# ADDRESSING THE JOBS CHALLENGE IN G20 COUNTRIES

## An overview of recent labor market trends and policies

2013

The World Bank

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The World Bank

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The current overview represents the finding of the work in progress to encourage the exchange of ideas about labor market issues.

Moscow: World Bank, 2013. – 56 p.

# Acknowledgement

This overview was prepared per request of Russia's G20 Presidency by the World Bank team led by Pierella Paci and authored by labor market experts Simone Moriconi, Marco Ranzani and Sara Johansson de Silva. The team would like to acknowledge overall coordination provided by Julia Komagaeva. Overview preparation would not be possible without broad support from the World Bank leadership for Europe and Central Asia and the World Bank Country Director for Russia – Michal Rutkowski.

The overview was discussed by the G20 Task Force on Employment during the G20 meeting on June 3-4, 2013 chaired by A. Vovchenko and M. Kidd. The team benefitted considerably from valuable comments and suggestions provided by G20 countries during the discussion.

The team greatly appreciates successful cooperation with and feedback from the Employment Division of Russia's G20 Expert Council, including Elena Zotova, Svetlana Misikhina, Natalya Stapran, Rimma Kalinchenko and Artur Gagiev, who supported the overview preparation and contributed with comments.

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# 1. OVERVIEW

Jobs are at the center of economic growth and prosperity. The earnings they generate are the main driver of poverty reduction because they are the principal source of income for families worldwide. The empowerment, recognition, and social value associated with them serve as a vehicle for social cohesion and inclusion. The outputs they create comprise the engine of economic growth. Creating more and better jobs is then a priority for social and economic development.

Globally, the private sector is the main engine of job creation and offers the only sustainable solution to job creation in the longer run. However, it is widely acknowledged that governments play a critical role in promoting the appropriate environment to catalyze job creation, in mitigating labor-related volatility and in supporting jobs with high social value, such as those for youth and women.

The objective of this study is to review policies to foster job creation and support earnings to identify policy packages that could be effective for different groups of countries[1]. This study reviews trends in labor market developments and policy responses in the G20 countries over the past five years, a period that has included strong negative shocks to output and labor markets, and provides a framework and taxonomy for understanding different policies, their impacts, and coherence.

The main findings of the study are:

1. Labor market focused policy interventions could serve two key objectives: (i) foster jobs, productivity and earnings over the long run, and (ii) protect workers, jobs, and earnings over the short run. Policy makers face different constraints and trade-offs in meeting these objectives, which can be mutually enhancing or conflicting, depending on circumstances.

2. Effective policy packages have the following characteristics: (i) are comprehensive, coherent, and well adapted to country-specific challenges and circumstances (including the nature of the shock, government fiscal space, prevailing institutions, and technical capacity); (ii) build on established institutions that can easily adapt to respond to different needs during the business cycle; and (iii) combine measures to stimulate growth and promote recovery (for example, skills development, expansionary policies, and business climate reforms) with efforts to protect workers, jobs, and firms.

3. Recent years have seen significant turbulence in output, employment, and earnings in G20 countries, calling for strong policy responses. Growth in aggregate labor income dropped 2 percentage points (2007–9) and rebounded only partially in 2010. The subsequent weak recovery did not restore job creation. Most countries were affected, but the euro zone and the United Kingdom, Canada, Japan, the Republic of Korea, Mexico, the Russian Federation, South Africa, and the United States were worst hit.

4. Labor markets adjustments differ across countries—through job losses or through reduction in hours worked (which in turn lowers earnings)—depending on institutions and economic structure. Although data are not available for all countries, it seems that countries that had relatively easy firing restrictions and/or were exposed to a bursting domestic property bubble—such as the United States, the United Kingdom, Canada, and Spain—adjusted with relatively large job losses leading to rapidly increasing unemployment (adjustment on the *extensive margin*). In contrast, countries with more restrictive labor market regulations and/or less pronounced fall in gross domestic product (GDP)—such as Australia, France, Germany, Italy, Japan, and Korea—experienced fewer direct job losses, but a more pronounced reduction in the number of hours worked (adjustment on the *intensive margin*).

5. Across countries, governments took action to mitigate labor market impacts and sustain aggregate demand by expanding existing policies or implementing new ones. In some areas, policy responses were remarkably similar across countries despite the diversity of economic structure and resources across the G20 countries. Policies used fall under the following categories:

    i. *Business climate reforms*. Across the majority of G20 countries, efforts were undertaken to increase competition, ease regulatory barriers, and reduce the tax burden on labor.

    ii. *Labor market regulatory reforms*. Organisation for Economic Co-operation and Development (OECD) countries characterized by restrictive labor market regulations focused on reforms to increase labor market flexibility. This was especially the case in countries where labor market adjusted on the extensive margin (such as Turkey and Spain).

    iii. *Social insurance and social assistance*. In emerging countries—particularly those where adjustment took place on the intensive margin—safety nets and insurance mechanisms were strengthened to protect workers from the negative impact of reductions in earnings.

    iv. *Training*. Efforts to bring unemployed individuals (especially youth) into training and skills development intensified in OECD countries.

    v. *Promoting or creating jobs in the public sector*. Public employment services, public employment schemes, and short-term public works schemes were initiated or expanded in some countries.

    vi. *Expansionary policies to stimulate demand*. Fiscal policies and other expansionary policies played a key role in helping recovery in some countries. Overall, however, insufficient attention was given to policies that could stimulate aggregate demand—even in countries with ample fiscal space.

6. Luck favors the prepared—countries that build a sound economic structure with strong institutions, that monitor labor market developments and react rapidly when needed, , are better positioned than others to foster the creation of more productive jobs and protect firms, workers, and the economy from the negative consequences of economic swings.

Chapter 2 of this study sets forth an organizing framework for understanding the role of different policy interventions in building long-term productivity and managing short-term fluctuations. The framework draws heavily on Paci, Revenga, and Rijkers (2010). Chapter 3 provides a detailed account of labor market trends in G20 countries in the past five years. Chapter 4 summarizes the key labor market policies in place and their impacts[2]. The final chapter concludes and offers recommendations for different country types.

# 2. ADDRESSING THE JOBS CHALLENGE: POLICY OPTIONS

The private sector globally provides 9 out of 10 jobs. Thus tong-term solutions to the jobs challenge hinge around governments' capacity to build a business climate that enables innovation and private investment, to invest in human and physical capital (including infrastructure), and to foster an effective and equitable financial market. Labor market policies are seldom the binding constraint for job creation but appropriate active labor market policies can be helpful, especially to spur the creation of jobs with high social value. There is also increasing recognition, that, beyond the long-term prospective, governments play an important role in mitigating the negative effects of even temporary negative economic shocks on welfare and growth prospects. Thus, while jobs of some sort, and for some people, will always exist, sustained, productive, and inclusive job creation by the private sector needs fundamental actions by the public sector.

The first set of fundamentals include macroeconomic stability, rule of law, appropriate regulatory policies, property rights and basic human rights: few longer-term productive jobs can exist if there is acute uncertainty about what the future will hold or the unfettered ability to exploit men, women, and children in the workplace. Essential infrastructure and access to finance are a second part of the fundamentals; reliable power is indispensable for modern production, basic transportation critical to connect that production to markets, and finance essential for producers to invest and expand jobs. Basic human capital is the third element: adequate nutrition, literacy, and numeracy and work place skills allow workers to function in the work place, and continue to develop their skills and adapt to a changing economic environment.

Labor market policies—regulations, collective bargaining, active labor market programs, and social protection—can also be critical to the jobs agenda when excessive regulation hinders formal employment and productivity, or when inadequate regulation allows harmful forms of work. But available evidence shows that, if kept within reasonable bounds, their aggregate effects are more on redistribution than employment. Employment protection legislation, for example, tends to have only modest effects on aggregate employment. But it favors prime-age males and consequently penalizes youth, women, and low-skilled workers often contrary to what policy makers want. By contrast, active labor market programs—including appropriate skills training and job search assistance—and well-designed social protection policies have been shown to promote greater employment and wage equality, as well as to foster labor mobility and investments in training. Thus, employment-focused policies are an important component of the global social and economic policy agenda.

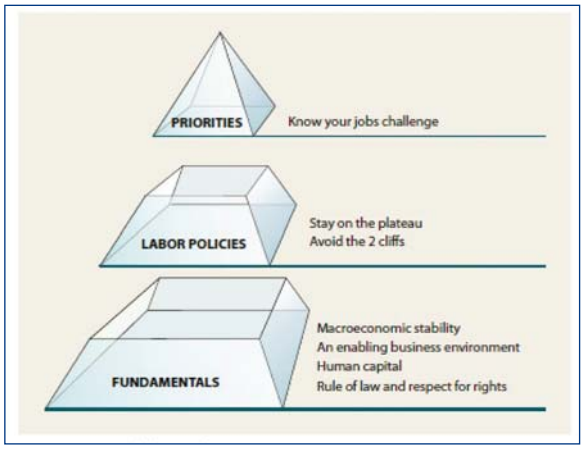
However, there is no magic formula for creating jobs across all milieus, and the element of an effective policy package will differ greatly depending on specific country conditions and priorities. The job agenda can center on promoting long-term increases in employment, productivity, and growth; on promoting jobs that are particularly valuable for development—for example, jobs for women, youth, or the poor; or on protecting firms, jobs, and workers from the negative impact of fluctuations. But whatever the focus the agenda will need to be multisectoral: too often, job policies focus on one necessary set of reforms, while not paying sufficient attention to other areas that provide sufficient complementary conditions for sustainable jobs to flourish.

This chapter reviews these challenges, constraints, and trade-offs inherent in designing a policy package consistent with the country specific job agenda. It provides a rationale for a job-focused strategy at the country level that fosters inclusive long-term job creation and productivity growth, while limiting the volatility in employment, earnings, and productivity. It also intends to guide policy makers in navigating the challenges to creating effective and comprehensive policy packages[3].

## 2.1. Fostering long-term job creation and productivity growth

Globally, most jobs are created by private actors—be they large enterprises, small firms, or individuals. In fact, in the mid-2000s, International Labour Organization (ILO) data show that jobs in the private sector accounted for around 9 out of 10 jobs in countries as different as Japan, Mexico, Brazil, Chile and South Africa, and around 4 out of 5 in France[4].

Figure 1. The "Policy Pyramid" for Creating Jobs Good for Development




*Source: World Bank 2012.*

However, governments play an essential role in ensuring the "fundamentals" of job-creating growth: getting labor policies right and tailoring them to the country's specific challanges. This is summarized by the "policy pyramid" in Figure 1, which unpacks the complex policy package required for creating good jobs into these three distinct areas (World Bank, 2013). The first two slices of the pyramid—establishing the fundamentals and getting labor policies right—apply to all countries, regardless of their specific challenges, though the relative importance may vary in specific contexts[5]. Given these basics, the third slice is specific to each country's priorities.

### Establishing fundamentals

Across firms and countries at varying levels of development, the most important constraints on formal private sector businesses are remarkably consistent: lack of aggregate demand, economic volatility, poor access to finance and infrastructure, and some aspects of regulation including taxation and unfair competition. For policy makers in any country, establishing the fundamentals for job creation involve policies and actions that serve two purposes: reducing uncertainty and providing a basic level of public goods. These include macroeconomic stability and rule of law, along with investments in basic infrastructure and basic human capital. They also include other aspects of the enabling environment, for example, making entry, operations, and exit of private enterprises efficient; allowing the development of a financial sector that efficiently allocates resources to the most productive enterprises; and allowing competition that continuously reallocates resources to their most productive uses.

### Labor policies

Labor policies have long been a central point of debate regarding their role in job creation (or job losses). Policies around labor regulations, collective bargaining, active labor market programs, and social protection all attempt to address the imperfections that exist in labor markets in the form of inadequate information, uneven bargaining power, limited ability to enforce long-term commitments, and insufficient insurance mechanisms against employment-related risks. They are also important levers to promote jobs with hogh social value, such as those for youth and/or women.

The effects of these policies on jobs, however, have long been debated—although there is consensus that, at very high levels of regulation, these policies end up not redressing market imperfections, but instead create distortions of their own. At the other end, if rules are too weak (or not enforced), the problems of poor information, unequal bargaining power, or inadequate risk management remain untreated and thus would lead to unbalanced and unsustainable labor markets.

The policy choice for countries is to stay on a "plateau" of a reasonable range of labor policies—where, at most levels between the extremes, the policies balance positive and negative effects on equity and longer-term productivity. When regulations are too strict or too loose, impacts are no longer mostly balanced and can significantly affect job creation and have perverse distributional effects. At one end, studies have found that more restrictive Employment Protection Legislation (EPL) is associated with significantly lower employment and output, as seen in some Indian states, where the effect was strongest when dispute resolution was ineffective or costly[6]. And large increases in the already high minimum wage in Colombia in the late 1990s led to significant employment losses, exacerbated by weak labor demand at the time[7].

### Establishing priorities

At the country level, constraints to job creation cut across different areas and often need to be addressed together in a mutually reinforcing manner. However, the biggest payoffs come from policies that address the most critical bottlenecks, along with other sufficient complementary conditions for sustainable employment. For instance, in many G20 countries, policies to improve productivity alone are insufficient to counterbalance rapidly aging labor forces and smaller contribution bases—they have to be combined with, among other options, rebalancing the social model of high labor taxes that strive to finance generous social benefits. In other countries, the complex youth employment problem needs to be addressed over the longer term with education policies that provide more market-relevant skills, competition policies that open up greater private firm entry, and social policies that lower the incentives for young women and men to queue for public sector jobs. In Latin America, in particular, reducing informal work will require a broad policy agenda that goes beyond tax and regulatory factors to improving the quality of regulations and public services.

But the specific context to frame multisectoral job policies will vary across countries, according to three initial conditions—the level of institutional development, the structure of the economy, and demography. *First*, existing policies, which affect the prevailing investment climate and potentials for jobs, are important. But the level of institutional development governs how well policies can be formulated, which is especially important for their enforcement. Even stringent tax and labor policies, for example, are often seen as less important by smaller firms in developing countries because they are usually easy to evade. On the other hand, countries with large formal sectors, established labor and social policies, and strong institutions have a greater capacity to devise and implement policies, but may be hampered by political economy factors. *Second*, the existing structure of production and resources in a country is also an important determinant of policy priorities. Agrarian economies, where a majority of the population lives in rural areas and is largely engaged in agricultural self-employment, have different job priorities than economies which have either growing or already established urban populations, usually engaged in manufacturing and services industries.. *Third*, countries that have large and growing youth populations, for whom there is a need to find productive opportunities and harness their capabilities for development, are again faced with options that differ from those of countries with fast-aging populations, who may face income insecurity in old age and need to continue to work past standard retirement ages.

## 2.2. Mitigating long-term effects of short-term fluctuations

In addition to its potential role in promoting long-term job creation and growth in productivity and earnings, there is increasing recognition that governments also play an important role in containing the negative employment and productivity impacts of economic fluctuations. In the absence of adequate safety nets, the way in which individuals, households, and firms are forced to manage even temporary negative shocks may have long-term negative impacts on income, productivity, and equity. Moreover, even as output recovers, the labor share in aggregate income recovers only slowly and partially, prolonging the negative impact on labor markets much beyond swings in output.

Originating in Schumpeter (1939) the idea of “creative destruction” as a necessary process for long-term improvement has been well established. This line of thinking suggests that negative shocks, while painful, can foster “creative destruction” by weeding out unproductive firms and reallocating resources to more productive uses. However, empirical evidenceshows that responses to even short-lived shocks can have destructive long-term consequences for aggregate productivity and individual workers’ earnings and welfare. Households facing income losses may be forced to take children out of school, or spend less on health, leading to future losses in income, welfare, and productivity (Ferreira and Schady 2009; Fafchamps 2003; Dercon 2001). Unemployment can lead to a loss of human capital that cannot be replaced quickly. In addition economic contraction can weed out productive firms, as the potentially efficient and more innovative firms may be more credit constrained and would be the first to go under in a credit crunch (Barlevy 2002, 2003; Ouyang 2009; Hallward-Driemeier and Rijkers 2010). Even when structural changes enhance productivity, the burden of the adjustment is likely to fall disproportionately on the most vulnerable. Unmanaged, economic downturns can thus result in irreversible productivity losses and damage long-term prospects for growth and poverty reduction.

This calls for policy packages that mitigate the short-term impacts of economic fluctuations on employment, productivity, and earnings while fostering sustainable growth in output, productivity and jobs. Putting policy packages in place thus requires careful consideration of existing constraints and careful negotiation of potential trade-offs.

## 2.3. Challenges of designing a comprehensive policy package

There are at least three significant constraints to effective design and implementation. First, while labor market outcomes can swing substantially over short periods, high frequency indicators are often not available, especially on earnings. As a result, there is high uncertainty as to who is affected by structural changes and economic cycles and by how much. Second, the fiscal space for policy interventions is often pro-cyclical and thus smaller in downturns when policy needs to expand. Third, policy makers are likely to face considerable political economy constraints with difficulties in pursuing important but politically unpopular reforms. In the recent economic downturn, countries with fiscally sound outlooks have been able to implement countercyclical packages, while others, notably in Europe, have not had the resources necessary to forcefully meet the challenging economic environment.

Designing effective policies also involves difficult trade-offs. First policies that ease short-term impacts of job losses may ruin prospects for a long-term recovery. If policies focus on protecting unviable firms and sectors, competitiveness will be reduced, the adjustment incomplete, and the cost (fiscal and other) of policies will never be recovered through higher consumption. Policy interventions should instead be designed to facilitate, rather than hamper the required transformation but be supported by other policies that smooth the transition and mitigate excess destruction, preserving human capital accumulation, and encouraging continued innovation.

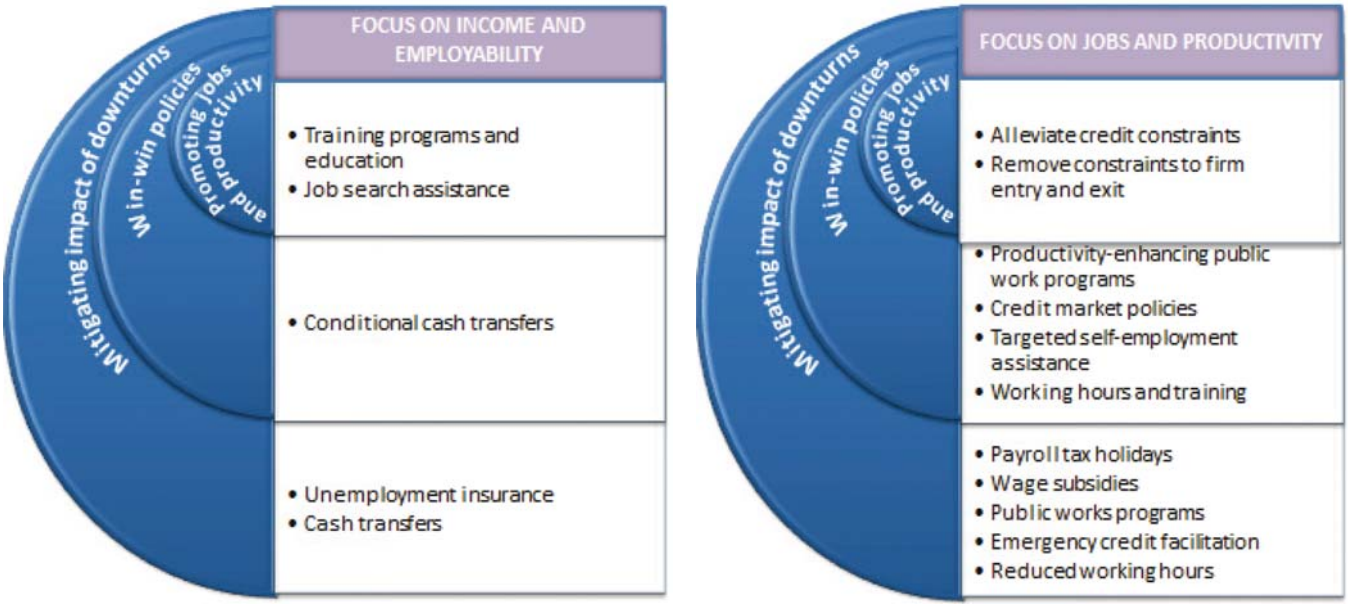
## 2.4. A taxonomy of policy interventions

With these constraints and tensions in mind, policies may be broadly separated into four categories along two dimensions: (1) whether their main objective is to mitigate short-term fluctuations or to promote long-term growth, and (2) whether they promote/sustain labor demand or protect household income. Policies to contain short-term impact should typically be countercyclical, that is, should have the ability to be scaled up in contractions and scaled down as recovery begins. Unemployment insurance or cash transfers fall within this category, because they automatically increase when more people need them. Policy interventions to increase jobs tend to be more permanent and aim at structural market imperfections, for example, skills development, credit policies, and broader investment climate interventions.

Figure 2 presents a rough grouping of commonly used policy interventions into those categories. The categorization is not rigid—policies may fit into various categories—but it provides an overview of the potential trade-offs. Policies that focus on jobs and productivity, while containing the impact of volatility, include wage subsidies and reduced working hours. Unemployment insurance and cash transfers (automatic stabilizers) focus on supporting income and ensuring that workers remain employable (by preventing deterioration of human capital) in the face of economic crisis. Regulatory reforms of output and labor markets, conversely, focus on stimulating labor demand for long-term growth in output, jobs, and productivity. Education and training programs are intended to increase employability and earnings over time.

As Figure 2 shows, there are also win-win policies without trade-offs that are potentially beneficial both in the short and the long run. This includes public works programs that focus on raising productivity (of workers, through combinations with training, or by upgrading infrastructure) while providing jobs and earnings to jobless. It also includes credit market policies that provide access to income smoothing over time. In developing countries, conditional cash transfers potentially help families with income support while building human capital (through conditions attached to schooling, health, nutrition, and so forth).

