World Economic Vulnerability Monitor

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Highlights

- The global rate of unemployment rose to 6.6 per cent by the end of 2009 up from 5.7 per cent at the end of 2007. The number of unemployed worldwide rose by 34 million people. The impact of the global crisis on employment levels varies greatly across countries, however.
- Both employment policies and the size of the informal sector play an important role in explaining variations in the degree to which the crisis has affected unemployment rates. Support measures preventing job shedding has helped contain increases in unemployment in many European countries as well as among some developing countries. Most developing countries have large informal sectors which have absorbed many workers that lost their jobs in manufacturing and modern services because of the crisis, limiting the impact on unemployment, but increasing vulnerable employment.

The global financial crisis has wiped out progress in reducing open unemployment

The fight against joblessness suffered a significant reversal

Between 2004 and 2007, the world economy expanded at an average annual rate of 3.9 per cent. Global growth helped reduce unemployment. According to the International Labour Organization (ILO), estimates of the average global unemployment rate fell from 6.4 to 5.7 per cent during that period, bringing down the estimated number of openly unemployment people from 191 million to 178 million.¹ The global crisis has wiped out this progress. The global economy began a notable deceleration during 2008 and contracted sharply in 2009 as a result of the global financial crash. The world economy contracted by about 0.3 per cent on average over these two years, while the rate of global unemployment rose by nearly 1 percentage point, implying a rise in the number of openly unemployed people in the world from 178 million to 212 million.

The effect of the crisis on unemployment was predictable but was more pronounced in some cases than in others

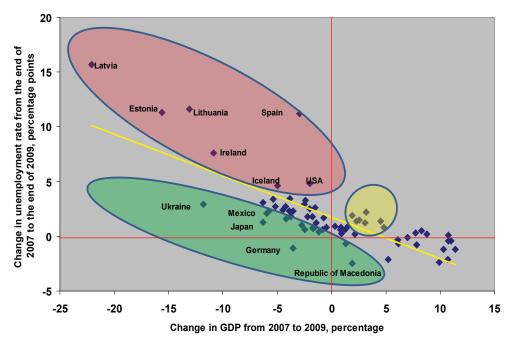
The empirical regularity in the degree to which unemployment rates respond to changes in output has become known as Okun's law. For example, during the immediate post-war period in the United States of America, Okun established that, if national income did not change from one quarter to the next, the unemployment rate would rise by about 0.3 percentage points, while for each 1 per cent fall of national income, the unemployment rate would rise by an additional 0.3 percentage points. During the past three decades, this negative relationship between output growth and unemployment has become more marked in the United States and has been even more dramatic during the present crisis. Between 2007 and 2009, output in the United States fell by 2 per cent, while the rate of unemployment increased by 4.8 percentage points.²

Across countries, the quantitative relationship between changes in output and the rate of unemployment tends to show considerable variety because of country-specific factors, such as economic structure, labour-force dynamics, and policies. Using ILO unemployment data for 72 countries for which economic growth data are also available, a first

- 1 ILO Global Employment Trends, January 2010. Between 2004 and 2007, the number of unemployed workers decreased from 191 million to 178 million and about 7 million new workers were added to the global labour force.
- 2 The 4.8-point increase in the rate of unemployment is greater than the 3-point increase that would have been expected had the conditions of the immediate post-war period—when Okun first established the "law" that bears his name— prevailed.

The World Economic Vulnerability Monitor is prepared by UN/DESA. It measures the impact of the global crisis on economic vulnerability based on the "Integrated Monitoring and Analytical System for Crisis Response", developed as part of CEB's Joint Crisis Initiatives. Contact: Rob Vos, Director, e-mail: vos@un.org • http://www.un.org/esa/policy/index.html approximation of this relationship Figure 1: Changes in output and unemployment rate in 2008-09 (72 countries)

is captured in figure 1. It suggests that-on average-if a country experienced no change in output over 2008-2009, the rate of unemployment would likely have risen by 1.7 percentage points, while for each 1 per cent loss of output, the rate of unemployment would increase by an additional 0.4 percentage points. The average pattern, represented by the countries close to the regression line, suggests that a cumulative loss of aggregate income of 2 per cent would be associated with an increase in the unemployment rate of 2.5 percentage points. In other words, by less than suggested by Okun's law.



Source: ILO Monthly Information Bulletin (February 2010) for unemployment data; UN/DESA, World Economic Situation and Prospects 2010, for economic growth.

Along the trend line: Countries

concentrated along the trend line denote output declines leading to near commensurate increases in unemployment rates (or vice versa). Turkey and Hungary, for example, saw stark increases in unemployment by about 3.4 percentage points as a result of output declines of 3.8 and 5.4 per cent, respectively, during 2008-2009. Similarly, the rates of unemployment in Bosnia and Herzegovina, Denmark, Italy, New Zealand, and Sweden rose by about 3 percentage points in response to losses of income in the range of 2.4 to 6.3 per cent (see table 1).

