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# Coping with Crises

## Why and How to Protect Employment and Earnings

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## Abstract

Events of the past two years are a reminder that crises are a recurring phenomenon with deep and often protracted impacts on labor markets. This paper examines the challenges inherent in crafting policy responses, with particular attention to developing countries. It focuses on the potential tradeoffs between offsetting adverse short-term impacts and preserving incentives for economic recovery and future growth, and between protecting the most vulnerable and compensating those most immediately impacted. It also highlights how policymakers' room for maneuver is constrained in crisis

times by deteriorating fiscal space, limited institutional capacity, and mounting political pressures. Based on empirical evidence from previous crises, the paper asserts that taking a myopic and reactive approach may be costly and counterproductive. Instead, it advocates a more comprehensive approach, designed to build institutions—such as automatic stabilizers and safety nets—that can deliver a coordinated and coherent policy package. This approach will make crises catalysts for institutional changes and long-run growth.

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# Coping with Crises:

## *Why and How to Protect Employment and Earnings*

*by*

*Pierella Paci, Ana Revenga and Bob Rijkers\**

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## INTRODUCTION

Although it is too early to make a complete and accurate diagnosis of the causes and impact of the recent crises on the global economy, it is clear that the capacity of policymakers to anticipate shocks, monitor their impact and formulate timely and effective policy responses has been fairly limited. Since the labor market is a prime channels through which shocks are transmitted to households, the especially weak ability of governments to foresee, monitor and offset adverse labor market impacts is an important concern. This is especially relevant for developing countries, since they are more vulnerable to volatility and because labor is the only asset of the majority of the population in most of these countries (Lustig and Walton 1998; Marquez 2000). Moreover, the recovery of the labor market after a crisis tends to be slow; in the aftermath of a crisis, aggregate indicators such as GDP growth sometimes obscure protracted pain in the labor market (Agenor 2008; Reinhart and Rogoff 2008).

Economic crises thus confront policymakers with the need to act quickly to protect employment and earnings. In combating crises they have to tackle potential tradeoffs: between minimizing short-term job losses as well as declines in earnings and catalyzing long-term growth; and between protecting those most vulnerable and those most impacted. The costs of choosing the wrong policy package are high, since inappropriate policies might exacerbate, rather than attenuate crises. Moreover, policymakers' room for maneuver is constrained by limited fiscal space, the prevailing policy regime and political economy conditions.

By taking stock of the literature on the effectiveness of policies to protect employment and labor earnings during times of crises, this paper aims to help policymakers formulate appropriate country-tailored policy packages designed to reduce the vulnerability of employment and wages to economic shocks. The paper assesses potential tradeoffs between different policy options, highlights the importance of pre-existing institutions, and identifies which policies are likely to work best in different scenarios. While it is clear that restoring (or preserving) macro-economic stability is a prerequisite for recovery from crisis, a comprehensive review of macroeconomic policies to cope with aggregate shocks is outside of the remit of this paper.

The contribution of this paper is to review what we know about the effectiveness of policies enacted in crisis times and to assess such policies in the light of potential intertemporal tradeoffs between minimizing short-term losses and catalyzing long-run growth, and between protecting those most impacted and the most vulnerable. While there is a relatively large literature on the impact of active and passive labor market programs on labor market outcomes during less volatile economic times (see, for example, Betcherman and others 2004; Fretwell and others 1999; Auer and others 2005), the empirical evidence on the effectiveness of these policies in times of crisis is surprisingly limited and often yields ambiguous results. In addition, these policies have most often been analyzed in isolation and not as components of coherent packages to mitigate the impact of macroeconomic shocks.

The paper is organized as follows; the next section discusses the difficult tradeoffs, which policymakers face during crises. Section 3 discusses the ingredients for effective policy packages, while section 4 reviews the evidence on various policies that have been applied in the past. Section 5 summarizes our key findings and concludes

## 1. THORNY TRADEOFFS

The main challenge for policymakers during crises is to design a policy package that can mitigate short-term negative impacts while maximizing, or at least not compromising, long-term growth prospects (Skoufias 2003; Lustig 2000; Holzmann and Jorgensen 2001). In addition, they may have to choose between protecting the poorest and most vulnerable and preserving the jobs and wages of those who are most directly impacted.

### *1.1 Intertemporal Tradeoffs*

The presence of a policy tradeoff between mitigating the short-run impacts of an economic slowdown and facilitating the resumption of long-run growth will depend on the depth, length, and nature of the crisis.

During short-lived downturns associated with the business cycle, the tradeoffs are typically limited. Well-designed countercyclical policies that preserve employment via temporarily stimulating output and labor demand will help minimize adverse short-term impacts and may also ensure maximum growth prospects by limiting any adverse long-term impact of shocks on household welfare, human capital accumulation and productive efficiency.

However, most crises involve some degree of sectoral reallocation of employment and output. In this context, the tradeoffs become much more acute: countercyclical policies may not only be ineffective, they could prove counterproductive. This is because hampering adjustment by maintaining existing employment may deepen and prolong the crisis. Indeed a host of macroeconomic models dating back to Schumpeter (1939) point towards the potential benefits of recessions, arguing that they catalyze the process of creative destruction, by facilitating the efficient re-allocation of resources by cleansing out unproductive arrangements (see, for example, Caballero and Hammour 1994, 1996; Hall 1991).<sup>1</sup> In such a setting, policy interventions should be designed to foster, rather than hamper, the required transformation.

Any need to facilitate sectoral reallocation, however, does not obviate the need for some policy interventions to smooth the transition, as crises can be excessively punishing in the short-run, which in turn may undermine long-run growth prospects. To start with, crises are typically associated with *excess* churning of firms and workers (Davis and Haltiwanger (1990, 1992); Davis and others 1996). Since the costs of separations are high (see, for example, Hall 1995), such churning is harmful. Crises also cause reductions in investments and innovation that could potentially flatten the economy's long-run growth trajectory (see, for example, Ouyang forthcoming) as innovation is essential for productivity growth.