Figure 2. Commonly Used Policy Interventions




*Source: Johansson de Silva, Paci, Revenga, and Rijkers (2010).*

## 2.5. What is the evidence on policy effectiveness?

A review of the literature on the effectiveness of policies reveals three broad lessons (Paci, Revenga, and Rijkers 2010). First, and most obviously, no single set of policies will work everywhere. Policy interventions need to be tailored to country-specific circumstances. Is the shock part of common business cycle swings or the result of structural problems? Is fiscal space available to implement different policies? What groups will be affected and what reforms are practically and politically feasible? And what institutions are in place that can serve as a basis for building a faster and more effective policy response? Second, comprehensive policy packages beat piecemeal responses because of synergy between policies (most obviously, stimulating labor demand while removing barriers to access to jobs). Third, if the policy is implemented in response to economic contractions the response need to be quick and decisive and the capacity to do so depend on sound, existing institutions. Expanding existing programs, whose target groups, costs and on-the-ground effectiveness are known, is likely to be a more effective strategy than implementing new and untested programs (World Bank 2008). In practice, many policy interventions have yielded limited returns because of weak targeting and the difficulties associated with implementing incentive-compatible packages from scratch (Paci, Revenga, and Rijkers 2010)). During the 1998 Russian crisis, for instance, while the safety net in place fell short of fully protecting living standards, it helped provide protection against poverty (Loshkin and Ravallion 2000).

There is some evidence, albeit scarce, on the impact of specific policies to contain short-term volatility or promote long-run growth.

### Policies designed to contain short-term impact

***Protecting existing jobs and providing replacement jobs***. Wage subsidies, tax holidays, and similar schemes can help reduce labor re-entrenchment and promote long-term employment of targeted groups. However, they are costly "per job" and, if targeted to specific groups, can run up against political economy constraints. Public works programs have been widely used with similar objectives since 2007. In poorer countries, appropriately designed programs provide a fairly efficient instrument for targeting earnings vulnerability because a low wage ensures that the scheme is attractive for the poor only, and during crises only (Ravallion 2008). However, their cost-effectiveness depends on budget leverage, labor intensity, overhead costs for supervision and targeting performance, which need to be weighed against other means, such as direct transfers.

***Maintaining labor-related income***. Extending *unemployment benefits* or using them to cover reduced hours and part-time training may be appropriate in case of economic downturns that affect mostly formal sector workers, when adjustment occurs on the extensive margin (jobs rather than earnings), and when governments have the fiscal and institutional capacity to design, implement, monitor, and target benefits. Where labor market adjustments take place on the intensive margin—through reduction in earnings rather than job destruction — *targeted cash transfers* can also provide a more cost-effective means of compensating the vulnerable: they have relatively low administrative costs and do not distort prices. However, scaling back temporary programs may be difficult because of political pressures.

### Policies designed to accelerate recovery and promote growth

***Job creation and market imperfections***. When there is demand for labor but slow job creation due to lack of information on job seekers and job offers, *job search assistance schemes* may be effective. However, they are likely to be much less effective in times of mass unemployment due to lack of labor demand (Betcherman and others 2004).

***Improving employability of the workforce***. The impact of *training programs* to enhance worker productivity has been limited, although it strongly depends on context and implementation (Auer, Efendioglu, and Leschke 2008). Training also seems to be most effective when used in conjunction with other policies. *Self-employment assistance programs* likewise often show low cost-effectiveness—assisted enterprises drive out other potentially more efficient enterprises (new or incumbent) from the market and program beneficiaries include entrepreneurially skilled persons who would have started up their own enterprises anyway—and their outreach tends to be very limited. They can be more promising when targeted at particular groups such as women and older individuals (Auer, Efendioglu, and Leschke 2008; Abrahart, Kaur, and Tzannatos 2000). [[Q: not on Refs list]]

### Win-win policies

*Conditional cash transfer* (CCT) programs provide cash transfers conditional upon investments by households in education and health that in turn should benefit productivity and growth over the long run. Mexico's *Oportunidades* and Indonesia's scholarship program, *Jaring Pengamanan Sosia*l, show CCTs can protect poor children's school enrollment in times of shocks. However, poorly designed schemes can exclude the most vulnerable, such as those who do not have access to the public services that transfers are conditioned upon (Fizbein and Schady 2009).

*Credit market policies* have shown the potential to be effective in resolving cash flow problems in otherwise viable firms, thus protecting them from going out of business. But credit policies can result in substantial incentive problems. In Japan, banks levied additional credit to the weakest firms to avoid balance sheet problems, leaving more viable firms to exit, and stifling economic recovery. Quick fixes such as loan forgiveness, subsidized lending, and interest caps risk limiting long-term access to financing. *Microfinance schemes* may work better in contexts of high self-employment and informality. *Productivity-enhancing public works schemes*, finally, also fit into this category. Cost-efficient schemes that provide public/community goods can protect labor income while simultaneously reducing vulnerability and increasing income growth in the future.

## 2.6. Conclusions: Country-specific, comprehensive, feasible, flexible, and incentive-compatible programs

Creating productive and sustainable jobs and reducing employment and earnings vulnerability are recurrent long-term priorities for governments worldwide. The economic turmoil and resulting jobs crisis of recent years has helped to emphasize the need for finding policy packages that combine a focus on long-term goals with attention to mitigating the potentially high and long-lasting costs—to individuals and economic performance as a whole—of short-term fluctuations. Despite the sound macroeconomic management in many countries, lack of preparedness has meant that policies to address labor market imbalances have been delayed. Thus experience has shown that luck favors the prepared: designing, implementing, and evaluating sound policies ex ante is a more effective crisis coping strategy than scrambling for responses ex post. Good policies and institutions—prudent fiscal management, reliable labor market information sys-

tems, flexible labor market regulations, well-functioning credit markets, and sound safety net systems—can provide the basis for an effective job strategy. But an effective and flexible system of automatic stabilizers and safety sets is also essential.

While there are many policy options, effective policy packages need to be:

- *country specific*, given the nature of the shock and the typical labor market adjustment mechanism,
- *comprehensive* to explore synergies, ensure wide coverage, and manage to address both unpredictable short-term fluctuations and long-term development objectives,
- *feasible* given the specific country constraints, including institutional set-up, capacity and fiscal constraints, and political economy constraints,
- *flexible*, so as to be scaled up and down depending on needs,
- *compatible with incentives*: smart targeting can enhance effectiveness and free up resources to be deployed elsewhere.

# 3. RECENT LABOR MARKET TRENDS IN THE G20

This chapter describes labor market developments in the G20 countries since 2007, a period marked by significant turbulence in output markets and sharp adjustments in labor markets.

Typically the long-term negative impacts of economic downturns are particularly severe in developing and emerging economies where formal safety nets are often less developed and widespread informality increased workers vulnerability (OECD 2010). However, this is one of the many ways in which the recent downturn differed from past crises. Most importantly, it originated in advanced economies that experienced significant contractions and although workers and earnings everywhere were affected, the transition mechanisms and the impact on emerging economies were corporately small and the recovery fast. The considerable heterogeneity with which labor market responded in different countries is another important feature of the last five years.

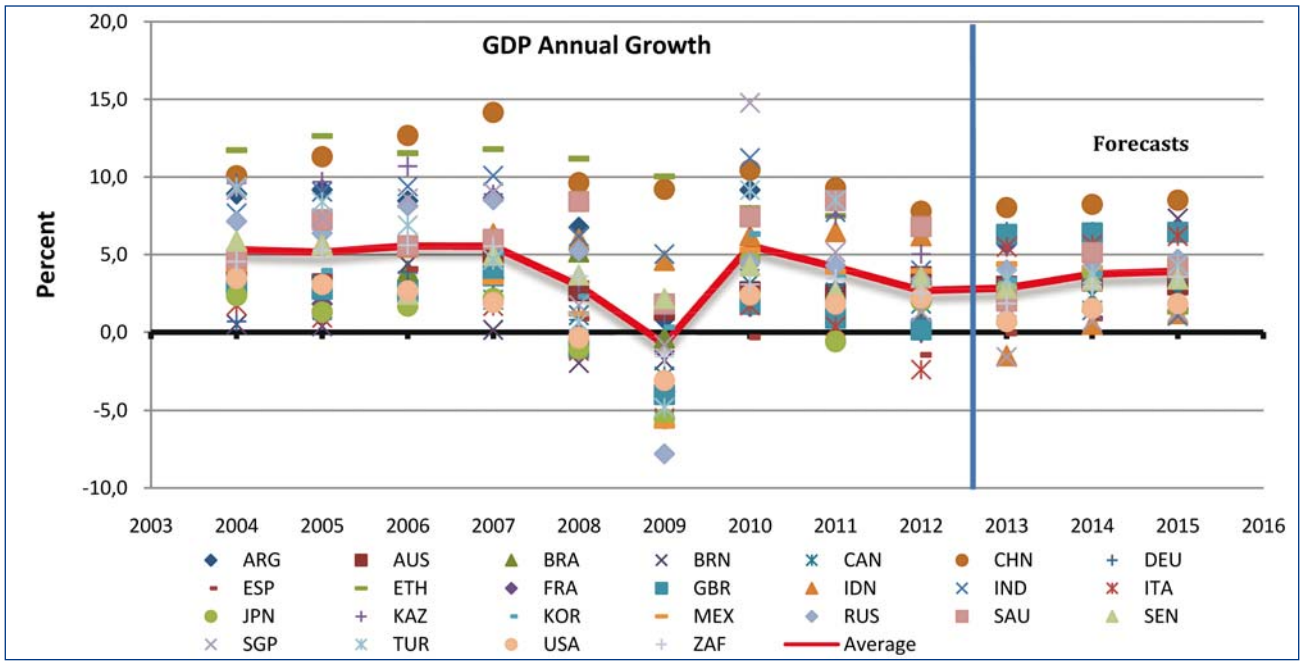
## 3.1. Economic developments, 2007–12

In 2007, turbulence in financial markets triggered a pronounced global slowdown. However, while advanced economies experienced a fall in output not seen since World War II, in emerging countries economic growth remained positive although appreciably slower (Figure 3). For most G20+ countries, the decline in output, as measured by GDP annual growth, started in 2008, although for some countries—such as Australia, Canada, the United States, the euro zone countries, Kazakhstan, Mexico, Russia, Turkey, Ethiopia, and Senegal—it had begun as early as 2005.

In 2009, the overall average growth rate for the G20+ became negative, but by 2010 growth had turned positive in all G20 countries except Spain. The recovery proceeded slowly, since many advanced economies and some emerging countries still faced important adjustments, including the need to make household balance sheets stronger, reduce high public debt, and implement financial sector reform (IMF 2010). In 2011, the global economy continued to be marked by weak and uneven recovery, further aggravated by a series of shocks, from the devastating earthquake and tsunami in Japan to the political unrest in some oil-producing countries, from the lack of rebound in private demand in the U.S. economy to the financial turbulence in the euro area (IMF 2011).

Overall, the global recovery followed the pattern of past recoveries, but while this recovery has been the weakest ever for advanced economies, it has been the strongest ever for emerging markets (IMF, WEO 2013). Moreover, while advanced economies were the engine of previous global recoveries, emerging markets account for the largest share of the current recovery. Indeed, although growth has picked up pace in some advanced economies—like the United States—overall in the developed world, the recovery has followed a W-shaped pattern (a “double dip”), whereby after the initial severe contraction, economic activity recovered temporarily in 2010 only to slow down again.

Figure 3. GDP Annual Growth




*Source: IMF 2013.*

## 3.2. Labor market trends, 2007–12

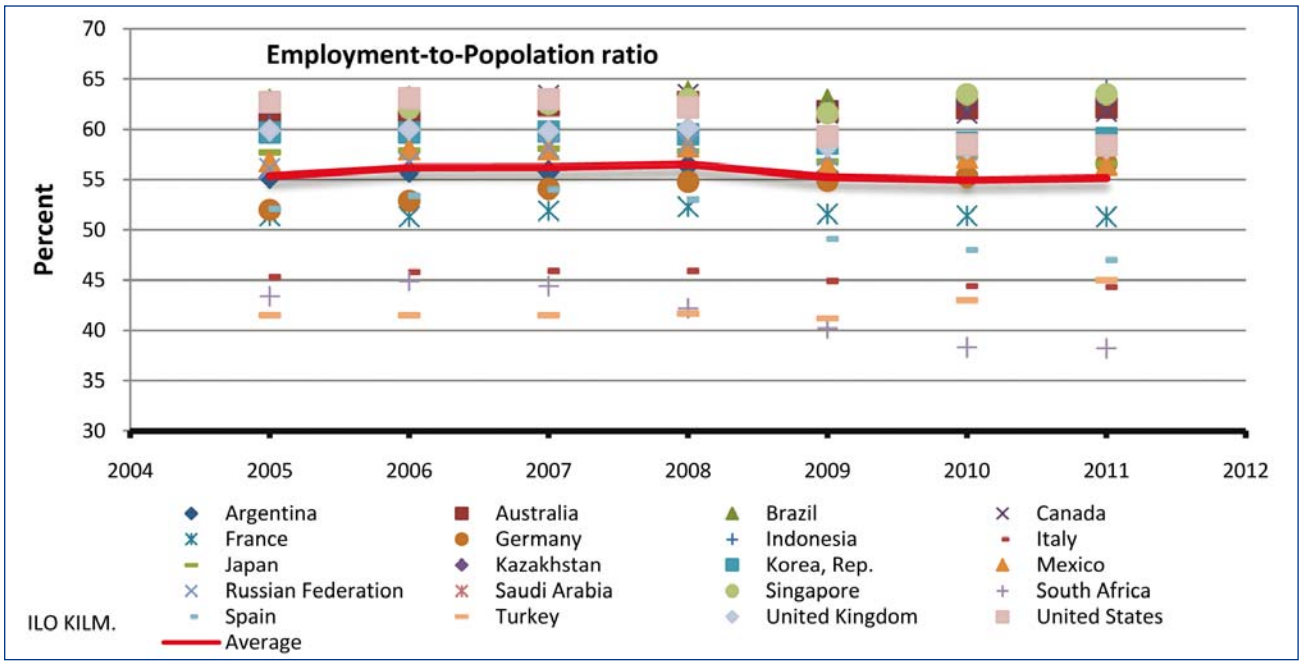
Employers adjust to economic shocks through quantitative and/or price changes in their demand for labor. Quantity adjustments can occur along the *intensive margin* (number of hours of work) or the extensive margin (number of employed). Price adjustments take place via changes in real wages and self-employment earnings.

Usually, both private and social costs are higher when adjustments are on the extensive margin, for both efficiency and equity reasons (ILO 2010). For firms, intensive adjustments can be implemented more rapidly and allow for workers to be retained in preparation for the recovery. For workers, even when unsubsidized, reductions in working hours are typically preferable to dismissal because they allow them to retain the employer-employee relationship and avoid the private and social cost of protracted unemployment. Sequences of outflows and inflows from and into employment induce losses in firm-specific human capital and productivity, which result in losses of both productivity and earnings and which could be avoided by adjustments in working hours (OECD 2009). For these reasons, adjustment along the extensive margin is typically only associated with a drastic drop in economic activity. The impacts of this type of adjustment are particularly severe in developing countries, where a large share of workers does not earn enough to move out of poverty, and for marginalized categories of workers—including immigrants and low-skilled workers—in advanced countries.

### Employment, unemployment, and inactivity

The sharp contraction in aggregate demand experienced in 2008–9 resulted in important job losses, and the weak economic recovery so far has not been enough for employment levels to recover and has made just a small dent in the unemployment hike. As shown in Figure 4, the average employment-to-population ratio in G20+ countries in 2011 was still well below its 2008 level, and the drop has been around 10 percent in South Africa and 6 percent in the United States.

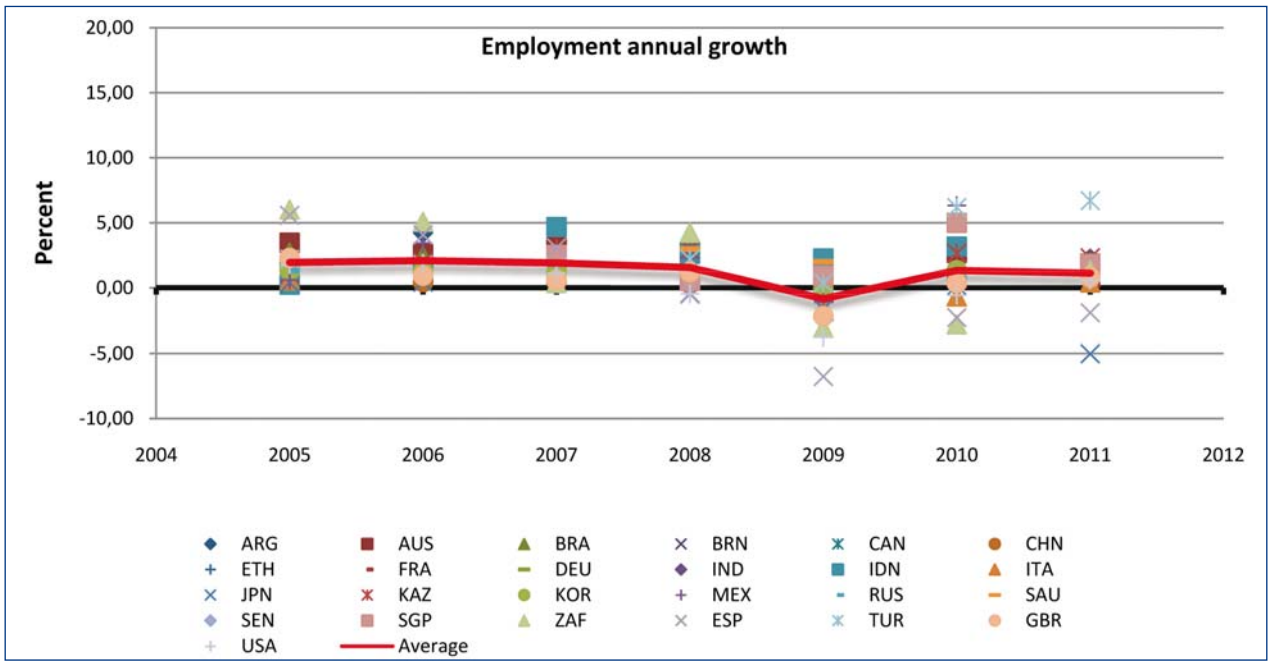
Figure 4. Employment-to-Population Ratio




Perhaps more importantly, the rate of growth in employment[8] —which had been stable at about 2 percent— started a slow decline in 2007 (Figure 5). On average in G20+ countries, employment grew at 1.9 percent in 2007, 1.6 percent in 2008, and actually declined in 2009. However, the extent of the impact varied considerably across countries. Job losses were particularly large, relative to the drop in output, in Spain, the United States, the United Kingdom, Canada and in the euro zone, with the exception of Germany.

By contrast, employment adjustments were virtually muted in Germany and Korea and, typically, employment did not decline in emerging economies, although it grew less than it had in previous years. Notable exceptions are Mexico, Russia, and South Africa. The OECD (2010) attributes the relatively weak adjustments of employment and unemployment in emerging economies to the weakness of their social protection systems, which forced workers to stay in employment, even if at a reduced income and often in the informal sector.

Figure 5. Employment Annual Growth

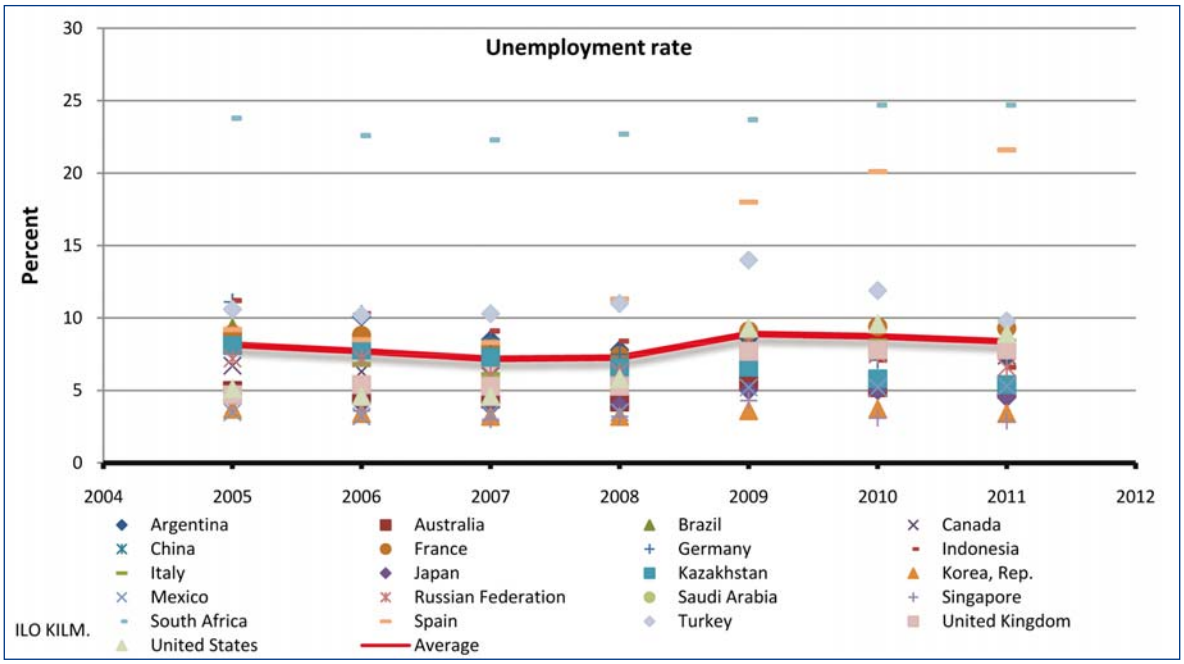



*Source: Estimates based on ILO KILM database.*

Overall in 2010, the year with the strongest economic recovery so far, the labor markets reacted quickly and employment rebounded by 2.4 points. The rebound was broad based, but its extent was very heterogeneous, with the countries that suffered the largest drop—Australia, Canada, Kazakhstan, Mexico, Russia, Spain, Turkey, and the United States—experiencing the largest employment growth. In 2011, employment growth slowed down again, especially in those countries that had experienced the fastest rebound—Australia, Indonesia, Japan, Kazakhstan, Mexico, and Singapore. Mexico appears to have been the most volatile country, with the rate of growth in employment declining by 3.4 points in 2009, rebounding fast in 2010 with a 7.4 point record, only to decrease again in 2011 by 5.7 points. The countries for which data are available show a persistent slowdown in employment growth in 2012, thus posing serious concerns for the recovery of labor markets[9].