In addition, the countries in the yellow circle in figure 1 (including Australia, Chile, Colombia, Greece, the Islamic Republic of Iran and Slovakia witnessed increases in unemployment, despite positive output growth in 2009 as compared with 2007. In these cases, the strong deceleration from high rates of pre-crisis growth may have adversely influenced labour demand.

Table 1: Cases of significant increases of unemployment along the trend line

	Percentage point increase in unemployment rate between 2007-Q4 and to 2009-Q4	GDP growth, cumulative 2007- 2009 (percentage)				
Turkey	3.4	-3.8				
Hungary	3.4	-5.4				
New Zealand	3.3	-2.4				
Italy	3.1	-6.3				
Bosnia-Herzegovina	2.9	-2.5				
Sweden	2.7	-5.2				
Denmark	2.7	-4.2				

Source: ILO Monthly Information Bulletin (February 2010) for unemployment data; UN/DESA, *World Economic Situation and Prospects 2010*, for economic growth.

Lessons to be drawn from "off-the-line" cases

Important observations can be drawn from cases which show considerable deviation from the average tendency (those in the pink and green circles seen in figure 1). Countries where the rise of unemployment was far higher than would have been expected given the fall of national income are positioned in the pink-shaded area, while the cases with better-than-expected unemployment dynamics (given the fall in output) are in the green zone.

Averting the impact on job losses in the "green" zone: A number of countries succeeded in reducing their unemployment rates or experienced only a very small increase in unemployment despite a significant fall in output or a slowdown in growth that normally should have caused a much greater rise in the unemployment rate (see table 2). Brazil, for instance, did not experience a reduction of output over this two-year period (its gross domestic product, GDP,



	Percentage point increase in	GDP growth,	Percentage
	unemployment rate	cumulative	point increase in
	between 2007-Q4	2007-2009	employment 2007-
	and 2009-Q4	(percentage)	Q4 and 2009-Q4
Ukraine	2.9	-11.8	-0.8
Japan	1.3	-6.3	-2.6
Mexico	2.3	-5.8	1.2
Finland	2.1	-6.0	-3.1
Netherlands	1.0	-2.8	0.8
Germany	-1.1	-3.5	0.0
Republic of Macedonia	-2.5	1.9	8.1
Brazil	-2.1	5.2	3.1

Table 2: Selected countries suffering output declines or stagnation, but witnessing limited or no increases in unemployment

Source: ILO Monthly Information Bulletin (February 2010) for unemployment data; UN/DESA, *World Economic Situation and Prospects 2010,* for economic growth.

in 2009 was 5.2 per cent higher than in 2007). Brazil's unemployment rate fell by 2.1 percentage points, much stronger than the cross-country trend, according to which it should have fallen by no more than one third of 1 percentage point. Likewise, for the Republic of Macedonia, the reduction in the unemployment rate was greater than predicted by the average pattern.

The rest of the countries, where output contracted, are quite heterogeneous. One subgroup consists of developed countries (Finland, Germany, Japan and the Netherlands) that have built a reputation for targeting employment through industrial/labourmanagement policies ("lifetime employment" in Japan and "co-determination" or "consensual" man-

agement in northwestern Europe). In line with a tradition of relatively well-managed labour relations, these countries also enacted measures which helped contain job losses during the crisis. These included incentives to firms to keep employees at the workplace: for instance, by allowing payouts from unemployment benefit schemes to workers to support income levels of those moving from full to part-time employment, as well as subsidies to firms to keep workers on the payroll.

Elsewhere, such as in Brazil, Mexico, the Republic of Macedonia and Ukraine, the insignificant impact of the crisis on open unemployment rates (or the relative recovery within this period) can be explained by a combination of two factors. In some cases, it was the result of specific policy measures, such as in Brazil, Mexico and Ukraine.³ In Ukraine, for instance, as in most Commonwealth of Independent States (CIS) countries, preservation of employment in difficult times (even at the expense of lower wages, accumulation of wage arrears, shorter working hours and longer leaves) remains a priority. In other cases, particularly for Brazil and Mexico, it can be argued that the size of the fiscal stimuli and their focus on maintaining output and jobs may have played a role.

The positive role of labour-market measures in these countries is likely to be corroborated by the experience in some Asian developing countries. Countries have implemented a variety of measures to maintain or create employment as part of their stimulus packages (including enhanced credit access and subsidies, tax breaks, training programmes, rural infrastructure projects and wage subsidies). In addition, a few countries have also provided additional support for some groups outside the labour force. Thailand, for instance, introduced new old-age support measures. While it is still too early to evaluate the relative success of some measures vis-à-vis others, it seems that countries that had some degree of labour support in place have done better than those that lacked such support.

