

**THE GLOBAL CRISIS IN EMERGING ECONOMIES: THE JOBS IMPACT AND POLICY
RESPONSE – SUPPORTING MATERIAL FOR CHAPTER 2 OF THE 2010 *OECD*
*EMPLOYMENT OUTLOOK***

The following pages provide supplementary material for Chapter 2 of *OECD Employment Outlook 2010*. This material is organised into 6 annexes.

ANNEX 2.A1. DATA SOURCES AND DEFINITIONS

This annex documents the micro data that are used in various parts of Chapter 2 of *OECD Employment Outlook 2010*. It also provides some details on the regional data that were used for the econometric analysis of Section 2.2. Finally, it provides details on the definition of skills that is used in Section 2.2 to distinguish between different skill groups.

Table 2.A1.1. **Data sources**

Country	Individual level data (years)	Regional level data, weblink
Brazil	Pesquisa Nacional por Amostra de Domicílios (PNAD) (1990, 1992-1993, 1995-1999 and 2001)	Instituto de Pesquisa Econômica Aplicada (IPEA) www.ipeadata.gov.br
Chile	Encuesta de Caracterización Socioeconómica Nacional (CASEN) (1991, 1992, 1996, 1998, 2000, 2003, 2006)	Banco de Chile www.bancochile.cl
India	Data provided to OECD (from Employment and Unemployment Survey of Households)	
Indonesia	National Labour Force Survey (Sakernas) (1996, 1998, 2000, 2002 and 2004).	BPS-Statistics Indonesia www.bps.go.id
Mexico	Encuesta Nacional de Empleo Urbano (ENEU) (1987-2004)	National Institute of Statistics and Geography (INEGI) www.inegi.gob.mx
Russia	LFS (aggregated data)	
South Africa	Labour Force Survey (2001-2007)	Statistics, South Africa www.statssa.gov.za
Turkey	Labour Force Survey (2000-2008)	

Table 2.A1.2. **Definition of education**

	Education categories		
	Low-skilled	Semi-skilled	High-skilled
Brazil	0 to 6 years of schooling	7 to 11 years of schooling	more than 12 years of schooling
Chile	primary school and below (basica)	incomplete and completed secondary (media)	higher education (tecnica and universidaria)
Indonesia	primary school and below	junior high school, high school and upper high school	higher education
Mexico	primary school and below	incomplete and completed secondary, upper secondary	higher education
South Africa	primary school and below	incomplete and completed secondary	higher education

ANNEX 2.A2. THE IMPACT OF THE GLOBAL CRISIS

To document the impact of the global financial crisis, Chapter 2 of OECD (2010) focuses on cyclical changes in output and labour market outcomes during the slowdown in economic growth. Cyclical changes are calculated as deviations from the pre-crisis trend over the period during which output growth declined. Table 2.A1.1 reports the underlying pre-crisis trends that were used for the calculations, the cyclical changes in labour market outcomes during the growth slowdown, and the cyclical response in labour market outcomes to the slowdown in economic growth for the nine emerging economies for which appropriate data are available.

The OECD average provides a benchmark as well as two additional country groupings: *i*) low-income OECD countries with below-average levels of GDP per capita and high-income countries with above-average income levels; and *ii*) OECD countries with a below-average trade shock, and countries with an above-average trade shock, where the trade shock is defined in terms of the change in exports over the year to 2009 Q3 as a % of 2008 Q3 GDP relative to the median change in the OECD. As can be seen from Table 2.A2.1, distinguishing between these different groups is not particularly effective in capturing the substantial degree of heterogeneity in labour demand adjustment patterns across the OECD.

Table 2.A2.1. Trends, cyclical changes and cyclical responses to the growth slowdown

