. The Turkish economy was hit hard by the global economic crisis, but recovered fast and strong.

The economy had already started to slow down in 2007, but the global financial events of late 2008 led to a sharp contraction starting in the last quarter of 2008 until growth resumed in the last quarter of 2009. As a result of the crisis, GDP growth

¹⁰ LFS only includes information on earnings, while SILC includes information on labor income (from earnings and self-employment) as well as other sources of income.

TABLE 1

The crisis hit the Turkish economy hard, and affected households mainly through reduced labor incomes, but the overall impact on jobs was relatively mild, and recovery was fast and strong

(Impact of the crisis and degree of recovery: GDP, household income, leading labor market indicators and labor transitions)

	GDP	HI	HLI	LFPR	ER	UR	EE	EU	EOLF	UE	UU	UOLF	OLFE	OLFU	OLFOLF
Levels															
Pre-crisis				46,1	41,6	10,3	88,5	3,8	7,7	46,5	29,0	24,5	9,3	2,9	87,8
Crisis				47,6	41,0	13,8	88,5	5,3	6,3	40,6	36,4	23,0	7,3	3,4	89,3
Post-crisis				49,3	44,0	10,7	--	--	--	--	--	--	--	--	--
Changes															
Pre-crisis	5,2	3,8	2,2	0,0	0,0	-0,1	1,1	0,2	-1,3	-3,6	2,1	1,5	-2,5	0,4	2,1
Crisis	-8,1	-0,4	-1,2	1,2	-0,6	3,4	-0,6	1,3	-0,7	-4,1	6,4	-2,2	-0,8	0,3	0,5
Post-crisis	7,7	--	--	0,8	1,6	-1,9	--	--	--	--	--	--	--	--	--
Outcomes															
Crisis impact	-13,3	-4,2	-3,4	1,2	-0,6	3,5	-1,7	1,0	0,6	-0,5	4,2	-3,7	1,7	-0,1	-1,6
Degree of recovery	1,15	--	--	1,08	1,09	0,87	--	--	--	--	--	--	--	--	--

Source: TUIK data and authors' calculations. Latest post-crisis quarterly data is for the second quarter of 2012. Latest post-crisis monthly data is July 2012 (labor force participation rate (LFPR), the employment rate (ER) and the unemployment rate (UR)). Impacts are in percentage points; degree of recovery is ratio of latest quarter to pre-crisis average level. HI: per capita household disposable income (real) (SILC), HLI: per capita household disposable labor income (real). Labor transitions are relative to the previous year. EE is the transition from employed to employed; EU: from employed to unemployed; EOLF: from employed to out of the labor force. The analysis of labor transitions is based on the 2006-2009 panel of households, where the pre-crisis trend is the difference between transition rates from 2007 to 2008 and transition rates from 2006 and 2007, while the crisis trend is the difference between transitions from 2008-2009 and transitions from 2007-2008 (see Tables A1 and A2 in the annex for all transition rates). The analysis of household income is based on the full sample of households for 2006-2010. Income refers to total annual income in the year prior to the survey. In this case we can use 2008 as part of the crisis period (2008-2009), while 2005 is added to the pre-crisis period (2005-2007) to make results more robust (see Table A3 for growth rates of household income and impacts). In both cases, results must be interpreted with caution as they are based on annual data.

deviated from its pre-crisis trend (5.2 percent) by 13.3 percentage points (Table 1). Turkey was hit essentially through two channels: exports and financial flows into the banking sector. Exports were concentrated in globally hard-hit sectors such as automotive vehicles, consumer durables, and capital goods and machinery. As a result of reduced financial flows to the banking sector, the banking system cut lending to all but the

most creditworthy borrowers. Growth resumed rapidly after the crisis, reaching 9 percent in 2010 and 8.5 percent in 2011. Turkey was among the 10 percent hardest-hit countries in 2009, but it was also one of the quickest to bounce back. Following the crisis in the Eurozone, growth slowed down in the second half of 2011, and it is expected to be around 3 percent in 2012 before reverting to about 5 percent growth over the medium term.

5. The crisis affected households mainly through reduced labor incomes.

The aggregate GDP shock translated into a less than proportional income shock at the household level. In particular, household per capita income remained basically unchanged during the crisis, but since it had been growing at almost 4 percent before the crisis, the crisis reduced the pre-crisis trend in household income per capita by 4.2 percentage points. And the main transmission mechanism of the crisis to households was through the labor market. In particular, household labor income per capita went from a positive trend before the crisis to a 1.2 percent drop, resulting in a crisis impact estimate of -3.4 percentage points. The rest of this section tries to identify the sources of this reduction in labor incomes and how it was distributed across types of employment, sectors and types of workers.

Increased unemployment duration and job losses were attenuated by the added-worker effect—employment recovered fast and strong

6. Increased unemployment duration and job losses fueled a sharp rise in unemployment during the crisis, coming down gradually as growth resumed to reach pre-crisis levels. The seasonally-adjusted unemployment rate started increasing in September 2008, peaking in April 2009 at 14.9 percent and falling gradually since then to reach 9.1

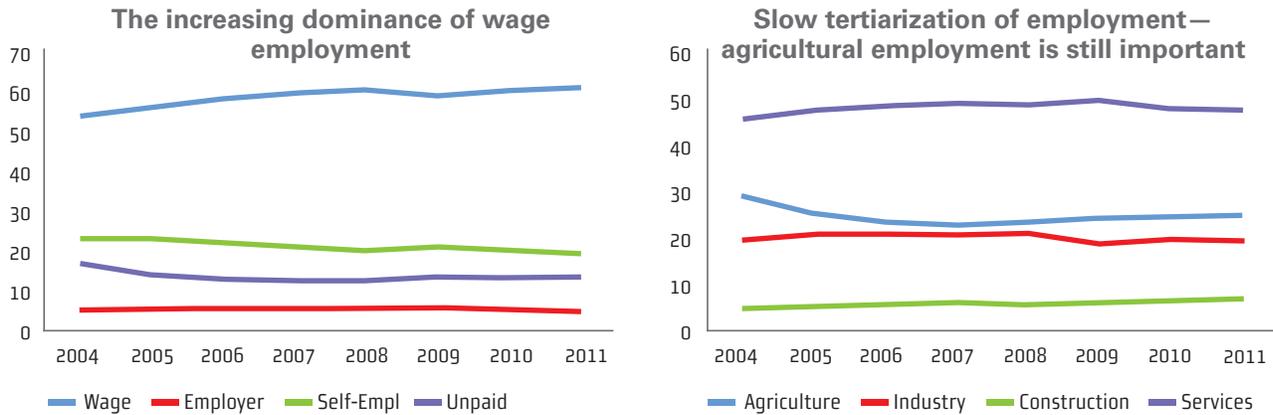
percent by July 2012 (Figure 2). Overall it is estimated that the crisis increased the pre-crisis unemployment rate trend by 3.5 percentage points (Table 1). Although the crisis increased the flow of people from employment to unemployment (job losses), the main source of the rise in unemployment was the increased share of people that remained unemployed (longer unemployment duration). The unemployment rate came back down to average pre-crisis level by February 2011, about 17 months after the crisis hit Turkey. And the unemployment rate for the second quarter of 2012 is already 13 percent lower than the average pre-crisis level.¹¹ Rapid growth has fueled this sharp decline in unemployment to pre-crisis levels, but the slowdown from the second half of 2011 may make it difficult to bring unemployment significantly below pre-crisis levels.

7. The added-worker effect minimized the negative impact of the crisis on employment, which recovered quickly to improve upon pre-crisis levels. The employment rate fell from around 42 percent right before the crisis to 40.3 percent in April 2009. But it rebounded quickly, reaching the average pre-crisis level by September 2009 and continuing to increase to reach 45.3 percent by the second quarter of 2012. The crisis reduced the employment trend by just 0.6 percentage points. This small

¹¹The decline in unemployment after the crisis also appears to be more the result of the reduction in the stock of unemployed rather than increased hiring of new entrants.

FIGURE 7**Increasing dominance of wage employment, particularly in services**

(Sector shares in total employment, %)



Source: TUIK (Labor Force Survey)

impact on employment despite the rise in unemployment is explained by the increase in the flow from inactivity to employment during the crisis, as additional household members managed to find jobs in response to the crisis (added-worker effect). The labor force participation rate grew by over 1 percentage point during the crisis, and most of these new entrants found their way into employment, as the transitions from inactivity to employment increased by 1.7 percentage points (Table 1). The employment rate in the second quarter of 2012 is already 9 percent higher than the average pre-crisis level. The strong recovery of employment is explained by both rising labor force participation and falling unemployment.¹²

12- Changes in the employment rate are decomposed into changes in the unemployment rate and changes in the labor force participation rate following Cho and Newhouse (2011). This analysis reveals that the increase in labor force participation rates explains 54 percent of the post-crisis trend in employment rates, while the decrease in the unemployment rate explains the other 46 percent.

Jobs losses hit formal employees, while the informal sector served as a cushion—formal wage jobs recovered strongly after the crisis

8. Job losses during the crisis were concentrated in formal wage employment, which also saw the greatest growth after the crisis—the informal sector served as a cushion. Prior to the crisis, formal wage employment (as a percentage of the WAP) was slowly increasing in Turkey, while all other types of employment were slowly decreasing (Figure 7). The crisis reversed this dynamic (Table 2): the trend in formal wage employment fell by 1.6 percentage points, while other types of employment were little affected by the crisis—the trend in informal self-employment and unpaid family labor increased slightly. Most formal wage sector job losers, however, went into

TABLE 2**Formal wage workers lost jobs but got higher earnings; informal workers got smaller paychecks****(Crisis impact and degree of recovery: sectors of employment, earnings and working hours)**

	Pre-crisis trend	Crisis trend	Crisis impact	Pre-crisis level	Q4 2010	Degree of recovery
Employment (relative to WAP)						
Wage employed	0,6	-0,9	-1,5	27,5	29,4	1,07
Self-employed	-0,5	0,1	0,5	9,0	8,7	0,96
Unpaid family workers	-0,1	0,2	0,3	5,7	5,9	1,05
Informal employed	-0,8	-0,3	0,5	19,8	19,4	0,98
Formal employed	0,9	-0,4	-1,3	24,9	27,2	1,09
Formal wage employment	1,2	-0,4	-1,6	19,5	21,8	1,12
Informal wage employment	-0,5	-0,4	0,1	8,0	7,6	0,95
Formal self-employment	-0,2	-0,1	0,1	3,3	2,9	0,90
Informal self-employment	-0,2	0,2	0,4	5,8	5,8	1,00
Employed in agriculture	-0,2	0,3	0,4	10	10,9	1,09
Employed in manufacturing	0,1	-0,7	-0,8	9,1	9,1	1,01
Employed in construction	0,0	-0,1	-0,1	2,7	3,2	1,19
Employed in services	0,1	-0,1	-0,2	22,5	22,7	1,01
Real average monthly earnings						
All employees	3,2	4,8	1,5	543,2	580,0	1,07
Formal employees	1,4	4,7	3,3	621,2	651,7	1,05
Informal employees	3,2	-1,3	-4,5	331,7	334,3	1,01
Employees in agriculture	5,0	1,3	-3,7	270,7	298,8	1,10
Employees in manufacturing	2,8	1,6	-1,2	476,2	481,5	1,01
Employees in construction	5,3	2,2	-3,1	464,8	493,1	1,06
Employees in services	3,0	5,6	2,7	591,7	646,9	1,09
Average hours worked						
All workers	-1,8	-2,8	-1,0	49,1	47,5	0,97
Formal workers	-1,0	-1,9	-0,9	50,8	50,4	0,99
Informal workers	-3,2	-4,3	-1,1	46,6	43,3	0,93
Workers in agriculture	-2,7	-4,2	-1,5	38,6	37,0	0,96
Workers in manufacturing	-0,9	-2,9	-2,1	52,2	51,7	0,99
Workers in construction	-1,8	-3,5	-1,6	51,8	51,9	1,00
Workers in services	-1,9	-1,8	0,2	51,8	50,1	0,97
Real wage bill						
All employees	7,3	3,3	-4,0			1,20
Formal employees	9,4	4,5	-4,9			1,00
Informal employees	-1,9	-5,7	-3,8			1,24
Household labor income	2,2	-1,2	-3,4	--	--	--
Household wage labor income	6,1	1,0	-5,0	--	--	--
Household self-employed income	0,1	-4,5	-4,6	--	--	--
Labor productivity	4,6	-5,6	-10,3	473,5	497,5	1,05

Source: TUIK and authors' calculations. All based on quarterly Labor Force Survey except for household-level variables, which are from SILC. Crisis impacts are in percentage points.

informal wage employment rather than into joblessness (Table A1). This boost to informal wage employment was offset by a reduced flow from informal to formal wage employment that instead went to informal self-employment and inactivity. And most 'added' workers went to informal self-employment (including unpaid family labor) (Table A1). Thus the informal sector served as cushion for job losers and new entrants. The recovery of formal wage employment has been impressive—formal wage employment was already 12 percent above its average pre-crisis level by the fourth quarter of 2010.

9. Job losses were concentrated in manufacturing, while agricultural employment increased, serving as a cushion—agricultural jobs continued increasing after the crisis. Before the crisis, agriculture was mostly shedding workers, although that trend started changing right before the crisis (Figure 7). And employment in manufacturing and services was increasing. The crisis hit manufacturing jobs, while agricultural employment increased (Table 2). The lack of movement across sectors before the crisis was exacerbated during the crisis. Thus the increase in agricultural employment was mostly due to new entrants and in the form of informal self-employment (including unpaid family labor). Employment has been growing in



Box: The crisis and high food prices are behind the stalling of agricultural shedding since 2007.

One of the salient structural transformations of the Turkish economy since the 1990s is the decrease in the share of agriculture in total employment and output, as the non-agricultural sector becomes more attractive and productivity increases in agriculture push labor out of agriculture. While agricultural subsidies have slowed down this process, the downward trend in agricultural employment continued until 2007: the share of agricultural employment halved from 46 percent in 1990 to 23.5 percent in 2007, while the number of agricultural workers declined from 9 million to 6 million during the same period. In parallel, the share of agriculture in GDP decreased from 17.5 percent to 7.6 percent.