Finally, in many developing countries the large informal sector, or shadow economy, tends to act as the residual "employer" in the economy. Although little real-time information is available, past experience would indicate that behind small changes in open unemployment rates loom stark increases in vulnerable employment, often for women and mostly at low pay.⁴

- 3 See Sandrine Cazes, Sher Verick, Caroline Heuer. *Labour market policies in times of crisis. Employment Sector Employment Working Paper* No. 35. 2009, available at http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_policy/documents/publication/wcms_114973.pdf.
- "Vulnerable" employment is defined by the ILO as work under "difficult" conditions or with "low earnings" that "undermine workers rights", but *calculated* as "the sum of own-account workers and contributing family workers" (ILO Global Trends, January 2010, p. 18). Thus, the indicator itself is subject to caveats (see ibid., footnote 14) and is moreover estimated on the basis of a less robust data set than that available for unemployment trends. Recent data for Mexico suggests that a significant shift took place towards informal sector employment for female workers. In Mexico, despite a steep decline in output, total employment increased by 2.9 per cent in 2009 (quarter-to-quarter annualized rate), but a 4.7 per cent job growth for female workers clearly outpaced that of male workers (1.9 per cent). However, "paid-employment" (ILO's definition for wage earners) *dropped* by 4.7 per cent with most paid job shedding affecting males workers (who saw labour demand decline by 6.3 per cent, compared to 0.5 per cent for females in paid employment). These data suggest that all job growth has been in "non-paid employment" (that is, non-wage earners like self-employed and unremunerated family workers), typically found in informal sector activities. In addition, according to the Mexican Institute of Statistics and Geography (INEGI), the rate of underemployment during that period rose from about 6 per cent to almost 10 per cent.

High job losses in the pink zone: The pink oval shape in figure 1 highlights countries where, despite the observed drop in output, unemployment rates increased well above the average trend of the cross-country comparison. Latvia's unemployment rate rose by almost 16 percentage points in tandem for 2008 and 2009, when output fell by 22 per cent. Estonia and Lithuania were affected in similar fashion. Spain also suffered a sharp increase (of 11 percentage points) in the unemployment rate, though the drop in GDP was not as marked (3 per cent). The increase in unemployment rates in Iceland, Ireland and the United States were not as sharp, but were still above the cross-country trend (see

Table 3: Unsatisfactory performers which experienced dramatic
rises in the unemployment rate

Country	Percentage point increase in unemployment rate between, 2007-Q4 and to 2009-Q4	GDP change from 2007 to 2009 (percentage)	Current account balance as a percentage of GDP In 2004-07	Current account balance as a percentage of GDP In 2009
Latvia	15.7	-22.1	-17.4	4.5
Lithuania	11.6	-13.1	-10.0	1.0
Estonia	11.3	-15.6	-14.0	1.9
Spain	11.2	-2.9	-8.0	-6.0
Ireland	7.6	-10.8	-3.2	-1.7
United States	4.8	-2.0	-5.6	-2.6
Iceland	4.6	-5.0	-17.8	-5.3

Source: ILO Monthly Information Bulletin (February 2010) for unemployment data; UN/DESA, *World Economic Situation and Prospects 2010*, for economic growth; and UN/DESA for current account data.

table 3).

The role that policy played for the group as a whole is ambiguous, since most countries have adopted some form of labour-protection policies but have also experienced adjustments at some level of government jurisdiction (local or regional). Differences in the sectoral composition of production may have played an accentuated role in rising unemployment rates, because some industries, such as construction, tourism and, more generally, the service sectors were

most affected by the crisis. It is also plausible that countries in this group may have experienced a much sharper financial constraint, thus affecting the capacity of entrepreneurs and governments to retain employment. Some observers have suggested that against a backdrop of "banking crises" the impact on employment is more severe and more lasting. Though it may be difficult to quantify the "degree of banking crisis", it is possible to link the impact of a financial constraint to the patterns of external financing, though not necessarily with a one-to-one correlation. Countries which have relied recurrently on external financing may be prone to more severe financial adjustments and a banking crisis either because external financing dried up or, in the case of the United States, because tighter domestic credit supplies drove down consumption and investment spending.

Conclusion

There should be no doubt that the global financial crisis has set considerable recent achievements in employment creation in reverse. Furthermore, from the statistics collected up to the end of 2009, the amount of people across the world who were forced to join the ranks of the unemployed, the sub-employed, the unpaid work force or the "vulnerably employed" has been striking. These facts merit reflection and should serve as a serious cautionary tale in comparison with the otherwise "seemingly" good news about the ongoing world economic recovery. While economic growth may recover and will hopefully at some point regain its lost momentum, the human tragedy of job losses and poverty implied in a crisis tends to have more lasting effects.

In addition, as often argued, the consequences of a crisis in terms of unemployment and poverty tend to lag behind a recovery. It remains to be seen whether the statistics released in the coming quarters continue to show persistently high levels of unemployment despite economic growth's having already turned positive. This is one more reason for not being complacent. Yet, looking back, we can take some comfort from some country experiences where the policies that have been enacted have served to mitigate the negative impact of the crisis on labour. But in some of these cases, the burden of such measures could signify some sacrifices in the future. Thus, every effort should be made to avoid economic crises and, in preparation for crises which cannot possibly be anticipated, appropriate protective measures should be readily available to avert the human consequences.