Panel A. Average annual change (%)										
	Period	Real output	Employment rate	Unemployment rate	Labour productivity	Employment	Real hourly earnings	Average hours	Real monthly earnings	Real private consumption
Brazil	2005Q1 to 2008Q1	5.7	0.8	-7.1	2.9	2.6	2.0	0.1	2.1	6.8
Chile	2005Q1 to 2008Q2	5.4	0.9	-6.4	2.6	2.6	3.9	-1.8	1.9	7.4
China	2006-2008	11.4	..	..	..	..	..	..	..	..
India	2005Q1 to 2008Q3	10.1	..	..	..	..	..	..	..	6.7
Indonesia	2005Q1 to 2008Q3	6.5	0.2	-5.2	3.9	2.3	..	..	-4.1	4.8
Mexico	2005Q1 to 2008Q1	4.0	0.6	0.4	1.8	2.1	-1.4	-0.2	-1.6	5.0
Russian Federation	2005Q1 to 2008Q1	8.7	1.1	-6.6	7.0	1.4	..	..	14.6	13.8
South Africa	2005Q1 to 2008Q2	5.6	1.3	-0.4	2.6	2.8	..	..	4.7	6.2
Turkey	2006Q1 to 2008Q1	7.9	2.1	1.1	5.5	2.2	-0.1	1.1	1.0	5.7
OECD	2005Q1 to 2008Q1	2.9	0.9	-7.7	1.1	1.6	0.5	-0.2	0.3	2.6
OECD1	2005Q1 to 2008Q1	3.8	1.2	-10.4	1.7	2.1	1.2	-0.3	0.8	2.8
OECD2	2005Q1 to 2008Q1	2.6	0.5	-3.6	1.0	1.4	0.3	-0.1	0.2	2.6
OECD3	2005Q1 to 2008Q1	3.3	0.9	-8.6	1.4	1.9	1.4	-0.5	0.8	3.0
OECD4	2005Q1 to 2008Q1	2.5	0.9	-6.7	1.1	1.4	0.4	-0.0	0.4	2.3
Panel B. Cyclical change										
	Period	Real output (%)	Employment rate (p.p.)	Unemployment rate (p.p.)	Labour productivity (%)	Employment (%)	Real hourly earnings (%)	Average hours (%)	Real monthly earnings (%)	Real private consumption (%)
Brazil	2008Q1 to 2009Q2	-7.3	-0.9	0.7	-5.5	-1.8	4.7	-0.9	3.7	-3.8
Chile	2008Q2 to 2009Q2	-9.2	-1.7	2.7	-6.0	-3.3	0.7	0.8	1.7	-8.8
China	2008Q1 to 2009Q4	-5.2	..	..	..	..	..	..	..	..
India	2008Q1 to 2009Q1	-3.8	..	..	..	..	..	..	..	-0.1
Indonesia	2008Q3 to 2009Q1	-1.9	0.5	-0.0	-2.5	0.7	..	..	3.7	0.8
Mexico	2008Q1 to 2009Q2	-13.2	-2.1	1.7	-11.4	-2.0	-1.4	-1.4	-2.8	-14.1
Russian Federation	2008Q1 to 2009Q3	-19.3	-1.9	2.9	-15.9	-3.9	..	..	-21.6	-22.4
South Africa	2008Q2 to 2009Q3	-8.7	-3.8	1.7	0.3	-8.7	..	..	-4.0	-11.3
Turkey	2008Q1 to 2009Q1	-20.6	-1.8	3.4	-18.4	-2.5	3.4	-5.3	-2.1	-14.5
OECD	2008Q1 to 2009Q2	-7.9	-2.0	2.6	-3.9	-3.9	0.6	-2.3	-1.8	-5.1
OECD1	2008Q1 to 2009Q2	-8.5	-1.6	2.0	-5.8	-2.8	1.5	-2.3	-0.8	-3.5
OECD2	2008Q1 to 2009Q2	-7.8	-2.4	3.3	-3.2	-4.3	0.2	-2.3	-2.1	-5.5
OECD3	2008Q1 to 2009Q2	-7.3	-1.8	2.8	-3.3	-4.1	0.7	-1.0	-0.3	-5.0
OECD4	2008Q1 to 2009Q2	-7.4	-2.1	2.4	-3.5	-4.1	0.7	-2.9	-2.2	-4.4
Panel C. Cyclical response to cyclical change in output										
	Period	Employment rate (p.p.)	Unemployment rate (p.p.)	Labour productivity (%)	Employment (%)	Real hourly earnings (%)	Average hours (%)	Real monthly earnings (%)	Real private consumption (%)	
Brazil	2008Q1 to 2009Q2	0.12	-0.09	0.75	0.24	-0.63	0.12	-0.51	0.52	
Chile	2008Q2 to 2009Q2	0.18	-0.29	0.65	0.36	-0.07	-0.09	-0.18	0.95	
China	2008Q1 to 2009Q4	..	..	..	..	..	..	..	..
India	2008Q3 to 2009Q1	..	..	..	..	..	..	..	0.04	
Indonesia	2008Q3 to 2009Q1	-0.26	0.02	1.31	-0.39	..	..	-1.97	-0.43	
Mexico	2008Q1 to 2009Q2	0.16	-0.13	0.86	0.15	0.11	0.10	0.21	1.06	
Russian Federation	2008Q1 to 2009Q3	0.10	-0.15	0.82	0.20	..	..	1.12	1.16	
South Africa	2008Q2 to 2009Q3	0.43	-0.20	-0.03	1.01	..	..	0.46	1.30	
Turkey	2008Q1 to 2009Q1	0.09	-0.17	0.89	0.12	-0.17	0.26	0.10	0.70	
OECD	2008Q1 to 2009Q2	0.25	-0.33	0.49	0.49	-0.07	0.29	0.22	0.64	
OECD1	2008Q1 to 2009Q2	0.19	-0.23	0.68	0.33	-0.18	0.27	0.10	0.41	
OECD2	2008Q1 to 2009Q2	0.31	-0.42	0.41	0.55	-0.03	0.30	0.27	0.70	
OECD3	2008Q1 to 2009Q2	0.24	-0.39	0.46	0.55	-0.09	0.13	0.04	0.69	
OECD4	2008Q1 to 2009Q2	0.28	-0.33	0.47	0.55	-0.10	0.40	0.30	0.59	

OECD aggregates exclude Iceland, Mexico, Switzerland and Turkey for employment rate and unemployment rate, Switzerland and Turkey for labour productivity, employment, real hourly earnings, average hours worked and real monthly earnings.

OECD1: Change in exports 2008q3 to 2009Q3 as a % of GDP 2008Q3 is less than median OECD of -7.4% percentage points.

OECD2: Change in exports 2008q3 to 2009Q3 as a % of GDP 2008Q3 is more than median OECD of -7.4% percentage points.

OECD3: GDP per capita between 0.5 and 1 OECD average.

OECD4: GDP per capita more than OECD average.

ANNEX 2.A3. INFORMAL EMPLOYMENT

Definitions of informal employment

Chapter 2 of OECD (2010) makes use of two definitions of informal employment (Table 2.A3.1). The first definition is based on the coverage of social security. This is the preferred definition for the purposes of this chapter as it gives an indication of the extent to which workers can access social security provisions when they confront adverse labour market outcomes. The main limitation is that information on social-security coverage is not available for all countries. The second definition is based on the occupational status of workers, and in particular, the share of the self-employed in total employment. While this definition is often used for cross-country comparisons, it only provides a very rough indication of the importance of precarious jobs in the economy. Due to differences in the occupational classification across countries, there are slight differences in the definition of informal employment across countries. In all countries, informal employment is defined after excluding the primary sector and non-market sectors such as public administration, defence, international organisations & foreign embassies.

Table 2.A3.1. **Definitions of informal employment**

Country	Definition	Description	
BRA	1	formal / informal	does / does not contribute to "instituto de previdencia"
	2	formal	Employees with contract, other employees (without or missing information on contract), domestic workers with contract, civil servants, employers
		informal	domestic workers (without or missing contract), own account, workers producing or constructing for own use, unpaid workers
CHL	1	formal / informal	does /does not contribute to any social security (AFP, INP, CAPREDENA, DIPRECA, other)
	2	formal	employees, employers
		informal	self-employed, unpaid family, domestic workers
IDN	2	formal	employees, self-employed assisted by permanent workers
	informal	self-employed, self employed with unpaid workers, casual and unpaid workers	
MEX	1	formal / informal	does / does not contribute to social security (IMSS + ISSSTE)
	2	formal	employees, cooperative members, employers
		informal	self-employed, employees on commission basis, unpaid workers
RUS	2	formal	employees, employers
	informal	Own-account workers, members of cooperatives, unpaid family helpers	
ZAF	1	formal / informal	does / does not contribute to unemployment insurance, or pension
	2	formal	employees
		informal	self-employed, employers, unpaid family members, domestic workers
TUR	1	formal / informal	registered /not registered with any social security institution related to main job
	2	formal	regular or casual employees, employers
		informal	self-employed, unpaid family members

Informal employment by sector and over time

Table 2.A3.2 presents data on the share of informal employment in total employment for the economy as a whole as well as by broad economic sector. Overall, there is clear evidence of a decline in informal employment in countries for which both definitions are available. In some countries, this decline may be attributed to an important extent to the ongoing process of urbanization that characterizes many of the emerging economies considered here (*e.g.* Brazil and Turkey). However, also within the agricultural and non-agricultural sectors, there is some evidence that informality has declined. By contrast, in countries for which only information on the share of self-employment is available, informal employment appears to have increased. However, these trends are more difficult to interpret given the wide heterogeneity in the individuals included in the group of the self-employed.