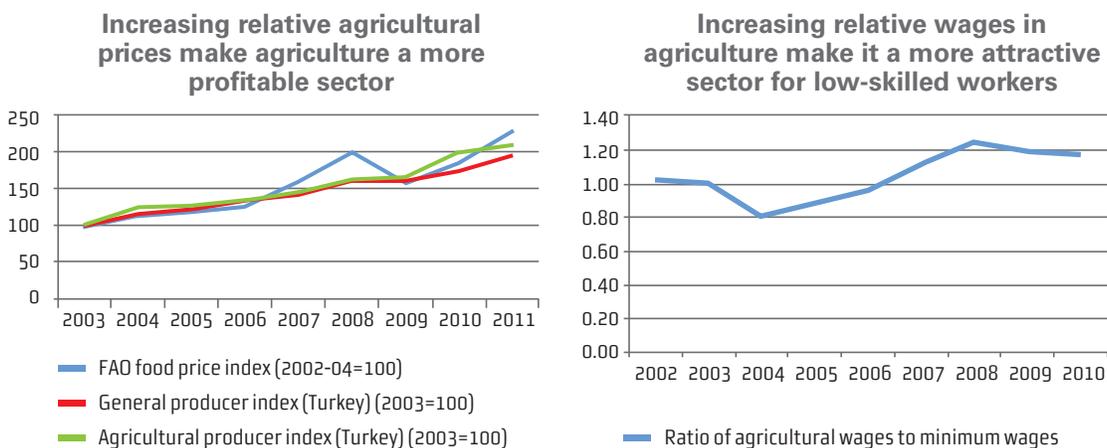
Since 2007, however, this trend has been reversed: agricultural employment increased by 26 percent between 2007 and 2011 and its share in total employment reached 25.5 percent in 2011. The increase has been larger for unpaid family labor and women. During the same period agricultural output increased by 17 percent in real terms and the share of agriculture in GDP increased to 7.9 percent in 2011. Why has agricultural employment been growing since 2007?

First, the process of agricultural shedding is far more complete, so the recent surge in agricultural employment is unlikely to indicate a structural shift. Turkish farms are still mostly family-owned, small and fragmented. Wage earners are only 10 percent of total employment and unpaid family workers are the main employment category (47 percent in 2011). Labor productivity is very low and there is still abundance of (mostly) low-skilled labor, which makes the employment-to-output elasticity very low—and agricultural output has indeed increased since 2007.





One explanation for the surge in agricultural employment is higher agricultural prices, which has made the sector more profitable and thus attractive for investments that have in turn generated employment. The figure below shows that until 2007 changes in agricultural prices in Turkey were closely aligned with world food prices and general producer prices. In 2007, world food prices shot up while Turkey's agricultural prices increased more modestly but faster than general producer prices. Around mid-2008 world food prices plunged while Turkey's agricultural prices decreased more marginally. By the end of 2009 world food prices started shooting up and Turkey's agricultural prices followed the same course this time (and well above the trend in general producer prices). Thus the trend in agricultural prices could explain some of the increase in agricultural employment in 2007 and could have had a lot to do with the increases after the crisis. Gürsel and İmamoglu (2011) make use of regional variation in agricultural employment between 2004 and 2010 to show that indeed changes in agricultural prices are a significant predictor of changes in agricultural employment.



Source: TUIK data. Agricultural wages refer to permanent male workers in agricultural enterprises (survey of salary structure).

The other explanation is increased attractiveness of agricultural jobs relative to non-agricultural jobs, particularly during the crisis. Agricultural employment served as a cushion against the crisis. The increase in agricultural employment mostly came in the form of unpaid family labor that came from inactivity (added-worker effect). Agriculture could have also become a more attractive sector for low-skilled salaried workers as a result of the increase in the relative labor demand for low-skilled workers in agriculture. One way to see that is by looking at the levels and trends of agricultural wages versus minimum wages. Indeed, the figure above shows that agricultural wages were below minimum wages and started growing faster than minimum wages from 2004, reaching the same level in 2006, increasing thereafter to peak at a level 24 percent higher than minimum wages in 2008 and staying around that level, but still growing, since then. So the increase in relative wages in agriculture could have contributed to the increase in agricultural employment since 2007. Gürsel and İmamoglu (2011) find that changes in non-agricultural wages for low-skilled workers do explain changes in agricultural employment in 2004-10.

Source: Hatunoğlu, E. Emrah (2011) (background paper this report); Gürsel, Seyfettin and Z. İmamoglu (2011).

all sectors after the crisis, particularly in construction and agriculture. By the fourth quarter of 2010, manufacturing employment had recovered to its pre-crisis level, while employment in construction and agriculture was 19 and 9 percent, respectively, above pre-crisis levels. The relative stability of agricultural employment since 2007 is explained by a combination of the cushioning function of agriculture during the crisis and improved agricultural terms of trade (Box).

The increase in minimum wages drove up formal (and total) earnings, while informal workers got smaller paychecks—earnings growth slowed with recovery but inequality increased further.

10. Despite the severe negative demand shock, monthly earnings grew even faster than before the crisis, which was driven by higher wages, as the trend in working hours declined. Despite the severe negative demand shock, average real monthly earnings grew slightly faster during the crisis than before the crisis, resulting in a 1.5 percentage point increase in the growth rate of earnings. And this was not just the result of the drop in inflation (which was only 0.7 percentage points) but also the increase in the growth rate of nominal earnings (0.9 percentage points). The increase in the growth rate of earnings is explained by

a 1 percentage point increase in wages (monthly earnings per hour), as working hours, on a downward trend before the crisis, declined even faster during the crisis (labor hoarding).

11. The reduction in household labor income was driven by household members not finding or losing jobs and lower self-employment income.

As noted earlier, the crisis affected households mainly through reduced labor income. This reduction is partly explained by increased unemployment duration and job losses. Earnings of informal employees declined but overall earnings increased. SILC data show that household income from wage employment did increase by 1.0 percent during the crisis but this increase was smaller than the pre-crisis trend, resulting in a negative impact of 5 percentage points (Table A2). Self-employment income, on the other hand, had a slight positive trend before the crisis and dropped significantly during the crisis, resulting in a negative impact of 4.6 percentage points (Table A2). Thus, although self-employment was not affected during the crisis and even increased slightly, income from self-employment declined significantly. Since most self-employment is informal (about 66 percent in 2011), the result reinforces the negative impact of the crisis on informal earnings to yield a significant decline in total informal income.

12. The growth in earnings contrasts with the decline in labor productivity and GDP, indicating an increase in the wage share and a disproportional negative impact on profits.

As a result of the downward adjustment in hours and employment (both of which were relatively small), the downward adjustment in labor productivity (GDP per hour worked) growth (10.3 percentage points) was smaller than the impact on GDP growth. Labor productivity was growing faster than earnings before the crisis (Figure 8). During the crisis, however, labor productivity declined while earnings increased (even faster than before the crisis). The wage bill

(the product of earnings and wage employment) grew but at a lower rate than before the crisis (consistent with the results on household labor income), increasing its share in GDP, as self-employment income and, particularly, profits took most of the hit from the crisis.

13. The formal wage sector was hit hard by job losses but real earnings grew even faster than before the crisis—particularly in services—while informal earnings fell sharply.

The overall impact on earnings masks significant differences by type of employment and sector. Earnings

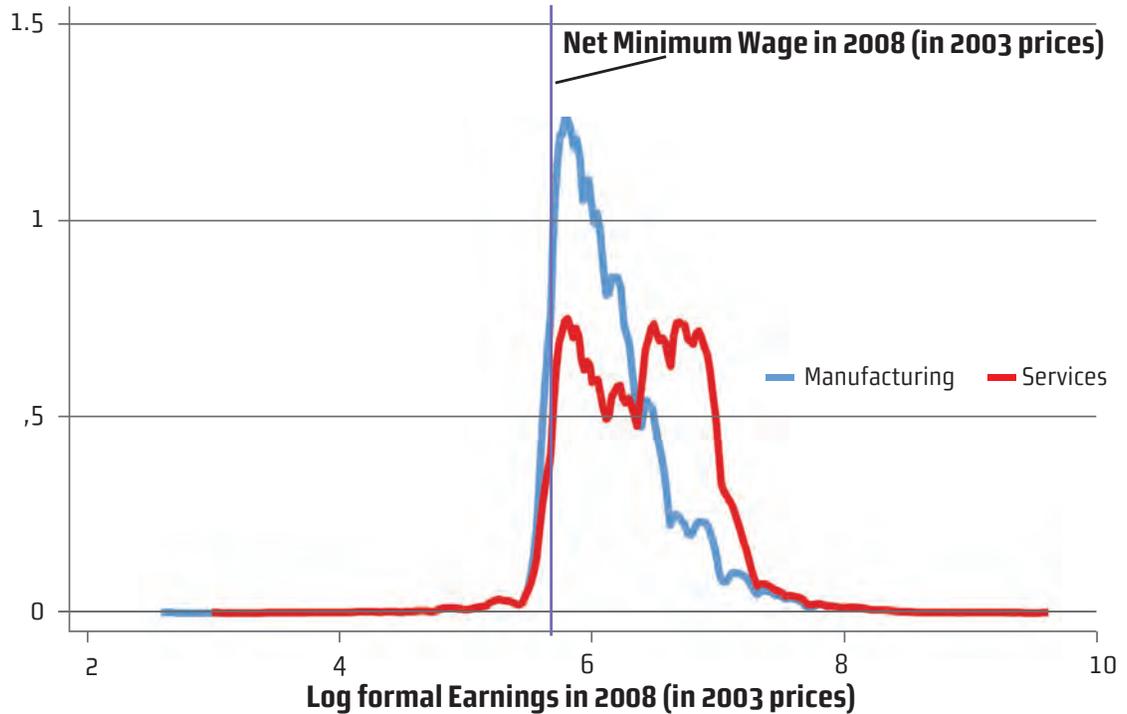
FIGURE 8

Growth in earnings despite sharp declines in labor productivity and GDP

(Year-on-year changes in real GDP, labor productivity and earnings, 2006-2011)



Source: TUIK and authors' calculations. Labor productivity: GDP into the product of total employment and average annual working hours. Earnings: monthly earnings.

FIGURE 9**The binding minimum wage****(Formal Earnings in Manufacturing and Services and Minimum Wage, 2008)**

Source: TUIK (Labor Force Survey) and authors' calculations.

increased in the formal sector but declined in the informal sector. Thus, the labor market adjustment to the demand shock was through employment in the formal wage sector and through earnings in the informal wage sector. While the crisis had the same negative impact on the growth of the wage bill of formal and informal workers (1.8 percentage points), the growth was still positive among formal workers but negative among informal workers. And while earnings increased across all sectors during the crisis, the only sector in which the trend in earnings increased during the crisis was services. The increase in formal

sector earnings was driven by higher wages (earnings per hour), as working hours decreased. The decline in informal sector earnings was the result of reduced wages and working hours.

14. The increase in minimum wages drove up formal sector earnings during the crisis but did not reduce earnings inequality in that sector. Formal sector wages continued to increase during the crisis because of the 2.6 percent increase in the minimum wage between 2008 and 2009. The minimum wage is binding in Turkey, as it is a floor to formal sector wages and monthly earnings are

bunched around it (Figure 9).¹³ Thus, increases in the minimum wage can affect average earnings, both directly (increased earnings for minimum wage earners) and indirectly (by anchoring all wages at a higher new level). But the minimum wage appears to be more binding for manufacturing than for services. Wages increased more in services than other sectors because of the differential impact of the crisis across sectors: manufacturing output dropped by 19 percent while services declined by 10 percent. Despite the sharp increase in minimum wages during the crisis, earnings inequality, as measured by Gini coefficient, in formal wage employment increased.

15. Earnings growth slowed down in the recovery period, while the earnings gap between formal and informal workers was reinforced. Increases in real wages after the crisis were offset by proportional reductions in working hours. The lack of earnings growth contrasts with the growth in labor productivity during the post-crisis period, which was already above pre-crisis levels by December 2010, indicating that the loss in competitiveness during the crisis was only temporary. The increase in wages was smaller among informal workers,

¹³ In contrast, while the minimum wage represents a ceiling for informal wages, most informal wages are significantly below the minimum wage. And the increase in minimum wages during the crisis had little effect on informal wages, which declined sharply.

resulting in a negative adjustment in informal earnings after the crisis, and a further widening of the earnings gap between formal and informal workers. By December 2010, formal earnings were significantly above pre-crisis levels while informal earnings were about the same level.

Job losses hit men in urban areas, while women, youth and the low educated saw lower earnings—women gained jobs through the business cycle while wage inequalities increased

16. Men suffered greater job losses than women, particularly formal manufacturing jobs—women gained relative to men in terms of employment through the business cycle. Controlling for age, education level and location, the crisis did have a larger impact on men's employment relative to women's (Table A3). In fact, as a result of the crisis female employment increased slightly while male employment decreased relative to the absence of any pre-crisis trend. This mainly reflects the larger flow of women out of inactivity into employment (added-worker effect) relative to men rather than a differential impact on unemployment. The negative impact on male employment was concentrated in formal manufacturing jobs. Male and female employment grew at similar rates during the recovery period, resulting in women gaining

relative to men in terms of employment through the business cycle (Table A4). This is due to the relative gains in labor force participation because the female unemployment rate has recovered more slowly than men's.

17. But women lost to men in terms of earnings during the crisis, although female earnings caught up during the recovery.

Female earnings were growing faster than male earnings prior to the crisis. During the crisis, however, the trend of male earnings adjusted slightly upwards while the trend for female earnings adjusted downwards. This was basically due to smaller relative increases in formal earnings and, particularly, greater relative declines in informal earnings. The relative gains in earnings for men were more apparent in manufacturing. And these gains can be attributed to the dynamics of hours worked by men relative to women, as women's hours were cut much more than men's in all sectors except agriculture. Female earnings grew faster than men's during the recovery period and by the last quarter of 2010, real earnings of both men and women exceeded pre-crisis averages by about 1 percent.

18. The crisis had a larger toll on youth unemployment—youth employment recovered more slowly, as some young people went back to school.

Youth unemployment rose almost twice as fast as that of adults relative

to respective pre-crisis trends. This was partly due to youth being hit harder by job losses in manufacturing than adults. Although youth unemployment came down faster than that of adults during recovery, youth labor force participation did not change, resulting in a slower recovery of youth employment relative to adult employment. This lack of change in youth activity rates is mostly due to some youth postponing entry and going back to school, as the joblessness rate (share of youth neither working, nor attending school) decreased significantly among youth during recovery after having increased during the crisis.

19. Youth lost to adults mostly in terms of earnings and that difference has been amplified after the crisis.

Prior to the crisis, earnings of youth were growing even faster than those of adults. The crisis saw earnings of adult workers increase (although at the same rate as before the crisis), while earnings of young workers remained unchanged, thus experiencing a sharp decline relative to its pre-crisis trend. The increase in the earnings gap between youth and adults during the crisis was due to a smaller relative increase in formal earnings among youth and, especially, a larger relative decline in informal earnings (3.3 percent). These disparities are mainly explained by wage dynamics. The increased earnings premium on work experience appears to be amplified after the crisis, as youth earnings have been

subject to large cuts (both formal and informal) while adult earnings have remained unchanged.

20. Earnings inequality between high and low educated workers increased during the crisis and was reinforced later. Before the crisis, earnings of workers with less than secondary education (low educated workers) were growing faster than earnings of workers with at least secondary education (high educated workers). Low educated workers lost to high educated workers in terms of earnings during the crisis, as their earnings stalled while high educated workers saw their paychecks increase even above the pre-crisis trend. High educated workers enjoyed large increase in formal earnings and even benefited from higher informal earnings, while low educated workers did not experience in any change in formal earnings and saw their informal earnings reduced. These differences were mainly driven by differences in wage rates. While low educated workers have caught up with high educated workers in terms of informal earnings, as high educated workers lost what they gained during the crisis, the gap has been amplified for formal earnings, as low educated workers have seen their earnings reduced.

