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## **Introducing Unemployment Insurance to Developing Countries**

Milan Vodopivec

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*World Bank and IZA*

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## ABSTRACT

### Introducing Unemployment Insurance to Developing Countries<sup>\*</sup>

The paper identifies key labor market and institutional differences between developed and developing countries, analyzes how these differences affect the working of the standard, OECD-style unemployment insurance (UI) program, and derives a desirable design of unemployment benefit program in developing countries. It argues that these countries – faced by large informal sector, weak administrative capacity, large political risk, and environment prone to corruption – should tailor the OECD-style UI program to suit their circumstances. To minimize employment disincentives, to ensure affordability, and to minimize administration costs, such adaptations include: (i) relying on self-insurance (via unemployment insurance savings accounts – UISAs) as a main source of financing and complementing it by solidarity funding; (ii) simplifying monitoring of job-search behavior and labor market status, and even eliminating personal monitoring of continuing eligibility requirements in the early phases; (iii) keeping modest benefits both in terms of the replacement rate and potential benefit duration; (iv) drawing on employers' and workers' contributions as sources of financing; and (v) piggybacking on existing networks to administer benefits. Particularly attractive is the UISAs-cum-borrowing version that uses pension wealth as collateral, making the system proof to moral hazard and strategic behavior, and allowing it to be rapidly deployed, such as in response to the currently emerging global economic crises.

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Unemployment insurance (UI) is the most common public income support program for the unemployed in developed countries. In these countries, it typically offers good protection: it covers the majority of employed persons, irrespective of occupation or industry, and provides adequate smoothening of consumption patterns. For example, studies on the U.S. find that the welfare of benefit recipient households is on average only 3-8 percent lower than the welfare of otherwise identical households (Hamermesh and Sleznick, 1995), and that in the absence of unemployment insurance, average consumption expenditures would fall by about 20 percent (Gruber, 1997). In the last two decades, transition countries also introduced UI programs, and their use in developing countries is on the rise as well.

The incidence of unemployment benefit programs is strongly related to the level of development of a country (see Vodopivec, 2004). But prompted by increased exposure to foreign markets and fearing future global crises, more developing countries (including lower middle-income countries such as the Philippines and Sri Lanka) are contemplating introducing UI. Such considerations are bolstered by the prospect of efficiency and distributive advantages of reforming social protection programs for workers in developing countries. Namely, in many developing countries the balance between job and worker protection is tilted in the favor of the former: virtually all have – typically very restrictive – severance pay programs, and very few have UI programs. It is often argued that removing excessive job protection would not only boost the creation of more and better jobs, but also improve job prospects for vulnerable groups (see, of example, Heckman and Pages 2000). And it goes without saying that reducing job protection is an extremely sensitive task that can often only be implemented if accompanied by introducing or strengthening income protection programs for workers – UI being one of them.

Obvious – and difficult – questions thus arise: when is a country ready to introduce an UI program? What factors influence successful operation of the program, and how to adjust the design of the program – the coverage, eligibility rules, the generosity of benefit, structure of incentives, and monitoring? In particular, how should factors such as lack of administrative capacity, large size of informal sector, and the profoundly different nature of unemployment of developing countries be accounted for?

To address these questions, the paper identifies key labor market and institutional differences between developed and developing countries, analyzes how these differences affect the working of the standard, OECD-style unemployment insurance program, and derives a desirable design of unemployment benefit program in developing countries. It argues that developing countries – faced by large informal sector, weak administrative capacity, large political risk, and environment prone to corruption – should tailor the OECD-style UI program to suit their circumstances. To minimize employment disincentives, to ensure affordability, and to minimize administration costs, such adaptations include: (i) relying on self-insurance (via unemployment insurance savings accounts – UISAs) as a main source of financing and complementing it by solidarity funding; (ii) simplifying monitoring of job-search behavior and labor market status, and even eliminating personal monitoring of continuing eligibility requirements in the early phases; (iii) keeping modest benefits both in terms of the replacement rate and potential

benefit duration; (iv) drawing on employers' and workers' contributions as sources of financing; and (v) piggybacking on existing networks to administer benefits. Particularly attractive is the UISAs-cum-borrowing version that uses pension wealth as the collateral, making the system proof to moral hazard and strategic behavior, and allowing it to be rapidly deployed, such as in response to the currently emerging global economic crises.

The organization of the paper is as follows. Section 1 describes the UI program, summarizes its key strengths and weaknesses, and discusses its income protection and efficiency properties as established in developed countries. Section 2 discusses how to adjust the program to account for specific conditions that characterize developing countries, and Section 3 reviews the experience with UI programs by transition and developing countries. Section 4 provides a case study of designing a suitable UI program for a developing country – Sri Lanka, and Section 5 concludes.

## **1. Income Protection and Efficiency Impact of UI**

Below we describe the stylized features of UI program as practiced around the world and summarize the program's key strengths and weaknesses. Moreover, to provide "benchmarks" for the analysis that follows, we also summarize both income protection and efficiency effects of UI programs in developed countries.

In developed countries, UI is provided, together with pension and health insurance, as part of – publicly provided – social insurance. Unemployment insurance is publicly provided primarily because its functioning is affected by strong information asymmetries – which give rise to the so-called moral hazard and adverse selection problems – that cannot be handled by private providers. Moral hazard arises because UI reduces self-protection; adverse selection arises because information problems prevent insurers to charge higher premiums to bad risks than to poor risks. Correcting for market failures calls not only for regulation – obligatory membership to avoid the problem of adverse selection, but also for its public provision, to improve monitoring capacity and financial sustainability of the program. Another advantage of its public provision is the enhanced ability to pool resources across large groups, which reduces strains on the program arising from the covariant nature of unemployment risk. Moreover, financial backing by the government is often provided when the program faces financial difficulties.

The program typically requires that workers and their employers pay earnings-related contributions which, upon separation, entitle workers to unemployment benefits according to predetermined eligibility conditions. While it mimics market insurance, the program deviates from actuarial principles by charging premiums which do not reflect individual risks. In developed countries, UI is mandatory and the most widely used income protection program for the unemployed, typically covering all workers. To qualify for benefits, the worker must satisfy the minimum covered employment or contribution requirement. The cause of dismissal may affect the individual's eligibility for benefits, with quitters often being disqualified. Continuing eligibility requires that applicants are available for and willing to take a job, and that they actively search for it. Benefits are typically a proportion

of the individual's pay in the most recent employment spell. The initial replacement rate is usually between 40 and 75 percent of average earnings (see Table 1 for more details about national UI programs).