In addition, crises may exacerbate frictions and market imperfections (see, for example, Barlevy 2002, 2003; Caballero and Hamour 2005). Evidence indicates that worker reallocation and the quality of new jobs created are procyclical, rather than countercyclical (Bowlus 1993), suggesting that recessions slow the creation of productive matches. In addition, the negative association between firms' productivity and the propensity to exit appears to be attenuated during crises (Casacuberta and Gandelman, 2009). One possible explanation for these findings is that crises exacerbate credit market imperfections; in Japan in the early 1990s, ailing firms were far more likely to receive additional credit than healthy ones, as troubled banks sought to avoid the realization of losses on their own balance sheets (Peek and Rosengren 2005).

Experience from previous crises suggests that even short-lived shocks can have adverse permanent consequences. Being laid off during a recession can have a scarring effect; evidence from Finland suggest that those laid off during a recession suffer an earnings penalty that only gradually declines over time (Verho 2008). Crises can furthermore force households into actions with pernicious long-term consequences, which are often especially severe for women and children (Handa and King 1991; Alderman and others 2001). These include depleting assets, reducing investments in physical and human capital as well as reducing essential consumption (see, for example, Bresciani and others 2002; Fallon and Lucas 2002; McKenzie 2002, McKenzie 2004, Manning 2000). Shocks can also have a lasting adverse effect on firms, as crises may drive otherwise viable firms out of business (Dollar and Hallward-Driemeier 2000; Casacuberta and Gandelman 2009). Firms that manage to survive typically respond to decreased demand, increased uncertainty and rising costs of capital, by firing, divesting or disbanding. This may entail a loss of firm-specific human capital and lead to a permanent increase in unemployment and/or informality, as displaced workers find difficult to go back into formal employment.

In short, even when substantial sectoral adjustment of output and employment is required, policies to offset excess churning, prevent the aggravation of market imperfections, limit scarring and prevent irrevocable impacts on human capital formation and firms can yield high payoffs.

### ***1.2 Safety Ropes or Safety Nets?***

In addition to intertemporal tradeoffs, governments face difficult choices between providing protection to the most vulnerable – typically the chronically poor – and supporting those most directly affected by the crisis – those who lose their jobs and incomes.

Evidence from previous crises suggests that those who suffer the largest welfare losses may not be the ones who are the most directly affected. Recent financial crises have rapidly spread from initially affected sectors, typically urban-based exporters, construction and manufacturing, to other parts of the economy, via reduced demand and re-allocation of labor. Thus even those not immediately impacted by a crisis are likely to suffer substantial earnings losses. Increased entry into self-employment and subsistence agriculture erodes the profitability of such sectors. In Indonesia, for example, while the construction sector initially bore the brunt of the impact from the 1998 crisis, contracting by 37%, by the end of the crisis mean earnings across the economy had declined by an

estimated 40%, with falls distributed over the entire income-earning distribution (Manning 2000). Similarly, while urban households with workers in financial services and construction suffered the greatest income declines (48% and 35% respectively) during Mexico's 1994/5 peso crisis, rural farm workers saw a 17% income reduction (McKenzie 2002). And even in cases where the earnings losses suffered by vulnerable groups may not be particularly large in absolute terms, the welfare impact of such losses is likely to be severe, since the poor often lack the coping capacity to deal with even relatively minor shocks.

The mechanisms by which labor market adjustment takes place will have an impact on who, in turn, shoulders the principal burden of adjustment. In broad terms, labor market adjustment can occur through two main channels: (i) via reduction in the number of people employed or in the number of hours worked per person (i.e. quantity adjustment); or (ii) via wage declines (i.e. price adjustment). Wage adjustment can be accomplished by an across the board reduction in wages – i.e., a shift of the wage distribution to the left – or by a change in the composition of employment towards less well paid jobs (see Fallon and Lucas 2002).

If most of the adjustment occurs through generalized wage declines, protecting the most vulnerable becomes important. Yet, it may raise political economy problems precisely because the most vulnerable may not be the most immediately impacted and because they are not always strongly politically represented. By contrast if first-round labor market adjustments are concentrated in specific geographic areas or sectors, then targeted interventions to protect those most immediately affected may also be needed.

## **2. DESIGNING AN EFFECTIVE POLICY PACKAGE**

A key question that policymakers have to address when designing the policy responses is whether or not the shock is a cyclical downturn that does not require significant changes in the current composition of output and employment to get back to rapid and sustainable growth, or whether resumption of growth requires significant reallocations of resources across sectors and firms. If the latter are required, then the issue of how to balance policies that aim to mitigate short-term impacts with those that foster the movement of resources out of non-viable sectors and firms becomes critical.

Choosing the wrong policy package to cope with a shock is costly since unsuitable policies may intensify the crisis. For example, using countercyclical fiscal stimuli when the crisis is structural might undermine countries' medium-term competitiveness, distort adjustment, and lead to increases in public debt, thus potentially leading to large growth losses. Even when fiscal stimuli are appropriate, frontloading them may limit fiscal space to cushion the shock over the medium-run. In addition, competitiveness might be undermined by artificial appreciation (or a lack of depreciation) of the exchange rate as a result of increased public spending.

As another example, structural policies implemented to protect workers may stifle recovery and undermine employment creation. In Indonesia, the crisis sparked pro-labor pressures that led to

better enforcement of minimum wages and the introduction of severance pay and dismissal regulations, leading to more severe rigidities in hiring and firing (Manning 2000). While more stringent regulation helped raise earnings and employment stability of manufacturing workers, the employment elasticity of manufacturing output growth sharply declined after the crisis-period, hampering job creation and the recovery of jobs (Narjoko and Hill 2007; Hill and Shiraishi 2007).