21. Job losses were concentrated in urban areas, while rural residents were able to resort to agriculture as a cushion against the crisis. Urban workers were disproportionately affected by job losses: the employment rate in urban areas decreased by 1.2 percentage points during the crisis while the rural employment rate remained unchanged thanks to the increase in agricultural employment. Unemployment increased in both areas, although by almost twice as much in urban areas than in rural areas. Both urban and rural areas benefited from the increase in employment and the decline in unemployment after the crisis. The growth of agricultural employment after the crisis continues to boost rural employment above pre-crisis levels.

Overall Turkey's labor market weathered the storm well relative to other countries

22. In most other upper middle income countries the crisis also had a relatively small overall impact on jobs. Evidence from up to 44 middle income countries using the same basic methodology as in this study (Khanna et al. 2011; Cho and Newhouse, 2011) shows that despite large contractions of GDP as a result of the crisis, employment, unemployment and, particularly, labor force participation were relatively little affected on average

TABLE 3

In middle income countries the crisis had a relatively small impact on jobs and a large impact on earnings growth

	Number of countries	Pre-crisis	Crisis	Difference
GDP growth	28	7.3	-2.4	-9.7
Wage bill growth	28	9.4	1.1	-8.3
Employment growth	28	1.8	-0.2	-2.0
Earnings growth	28	7.3	1.3	-6.0
Hours worked growth	14	1.7	-5.2	-6.9
Real wage growth	14	6.5	7.2	0.7
Nominal wage growth	14	12.9	12.2	-0.7
CPI growth	14	7.0	6.0	-1.0
Unemployment rate	28	9.0	9.7	0.7
Labor force participation rate	24	53.0	53.3	0.3

Source: Khanna et al. 2011. The pre-crisis period is an average of year on year changes over eight quarters from Q3 2006 to Q3 2008. The crisis period is an average between Q4 2008 and Q3 2009.

(Table 3).¹⁴ There was, however, variation across countries according to the severity of the GDP shock, the structure of the economy (e.g. relative size of export and manufacturing sectors) and the nature of labor market institutions.

23. In most cases people who remained or became unemployed as a result of the crisis stayed attached to the labor force. In general, unemployment was more sensitive to

¹⁴ These studies are necessarily constrained by the data available to make a homogenous analysis of 44 countries. The present study for Turkey thus extends the analysis in a number of dimensions, including the analysis of the impact of the crisis on different forms of informal employment, informal earnings, earnings inequality and transitions across different labor market states and sectors.

the shock than employment, while there was a negligible impact on activity rates. This is because (1) part of the impact on unemployment came from those who remained unemployed as a result of the crisis (as in Turkey); (2) most of those who remained and became jobless a result of the crisis stayed attached to the labor force looking for a job (as in Turkey); and (3) the added-worker effect was weak, unlike in Turkey where it was significant, although most of this new employment was of low quality (informal self-employment, including unpaid family labor). Although the same type of analysis is not available for OECD countries, the impact of the crisis on jobs in OECD countries was also mainly reflected in increases in unemployment.

The fall in real GDP was larger than the increase in unemployment in all but 6 OECD countries (e.g. the US and Spain), and employment was only 1.8 percent lower in the fourth quarter of 2010 than three years earlier (OECD 2011).

24. As in Turkey, wage employment and manufacturing jobs were particularly affected by job losses.

The relatively small overall impact on jobs masks significant differences by sector, with wage employment and manufacturing jobs being more affected as a result of their relatively larger exposure to trade shocks. For example, while employment growth fell in industry by 3.3 percentage points, it increased in agriculture by 1.5 percentage points and remained unchanged in services. As in Turkey, job losses in one sector were not absorbed by other sectors but instead translated into higher unemployment.

25. The impact on jobs was also larger for youth and men in most countries.

In most countries young people were disproportionately affected by job losses and increased unemployment relative to adults. The differential impact (which was only significant in manufacturing in Turkey) happened within the same sectors, suggesting firms tended to prefer dismissing youth over adults, perhaps as a result of youth's lower firm-specific skills and more flexible contractual arrangements. The larger impact on men relative to women

is mostly explained by men being disproportionately represented in wage employment and manufacturing. Unlike Turkey, however, it is not explained by the added-worker effect among women. As in Turkey, the differences by level of education were small. Relative to most other countries, in Turkey the crisis did have a significantly larger impact on urban unemployment. Despite the relatively small overall impact on employment in OECD countries, youth, men, low-skilled workers and temporary workers were hit especially hard (OECD 2011).

26. Unlike Turkey, formal-sector earnings growth was reduced in most countries.¹⁵

As in Turkey, in most other middle income countries real earnings growth started declining in the first quarter of 2008, as increases in food and fuel prices skyrocketed. However, while in most other middle income countries nominal earnings growth declined during the crisis, it increased slightly in Turkey. In fact, the fall in earnings growth explains most of the decline in wage bill growth during the crisis in most other middle income countries. The fall in

¹⁵- Data on earnings for these countries come from establishment surveys and thus mainly refer to formal sector employees. Khanna et al. (2011) use the wage bill, the product of total employment and (essentially formal) earnings, to look at labor market adjustment borne by workers and how much of this adjustment is due to changes in employment and earnings.

earnings growth was entirely explained by the sharp drop in the growth of hours (significantly larger than in Turkey), as real wages increased slightly thanks to declining inflation. The reduction of positive growth in real earnings in 2009 is also observed for 80 out of 115 countries analyzed in the Global Wage Report 2010 (ILO 2010a).¹⁶ An ILO survey of 54 countries across the income spectrum also shows that labor hoarding was a common labor market adjustment to the crisis (ILO 2009). OECD countries relied much more on labor hoarding than layoffs, and the decline in hours tended to be more proportional to the fall in GDP (OECD 2011).

27. About half of the countries with minimum wages also chose to increase it during the crisis. About half of the 108 countries in the ILO sample increased the statutory minimum wage in 2009 (including Turkey, Brazil, Russia and the majority of advanced countries), while in the other half minimum wages were left unchanged (ILO 2010a). As a result of changes in statutory minimum wages and/or declining inflation, most advanced countries and half of countries in Europe and Central Asia (ECA) (including Turkey) experienced increases

¹⁶ There is, of course, variation across regions: growth declined but remained positive in Asia and Latin America, it was slightly positive in advanced countries and significantly negative in some countries of Europe and Central Asia like Latvia, Lithuania, Serbia and Ukraine.

in minimum wages in real terms of 1 percentage points or more in 2009.¹⁷ The Global Wage Report 2010 finds no clear relationship between minimum wages and the incidence of low pay or earnings inequality (often the objectives of minimum wage policies). In Turkey, the increase in real minimum wages in 2009 did not prevent an increase in the incidence of low pay or an increase in earnings inequality, even among formal employees.

28. In most countries the share of the wage bill in GDP also increased during the crisis. The slowdown in earnings growth was generally smaller than the decline in labor productivity and GDP growth. In most countries the wage bill share in GDP increased and profits took a disproportional hit from the crisis. Previous crises have also witnessed smaller adjustments in earnings relative to labor productivity and GDP and increases in the wage bill share. And in most cases, recovery periods tended to reverse this dynamic.

29. In most ECA and OECD countries labor market recovery lagged behind economic growth—Turkey has fared relatively well. Most countries in ECA started growing by the second and third quarters of 2009, while real GDP in the OECD area has been growing since the

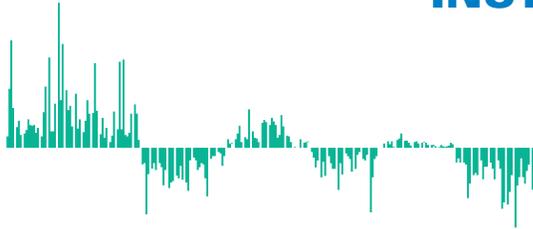
¹⁷ The ECA region encompasses the transition countries of Eastern Europe, the Balkans, the Commonwealth of Independent States, and Turkey.



first quarter of 2009. In Turkey, one of the hardest hit countries, recovery only started at the end of 2009, but once it started it was among the most vigorous, quickly recovering its pre-crisis level. In most ECA and OECD countries, however, growth was not vigorous enough to re-employ many of those workers that were laid off during the crisis. Among ECA countries, employment growth has been weak even in countries with high GDP growth, except in Turkey and Kazakhstan where rapid GDP growth has been accompanied by strong employment growth leading to higher employment rates and lower unemployment rates than before the crisis. The unemployment rate in the OECD had only come down by 0.6 percentage points by the third quarter of 2011 from its high of 8.7 percent in the fourth quarter of 2009. Turkey, Germany and Chile are the only OECD countries where unemployment is already below pre-crisis levels.

30. And in a number of these countries, particularly in Europe, employment figures are getting worse due to the economic slowdown starting in the second half of 2011. Even when, on average, labor markets in the OECD were slowly recovering, countries like Spain, Greece, Portugal and Ireland (the last three experiencing 'bailouts' by the EU and the IMF that prompted harsh fiscal consolidations) were experiencing stagnant or increasing unemployment. Following the spread of the sovereign debt crisis to other countries of the Eurozone like Spain and Italy in August of 2011, growth has slowed down in the OECD, particularly in the Eurozone, and some countries in this area have entered into negative territory in 2012. Turkey's growth slowed down in the second half of 2011 and is expected to reach 3 percent in 2012, as exports to the EU and foreign capital are reduced.

3. POLICY MEASURES AND LABOR MARKET INSTITUTIONS DURING THE ECONOMIC CYCLE



1. To what extent were the observed overall and distributional impacts of the crisis and recovery on the labor market due to policies? Surely policies have some explanatory power but exactly how much is hard to tell because of the lack of a credible counterfactual, i.e. what would have happened in the absence of these policies. This section looks at this question, but rather than attempting to evaluate the impact of policies, the focus is rather on making a constructive assessment of policy measures taken during the business cycle and existing labor market institutions against the observed impacts. The (reasonable) assumption is that while policies may have had an effect, this effect was not strong enough to change the sign of the observed impacts. The focus of the analysis is on employment and social protection policies. The last part of this section benchmarks Turkey's crisis-response policies against those taken by other countries.

A framework for employment and social protection policies through the economic cycle

1) Policies to create or protect jobs (i.e. stimulate demand)

a. Create jobs: subsidies to firms for new hires (e.g. reductions in social

security contributions, often targeted to disadvantaged groups like youth and women), support to SMEs and the self-employed (e.g. access to finance, advisory services, and preferential treatment in public tenders), and public works.¹⁸

b. Protect jobs: short-time work schemes, under which firms or workers receive a subsidy for a temporary reduction in hours per worker, encouraging work sharing rather than layoffs. Labor regulations governing severance payments and labor contracts are not tied to the business cycle but they can affect how labor markets adjust to it. High severance pay makes it more costly for firms to fire workers. More flexible contracts in terms of wages and/or hours reduce the need for firms to fire workers.

2) Policies to support job search and upgrade skills. This group of policies aims to address individual's barriers to employment in terms of information and skills: employment services (job intermediation and counseling, job search assistance) and skills training.

3) Policies to protect income. These programs aim to complement self-insurance against unemployment or a fall in earnings:

a. Benefits tied to employment: in-work benefits (e.g. tax credits or lump-sum payments) for low-paid workers; minimum wages; partial withdrawal from individual savings accounts for unemployment or pensions.

b. Benefits for the jobless: unemployment insurance (including automatic or ad-hoc extensions of benefit receipt period during crises) and unemployment assistance (e.g. for jobseekers who do not, or no longer, qualify for unemployment insurance).

c. Benefits not tied to job status: social assistance, such as cash and in-kind transfers. These benefits are typically targeted to the chronic poor, but can also be used to address the increasing social needs arising from crises by, for example, relaxing eligibility criteria (and thus expanding coverage) and increasing benefits.

A recap of results

- The Turkish economy was hit hard by the crisis, which affected households mainly through reduced labor incomes—recovery was fast and strong.
- The crisis had a relatively small overall impact on jobs, mainly through increased unemployment.
- The increase in unemployment was explained by increased unemployment duration and job losses, but the

¹⁸ Public works programs also have an income-protection role, particularly during crises.

effect on total employment was partly attenuated by the added-worker effect—employment recovered fast and strong.

- Jobs losses hit formal employees, while the informal sector served as a cushion for job losers and new entrants (mostly going to informal self-employment, including unpaid family labor in agriculture—formal wage jobs recovered strong after the crisis.
- The increase in minimum wages drove up formal sector and total earnings, while informal workers got smaller paychecks—earnings came to a stall with recovery but inequality was reinforced.
- The decline in household labor incomes was driven by increased unemployment duration, job losses among formal employees as well as reduced wages and self-employment income among informal workers.
- Job losses hit men in urban areas disproportionately, while women, youth and the low educated saw lower earnings—women gained jobs through the business cycle while wage inequalities increased.

Turkey's policies through the economic cycle

2. The crisis was preceded by a labor market reform that reduced non-wage labor costs and set the basis for expanding active labor market programs (ALMP). In May 2008 the first employment package was introduced, but measures were implemented in October of that year, coinciding with the beginning of the recession. The main elements of the reform were (1) reductions in employers' social security contributions (across-the-board 5 percentage points reduction and further temporary reductions for hiring new female and young entrants into the labor market), bringing Turkey's tax wedge (35 percent) to the OECD average;¹⁹ and (2) the opening of ALMP to all registered unemployed (funding from the Unemployment Insurance Fund, UIF, was increased and the beneficiary base was extended to all registered unemployed—previously only UI beneficiaries qualified), thus facilitating the expansion of these programs from a low base—30,700 beneficiaries, almost all of them vocational trainees, in 2008, representing 3.8 percent of registered unemployed (1.2 percent of all unemployed).

¹⁹The tax wedge is the share of taxes and social security contributions in total labor costs.

3. The across-the-board reduction in non-wage labor costs is likely to have prevented some layoffs during the crisis and encouraged hiring during recovery.

Although not a crisis-response measure, the across-the-board cut in employers' social security contributions was introduced at the outset of the crisis, reducing labor costs for firms at a time when their revenues were declining. Along with the targeted subsidy for new hires (which has been extended ever since), it is likely to have contributed to job creation (the original purpose of the reform) during recovery by reducing hiring costs. A study simulates that the impact on employment of the across-the-board reduction (1.25 percent increase) may be limited relative to its budgetary cost (World Bank 2009b) because part of the reduction is translated into higher wages. The same study shows that reductions targeted at low-wage earners (e.g. youth and women) are more cost-effective.