When thinking about transferability of UI to developing countries, it is important to have in mind the origin of social insurance. Namely, social insurance is a response of the modern, industrial society to the changing nature of the labor market, above all, to the development of a modern employment relationship (Atkinson, 1995). In an industrialized and urbanized society, employment becomes a "discrete" event: workers either work or do not work. This development has strong implications for unemployment – if they cannot find a job in wage employment (working for others), workers are unable to resort to self- or home-production, because they are divorced from ownership of means of production. Similarly, older and less productive workers in industrialized societies stop working altogether once their productivity drop substantially, whereas under different labor market conditions of traditional societies they continue to be economically active as long as they produce something valuable. Thus the "invention" of unemployment and the changing nature of retirement created the need to insure against the new non-employment contingences. In other words, social insurance is based on the concepts of unemployment and retirement as specific social constructs.

The key strengths of the UI program are as follows (Vodopivec, 2004):

- Because it pools resources across a wide base, it provides good protection – enabling strong consumption smoothing – for all covered workers.
- It performs well under all types of shocks.
- By automatically injecting additional resources and reducing taxes in times of recessions, UI acts as an automatic stabilizer and thus moderates the magnitude of the economic downturn.
- It encourages the emergence or expansion of more risky jobs and/or industries, which may increase efficiency (Acemoglu and Shimer 1999, 2000).

The above strengths have to be weighed against the following main weaknesses of the program:

- The program creates reemployment disincentives and wage pressures, which increase the equilibrium unemployment rate of the economy (see, for example, Holmlund, 1998).
- By interacting with adverse shocks, the program contributes to the persistence of unemployment (Blanchard and Wolfers, 2000).
- It may create large unfunded liabilities, which creates the need of the government to subsidize the program.
- The protection is limited to formal sector workers only.

## **Income Protection Effects**

The main objective of income unemployment benefit programs is to compensate workers for the loss of income when they become unemployed. Below we evaluate two key aspects of such protection: coverage and adequacy. We pay particular attention to programs in transition countries, most of them introduced in the beginning of the 1990s, which offer most valuable lessons for developing countries contemplating introducing such programs.

### *Coverage*

In industrial countries, most workers are protected by several income support programs (for a review of income support programs for the unemployed around the world, see Vodopivec 2004 and Vroman and Brusentsev, 2005). Most UI programs are government mandated and cover all employees; many exclude the self-employed and some other groups, such as agricultural workers and household workers. Note that coverage by legislated severance pay also tend to be widespread, and that industrial countries also offer social assistance programs that provide assistance of last resort. In most countries these programs are open-ended in duration. Industrial countries also offer other types of income support programs (early retirement, public works, training, employment subsidies), which are usually targeted to specific groups.

In transition countries, UI covers most of the labor force (and workers are also usually eligible for severance pay). Unemployment benefits represented an important source of income in these countries in the mid-1990s (Vodopivec 2004). As many as 78 percent of households in Hungary and 65 percent of households in Poland with at least one unemployed worker received unemployment benefits; the share in other countries was lower, particularly in Estonia and Latvia, where just 17–19 percent of such households received unemployment benefits. Interestingly, among households with at least one unemployed member, the receipt of unemployment benefits was less prevalent among poor households, except in Estonia.

Because of a large informal sector, UI tends to cover only a part of the workforce in developing countries – and is available in only a small number of developing countries. For example, only about 60 percent of all wage workers in the Republic of Korea were covered in 1999, four years after the program's introduction (Hur 2001), and in 2003 still less than a third of the workforce was covered. In the late 1990s, only 40 percent of urban workers were covered in Brazil, and unemployment insurance savings accounts covered 47 percent of urban workers in Colombia (de Ferranti and others 2000).

Unemployed workers may also qualify for other income support programs. Unemployment assistance is available in some transition economies after beneficiaries exhaust UI benefits, as are early retirement programs. Social assistance is rarely available in developing countries; if it is, it is often provided on a one-time basis. Workers may also benefit from public sector retrenchment programs. In the absence of social assistance, public works programs provide assistance of last resort, although such programs are often not available to all potential beneficiaries. In Mexico training is used as a form of assistance of last



resort (30 percent of the unemployed receive some training [de Ferranti and others 2000]). Recently, other innovative programs have emerged, including unemployment insurance savings accounts and social funds. In response to economic crises, countries may also introduce temporary programs such as the Emergency Loan Facility available to displaced workers in the Philippines, where workers obtain loans contingent on their previous payments into the social security fund (Esguerra and others, 2001).

### *Adequacy of Support*

Replacement rates and the entitlement duration of unemployment benefit programs as well as the consumption-smoothing and poverty-reduction effects of income support programs are examined to gauge the elusive concept of adequacy of support.

*Replacement Rates and Potential Entitlement Duration.* Replacement rates differ widely across countries. In most industrial countries they are 40–75 percent, and in the Nordic countries they are even higher (the replacement rate in Denmark is 90 percent). In the United States a broad consensus has emerged that an adequate income replacement rate is 50 percent (O’Leary 1997). The replacement rates in developing countries and transition economies are mostly in the range of 45–70 percent, although there are notable exceptions. In the late 1990s through 2003, for example, Estonia offered flat-rate benefits of less than 10 percent of the average wage (Vodopivec, Wörgötter, and Raju 2005).

The range of the maximum entitlement duration of benefits is also very large. In industrial countries it ranges from six months to indefinite. In developing countries and transition economies, it ranges from 6 months to 24 months (with some extensions close to retirement age).

A summary measure—the net (after-tax) replacement rate—that combines income received from various programs confirms the generous nature of income protection in industrial countries. On average OECD countries offer more than 60 percent of expected earnings in work; some countries (Denmark, Finland, the Netherlands, Sweden, and Switzerland) offer more than 80 percent (Martin and Grubb 2001).<sup>1</sup> The United States, which provides net replacement of just 34 percent, and Greece, with a net replacement rate of just over 10 percent, are at the bottom among OECD countries.