## ***2.1 Constraints***

When designing policy responses, governments are constrained by: i) their ability to anticipate the impact of the crisis and policy responses to the crisis; ii) the available fiscal space; and, iii) institutional capacity and political economy conditions. Which policy interventions are feasible and yield the highest returns will crucially depend on these initial conditions. In section 4.1, we shall argue that prevailing policy regime and the existing social safety net system are also important determinants of which policy package is most appropriate.

Effective evidence-based policy making requires an adequate system for monitoring early warning and fast-tracking indicators, to help policymakers identify transmission channels and the appropriate policy response. Unfortunately, labor market information systems in developing countries are often very weak, thus constraining policymaker's ability to formulate effective policy packages. As a result, decisions are often made against a backdrop of extreme uncertainty, on the basis of very partial (and outdated) data: for instance, data may track formal sector wages only, even though the vast majority of the workforce is working in the informal sector.

In times of crisis, government budgets are likely to come under strain. For example, on average public debt rose by over 86 percent during the post-war financial crises (Reinhart and Rogoff, 2009). Tax revenues are typically procyclical and governments may face borrowing constraints. Thus, unless governments have prepared for crises by accumulating reserves, the scope for undertaking additional policy measures is likely to be limited, especially for countries with high levels of debt.

In many cases, the relevant question might be which policies and safety nets to protect, rather than what additional policies to undertake. Indeed, spending on safety nets is typically procyclical rather than countercyclical (Braun and Di Gresia 2003; De Ferranti and others 2000 – see also the discussion in Grosh and others 2008a, p.55). Often, the best option to finance safety net programs during crises times is to pre-fund safety net budgets (Grosh and others 2008a). Once confronted with a crisis, countries can try to reallocate expenditures from less productive programs to ones which are more effective. Such budget reallocations can have a positive distributional impact, as happened in Jamaica, which eliminated general food subsidies in 1984 and used a share of the resulting savings to fund its Food Stamp Program (Grosh and others 2008a, p.56), with a positive impact on poverty reduction (Ezemenari and Subbarao 1999).

Political economy conditions and institutional capacity are two other important determinants of governments' room for maneuver. Some believe that crises may provide a window of opportunity



to reform unwieldy institutions and make political decisions that would in ‘normal’ times be unfeasible (Robinson, 2009). This is perhaps best encapsulated by Hillary Clinton’s one-liner: “never waste a good crisis.” For example, for countries lacking sound social safety nets and automatic stabilizers, crises can be an opportune time to institute such programs. The experience of Mexico in the aftermath of the tequila crisis demonstrated that stabilizers set up under emergency conditions can in turn serve as a stepping stone for the development of more permanent income support systems (see Marquez 2007; Grosh and others 2008a)

Whether or not crises indeed catalyze reform is an open empirical question however (Robinson 2009; Drazen and Easterly 2001; Drazen 1983). And even if crises trigger reforms, the extent to which such reforms will be conducive to long-run growth depends will depend on the existing political situation and institutions. Acemoglu and others (2008) show that in societies with weak institutions policy reforms may be ineffective because the underlying political economy problems are not typically altered by these reforms. Cavallo and Cavallo (2008) demonstrate that only countries with strong political competition and external constraints on governments are likely to be able to use crises as opportunities to enhance long-run growth.

## ***2.2 The Need for Coherence and Coordination***

The theory of the second best tells us that when multiple market failures interact, correcting one market failure may make things *worse* not better. In designing policy packages, policymakers must pay special attention to the coherence and timing of policy packages. Evidence from Korea suggests that the adverse impact of the East Asian crisis was substantially softened by the multifaceted policy response undertaken by the Korean government (Phang and Kim 2001; Hur 2001). Thus policies should be designed as a package of structural interventions rather than as a plethora of isolated responses.

Timing matters too. For example, while introducing reforms conducive to long-run growth, the adjustment program implemented in Thailand to cope with the Asian crisis proved to be too tight, leading to an unnecessary decline in output (Dollar and Halward-Driemeijer, 2000).

Moreover, if crises affect multiple countries at the same time, internationally coordinated efforts may be required. If individual countries pursue their own self-interest, for example by implementing protectionist policies, they may be collectively worse off than when they cooperate. In addition, self-insurance is inferior to insurance through international cooperation (Fernandez Arias and others 2009).

## **3. WHAT WORKS: EVIDENCE ON THE EFFECTIVENESS OF DIFFERENT POLICY OPTIONS**

The above discussion makes it clear that it is very difficult to prescribe a uniform policy package that will work for all countries. Instead, policies need to be tailored to the characteristics of the crisis and country-specific circumstances such as the available fiscal space, the prevailing policy regime and political economy conditions. To complicate matters further, there is no consensus on

which individual policies are most likely to be effective under alternative scenarios. This is because the empirical evidence regarding policies to cope with the labor market impacts of crises is sparse. Moreover, the literature points in different directions as the impact of different policy responses has been highly heterogeneous and strongly context-dependent. Using evidence from previous crises, this section highlights the importance of having effective safety nets and sound structural policies in place at the outset of the crisis. Subsequently, it reviews the empirical evidence on the effectiveness of commonly used policy responses. We only present our main findings. A more detailed review is presented in the appendix.