Figure 6 shows that, as employment declined, unemployment soared in 2009. More importantly, whereas unemployment[10] had been in decline over the two years preceding the crisis, it quickly bounced up between 2007 and 2009, reaching an all-time high growth rate of over 26 percent for the G20+. The economic recovery of 2010 helped reduce the acceleration in the unemployment rate, but it reversed to its pace in 2011.

Figure 6. Unemployment Rate

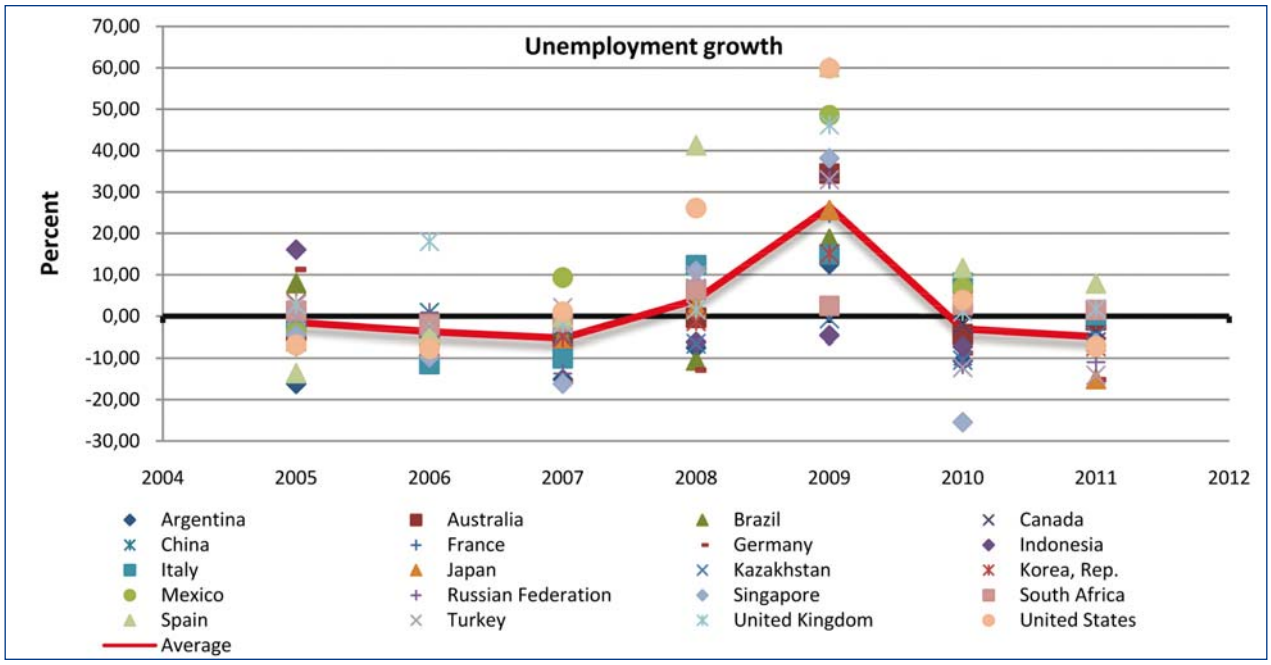



*Source: Estimates based on ILO KILM database.*

The trends in average unemployment growth rates also hide a large variation in country-level trends (Figure 7). Although unemployment grew virtually everywhere in 2009 – Indonesia and Kazakhstan are two exceptions – the growth was single-digit in countries such as Germany and South Africa , while other countries--including Argentina, Brazil, Italy and Korea – saw unemployment increase at rates of between 12 and 19 percent. Australia, Canada, France, Japan, Russia, and Turkey experienced growth rates in the range of 20 to 40 percent. In Mexico, Spain, the United Kingdom and the United States, unemployment growth rates were observed above 40 percent.

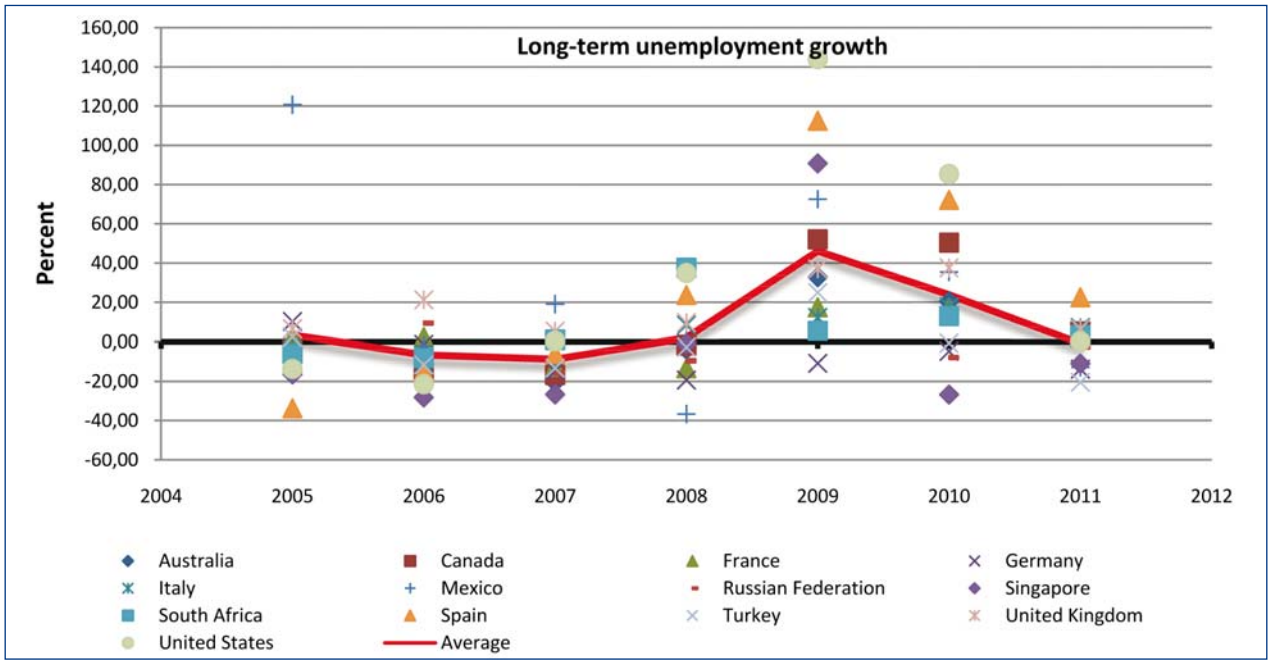
A major concern is the fact that the weak recovery and the exceptionally high growth in unemployment caused an increase in the incidence of *long-term unemployment*[11] which grew 46 percent in 2009 and continued to grow, although half as fast, the following year (Figure 7). Without a stronger recovery, long-term unemployment is likely to persist over time, transforming what was initially cyclical unemployment into structural unemployment. The detachment from the labor market that may result can have long-lasting negative effects at the micro and macro level: human capital deterioration, physical and mental health deterioration because of stigmatization and stress, compromised earnings potential for youth, and unutilized productive capacity.

Figure 7. Unemployment Annual Growth




*Source: Estimates based on ILO KILM database.*

Figure 8. Long-Term Unemployment Annual Growth

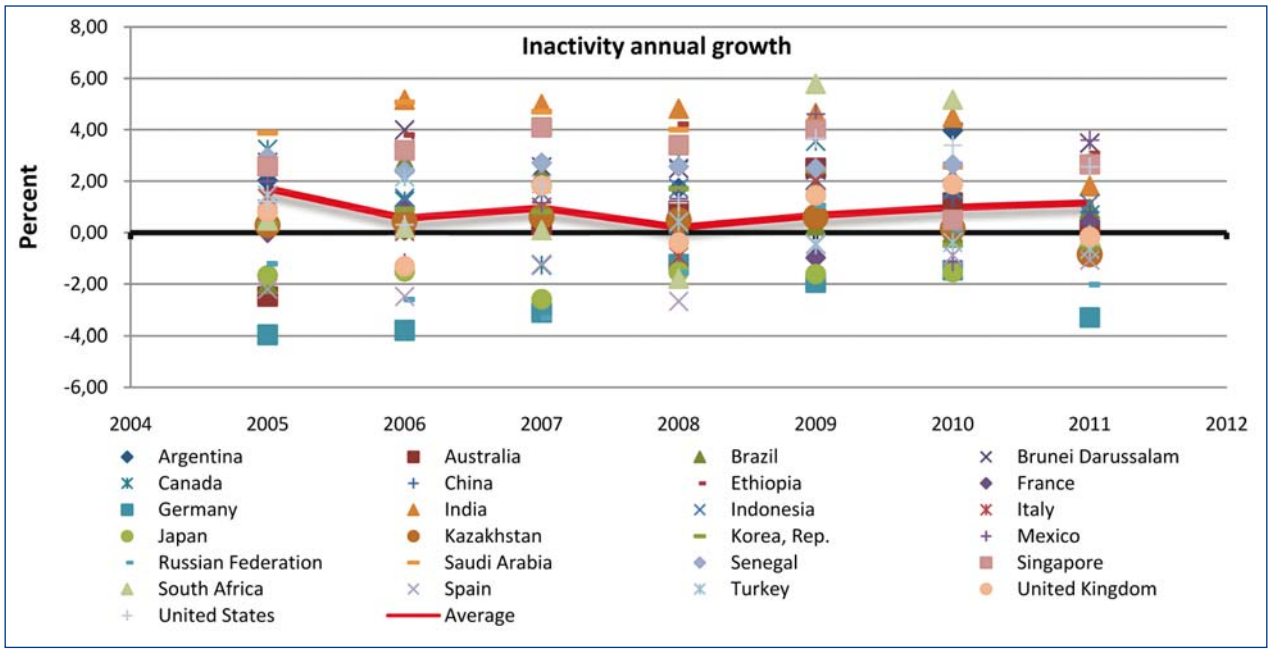



*Source: Estimates based on ILO KILM database.*

The recession created substantial labor market slack, not just in terms of unemployment, but also in terms of the number of persons outside the labor force, despite wanting a job, because they believed none were available. During economic downturns, there can be two mutually contradictory forces at play in terms of labor force participation. The so-called "discouraged-worker effect" implies that workers withdraw from the labor force because of lack of employment opportunities, thus reducing the impact of the crisis on unemployment, but not on underlying welfare. In contrast, the "added-worker effect" implies that additional workers enter the labor force to compensate for the loss of household income, thus magnifying the impact

of the crisis on unemployment. As shown in Figure 9, the trend toward higher labor force participation has been reversed in most G20+ countries. Since 2000, the growth rate of the inactive population had been slowing down and had become virtually zero in 2008. However, the inactivity rate grew again in 2010 and has continued to grow since.

Figure 9. Inactive Population Annual Growth



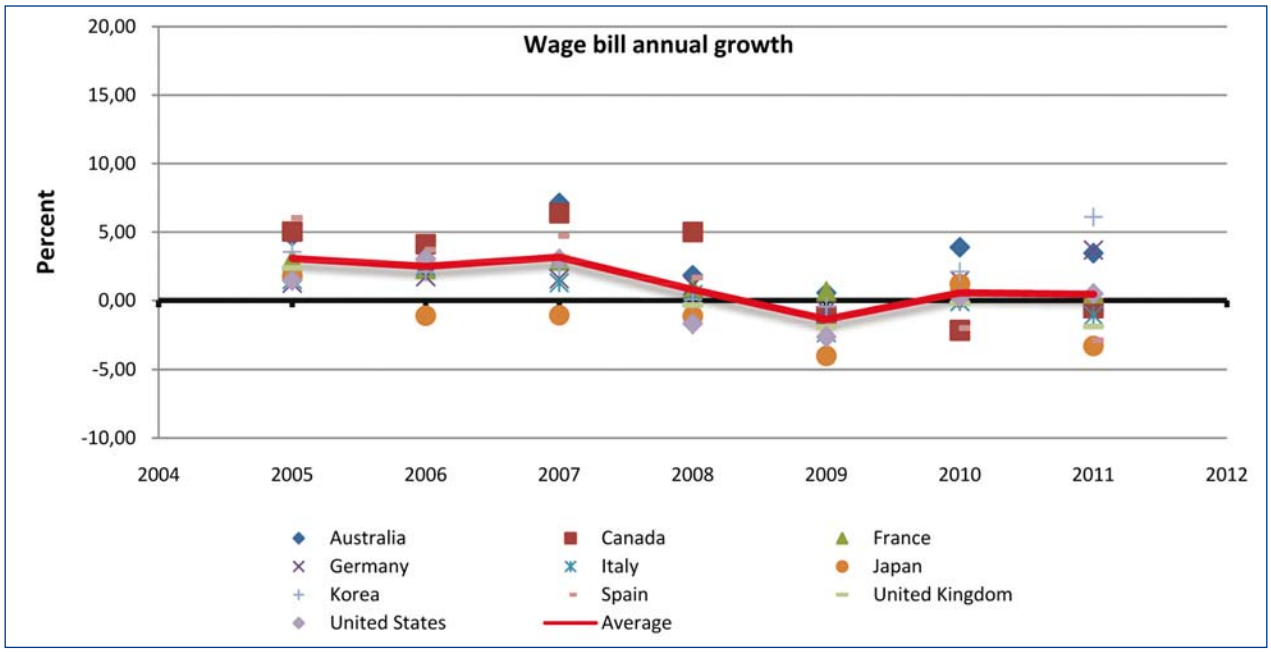

*Source: Estimates based on ILO KILM database.*

## The wage bill

The wage bill is the product of the number of people employed, the average annual hours worked per worker, and the average hourly wage. Because of the lack of data on wages for a substantial number of countries, analysis of the wage bill is limited to the countries for which wage information is available. The main source for data is the OECD statistical database, and the sample of countries is necessarily limited to OECD member states that are part of the G20: Australia, Canada, France, Germany, Italy, Japan, Korea, Spain, the United Kingdom, and the United States.

Figure 10 illustrates the annual growth of the wage bill. Similarly to what has been observed for employment, after a period of constant growth at 3 percent per year (2005–7), the growth of the wage bill began to slow down to 0.8 percent in 2008, and turned negative (-1.4 percent) in 2009. But by 2010, the wage bill had begun to grow again at 0.6 percent, and it maintained about the same rate of growth in 2011. It must also be noted that the adjustment to the wage bill was considerably smaller than that to GDP.

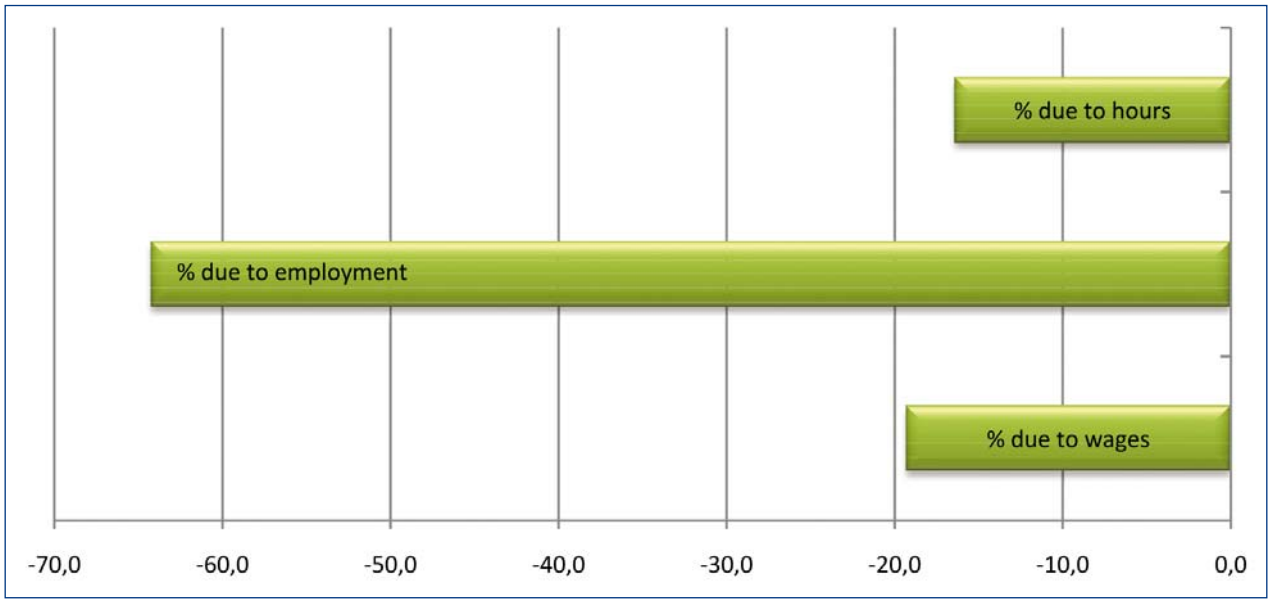
Figure 10. Wage Bill Annual Growth




*Source: Estimates using ILO KILM database and OECD.StatExtracts*

To better understand the main forces behind the decline in wage bill, Figure 11 decomposes the observed trend into changes in its different components. The bars in the graph reflect the relative importance of changes in each of the components in the overall changes in wage bill. Overall the adjustment was more on the extensive margin. The reduction in the number of jobs accounted for over 60 percent of the decline, while the reduction in wages and hours accounted for just over 15 percent.

Figure 11. Decomposition of Decline in Wage Bill Growth, 2007–9

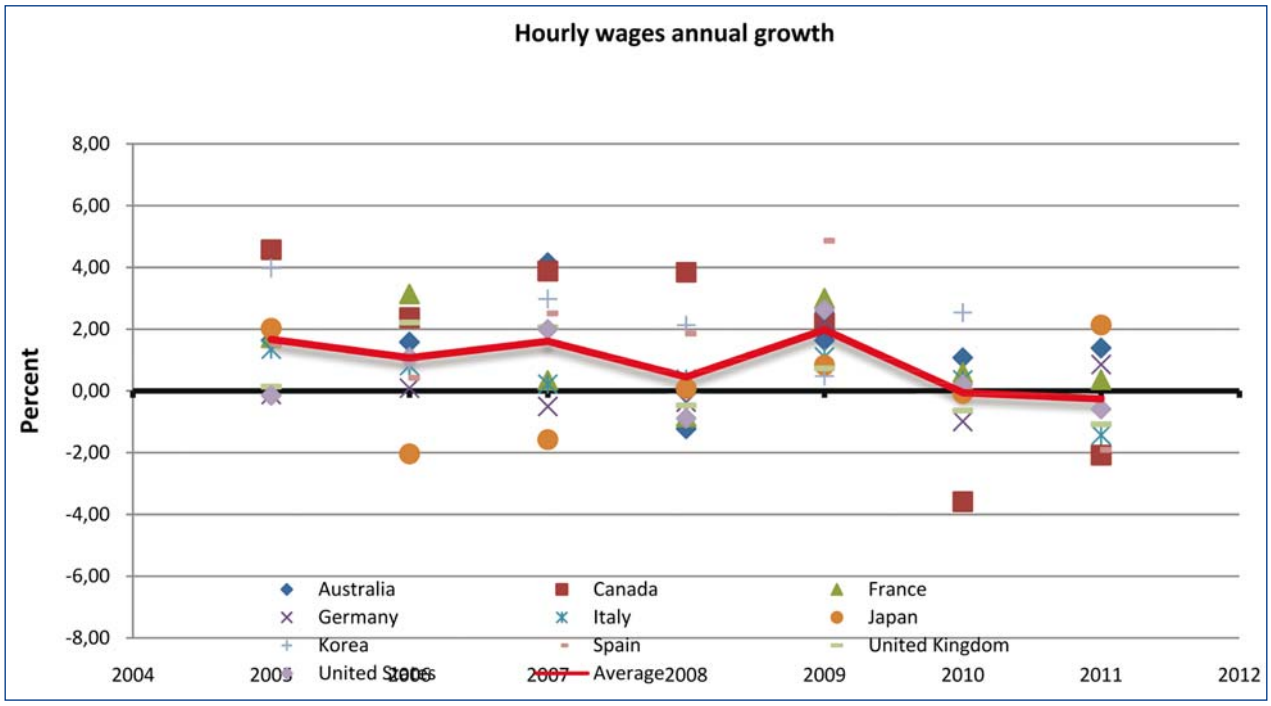



*Source: Authors' computation on IMF, OECD, and ILO KILM data.*

Real wages grew at an average rate of 1.4 percent between 2005 and 2007. The growth slowed to 0.5 percent in 2008, rebounded in 2009, and declined again in 2011. It is worth highlighting that the growth of hourly wages in nominal terms decreased substantially between 2007 and 2009 (), and the limited impact on real

wages growth is partly explained by the simultaneous slowdown in inflation () that prevented a steeper drop in the wage bill. After a drop in the rate of growth between 2007 and 2008 (-1.2 points), and contrary to what happened to employment, average wages recovered (+1.5 points) in 2009 only to slow down again in 2010.