Given the wide differences in the replacement rate and the entitlement duration, a better comparison of adequacy is obtained by combining the two measures in an “index of generosity.” The index of generosity is defined as the product of the replacement rate and the share of benefit recipients in the total number of unemployed times 100. It equals the cost of unemployment benefits per percentage point of unemployment (Vroman and

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<sup>1</sup> This summary measure takes into account the support provided not only by unemployment benefits but also by other welfare programs and active programs, including social assistance and family, housing, employment-conditional, and single-parent benefits. It is calculated for a period of more than 60 months for four different household types (single, married couple, couple with two children, and a single parent with two children) and two alternative earnings possibilities (an average production worker and one earning two-thirds of the average).

Brusentsev 2005). By this measure, on average unemployment benefit programs in transition economies lag significantly behind benefits in OECD countries, but there are substantial variations within the two groups of countries (see Vroman and Brusentsev 2005, and Vodopivec, Wörgötter, and Raju 2005). Among European transition economies in the 1990s, the most generous unemployment benefits were provided in Slovenia and Hungary (and in Poland until 1996); the least generous were in Estonia.

*Consumption-Smoothing and Poverty-Reduction Effects.* Research on industrial countries (primarily the United States) suggests that unemployment benefits effectively smooth consumption. Hamermesh and Sleznick (1995) find that the welfare of benefit recipient households was on average only 3–8 percent lower than the welfare of otherwise identical households. Gruber (1997) finds that in the absence of unemployment insurance, average consumption expenditures would fall by 22 percent. Vary rare studies examine the consumption-smoothing effects of income support programs in developing countries. One notable study is Kugler (2002), showing that withdrawals from unemployment insurance savings accounts in Colombia increased consumption by nonemployed household heads.

Somewhat surprisingly, evidence also suggests that unemployment benefits can strongly reduce poverty.<sup>2</sup> In particular, in the mid-1990s unemployment benefit programs contributed substantially to poverty reduction in European transition economies—an unexpected finding given that reducing poverty is not one of the stated goals of unemployment benefits. The effects were strongest in Hungary and Poland. In Hungary poverty among the unemployed fell more than 50 percent; in Poland it declined 45 percent (Vodopivec et al 2005). In Hungary 5.2 percent of the total population was drawn out of poverty by unemployment benefits; in Poland the figure was 3.5 percent. Benefits reduced poverty among the unemployed in other countries as well, albeit less significantly. Poverty fell 31 percent in the Slovak Republic, 16 percent in Slovenia, 9 percent in Latvia, and 5 percent in Estonia. These strong effects reflect both the favorable distributive properties of unemployment benefit programs and the small poverty gap in these countries.

### **Efficiency Effects**

By providing protection against unemployment risk, UI increases the sense of security among employed workers and provides financial compensation to workers who lose their jobs. This protection obviously brings welfare gains, but questions arise: are these gains produced at a cost, and, if so, what are the costs and how large are they?

The introduction of a UI program changes the opportunity cost of leisure and that, together with a variety of other channels, may affect employment decisions, labor-force participation, and unemployment. UI may influence job-search intensity, post-unemployment wages, the labor supply of other family members, and the choice between entering regular versus informal jobs. The program may also interact with adverse shocks, contributing to the persistence of unemployment. And by interfering with the allocation

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<sup>2</sup> Another social protection program that has also shown large scope for reducing poverty is public works (see the review by Subbarao, 2003).

decisions of economic agents, UI benefits may have a separate effect on economic growth – by influencing enterprise restructuring and layoff decisions, for example.

#### *Effects on unemployment*

Benefits affect unemployment through two main channels. First, they influence job-search effort and the reservation wage of recipients. This may either prolong unemployment spells by making leisure more attractive, or shorten them by providing additional resources and thus enabling more effective job search. Second, unemployment benefits improve the bargaining position of workers. This leads to higher wages and hence a higher equilibrium unemployment (Blanchard and Wolfers, 2000).

These ambiguous predictions from theoretical models make empirical studies particularly relevant. And, by and large, they show that unemployment benefits *increase* unemployment (for a recent summary, see Calmfors and Holmlund, 2000). Many studies of individual countries (using microdata) find that both a higher level and a longer duration of benefits increase unemployment, suggesting the presence of the moral hazard problem in the job search of benefit recipients (direct evidence on the intensity of job search by benefits claimants is scarce and inconclusive). As for the size of these effects, Layard et al (1991) estimate that the elasticity of the duration of unemployment spell with regard to benefit level ranges from 0.2 to 0.9, depending on the state of the labor market and the country concerned. As for the elasticity of unemployment spell duration with regard to potential benefit duration, for U.S. Katz and Meyer (1990) showed that one-week increase in the potential benefit duration was associated with one day increase in the average unemployment spell of recipients, and, according to Card and Levine (2000), with a 0.5 day increase. For Austria, Lalive and Zweimuller (2004) report that the increase in the potential benefit duration was associated with 0.4 day increase in the average unemployment spell of recipients, and for Slovenia van Ours and Vodopivec (2006) report a 1.4 day increase in the average unemployment spell of recipients.

Some studies (particularly in Europe) find insignificant effects of UI on unemployment, but most observers agree that the evidence on positive effects is more compelling. The evidence based on microstudies is particularly credible. Many studies, in both developed and transition countries, find a positive elasticity of unemployment with respect to the level and duration of benefits (for the evidence on developed economies, see Devine and Keifer, 1991, and on transition economies, see below). Moreover, disincentives created by unemployment benefits show up clearly in a pronounced spike in the probability of exit from unemployment just before benefit exhaustion. And unemployment-insurance experiments in the U.S. also provide strong evidence of moral hazard: those unemployed who were offered a bonus for fast re-employment significantly reduced their unemployment spells, without affecting their re-employment earnings (Meyer, 1995).

Apart from increasing the equilibrium level of unemployment, unemployment benefits also make unemployment more persistent. That is, economies with unemployment benefits experience larger and more prolonged unemployment following a transient shock. Theoretic models argue that the 'non-UI' economy recovers more rapidly as reservation

wages adjust more quickly and job-search intensity is higher than in the ‘UI’ economy. The interaction of institutions with adverse shocks also offers an explanation for the rise of European unemployment in the last several decades (Blanchard and Wolfers, 2000).