Table 2.A3.2. Informal employment by sector

		Share of workers not affiliated to social security (definition 1)			Share of non salaried workers (definition 2)		
		Total	Agricultural sector	Non agricultural sector	Total	Agricultural sector	Non agricultural sector
Brazil	1995	53.8	89.5	43.0	40.6	66.9	32.7
	2001	52.0	88.5	43.7	37.3	66.0	30.8
	2007	47.3	82.6	41.7	34.8	65.1	29.9
Chile	1996	34.2	54.3	30.8	26.8	30.1	26.2
	2000	35.4	52.0	33.0	26.6	26.3	26.7
	2006	31.2	40.3	29.9	25.8	22.3	26.3
Mexico	1996	59.1	..	58.6	27.6	..	27.5
	2000	54.0	..	53.6	25.3	..	25.3
	2003	54.2	..	53.9	27.5	..	27.5
India	1994	..	..	..	51.9	..	..
	1999	..	..	..	50.1	..	..
	2004	..	..	..	54.1	..	..
Indonesia	1996	..	..	..	63.4	85.4	47.0
	2000	..	..	..	63.8	84.6	47.4
	2004	..	..	..	68.7	92.2	51.6
Russian Federation	1996	..	..	..	6.3	..	..
	2000	..	..	..	9.5	..	..
	2007	..	..	..	7.0	..	..
South Africa	2000	33.2	57.8	30.6	35.0	63.6	28.4
	2005	25.8	38.2	24.8	28.4	38.8	27.3
	2007	25.8	38.1	24.9	27.5	39.5	26.4
Turkey	2000	49.5	88.7	29.1	44.7	93.1	19.5
	2005	49.1	88.1	34.0	39.3	90.0	19.7
	2008	42.2	87.3	29.4	31.6	88.9	15.4

Notes: For India data refer to workers aged 15 and older. For the other countries, data refer to workers aged 15-64.

Source: OECD calculations based on microdata for Brazil (PNAD), Chile (CASEN), Indonesia (SAKERNAS), Mexico (ENEU), Turkey (LFS) and South Africa (LFS). Data provided to OECD for India (from Employment and Unemployment Survey of Households) and Russia (LFS).

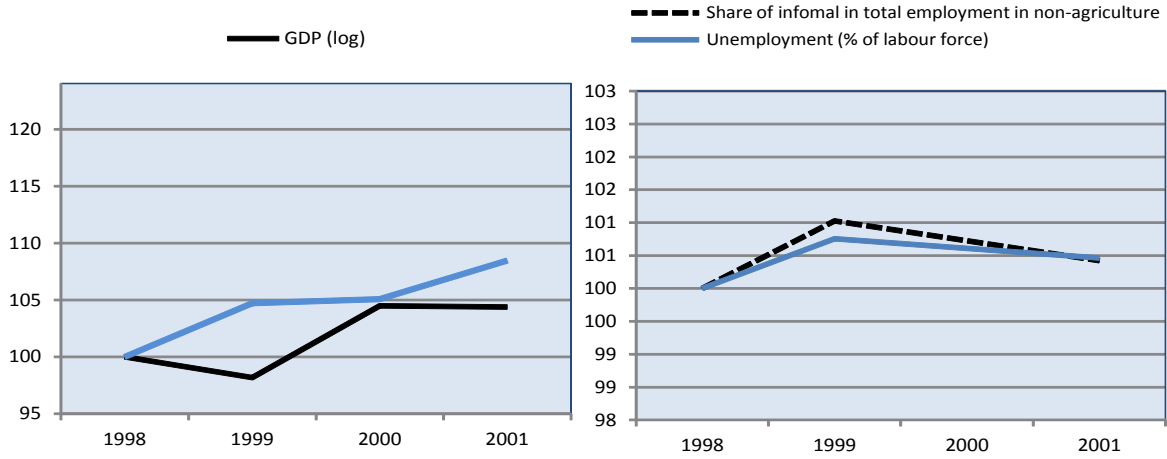
ANNEX 2.A4. THE LABOUR MARKET DURING PAST CRISES

Macro-economic trends during past crises

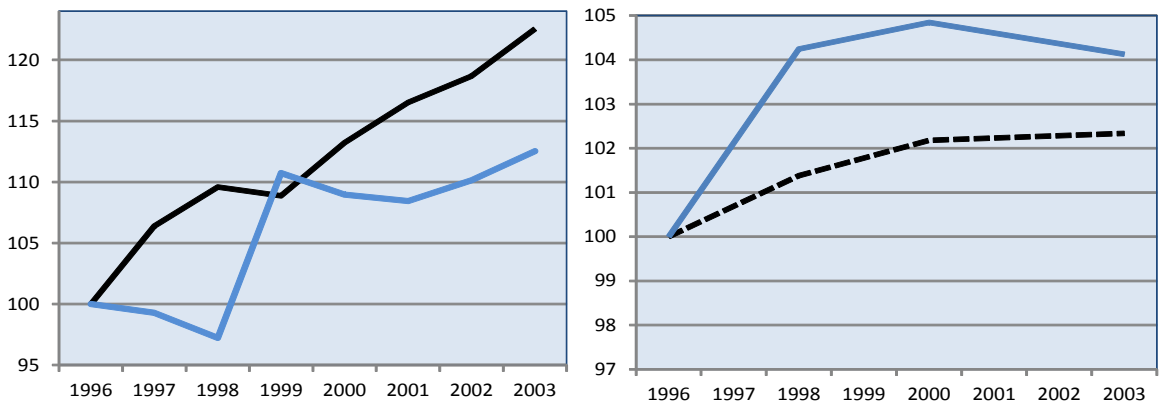
In the main text of Chapter 2 of OECD Employment Outlook 2010 macro-economic trends during previous crises for Indonesia and Mexico are presented. Figure 2.A4.1 presents similar information for the other emerging economies that experienced a recent crisis episode. It shows that also in Brazil, Chile and Turkey, previous crisis episodes were associated with both significant declines in aggregate demand and substantial improvements in the trade balance. Furthermore, previous crisis episodes in Brazil, Chile and Turkey all resulted in increased unemployment and informality, similar to the experience in Indonesia and Mexico.