### ***3.1 Permanent Policies: Being Prepared Pays Off***

Programs and policies set up prior to crisis are arguably more effective in dealing with shocks than policy *responses*, which are designed “on the run,” difficult to get right, hard to implement and possibly difficult to dislodge once they are no longer needed. Analyzing the efficacy of structural policies (defined as policies that have been in place for a prolonged period of time) to mitigate the impact of shocks, Collier and Goderis (forthcoming) find that regulations that delay the speed of firm closure significantly and substantially increase the short-term growth loss from adverse price-shocks in mineral exporting countries, while labor market flexibility helps reduce short-term output losses due to natural disasters. Similarly, Bassanini and others (2009) find that in OECD countries, mandatory dismissal regulations have a depressing impact on productivity growth in industries where layoff restrictions are more likely to be binding.

Countries’ ability to cope with shocks increases considerably if appropriate safety nets are in place before a crisis hits (Grosh and others 2008, Ferreira and others 1999). In reviewing the performance of safety nets during crises in Latin America and East Asia, Blomquist and others (2001) observe that since many safety net programs had to be set up from scratch, spending on these programs ended up being procyclical rather than countercyclical. They argue that permanent safety nets can provide much more effective protection than ad hoc policies. The usefulness of permanent, countercyclical safety net spending is also illustrated by Ravallion and Lokshin’s (2000) analysis of the performance of the Russian social safety net during the 1998 crisis; while the safety net fell short of fully protecting living standards, it helped provide protection against poverty. In times of crisis, expanding existing programs is likely to be a more effective strategy to cope with shocks than implementing new and untested programs from scratch (World Bank, 2008).

### ***3.2 Policy Responses***

In practice, though, many countries will not be optimally prepared for crisis times. Such countries cannot rely on automatic stabilizers but will instead have to undertake policy responses to mitigate the adverse impacts of a crisis.

This section takes stock of prominent policy responses. We categorize these policies into: i) policies to support employment, in particular, wage subsidies, access to credit and reduced hours arrangements; ii) policies to facilitate transitions, including training, job-search assistance and self-

employment assistance programs; and, iii) policies to protect losers, namely, unemployment benefits, public works programs and cash transfers. This is certainly not intended as a rigid categorization, as many policies can serve multiple goals. For example, facilitating access to credit not only supports existing jobs, but can also create opportunities for losers. As another example, wage subsidies can both be used to support employment opportunities and to compensate earnings shortfalls.

Previewing our results, two findings are worth highlighting. First, while estimates of effectiveness are heterogeneous (suggesting that context and design matter) they are limited on average. This supports the argument that having permanent policies and sound safety net systems in place is superior to haphazardly implementing policies after a crisis hits. However, if countries are not prepared for crisis, the necessary speed and scale of policy responses may require compromises in terms of targeting and design (Grosz and others 2008a). In other words, programs with a mediocre design that are implemented quickly may yield better protection than well-designed programs that take time to implement, albeit at some cost in terms of leakages.

Second, a common finding is that the effectiveness of policy responses is enhanced if they are implemented in conjunction with other policies, thus providing empirical support for the argument that policies are likely to be more effective when they are part of a comprehensive policy package than when they are implemented in isolation.

### ***3.2.1 Policies to Support Employment***

#### *Facilitating access to credit*

Facilitating access to credit, for example by expanding microfinance and facilitating access to trade finance, can prevent otherwise viable firms from going out of business due to cash-flow problems, although governments must of course be careful not to bail out firms that are not viable or encourage moral hazard.

A review of the studies evaluating the performance of microcredit schemes during previous crises, summarized in Table 1 in the appendix, shows that they have performed relatively well. While many large banks suffered major problems, microfinance institutions (MFIs) in Indonesia were remarkably resilient to the East Asian crisis (Patten and others, 2001). In Bolivia, the Caja Los Andes bank's microfinance branch was not significantly impacted by the 1998 crisis, unlike other branches of the same bank. However, Marconi and others (2006) contend that the performance of the microcredit branch was a positive outlier – and point out that other Bolivian banks and microfinance institutions were forced to reduce their lending. They argue that the procyclical nature of MFI lending might in fact have exacerbated the crisis. Furthermore, the ability of microfinance credit schemes to alleviate crises may be hampered by credit market interventions. During the East Asian crisis, rural MFIs were adversely affected by governments' reluctance to extend rural credit guarantees (Patten and others 2001, McGuire and Conroy 1998). In addition, short-term fixes such as such as loan forgiveness, subsidized lending, or interest caps may negatively affect long-term access to financial services (Littlefield 2009). The evidence, summarized in Table 1 in the appendix,

points to the importance of careful design of credit extension schemes; in facilitating sustainable access to credit, the devil is in the details.

#### *Temporary payroll tax holidays and wage subsidies*

Subsidies have been widely applied during previous crises. The theoretical appeal of this intervention is indeed clear (see for example Pauw and Edwards 2006). They limit short-term labor retrenchment and can, in principle, be targeted to maximize protection for the most vulnerable groups, such as women and young workers.

However, the available evidence on their impact (summarized in Table 2) suggests that such schemes typically have high deadweight and substitution effects both during crises (in the order of magnitude of 20%) and during less volatile times. Their effectiveness also seems limited although it varies with sector and firm-size (Abraham and others 2000). They have been found to be less effective in highly capital intensive sectors and more effective when targeted at small firms, perhaps because these firms pay lower wages (Kang and others 2001). Their impact may be (marginally) enhanced if they are combined with job search assistance (Betcherman and others 2004), underscoring the importance of implementing comprehensive policy responses. In the medium to long term, however, subsidies are unlikely to be economically or politically sustainable.

#### *Temporary reduction in hours worked*

Another popular option to maintain viable employment is to facilitate reduced hours arrangements, such as publicly financed trainings, access to partial unemployment benefits, and paid holidays. For example, a recent ILO survey of 54 countries (10 LICs, 10 lower middle income, 17 upper middle income and 17 HICs) shows that reductions in hours worked have been implemented in a number of countries including China, Vietnam, the Philippines, Indonesia, Mexico, Argentina, Columbia and Jordan (ILO, 2009).