#### *Effects on post-unemployment outcomes*

How do unemployment benefits affect quality of post-unemployment jobs? Ehrenberg and Oaxaca (1976), Burgess and Kingston (1976), Hoelen (1977), and Barron and Mellow (1979) find a statistically significant and positive relationship between benefit levels and post-unemployment wages.<sup>3</sup> But Classen (1977), Blau and Robins (1986), Kiefer and Neumann (1989), and Addison and Blackburn (2000) find a weak or negligible effect on post-unemployment wages. Meyer (1995) finds that re-employment bonuses shortened the duration of compensated unemployment without affecting post-unemployment wages. There is also mixed evidence about the effects of unemployment benefits on the duration of post-unemployment jobs. Böheim and Taylor (2002), Centeno (2004), and Tatsiramos (2006) find that a more generous UI program is positively related to post-unemployment job tenure, but Portugal and Addison (2003) find no evidence that unemployment benefits facilitated entry into stable jobs in Portugal, and Belzil (2001) finds a negative correlation between unemployment duration and subsequent job duration for Canada. Finally, Card et al. (2006) and van Ours and Vodopivec (2008) find that extending the duration of potential benefits lengthens the spell of unemployment but has little or no effect on the quality of subsequent job matches (for Austria and Slovenia, respectively).

#### *Effects on labor force participation*

The effects of unemployment benefits on labor force participation are not well researched. Some studies find that the existence of UI in OECD countries attracts specific groups – for example, women and older workers – into the labor force. With the increase of the fringe benefits, these groups find labor force participation more valuable - the so-called ‘entitlement effect.’ But there is conflicting evidence as to whether the entitlement effect increases employment. Some studies find that the increase in labor-force participation and the increase of unemployment cancel each other, with no net effect on employment. For the U.S., however, there is evidence that benefits increase both employment and unemployment rates. Particularly in the context of developing countries, it is also important to realize that uninsured transient shocks may reduce individual consumption below a threshold needed to retain productivity and labor force attachment, and may thus give rise to “dynamic poverty traps” and lead to chronic poverty (Ravallion, 2003).

UI also affects the labor supply provided by family members of benefit recipients. In theory, more generous benefit rates suppress the labor supply of other family members because they reduce the family’s need for replacement income, the so-called ‘income effect.’ Empirical evidence confirms such predictions. For example, research in the U.S. shows that the labor supply of wives of unemployed workers is responsive to

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<sup>3</sup> Ehrenberg and Oaxaca (1976) estimate that a 10-percentage-point increase in the benefit replacement rate increases post-unemployment wages by 7% for older men and 1.5% for older women. Using New Zealand data, Maani (1993) finds that a 10-percentage-point increase in the benefit replacement rate is associated with a 4.5% increase in post-unemployment wages.

unemployment benefits received by their husbands: a \$1 increase in the unemployment benefits of a husband reduces the earnings of his wife by 36 cents (Gruber 1999).

#### *Effects on output and growth*

The effects of UI on output and growth have not been well researched, let alone quantified. The predictions of theoretical models about the *effects on output* conflict. Some argue that, by mitigating their greater unemployment risk, UI programs can support the creation of high-quality, high-wage jobs. Thus, UI may help the economy achieve higher output. More generous benefits are also expected to help workers acquire more specialized skills, which may enhance efficiency. Other researchers argue that government-mandated programs may break down the social fabric that maintains private transfers and reduce private transfers by more than the amount of the publicly provided insurance benefits, thereby hurting the efficiency of the economy. Recent empirical evidence from OECD countries indeed suggests that these effects cancel each other: using difference-in-differences method, OECD (2007) finds that generosity of unemployment benefits has no significant long-run impact on the level of GDP per capita.

Similarly, the *effects of benefits on growth* are not well documented, but empirical studies suggest they are insignificant (Nickell and Layard, 1999). One way that UI might influence growth is by encouraging labor reallocation and, in particular, enterprise restructuring. Partial-equilibrium results suggest this to be the case. For the U.S., there is considerable empirical evidence that the availability of benefits strongly increases the probability of temporary layoffs, but not of quits and permanent layoffs. Apparently, when considering temporary layoffs, employers do take into account the availability of UI.

These partial-equilibrium results do not necessarily carry over to the general-equilibrium framework. Theoretical modeling does not support the argument that restructuring could be facilitated by more generous unemployment benefits: while such benefits might add to the attractiveness of restructuring, they also hinder job creation because they make it more costly (Blanchard, 1997). Similarly, in the context of a job creation/job destruction model, an increase in the UI program's income-replacement rate reduces job creation and thus aggregate output (Mortensen, 1994). Therefore, the overall potential of income support programs to spur enterprise restructuring is likely to be limited.

Finally, let us emphasize that *UI acts as an automatic macroeconomic stabilizer*. Unemployment benefits soften the impact of adverse shocks on GDP – and, by the same token, they also restrain expansion when the economy starts growing again. During downturns, unemployment benefit payments increase and UI taxes fall, and the net injection of purchasing power moderates the severity of the contraction. During upturns, however, UI taxes increase and UI benefits decrease, restraining the expansion. Empirical evidence in North America shows that UI reduces GDP losses during downturns by 10-15 percent (Chimerine et al, 1999).

To summarize, unemployment benefits increase the duration of unemployment spells of recipients (evidence from single-country studies) and contribute to higher equilibrium

unemployment (evidence from cross-country studies) – although the magnitude of such effects is not firmly established. Benefits also contribute to the persistence of unemployment. Their effects on restructuring and growth are less researched and are probably not significant, except for the positive effects arising from the macroeconomic stabilization function of the benefits. The evidence on some other effects – for example, on the impacts of benefits on post-unemployment wages – is also inconclusive. There seems to be mounting and persuasive evidence of the negative efficiency effects of UI, much more so than of the positive effects. However, the magnitude of these effects has not been precisely determined and is undoubtedly influenced by a host of country-specific features.

## **2. How to Account for Specific Conditions of Developing Countries?**

UI program functions well under favorable labor market conditions and a suitable institutional support – but, as we showed, protection may be provided at the expense of efficiency. Below we argue that circumstances enabling successful working of the UI program are less favorable in developing countries and that if introduced, the program has to be tailored according to local circumstances, thus deviating from a standard, OECD-style UI program.