Figure 2.A4.1. The 1990's and 2000's crises in the emerging economies

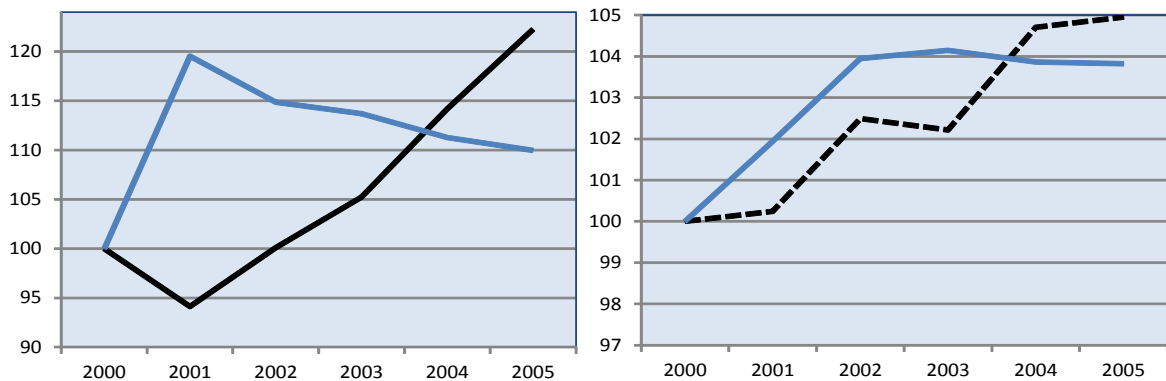
Brazil, 1998-2001



Chile, 1996-2003



Turkey, 2000-2005



Notes: Percentage change for GDP and change in percentage points for the other three measures. Trade balance is net exports over total trade. Base year is 1998 for Brazil, 1996 for Chile and 2000 for Turkey. Informal employment is defined on the basis of social security coverage for all countries.

Source: GDP data from the OECD Main Economic Indicators database; labour market statistics are OECD Secretariat calculations based on PNAD (1998, 1999 and 2001) for Brazil, CASEN (1996, 1998, 2000 and 2003) for Chile and LFS (2000-2005) for Turkey.

Which groups are the most vulnerable in terms of their initial labour market position?

Table 2.A4.1 documents the relative probability of being employed, unemployed, inactive or in formal employment in the tradable and the non-tradable sectors for different population groups using data for Brazil, Chile and Mexico. Population groups are defined by age, education, gender and rural/urban location. As the data for Mexico only cover urban areas, the distinction between rural and urban areas can only be made for Brazil and Chile. Figure 2.11 in section 2.2 presents summary statistics of the shares in formal employment, informal employment, unemployment and inactivity averaged across countries. Table 2.A4.1 summarise the same statistics by country with the slight difference that the share of formal employment is reported separately for the tradable and non-tradable sector.¹ The statistics by sector are discussed in Section 2.3 and used as an input to the simulation exercise. Table 2.A4.1 shows that the probability of being formal is consistently higher for all population groups in the tradable sector. This may suggest that the impact of the global crisis on formal employment may be larger than during previous crisis episodes, in which the tradable sector had not been affected by the shock.

Table 2.A4.1. **Labour market outcomes, by country and group**

In percentages

	Brazil					Chile					Mexico				
	Employed	Unemployed	Inactive	Formal employment		Employed	Unemployed	Inactive	Formal employment		Employed	Unemployed	Inactive	Formal employment	
				Tradable sector	Non-tradable sector				Tradable sector	Non-tradable sector				Tradable sector	Non-tradable sector
All	65.3	5.3	29.4	73.0	52.3	54.9	5.0	40.1	72.6	65.5	57.6	2.9	39.5	67.2	34.8
Men	81.1	5.4	13.5	75.6	54.6	72.8	5.7	21.5	77.0	66.5	78.2	3.7	18.2	67.4	34.1
Women	50.6	5.2	44.2	66.6	49.6	38.2	4.3	57.5	61.6	64.1	38.8	2.3	59.0	66.7	35.8
15-24	54.9	8.8	36.3	65.5	40.6	30.8	6.6	62.6	69.5	58.5	44.0	4.6	51.5	66.8	33.6
25-54	72.8	4.2	23.0	77.4	57.0	66.8	4.7	28.5	74.6	67.7	67.0	2.2	30.8	68.6	36.4
55-64	51.3	1.4	47.3	58.1	48.2	48.2	2.7	49.1	60.0	59.1	45.3	1.1	53.6	48.3	21.8
Low-skilled	64.1	4.3	31.6	66.0	38.8	52.1	4.6	43.3	63.5	49.5	54.4	2.2	43.4	60.7	22.4
Semi-skilled	63.5	7.4	29.1	78.2	59.6	52.0	5.4	42.6	73.3	65.0	55.7	3.3	41.0	70.4	39.7
High-skilled	79.8	4.1	16.1	87.8	80.2	65.6	4.6	29.8	81.5	80.0	70.9	3.3	25.8	71.3	43.1
Rural areas	76.0	1.7	22.2	54.3	37.7	50.8	3.3	45.9	62.7	56.3	..	..	..	..	..
Urban areas	62.7	6.2	31.1	74.9	53.5	55.6	5.3	39.2	73.1	66.0	..	..	..	..	..

Notes: Samples include persons aged 15-64. The three educational groupings are defined in Table 2.A1.1. Reported data are averages across the years and countries considered. The data on rural and urban locations are based only on Brazil and Chile. The definition of formal employment is based on social security coverage (see Annex 2.A3, for details).

Source: OECD estimates based on the PNAD (1990, 1992-1993, 1995-1999 and 2001) for Brazil, the CASEN (1991, 1992, 1996, 1998, 2000, 2003 and 2006) for Chile and the ENEU (1993-1998) for Mexico.