4. Turkey entered the crisis with stringent labor market regulations and limited protection for the unemployed.

The 2008 reform did not touch the employment protection legislation (EPL), which remains among the most restrictive in the OECD. This rigidity stems from restrictions/disincentives to flexible contracting (part-time, fixed-term and temporary contracts) and generous severance

obligations.²⁰ Restrictions on fixed/temporary contracting result in a 74 percent job informality rate among workers employed on temporary/fixed basis (almost half of all workers in Turkey) (Labor Force Survey, 2010). There are disincentives for workers and employers to take on part-time jobs, resulting in only 3 percent of formal workers being part-time. The 2008 reform increased unemployment benefits by 11 percent (17 percent among minimum-wage earners) by tying payments to gross rather than net wages. But the combination of large numbers of informal workers, strict qualification rules and low benefits limit the effectiveness of unemployment insurance to protect workers during economic downturns and beyond. In September 2008, only 17.3 percent of registered unemployed (5.3 percent of all unemployed) were receiving unemployment benefits.

5. Stringent EPL is unlikely to have been a major factor in safeguarding jobs during the crisis, but is likely to pose a constraint to job creation.

Strict EPL tends to reduce job flows through the business cycle (hiring during upturns and firing during downturns) (Micco and Pages 2004). If severance obligations or restrictive working arrangements had been a major

²⁰ Workers qualify after one year of service, with payment of one monthly wage per year of service for qualifying separations (including separations for economic reasons, just cause discharge cases, and retirements), and no ceiling on the number of years of service but on the amount paid per year.

deterrent for layoffs during the crisis, there would have been a relatively larger impact on employment not subject to these obligations or restrictions. Job losses, however, were concentrated among formal wage sector workers, for which severance payments apply. Most job losers went to the informal wage employment, which was not affected by the crisis. And there was some adjustment in average working hours both in the formal and informal sectors. Even within the formal sector, the crisis did not have a disproportional impact on youth employment (generally more flexible), except in manufacturing.

6. The Government introduced a crisis-response package in 2009, including employment-related measures. The authorities' response to the global crisis covered four areas: monetary policy, banking liquidity measures, fiscal stimulus, and employment. The bulk of the measures came in May 2009 and accounted for about 2.2 percent of GDP in 2009 (ILO 2010b), although this figure is reduced to less than 1 percent of GDP if only crisis-related discretionary measures are included. Employment-related crisis measures included (Table 4):

1) Short-time work scheme. Payments increased by 50 percent and benefit receipt period extended from 3 months to 6 months (February 2009). The program was initiated in 2005 to partially compensate workers in firms going through difficulties for reduced working hours. To be eligible,

workers need to meet the same strict conditions as for unemployment insurance. A negligible number of workers benefited from this program before 2009, when it reached 190,233 people.

2) Expansion of vocational training. The coverage of vocational training provided by the Turkish Employment Agency (ISKUR) increased from 30,000 people in 2008 to 167,000 in 2009 (21 percent of registered unemployed, 6.4 percent of total unemployed). In addition to building skills, the program also provided a daily stipend of 15TL to trainees (about half of the minimum wage in 2009), which increased to 20TL in 2012.

3) Public works. The Public Works program was introduced in 2009. To be eligible, the beneficiary had to register at ISKUR and not receive any other similar public support. Payments were made equal to the minimum wage for 6 months (it was extended to 9 months in 2012). The program benefited 45,500 people in 2009.

4) Support to SMEs. SMEs account for most employment in Turkey.²¹ The government increased funding to Turkey's Small and Medium Enterprises Development Organization (KOSGEB) by

²¹- SMEs (firms with less than 250 workers) account for 92 percent of employment. Small firms (less than 50 workers) account for 79 percent, while firms with less than 10 workers are the single most important category (59 percent).

48 percent to support credit subsidies, grants and technical support programs, extended this support to SMEs in the service sector, and expanded the Credit Guarantee Fund (CGF) by 1 billion TL to leverage credit resources for SMEs. Credit flowed quickly back into the system at lower interest rates, partly thanks to early liquidity measures, reducing the cost of credit subsidies and resulting in actual KOSGEB expenditures being lower in 2009 relative to 2008 despite the significant increase in beneficiaries.²²

5) Time-bound measures. Subsidies for hiring new female and young entrants were extended until July 2010. Subsidies for hiring UI beneficiaries (employers' social security contributions paid by the UIF for remainder of UI benefit eligibility period) were introduced until the end of 2010. In an effort to reduce layoffs in hard-hit sectors, reductions in consumption taxes were introduced until September 2009 in sectors like automotive, electronics and household appliances.

7. Although not explicitly part of the crisis-response package, statutory minimum wages were increased substantially in 2009. The statutory minimum wage for workers 16 years of age and older increased by 9 percent in

²²-There was also some delay in the allocation of new grants and credit subsidies as a result of the extension of support to SMEs in the service sector.

2009, well beyond inflation (6.3 percent), resulting in a 2.6 percent increase in real terms (Figure 10), in sharp contrast with the decline in labor productivity.²³ But the increase in the statutory minimum wage was not exceptional to the crisis: it was slightly larger than in previous years but smaller than in later years. The minimum wage reached 71 percent of the median wage of full-time workers in 2009, the highest among OECD countries. And as shown earlier, the minimum wage is binding in Turkey.

8. There was also some response to the crisis in terms of social assistance programs. Overall, social assistance beneficiaries and spending displayed a countercyclical behavior, increasing substantially in 2009 by 33 percent and decreasing slightly in 2010 (Table 5). The increase in spending in 2009 led to a sharp increase in the share of social assistance in GDP from 1 percent to 1.4 percent. However, most of this increase was not in response to the crisis. About half of the increase in spending is explained by the increase in Green Card Program (GCP) benefits, following the implementation of the 2008 Social Security and Universal

²³-The national minimum wage is set by the tripartite Minimum Wage Determination Commission, composed of government and confederation representatives of employers and workers' unions. The minimum wage is set twice per year (January and July). A lower level is set for workers younger than 16 years of age.

TABLE 4

Key employment-related crisis measures
(Main programs and totals)

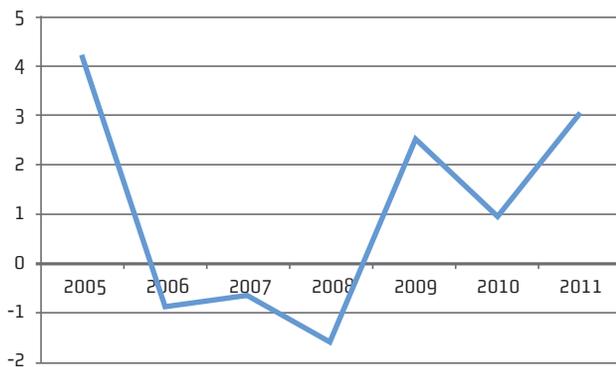
	2008		2009		2010	
	Benef. (x1000)	Million TL	Benef. (x1000)	Million TL	Benef. (x1000)	Million TL
Vocational training	31	35	167	193	157	242
Public works			45	111	42	138
Short-term work scheme			190	163	27	39
Incentives for new hires		16		66		137
KOSGEB support to SMEs	51	186	74	167	73	203

Source: ISKUR, KOSGEB and Ministry of Labor and Social Security.

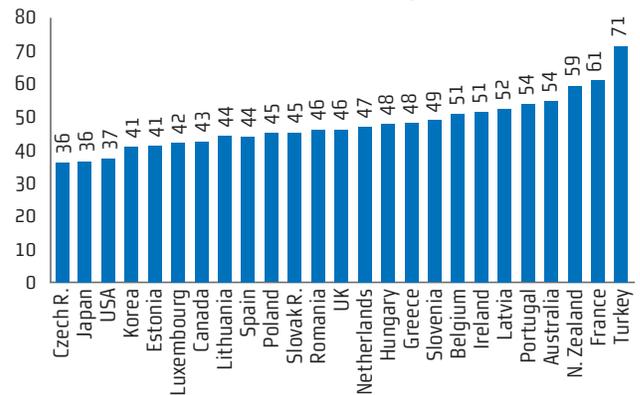
FIGURE 10

The minimum wage increased significantly during the crisis to reach the highest level relative to median wages in the OECD

Increasing minimum wages during the crisis and beyond
(Growth rates of minimum wages in 2003 prices)



The highest relative minimum wage in the OECD
(ratio of national minimum wage to median wage)



Source: TUIK and OECD (National Labor Force Surveys).

TABLE 5**Social assistance: Expenditures and beneficiaries**

(Main programs and totals)

	2007		2008		2009		2010	
	Benef. (x1000)	Million TL	Benef. (x1000)	Million TL	Benef. (x1000)	Million TL	Benef. (x1000)	Million TL
Social Assistance DG		1,413		1,797		2,379		2,033
CCT	2,756	321	2,978	409	2,882	483	3,002	341 ⁽¹⁾
Food assistance		140	2,106	218	2,063	379	862	92
Green Card	9,355	3,913	9,338	4,031	9,647	5,506	9,452	4,951
Non-contributory pensions	1,245	1,620	1,266	2,019	1,321	2,367	1,364	2,562
Home care subsidy	0,4	0,5	1,3	400	205	959	285	1,567
Coal assistance				436		594		557
Municipalities		436		519		485		453
Social assistance, total		8,066	11,159	9,815	14,834	13,019	14,018	12,998
Total/GDP (%)	0,96		1,03		1,37		1,18	

Source: Ministry of Development and Ministry of Family and Social Policy. Social pensions include non-contributory pensions for the elderly and disabled.

⁽¹⁾ CCT expenditures decreased in 2010 due to the introduction of the new Integrated Social Assistance Information System (ISAIS- benefits were discontinued temporarily for 1 million beneficiaries until data could be verified.

Health Insurance Law.²⁴ Overall social assistance programs were protected during the crisis and in some cases expanded in response to the crisis.

²⁴-The Green Card Program has been providing health insurance coverage to low-income families not covered by social security. As a result of the 2008 Universal Health Insurance Law, benefits of Green Card holders have been aligned with those for beneficiaries of contributory systems. In January 2012 the program was integrated with contributory health insurance program under a single general health insurance.

9. The Social Support Program (SSP) also helped to meet the increased social needs arising from the crisis in the South East region of Turkey. Social Support Program (SSP) was introduced in May 2008 to complement other government programs under the South Eastern Anatolia Project (GAP) aimed at raising the living standards of people living in South East region of Turkey. SSP includes specific interventions to increase the employability and living standards of disadvantaged groups.

Assessment of policies against observed crisis impacts

10. The focus of crisis-response measures on protecting the jobs of formal employees was appropriate to the nature of labor market adjustments to the crisis. The changes to the short-time work scheme gave firms greater capacity to adjust to the shock via working hours rather than workers. And it did so in the formal wage sector, which was hit the hardest. However, despite the changes introduced to the scheme in response to the crisis, the coverage remained low (82,439 at its peak in June 2009, accounting for only 1 percent of registered workers), which may have resulted in a limited overall impact on employment. In the automotive industry, one of the hardest-hit sectors, jobs rather than average working hours was the main labor adjustment to the crisis (Taymaz 2011). Efforts to support SMEs through grants and interest subsidies are also likely to have protected jobs, both formal and, to a lesser extent, informal.²⁵

²⁵- SMEs account for 99.5 percent of informal workers, with the percentage of job informality increasing as firms get smaller. The typical SME receiving public support tends to employ about 100 workers and it is less likely to employ informal workers than similarly-sized firms. An evaluation of WB-funded credit lines to SMEs between 2006 and 2008 (World Bank 2011c) shows that receiving the loan is associated with a 13 percent increase in employment. Because of the controls they are subject to, however, these firms are less likely to employ informal workers.

11. Also appropriate was the increased support to the unemployed through Active Labor Market Programs (ALMP).

The expansion of ISKUR vocational training allowed more unemployed people to preserve and upgrade their skills at a time when the opportunity cost of training was lower, increasing their chances of finding more and better jobs when labor demand recovered. The program also provided income support through the stipend. The public works program provided temporary employment and income support to the registered unemployed. Despite the significant expansion of ALMP during the crisis (particularly vocational training), coverage remained low (27 percent of registered unemployed, 8 percent of unemployed). The typical delays of setting up a new program like the public works made the actual number of beneficiaries smaller than originally anticipated. By setting benefits equal to the minimum wage, the program may have created competition between people really in need and workers earning less than the minimum wage.

12. Unemployment insurance provided limited income protection for the unemployed.

There were no changes made to unemployment insurance during the crisis in terms of eligibility, benefits or the duration of the benefit receipt period. As a result, although UI coverage among the unemployed increased from 5.3 in September 2008 to 9.4 percent in

June 2009, it remained very low. Thus unemployment insurance provided little 'automatic' protection to those who had been unemployed prior to the crisis and remained jobless as a result of the crisis as well as those who lost their jobs as a result of the crisis.

13. The increase in minimum wages may have protected the income of low-wage earners in the formal sector, but possibly at the expense of job losses. The increase in minimum wages drove up earnings in the formal sector. Interestingly, however, the increase in earnings was higher at higher levels of earnings, i.e. earnings inequality in the formal sector increased despite higher minimum wages—overall earnings inequality also rose as informal earnings declined. As most workers were already earning the minimum wage, the ability of firms to adjust wages downwards in response to higher minimum wages was limited, resulting in higher average earnings. The latter combined with limited scope to maneuver in adjusting hours possibly made firms resort to layoffs to adjust to the crisis more than they would have otherwise without the minimum wage increase. But there is no evidence to suggest low earners were significantly more affected by layoffs.

14. The GCP contributed to protecting healthcare utilization among poor informal families during the crisis. Although the expansion of benefits was

already planned as part of the Universal Health Insurance Law, a decision was made to implement it during the crisis despite the much reduced fiscal space. The GCP is targeted to poor households without social security coverage, i.e. the poor households engaged in informal activity, which are the poorest households. In fact, the GCP was among the best performing social assistance programs in ECA at the outset of the crisis: in 2008, 48 percent of households in the poorest quintile of the population (in terms of per capita household consumption expenditures) were covered, and 71 percent of all Green Card beneficiaries were in the poorest quintile of the population. Coverage of the poorest quintile increased to 52 percent in 2009. The scale-up of an already high-performing program to poor informal households, whose incomes declined significantly during the crisis, contributed to protecting health utilization (Aran 2012).

15. Other social assistance program provided more limited income protection to those affected by the crisis. Transfer programs are potentially effective tools to mitigate the negative impacts of the crisis on households, particularly when the coverage of unemployment insurance is low and part of the adjustment takes place through reduced informal income, as in Turkey. Expenditures under the Social Assistance DG increased by 32 percent in 2009.

CCT expenditures increased but the number of beneficiaries did not change. The increase in spending responded to the annual increase in the benefit level. Without any discretionary measure (e.g. a temporary increase in the eligibility threshold), the lack of change in the number of beneficiaries is not surprising given that the CCT makes use of a proxy-means test to determine eligibility, and proxies are unlikely to change much in the short run, even in the face of a shock. This is because the CCT program in Turkey, like similar CCTs around the world, is primarily designed to address long-term poverty rather than short-term income shocks. As discussed later, however, there are a number of design features that can make these programs more responsive to shocks.