The most important circumstances which dictate deviations from a standard UI program are the low stage of development of the labor market and weak administrative capacity. In developed countries, UI has emerged in response to the developments of the labor market, specifically, the emergence of the unemployment as a “discrete event.” In important ways, labor market conditions in developing countries – particularly the prevalence of large informal sector – make unemployment more a “continuous” variable, with important consequences for the design of unemployment insurance. Moreover, the administrative capacity of developing countries (even in upper-middle income group) lags behind the capacity of developed countries, which is likely to worsen the efficiency properties of UI program.

Below we elaborate on these key circumstances and suggest adaptations of the standard UI program when being transferred to developing countries. We argue that such adaptations include self-insurance (personal savings) as a main source of financing, to be complemented by solidarity funding, and the simplification of eligibility conditions – even elimination of personal monitoring of continuing benefit eligibility, perhaps as a transitory measure. At the same time, such simplifications would make the administration of benefit claims much more straightforward and would enhance the possibilities of piggybacking the existing administrative networks.

### **Adapting UI to the undeveloped labor market**

Below we elaborate on key labor market characteristics that developing countries should consider when designing their UI programs. We argue that these characteristics are the “non-discrete” nature of unemployment and the fact that the poor are less than proportionally represented among the unemployed. We show that under these circumstances, the standard, OECD type of UI program would inhibit self-protection as a

response to unemployment, impose high costs of monitoring of the continuing eligibility, and bring regressive redistribution. To respond to these problems, we propose that the design of UI should be changed to exempt working in informal sector from disqualifying conditions for continuing eligibility; drop conventional monitoring of continuing eligibility, and rely exclusively on employers' and workers' contributions as sources of financing, that is, refrain from using government subsidies for financing of UI.

*Key labor market features of developing countries relevant for UI*

(i) *Unemployment as a “non-discrete” event.* In contrast to developed countries, in developing countries a large proportion of the workforce is “partly unemployed” – underemployed, and the entry to informal employment, and exit from it, is easy (there are low capital requirements and reputation costs). The prevalence of underemployment can be explained by the fact that transition from underemployment to open unemployment can be viewed as an income effect. Unemployment is virtually nonexistent in traditional societies, where individuals cannot afford to be jobless and therefore they undertake any type of work, even work that leaves them underemployed or that is unsuitable for their skills. In other words, rather than waiting to find a “good” job, workers in developing countries undertake any type of job – self-protection emerges as their dominant strategy in dealing with risk of unemployment.<sup>4</sup>

Another reason why unemployment in developing countries is a “non-discrete event” is the fact that the informal sector in these countries is much larger and imposes low entry and exit costs (as opposed to often prohibitive costs of entry in the informal sector of developed countries). Low-cost entry to and exit from informal employment can be explained by low capital requirements due to low labor productivity in general, but very importantly, also by few institutional constraints imposed on forming self-employment or employment relationship. In contrast, developed countries impose large costs of entry – through taxation, sanitary as well as health and safety regulations, zoning rules, and licensing – for many occupations, including those that in developing countries flourish in the informal sector (such as retail trade, transportation, various household services and repair).

(ii) *The unemployed are not necessarily poor.* The second feature of unemployment which is important for the design of the UI program in developing countries is the fact that in these countries, the members of poor households may be less than proportionally represented in the ranks of the unemployed (Cox Edwards and Manning, 2001). For example, in Peru and Brazil, the poor show disproportionately less unemployment than the rich; while the pattern is reversed in Mexico and Uruguay, unemployment is still heavily represented among richer quintiles (de Ferranti et al, 2000). Moreover, in the Philippines in 1997, only 12.1 percent of the households whose heads were unemployed were poor, in comparison to a 25 percent poverty incidence in general (Esguerra et al, 2001). Although

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<sup>4</sup>In words of Cox Edwards and Manning (2001, p.346): “The transition from widespread underemployment to open unemployment is in part an income effect. As countries grow and household incomes rise, jobless workers are able to endure periods without work while waiting for a job to open.”

the same group of households whose heads were unemployed represented 12.7 percent of the total population, its contribution to the total number of poor persons was only 6.1 percent. Similarly, in Sri Lanka unemployment has been closely related to the status in the household and the availability of income support from relatives, both critical factors for allowing extended periods of job search (World Bank, 1999). Therefore, it seems that in low income countries, members of poorer households cannot afford to stay unemployed for a prolonged period of time. They try to cushion the loss of earnings by opting for low productivity jobs (mostly in the informal sector) instead of not working at all while they continue to search for more adequate and better paid jobs.

### ***Implications for the UI program design***

The above considerations lead us to infer that when transferring UI program to developing countries, it would be advisable to change the standard, OECD-style design as follows:

- (i) exempt informal sector work from disqualifying conditions for continuing eligibility,
- (ii) drop conventional monitoring of continuing eligibility and, possibly, introduce work or training requirements, and
- (iii) rely exclusively on employers' and workers' contributions as a source of financing.

*Exempting informal sector work from disqualifying conditions for continuing eligibility.* The enforcement of standard continuing eligibility conditions, if applied to developing countries, would hamper self-protection via taking informal jobs or working as underemployed, thus taking advantage of employment opportunities that, by and large, are not available in developed countries where unemployment is a “discrete” event.<sup>5</sup> In choosing between relying on unemployment benefits or taking a temporary, low-paid job, many such workers would prefer unemployment benefits, which means that insurance would reduce their incentives to work – and thus to self-protect. The ensuing efficiency losses could be high, because activities forgone due to public income support may not be much less productive than those carried out in formal production units, due to the low capital intensity of the latter ones. Unless benefit eligibility monitoring produces larger post-unemployment wages or otherwise improves job matches – in the light of the evidence presented in the previous section, a highly unlikely scenario – the reduced self-protection would hamper efficiency.