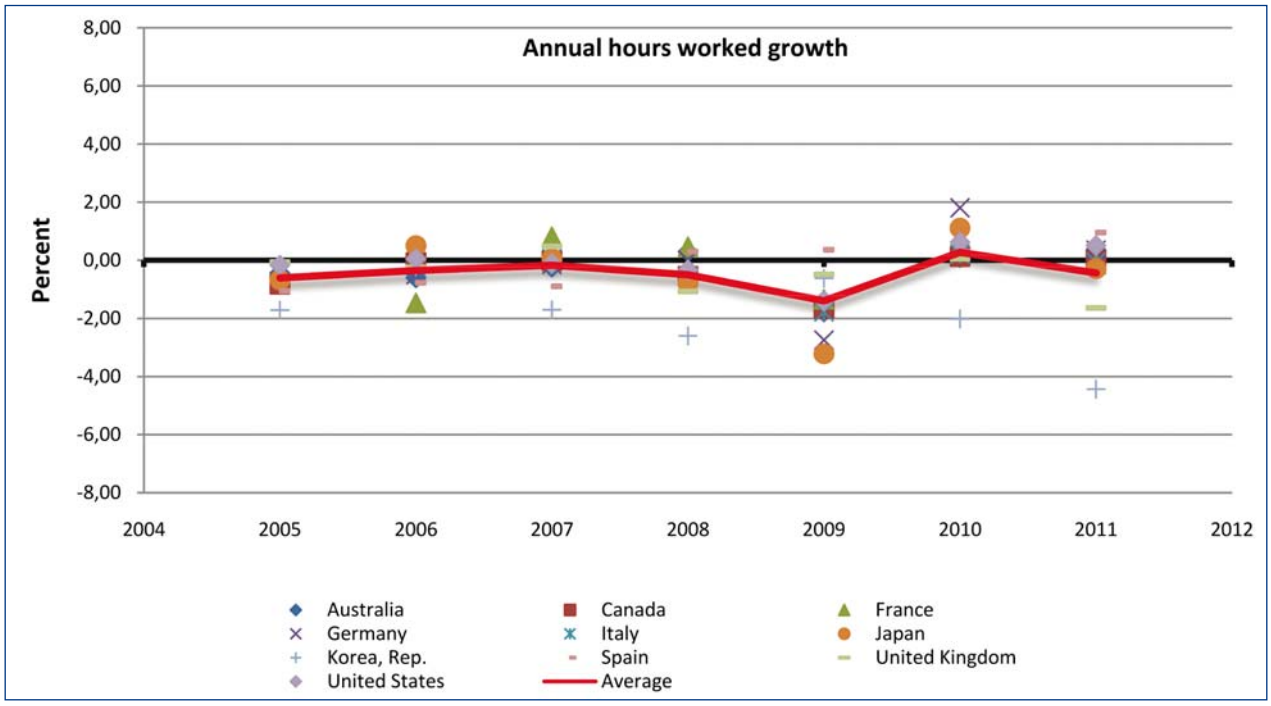
Figure 12. Hourly Real Wages Growth




*Source: Estimates using data from the ILO KILM database and OECD.StatExtracts.*

On the other hand, the average annual hours worked globally begun to decline well before the start of the crisis (Figure 13) and between 2007 and 2009 continued to decline by as much as 1 percentage point.

Figure 13. Annual Hours Worked Growth




*Source: Estimates using ILO KILM database.*

## Different impacts across vulnerable groups

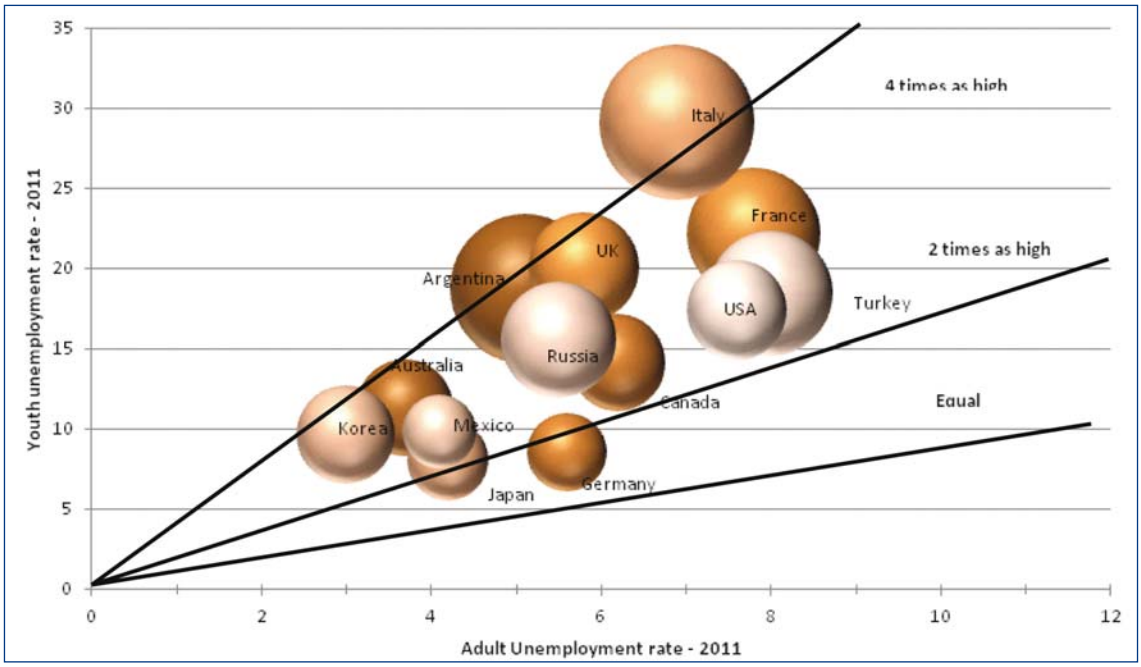
Broadly speaking, traditionally disadvantaged worker, such as youth, female, and low-skilled and temporary workers, are all likely to suffer most from economic shocks. It is therefore important to review the impact of fluctuations for each group of vulnerable workers in the G20.

### *Youth*

OECD (2009) estimated that the sensitivity of total hours worked to business cycle fluctuation for workers in the 15–24 age group is more than twice as high as for individuals in the 25–54 age group. About 90 percent of the adjustment in total hours for youth occurs through lower participation or lower employment, while only the remaining 10 percent occurs through a reduction of working hours (OECD 2009). This high sensitivity of youth employment to the business cycle is worrisome in countries where labor market adjustment took place on the extensive margin. For 2007–11, ILO (2010 2012) reports generalized upward trends for youth unemployment rates, which were particularly marked in Turkey, the United Kingdom, Spain, and the United States.

The growth rate of youth unemployment increased substantially during the crisis. It reached a record high of 18 percent in 2009, with an acceleration of almost 19 points between the rate of growth 2009 ( and ). Youth unemployment rate before the crisis (2005) was 4.6 points higher than the adult rate in Germany, and was between two times as high and four times as high the adult rate in Canada, France, Spain, Turkey, Japan, Russia, Mexico, and Australia. It was four times the adult unemployment rate or even higher in Italy, the United Kingdom, Korea, and Argentina. After the economic recession and a few years of weak recovery, the relative condition of youth in the labor market has not improved (Figure 14). Virtually all the countries are above the line representing the equality condition. Notwithstanding the fact that Germany saw an improvement in the unemployment rates of youth and adults, the relative condition of youth has deteriorated, as documented by the shift of the bubble indicating Germany toward the left-hand side of the plot. The majority of the countries that were between the equality line and the two times as high line are still found in the same plot area, but now they are shifted toward the upper-right corner of the plot, in other words, they recorded an increase in the unemployment rates of both youth and adults. Italy stands out as the worst-performing country in terms of youth-adult unemployment rates since it moved toward the upper-right corner of the graph and is now situated well above the four times as high line.

Figure 14. Youth and Adult Unemployment Rates, 2011




*Source: Estimates using ILO KILM database.*
*Note: Bubble size is proportional to the percentage points' difference between youth and adult unemployment rate in 2005. South Africa is excluded for visual purposes.*

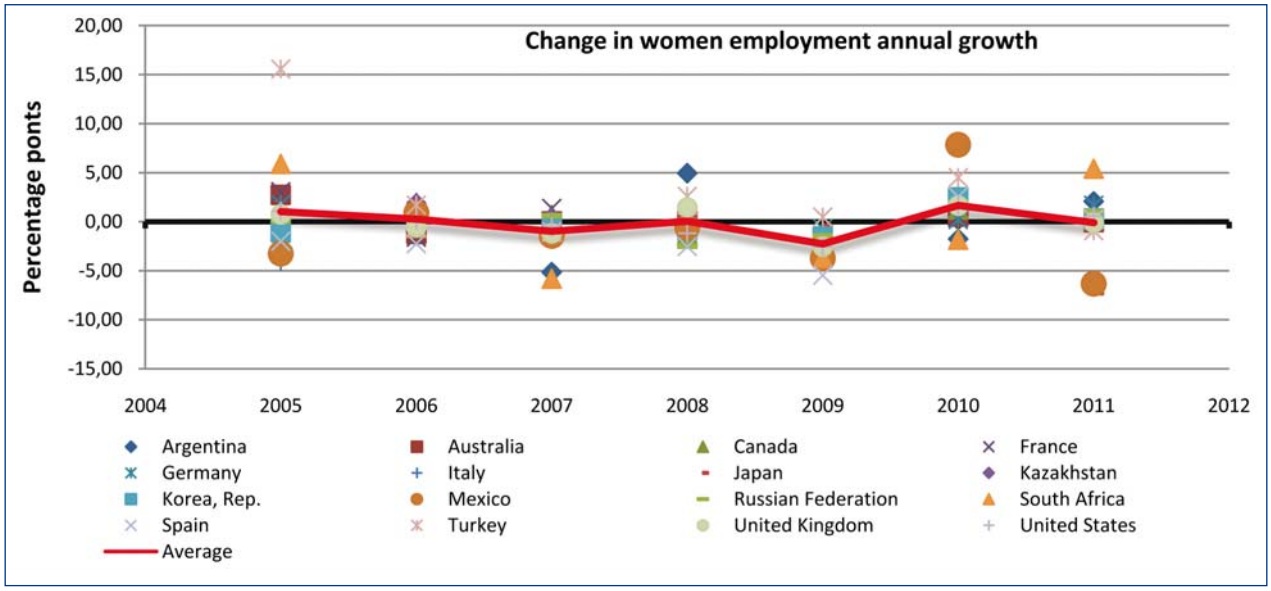
In countries experiencing adjustments mainly along the intensive margin, the crisis had a relatively small impact on youth unemployment during 2007–11 (with the exception of Italy, which experienced an increase in youth unemployment of over 5 percentage points; see ILO [2012]). However, the labor hoarding phenomenon exposed youth workers in these countries to underemployment and labor market slack (OECD 2010). In emerging economies, the situation is even starker. In general, these countries are not characterized by steady unemployment increases. In some cases the crisis brought about increasing youth employment rates (ILO 2012; OECD 2010). However, in countries such as Brazil and Mexico, the apparently stable employment conditions hide youth segregation into low pay and low quality jobs, mostly in the informal sector (OECD 2010; ILO 2012, 2013).

***Women***

Estimates by OECD (2010) suggest that the impact of the crisis has been more detrimental for men than for women, both in developed and developing economies.

For women, the employment annual growth rate from 1.9 percent in 2008 turned negative to -0.4 percent in 2009, compared to the men's rate of 1.2 in 2008 to -2.2 in 2009 ( and ). Also, the change in the rate of growth was especially larger among men, with an average change of -3.4 points at the crisis peak, compared with a change of -2.3 points among women.

Figure 15. Change in Employment Annual Growth for Women

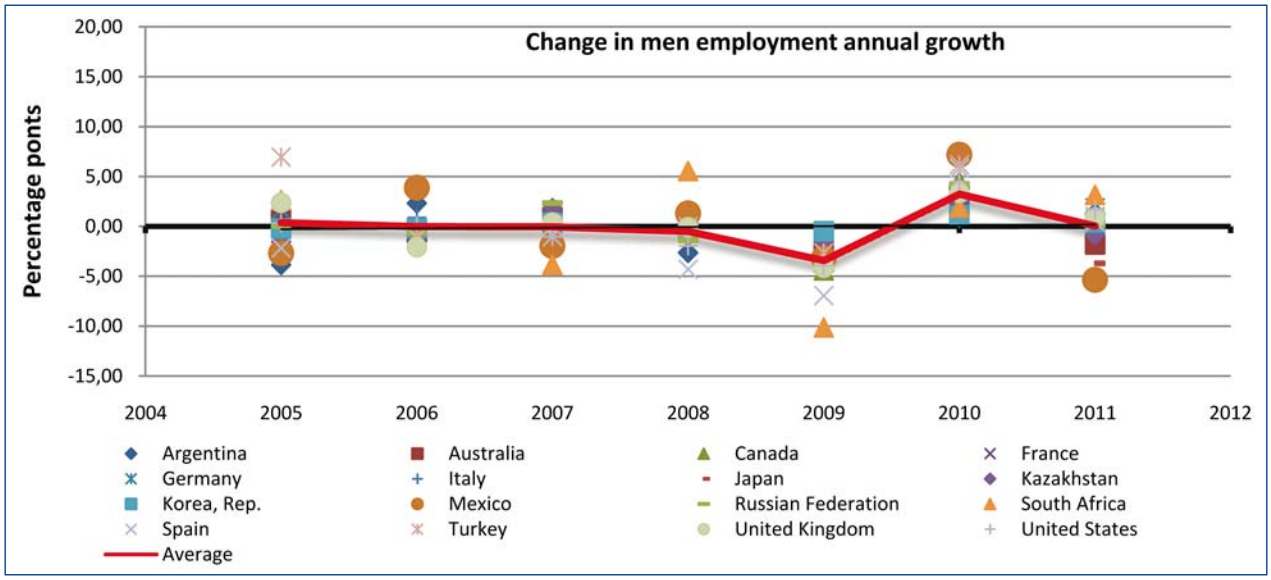



*Source: Estimates using ILO KILM database.*

For developed countries directly hit by the financial crisis, such as the United States, Canada and Spain, the crisis mainly affected sectors characterized by a higher intensity of male employment (for example, construction, manufacturing, real estate, and business activities), leading to employment rates falling faster for men than for women (ILO 2010).

In countries (particularly EU countries) experiencing stagnation in exports, there is little difference in how women and men were affected in terms of unemployment rates. However, probably due to adjustments on the intensive margin, these countries experienced an asymmetric effect on wages, which in some cases led to a reduction of the gender wage gap (United Nations 2013).

Figure 16. Change in Employment Annual Growth for Men




*Source: Estimates using ILO KILM database.*

The crisis also was relatively less detrimental to women in emerging countries. During a downturn, women are often forced to turn to home-based subcontracting activities, work in microenterprises, or other forms of nonregular work that are very poorly paid and lack nonwage benefits (United Nations 2013). However, reduced household earnings may also lead to a rise in the number of women entering the labor market, especially in rural areas. This second aspect supports the fact that overall activity and unemployment rates during the recent crisis were largely unaffected (Khanna, Newhouse, and Paci 2011).

***Elderly***

The OECD (2009) estimated that the sensitivity of total hours worked to business cycle fluctuation for workers aged 65+ is 20 percent higher than for prime-age workers in developed countries. In the case of the elderly, over 70 percent of the adjustment in total hours occurs through lower participation, possibly reflecting labor force exits via early retirement during recessions. A reduction of working hours accounts for about 20 percent, while adjustment through lower employment is only residual (OECD 2009).

This reduced tendency to adjust over the extensive margin may explain why—in marked contrast to the situation for youth—for 2007–11, ILO (2010, 2012) reports a generalized upward trends for elderly employment and participation rates. The employment rates for older workers rose on average by nearly 2 percent in OECD countries. Increases in participation rates were particularly pronounced in countries that adjusted either on the extensive margin (for example, 1.7 percentage points in Spain) or the intensive margin (for example, 2.5 percentage points in Germany). This is a significant departure from past recessions where employment and participation of older workers were about as cyclical as overall employment/participation. This novel development may reflect, at least in part, a reaction to sometimes large losses in retirement savings as well as the lesser availability of early retirement options in national pension and social protection systems as a result of the financial crisis.

Also in emerging economies, the impact of the crisis on older workers was relatively limited when compared to other disadvantaged work categories such as youth or women. For example, in the case of Brazil and Mexico, OECD (2010) finds that the expected increase in the risk of job loss among formally employed elderly is more than three times smaller than that of formally employed youth.

***Low-skilled and temporary workers***

During the recent downturn, the labor market prospects for low-skilled and temporary workers were very similar to those of youth. As a matter of fact, in both developed and developing economies, youth workers are often segregated into low-skilled occupations and employed with temporary contracts.

The OECD (2009) shows that the sensitivity of total hours worked to the business cycle decreases with both educational attainment and contract length. In developed countries, these factors proxy the size of the firm-specific skills that would be lost by workers' layoffs. For this reason, adjustments on the extensive margin were extremely high in sectors with a high concentration of low-skilled workers (for example, construction and manufacturing) and in countries characterized by either a low degree of employment protection (such as the United States and Canada) or dual labor markets (Spain). On the other side of the spectrum, OECD (2010) reports that labor hoarding prevailed in countries with strong workers' protection (such as Germany, France, and Italy), which is particularly pronounced in technology-intensive sectors and for high-skilled workers.

For youth, low-skilled workers in emerging economies did not experience steady unemployment increases. Also for the low-skilled youth, however, the apparently stable employment conditions hide deteriorating working conditions, migration from the formal to the informal sector, and segregation into low pay (ILO 2010, 2012).

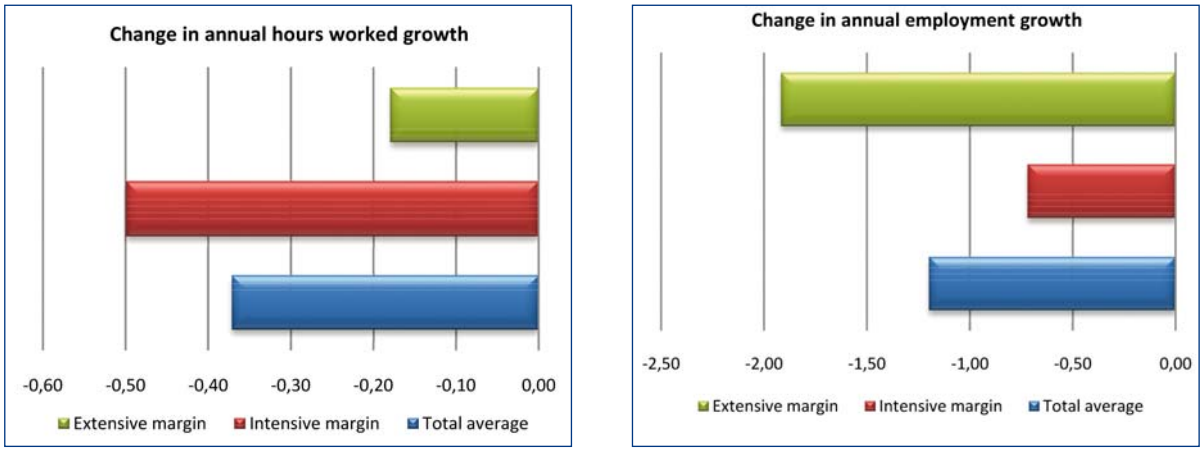
## 3.3. Adjustment paths across countries

Average trends across the G20 countries say little about the heterogeneity of the impact across countries (Figure 17). However, there are two clusters of countries for which there is complete information on employment, hours worked and wages, and that are characterized by different labor market responses.

The first group includes the United States, the United Kingdom, Spain and Canada, which all experienced adjustments along the extensive margin and had large unemployment increases between 2007 and 2010. In these countries, the recession was perceived as a structural decline in the relative size of the construction sector and induced employers to shed labor as a response to the deteriorating business conditions. This process of job destruction was favored because of the lack of restrictions to prevent the firing of workers and, in Spain, by the widespread use of temporary contracts.

In Australia, Korea, Japan, Italy, France and Germany, the economic downturn induced a relatively bigger adjustment through a reduction in average hours per worker (intensive margin adjustment). This adjustment, as well as the relatively strict levels of employment protection that characterize some of these countries, in turn limited the process of job destruction and favored labor hoarding.

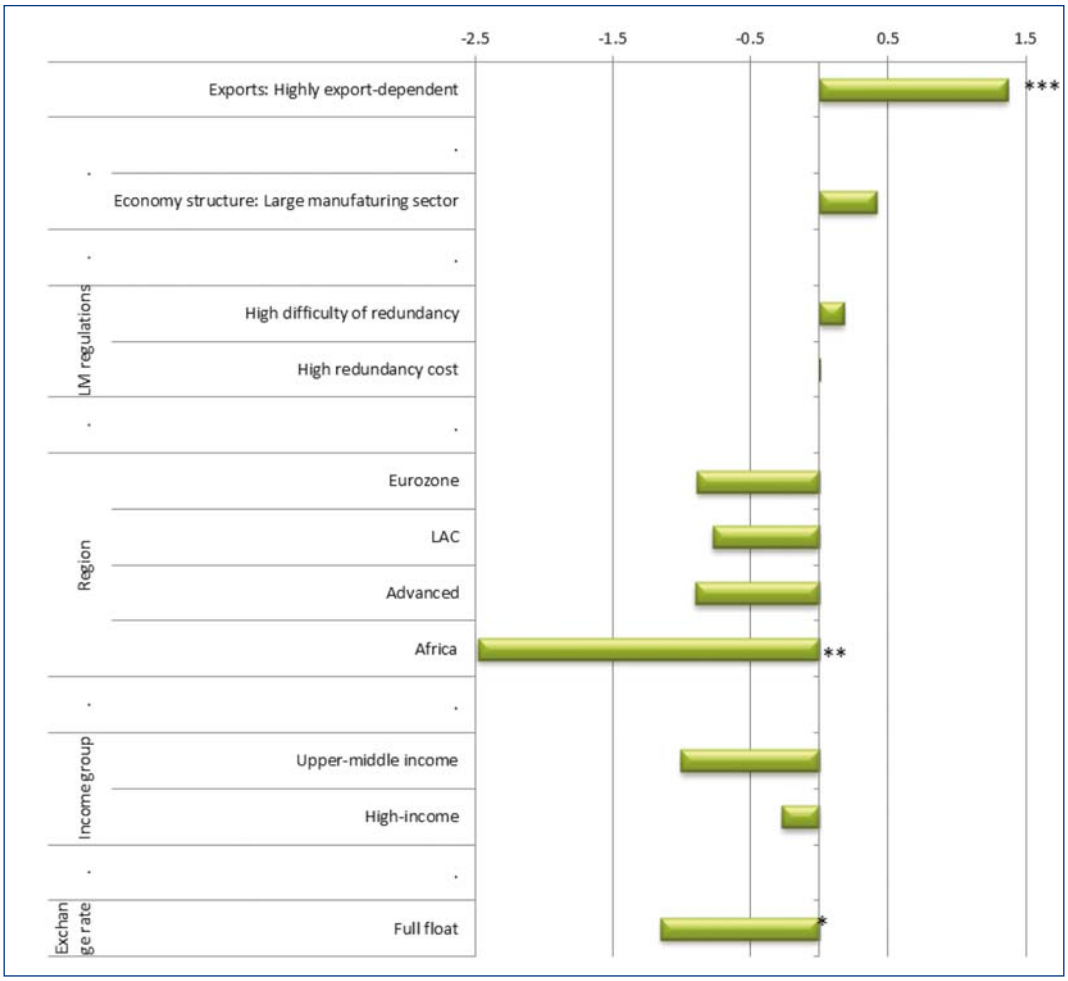
Figure 17. Average Change in Annual Hours Worked and Employment Growth by G20




To investigate the determinants of the cross-country heterogeneity in putput this study uses some indicators of countries' characteristics to capture structural differences in the economy and labor market institutions using a regression analysis. The factors include the size of the manufacturing and export sector, the level of labor regulation, exchange rate regimes, region, and level of per capita GDP. Countries are classified as high manufacturing, high export, difficult to fire[14], or high firing cost[15] based on whether the relative indicator has above the cross-country median.