1. The tradable sector is assumed to correspond to manufacturing, while services are assumed to be non-tradable. While this assumption may be problematic in many developed countries where services trade has tended to increase in recent years, services trade still remains relatively small in the emerging economies considered here.

Which groups were affected most during past crises?

The main results are reported in Table 2.3. Figure 2.A4.2 reports additional results on the level of business-cycle sensitivity of formal employment for each group in the tradable and non-tradable sector. These results are discussed in Section 2.3 and used as inputs to the simulation exercise.

Table 2.A4.2. How sensitive to the business cycle are the labour market outcomes of different groups?^a

Sensitivity of labour market outcome to GDP for:	Formal employment in the tradable sector	Formal employment in the non-tradable sector
	Brazil	
Population	0.254 ***	0.113 **
Men	0.233 ***	0.126 **
Women	0.285 *	0.093 **
15-24	0.440 ***	0.207 ***
25-54	0.160 *	0.069 *
55-64	0.355 **	0.115
Low-skilled	0.301 **	0.104 ***
Semi-skilled	0.161 *	0.087 *
High-skilled	0.144 *	0.080 *
Sensitivity of labour market outcome to GDP for:		
Chile		
Population	0.040	0.054
Men	0.045	0.094
Women	0.036	0.002
15-24	0.234	0.339
25-54	-0.023	-0.025
55-64	0.387	0.414 *
Low-skilled	-0.021	0.179
Semi-skilled	0.136	0.008
High-skilled	-0.442	-0.029
Sensitivity of labour market outcome to GDP for:		
Mexico		
Population	0.551 ***	0.122
Men	0.461 **	0.148
Women	0.786 ***	0.065
15-24	0.705 ***	0.099
25-54	0.495 ***	0.167
55-64	0.676 *	-0.006
Low-skilled	0.687 ***	0.016
Semi-skilled	0.546 ***	0.247 *
High-skilled	0.256	0.110

*, **, *** statistically significant at the 10%, 5%, 1% levels, respectively.

a) Each cell in the table corresponds to a separate regression of the outcome of interest on regional GDP, of which only the marginal effect on the regional GDP variable is reported. In addition to regional GDP each regression controls for education, age, gender, a rural dummy (for Brazil and Chile), time and region dummies. The analysis is conducted at the individual level with samples including persons aged 15-64. Standard errors have been corrected for clustering at the regional level. The three broad educational groupings are defined in Table 2.A1.2.

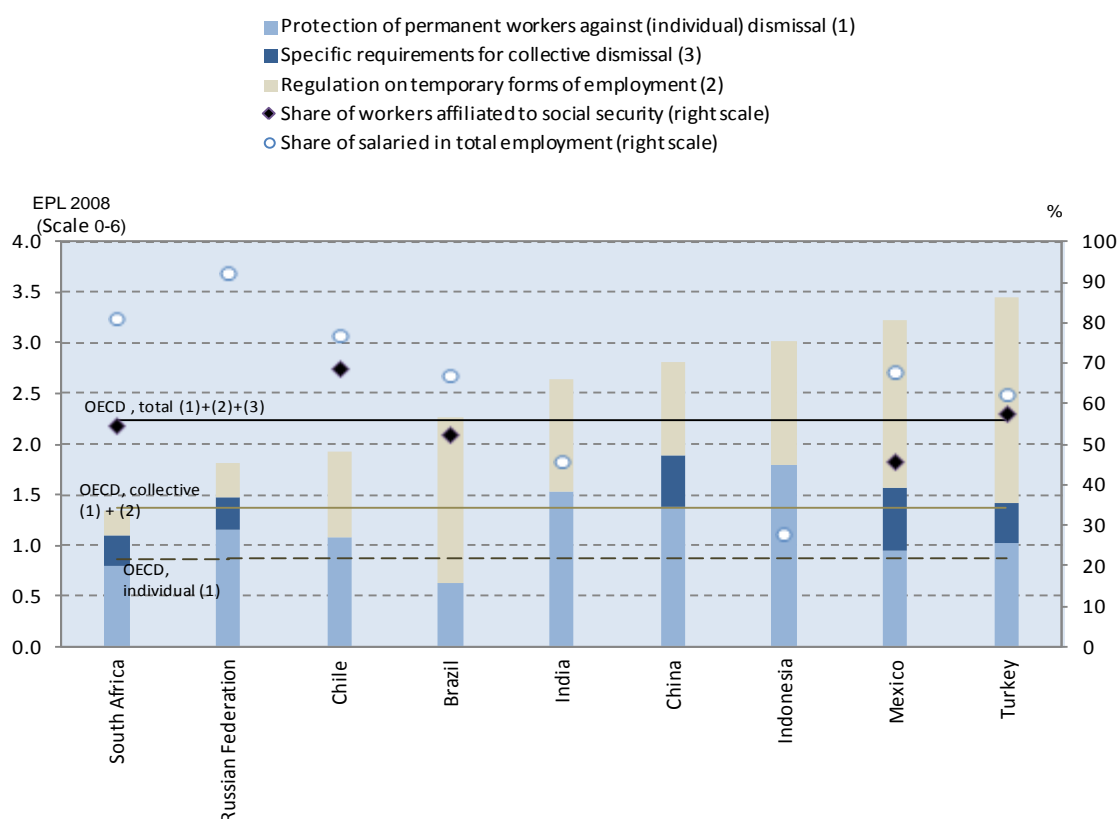
b) Formal employment is defined on the basis of social security coverage. See Annex 2.A3 for more details on the definition of informal employment).

Source: OECD estimates based on the PNAD (1990, 1992-93, 1995-99 and 2001) for Brazil, the CASEN (1991, 1992, 1996, 1998, 2000, 2003 and 2006) for Chile and the ENEU (1993-98) for Mexico.

ANNEX 2.A5. EMPLOYMENT PROTECTION LEGISLATION

The overall level of stringency of employment protection varies significantly across emerging economies. In Turkey, Mexico, Indonesia, China and India, regulation is well in excess of the OECD average, while South Africa, the Russian Federation and Chile have relatively low levels of regulation (see Figure 2.A5.1). Despite this variation in the overall stringency of employment protection, the cost of individual dismissal, one of the three main components of the OECD's employment protection indicator, is generally higher in the emerging economies than the OECD average, except in South Africa and Brazil. This is typically due to complicated or time-consuming notification requirements and regulations that make it difficult, if not impossible, to lay-off workers for economic reasons. Regulation on individual dismissal is particularly strict in Indonesia, India and China, with employers having to get authorisation from a public authority in the former two. Severance payments are also very high in these countries. In India and Indonesia, there are no additional costs or notification requirements for collective dismissals, but the effective cost of collective dismissals (the sum of costs for individual dismissal and any additional costs for collective dismissal) would put both countries among the top third of OECD countries, while China exceeds all OECD countries on this measure.