### ***3.2.2 Policies to Facilitate Transitions***

The same ILO survey shows that 63% of countries had introduced additional training measures in response to the recent financial crisis, 78% had implemented subsidies and tax reductions for SMEs, and nearly 50% had increased capacity for public employment services. All of these percentages are much higher if Sub-Saharan Africa is excluded from the sample.

Training, self-employment assistance and job-search assistance facilitate employment transitions. Evaluations of such programs during less volatile economic times suggest that their impacts are highly heterogeneous and strongly dependent on context and implementation (Auer 2008). In a meta-analysis of active labor market programs, Card and Weber (2009) demonstrate that many programs that exhibit insignificant or even negative impacts after only a year have significantly positive impacts after 2 or 3 years, indicating that the impacts may vary with time.

**Training programs** can help enhance the productivity of labor and may be used to help workers adapt to a changing economic environment. Since human capital formation is a cumulative process, training benefits the most able workers foremost, making it a weak tool for protecting the most vulnerable. Training seems to be most effective when used in conjunction with other policies (Fares and Puerto, 2008) – providing further evidence for the contention that comprehensive policy packages are likely to be more effective than policies implemented in isolation.

While they have been utilized in a variety of forms during past crises, the fragmented evidence reviewed in Table 3 in the appendix suggests that, on average, the usefulness of training programs is limited. The net employment effect of training policies implemented in response to crises is in the range of 10% to 20% (See Table 4).

**Self-employment assistance programs** usually have high deadweight and displacement effects and only help a selected subset of the vulnerable population. During “normal” times, businesses created under self-employment policies have high failure rates, often exceeding 50% (see Abraham and others 2000). Evidence exists of positive impacts for older and better-educated workers, but take-up is highly concentrated amongst individuals with entrepreneurial skills, many of whom would have started up their own enterprise regardless of the introduction of self-employment support (Betcherman and others 2004; Abraham and others 2000). For instance, Almeida and Galasso (2007) find that only a very small subset of former welfare beneficiaries – those who were younger, more educated, and with previous self-employment experience – were attracted to a self-employment assistance program in Argentina. Subsidies for self-employment initiatives normally reach less than 5 percent of the unemployed but are somewhat more promising when targeted at particular groups – such as women and older individuals (Auer 2008; Abraham and others 2000). Implementation of self-employment support may also entail a tradeoff between promoting the creation of new firms and protecting the profitability of incumbent firms (Auer 2008).

**Job-search assistance** services such as counseling, placement assistance and job matching typically have positive impacts on post-program employment and earnings and favorable cost-benefit ratios in developed countries. However, it is not clear how they perform in developing countries, where many labor market transactions are informal, and in times of crisis, when the demand for labor is lower than usual.

### ***3.2.3 Policies to Protect Losers***

#### *Unemployment Benefits*

According to the ILO survey 32% of countries have adopted some extension of unemployment benefits in response to the current financial crisis and 28% have used partial unemployment benefits to cover reduced hours and part-time training (ILO, 2009).

When the labor market transmission of shocks occurs primarily via a reduction in formal sector employment and an effective unemployment insurance system is in place, unemployment

benefits can act as an automatic stabilizer, effectively compensating those who lose their jobs. In times of crisis, an extension of the duration of the entitlement may be appropriate. Coverage can also be extended to previously unprotected groups, such as workers with short employment histories, those completing prolonged training courses, those exiting from public works, or, as was the case in Korea during the Asian financial crisis, to workers in small enterprises. The introduction of unemployment benefits targeted to low skilled workers and those on low wages may also be an option in middle income countries with good administrative capacity.

Unemployment benefits can also be used to compensate workers for a reduction in the number of work hours, with a view to allowing employers to maintain workers in times of weak demand. Typically, workers who reduce their work hours receive unemployment insurance benefits pro-rated for the hours lost, benefit duration is limited to 20–30 weeks, and there is a floor (and sometimes, a ceiling) for the percentage of the workforce that reduces work hours (Abraham and Houseman 1993).

An effective system of unemployment insurance requires time and substantial institutional (and fiscal) capacity to implement, monitor, and target benefits (Vodopivec 2006). Only a small number of developing countries have a comprehensive and effective system of unemployment benefits in place and in some of them, such as Chile and Columbia, the benefits are anchored to individuals' savings accounts. For MICs, an innovative proposal has been suggested as a rapid response to the current crisis (Robalino and others forthcoming). This involves the introduction of a variant of the standard unemployment insurance savings accounts (UISAs) that allows for borrowing from these accounts, using pension wealth as a guarantee. By relying on past social security contributions as a qualifying condition, such a scheme could be made operational in a relative short time (4-6 months) and eventually it could be transformed to a permanent scheme by mandating regular (worker and employer) contributions.

Nevertheless, for many developing countries unemployment benefits are not a viable instrument to protect the losers and stabilize the economy. For such countries public works programs may represent a better option.

#### *Public works programs*

Public work programs are a common feature of crisis response packages, especially in countries without an effective unemployment insurance program. They have been used with this purpose in Argentina, Bolivia, Chile, Columbia, Indonesia, the Republic of Korea and Peru (Grosh and others 2008a) and they appear to be the most common response to the current financial crisis so far (ILO, 2009). The existing empirical evidence on the impact of expanding public works programs to mitigate crisis impacts provides scope for modest optimism regarding their possible capacity to absorb excess labor. For example, the Argentinian Jefes Y Jefes program – introduced during the Argentine crisis to provide support to unemployed household heads conditional on a work requirement – helped reduce unemployment by 2.5% and could have been even more effective if

better targeted (Ravallion and Galasso, 2005). Yet, when labor market adjustments to shocks occur primarily via wages, public work programs will be less useful as a crisis response.