Post-crisis labor and social protection policies

16. Efforts to expand and improve ALMP after the crisis are likely to contribute to job creation. The main role of ALMP is to help create jobs during recovery periods and beyond by addressing barriers to employment (e.g. information and skills). The coverage of ALMP has continued to expand, mainly vocational training—250,000 trainees in 2011. As part of this effort, UMEM (Specialized Vocational Course Centers Project) was introduced in 2010. UMEM is a partnership between ISKUR, Ministry of National Education (MoNE) and the

Unions of Chambers and Commodity Exchanges of Turkey (TOBB) to provide vocational training in vocational and technical high schools and internships at TOBB businesses. The national vocational qualification system, which links curricula and qualifications in vocational fields with occupational needs, continues to be developed. And training providers are now selected on the basis of specific quality and performance criteria, not just cost.

17. Some changes related to the STW scheme, flexible contracting and targeted subsidies for new hires have been introduced. A number of changes to the STW scheme have increased its coverage and payments and reduced processing time, including the extension of the benefit receipt period to 12 months and the enlarged scope of the scheme to include sectoral and regional crises. In February 2011 legislative changes were introduced to extend the scope of the incentives introduced in 2008. For example, the incentives for hiring women and youth were extended until 2015, and social security contributions for self-employed women were reduced. The Law also enabled part-time workers to pay their unpaid social security contributions retroactively, and to be eligible for unemployment insurance. And it reduced possible disincentives for Green Card holders to look for jobs in the formal sector by ‘freezing’ (rather than taking away) the Green Card while the person works in the formal sector.

18. The Government has been preparing a new National Employment Strategy, which will include a focus on making labor markets more flexible while increasing the protection of workers. A comprehensive National Employment Strategy (NES) is in the making, covering measures to improve labor market flexibility and security, the relevance of education to market needs, and the employability of vulnerable groups (including youth and women) and the link between social protection and employment. The NES will complement the new Industry Strategy—dealing with the investment climate and innovation policy aspects of employment. Other employment-related measures, including KOSGEB’s increased support to SMEs in 2010 (9 new programs were added), will also contribute to job creation, but access to long-term financing continues to be a challenge.

19. Significant steps are being taken to improve the effectiveness of social assistance, including measures to make it more responsive to future crises. After the June 2011 election, the Government combined responsibility for all central government social assistance benefits under the new Ministry of Family and Social Policies (MoFSP). A new Integrated Social Assistance Information System (ISAIS) has been developed, while common mechanisms are being developed to target benefits more effectively. ISAIS is also used to determine contribution to the new

general health insurance system. ISAIS will enhance responsiveness to future crises by allowing a much faster, streamlined and objective application process, including an automatic determination of eligibility from within the system, and by paying beneficiaries directly.²⁶ An action plan to strengthen the link between social assistance and employment was introduced in 2010, including the registration of social assistance beneficiaries that are able to work in ISKUR.

Benchmarking of crisis-response policies around the world²⁷

20. Most countries adopted some kind of policy response to the crisis—the magnitude and nature of response were driven by fiscal space, readiness and severity of the crisis. Around the world, governments were more active in protecting jobs, training workers, and expanding safety nets than in previous crises. These policies were roughly divided among these 3 types of interventions: labor demand, income protection, and job search

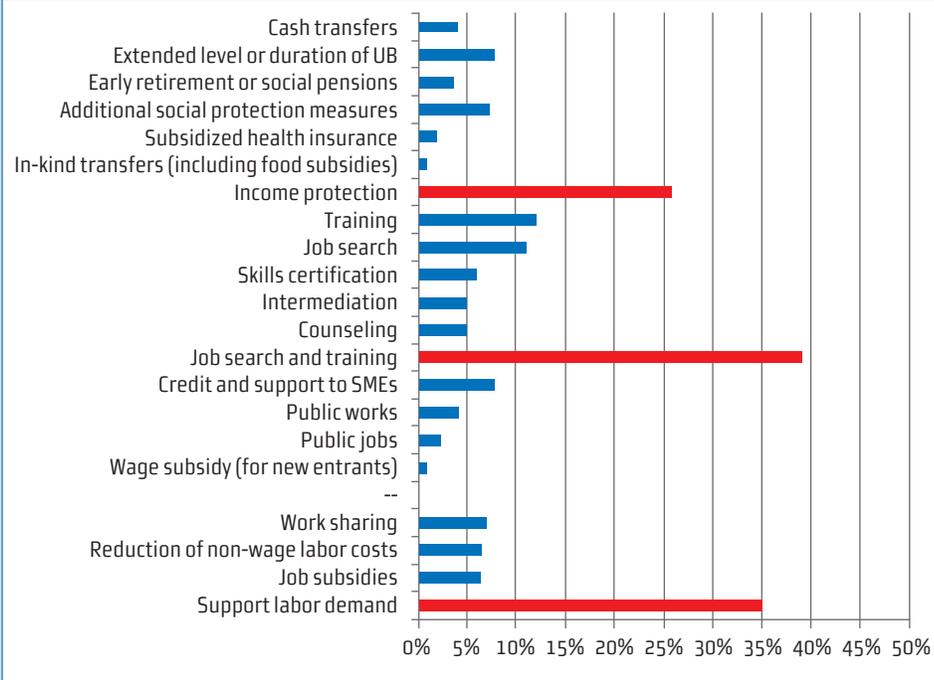
²⁶ Under the new system, applications for assistance can be done at any point during the year and are processed automatically the same day with single ID document. Under the previous system, applications for the CCT could only be done between August and October, it would require more than 6 documents from other public institutions and it would take between 2 and 3 months to process.

²⁷ This section draws from Robalino et al. (forthcoming), Isik-Dikmelik (forthcoming), and OECD (2011).

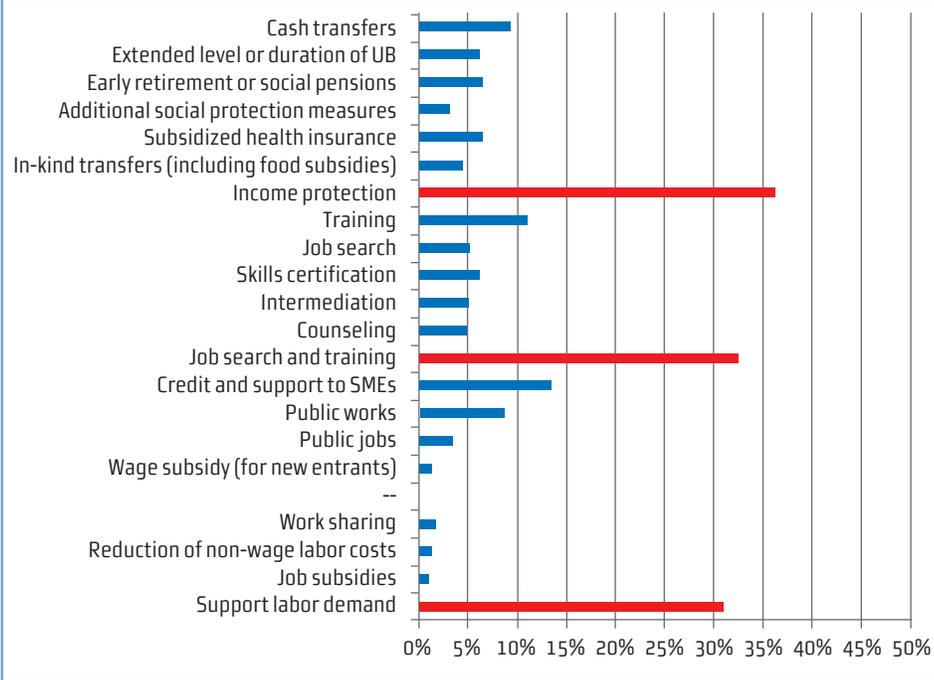
FIGURE 11

Distribution of Policies in OECD and Middle and Low Income Countries

OECD



NON OECD



Source: ILO-WB Inventory of Policy Responses.

and skills training. The policy mix within each of these categories differed across OECD and non-OECD countries (Figure 11). While there are no accurate data on all programs, estimates suggest that in most cases crisis-response budgets did not exceed one percent of GDP. For example, expenditures on ALMP in OECD and ECA countries ranged between 0.01 and 0.5 percent of GDP—0.13 percent in Turkey. Overall, the magnitude of the response and the choice of policies were more a reflection of the available fiscal space, the types of institutions and programs that were already in place and the severity of the GDP shock, rather than an assessment of the nature of labor market adjustments—Turkey was no different.

21. In general, interventions tended to focus on protecting jobs and the unemployed—mostly benefiting formal sector workers—rather than providing income support to workers. In non-OECD countries, around 60 percent of the policy interventions consisted of support to labor demand (excluding public works), job search assistance and training, and the extension of unemployment benefits—interventions to avoid dismissals in the formal sector or to protect those who lost formal sector jobs. This is in sharp contrast with the finding that in most of these countries the main labor market adjustment to the crisis was through reduced earnings. With the exception of cash transfer programs and public works (which only represented about 25 percent of interventions in non-

OECD countries), interventions were mostly directed at formal sector workers. In countries like Turkey, however, informal workers did experience a significant reduction in income. The rest of this section tries to draw some lessons from selected interventions to support labor demand and protect incomes.

Support to labor demand

22. Short-time work schemes (STW) were the most common type of support to labor demand in OECD countries—and they have been effective in protecting jobs. Most OECD countries already had STW or partial unemployment schemes before the crisis. These programs are meant to preserve jobs and provide income support for workers experiencing reduced hours in firms subject to temporary shocks to demand. Many of these countries, including Turkey, extended the coverage or generosity of STW schemes (as in Turkey) or relaxed eligibility or the administrative requirements to encourage take-up. The take-up was much larger in countries with well-established STW programs relative to countries with new schemes. The increase in take-up was particularly large in countries like Germany and Italy, where the average monthly number of beneficiaries reached more than 3 percent of employees (0.4 percent in Turkey). Hijzen and Venn (2011) find a positive impact of STW schemes on employment during the crisis, particularly in Germany and Japan. The main challenge of

STW schemes is to ensure that the subsidy does not become quasi-permanent, thus preventing the necessary reallocation of jobs that are no longer competitive.²⁸

23. Outside the OECD, support to labor demand was mainly channeled through SMEs. SMEs were not only affected by reduced sales, but also limited access to financing and high borrowing costs. Most countries intervened to support SMEs through a variety of instruments, including access to finance, advisory services, and preferential treatment in public tenders. For example, Mexico's stimulus package required at least 20 percent of government purchases to be made from SMEs. Because of the stricter control they are subject to, most beneficiary SMEs are more likely to be in the formal sector or have lower incidence of job informality than other SMEs. However, some countries, particularly in ECA, have also supported the self-employed, which are more likely to be informal. In the Czech Republic, for example, the number of recipients of entrepreneurship grants increased from 12,800 in 2008 to 20,200 in 2009.

24. Public works contributed to mitigating the impact of reduced incomes among the poor, particularly in countries with existing programs. Public works programs accounted for about 10

²⁸-The significant reduction in take-up in Turkey in 2010 despite the extension of the benefit to 12 months suggests that STW scheme works as a mechanism to protect jobs during temporary shocks.

percent of interventions in developing countries. Public works programs provide temporary employment at low wage rates on labor-intensive projects. One good feature of these programs during downturns is self-selection (thus not involving administrative decisions for program entry or exit). When wages are sufficiently low (i.e. no higher than the market wage for unskilled labor) and the work is labor intensive, then poor people are likely to participate and benefit from the program (Del Ninno et al. 2009).²⁹ Despite the self-selection feature, it is not easy to set up and implement a new program during a crisis, as the experience in countries like Turkey shows. Programs that have succeeded in protecting the poor during a crisis tend to be programs that were already in place and were just expanded during the crisis, like Argentina's Jefes de Hogar (Galasso and Ravallion 2004). These programs often maintain a list of projects that are ready to be implemented and scaled up when needed while ensuring resources are allocated to building infrastructure or maintaining assets with the highest value to the community.

²⁹- In May 1999, the Republic of Korea launched a public works program for the unemployed not covered by unemployment benefits. Around 2.5 times more people benefited from the public works compared with unemployment insurance. The wage had to be adjusted downward several times as some workers were leaving their jobs to receive the higher wages in the program.

Income protection

25. The coverage of unemployment insurance was limited at the outset of the crisis except in rich OECD countries.

Few developing countries have unemployment insurance (UI) and even when they do coverage tends to be very limited, as eligibility is linked to formal sector employment. In rich OECD countries, UI is the first and main tier of automatic support to the jobless during downturns. Many of these countries also have unemployment assistance (UA), which typically takes the form of temporary support to the unemployed who do not meet minimum eligibility conditions for UI or have exhausted their UI benefits (Figure 12).

26. Unemployment benefits were the first line of response to the crisis, but they provided limited protection to the jobless except in rich OECD countries—temporary changes in the duration and level of benefits made it more effective.

In OECD countries, the increase in the number of beneficiaries was on average about 60 percent of the increase in the total number of unemployed (OECD 2011). The degree to which unemployment benefit programs responded to the crisis depended on initial conditions (i.e. qualifying rules and benefits of UI as well as existence of UA) and the adjustments made during the crisis to eligibility rules as well as the level and duration of benefits (Figure

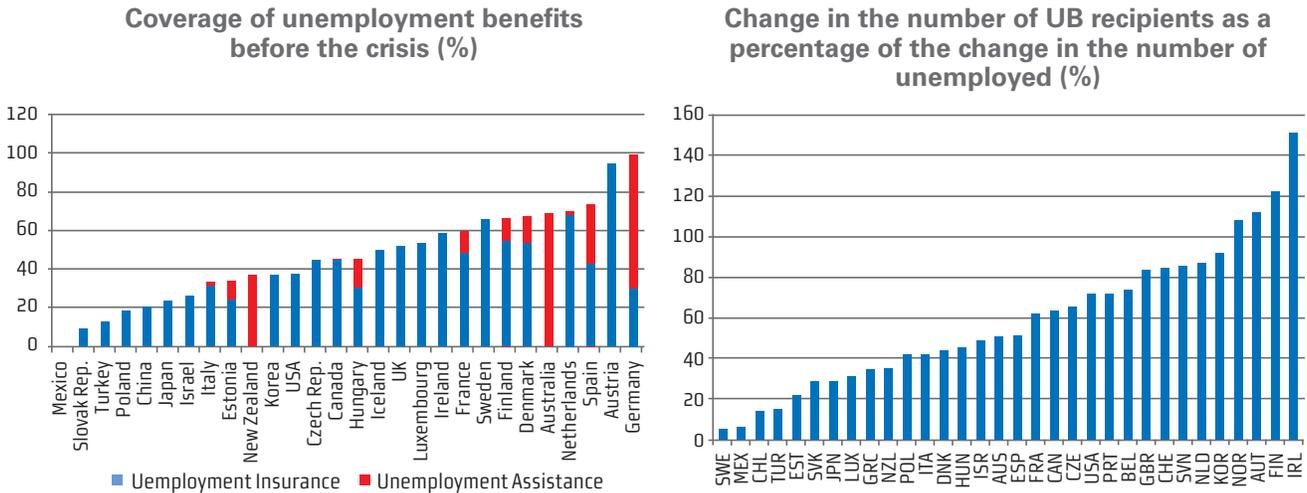
12). France and Japan made it easier for temporary irregular workers to access unemployment insurance. In Latvia, the contribution period before a worker could claim benefits was decreased. The duration of unemployment benefits was increased in countries like the USA, Canada, Latvia, Poland, and Romania. Benefit levels were increased in countries like Greece and Italy.