*Dropping conventional monitoring of continuing eligibility and introducing work requirements.* If applied to developing countries, the standard, OECD-style monitoring of continuing eligibility would produce prohibitively large costs to be effective. In comparison to developed countries, eligibility monitoring is more demanding and thus costly because of a larger informal sector, which provides more abundant informal employment opportunities. Above all, monitoring of availability for work, and earnings obtained from informal employment, becomes exceedingly challenging. The existence of a large informal sector, together with the ease of entry into – and exit from – informal

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<sup>5</sup> Information problems plaguing the traditional UI system prevent a virtuous circle of self-protection leading to lower insurance premiums, an argument advanced by Gill and Ilahi (2000).



sector activities, makes verification of the status of unemployment, as well as earnings of individuals, difficult if not impossible. Moreover, ample informal sector opportunities make monitoring of job search behavior similarly costly and intractable (the presence of informal sector opportunities also make more difficult to specify the “suitable job” as well as the conditions for active job search, including the proofs of such search (see below on information requirements to determine continuing benefit eligibility). Therefore, an alternative way of avoiding the misuse of the benefits financed on solidarity basis seems more attractive: imposing work or other requirements (such as participation in training) as a condition of benefit receipt. And introducing self-policing via relying on personal savings as the source of finance of benefits also greatly reduces the need for conventional monitoring of continuing benefit eligibility (see below).<sup>6</sup>

*Relying exclusively on employers’ and workers’ contributions as sources of financing.* Another deviation from the existing UI practice is the desirability of the self-financing of the scheme. This follows from the fact that particularly under large underemployment, the occurrence of unemployment tends to be more concentrated among the non-poor population (see above). To prevent regressive redistribution, the financing of the scheme should therefore rely exclusively on contributions from workers and employers covered under the scheme, and not on public funding.

### **Adapting UI to weak administrative capacity**

Performance of social programs also depends on administrative capacity to deliver the program – and this applies with full force to the UI program. We argue that developing countries, particularly low-income ones, typically have weak administrative capacity to administer this program, and that under such administration, the standard, OECD-style UI program would produce several undesirable outcomes: long durations of benefit receipt, double dipping (UI recipients working in the informal sector and receiving earnings on top of UI benefits), and high prevalence of bribes. To improve the program, we propose strengthening of financial incentives and keeping benefits modest, and avoiding judgments when awarding benefits.

*Why is the administrative capacity of developing countries insufficient for a standard UI program?* Such a program requires obtaining continual, extensive and sophisticated information that is rarely available in developing countries, particularly low-income ones. First, the monitoring capacity of UI eligibility is weak because these countries typically lack administrative social security databases on individual workers that would allow cost-effective methods of cross-checking the benefit receipt with earnings or the receipt of other benefits. Second, the standard UI program relies on personalized monitoring of continuing eligibility that requires making decisions based on judgments of government officials, and the capacity of many countries to arrive at unbiased decisions (and avoid bribes) is rather

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<sup>6</sup> Among the available mechanisms to reduce work disincentives in UI benefit programs, we are thus suggesting to rely primarily on financial incentives and work requirements coupled by benefit sanctions, as opposed to monitoring (for the evaluation of these methods, see Fredriksson and Holmlund, 2006a and 2006b).

weak. And third, there exists a high political risk – risk that resources are mismanaged or used for other purposes.

Before elaborating on implications for UI design, we describe first the informational requirements of the standard UI program, the description crucial to understand why the capacity of developing countries would typically not suffice to provide it.

*Informational requirements of a standard UI program.* Below we focus on the capacity to evaluate initial and continuing program eligibility, as well as to pay out benefits as required under the standard, OECD-style UI program. Specifically, we discuss the capacity to generate and process information on the payment of program contributions by or on behalf of the workers, as well as on their employment/unemployment status, job search effort, incomes from other sources, and assets.

With recent advancements in information and communication technology, the record-keeping of payments of insurance premiums as well as disbursements of funds has become increasingly affordable even in low-income countries. An example of such a program which exists even in low-income countries are pension programs, which typically require a long history of contributions for individual workers. Precisely this kind of information program is necessary for the administration of unemployment insurance.

While information technology is instrumental in maintaining records on premium payments, it is only of limited help when it comes to checking other eligibility requirements under UI program, particularly the continuing eligibility. The need for additional screening of applicants arises from the fact that UI program is prone to the moral hazard problem: the status of unemployment triggers the payment of benefits – hence disincentives to take a job. Besides checking whether recipients are in fact working, one also has to monitor whether they are available and willing to take a job, and whether they are actively searching for a job.

Several factors make monitoring of continuing eligibility conditions under a standard UI program a challenging task even for developed and transition countries. First, what is the best way to monitor “availability for work” – the requirement often used to curtail informal employment? Different countries use different approaches, but they all have shortcomings. For example, amendments in the unemployment benefit law of Slovenia in the late 1990s required that benefit recipients make themselves available for contacts by employment offices for three hours per day, but results showed little effect on disqualification (Vodopivec, 2004). Moreover, such an arrangement may well backfire because it forces employment counselors to assume two opposing roles: one of job facilitator, and the other of a policeman. On the one hand, counselors try to help the unemployed by preparing a job plan, directing them to training, etc.; on the other hand, they are forced to “spy” on the unemployed to find out whether they are in fact available to take a job – and, if deemed necessary, disqualify them from receiving benefits. Second, similar difficulties exist with respect to the monitoring of the requirement of “actively seeking employment.” Because this requirement entails many different aspects, it cannot be easily incorporated in

legislation. What can normally be reasonable to expect from the unemployed may well depend on individual circumstances (such as skills, qualifications, experience, and also the length of the unemployment spell), as well as on available vacancies in the local labor market. Third, additional problems are involved in determining a “suitable job,” and the amount of work that may be undertaken without being disqualified from benefit receipt. It is thus not surprising that disqualification from unemployment benefits occurs rarely, and that this practice differs across countries as well as within a country.<sup>7</sup>

The task of monitoring continuing eligibility is somewhat easier in countries with interlinked administrative bases of individuals. For example, in the Poznan region (Poland), a pilot information management project reduced benefit leakage by checking whether unemployment benefit recipients had already taken a job. The screening has been based on advanced communications capabilities among employment offices, on one side, and Social Security Administration and Tax Office, on the other (Vodopivec, 2004). In developing countries, however, such interlinked programs may not exist, and other information technology of local government and public employment service offices is limited. Faced with the above described monitoring problems, the Argentinean UI program altogether avoids checking the continuing eligibility of their UI recipients, but has developed the capacity to cross-check whether benefit recipients are also on social security payment rolls (Mazza 1999).