The limited available evidence also suggests that self-selection into public works programs provides a fairly efficient instrument for targeting those most impacted by a crisis. Self-targeting through a low-wage, assures that leakages tend to benefit the poor and assures a credible exit strategy.

The cost-effectiveness of public works programs depends on budget leverage, labor intensity of the program, targeting performance, the net wage gain of participants receive, as well as possible indirect benefits. Ravallion (1999) estimates that the cost of a \$1 gain in current earnings to the poor using the public employment programs is about \$5 in a middle income country and \$3.50 for the middle and low-income countries respectively. While the cost-effectiveness of public work programs may be better than that of other transfer mechanisms, it is likely to be inferior to that of direct transfer programs.

### *Cash Transfers*

Although they are not specific labor market interventions, cash transfers can be an effective method to compensate losers when the adjustments occur primarily via wage reductions. Provided that they have adequate coverage and generosity, they have also been found to be very cost-effective options for protecting the most vulnerable, especially in LICs, as they have low administrative costs and do not distort prices. In-kind transfers are less desirable in general, because they have higher administrative costs and are more paternalistic. “Near-cash” instruments (e.g. food stamps) represent a middle ground, but their administrative costs tend also to be significantly higher than cash transfers.

*Conditional Cash Transfer (CCT)* programs may improve on the performance of unconditional cash transfers in channeling help to the most vulnerable. For example, they may be targeted at children and women, who often bear the brunt of economic crises. Conditioning cash transfers on school enrolment may enhance children’s educational outcomes, and conditioning on female labor market participation may boost women’s intrahousehold bargaining position. Thus, in countries where CCTs are already established, raising benefits or expanding coverage could be desirable. For example, evidence from Mexico’s *Oportunidades* and Indonesia’s scholarship program *Jaring Pengamanan Sosial* shows CCTs can protect poor children’s school enrollment against shocks (de Janry and others 2006; Cameron 2002). However, where cash transfer programs are not in place, as in many LICs, conditional transfer schemes are likely to take longer to implement than unconditional schemes. Conditionality must also be carefully assessed, since poorly designed schemes may actually exclude the most vulnerable, such as those who do not have access to the public services upon which transfers are conditioned. As a crisis response, targeted unconditional cash transfers may therefore yield better results.

#### **4. CONCLUSIONS: PREPARE AND PRESERVE POLICIES THAT WORK**

The deep economic shocks experienced by developing countries over the last two years remind us that crises are a recurring phenomenon. Macroeconomic shocks can have deep and long-lasting effects on labor market structures and outcomes, which in turn may undermine the prospects for recovery, future growth and poverty reduction. Crises thus confront governments with the need to act promptly and effectively to protect employment and labor earnings and to compensate the losers. The pressure is particularly profound in developing countries, where the incidence of poverty and vulnerability is high, safety net systems are weak and the poor own no other assets than labor.

This paper examines the challenges faced by policymakers of developing countries in identifying the interventions that can transform crises from threats to development to catalysts for institutional reform conducive to growth and poverty reduction. It focuses on two important tradeoffs: (i) between offsetting adverse short-term impacts and preserving incentives for economic recovery and future growth; and, (ii) between protecting the most vulnerable and compensating those most immediately impacted. It also highlights how policymakers' room for maneuver is limited during crises by deteriorating fiscal space, limited institutional capacity and mounting political economy pressures. It points out how these constraints are particularly stringent in developing countries, where the scope for fiscal stimuli and incremental interventions is often nonexistent, and timely and reliable information on the evolution of labor market outcomes is rarely available. In many of these countries the relevant question is not what additional policies to undertake, but rather what policies to protect.

Using empirical evidence on the effectiveness of such policies during past crises, this paper claims that taking a myopic and reactive approach to crises may not only be costly, it may also be counterproductive. Implementing the wrong policies, or doing so at the wrong time, might exacerbate, rather than attenuate, the depth and length of the downturn. If resumption of growth requires substantial reallocation of employment and output, policy responses such as wage subsidies might obstruct recovery by hampering adjustment in the long run, even if these responses may help minimize excess churning and limit scarring effects in the short run.

Instead of focusing on isolated responses, this paper advocates taking a more comprehensive approach, by building institutions that can deliver a coordinated and coherent policy package conducive to long-run growth. Such institutions will not only help mitigate the impact of the contemporary crisis, but will also help dampen and shorten future crises and maximize growth prospects. Implementing sound structural policies ex-ante is a more effective crisis coping strategy than scrambling for responses once the crisis has hit. Countries with prudent fiscal management, reliable labor market information systems, labor market policies promoting flexibility, well-functioning credit markets, and sound safety net systems have proven much better at cushioning shocks; safety nets such as public works programs offer protection for the chronically poor, while direct transfers can help to protect those most immediately impacted.



On the other hand, a pressing need for additional policies to cope with the current crisis indicates that pre-existing institutions were insufficient to cope with the shock. For countries in need of such additional policies, the crisis can provide an opportune time to institute automatic stabilizers and set up safety nets, which can serve as a stepping stone for the development of more permanent income support systems. However, this task may be especially daunting in countries that have poor institutions to start with.