27. To be cost-effective, adjustments in the level and, particularly, the duration of benefits need to be temporary and tied to labor market conditions.

UB are effective tools to protect the jobless during a downturn. And there is a rationale for extending the duration of benefits during downturns when unemployment spells are typically longer. Extensions also support an otherwise weak aggregate demand, thus acting as an economic stabilizer. However, longer benefit periods can induce benefit recipients to delay their transition into employment when labor market conditions improve.³⁰ To mitigate this negative impact, benefit extensions should be temporary and linked to labor market conditions. In

³⁰- For example, Aaronson et al. (2010) estimate that the significant benefit extension in the US (from 26 weeks in 2007 to 99 weeks in 2009) accounts for 10-15 percent of the total increase in average unemployment duration since July 2008, which translates into a 0.7 percentage point rise in unemployment.

FIGURE 12
Coverage of unemployment benefits and response during the crisis in the OECD



Source: OECD. Right-hand side figure refers to beneficiaries and unemployed during the first year of the crisis.

general, automatically linking extensions to labor market conditions through a rule is preferable to ad-hoc/discretionary adjustments during crises in terms of timeliness, temporariness and overall cost-effectiveness (Woodbury and Rubin 1997). The specification of an automatic rule is not without challenges in practice, the most important of which is to limit the extent of automatic adjustment in a typically fiscally-constrained environment (OECD 2011).³¹

28. Eventually, unemployment benefits could be linked to activation measures as labor market conditions improve. Linking benefit extensions,

31- Canada provides a good example of linking both eligibility and benefit duration to local labor market conditions while limiting the automatic variation in benefit duration to a pre-defined range (OECD 2011).

and receipt of UB more generally, to activation measures like job search and work requirements during the downturn is likely to limit its effectiveness as a crisis-response measure. There is still, however, room to set benefits in the extended period (and the UB receipt period more generally) to decline with the length of the unemployment spell to provide incentives for job search. And it may be desirable to link benefits to participation in ALMP such as job search assistance and skills training for those who need such support. As labor market conditions improve, linking benefit receipt to activation measures like job search and work requirements is key to ensuring the unemployed transition back into employment (Almeida et al. 2012).

Alternatively, Unemployment Insurance Individual Savings Accounts (UIISA), implemented in countries like Chile and Brazil, automatically provide an incentive for job search without the need for close monitoring (Reyes-Hartley et al. 2010).

29. Along with public works, social assistance, particularly cash transfers, are likely to have been the most effective policy response to protect the incomes of poor and vulnerable.

Transfer programs have been a more common crisis-response measure in developing countries, where the first and main tier of support (UI) is often not available or limited. Transfer programs have also been appropriate policy responses to the crisis in developing countries, where the main adjustment was through reduced labor incomes, especially when informal workers were particularly hit, as in Turkey. In all cases social assistance has been less responsive to the crisis than UB, but a number of factors improved the responsiveness of these programs.

30. Pre-crisis preparedness and the adjustment of program parameters improved the responsiveness of social assistance programs to the crisis. In the ECA region, pre-crisis preparedness mattered (Isik-Dikmelik, forthcoming): countries with pre-existing social assistance programs that had greater coverage of the poor and vulnerable and with readily available

data from management information systems were able to respond better.³²

Tight and low eligibility thresholds of Guaranteed Minimum Income (GMI) schemes, the most common last-resort social assistance program in ECA, has limited its responsiveness to the crisis.³³

However, the regular indexation of the eligibility threshold for Serbia's Material Support Program allowed the program to expand significantly during the crisis. CCT programs are also not typically designed to address short-term income shocks, but a number of countries introduced changes to make CCT more responsive. Brazil and Mexico temporarily added beneficiaries to programs with already large coverage and increased benefit levels. Brazil's Bolsa Familia expanded coverage by raising the benefit eligibility threshold and revising the targeting formula to account for variations in household income, a permanent change that will allow greater automatic responsiveness to future crises (Fiszbein et al. 2011).

32- The latter is a proxy for administrative capacity as well as the ability to monitor and manage social assistance programs.

33- GMI schemes tailor benefits to each household according to the difference between their observed incomes and some guaranteed minimum income level, which is typically fixed and thus has been eroded over time due to inflation, resulting in very narrowly-targeted programs. GMI schemes are also inflexible because to increase coverage via an increase in the threshold, governments usually have to increase benefits for all recipients.

4. OPTIONS TO STRENGTHEN THE MANAGEMENT OF LABOR MARKETS THROUGH THE CYCLE



1. Crises are rarely fully predictable, but there are measures Turkey can take to be better prepared for and responsive to them. This section makes use of the analysis of the impact of the crisis and policy responses in Turkey as well as lessons from international experience to suggest (i) some guiding principles to improve the responsiveness to future crises in a cost-effective way; (ii) ways to adjust the policy mix through the economic cycle; and (iii) options to strengthen income protection policies in Turkey. Section 5 links policies to manage labor markets through the cycle with policies to address the longer-term, structural jobs challenge in Turkey.

Improving the responsiveness to future crises

2. To be most cost-effective, the policy response to a crisis needs to be timely (when needed), address the nature of the adjustment (e.g. jobs versus earnings), well-targeted to those who need support and temporary (for as long as support is needed). How? Mostly by being prepared and then making temporary adjustments as needed and only introducing new programs as a last resort:

1) Articulation of policies and institutions.

Gradually converging to a system that coordinates social insurance, social assistance, ALMP and labor regulations. Well-articulated systems are not only more effective overall but also more responsive to crises (World Bank 2012a).

2) Increasing reliance on social insurance.

Gradually increasing the coverage of social insurance, including unemployment insurance, will reduce reliance on discretionary transfers during downturns, and allow limited fiscal resources to be allocated to protecting the incomes of the most vulnerable.

3) Making labor markets more flexible.

Giving firms more flexibility in the management of human resources and encouraging job creation. For example, more flexible contracts in terms of wages and/or hours reduce the need for firms to fire workers during downturns. This can be complemented with STW incentives to prevent layoffs. High severance pay reduces job flows but at the expense of inefficiencies. Reducing severance pay while increasing coverage of UI will encourage job creation during upturns and increase worker protection during downturns.

4) Good information and analysis.

While it is impossible to predict the exact magnitude and nature of the impact of a crisis, early analysis on probable labor market impacts and adjustments (overall as well as

for different types of workers) against an assessment of existing policies and institutions and the available fiscal space can inform the policy mix and targeting in response to the crisis. This analysis can be updated as new information comes in, so that policies can be adjusted accordingly.

5) Increasing reliance on well-designed pre-existing programs.

While good information and analysis can help inform the right policy response, the best policy 'insurance' against a crisis is to have a good inventory of pre-existing programs that can be scaled up and adjusted as needed. This involves, for example, having social assistance programs with good coverage and targeting of the poor and vulnerable that can be 'adjusted' to a crisis situation. It also involves having programs like public works that can be 'switched' on and off as needed. And pre-existing programs need to be designed to respond flexibly to temporary shocks, e.g. by adjusting the targeting formula to account for variations in income and having a streamlined and automated system for processing applications for social assistance.

6) Making temporary adjustments as needed and linking them to labor market conditions.

Pre-existing programs, even if well-designed, may need to be adjusted to better respond to the crisis, e.g. the extension of UB period. In some cases, it may even be necessary to discontinue

some of the 'conditions' attached to a benefit to quickly increase coverage of this benefit during a crisis (e.g. activation conditions). These adjustments, however, should be temporary to avoid possible moral hazard. And the best way to ensure temporariness is by tying them to labor market conditions through a pre-defined rule and eventually accompanying them with activation measures as labor demand picks up. More generally, ex ante planning of policy responses to a downturn leads to more cost-effective interventions. And while making policy interventions (including adjustments) automatic increases responsiveness, it may also be desirable to set limits to the automatic variation to avoid excessive fiscal pressure.

Adjusting the policy mix through the economic cycle

3. To manage labor markets effectively through the cycle, policies should aim to minimize the impact of the crisis on workers and their families and maximize the impact of recovery on job creation. To this end, the policy mix needs to be adjusted through the economic cycle—the availability of timely information is crucial, focusing on policies aimed at stabilizing employment and providing income protection to workers during downturns, and eventually switching to policies that facilitate job creation and activate the jobless as the economy starts recovering.

4. During downturns, the focus could be on protecting workers who are most at risk of losing their jobs or seeing their earnings fall. Unemployment benefits, cash transfers and public works are the main policy instruments to protect incomes. Temporary short-time work schemes can encourage work sharing rather than layoffs during a downturn, although the benefit is limited to formal employment. Support to SMEs and the self-employed, particularly through access to finance, can also help protect jobs. Policies that facilitate job search are less effective when labor demand is low. Skills training for the jobless can help preserve skills and re-skill those in need to switch sectors/careers, although the impact of these programs is greater when labor demand is high.

5. During recovery, the policy mix would focus on activating individuals and facilitating job creation. As labor market conditions improve, the receipt of UB or welfare transfers can be linked to activation measures like job search and work requirements as well as participation in ALMP (e.g. job search assistance and skills training) for those who need such support. Targeted wage subsidies for new hires can help increase employment among vulnerable groups over and above the displacement of other workers. Support to SMEs and the self-employed could be continued during the upturn for as long as access to finance continues to be a key binding constraint.

Strengthening income protection policies in Turkey

6. This section more specific options to strengthen income protection policies in Turkey. These policies aim to complement self-insurance against unemployment or a fall in earnings. As mentioned above, a well-articulated income protection system would ideally rely first and foremost on UI, complemented with unemployment assistance (UA) for jobseekers that do not qualify for UI, public works for other jobseekers, and cash transfers not tied to job status to protect the incomes of the most vulnerable. The following discussion focuses on UB, UA and the cash transfers.

7. Unemployment insurance: coverage and activation. Large numbers of informal workers, strict qualification rules and low benefits limit the effectiveness of the current unemployment insurance system in protecting workers.

1) Increasing protection through UI goes hand in hand with reduced severance obligations. One option is to introduce pre-funded severance accounts (to make it more efficient and ensure workers are actually paid), as in Austria, while increasing benefits and relaxing the eligibility criteria for UI, so that more workers in the formal

sector have access to it.³⁴ An alternative approach is to reduce severance pay without changing the system, while expanding UI and replacing the current PAYGO system with Unemployment Insurance Individual Savings Accounts (UIISA) as in Chile and Brazil. The proceeds from UIISA could be topped up by a general revenue-financed solidarity component to ensure a minimum benefit, as in Chile. UIISA delink access to UI from social security contributions, reducing the 'tax' on job formality and thus reducing job informality. It also links benefits directly to contributions, with a well-targeted subsidy for those who do not reach the minimum benefit. Partial withdrawals would allow workers to cope with reduced earnings. And it provides a strong incentive to look for a job.

2) Linking UI to activation measures. Under the current PAYGO system, benefits can be set up to decline with the length of the unemployment spell to provide incentives for job search. And the existing links between the receipt of UB and activation—job search and work requirements as well as (targeted) participation in ALMP—could be further strengthened in practice (such links already exist in the law). Activation conditions could be temporarily switched off during downturns and an automatic

³⁴- Küçükbayrak (2012) shows that reducing the minimum period of contribution to be eligible for UI would not significantly affect the finances of the Unemployment Insurance Fund.



extension of receipt period (which is less than one year on average) switched on.

8. Unemployment assistance: targeted complement to UI. The expansion of the current UI system can be accompanied by the introduction of a UA program for jobseekers that do not, or no longer, qualify for UI, with preference given to those who have had some formal sector attachment. To make these programs cost-effective they would need to be targeted (on the basis of means or proxy-means), time-bounded (as UI) and tied to the same activation measures as UI.

9. Cash transfers to the poor: coverage, responsiveness to crises and activation. As noted earlier, significant steps are being taken to improve the effectiveness of social assistance, including measures to make it more responsive to future crises (e.g. ISAIS) and link it to activation. Cash transfers are typically targeted to the chronic poor irrespective of work status but can also

be used to protect the incomes of the poor during crises. And initial coverage and responsiveness are crucial to making these transfers an effective crisis-response policy. The following policy options refer to Turkey's CCT program, but the same basic principles could apply to other transfers to the poor. The CCT program is selected as an example because it is the benefit of last resort for the poor, its overall good design and performance are well documented and some of the best international examples of crisis-responsive safety nets come from CCT programs.³⁵

³⁵-The 2007 evaluation of the program (Ahmed et al. 2007) shows that 62 percent and 78 percent of beneficiaries of education and health benefits, respectively, belong to the poorest quintile of the population, which is very high by international standards. And the benefits are conditional on investments in the health and education of children from poor families, which has resulted in significant improvements in those areas, particularly among girls.



1) Increasing the coverage of poor will make the CCT a more effective safety net. The CCT program may have grown to be too narrowly targeted. Although there is no information on the coverage of the poor, if we assume that 70 percent of the beneficiaries are in the poorest quintile, then the CCT is estimated to benefit 19 percent of the 20 percent poorest households. This is in contrast with similar programs like Bolsa Familia in Brazil and Oportunidades in Mexico where the coverage of the poorest quintile is 48 percent and 54 percent, respectively. The proxy-means test (PMT) used for Turkey CCT is currently being revised and extended to other social

assistance programs. This revision could be accompanied by an increase in the cutoff point of the PMT distribution that determines eligibility so as to increase coverage.

2) Increasing flexibility to better respond to idiosyncratic shocks. The CCT program would continue focusing on reducing chronic poverty, but small changes can make it more responsive to shocks. One option is to modify the PMT formula to account for variations in household income, as in Brazil. Another option is to raise the eligibility threshold during crises, as a number of countries did during the recent crisis.

5. OPTIONS TO ENHANCE PRODUCTIVE EMPLOYMENT



1. Clearly, many of the policies to manage labor markets through the cycle, particularly skills training and policies to improve the functioning of the labor market, also address the long-term labor market challenges outlined in Section 1. The Government is well aware of these challenges and has made employment a top policy priority with important initiatives such as those outlined in Section 3. And a new National Employment Strategy is in the making. The aim of this section is to build on these initiatives and provide additional options to enhance productive employment in Turkey—putting more human capital to use and making it more productive, while recognizing that more work is needed to refine these options.

2. More research is needed on the barriers to the creation of and access to productive employment to help refine the policy options below and come up with others. The report notes the stalling of agricultural labor shedding since 2006, which is explained by a combination of higher food prices and the added-worker effect during the crisis. And subsidies to agriculture have slowed down agricultural labor shedding over the long run. A more general question, however, is the extent to which there are barriers to the reallocation of labor (and capital) from less productive

sectors to more productive sectors (including within agriculture). Another area that deserves further work is female employment, which seems to be trending up after two decades of decline, possibly indicating a structural shift. Policies that help to activate women into productive employment will boost growth. And more work is needed on the sources of and factors behind job creation after the crisis.