Figure 2.A5.1. **Employment protection indicators**



Note: data on the share of workers without social security and/or the share of salaried in total employment refer to 2007 for Brazil, Russia and South Africa, 2003 for Mexico, 2004 for India and Indonesia, 2006 for Chile and 2008 for Turkey. Data refer to workers aged 15 to 64 except for Russia and India (15+).

Source: Venn (2009) for EPL index; see Annex 2.A3 for the rest.

However, compared with most OECD countries, the number of workers covered by these regulations is limited. First, self-employed workers, by definition not covered, account for a much larger share of the employed population than in most OECD countries. Second, the legislation sometimes excludes some categories of salaried workers from its scope. In India, businesses employing less than 100 employees are exempt from the administrative permission in case of dismissal, and also have shorter notice periods, a threshold which encourages firms to stay small or to expand horizontally by setting-up more units and contributing to a strong dualism between large and small firms in Indian manufacturing (see Mazundar, 2010). In Mexico and Turkey, small businesses (employing less than 20 and 30 employees) are exempt from additional requirements in case of collective dismissals; these exemptions are wide in scope, concerning for example about half the employees in Turkey. In Turkey again, agricultural workers are also exempt from most legislative provisions concerning employment protection (Venn, 2009). Third, salaried workers on non-standard contracts, such as temporary or subcontracted workers are also not covered by the dismissal regulations. In China, nearly all private-sector labour contracts, where they exist, are for fixed terms, and only government or state-owned enterprises' employees have permanent labour contracts (Herd *et al.*, 2010). In Chile, temporary workers account for about 30% of the formal employees in 2006, and 40% of employers used subcontractors (OECD, 2009b).

The enforcement of regulations is generally weak in these economies, however. All informal salaried workers are de facto not covered by EP, and even for formal salaried employees, employers often find ways to avoid the regulations and procedures for dismissals. In India, despite the very limited number of permissions to dismiss provided by the authorities, job flows in large manufacturing firms are comparable to those in the United States, which has a very lax labour regulation (Venn, 2009). This suggests widespread evasion of the requirement for large firms to gain permission for dismissals. Enforcement problems are often aggravated by the fact that there is no real freedom of association for workers; it is the case for example in China (Herd *et al.*, 2010), Mexico (Hess and Prasad, 2007), the Russian Federation and Turkey (World Bank, 2006).

As documented in Chapter 1 of this publication, employment protection has consequences on the way labour market adjusts in times of crisis. A relatively strict EPL tends to shift the burden of adjustment from job losses to average hours reductions. However, stringent employment protection for permanent workers may also induce firms that require additional flexibility to deal with business-cycle fluctuations by employing a greater number of workers on fixed-term contracts in countries where restrictions on such non-standard arrangements are limited and increase labour informality in others. In this case, the burden of adjustment may be shifted from permanent workers to temporary and informal workers. In Mexico and Turkey, where temporary workers can only be hired under exceptional circumstances, informal salaried employment tends to be more sensitive to the business cycle than formal salaried employment (Bosch and Maloney, 2007; OECD, 2008).

ANNEX 2.A6. LABOUR MARKET AND SOCIAL POLICIES

This Annex provides information on the data presented in the Tables and Figures of section 3 and discusses the main features of public works programmes in the emerging economies.

Data sources and notes

Tables 2.A6.1, 2.A6.2, 2.A6.3 and 2.A6.4 report the notes and data sources that correspond to Figure 2.14 (Panel A), Table 2.5, Table 2.7 and Table 2.8, respectively.

Table 2.A6.1. **Social expenditure (Figure 2.14, Panel A)**

Data sources and notes

Country	Year	Notes	Sources
Brazil	2005	Social expenditure comprises pensions, sick pay and maternity leave, social assistance (elderly disabled, youth, Bolsa Familia), unemployment benefits, and health.	IPEA, quoted in Neri (2010).
Chile	2007	Social expenditure comprises pensions, housing, family benefits, and health.	Gobierno de Chile, Ministerio de Hacienda, Estadísticas de las Finanzas Públicas
China	2008	Social expenditure includes health, social security and employment (included in the budget), and social security funds (not included in the budget)	Ministry of Finance, quoted in the November 2009 Quaterly Update of the World Bank Office, Beijing.
India	2006/07	Social expenditure includes pension, food subsidies, social security and welfare, health and water supply and sanitation, family, housing, and employment.	Combined budgetary transactions of the centre and the states, Ministry of Finance.
Mexico	2005		OECD SOCX.
Russia	2007	Social expenditure includes pensions, health, family and other types of social assistance.	OECD Secretariat estimates based on available budget data.
South Africa	2007/08	Social expenditure includes health, housing and community amenities and social protection.	Financial Statistics of Consolidated General Government 2007/08. Statistics South Africa.
Turkey	2005		OECD SOCX.

Note: The data definitions correspond as much as possible to the OECD SOCX definition of social expenditure, which includes pensions, incapacity-related benefits, health, family, active labour market policies, unemployment, housing, and non-categorical cash benefits provided to low-income households.