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## Appendix A: Review of Evidence on Main Policy Interventions

**Table 1: Wage subsidies/Payroll tax subsidies**

<b>Crisis and Context</b>	<b>Authors</b>	<b>Methodology</b>	<b>Main Findings</b>	<b>Comments</b>
<p><b><i>Korea (1997-2001)</i></b></p> <p>Employment stabilization program.</p>	Phang et al. (2001).	<p>Annual <i>Economically Active Population Survey</i>, (1995-2000) from the National Statistical Office are used in combination with statistics provided by the Ministry of Labor and Korea Labor Institute.</p> <p>Net employment effect calculated as: net employment effect = gross effect – deadweight loss – substitution effect – displacement effect.</p>	<p>Net employment effect of the employment stabilization program<sup>1</sup> was 22.5% on average, implying a high deadweight loss.</p> <p>The effectiveness of wage subsidies varied with firm-size as well as sector. More capital intensive sectors benefitted less while small firms benefitted more.</p>	
<p><b><i>Czech Republic and Hungary (1990-2005)</i></b></p> <p>Wage subsidies to help the long-term unemployed</p>	Fretwell, and others (1999)	Matching in combination with regression methods.	Employment impact was an increase of 10 pp in Czech Republic*** and 12 pp in Hungary**.	
<p><b><i>OECD and Post-Soviet transition countries (1982-1999)</i></b></p> <p>Mix of wage subsidies studied.</p>	Dar and others (1999)	Literature review: An analysis of 18 interventions in developed and developing countries: 1 experimental, 11 quasi-experimental, and 6 non-scientific.	<ul style="list-style-type: none"> <li>• Additionality is typically in the order of magnitude of 20-35%</li> <li>• Deadweight effects range between 20-70%</li> <li>• Substitution effects range between 10-80%.</li> </ul>	

Note: \*\* Impact statistically significant at the 95 percent level of confidence

\*\*\* Impact statistically significant at the 99 percent level of confidence

**Table 2: Access to Credit**

<b>Crisis and Context</b>	<b>Authors</b>	<b>Methodology</b>	<b>Main Findings</b>	<b>Comments</b>
<p><b>Indonesia (1997)</b></p> <p>Performance of different parts of Bank Rakyat Indonesia (BRI) during the Indonesian crisis (1997-2000)</p>	<p>Patten and others. (2001)</p>	<p>(Descriptive) Comparative analysis of the performance of different parts of BRI during crisis including corporate banking, retail banking and micro-banking.</p>	<p>Microenterprise credit remarkably resilient to the crisis and outperformed other parts of RBI.</p> <ul style="list-style-type: none"> <li>• Microcredit repayment rates &gt;97%</li> <li>• Average growth of microfinance lending = 14% p.a. (1997-1999)</li> <li>• Ratio of savings accounts to loan accounts = 1 to 1 (1997-1999)</li> </ul>	
<p><b>Bolivia (1998)</b></p> <p>Crisis performance of Caja Los Andes, a registered savings and loan company using information on default and late payments.</p>	<p>Vogelgesang (2003).</p>	<p>Bivariate probit model of i) defaults and ii) late repayment, correcting for selection due to non-random characteristics of individuals with loan approval. Exclusion restrictions: (i) for first-time loans = the amount requested; (ii) for prior loans = the length of prior loan</p> <p>Sample: 76,000 clients and 28,000 rejected loan applications (May 1992-June 2000).</p>	<p>The crisis had a negative, but insignificant impact on the probability of repayment</p>	<p>According to Marconi et al. (2006) the performance of Caja Los Andes was a “positive outlier”. Most banks and financial intermediaries witnessed higher arrears and lower the value of outstanding loans. Unfortunately, they only present descriptive statistics making it difficult to assess causality.</p>
<p><b>Bolivia (1998-2004)</b></p> <p>Comparative analysis of microfinance institutions</p>	<p>Marconi et al. (2006)</p>	<p>(Descriptive) Comparative analysis of banks and microfinance institutions + simulation exercise. Focus on the value of the outstanding portfolio and arrears rates Simulation based on a structural macro-model that endogenizes the microcredit sector calibrated by means of OLS regressions estimated using a sample of 48 observations drawn from 8 microfinance institutions (1997-2002) and parameter values inferred from existing literature.</p>	<p>While banks and microfinance institutions reduced their lending and witnessed increasing arrears institutions providing savings, training and quasi-insurance did relatively well.</p> <p>Simulation suggests: (i) microfinance institutions acted as a crisis catalyst; (ii) improvements in the design of microcredit schemes (such as the introduction of complementary insurance and savings schemes) enhance the effectiveness of microcredit institutions</p>	<p>The paper presents many useful descriptive statistics. The simulation relies on strong structural assumptions. In addition, the econometric analysis at the basis of the model calibration suffers from small sample and omitted variable bias.</p>

**Table 3: Training and Self-Employment assistance**

Crisis and Context	Authors	Methodology	Main Findings	Comments
<p><b><i>Korea (date crisis began Oct 2007)</i></b></p> <p>Training programs for the unemployed.</p>	<p>Kang and others (2001)</p>	<p>(Descriptive) Comparison of participants and non-participants to determine effect of training on the unemployed + hazard model.</p>	<p>Re-employment Rate: No significant differences between the two groups: 49.6% of participants v/s 53% of non-participants have been re-employed and 38% of participants v/s 40% of non-participants were employed at time of study.</p> <ul style="list-style-type: none"> <li>• Performance after active job search: Training participants were more successful in finding jobs: one-third was re-employed within a month and 54.3% within the first three months and 23.4% found re-employment after seven months (compared to rates of , 21% s and 60% for non participants).</li> <li>• Participants spent on average 4.3 months before re-employment compared to an average of 8.6 months for the rest.</li> <li>• However a higher percentage of participants held full-time wage employment compared to non-participants, while a larger percentage of non-participants held part-time jobs.</li> <li>• However, participation in training increases the probability of re-employment by 28% and the impact was particularly significant for women, training participation increases the probability of re-employment ( 63% higher ).</li> </ul>	
<p><b><i>China (1998-2000)</i></b></p> <p>Retraining programs for laid-off workers in the cities of Shenyang and Wuhan.</p>	<p>Bidani et al. (2005)</p>	<p>Propensity score matching in conjunction with regression methods.</p> <p>The training and comparison group was chosen from official 1998 census data. The final sample was administered in 2000.</p>	<ul style="list-style-type: none"> <li>• Positive impact on employment in Wuhan. Little impact in Shenyang but impact on earnings was reversed</li> <li>• Participation higher for unemployed younger females, previously working in non-state owned manufacturing who have visited an employment service center in the past (indicating targeting was effective).</li> </ul>	
<p><b><i>Argentina (1994)</i></b></p> <p>Programa Joven.</p>	<p>Aedo et al. (2001)</p>	<p>Data for individuals who registered and qualified for training programs (March 1996 – December 1997). Propensity Scores Matching Estimators and Cost benefit analysis.</p>	<ul style="list-style-type: none"> <li>• Impact on earnings statistically significant but only for young males and adult females.</li> <li>• Impact on employment only statistically significant for adult females.</li> <li>• Statistically significant impacts not sensitive to different specification ( propensity score matching) but cost-benefit analysis indicates it takes 9 years for the net present value to become positive.</li> </ul>	