### ***Implications for the UI program design***

The above discussion has the following implications about how to adjust the standard, OECD-style UI program to developing countries:

- (i) strengthen financial incentives to address motivational problems by relying on unemployment insurance savings accounts (UISAs) and keeping benefits modest, and
- (ii) avoid relying on the judgment when awarding benefits.

*Strengthening financial incentives and keeping benefits modest.* The lack of appropriate administrative capacity to effectively monitor continuing eligibility and to impose sanctions implies that the moral hazard problem which arises from asymmetric information could be particularly prominent. As a consequence, benefit recipients would draw benefits longer (many for the maximum potential duration – see Vodopivec and Hang Tong, 2008,

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<sup>7</sup> Micklewright and Nagy (1998) report that in Hungary disqualification from unemployment insurance benefits receipt rarely occurs. For example, of the March 1992 cohort of benefit recipients, 4 percent of spells ended that way. The risk of disqualification was much higher for the young, the less-educated, blue-collar workers, and those living in the capital, Budapest. While conceivably such differences could occur with the same degree of enforcement of the rules, in all likelihood the severity with which the sanctions are imposed vary across offices within the country – as well as between countries. For example, the risk of benefit disqualification in Slovenia is much lower than in Hungary – in 1998, only one percent of spells ended with disqualification, and in 1999, only 0.65 percent, despite changes in legislation aimed at improving the monitoring of benefit eligibility. And in Estonia, the country with extremely modest unemployment benefits, casual evidence suggest that employment offices sometimes side with the unemployed and do not take any actions that would result in disqualification – precisely because the benefit is so low (see OECD, 2000, for evidence on OECD countries).

for the experience of China), and many of them would simultaneously work in the informal sector. Keeping the level of benefits low and their potential benefit duration short alleviates such problems, but, of course, does not remove them. A complementary, and arguably a more powerful, method is to reinforce financial incentives for (re)employment via unemployment insurance savings accounts (UISAs) – the approach that would, at the same time, minimize bad governance and political risk.

UISAs are among the most radical and promising new approaches to reduce employment disincentives in unemployment benefit programs. Under the UISA system, each worker is required to save a fraction of earnings in his or her account, and draw unemployment benefits from it. By internalizing the costs of unemployment benefits, the UISA system is expected to change workers' incentives and thus avoid or at least reduce the moral hazard inherent in traditional UI schemes (Orszag and Snower 1997, Orszag et al 1999) – while, under some proposals, providing the same protection to the unemployed as the traditional UI system.<sup>8</sup> In contrast to pure UISAs, where withdrawals are strictly limited by the account balance (that is, the balance on an individual's UISA must always be nonnegative), other types of UISAs allow for solidarity funding: under UISA-cum-borrowing individuals can borrow, within predetermined limits, from their UISAs; and under the UISA-cum-solidarity-fund, individuals can receive payments from the solidarity fund after depleting their own accounts (see the description of the Chilean example below). Because the UISAs are still largely an uncharted territory, empirical evidence is mostly provided via simulations studies that are, by and large, encouraging.<sup>9</sup>

A very recent study of van Ours, Reyes and Vodopivec, (2009), however, is the first one to provide empirical evidence corroborating theoretical predictions that UISAs improve work incentives and can thus be used as an effective tool to combat the moral hazard problem of traditional UI systems. Using a mixed proportional hazard rate model, van Ours et al (2009) examine the determinants of job-finding rate of unemployment benefit recipients under the Chilean program and find that: (i) the larger the resources on the UISA at the start of the unemployment spell (and thus the lower the potential benefits from the solidarity fund), the higher the probability of exit from unemployment of benefit recipients; (ii) for benefit recipient not using solidarity fund, the amount of accumulation on the UISA does not affect hazard rate from unemployment, suggesting that such individuals internalize the costs of unemployment benefits, and (iii) for beneficiaries using solidarity fund, the unemployment duration dependence pattern is consistent with moral

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<sup>8</sup> Another way of looking at the improved incentives is noting that the UISA system is based on lifetime income, not current income, which is much more volatile. By doing so, it enables workers to self-finance shorter unemployment spells and public funds to be targeted to those facing larger shocks. The system thus eliminates the “piggy-bank” function of unemployment insurance (redistribution across the life cycle). This redistribution represents the majority of spending in welfare states (Barr 2001 reports that two-thirds to three-quarters of welfare-state spending is life-cycle redistribution). Eliminating this function reduces taxes and thus disincentives.

<sup>9</sup> For example, Feldstein and Altman (1998) simulated the working of the UISA system for the U.S. and conclude that it is a viable alternative to the standard UI system (similar conclusion is reached by Folster, 1999 and 2001, for Sweden, and Vodopivec, 2008, for Slovenia).

hazard effects, and for beneficiaries relying on UISAs only, the pattern is free of such effects.

The *UISAs-cum-borrowing variant that uses pension wealth as the collateral* deserves particular attention. Under this scheme, upon being laid off, workers enrolled in social security would be entitled to borrow, under certain conditions and up to a predetermined threshold (depending on the individual pension wealth), from their UISA, thereby enhancing consumption smoothing properties of the scheme as compared to pure UISAs (that do not allow any borrowing). Their accumulated pension wealth would act as collateral and perhaps also as a source of funding. Workers would be required to repay the debt (and accrued interest) upon their reemployment by a slight increase of their contribution rate; any outstanding debt upon retirement would be subtracted from their pension wealth. If the pension system uses defined benefit formulas, the debt repayment would imply in effect a temporary reduction of the pension benefit (see details in Vodopivec, Robalino and Bodor, 2009, for details and discussion of implementation issues). Note that two most innovative elements of this proposal – allowing the unemployed to borrow from their UISAs and using pension wealth as an ultimate guarantee for repayment – have so far not been utilized by unemployment benefit schemes.<sup>10</sup>

Two important features of the above design must be particularly emphasized. First, the design addresses, in a most direct and thorough way, the problem of work disincentives (moral hazard) created by standard UI programs. By drawing benefits from their own UISAs, individuals do not have an incentive to prolong their job search or to postpone taking a job, and the requirement that at the end of the working career, the negative balance on their UISAs is subtracted from their pension wealth makes the system completely proof to moral hazard and strategic behavior. Second, such a scheme could be adopted by countries that currently do not have an unemployment benefits system to provide unemployment compensation for workers affected by global economic crisis – such as the one emerging currently. Namely, relying on past social security contributions as a qualifying condition and piggybacking on existing administrative capacity of the social security system to deliver unemployment benefits allows the scheme to become operational in a short time, for example, in 4-6 months.