Table 2.A6.2. Coverage rates and expenditure of unemployment benefit schemes (Table 2.5)

Data sources and notes

Country		Notes and sources
Brazil	Coverage rate	Ratio of the average number of unemployment insurance beneficiaries (source Sistema de Acompanhamento Estatístico-Gerencial do Seguro-Desemprego, available at http://saeg.datamec.com.br/MenuTelas.asp#inicio) to average number of unemployed source PNAD), period October 2007 to September 2008.
	Expenditure	Data for 2008; source IPEA quoted in Neri (2010)
Chile	Coverage rate	Ratio of the number of unemployment benefit recipients in June 2008 (source: OECD 2009b) to the number of unemployed in June 2008 (source: INE).
	Expenditure	Data for 2008; source answer to the OECD questionnaire by the Chilean authorities.
China	Coverage rate	The 16% is calculated as the total number of unemployment benefit recipients in 2008 (source Zhu, 2009) to the average number of unemployed in 2009 (source OECD, 2010a).
	Expenditure	Data for 2008; source Zhu (2009).
India	Coverage rate	In 2007/08, 535 persons received an unemployment benefit and 1002 persons in 2008/09 (source: answer to the OECD questionnaire by the Indian Labour Ministry).
Russia	Coverage rate	Ratio of the average number of unemployment benefit beneficiaries in 2008 to the average number of unemployed persons in 2008 (source Rosstat).
	Expenditure	Data for 2008; source consolidated budget of the Russian Federation, Rosstat.
South Africa	Coverage rate	Leibbrandt <i>et al.</i> (2010b).
Turkey	Coverage rate	The data on the number of beneficiaries come from the Turkish Authorities, whereas the total number of the unemployed is from the Turkish LFS.
	Expenditure	Data for 2005; source OECD SOCX.

If not specified in Table 2.A6.3 below, the information in Table 2.7 comes from Grosh *et al.* (2008) and/or Fizbein *et al.* (2009).

Table 2.A6.3. Main cash transfer programmes (Table 2.7)

Data sources and notes

Country	Notes and data sources
Brazil	The number of beneficiaries comes from the Ministerio do Desenvolvimento Social, Programa Bolsa Familia, https://www.beneficiossociais.caixa.gov.br/consulta/beneficio/04.01.00-00_00.asp
Chile	The number of beneficiaries and total expenditure comes from OECD (2009b).
China	The number of beneficiaries comes from Zhu (2009), the share of households covered and total expenditure in GDP from the OECD (2010a).
Mexico	The number of beneficiary households comes from SEDESOL – Oportunidades, http://www.oportunidades.gob.mx/Wn_Inf_General/Padron_Liq/Cober_Aten/index.html , the total number of households from CONAPO http://www.conapo.gob.mx/prensa/2008/bol2008_02.pdf .
South Africa	The number of children benefiting from the CSG, the share of households receiving benefits and comes from Leibbrandt <i>et al.</i> (2010a).
Turkey	The number of beneficiary households comes from World Bank (2008), p. 23 http://www-wds.worldbank.org/external/default/main?pagePK=64193027&piPK=64187937&theSitePK=523679&menuPK=64187510&searchMenuPK=64187283&siteName=WDS&entityID=000333038_20080806015943 .

Table 2.A6.4. **Main features of PWPs (Table 2.8)**

Data sources and notes

Country	Notes and data sources
Chile	The 2003 data are from Bravo <i>et al</i> (2004). Data for 2009 are taken from the response to the OECD 2010 questionnaire. Information on total public works expenditure as a share of GDP is from OECD (2010b).
India	NREGA DMU reports (http://nrega.nic.in/netnrega/home.aspx), ILO 2009 Questionnaire and Chhibber <i>et al</i> , 2009.
Indonesia	McCord (2007) for the 2000 programmes. For the PNPM-Rural, the data are taken from the Annual Report of the PNPM Rural (2008) produced by the Ministry of Home Affairs, from Papanek (2007) and from www.ppk.or.id .
Mexico	2003 data are from the "Evaluación externa del programa del empleo temporal" (2006), (http://dgcg.sct.gob.mx/fileadmin/DGCF/prog_trabajo/program_cargo/normatividad_pet/EVALUA06.pdf). 2009 data on beneficiaries and expenditure are from the response to the OECD 2010 questionnaire.
OECD	OECD (2009a).
Russia	World Bank and Russian Public Employment Service Agency (2010) Policy Note.
South Africa	EPWP five-year report and yearly (4th quarter) reports (http://www.epwp.gov.za/index.asp?c=downloads) and response to the OECD 2010 questionnaire.
Turkey	Information provided by the Turkish Authorities

Public work schemes in six emerging economies

This Annex provides a short description of the main PWPs in the emerging economies.

Chile

Chile was a pioneer in public works programmes in Latin America in the 1980s (*e.g.* cash for work programme). The first PWP were the emergency employment programmes, introduced in 1982 as a response to the crisis. These programmes were soon abandoned because of concerns about their efficiency and targeting and were only revived in the 1990s, as a response to the high unemployment rates following the crisis. The Community Investment Program (Programa Inversión en la Comunidad) and the PEE (Programa de Emergencia de Empleo) are more recent programmes, introduced in 2001. The first is a sub programme of ProEmpleo and offers employment at the minimum wage for an average of 4 months, possibly renewable in case of high unemployment (Bravo *et al*, 2004; OECD questionnaire sent to national authorities). The PEE is implemented by the National Forestry Corporation (CONAF) and aims to create temporary employment in public works while improving the quality of life in rural and urban areas. The average job duration in this programme is 3 months (OECD questionnaire sent to national authorities).

India (Box 2.4)

The National Rural Employment Guarantee Scheme (*NREGA*) is India's largest public works scheme and possibly one of the largest in the world in terms of coverage (10% of the labour force in 2008/09). It was initially established in 1978 in the state of Maharashtra and was slowly extended to reach complete coverage of the country in 2008/2009. The scheme aims to provide to all rural households a guarantee of up to 100 days of unskilled manual wage employment (mainly in water conservation, land development and drought proofing) per year at the minimum wage for agricultural workers in the state. If no work offer is made 15 days after the demand is done, the claimant gains the right to receive an unemployment benefit of between 30 and 50% of the minimum wage. The scheme was significantly scaled-up in 2009, but this

expansion is more likely to be linked to national elections than to the global economic downturn (information has been requested on this).

Although the *NREGA* can play an important role in reducing short-term poverty and smooth employment for rural labourers and income throughout the year, its enormous potential has not yet been fully explored (Chhibber *et al*, 2009). Fund utilization remains low especially in poorer states, possibly due to the funding design of the scheme. Fund allocation is not pre-determined based on state income levels, but instead it is based on each State's Annual Work Plan and Budget Proposal submitted to the Ministry of Rural Development. As a result, low-income states with more households below the poverty line, and lower than average capacity to plan, manage and forecast labour demand, tend to receive on average less resources (Chakraborty, 2007). In addition, weak implementation capacity at the local level limits the benefits poor rural communities derive from the scheme. Average duration of jobs is only 50 days, possibly because rural labourers tend to participate in the scheme only in the lean season and in special drought conditions.