3. Employment-related policies need to build on a stable macroeconomic environment—macro policies have largely achieved that but reliance on external financing remains a challenge.

Turkey's economy was growing fast before the crisis, it was then hit hard by the global crisis but recovered fast and strong. Underlying these changes are movements in the current account deficit (CAD), which was growing fast before the crisis, declined during the crisis, shot up thereafter to reach 10 percent of GDP in 2011, and it is now expected to decline to 7.3 percent in 2012. And CAD is largely financed by short-term capital inflows. Underlying the persistently high CAD are structural factors like export competitiveness, energy imports and domestic savings.³⁶ But expansionary fiscal and monetary policies (at least until the end of 2010) have contributed to it. High reliance on

³⁶- A recent report examines the factors underlying the low and declining levels of domestic savings in Turkey and provides options for boosting domestic savings (World Bank 2012b).

short-term external financing makes the economy more exposed to global shocks. The concomitant appreciation of the TL has led to a loss of competitiveness of traditional Turkish exports, while modern manufacturing sectors with high import content, such as automobiles and consumer durables, have benefited from this appreciation, substituting domestic intermediate goods for foreign intermediate goods, thus reducing labor demand in the formal wage sector (Yeldan 2010).

4. Thus, while rapid economic growth is behind the impressive rates of job creation after the crisis, reliance on short-term capital inflows to finance this growth puts into question the sustainability of those gains, particularly given the uncertainties created by the crisis in the eurozone, and calls for policy action to address the high CAD and enhance productive employment through employment-related policies, which are the focus of the rest of this section.

A two-pillar policy framework to enhance productive employment in Turkey

1) Building the skills for work, entrepreneurship and innovation.

Policies to boost firm growth and innovation are crucial to increasing labor productivity in Turkey (World Bank 2009c, 2010b). However, this study focuses on the skills dimension of competitiveness.

2) Improving the enabling environment for skills to be productively used.

Policies that improve the business climate (e.g. by reducing the regulatory burden) are essential for firms to grow and generate employment. Innovation policies (e.g. promoting the collaboration between universities and firms) are key to putting new ideas to use (World Bank 2009c, 2010b). Here we focus on policies to improve the functioning of the labor market.

Building the skills for work, entrepreneurship and innovation

5. Skills are central to enhancing productive employment in Turkey.

Skills are at the core of improving individuals' chances of finding a good job in the formal sector and being productive at that job, developing new ideas and helping to use existing ones, and becoming a successful entrepreneur. The required skill set includes basic cognitive skills (e.g. numeracy, literacy), technical skills and, increasingly—as countries move up in the value-added chain—higher-level cognitive skills (e.g. problem solving, communication) and behavioral skills (e.g. perseverance, self-discipline, teamwork). In Turkey, the low level of skills of the WAP, the increasing demand for skills, and the demographic dividend make the skills agenda particularly relevant (see Section 1). More information, however, is needed on the supply, demand by firms and labor

market returns of technical, cognitive and behavioral skills in Turkey to help inform future policy.

6. Improving skills starts with a strong foundation and getting the basic skills right for everybody, and then building job-relevant skills through secondary and higher education.

The ongoing expansion of preschool education (universal enrollment of 5 year olds by 2014) will improve school readiness and subsequent learning achievement. Turkey has near-universal primary education and the new primary education curriculum already yielded improved PISA scores.³⁷ There are ongoing reforms to improve the quality and relevance of secondary education. The main challenge in higher education is to ensure the quality of the rapidly expanding sector. But further reforms are needed to ensure that curricula emphasize the full skills set (including innovation skills) and to strengthen quality assurance systems, teacher quality, school financing and service delivery (World Bank 2011a and forthcoming). Improving the quality of education through the school cycle is the most cost-effective measure to enhance productive employment over the long run.

³⁷-Turkey's results in the Program for International Student Assessment (PISA)—which evaluates 15 year olds' abilities to apply basic skills—improved remarkably between 2006 and 2009, although the average 15 year old in Turkey is still about one full school year behind the average OECD student (World Bank forthcoming).

7. Building job-relevant skills is also about providing opportunities for skills upgrading through the working life.

The 2009 lifelong learning strategy and the expansion and quality improvement of ISKUR vocational training are positive steps, but more efforts are needed to ensure lifelong learning opportunities are available to those who need them, irrespective of whether they have a job or not. The role of government in lifelong learning can be more focused on setting standards (e.g. skills certification), ensuring quality and providing targeted funding, as in Chile.

8. Upgrading the skills of the vulnerable—as part of an activation package—is crucial to enhance productive employment over the medium term.

Skills are best acquired the first time around and reforms to improve skills while in school are most cost-effective. But the impact of these reforms will only materialize in the long run, while the large share of the WAP that do not have the basic skills to find a job or to get out of informal/low-productivity jobs (i.e. the vulnerable) limits Turkey's growth potential. The skills building needs of these low-skilled people are largely underserved: about 74 percent of ISKUR trainees have at least secondary education,³⁸ and second chance education programs have limited

³⁸-This is because courses are designed for these people and providers have an incentive to select them for training (World Bank, forthcoming).

coverage. Low-skilled workers also face barriers to productive jobs other than skills, including information, access to capital and mobility, and the availability of programs to address these barriers is still limited in Turkey. And often their precarious job status is reinforced by disincentives for formal employment built in social benefits. Recent reforms are, however, starting to address this problem by linking social assistance receipt to registration in ISKUR, opening up social assistance to formal sector workers and reducing the disincentives to formal employment for Green Card holders.

9. Activation programs can be designed in a cost-effective way—targeting low-skilled youth and women can have a large payoff.

Activating the vulnerable into productive employment in a cost-effective manner involves (i) good targeting and profiling (right package to the right people), (ii) a comprehensive approach to activation (a package of programs/services to address multiple barriers to productive employment), and (iii) linking the receipt of social benefits to activation. And targeting low-skilled youth and women, the two groups disproportionately affected by the jobs challenge, could have a large payoff:

1) Youth. Activation programs are more cost-effective for youth than for adults (Betcherman et al. 2007) and the overall impact is larger while the demographic window is open. More than one third

of youth are neither working nor going to school—60 percent among 20-24 year olds with less than secondary education. Inspired by the experiences in the UK and the US, *Jovenes* programs in several Latin American countries target disadvantaged out-of-school youth (typically 15-29 year olds with less than secondary education) and provide a package of services: incentives to complete secondary education, vocational training, socio-emotional skills training, employment services and job internships. These programs have had large impacts on formal employment exceeding program costs.

2) Women. Women account for most of the jobless and most working women are informal—the low level of education and skills is a key underlying factor. Activation programs can be designed to recognize women’s mobility and time constraints. The Argentina *Jovenes* program, for example, provides extra subsidies for mothers and transport expenses, yielding a higher impact on earnings and employment among women than men. The Government could consider the experience of *Jovenes* programs to develop Turkey-specific schemes that build on existing ISKUR programs.

10. Introducing such programs would require reorienting ISKUR services towards the vulnerable (see paragraph 15). It would also involve close collaboration between ISKUR, MoNE and

MoFSP. And good public information on the programs is essential to attract the right people to the program.

Providing the enabling labor market for skills to be productively used

11. Functioning labor markets are essential, in addition to skills, for individuals to find and accept good jobs and for employers to find and recruit skilled employees. Employers need the flexibility to manage their human resources, and workers need to be able to move freely between jobs and regions. Achieving this objective will require moving towards more flexible, efficient and secure labor markets by avoiding high labor costs, restrictive contracting, and high severance payments, while revamping income protection systems for workers and employment services to help match skills to jobs. The employment protection legislation in Turkey is one of the most restrictive in the OECD, resulting from restrictions/disincentives to flexible contracting and generous severance obligations. And support to workers through UI and employment services has been limited. Severance pay and UI have already been discussed above, so here we focus on flexible contracting, enforcement of labor laws and awareness-raising to reduce informality and enhance employment services.



12. More flexible contracting mainly involves reducing barriers to existing flexible contracts.

The restrictions on fixed/temporary contracting result in a 74 percent job informality rate among workers employed on a temporary/fixed basis (almost half of all workers in Turkey). To avoid this situation, the following changes could be considered: (i) opening up fixed-term contracts to all job activities and allowing temporary employment agencies to operate in all sectors/occupations; (ii) allowing several unconditional renewals of fixed-term and temporary contracts; and (iii) extending the probation period to at least the OECD average (4 months). The recent legislative changes enabled part-time workers to pay their unpaid social security contributions retroactively. However, there are still disincentives for workers to take on part-time jobs, resulting in only 3 percent of formal workers being part-time: while part-time workers contribute for days worked, a full-time worker gets

credited 30 days a month, becoming eligible for a pension proportionally much faster. The contributory week could be redefined to make it more proportional to days worked.

13. Effective enforcement and awareness-raising are already reducing job informality, but incentives need to be addressed.

Job informality is interrelated with other forms of informality like tax evasion (World Bank 2009a). Ongoing enforcement and awareness-raising have already contributed to the 7.3 percent increase in the number of SSI contributors in 2010 and 2011. But these instruments do not affect the incentives for firms (particularly SMEs) to employ informal workers and for workers to be employed informally. The 2008 across-the-board reduction in employers' social security contributions is likely to have reduced informality by decreasing the 'tax' on formal jobs. Evidence from Mexico suggests that

moving towards a general revenue-financed universal social security system could make job informality negligible (by eliminating the ‘tax’ on formal jobs and the ‘subsidy’ to informal jobs) in a budget-neutral way (by reducing evasion of VAT and direct taxes). This process, however, requires careful thinking about what benefits to delink from contributions and how. Another option to strengthen incentives is to tie access to public contracts or support to SMEs to employing workers formally.

14. Making employment services front and center of activation efforts.

ISKUR is working to expand employment services (job placement, counseling, job search assistance), which are currently very limited. International evidence shows that employment services are more cost-effective than other activation measures and an effective screening device for identifying individuals who require additional services (e.g. vocational training).

15. Making activation policies cost-effective also requires making jobseekers more responsible and getting the right services to the right people.

A good example is UK’s Jobcenter Plus, which centers around job counselors who (i) agree with each jobseeker on an individual plan—including individual actions to find employment and participation in specific activation programs, based on an employability

assessment and after subjecting the individual to a ‘market test’, (ii) monitor progress (UI is conditional on that), and (iii) provide job counseling. ISKUR introduced job and vocational counselors in 2012, which are expected to reach 4,000 by the end of 2012, advising jobseekers on occupation and training.³⁹ And job counselors are part of a larger system change that ISKUR is considering, including changes in the services provided to different groups of jobseekers. Under such a system jobseekers deemed to have good chances of finding employment only get minimal services (e.g. information on job vacancies), focusing instead the attention on monitoring their individual actions to find employment. Individuals who have the hardest time finding employment get the bulk of activation services, including follow-up support from job consultants.

³⁹-The plan is also to provide counseling services to employers.





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TABLE A1**Labor market transitions and crisis impacts (main)**

	Transitions from the previous year to			Trends and crisis impact		
	2007	2008	2009	Pre-Crisis trend	Crisis trend	Crisis impact
FS to FS	89,3	90,2	83,8	1,0	-6,5	-7,4
FS to IS	2,8	1,9	4,7	-0,9	2,8	3,8
FS to FSE	0,4	0,5	0,5	0,1	0,0	-0,1
FS to ISE	0,9	0,9	1,7	0,0	0,9	0,8
FS to U	2,7	3,5	6,1	0,9	2,6	1,7
FS to OLF	4,1	3,0	3,2	-1,0	0,2	1,2
IS to FS	12,9	15,4	8,6	2,5	-6,8	-9,3
IS to IS	57,7	58,5	59,0	0,7	0,5	-0,2
IS to FSE	0,8	0,9	0,8	0,1	-0,2	-0,2
IS to ISE	7,0	5,4	7,9	-1,6	2,5	4,2
IS to U	9,4	10,2	11,7	0,9	1,5	0,6
IS to OLF	12,2	9,6	12,0	-2,6	2,4	4,9
FSE to FS	3,3	4,7	2,4	1,4	-2,3	-3,7
FSE to IS	2,6	0,8	2,0	-1,8	1,2	3,0
FSE to FSE	78,8	82,6	77,8	3,8	-4,8	-8,5
FSE to ISE	12,0	6,5	13,3	-5,5	6,7	12,2
FSE to U	0,9	1,4	1,3	0,5	-0,1	-0,6
FSE to OLF	2,4	4,1	3,3	1,7	-0,8	-2,4
ISE to FS	1,3	1,6	1,1	0,3	-0,5	-0,8
ISE to IS	4,0	3,3	2,3	-0,7	-0,9	-0,2
ISE to FSE	4,5	3,7	1,5	-0,8	-2,2	-1,4
ISE to ISE	77,3	79,8	85,8	2,4	6,0	3,6
ISE to U	2,0	1,4	1,5	-0,6	0,1	0,7
ISE to OLF	10,9	10,3	7,8	-0,6	-2,5	-1,9
U to FS	15,2	15,0	14,9	-0,3	-0,1	0,2
U to IS	26,4	21,8	17,8	-4,5	-4,0	0,5
U to FSE	0,7	1,1	0,8	0,3	-0,2	-0,6
U to ISE	6,0	6,9	7,0	0,9	0,2	-0,8
U to U	27,9	30,0	36,4	2,1	6,4	4,2
U to OLF	23,8	25,3	23,0	1,5	-2,2	-3,7
OLF to FS	1,7	1,8	1,3	0,1	-0,5	-0,6
OLF to IS	3,3	2,8	2,4	-0,4	-0,4	0,1
OLF to FSE	0,2	0,2	0,1	-0,1	0,0	0,0
OLF to ISE	5,4	3,3	3,5	-2,0	0,1	2,2
OLF to U	2,7	3,1	3,4	0,4	0,3	-0,1
OLF to OLF	86,7	88,8	89,3	2,1	0,5	-1,6

Source: TUIK (Survey of Income and Living Conditions) and authors' calculations (see also Tansel and Oznur-Kan 2011). FS: Formal salaried; IS: Informal salaried; FSE: Formal self-employed; ISE: Informal self-employed; U: Unemployed; OLF: Out of the labor force.