Figure 18 shows the main factors affecting the changes in employment growth[16]. The point estimates indicate that the labor markets of countries with larger export sectors reacted with larger employment losses. Countries in all regions adjusted relatively more on the extensive margin than the Asian countries, although the only statistically significant coefficient is the one attached to the Africa region. Also, countries with a full float exchange rate regime were more able to maintain previous trends in employment than countries with a managed float exchange rate regime.

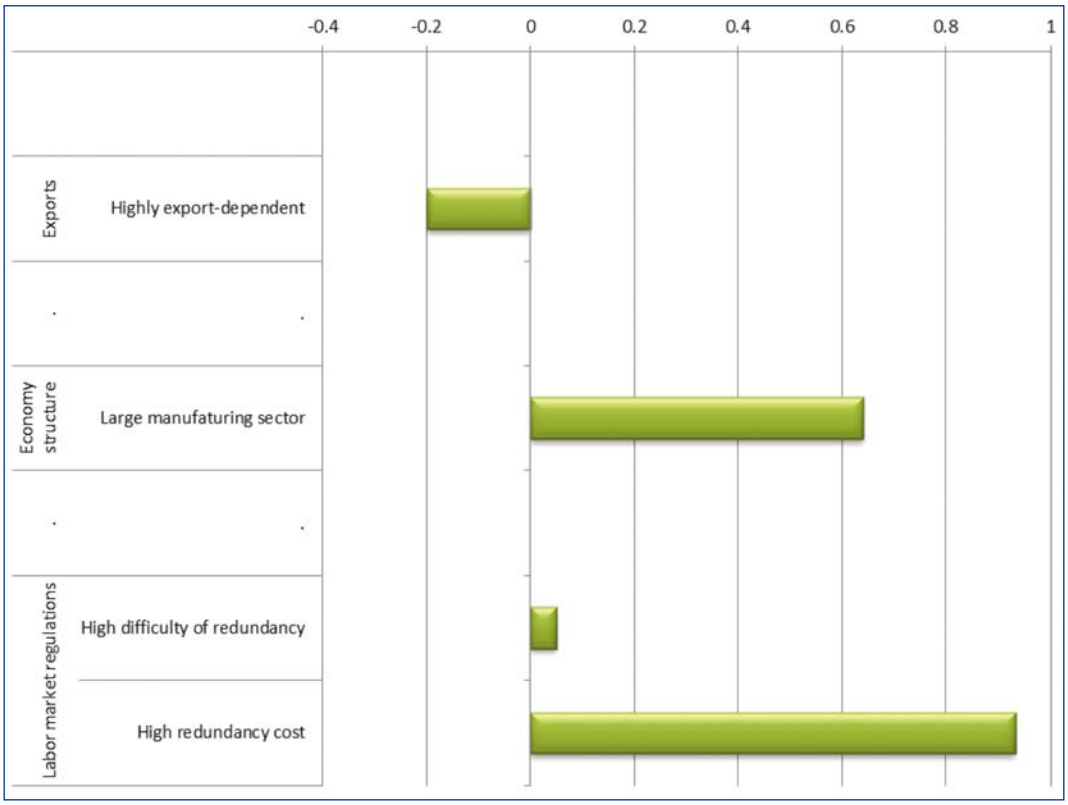
Figure 18. Estimated Employment Elasticity by Country Characteristics




*Note: the reference categories are low export-dependent, small manufacturing sector, low difficulty of redundancy, low redundancy cost, Asia, lower middle-income, managed float.*
*Source: Authors' computation on IMF and ILO KILM data.*

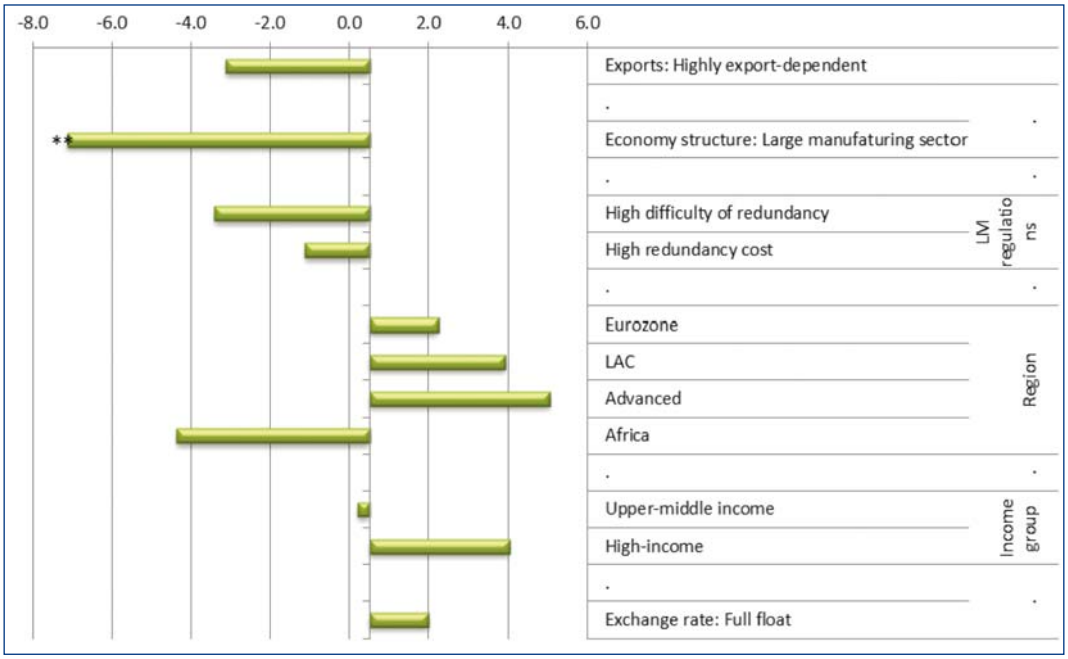
Among the subset of countries for which there is information about earnings, country characteristics do not appear to be statistically significantly correlated with the changes in earnings growth after controlling for changes in GDP growth (Figure 19). Using the same methodology, Figure 20 shows that after controlling for the size of the shock, unemployment increases were smaller in countries with a larger manufacturing sector.

Figure 19. Estimated Impact of the Crisis on Changes in Earnings Growth by Country Characteristics




*Note: the reference categories are low export-dependent, small manufacturing sector, low difficulty of redundancy, low redundancy cost, Asia, lower middle-income, managed float.*
*Source: Authors' computation on IMF and ILO KILM data.*

Figure 20. Estimated Impact of the Crisis on Changes in Unemployment Growth




*Note: the reference categories are low export-dependent, small manufacturing sector, low difficulty of redundancy, low redundancy cost, Asia, lower middle-income, managed float.*
*Source: Authors' computation on IMF and ILO KILM data.*

## 3.4. Conclusions

Recent years have seen major economic contraction in the advanced G20 countries and the falling global demand for goods and services has transmitted the slowdown to emerging countries. Whereas some of the large emerging economies—including Brazil, Mexico, Russia, Turkey, and South Africa—saw their output contract between 2008 and 2009, most of the emerging economies were affected through a slowdown rather than outright halt of economic growth. Because the economic troubles were imported from abroad, policy adjustments through currency devaluations and high inflation were not possible.

The poor economic performance had significant effects on labor markets in most countries. Broadly speaking, this paper identifies two groups of countries, each group characterized by different labor market adjustment mechanisms. The first group consists of countries that experienced adjustments on the extensive margin, that is, marked unemployment increases, job destruction, and labor shedding between 2007 and 2010. In the second group, countries experienced adjustments on the intensive margin; instead of striking job losses and rising unemployment, they saw reductions in the number of hours worked per employed person, with declining per worker productivity.

The impact of the slowdown did not affect all workers to the same extent. For example, the crisis impacted men relatively more than women because of the sector profile of the recession and prevailing occupational segregation. Youth, who were already disadvantaged with respect to adults before the crisis, faced even more difficulties in entering the labor market in the aftermath of the crisis. The growth rate of the long-term unemployed accelerated during the crisis and its share increased. As discussed in chapter 2, these outcomes potentially can have long-lasting negative effects both at the micro and macro level.

# 4. RECENT EXPERIENCE WITH LABOR MARKET POLICIES IN G20 COUNTRIES

The G20 countries responded actively to the economic turmoil of the last five years implementing a combination of structural reforms and targeted labor market interventions. Typically the responses differed across developed and emerging countries in a number of ways. Most significantly, and in contrast to past recessions, most developed economies did not use countercyclical fiscal policies while emerging economies increased public expenditure to support aggregate demand and maintain living standards.

This chapter reviews the policies implemented by different G20 countries, establishes communalities, evaluates the extent to which selection of policies was consistent with the country specificity of the shock and, as far as possible provides early evidence of impact.

Although it is still too early to evaluate the relative effectiveness of the different responses in a rigorous way, the emerging evidence confirms the conclusions of chapter 2. In particular it is clear that (i) it pays to be prepared and act quickly, even with limited information, (ii) packages of policies are more effective than single interventions and (iii) there is not a one-size-fits-all package of effective interventions, but rather the policy selection needs to respect country's prevailing labor market conditions, needs and/or development priorities/strategies.

## 4.1. Policy relevant typology of G20 countries

As seen in the previous chapter, the recent economic crisis had an asymmetric impact on earnings and employment prospects of workers in G20 countries, with the adjustment being predominantly on the extensive margin for some countries and on the intensive for others. Chapter 2 highlights how the policy options adopted should differ to reflect differences in the adjustment mechanism. It also suggests that the package selected should reflect systematic differences in preexisting labor market conditions and institutions as well as the characteristics of the economic shock.

Chapter 3 goes into some details to describe the way in which the recent economic turmoil differed from previous downturns. First, the comprehensive set of reforms implemented during the past two decades allowed developed economies to enter the downturn with relatively high employment rates and flexible labor markets (OECD 2009). Second, the emerging economies—and some of the others—had considerable fiscal space. Third, the economic shock downturn had a marked sectoral dimension compared with past downturns. In countries where the property price bubble burst (for example, Spain, the United States, and the United Kingdom), the crisis has been financial in nature and initially hit primarily the construction sector, spreading later to manufacturing and business services (OECD 2009). Conversely, in other countries, the shock has been driven mostly by negative demand shocks hitting the tradable sectors and resulting in a big drop in exports (OECD 2009; IMF 2009). Finally, the downturn was weaker in emerging economies than in developed countries and primarily triggered by the multilevel links with developed economies rather than by domestic imbalances (OECD 2010). This chapter focusses on the other two elements of importance in determining policy responses: the type of impact and the pre-existing labor market conditions.

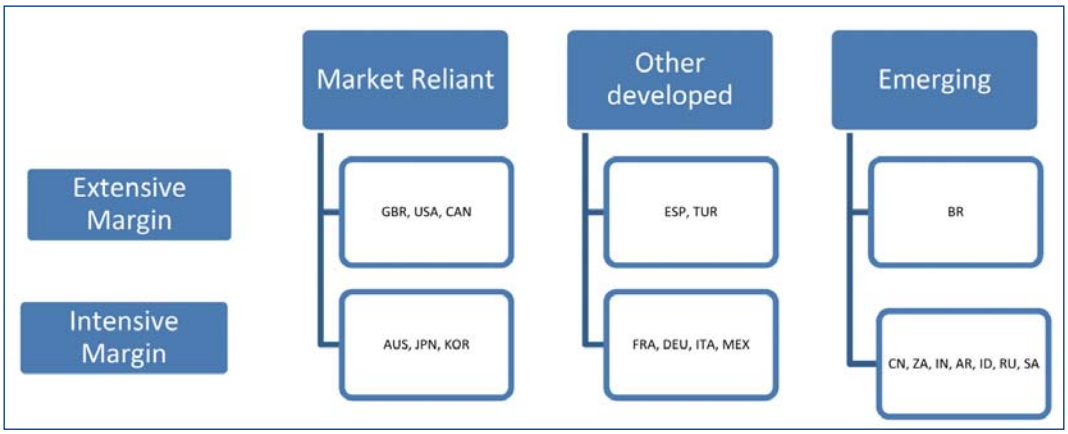
To this purpose we group G20 countries according to a dual classification which combines a taxonomy of countries according to the prevailing labor market conditions with one reflecting the impact of the shock. The first categorization, based on the taxonomy introduced by the OECD Job Strategy (see also OECD [2009]), distinguishes between:

- *Market-reliant countries*: countries with history of good aggregate employment performance, despite limited use of welfare benefits, active labor policies, and light regulation,
- *Other successful countries*: have in place a mix of strong work incentives, generous welfare protection, well-designed regulation and good labor market performance,

- *Other OECD countries*: have traditionally relied heavily on passive and active labor market policies, without any significant improvement in labor market performance,
- *Emerging economies*: derived as a residual category.

The second distinction is that between countries where the labor market adjustment was on the extensive versus the intensive margin. Figure 21 gives the details of the country groping according to these taxonomies. The category '*Other successful countries*' is omitted because it does not include any G20 countries[17].

Intensive margin adjustments were twice more common amongst G20 countries than adjustments on the extensive margin and were by far the most common amongst emerging economies. The only market-reliant countries that adjusted on the intensive margin were Australia, Korea, and Japan. However, the impact of the crisis in Australia was rather small compared to countries such as the United States, the United Kingdom, or Canada. Moreover, the inclusion of Japan, and particularly Korea, in the group of market-reliant countries is somewhat disputed due to the exceptionally high growth in GDP per capita experienced during the period in question (OECD 2007). By contrast half of the six countries with extensive margin adjustments are market reliant and, according to the OECD (2012) have comparatively resilient labor market and strong institutions. This suggests that recent sharp increases in unemployment are unless likely to be long in these countries (see, for example, OECD [2009] and Bassanini and Duval [2006]).




*Source: Authors' compilation*

## 4.2. Commitment to structural reforms in the G20

The joint ILO, World Bank, OECD, and IMF (2012) report, "Boosting Jobs and Living Standards in G20 Countries," contains a detailed summary of the structural policy commitments of G20 countries. The report distinguishes three policy domains: (i) policies aimed at boosting labor demand through stronger competition and better investment and fiscal incentives; (ii) policies aimed at breaking the persistence of high unemployment and labor market duality; and (iii) policies aimed at fostering labor force participation. Table 1 reports on the implementation over the last five years of structural reforms by G20 countries, grouped accordingly to the taxonomies above.

The most striking result is the strong commitment across all G20 countries to enact policies that increase competition, ease regulatory barriers, and reduce the tax burden on labor. Although in some countries—noticeably the United States, United Kingdom, and Canada--the bulk of product market reforms have already been carried out, the recent economic downturn provided a stimulus to introduce measures aimed at increasing competition in sectors particularly hit by the crisis—network industries, professional services, and retail trade (Conway and Nicoletti 2006). It also helped to catalyze foreign direct investment (FDI) inflows and new start-ups. Table 1 also shows that measures to facilitate FDI inflows were also widely adopted in emerging economies.

**Table 1. Structural Policy Commitments by Country Typologies**

| Countries | Policy commitments | | |
|---|---|---|---|
| | 1. Increasing labor demand | 2. Breaking unemployment and labor market duality | 3. Social insurance and labor force participation |
| Market-reliant countries that adjusted on the extensive margin | | | |
| United Kingdom | Ease regulatory barriers to entrepreneurship | | |
| United States | -- | -- | -- |
| Canada | Strengthen competition, ease regulatory barriers to entrepreneurship and FDI, shift the tax burden away from labor to consumption and property | | |
| Market-reliant countries that adjusted on the intensive margin | | | |
| Australia | Strengthen competition, ease regulatory barriers to entrepreneurship, shift the tax burden away from labor to consumption and property | | |
| Japan | Ease regulatory barriers to FDI | | Financial incentives to work |
| Korea, Rep. of | Ease regulatory barriers to entrepreneurship, shift the tax burden from labor to consumption and property | Reform wage bargaining | Financial incentives to work |
| Other developed countries that adjusted on the extensive margin | | | |
| Spain | Strengthen competition, ease regulatory barriers to entrepreneurship and FDI | Reduce the minimum cost of labor relative to average cost, reform wage bargaining | |
| Turkey | Strengthen competition | Reform employment protection | Reduce financial disincentives to work |
| Other developed countries that adjusted on the intensive margin | | | |
| France | Strengthen competition, ease regulatory barriers to FDI, shift the tax burden away from labor to consumption and property | Reform wage bargaining and employment protection legislation | Reduce financial disincentives to work |
| Germany | Strengthen competition | | Reduce financial disincentives to work |
| Italy | Strengthen competition, ease regulatory barriers to entrepreneurship | Beef up training and job-search assistance, reform wage bargaining, employment protection legislation | Extend coverage of unemployment insurance and reduce financial disincentives to work |

| | | | |
|---|---|---|---|
| Mexico | Strengthen competition, ease regulatory barriers to entrepreneurship and FDI, shift the tax burden away from labor to consumption and property | Reform wage bargaining | |
| Emerging countries that adjusted on the extensive margin | | | |
| Brazi | Ease regulatory barriers to entrepreneurship, shift the burden away from labor to consumption and property | | |
| Emerging countries that adjusted on the intensive margin | | | |
| China | Strengthen competition, ease regulatory barriers to FDI, shift the tax burden away from labor to consumption and property | | Extend coverage of unemployment insurance |
| South Africa | Strengthen competition, ease regulatory barriers to FDI, shift the tax burden away from labor to consumption and property | Reform wage bargaining | |
| India | Ease regulatory barriers to FDI, shift the tax burden away from labor to consumption and property | | |
| Argentina | Ease regulatory barriers to FDI, shift the tax burden away from labor to consumption and property | | |
| Indonesia | Ease regulatory barriers to FDI, shift the tax burden away from labor to consumption and property | | |
| Russian Federation | Shift the tax burden away from labor to consumption and property | | Reduce financial disincentives to work |
| Saudi Arabia | -- | -- | -- |

*Source: ILO et al. (2012); OECD (2013).*

By contrast, commitments to reform labor market institutions emerge only in developed countries and are relatively stronger for countries adjusting along the intensive margin. Highly regulated EU countries—such as Italy and France—but also Korea and Mexico undertook to reform collective bargaining institutions and ease employment protection legislation. In the group of countries adjusting on the extensive margin, a similar commitment emerges for heavily regulated countries such as Turkey and Spain. In order to increase the responsiveness of wages to labor market conditions and mitigate the impact of labor market duality, Spain committed to reducing the minimum cost of labor relative to the average cost and to reforming collective bargaining institutions. Turkey committed to reducing employment protection legislation (OECD 2009, 2010).

It is not surprising that market-reliant countries that adjusted on the extensive margin do not express any commitment in this direction, as they are already characterized by relatively flexible labor market institutions (see, for example, Arpaia and Mourre 2012). On the other hand, the lack of commitment to labor market reforms in the emerging economies is likely to be more linked to the high incidence of informality and the poorly developed industrial relations system (G20 2012; OECD 2012).

According to the conclusions of Chapter 2, some commitment to increase the degree of social insurance and social assistance emerges amongst the countries with intensive margin adjustment and particularly amongst the developed economies. Table 2 shows that only Italy and China committed to extend coverage

of social safety net and unemployment insurance schemes. Other countries—such as Germany, Italy, Japan, Korea, and Turkey—committed to reducing the financial disincentives to work through reforms of the retirement system, disability schemes, and others (G20 2012; OECD 2011).

## 4.3. Evaluation of policy interventions

Table 3 reports the set of measures that were actually implemented in 2009–12 for each G20 country. This section addresses (i) whether the policies actually implemented are consistent with the commitments taken by G20 countries and (ii) if the policies implemented respond to the countries' needs, identified by the policy evaluation literature and summarized in Chapter 2 (see, for example, Paci, Revenga, and Rijkers [2010])[18].

### Policy responses to the economic crisis

Commitments to reform labor market institutions were fulfilled by some of the OECD countries that did not perform well in the past in terms of unemployment, regardless of the type of labor market adjustment. For example, Spain introduced major employment protection legislation reforms aimed at reducing severance payments on permanent contracts and facilitated company-level agreements over any other negotiation level on issues such as wages and distribution of working time. Turkey progressively eased the conditions for establishing temporary work contracts. Italy promoted greater wage differentiation in the private sector and allowed local enterprise bargaining to undercut national wage agreements, conditional on acceptance by a representative union in the firm (OECD 2010, 2013).

The implementation of measures aiming at increasing social insurance and social assistance was widespread, both in developed and emerging economies but with some crucial differences. In OECD countries, additional social insurance and assistance measures were introduced or reinforced at the onset of the crisis, and phased out later on[19]. In several emerging economies, where systems of unemployment insurance and social assistance were somewhat underdeveloped, new programs were established (India) and coverage was increased in a number of countries (for example, Brazil and Russia). In some cases this resulted in structural expansions in the cov¬erage of social protection programs—from conditional cash transfers to basic old-age pensions, child benefits, and health services (OECD 2010, 2011).