Indonesia

At least sixteen programmes² under the broad name *Padat Karya*³ were introduced as emergency response to the Asian crisis and operated by various government departments. Spending was substantial for the first two years after the crisis and declined afterwards, and according to Perdana and Maxwell (2004) there were only two programmes left in 1999/2000. The objective of *Padat Karya* was to provide income support to the unemployed and the poor while building local infrastructure. A second major programme, the *PDM-DKE (Pemberdayaan Daerah dalam Mengatasi Dampak Kekeringan dan Masalah Ketenagakerjaan, Regional Empowerment in Overcoming the Impact of Drought and Labour Problems)* operated from 1998 to 2003 in all villages. The difference between this scheme and the previous ones is that funds were provided from the central government directly to the communities (via local governments) as a function of the number of poor and unemployed in the village. Targeting and monitoring were also conducted at the village level (Lubis, 1999). Overall, the public employment schemes in Indonesia have been criticized for the weak involvement of local communities, low coverage of women (and missing information on coverage of vulnerable groups), corruption and nepotism, as well as wages above market levels (Betcherman and Islam, 2001). Moreover they have been criticized for being poorly planned, implemented and monitored (Perdana and Maxwell, 2004) and for the lack of long-term positive impacts (AusAID, 1998 and URDI, 1999).

Today, the largest *padat karya* program in Indonesia is run by the infrastructure component of *PNPM-Mandiri (Program Nasional Pemberdayaan Masyarakat or National Community Empowerment)*. The programme started in 2007, as a continuation of the *Kecamatan Development Program (PPK)* and the *Urban Poverty Program (P2KP)*, which were started in 1998. *PNPM-Mandiri* covered 2.230 sub-districts in 2008. It is an integrated programme based on a community driven development approach and is used as an instrument to accelerate the achievement of MDGs targets toward 2015. *PNPM* has a rural and an urban component, with the greatest share of infrastructure projects being undertaken under the rural component. An important element of *PNPM* is the involvement of communities in development planning and management of the projects undertaken. The programme is deemed successful in covering an important

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2. Some of the programmes included in *Padat Karya* were the following: *PDKMK (Proyek Dampak Kekeringan dan Masalah Ketenagakerjaan)*, *P3T* programme for the skilled unemployed, and a labour intensive programme in the forestry sector, the labour intensive city-wide urban infrastructures and services programme (*PKP*) and the special initiatives for women unemployment programme (*SIWU*).
 3. "The term *Padat Karya* has been used throughout Indonesia since at least the early 1970s for small-scale village infrastructure activities that selected the required labour entirely from within the village community", Perdana and Maxwell (2004).

share of women and poor groups and is likely to have important positive indirect effects on economic activity (Ministry of Home Affairs, 2008; Papanek, 2007).

Mexico

The Programa de Empleo Temporal (PET) was created in 1995⁴ as a response to the Tequila crisis and aimed to provide work and income to the poor in rural areas through infrastructure projects. Total spending was 2.4 billion pesos in 1995, reached 4 billion in 2000 and went down to 558 million in 2006. This reduction in spending was accompanied by a significant reduction in the number of jobs created from 1,086,000 in 2000 to 1719000 in 2006. The average duration of jobs in 2003 was about 87 days. It was announced in February 2009 that the program will benefit from a budget increase (from \$1.5 billion pesos in 2008 to \$2.2 billion pesos in 2009) for 250,000 families that earn incomes of up to two minimum salaries.

Russia

The Public Works for the Unemployed programme is part of the Public and Temporary Works Programme in Russia⁵. It subsidizes wages of the unemployed through direct job creation in public works. The programme participants must be registered with the employment service as jobless or job seekers. As part of the anti-crisis response of the government, the employment service pays the minimum wage (as well as regional supplements and payroll taxes) to enterprises who organize the public works. Hence beneficiaries receive the minimum wage, the unemployment benefit as well as possible assistance benefits from the region. The average job duration is 2.14 months.⁶

South Africa (Box 2.4)

The South African Expanded Public Works Programme (EPWP) was launched in 2004, as the new version of the National Public Works Programme (NPWP) and the Community Based Public Works Programme (CBPWP). It is the third-biggest infrastructure spending programme in the world and a key component of the South Africa's social protection strategy. The programme provides short-term work to the unemployed and to marginalized groups, mainly unskilled, poor and youth in four areas, with infrastructure being the largest among them. The scheme aims not only at providing a temporary job to poor, unemployed persons, but also at strengthening their skills through training and offering them "exit" strategies at the end of their participation in the programme.

However, the EPWP has been criticized on the ground of limited capacity to pursue both objectives at the same time (Hemson, 2007). As a result, the second phase of the scheme announced in April 2009, places more emphasis on employment generation relative to training provision in order to maximise the benefits from job creation. The quality of jobs offered by the EPWP is fairly low both in terms of job duration and wages. As in the Indian scheme, average job duration is shorter than initially stipulated, especially in areas with high unemployment rates because of the pressure to rotate jobs (Lieuw-Kie-Song, 2009) and wages are low (Hemson, 2008). In addition, low actual spending possibly due

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4. It is a joint initiative of the Secretariat of Social Development (SEDESOL), the Secretariat of Communications and Transport (SCT), the Secretariat of the Environment and Natural Resources (SEMARNAT) and the Secretaria de Agricultura, Ganaderia, Desarrollo Rural, Pesca y Alimentacion (SAGARPA).
 5. The Temporary Works programme provides wage subsidies to enterprises so as to retain workers who are at risk of layoff.
 6. However, it is not clear whether this job duration refers to both programmes or just the public works programme.

to unclear funding conditions at the moment that projects decisions are taken, in combination with weak implementing capacity further limit the effectiveness of the scheme. The second phase of the programme aims to address these challenges by improving coordination across governmental bodies and providing incentives to promote the programme expansion and increase in job duration.

Turkey

The Turkish PWP (*Toplum Yararına Calisma Programi*) was introduced in 2009, as a response to the global crisis. Its objective to create jobs and generate income to the poor in rural and urban areas through infrastructure projects like forestation, landscaping, land improvement and maintenance of public buildings, parks, etc. Wages are equal to the minimum wage and the maximum period of work is 6 months. In 2009, total spending for this PWP was nearly 110 million TL, and the total number of beneficiaries is 46,000.

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