			<ul style="list-style-type: none"> <li>For all of the beneficiaries 12 years are required for the program to have a positive net present value.</li> </ul>	
<b>Argentina (1994)</b> Programa Joven.	Almeida and Galasso (2007)	Difference-in-difference methodology to compare the outcomes of interest for project participants before and after the intervention with those of non-participants. A baseline household survey was administered to 309 participants and 244 non-participants.	<ul style="list-style-type: none"> <li>Those with entrepreneurial skills, female household heads and more educated individuals are most likely to take up self-employment.</li> <li>No evidence of average income gains to participants and their households in the short run.</li> </ul>	
<b>Mexico (1982)</b> PROBECAT (Programa de Becas de Capacitación para Trabajadores)	Wodon and Minowa (2001)	Use the PROBECAT at the state level is used as an instrumental variable to control for endogeneity of program placement to compare a sample of PROBECAT participants and a sample of unemployed individuals from Mexico's urban employment survey.  Heckman Sample Selection Model is used to estimate the impact of PROBECAT on monthly earnings corrected for selection into the program. Cox Proportional Hazard Models are estimated to assess the impact of training on the time necessary to find employment.	<ul style="list-style-type: none"> <li>No impact on employment and wages found.</li> </ul>	This result contrasts with earlier evaluations; this study concludes that the positive results in the past evaluations were obtained because limited attention was given to the problem of sample selection.
<b>Mexico(1984)</b> PROBECAT (Programa de Becas de Capacitación para Trabajadores)	Revenga, Riboud and Tan (1994)	Comparison Group Analysis with quarterly National Urban Employment Survey administered to the 1990 cohort of PROBECAT participants with the non-participants comprised of unemployed individuals  Heckman Two Stage Selectivity Correction Procedure is used to correct for selectivity into the program. Cox Proportional Hazards Model of unemployment duration on the pooled trainee and comparison group samples.	<ul style="list-style-type: none"> <li>PROBECAT fairly effective in shortening the duration of unemployment only for trainees with prior work experience.</li> <li>It also improved the likelihood of employment over a longer run (three-six months for male and one year for female)</li> <li>It raised post-training earnings of men but not women and the effects were greater for males with 7-9 years of schooling.</li> <li>For both men and women, training induced an increase in the number of hours worked per week.</li> <li>The study confirms that program evaluation results can be sensitive to the way in which training effects are measured. A key source of bias is that arising from nonrandom selection of participants into the training program and it is important to correct for selectivity bias.</li> </ul>	

**Table 4: Public Works**

Crisis and Context	Authors	Methodology	Main Findings	Comments
<p><i>Argentina (1994-2003)</i></p> <p>Jefas Y Jefas programme</p>	<p>Galasso and Ravallion (2003)</p>	<p>Matched subset of applicants who are not yet accepted into the program are used as a comparison for program participants using matching methods to control for selection on observables. Matches double differenced estimates of program impact are used to minimize bias due to selection on unobservable but estimates are imprecise, rendering the matched single-differenced estimates the preferred estimation method.</p>	<ul style="list-style-type: none"> <li>• Program reduced unemployment by 2.5% and had a small impact on poverty rate, but a large impact on the number of people in extreme poverty which would have been 10% without the program.</li> <li>• The impact could have been higher if the program had been targeted since the program attracted many inactive people into the workforce.</li> </ul>	
<p><i>Argentina (1994-2003)</i></p> <p>Jefas Y Jefas programme,</p>	<p>Iturriza, A. and Bedi, A and Sparrow, R (2008)</p>	<p>Comparison of probability of exiting unemployment of participants and non-participants using logit and multinomial logit models, single-differenced and double-differenced matcing estimators</p>	<ul style="list-style-type: none"> <li>• Participation is associated with a 12-19% lower probability of transiting to employment</li> <li>• Women are especially less likely to exit the program.</li> </ul>	
<p><i>Indonesia (1997-2000)</i></p> <p>Two social safety net programs: the <i>Jaring Pengaman Sosial</i> and a rice subsidy program</p>	<p>Sumarto, Sudarno, et al. (2003)</p>	<p>Dynamic benefit incidence analysis using representative household panel data.</p>	<ul style="list-style-type: none"> <li>• The job creation program was much better at targeting the most affected than the rice subsidy program,</li> <li>• The rice program was better at targeting the poorest.</li> </ul>	

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**ENDNOTES**

\* Poverty Reduction Group, The World Bank, Washington DC, USA.

<sup>i</sup> It should be noted that the empirical evidence for the idea that crises catalyze the process of creative destruction is more ambiguous than theory would suggest. Studies of manufacturing firms only weakly support the hypothesis that allocative efficiency increases during downturns (see, for example, Griliches and Regev 1995; Bailey and others 1998; Foster and others 2001).