**Table 2. Policies Implemented by Country**

| Countries | 1. Increasing labor demand | | 2. Boosting employment and breaking labor market duality | | | 3. Social insurance and labor force participation | | | 4. Other employment-friendly policies | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | reduction in non-wage costs (payroll taxes, SSC on existing or new hires, 2007–10) | start-up incentives, improved access to credit, competition policies and other investment, and fiscal incentives[a] | ease employment protection | reform wage bargaining and minimum wages | Training measures | unemployment benefits, expanded coverage of unemployment insurance[b] | social assistance and in-work benefits | reduction of financial disincentives to work (disability, women, elderly) | increase ALMP expenditure 2007–10 | increased PES capacity | public sector job creation | Short-time work |
| **Market-reliant** countries that adjusted on the **extensive margin** | | | | | | | | | | | | |
| United Kingdom | **X** | **X** | | | **X** | **X** | **X** | **X** | **X** | **X** | | **X** |
| United States | | **X** | | | X | X | X | | | **X** | **X** | **X** |
| Canada | **X** | **X** | | | X | X | | | | X | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Market-reliant** countries that adjusted on the **intensive margin** | | | | | | | | | | | | |
| Australia | **X** | **X** | | **X** | **X** | **X** | **X** | **X** | | X | | |
| Japan | **X** | | | | | **X** | **X** | | **X** | **X** | **X** | **X** |
| Korea, Rep. of | **X** | **X** | | | X | X | X | X | X | X | X | |
| **Other developed** countries that adjusted on the **extensive margin** | | | | | | | | | | | | |
| Spain | **X** | **X** | **X** | **X** | **X** | **X** | | X | | X | | |
| Turkey | **X** | **X** | **X** | **X** | **X** | **X** | | X | X | X | X | |
| **Other developed** countries that adjusted on the **intensive margin** | | | | | | | | | | | | |
| France | **X** | **X** | **X** | | **X** | **X** | **X** | **X** | **X** | **X** | **X** | **X** |
| Germany | **X** | **X** | | | X | | | **X** | **X** | **X** | **X** | **X** |
| Italy | **X** | **X** | | **X** | | **X** | **X** | | | **X** | **X** | **X** |
| Mexico | **X** | X | | | | | X | | | **X** | **X** | **X** |
| **Emerging** countries that adjusted on the **extensive margin** | | | | | | | | | | | | |
| Brazil | | **X** | | | X | X | X | | | | | |
| **Emerging** countries that adjusted on the **intensive margin** | | | | | | | | | | | | |
| China | **X** | **X** | | | X | X | X | | | X | | |
| South Africa | | X | | X | | X | X | | | | X | |
| India | **X** | | | | | X | X | | | X | X | |
| Argentina | | **X** | | | X | X | | | | X | X | |
| Indonesia | | | | X | | X | | | | | X | |
| Russian Fed. | | **X** | | | X | X | X | X | | X | X | |
| Saudi Arabia | | **X** | | | **X** | **X** | | | | | | |

*Sources: OECD 2009, 2010, 2011; ILO 2010, 2010, 2012.*
*Note: Active Labor Market Policies (ALMP); Public Employment Services*
*a. The vast majority of these measures are directed at strengthening competition and reducing barriers to entrepreneurship rather than removing barriers to FDI.*
*b. Most of these measures were introduced at the onset of the crisis and relaxed afterwards.*

A few countries, particularly OECD countries, implemented structural reforms aimed at increasing labor force participation. In some countries—eg, Spain and Italy—this was done by tightening eligibility conditions for early retirement schemes. Others countries progressively closed de-facto early retirement routes--for example, by abolishing job-search exemptions for older unemployed individuals, as in the case of France. Minimum and statutory retirement ages were also raised in France and Spain and disability schemes reformed the United Kingdom to reduce the "excess" inflow of recipients and help existing recipients with work capacity to re-enter the labor market (see for example, OECD 2010).

Several countries also implemented various forms of labor market. OECD countries increased capacity of public employment services to provide additional job-search assistance to disadvantaged groups such as youth, individuals with short-term contracts, or those not receiving any benefits. Several countries that adjusted over the intensive margin favored public sector job creation and some emerging economies (such as South Africa and Russia) expanded the size of their public works programs (OECD 2010). Developed economies also introduced or scaled up wage subsidies, particularly for youth and the elderly (see, for example, France), or directly expanded public employment in specific sectors (for example, Mexico; OECD 2010). Work-sharing arrangements and in particular short-time working (STW) schemes have also played an important role. New schemes were introduced in Mexico and many countries extended the coverage or relaxed eligibility or other administrative requirements. For example, the share of employees participating in pre-existing STW schemes expanded substantially in Germany, Italy, and Japan.

## Are the interventions consistent with policy objectives?

A proper evaluation of the policy responses is very hard, as the full impact of most policies—notably competition policies, investment and fiscal incentives, labor market reforms, training, and education—takes time to materialize and depends to a great extent on the speed of recovery. However, it is worth providing a preliminary assessment of the expected effectiveness of the policy packages adopted by the G20 countries and described in Table 2 above.

As stressed earlier, there is not golden-rule of what an effective policy package looks like and the relative effectiveness of government interventions depends on the combination of type of labor market adjustment (that is, extensive or intensive margin) along with the underlying characteristics of the country (that is, whether market reliant, other OECD, or emerging). Table 3 compares the policy priorities for each typology of countries as they emerge from reviews of previous experiences and evidence and (see for example, Paci, Revenga, and Rijkers, 2010 and OECD, 2013).

The general recommendation for countries experiencing adjustments on the extensive margin is to introduce policies that sustain labor demand, for example, through investment and fiscal incentives, tax credit schemes (as for market-reliant countries), or public works programs (in the case of emerging countries). In addition other OECD countries are also advised to introduce reforms that reduce labor market rigidities and labor market duality. Countries that adjust on the intensive margin are required to implement policies that protect income, in the form of social insurance (as in the case of market-reliant countries) or social assistance (particularly in other OECD countries) or both (as in the case of emerging economies). Particularly for OECD countries, adjustment on the intensive margin calls for more pervasive action of public employment services through ad hoc measures that help workers in the job search process.

The last column of table 3 summarizes the main policies implemented by countries in each subgroup and compares it with the policy objectives. A number of interesting patterns emerge:

- In countries characterized by adjustments on the extensive margin, the policies implemented address well the need of sustaining labor demand. Investment incentives and credit schemes were widely used in market-reliant and OECD countries, while public works programs can be quite effective in emerging economies. In other OECD countries, public employment services and measures to help workers in the job search process were reinforced as recommended.
- In OECD countries with strict labor market regulations, regulatory reforms were enacted to varying degrees. The reform agenda was significant for countries that experienced adjustments on the extensive margin (that is, Turkey and Spain) but relatively less for OECD countries that adjusted on the intensive margin.
- Emerging economies that adjusted on the intensive margin were generally successful in reinforcing national schemes of social insurance and social assistance, generally by loosening eligibility conditions and increasing coverage.

Nevertheless, table 3 also highlights that the policy responses were not always coherent with country priorities. Examples of inconsistent policies include:

- The almost universal use of training programs, even in countries where the main challenge was lack of demand.
- The use of public employment and short-term work schemes in OECD and emerging countries – such as Italy, Mexico or France—where adjustment occurred mostly on the intensive margin.

**Table 3. Coherence of the Policies Implemented with the Policy Objectives**

| Country group | Country | Policy objectives (Paci et al. 2010; Going for Growth 2013) | Policies implemented |
|---|---|---|---|
| **Market-reliant** countries that adjusted on the **extensive margin** | United Kingdom, United States, Canada | Employment incentives, sustain aggregated demand | Reduction in nonwage costs, start-up incentives, improved access to credit |
| | | | Competition policies and other investment and fiscal incentives |
| | | | **Training measures** |
| | | | Social insurance and **social assistance** |
| | | | Increased PES capacity, public sector job creation and STW |
| **Market-reliant** countries that adjusted on the **intensive margin** | Australia, Japan, Korea, Rep. of | Social insurance, social assistance, sustain aggregate demand | Reduction in nonwage costs, start-up incentives, improved access to credit |
| | | | Competition policies and other investment and fiscal incentives |
| | | | **Training measures** |
| | | | Social insurance and social assistance |
| | | | Increased PES capacity, public sector job creation |
| **Other developed** countries that adjusted on the **extensive margin** | Spain, Turkey | Employment incentives, sustain aggregate demand, labor market reforms | Reduction in nonwage costs, start-up incentives, improved access to credit |
| | | | Competition policies and other investment and fiscal incentives |
| | | | Labor market reforms |
| | | | **Training measures** |
| | | | Social insurance, reduction of financial disincentives to work |
| | | | Increased PES capacity, public sector job creation |
| **Other developed** countries that adjusted on the **intensive margin** | FRA, DEU, ITA, MEX | Social assistance, sustain aggregate demand, income protection, | Reduction in nonwage costs, start-up incentives, improved access to credit |
| | | | Competition policies and other investment and fiscal incentives |
| | | | Labor market reforms |
| | | | **Training measures** |
| | | | Social insurance, reduction of financial disincentives to work |
| | | | **Increased PES capacity, public sector job creation, STW** |
| **Emerging** countries that adjusted on the **extensive margin** | Brazil | Public works programs, sustain aggregate demand | Improved access to credit, competition policies, investment incentives |
| | | | **Training measures** |
| | | | Social assistance, in-work benefits, social insurance |
| **Emerging** countries that adjusted on the **intensive margin** | China, South Africa, India, Argentina, Indonesia, Russian Fed., Saudi Arabia | Extension of social insurance, cash transfers, education | Improved access to credit, competition policies, investment incentives |
| | | | **Training measures** |
| | | | Social assistance, in-work benefits, social insurance |
| | | | **Increased PES capacity, public works programs** |

## Are interventions consistent with country challenges?

Policy evaluation literature suggests the main challenge for policy makers during an economic downturn is to implement a set of policies that maximize long-run prospects for growth and household welfare while minimizing short-run negative impacts on productivity and welfare (Lustig 2000; Holzmann and Jorgensen 2001; Skoufias 2003). As stressed in chapter 2, the rationale for policy intervention is not only related to the reduction in aggregate income induced by the crisis, but to the pattern of adjustment made in response to the crisis itself. If such adjustments are consistent with inter-temporal welfare optimization and growth prospects, policies aimed at offsetting short-term shocks can interfere with the necessary adjustment process, and thus be detrimental to growth and efficiency in the long run. Conversely, if the adjustment pattern chosen by economic agents (typically households and firms) is suboptimal, short-term interventions may actually maximize long-term welfare and prevent long-term efficiency costs.

## Policy interventions, type of adjustment, and countries' institutional features

OECD (2009) shows that market-reliant countries are characterized by high labor market "resilience," that is, the recovery can be rapid even after profound economic shock. Based on the framework presented in chapter 2, the set of policies implemented by these countries seems to pursue contradictory objectives. On the one hand, the policies introduced to boost aggregate demand (compare table 3, column 1) are well suited to boost economic recovery and the increase Public Employment Services (PES) capacity can be instrumental in facilitating job matching during the recovery. On the other hand, policies that increase social assistance in market-reliant countries that adjusted along the extensive margin (that is, the United Kingdom, the United States, and Canada) fit the reality less well. These policies may even have detrimental effects on long-run growth and efficiency in these countries, by distorting the long-term patterns of economic recovery. Along similar lines, policies to boost employment and job creation and increase PES capacity appear redundant in Australia, Japan, and Korea. These countries, in fact, experienced an adjustment on the intensive margin, and thus had low employment destruction, and were also characterized by quite resilient labor markets.

OECD (2009) shows that other developed OECD countries are characterized by a high intensity of labor market institutions that reduces both the short-run impact of the economic shock and the ability of the labor market to catch up with the economic recovery. Based on the taxonomy by Paci, Revenga, and Rijkers (2010), policies that boost labor demand in these countries may be rather counterproductive, discouraging the "cleansing" effect (or creative destruction) of firms induced by the economic crisis: widespread reduction of nonwage costs or distribution of start-up incentives are mostly enjoyed by unproductive firms, which are then maintained in the market and discourage entry of more productive and efficient firms. Conversely, labor market reforms aimed at boosting employment and breaking labor market duality (table 3, column 2) are the appropriate tool to raise labor market resilience and to reinforce the cleansing effect in developed OECD countries (Barlevy 2002).

In countries that mostly adjusted along the extensive margin, such as Spain and Turkey, low labor market resilience risks to interrupt the accumulation of on-the-job human capital and destroy firm-specific human capital gains (Paci, Revenga, and Rijkers 2010). This process may have negative consequences on the future quality of labor in these countries. Such negative consequences can be attenuated by measures that enhanced PES capacity and public sector job creation, provided that these policies are properly designed. Conversely, the whole set of policies aimed at increasing social insurance are not consistent with the labor market characteristics of these countries. These measures may reduce individuals' efforts to look for a job, amplifying the negative impact of the crisis on the quality of human capital (Barlevy 2002). A similar issue arises in countries such as France, Italy or Mexico, which mostly adjusted along the intensive margin, and introduced social assistance measures and in-work benefits. In the presence of labor hoarding in low productivity jobs, these measures may reduce workers' incentives to improve their labor market match, amplifying the negative impact of the crisis on the quality of human capital (Barlevy 2002) and further reducing labor market resilience. Among the employment-friendly measures, increasing the capacity of PES may provide a useful device that helps workers improve their labor market match, temporary STW arrangements

may be useful to cope with labor hoarding and sustain individual productivities. Conversely, forms of public sector job creation and active labor market policies seem less useful in countries characterized by small flows in and out of employment.

In emerging economies, reinforcing the system of social insurance also acted as an automatic income stabilizer. This is true for those who lost their jobs, as in the case of Brazil, the only emerging economy characterized by adjustment on the extensive margin. This is also true for countries who adjusted mostly on the intensive margin (for example, China, South Africa, and India). In these countries, expanded coverage and looser eligibility conditions allowed the use of benefits as an income stabilizer for those comprising the "working poor" and informal workers as well. In emerging countries, public works programs also appear relatively more useful than the training measures. Public works programs in fact provide an important instrument to absorb the excess labor created during an economic downturn (as in the case of Brazil) as well as to provide targeted on-the-job training (as in the case of South Africa). Training programs have generally shown limited usefulness, with rather heterogeneous effects among the different groups of the population (Paci, Revenga, and Rijkers 2010; Auer, Efendioglu, and Leschke 2005).

## Identifying "win-win" policies in G20 countries

It is still difficult to say whether the policies implemented are actually having beneficial effects. Economic recovery is still lagging behind, and the benefits of labor policies just implemented are likely to be enjoyed with some lag. Chapter 2 proposes some guidelines to assess the effectiveness of government interventions in the labor market during economic crises. On the one hand, policy interventions should minimize the short-term impact of the economic recession, that is, the social loss due to lower employment, productivity, and earnings. On the other hand, they have to maximize the expected returns of the policies implemented, in terms of time to recovery and expected growth. While any policy introduces a trade-off between these short-term and long-term objectives, win-win policies do exist that reconcile short-term and long-term policy objectives.

Identifying win-win policies provides a useful tool to construct prototypical reforms paths that could be extended to other G20 countries. As suggested in the previous sections, the evaluation of policies' effectiveness during the last recession depends on both (i) the underlying institutional features of the country (that is, whether it is a market-reliant, an unsuccessful OECD, or an emerging economy) and (ii) the characteristics of the adjustment itself (that is, whether it occurred on the intensive or the extensive margin).

This section proposes some prototypical reform paths that can be considered win-win by group of country and type of labor adjustment. Based on Coe and Snower (1997) and Bassanini and Duval (2009), research shows that "bundles" or combinations of policies are more likely to be win-win than isolated policies, if they are designed coherently and exploit policy complementarities.

Policies that favor economic and labor market recovery may be win-win in market-reliant countries. In the absence of heavy regulations and market imperfections, such policies are likely to be effective in the medium to long run, without having short-term negative effects on aggregate welfare. The United Kingdom experience suggests that these policies can be particularly effective when matched with reforms that eliminate financial disincentives to work (compare box 1) when adjustments mostly occur on the extensive margin. The Japanese experience suggests that when adjustment takes place on the intensive margin, these policies can be matched with measures that provide short-term income support to disadvantaged workers in specific sectors (box 1).

Labor market reforms aimed at boosting employment and breaking labor market duality, if properly designed, may be win-win in heavily regulated OECD countries. These reforms in fact are undoubtedly beneficial to long-term growth, but can also be very costly in the short term. In countries characterized by adjustments on the extensive margin, these reforms should be combined with policies that cushion their social cost, for example, job or hiring subsidy schemes for vulnerable job seekers, looser eligibility conditions, or unemployment benefits that favor access by temporary or irregular workers (see, for example, the case of Spain, discussed in box 1). In countries characterized by adjustments on the intensive margin, which reduce flows in and out of employment, reforms should be accompanied by job assistance programs for youth, elderly, and the long-term unemployed (as in the case of France, also in box 1).

Active social assistance policies and public works programs can be win-win in emerging economies. In countries experiencing labor shedding (for example, Brazil), social assistance policies may be beneficial in the short run because they help job losers, smoothing their consumption during the period of unemployment. They may also be efficient in the long run and prevent liquidity-constrained job losers from being forced to accept the first job offer available. In this way, these policies may favor the establishment of good labor market matches in a bad labor market, which could be inefficient from a welfare perspective. Similarly, public works programs such as the South African program (box 1) may provide both short-term work to the unemployed and to marginalized groups and strengthen workers' general skills through training. These are also likely to improve workers' long-term perspectives through exit strategies at the end of their participation in the program.

## Box 1. Case Studies of Win-Win Labor Market Policies in G20 Countries

***The United Kingdom*** *is a typical case of a market-reliant country; it mostly adjusted on the extensive margin*, experiencing increased unemployment, reduced participation (particularly for youth and low skilled), and an increased incidence of temporary workers. During the crisis, the United Kingdom introduced reforms to support job recovery and growth, for example, by reducing the administrative burdens and regulatory barriers to firm creation. These reforms are well matched to other measures favoring labor market participation, particularly for the disadvantaged categories. To give a few examples, just prior to the onset of the crisis, the United Kingdom had reformed national disability schemes to limit the "excess" inflow of recipients and help existing recipients to rejoin the labor market. Preliminary recipiency rates data suggest that this reform was rather effective, reversing the rising trend in disability rates (OECD 2013). Furthermore, during the crisis, the UK government took sudden measures to step up the child care components of tax credits, restructure income support for single parents or second earners, and increase the supply of vocational education at the upper secondary level and support for students from disadvantaged backgrounds.

***Japan*** *is a good example of market-reliant country that mostly adjusted on the intensive margin*. During the crisis, it experienced increasing inequality, diminished earnings, and limited unemployment outflows that created serious risks of long-term unemployment, particularly for youth and low-skilled workers. When the crisis started, the "Going for Growth" OECD (2013) guidelines identified significant room for improvement regarding reforms in the tax structure, training programs, and reforms to reduce the financial disincentives to work. During the crisis, Japan introduced a bundle of reforms pursuing its long-term objective to sustain economic growth. It introduced "growth-friendly tax reforms" to broaden the tax base; it lowered barriers to foreign ownership/investment through the "Inward Investment Promotion Programme" (2010), which featured some deregulation of investment procedures; and, finally, it created important university-industry links. The long-term objective of sustaining growth has been reconciled with the short-term objective of helping the more disadvantaged workers. Changes in eligibility rules were introduced that made it easier for temporary or irregular workers to access unemployment benefits. The share of employees participating in work-sharing arrangements expanded substantially, contributing to relatively positive labor market effects (OECD 2010; Hijzen and Venn 2011). Finally some income support measures were introduced in agriculture (OECD, 2013).

**Spain**, *a country with traditionally an unsuccessful labor market, introduced pervasive reforms during the downturn*. Due to the financial nature of the economic downturn, Spain mostly adjusted on the extensive margin. The acute crisis forced it to enact unpopular reforms in difficult areas, such as labor market regulation and social welfare systems (for example, job protection, pension, and welfare reforms). The recent crisis also induced the government to ease entry barriers, including for large retailers. While these reforms have been undoubtedly costly, Spanish governments have also introduced policies aiming at cushioning their social cost. For example, they introduced job or hiring subsidy schemes that often targeted vulnerable job seekers such as youth, older workers, or the long-term unemployed. They changed eligibility to unemployment benefits to make it easier for temporary or irregular workers to access assistance.

***France*** *is quite similar to Spain in terms of its institutional features, but it adjusted mostly on the intensive margin, due to the different nature of the downturn.* To foster growth during the crisis, the government introduced measures to foster competition and reduce regulatory barriers. It also introduced comprehensive deregulation in the labor market, with the aim of reducing its duality. These measures were accompanied by new job assistance programs for youth, the elderly, and the long-term unemployed. To favor workers' employability and reduce unemployment duration, these policies were matched with training or work-study schemes. As in the case of Spain, France also relaxed eligibility to social assistance and social insurance.

Due to the very peculiar characteristics of their labor markets, and the lack of accurate data, it is difficult to identify win-win case studies for the group of emerging countries. However, it is worthwhile mentioning the Brazilian system of social assistance and public works programs in South Africa, as these provide important benchmarks for similar measures to be implemented in other emerging economies. Unemployment compensation in **Brazil** is based on the combination of individual severance pay accounts and a system of public unemployment insurance. As discussed by OECD (2011), this system helps job losers, smoothing their consumption during the period of unemployment and prevent liquidity-constrained job losers from being forced to accept the first job offer that arrives, which could be inefficient from a welfare perspective. The economic crisis induced temporary increase of the benefit duration was temporarily increased for specific categories of laid-off workers. Finally, the **South African** public works program is the third biggest infrastructure spending program in the world and a key component of the South Africa's social protection strategy. The program provides short-term work to the unemployed and to marginalized groups, mainly unskilled, poor and youth, particularly in the area of infrastructure. The scheme aims not only at providing a temporary job to poor, unemployed persons, but also at strengthening their skills through training and offering "exit" strategies at the end of their participation in the program. To cope with the effects of the crisis, in 2009, the program was revised to place more emphasis on employment generation.

## The importance of fiscal policies

The analysis in the previous sections discusses a number of policy measures that may help the labor market to recover from the very poor performance of the last few years. Some of the measures mentioned above (particularly those sustaining labor demand) are very helpful in increasing labor market resilience, that is, its responsiveness to the fluctuations of the business cycle (OECD 2010).

However, labor market policies that encourage long-run growth are not sufficient on their own to put the labor markets of G20 countries back on track. These measures are going be effective only in the presence of a steady economic recovery. The World Economic Outlook (IMF 2012, 2013) indicates mixed forecasts for the G20 countries. Recovery is occurring at a two-speed (if not three-speed) pace. On one hand, emerging countries are characterized by forecasts of a sustained recovery; on the other hand, advanced economies, particularly in the euro area, are expected to stagnate for the next two years.