TABLE A1 (Continued)**Labor market transitions and crisis impacts (sectors)**

	Transitions from the previous year to			Trends and crisis impact		
	2007	2008	2009	Pre-Crisis trend	Crisis trend	Crisis impact
A to A	95.8	95.5	96.9	-0.3	1.4	1.7
A to M	0.8	1.1	0.7	0.3	-0.5	-0.8
A to C	1.0	1.1	0.7	0.1	-0.3	-0.4
A to S	2.4	2.4	1.8	0.0	-0.6	-0.6
M to A	1.9	2.3	2.2	0.4	-0.1	-0.5
M to M	91.1	87.5	89.5	-3.6	2.0	5.6
M to C	1.7	2.4	1.3	0.7	-1.1	-1.8
M to S	5.3	7.8	7.0	2.5	-0.8	-3.3
C to A	4.4	3.1	8.0	-1.3	4.9	6.2
C to M	3.3	4.7	2.3	1.4	-2.4	-3.8
C to C	86.0	82.0	81.4	-4.0	-0.5	3.5
C to S	6.2	10.2	8.2	4.0	-2.0	-6.0
S to A	1.7	1.4	1.5	-0.3	0.1	0.4
S to M	2.1	2.6	1.5	0.6	-1.2	-1.7
S to C	0.8	1.7	0.8	0.8	-0.9	-1.7
S to S	95.4	94.3	96.2	-1.1	1.9	3.0

Source: TUIK (Survey of Income and Living Conditions) and authors' calculations (see also Tansel and Oznur-Kan 2011). A: Agriculture; M: Manufacturing; C: Construction; S: Services.

TABLE A2**Household per capita real income and crisis impacts**

	2006	2007	2008	2009	Trends and crisis impact		
Growth rates of per capita household income (%)					Pre-Crisis trend	Crisis trend	Crisis impact
Total income	13,3	-5,7	0,7	-1,4	3,8	-0,4	-4,2
Labor income	4,3	0,0	-3,4	0,9	2,2	-1,2	-3,4
Wage income	8,3	3,9	1,2	0,9	6,1	1,0	-5,0
Self-employed income	5,4	-5,2	-6,3	-2,7	0,1	-4,5	-4,6
Shares of per capita household income (%)							
Labor income in total income	45,2	47,6	44,9	45,7			
Wage income in labor income	66,5	67,2	67,0	66,6			

Source: :TUIK (Survey of Income and Living Conditions) and authors' calculations.

TABLE A3**The impact of the crisis across different types of workers**

Dependent Variable = Crisis impact on:	Male		Young	
	Coeff.	St. Err.	Coeff.	St. Err.
As a share of WAP				
LF (=LFPR)	-0,011	(0,007)	0,002	(0,010)
Employed (=ER)	-0,027***	(0,004)	-0,005	(0,005)
Idle	0,019**	(0,005)	-0,004	(0,008)
Jobless	0,035**	(0,008)	0,003	(0,012)
Wage employed	-0,023***	(0,003)	-0,001	(0,005)
Self-employed	-0,001	(0,002)	-0,004+	(0,002)
Unpaid family workers	-0,001	(0,002)	-0,000	(0,002)
Informal employed	-0,005	(0,003)	-0,003	(0,005)
Formal employed	-0,022***	(0,004)	-0,002	(0,003)
Formal wage employed	-0,020***	(0,004)	-0,000	(0,003)
Informal wage employed	-0,003	(0,003)	-0,000	(0,005)
Formal self-employed	0,001	(0,001)	-0,001+	(0,001)
Informal self-employed	-0,002	(0,002)	-0,003	(0,002)
Employed in agriculture	0,002	(0,001)	-0,002	(0,001)
Employed in manufacturing	-0,017***	(0,003)	-0,007*	(0,003)
Employed in construction	-0,003+	(0,001)	-0,003	(0,002)
Employed in services	-0,008+	(0,004)	0,006	(0,004)
As a share of labor force:				
Unemployed (=UR)	0,003	(0,006)	0,029*	(0,010)
Log real monthly earnings				
Of all wage employed	0,018+	(0,009)	-0,034*	(0,014)
Of formal wage employed	0,002	(0,009)	-0,024	(0,015)
Of informal wage employed	0,039+	(0,020)	-0,012	(0,019)
Of wage employed in agriculture	0,002	(0,043)	-0,090+	(0,047)
Of wage employed in manufacturing	0,053**	(0,016)	-0,008	(0,022)
Of wage employed in construction	-0,097+	(0,049)	-0,011	(0,043)
Of wage employed in services	0,011	(0,009)	-0,033+	(0,016)
Log Hours worked:				
Of formal employed	0,018*	(0,008)	0,003	(0,011)
Of informal employed	0,016	(0,015)	-0,017	(0,014)
Of employed in agriculture	-0,021+	(0,010)	-0,031+	(0,017)
Of employed in manufacturing	0,053**	(0,016)	-0,003	(0,010)
Of employed in construction	0,035+	(0,015)	0,014	(0,019)
Of employed in services	0,025***	(0,004)	0,002	(0,007)
Log constructed hourly wage rate:				
Of formal wage employed	-0,013	(0,011)	-0,023	(0,020)
Of informal wage employed	0,035	(0,026)	0,009	(0,024)
Of wage employed in agriculture	0,027	(0,029)	-0,181**	(0,048)
Of wage employed in manufacturing	0,033	(0,019)	-0,004	(0,022)
Of wage employed in construction	-0,125+	(0,055)	-0,068	(0,037)
Of wage employed in services	0,005	(0,016)	-0,025	(0,019)

Source: TUIK (quarterly labor force survey data) and authors' calculations. *** statistically significant at less than 1% level, ** at 1%, * at 5% and + at 10%.

Sec. Educ.		Urban		Constant		R-squared
Coeff.	St. Err.	Coeff.	St. Err.	Coeff.	St. Err.	
0,008	(0,009)	-0,006	(0,006)	0,019**	(0,005)	0,213
0,005	(0,006)	-0,014**	(0,004)	0,016**	(0,004)	0,775
0,016*	(0,007)	0,003	(0,005)	-0,031***	(0,004)	0,661
0,019	(0,012)	0,011	(0,007)	-0,028***	(0,005)	0,683
0,005	(0,005)	-0,009*	(0,004)	0,002	(0,003)	0,735
-0,001	(0,003)	-0,001	(0,003)	0,008**	(0,003)	0,201
-0,000	(0,001)	-0,004	(0,002)	0,006*	(0,003)	0,338
0,005	(0,004)	-0,007	(0,004)	0,011*	(0,004)	0,338
0,000	(0,005)	-0,007	(0,004)	0,005	(0,004)	0,759
0,001	(0,005)	-0,003	(0,003)	-0,003	(0,003)	0,732
0,005	(0,003)	-0,006+	(0,003)	0,005+	(0,002)	0,308
-0,000	(0,001)	-0,000	(0,001)	0,002**	(0,000)	0,318
-0,000	(0,003)	-0,001	(0,003)	0,006*	(0,003)	0,130
-0,000	(0,002)	-0,015***	(0,002)	0,015***	(0,002)	0,827
0,001	(0,003)	-0,005+	(0,002)	0,005*	(0,002)	0,853
0,003*	(0,001)	-0,002	(0,002)	0,001	(0,001)	0,478
0,001	(0,003)	0,009+	(0,005)	-0,006	(0,005)	0,535
-0,012	(0,007)	0,023***	(0,005)	0,016+	(0,007)	0,697
0,055***	(0,010)	0,001	(0,016)	-0,044*	(0,017)	0,759
0,046***	(0,007)	-0,022+	(0,012)	0,002	(0,017)	0,718
0,037	(0,045)	0,020	(0,017)	-0,087**	(0,023)	0,311
-0,006	(0,199)	0,051	(0,041)	-0,061	(0,053)	0,205
0,041+	(0,019)	-0,034	(0,033)	-0,051	(0,034)	0,464
0,053	(0,047)	-0,014	(0,028)	0,048	(0,059)	0,374
0,043***	(0,009)	-0,001	(0,019)	-0,021	(0,021)	0,521
0,009	(0,005)	0,015+	(0,008)	-0,037**	(0,010)	0,421
0,014	(0,011)	-0,010	(0,014)	-0,016	(0,015)	0,304
0,014	(0,033)	-0,033	(0,028)	0,003	(0,008)	0,297
0,016	(0,010)	-0,001	(0,010)	-0,064**	(0,018)	0,658
0,034*	(0,012)	0,020	(0,016)	-0,078**	(0,021)	0,473
0,003	(0,003)	-0,010	(0,007)	-0,012+	(0,006)	0,666
0,041**	(0,010)	-0,014	(0,017)	0,012	(0,022)	0,579
0,042	(0,051)	0,023	(0,025)	-0,116**	(0,030)	0,262
0,023	(0,168)	0,002	(0,037)	-0,065*	(0,027)	0,503
0,032+	(0,017)	-0,020	(0,036)	-0,030	(0,042)	0,267
0,052	(0,045)	-0,029	(0,018)	0,081	(0,061)	0,530
0,058***	(0,012)	0,011	(0,024)	-0,047+	(0,026)	0,570

TABLE A4**Degree of recovery for different types of workers**

Dependent Variable = Degree of recovery for:	Male		Young	
	Coeff.	St. Err.	Coeff.	St. Err.
As a share of working age:				
LF (=LFPR)	-0,178**	(0,043)	-0,080*	(0,033)
Employed (=ER)	-0,164**	(0,043)	-0,085*	(0,032)
Idle	-0,004	(0,023)	-0,100**	(0,024)
Jobless	0,032+	(0,016)	-0,054**	(0,016)
Wage employed	-0,131**	(0,036)	0,008	(0,044)
Self-employed	-0,617**	(0,191)	-0,093	(0,156)
Unpaid family workers	-0,083	(0,055)	-0,239**	(0,063)
Informal employed	-0,201**	(0,060)	-0,105*	(0,044)
Formal employed	-0,377*	(0,130)	-0,023	(0,100)
Formal wage employed	-0,126**	(0,030)	0,045	(0,033)
Informal wage employed	-0,154**	(0,044)	0,033	(0,053)
Formal self-employed	-0,613**	(0,138)	0,122	(0,229)
Informal self-employed	-0,721**	(0,213)	-0,074	(0,229)
Employed in agriculture	-0,073	(0,041)	-0,115+	(0,054)
Employed in manufacturing	-0,193**	(0,053)	-0,139*	(0,051)
Employed in construction	-0,177+	(0,088)	0,060	(0,103)
Employed in services	-0,255**	(0,063)	0,060	(0,096)
As a share of labor force:				
Unemployed (=UR)	-0,157*	(0,051)	-0,028	(0,042)
Log real monthly earnings				
of all wage employed	-0,001	(0,001)	-0,004+	(0,002)
of formal wage employed	-0,001	(0,001)	-0,004*	(0,002)
of informal wage employed	0,004	(0,004)	-0,004	(0,005)
of wage employed in agriculture	0,012	(0,019)	0,017	(0,017)
of wage employed in manufacturing	0,000	(0,005)	-0,003	(0,004)
of wage employed in construction	-0,007	(0,009)	-0,016***	(0,003)
of wage employed in services	-0,000	(0,001)	-0,003	(0,001)
Log Hours worked:				
of formal employed	0,002	(0,003)	-0,005	(0,003)
of informal employed	0,008	(0,005)	0,001	(0,004)
of employed in agriculture	0,000	(0,001)	-0,012***	(0,003)
of employed in manufacturing	0,009+	(0,005)	0,002	(0,004)
of employed in construction	-0,004	(0,007)	-0,009***	(0,002)
of employed in services	0,006	(0,006)	-0,007	(0,004)
Log constructed hourly wage rate:				
of formal wage employed	0,006	(0,017)	0,018	(0,021)
of informal wage employed	-0,060	(0,345)	-0,385	(0,373)
of wage employed in agriculture	0,308	(0,666)	-0,807	(0,642)
of wage employed in manufacturing	0,012	(0,174)	-0,080	(0,112)
of wage employed in construction	0,040	(0,098)	-0,107	(0,060)
of wage employed in services	0,085	(0,193)	0,735	(0,438)

Source: TUIK (quarterly labor force survey data) and authors' calculations. *** statistically significant at less than 1% level, ** at 1%, * at 5% and + at 10%

Sec. Educ.		Urban		Constant		R-squared
Coeff.	St. Err.	Coeff.	St. Err.	Coeff.	St. Err.	
-0,055	(0,040)	0,078+	(0,042)	1,159***	(0,038)	0,801
-0,065	(0,041)	0,062	(0,041)	1,151***	(0,036)	0,789
-0,003	(0,029)	0,062*	(0,025)	0,887***	(0,022)	0,669
0,020	(0,012)	0,075**	(0,020)	0,881***	(0,019)	0,812
-0,055	(0,045)	-0,127*	(0,044)	1,281***	(0,042)	0,692
-0,187	(0,170)	0,367	(0,220)	1,272***	(0,230)	0,679
-0,197*	(0,074)	0,094+	(0,048)	1,137***	(0,029)	0,728
-0,137*	(0,053)	0,038	(0,060)	1,135***	(0,054)	0,780
-0,157	(0,108)	-0,347+	(0,182)	1,736***	(0,228)	0,693
-0,117*	(0,040)	-0,036	(0,032)	1,283***	(0,027)	0,747
-0,117	(0,070)	-0,223**	(0,050)	1,269***	(0,051)	0,775
-0,334+	(0,183)	-0,033	(0,118)	1,525***	(0,079)	0,670
-0,054	(0,239)	0,431+	(0,238)	1,290***	(0,258)	0,596
-0,150**	(0,044)	0,071+	(0,039)	1,130***	(0,030)	0,681
-0,118	(0,074)	0,050	(0,051)	1,195***	(0,044)	0,639
-0,091	(0,101)	-0,074	(0,110)	1,461***	(0,111)	0,272
-0,044	(0,059)	0,034	(0,087)	1,168***	(0,099)	0,582
0,018	(0,030)	0,059	(0,041)	1,159***	(0,066)	0,627
0,004**	(0,001)	-0,004	(0,002)	1,010***	(0,002)	0,598
0,007***	(0,001)	-0,003	(0,002)	1,005***	(0,002)	0,744
-0,002	(0,005)	-0,006	(0,004)	1,006***	(0,005)	0,318
0,017	(0,022)	0,006	(0,012)	1,006***	(0,021)	0,146
-0,001	(0,003)	-0,003	(0,006)	1,007***	(0,009)	0,060
-0,014***	(0,002)	-0,014***	(0,003)	1,039***	(0,009)	0,891
0,009***	(0,001)	-0,001	(0,002)	1,006***	(0,002)	0,782
-0,001	(0,002)	0,004+	(0,002)	0,993***	(0,003)	0,288
-0,007	(0,006)	-0,005	(0,005)	0,980***	(0,004)	0,328
-0,004	(0,006)	0,008**	(0,002)	0,988***	(0,001)	0,596
0,003	(0,003)	-0,004	(0,005)	0,992***	(0,005)	0,331
-0,007**	(0,002)	-0,008***	(0,001)	1,016***	(0,007)	0,789
0,004	(0,004)	-0,002	(0,003)	0,986***	(0,006)	0,377
0,060***	(0,011)	-0,007	(0,019)	0,999***	(0,026)	0,461
-0,170	(0,647)	0,458	(0,701)	0,810	(0,531)	0,080
-0,280	(0,753)	-0,053	(0,464)	1,262	(0,714)	0,082
-0,029	(0,063)	-0,087	(0,212)	1,136**	(0,355)	0,040
-0,064*	(0,028)	-0,190**	(0,047)	1,248***	(0,103)	0,710
-0,202	(0,202)	0,190	(0,181)	0,958***	(0,205)	0,436



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