It is not easy to identify the factors that drive these different paths. IMF (2013) points out the different role of fiscal policies in emerging versus developed countries. Contrary to past recessions, most developed economies have not been able to use countercyclical public expenditure as an automatic stabilizer during the recent downturn. The opposite holds for emerging economies that, on average, increased public expenditure during the downturn. To be effective, labor market policies have to be matched with proper monetary and fiscal policies able to put developed G20 countries back on a path of economic growth. The weakness of private demand suggests that countries that have the scope to do so should allow automatic stabilizers to operate, and some countries with fiscal space should go even further. At the moment, some fast-growing emerging countries, for example, India and Brazil, are better endowed to sustain economic recovery and transfer it to the labor market. Being net receivers of capital flows, these countries of course face the challenge of how to handle such capital flows. On the one hand, this is a clearly desirable process, which may have very good implications also for labor market performance. However, a challenge exists for these countries in that they have to accommodate capital flows—these are indeed very volatile, making macroeconomic management more difficult and recovery very uncertain.

# 5. CONCLUSIONS

Jobs and earnings opportunities are central to development. The negative economic, social, and political consequences are clear for societies that cannot offer sufficient job opportunities to ensure workers enough income to provide for their families or to partake in society through work. The private sector must be the main source of these jobs. However, governments play a critical role in catalyzing job creation by providing the appropriate legal, institutional and economic framework, and in ensuring that workers have the skills needed to take full advantage of new opportunities. In addition, governments also have primary responsibility for mitigating the negative long-term consequences of economic shocks on workers and firms.

To fulfill this responsibility, governments need an explicit strategy, anchored around comprehensive policy packages, for the creation of more and better jobs. Although the specific elements of an effective package need to reflect country specificity, the package will typically include structural policies aimed at raising long-term productivity, supporting labor-intensive economic transformation, and facilitating access to productive employment for more workers. But it will also include short-term cyclical policies designed for mitigating labor market volatility and the impact of economic shocks. In some instances, pursuing these policy objectives may require trade-offs, but there are also win-win policies that can serve both purposes—fostering long-term job creation and growth while mitigating undesirable short-term outcomes.

The focus of structural policies should be providing the fundamentals: a stable macroeconomic environment; a strong regulatory framework; good governance principles; human rights that guarantee safe and fair working conditions; physical and financial infrastructure; and human capital. All of these constitute necessary conditions. The structural policy mix should also include labor market policies—employment protection legislation, active labor market policies, and social protection—that strike a balance between excessive regulation, which may in fact hinder good job creation, and inadequate regulation, which can open up possibilities for exploitation and leave large parts of the population exposed to high income insecurity and even risk of poverty.

To maximize long-term growth, these policies need complementary policies aimed at smoothing out the effects of cyclical swings on jobs, on workers, and on firms and reduce their vulnerability. Economic crises often provide a mandate to undertake more far-reaching, important structural reforms. However, restructuring needs to be balanced, as it can come at a high cost. Beyond the immediate damage inflicted by firm closures or job losses, it is becoming clear that even short-lived downturns may have long-term negative impacts on income, productivity, and equity. Examples include the negative consequences of long-term unemployment on human capital, or the fact that productive and innovative firms with strong growth potential over time may well be the first to close in a downturn. Governments therefore need to monitor and react to downturns, and be prepared to expand and change the policy mix as the situation requires. The most effective policy mix will depend on several factors, including institutional capacity and existing institutions, fiscal space (that is, resources to spend on program expansion), the nature of shocks and those affected by them, and political economy constraints. Clearly, however, the policy package must cut across many areas and constraints and be coherent.

The labor market trends experienced by the G20+ countries over the last five years provide an excellent example of how global economic volatility can spill over, resulting in high labor market vulnerability, and how the recovery of jobs and earnings can be painfully slow. The last five years also clearly show that the extent and ways in which economic downturns translate into deteriorating labor market conditions can vary considerably across countries depending on, among others, the transmission of the shocks, regulatory frameworks, and adjustment mechanisms.

Broadly, two groups can be discerned: countries with more flexible labor markets and exposed to a bursting domestic property bubble that adjusted on the extensive margin, with significant jobs and firm destruction; and countries with more restrictive labor market regulations and/or less pronounced fall in GDP that adjusted on the intensive margin, with a reduction in hours worked and earnings per worker, but less job destruction overall. In the latter countries, the burden of the economic shock is likely to have been more evenly distributed than in the countries with rapidly increasing unemployment. These shocks were met with different policy responses:

i. *Business climate reforms*. Across a majority of G20 countries, efforts were undertaken to increase competition, ease regulatory barriers, and reduce the tax burden on labor.
ii. *Labor market regulatory reforms*. OECD countries characterized by restrictive labor market regulations focused on reforms to increase labor market flexibility. This was especially the case in countries where labor markets adjusted on the extensive margin (such as Turkey and Spain).
iii. *Social insurance and social assistance*. In emerging countries—particularly those where adjustment took place on the intensive margin—safety nets and insurance mechanisms were strengthened to protect workers from the negative impact of reductions in earnings.
iv. *Training*. Efforts to bring unemployed individuals (especially youth) into training and skills development intensified in OECD countries.
v. *Promoting or creating jobs in the public sector*. Public employment services, public employment schemes, and short-term public works schemes were initiated or expanded in some countries.
vi. *Expansionary policies to stimulate demand*. Fiscal policies and other expansionary policies played a key role in helping recovery in some countries. Overall, however, insufficient attention was given to policies to stimulate aggregate demand—even in countries with ample fiscal space.

These policy responses did not always accurately reflect the labor market adjustments that took place in the country. Based on the framework suggested in this paper, countries where adjustments were mostly on the extensive margin should have focused on protecting jobs and firms. This includes policies that sustain aggregate demand – investment, tax credit schemes, and public works programs where applicable. Countries where adjustment was on the intensive margin should have focused on protecting labor earnings more directly, for example, through social protection systems that provide short-term support to disadvantaged workers.

In less-regulated economies, policies that favor economic and labor market recovery may have been good examples of win-win policies—they can be effective over time without deteriorating short-term negative effects. In more heavily regulated countries, labor market reforms would have been necessary to boost employment and address an often significant labor market duality, with widespread informal activity and work. In many countries, the use of complementary policies to reduce the social costs of these regulatory reforms—for example, more accessible unemployment benefits for informal sector workers—was a positive move. In countries with adjustment on the intensive margin, marginalized groups will remain more marginalized than ever, as employed workers stick to the jobs they have. These groups will need additional assistance.

Recent and past experience in G20+ countries (Mexico and Argentina's currency crises, the Asian crisis, the Russian crisis, among others) suggest that, usually, preparation pays off. Countries that monitor labor market outcomes with strong diagnostic frameworks and relevant and high frequency indicators, that react quickly, and that have institutions in place that can be expanded or reduced depending on economic needs, also have the best chances of providing sustainable and stable jobs and earnings opportunities to a wider share of the population.

# ENDNOTES

[1] Prepared by Simone Moriconi, Marco Ranzani, Pierella Paci, and Sara Johansson de Silva.
[2] The study exploits data from different sources: data on GDP and Consumer Price Index are from the IMF *World Economic Outlook* 2013 database; data on employment, unemployment, labor force participation, inactivity, underemployment, and number of annual hours worked are from the ILO KILM database; and data on average nominal annual wages are from the OECD. Additional data used in the regression analysis are derived from the World Bank World Development Indicator database, the World Bank Doing Business Project, and the IMF's de facto exchange rate regime, available at: http://www.imf.org/external/np/mfd/er/2006/eng/0706.htm. Additional details about data used can be found in the appendix.
[3] The chapter draws largely on Paci, Revenga and Rijkers (2010), and Johansson de Silva et al. (2010).
[4] According to ILO LABORSTA data from the mid-2000s, the proportion of public sector employment to total employment was 11 percent for Brazil (2007); 10 percent for Chile (2008); 25 percent for the Arab Republic of Egypt (2008); 25 percent for Finland (2008); 24 percent for France (2006); 20 percent for Georgia (2006); 7 percent for Japan (2009); 9 percent for Mexico (2008); 12 percent for South Africa (2006); and 16 percent for the United States (2008).
[5] As an example, the type of infrastructure needed varies with whether countries are exporting and what types of goods. Airports are needed for cut flowers; ports for manufacturing exports; and power may be more important for formalizing and urban economies than for those that are primarily agricultural.
[6] Ahsan and Pagés (2009).
[7] Kucera and Roncolato (2008).
[8] For ease of interpretation, in the appendix illustrates the employment-to-population ratios between 2005 and 2011.
[9] The countries in question are the G20 OECD countries plus Brazil, Indonesia, and Russia.
[10] For ease of interpretation, in the appendix illustrates the total unemployment rates between 2005 and 2011.
[11] For ease of interpretation, 9 in the appendix illustrates the long-term unemployment rates between 2005 and 2011.
[12] For ease of interpretation, 10 in the appendix illustrates the inactivity rates between 2005 and 2011.
[13] The technique used is a simple Shapley decomposition.
[14] The difficulty-of-firing index measures whether redundancy is legal as a basis for terminating workers; whether the employer must notify and need the approval of a third party in case of dismissal of a worker; whether the employer must consult and need the approval of a third party before a collective dismissal; whether there is a reassignment or retraining obligation before an employer can make a worker redundant; and whether there are priority rules in case of redundancy dismissal, lay off, or reemployment.
[15] The redundancy cost indicator measures the cost of advance notice requirements, severance pay, and penalty of redundancy due when terminating a worker, expressed in weeks of salary for a worker after 20 years of continuous employment. Additional information is available at www.doingbusiness.org.
[16] The following model is estimated separately for each labor market indicator, namely employment, earnings, unemployment, and labor force:

$$\Delta I_{ct}=\alpha+\beta\Delta GDP_{ct}+\gamma C_c+\varepsilon_{ct}, c=1,\ldots,n \text{ and } t=1,\ldots,T$$

where c indicates country and t indicates each year-on-year change.
[17] According to the OECD, the successful employment performers are Austria, Denmark, Ireland, the Netherlands, Norway and Sweden.
[18] Caution is needed in the analysis of these data for at least three reasons. First, the aggregation of different measures in single categories is necessarily crude, and may hide substantial underlying heterogeneity. Second, due to the length of the crisis, some of the measures reported in the table have been used only temporarily. Table 3 only provides a cross-sectional picture of the policies implemented during the crisis. Finally, as it only provides a list of the policies implemented, table 3 does not give a picture of the effectiveness of the specific policies implemented. Having these caveats in mind, a comparison of table 2 and table 3 is informative of the effort of G20 countries during the crisis.
[19] There are, of course, some relevant exceptions—for example, France, Japan, and Spain, which lost eligibility conditions to unemployment benefits to increase access to employment for the disadvantaged categories.

# APPENDIX

**Table A1. Data Sources**

| Country | GDP | Consumer Price Index | Employment | Annual hours actually worked per worker | Average annual wages | Unemployment | Long-term unemployment | Time-related underemployment |
|---|---|---|---|---|---|---|---|---|
| Argentina | X | X | X | | | X | | X |
| Australia | X | X | X | X | X | X | X | X |
| Brazil | X | X | X | | | X | | |
| Brunei Darussalam | X | X | X | | | | | |
| Canada | X | X | X | X | X | X | X | X |
| China | X | X | X | | | | | |
| Ethiopia | X | X | X | | | | | |
| France | X | X | X | X | X | X | X | X |
| Germany | X | X | X | | | X | X | X |
| India | X | X | X | | | | | |
| Indonesia | X | X | X | | | X | | |
| Italy | X | X | X | X | X | X | X | |
| Japan | X | X | X | X | X | X | | |
| Kazakhstan | X | X | X | | | X | | |
| Korea, Republic of | X | X | X | X | X | X | | |
| Mexico | X | X | X | | | X | X | |
| Russian Federation | X | X | X | | | X | X | X |
| Saudi Arabia | X | X | X | | | X | | |
| Senegal | X | X | X | | | X | | |
| Singapore | X | X | X | | | X | X | |
| South Africa | X | X | X | | | X | X | |
| Spain | X | X | X | X | X | X | X | X |
| Turkey | X | X | X | | | X | X | |
| United Kingdom | X | X | X | X | X | X | X | |
| United States | X | X | X | X | X | X | X | X |

*Note: Employment: Argentina, geographic limitation—28 urban agglomerations, 31 urban agglomerations in 2010 and 2011.*

*Average annual wages: average annual wages per full-time and full-year equivalent employee in the total economy.*

### Table A2. GDP Annual Growth

| Country | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 8.9 | 9.2 | 8.5 | 8.7 | 6.8 | 0.9 | 9.2 | 8.9 | 1.9 | 2.77 | 3.46 | 3.00 |
| Australia | 4.1 | 3.1 | 2.7 | 4.6 | 2.7 | 1.4 | 2.6 | 2.4 | 3.6 | 2.96 | 3.31 | 3.05 |
| Brazil | 5.7 | 3.2 | 4.0 | 6.1 | 5.2 | -0.3 | 7.5 | 2.7 | 0.9 | 3.02 | 4.04 | 4.13 |
| Brunei Darussalam | 0.5 | 0.4 | 4.4 | 0.2 | -1.9 | -1.8 | 2.6 | 2.2 | 1.3 | 1.19 | 6.00 | 7.33 |
| Canada | 3.2 | 3.1 | 2.7 | 2.1 | 1.1 | -2.8 | 3.2 | 2.6 | 1.8 | 1.46 | 2.39 | 2.49 |
| China | 10.1 | 11.3 | 12.7 | 14.2 | 9.6 | 9.2 | 10.4 | 9.3 | 7.8 | 8.04 | 8.24 | 8.51 |
| Germany | 0.7 | 0.8 | 3.9 | 3.4 | 0.8 | -5.1 | 4.0 | 3.1 | 0.9 | 6.50 | 6.50 | 6.50 |
| Spain | 3.3 | 3.6 | 4.1 | 3.5 | 0.9 | -3.7 | -0.3 | 0.4 | -1.4 | -0.07 | 0.88 | 1.46 |
| Ethiopia | 11.7 | 12.6 | 11.5 | 11.8 | 11.2 | 10.0 | 8.0 | 7.5 | 7.0 | 0.61 | 1.46 | 1.32 |
| France | 2.5 | 1.8 | 2.5 | 2.3 | -0.1 | -3.1 | 1.7 | 1.7 | 0.0 | 5.68 | 6.23 | 6.63 |
| United Kingdom | 2.9 | 2.8 | 2.6 | 3.6 | -1.0 | -4.0 | 1.8 | 0.9 | 0.2 | 6.30 | 6.40 | 6.44 |
| Indonesia | 5.0 | 5.7 | 5.5 | 6.3 | 6.0 | 4.6 | 6.2 | 6.5 | 6.2 | -1.47 | 0.52 | 1.20 |
| India | 7.7 | 9.1 | 9.4 | 10.1 | 6.2 | 5.0 | 11.2 | 7.7 | 4.0 | 1.58 | 1.41 | 1.05 |
| Italy | 1.7 | 0.9 | 2.2 | 1.7 | -1.2 | -5.5 | 1.7 | 0.4 | -2.4 | 5.50 | 5.65 | 6.20 |
| Japan | 2.4 | 1.3 | 1.7 | 2.2 | -1.0 | -5.5 | 4.7 | -0.6 | 2.0 | 2.85 | 3.89 | 4.03 |
| Kazakhstan | 9.6 | 9.7 | 10.7 | 8.9 | 3.2 | 1.2 | 7.3 | 7.5 | 5.0 | 3.39 | 3.40 | 3.35 |
| Korea, Republic of | 4.6 | 4.0 | 5.2 | 5.1 | 2.3 | 0.3 | 6.3 | 3.6 | 2.0 | 3.37 | 3.78 | 3.70 |
| Mexico | 4.0 | 3.2 | 5.1 | 3.2 | 1.2 | -6.0 | 5.3 | 3.9 | 3.9 | 4.39 | 4.17 | 4.44 |
| Russian Federation | 7.2 | 6.4 | 8.2 | 8.5 | 5.2 | -7.8 | 4.5 | 4.3 | 3.4 | 4.02 | 4.59 | 4.71 |
| Saudi Arabia | 4.7 | 7.3 | 5.6 | 6.0 | 8.4 | 1.8 | 7.4 | 8.5 | 6.8 | 2.01 | 5.13 | 4.19 |
| Senegal | 5.9 | 5.6 | 2.4 | 5.0 | 3.7 | 2.2 | 4.3 | 2.6 | 3.5 | 2.84 | 3.35 | 3.43 |
| Singapore | 9.2 | 7.4 | 8.6 | 9.0 | 1.7 | -0.8 | 14.8 | 5.2 | 1.3 | -1.56 | 0.74 | 1.35 |
| Turkey | 9.4 | 8.4 | 6.9 | 4.7 | 0.7 | -4.8 | 9.2 | 8.5 | 2.6 | 3.43 | 3.73 | 4.34 |
| United States | 3.5 | 3.1 | 2.7 | 1.9 | -0.3 | -3.1 | 2.4 | 1.8 | 2.2 | 0.69 | 1.54 | 1.84 |
| South Africa | 4.6 | 5.3 | 5.6 | 5.5 | 3.6 | -1.5 | 3.1 | 3.5 | 2.5 | 1.85 | 2.95 | 3.56 |

*Source: IMF WEO database, 2013.*

**Table A3. Change in GDP Annual Growth (with reference to the previous year)**

| Country | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 0.3 | -0.7 | 0.2 | -1.9 | -5.9 | 8.3 | -0.3 | -7.0 | 0.9 | 0.7 | -0.5 |
| Australia | -1.0 | -0.4 | 1.9 | -2.0 | -1.3 | 1.2 | -0.2 | 1.1 | -0.6 | 0.3 | -0.3 |
| Brazil | -2.6 | 0.8 | 2.1 | -0.9 | -5.5 | 7.9 | -4.8 | -1.9 | 2.1 | 1.0 | 0.1 |
| Brunei Darussalam | -0.1 | 4.0 | -4.2 | -2.1 | 0.2 | 4.4 | -0.4 | -0.9 | -0.1 | 4.8 | 1.3 |
| Canada | -0.1 | -0.5 | -0.6 | -1.0 | -3.9 | 6.0 | -0.6 | -0.7 | -0.4 | 0.9 | 0.1 |
| China | 1.2 | 1.4 | 1.5 | -4.5 | -0.4 | 1.2 | -1.2 | -1.5 | 0.2 | 0.2 | 0.3 |
| Germany | 0.1 | 3.0 | -0.5 | -2.6 | -5.9 | 9.1 | -0.9 | -2.2 | -0.3 | 0.8 | -0.1 |
| Spain | 0.3 | 0.5 | -0.6 | -2.6 | -4.6 | 3.4 | 0.7 | -1.8 | -0.1 | 2.3 | 0.6 |
| Ethiopia | 0.9 | -1.1 | 0.3 | -0.6 | -1.1 | -2.0 | -0.5 | -0.5 | -0.5 | 0.0 | 0.0 |
| France | -0.7 | 0.6 | -0.2 | -2.4 | -3.1 | 4.8 | 0.0 | -1.7 | -0.1 | 0.9 | 0.6 |
| United Kingdom | -0.1 | -0.2 | 1.0 | -4.6 | -3.0 | 5.8 | -0.9 | -0.7 | 0.5 | 0.9 | 0.3 |
| Indonesia | 0.7 | -0.2 | 0.8 | -0.3 | -1.4 | 1.6 | 0.3 | -0.3 | 0.1 | 0.1 | 0.0 |
| India | 1.4 | 0.3 | 0.7 | -3.9 | -1.2 | 6.2 | -3.5 | -3.8 | 1.7 | 0.6 | 0.4 |
| Italy | -0.8 | 1.3 | -0.5 | -2.8 | -4.3 | 7.2 | -1.3 | -2.7 | 0.9 | 2.0 | 0.7 |
| Japan | -1.1 | 0.4 | 0.5 | -3.2 | -4.5 | 10.2 | -5.2 | 2.6 | -0.4 | -0.2 | -0.4 |
| Kazakhstan | 0.1 | 1.0 | -1.8 | -5.7 | -2.0 | 6.1 | 0.2 | -2.5 | 0.5 | 0.2 | 0.6 |
| Korea, Republic of | -0.7 | 1.2 | -0.1 | -2.8 | -2.0 | 6.0 | -2.7 | -1.6 | 0.8 | 1.0 | 0.1 |
| Mexico | -0.8 | 2.0 | -1.9 | -2.1 | -7.2 | 11.3 | -1.4 | 0.0 | -0.6 | 0.0 | -0.1 |
| Russian Federation | -0.8 | 1.8 | 0.4 | -3.3 | -13.0 | 12.3 | -0.2 | -0.9 | 0.0 | 0.4 | -0.1 |
| Saudi Arabia | 2.5 | -1.7 | 0.4 | 2.4 | -6.6 | 5.6 | 1.0 | -1.7 | -2.4 | -0.2 | 0.3 |
| Senegal | -0.2 | -3.2 | 2.5 | -1.3 | -1.5 | 2.1 | -1.7 | 0.9 | 0.5 | 0.6 | 0.1 |
| Singapore | -1.8 | 1.3 | 0.4 | -7.3 | -2.5 | 15.6 | -9.6 | -3.8 | 0.7 | 3.1 | -0.9 |
| Turkey | -1.0 | -1.5 | -2.2 | -4.0 | -5.5 | 14.0 | -0.7 | -5.9 | 0.8 | 0.3 | 0.6 |
| United States | -0.4 | -0.4 | -0.7 | -2.3 | -2.7 | 5.5 | -0.6 | 0.4 | -0.4 | 1.1 | 0.6 |
| South Africa | 0.7 | 0.3 | -0.1 | -1.9 | -5.1 | 4.6 | 0.4 | -0.9 | 0.3 | 0.5 | 0.1 |

*Source: IMF WEO database, 2013.*

Figure A1. Change in Employment Annual Growth, 2005–12

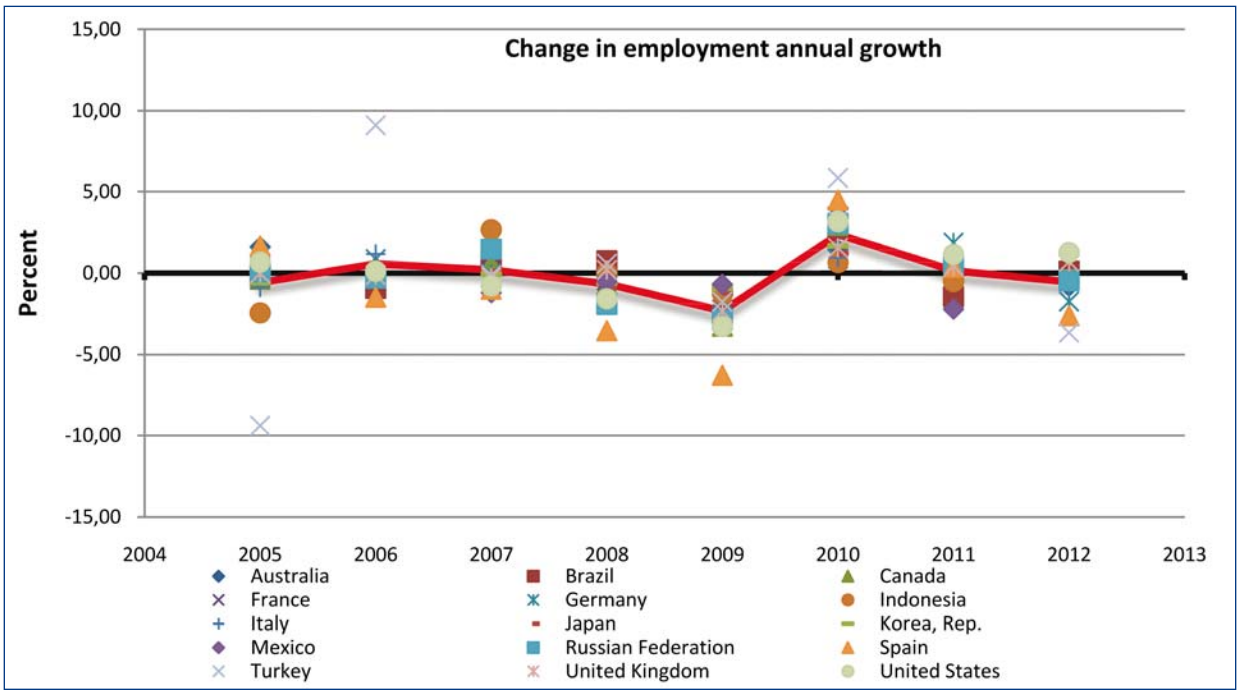



Figure A2. Change in Hourly Nominal Wage Growth

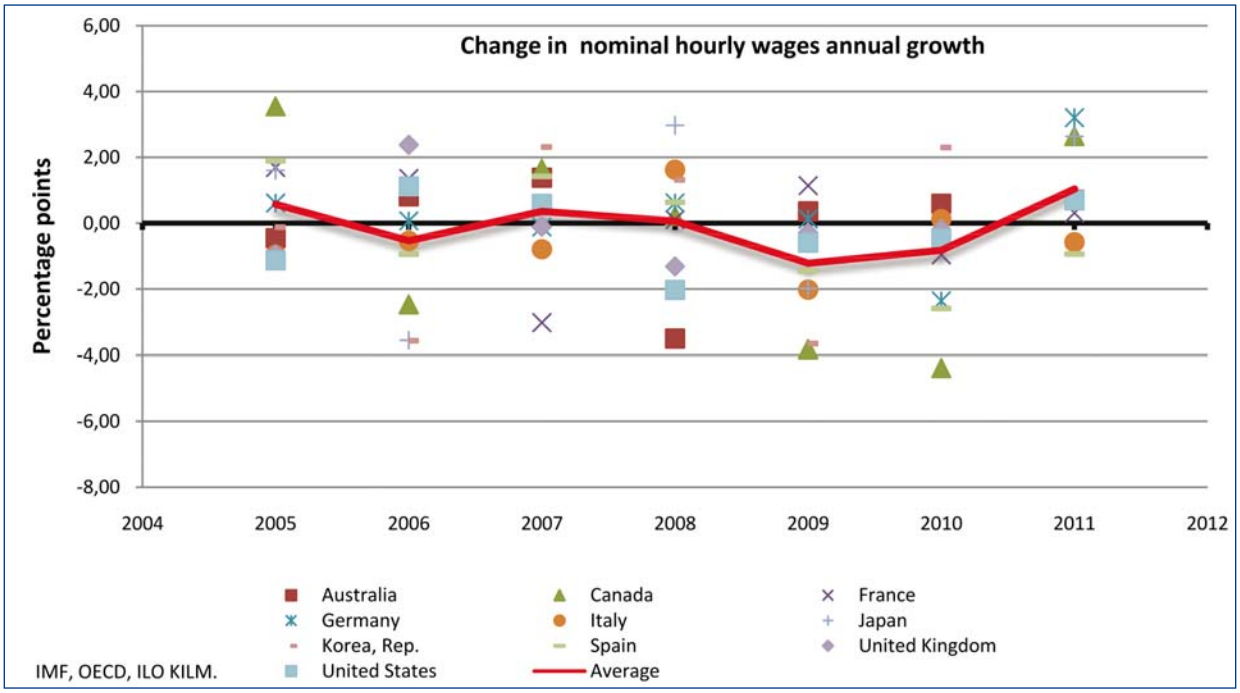


Figure A3. Change in CPI Annual Growth

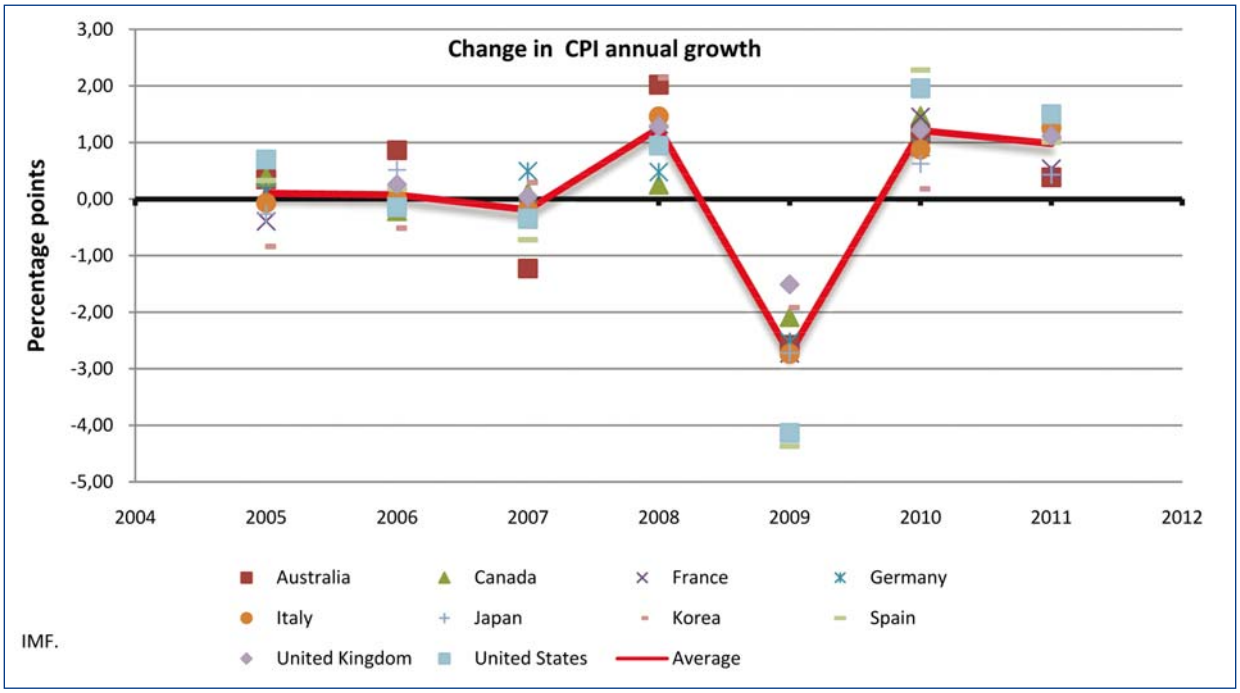



Figure A4. Women's Employment-to-Population Rate

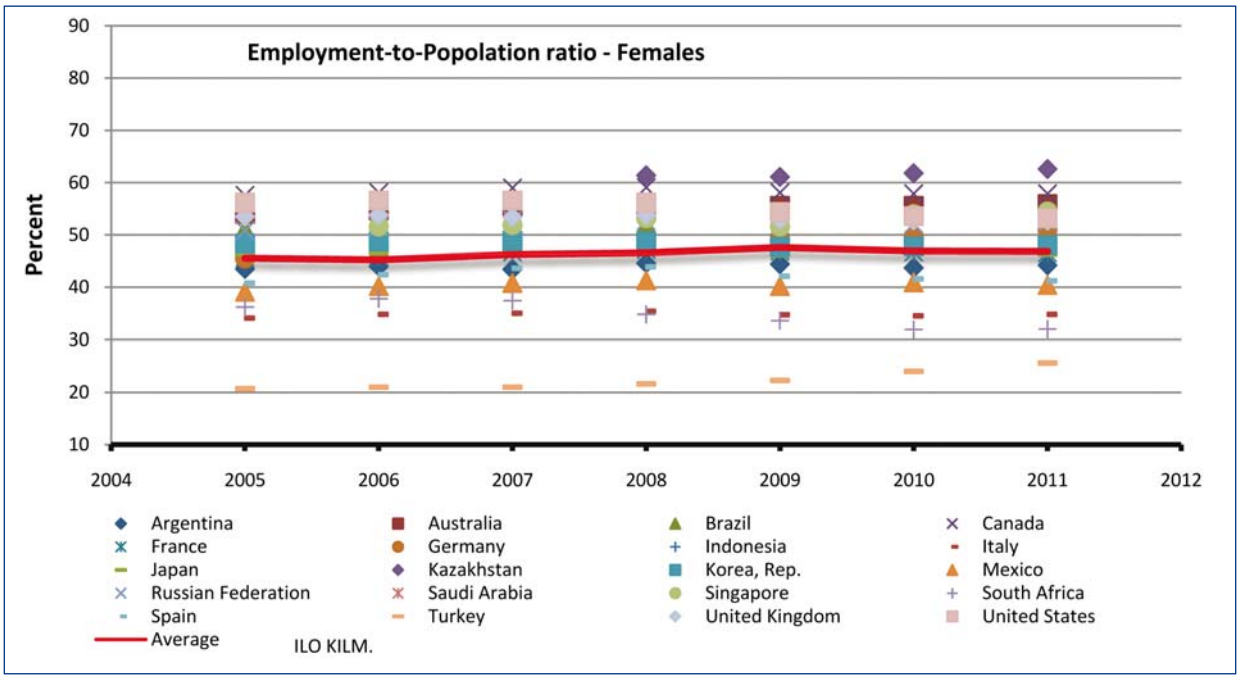


Figure A5. Men's Employment-to-Population Rate

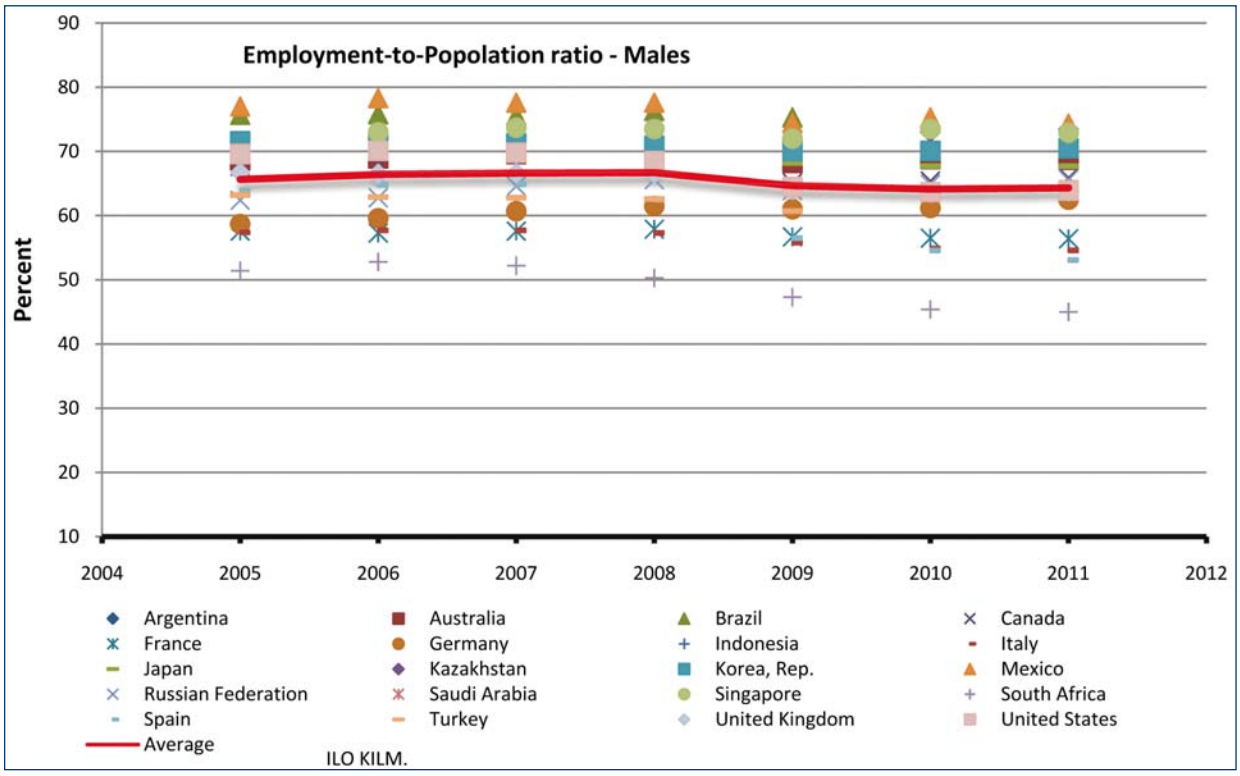



Figure A6. Employment Annual Growth for Women

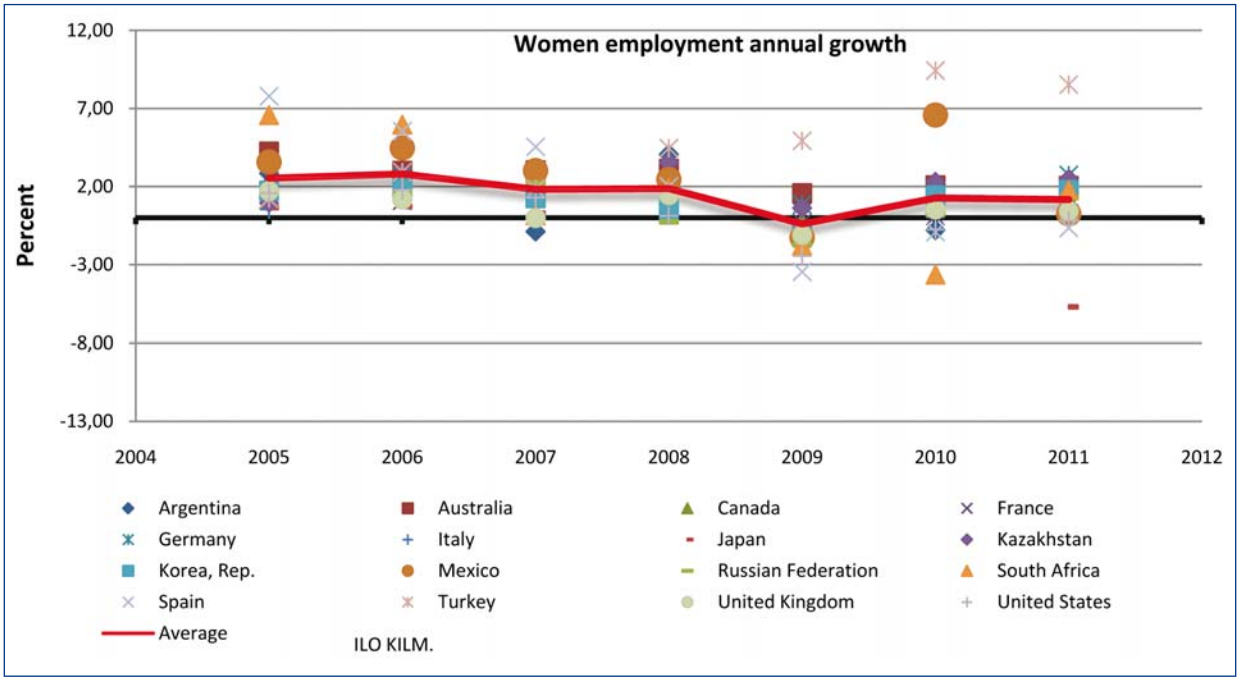


Figure A7. Employment Annual Growth for Men

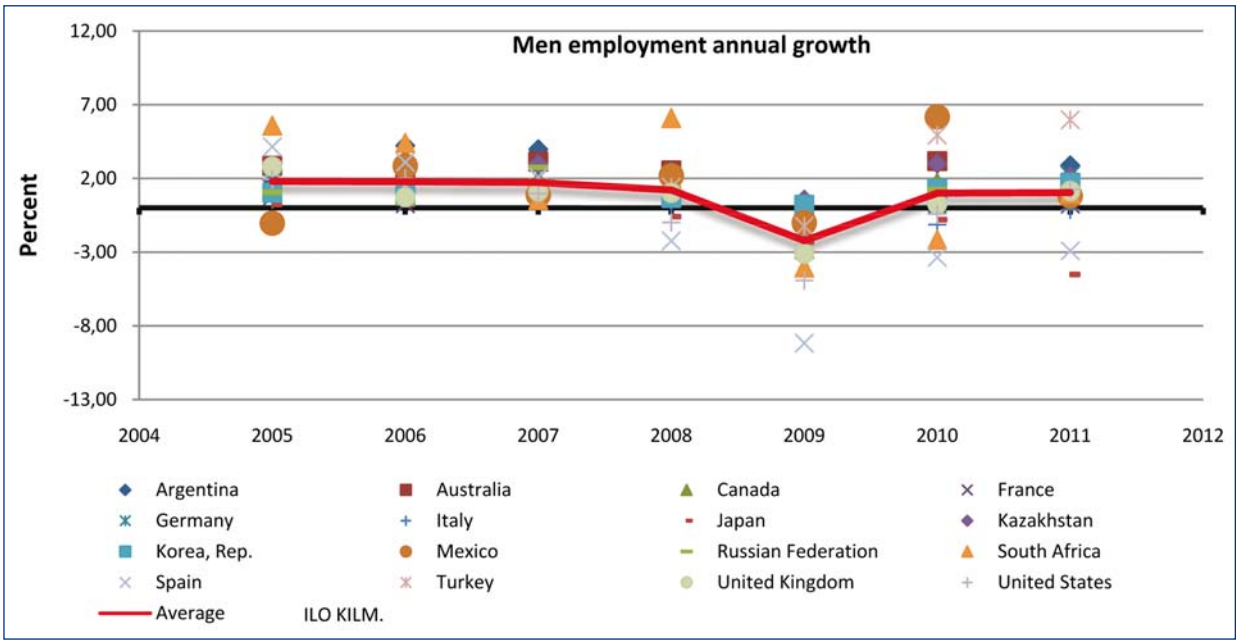
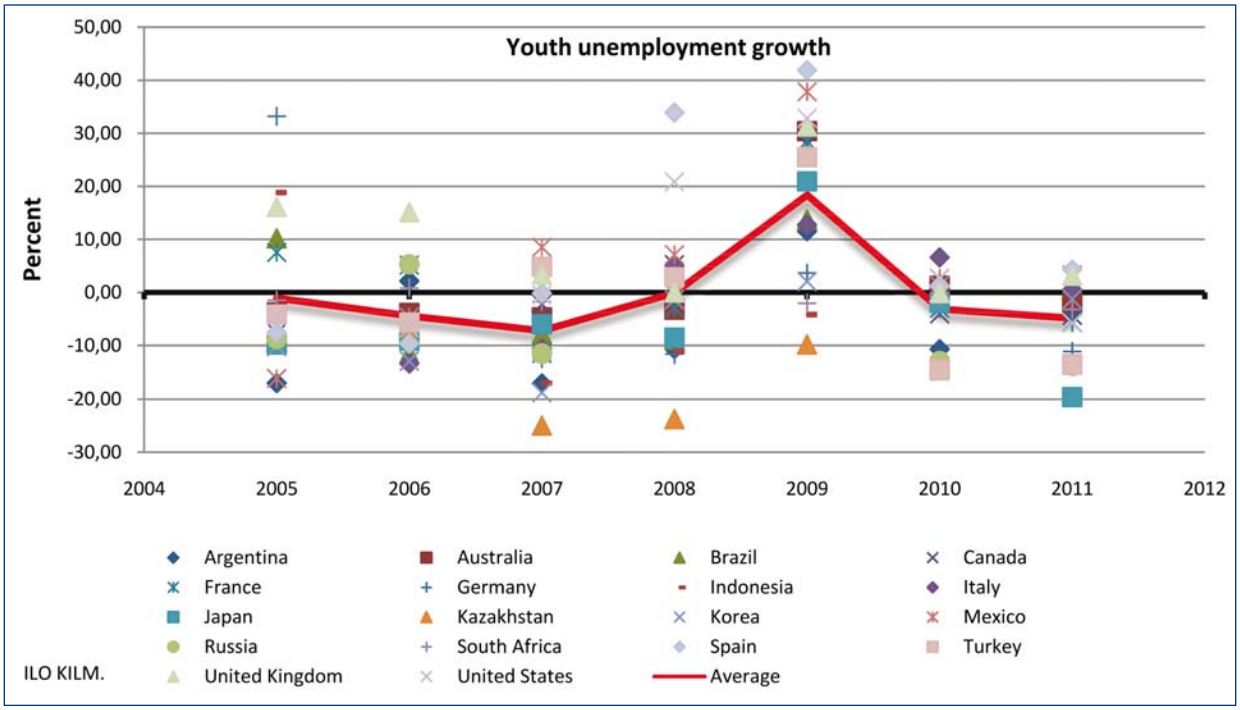



Figure A8. Youth Unemployment Annual Growth



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