*Avoiding judgments in awarding benefits.* As explained above, the OECD style UI program requires officials to confirm continuing benefit eligibility based on their judgments (whether recipients are available and willing to take a job, and whether they are actively searching for a job). In many developing countries, however, the capacity to carry out such regulations even in the absence of information problems – the capacity connected by the quality of governance and prevalence of corruption – is worse than in developed countries, and the program thus much more prone to misuses. Under such circumstances, the program design that avoids judgments made by program administrators is preferred.

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<sup>10</sup> Such a scheme, however, is under consideration by Jordan.

### 3. Experience with the UI Program in Developing and Transition Countries

Given the above theoretical discussion about the importance of country-specific circumstances for the operation of UI programs, it is worthwhile to review the actual experience with UI programs by transition and developing countries, in particular, to examine how these countries have proceeded about the introduction and design of their UI programs. As explained below, in transition countries some efficiency measures show that the performance of UI programs has been comparable to the one in developed countries and that, somewhat surprisingly, the performance of the program in poverty reduction and distributive properties was even better than the one of developed countries. In developing countries, few UI programs exist, and very few of them have been studied in considerable detail. Interestingly, in Argentina, an upper-middle-income country, the capacity for screening the initial eligibility for UI is adequate (the existing capacity of other social insurance programs has been used), but more than ten years after UI's introduction the country has still not acquired effective capacity to monitor continuing eligibility. Moreover, in Venezuela the pertinent legislation was introduced in 1991, but the program has yet to be implemented.

*Transition countries.* Vodopivec et al (2005) show that unemployment benefits in transition countries were progressive and that – in countries with broad coverage and sizeable share of benefits in household incomes – they also strongly reduced poverty. Because coverage was very wide-spread and because earnings represented the single most important household income, the unemployment compensation provided to job-losers prevented many of them to be pushed into poverty. The evidence also shows that the income redistribution produced by unemployment benefits was strongly progressive, although it did not reach the extreme outcomes obtained, for example, in Chile, where about 60 percent of unemployment benefits is received by the poorest quintile of the population (Krumm et al, 1994). Because UI contribution rates are earnings related, the incidence of *net* benefits, that is, the incidence of benefits once both the cost and benefits are considered, is even more progressive.<sup>11</sup>

It must be emphasized that the poverty reduction performance of unemployment benefit programs in transition countries is unlikely to be matched by developing countries. In transition countries, UI programs have covered practically all workers from their very introduction. In contrast, in developing countries the coverage is much more limited, and the covered workers already have the advantage of working in the formal sector and thus usually belong to a relatively prosperous population group (see below on the coverage of workers in South Korea following its introduction UI in the mid-1990s).

As for efficiency effects, empirical studies for transition economies – in line with the evidence on developed economies – show that unemployment benefits reduce the probability of leaving unemployment to take a job. Except for Romania, the negative

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<sup>11</sup> The impact of unemployment benefits is less progressive in developed countries. As shown by Forster (2000), the effects of benefits are progressive in about half of the OECD countries, and neutral in the other half.

effects of the potential benefit duration on the probability of exit from unemployment to employment have been confirmed for all countries for which such studies were performed, although some studies also found little evidence of work disincentives (see Vodopivec et al, 2005, for a summary of empirical findings). Most studies find that the exit rate from unemployment to employment significantly increases near benefit exhaustion (in some countries, the exit rate to inactivity also increases). The effects of the replacement ratio are less pronounced: Ham et al. (1998) find significant effects for the Czech Republic but not for Slovakia; Vodopivec (1995) also finds insignificant effects for Slovenia. As for the scale of these effects, Ham et al (1998) find the effects for the Czech Republic to be comparable to the ones in developed economies (few other studies provide estimates of the elasticity of the duration of unemployment with respect to potential duration and level of benefits).

*Asia.* Recent survey shows that UI programs are offered by China, Iran, South Korea, Taiwan, and since 2002, also by Kuwait and Turkey. With the exception of Korea, little is known about the working of these programs, so in continuation we focus on relatively well researched and often mentioned Korean case. Thanks to the introduction of unemployment insurance, the financial crisis of the late 1990s was less painful for many Korean unemployed – although those covered by the insurance, as well as those in the receipt of benefits, were in large minority.

Oil shocks of the 1970s stimulated discussions about the need for an UI program in Korea. But it was only in 1995, after more than two years of intense discussions and hearings, that Korea eventually introduced a compulsory UI which – together with training and job information service – forms its “employment insurance program.” At its introduction, UI was limited to workers in firms with at least 30 workers, covering about 21 percent of employed workers. Although the coverage was expanded during the financial crisis to cover workers in smaller firms, the coverage only modestly increased. In mid-1998 – at the height of the financial crisis – insurance was extended to firms with 5 or more employees and covered 24 percent, and by December 1999, to all firms, covering 57 percent of all wage workers (see details in Vodopivec, 2004).

By a historic coincidence – having just introduced UI a couple of years before the crisis – Korea was able to provide unemployment benefits to the swollen ranks of the unemployed during the crisis of 1998. Still, at the height of the crisis, unemployment benefits were received only by 7.6 percent of workers, and by February 2003 this percentage doubled. Important limitations to further expansion of the coverage are set by (i) large informal sector, estimated to amount to more than a third of total employment; and (ii) a large segment of temporary and daily workers. Workers of these two groups are ineligible for unemployment insurance, and they constitute about 80 percent of all unemployed (Vroman and Brusentsev, 2005).

*Latin America.* UI programs exist in only few countries, with quite limited coverage. The program is offered by Argentina, Barbados, Chile, and Brazil. Few analytical studies about the performance of these programs exist, so below we concentrate on the description

of some suggestive details. In Venezuela, for example, the pertinent legislation was introduced (last amendments in 1991), but the program has yet to be implemented. Moreover, in Argentina, the capacity for screening the initial eligibility for UI is adequate (the existing capacity of other social protection programs has been used) but decades after UI's introduction the country has still not acquired effective capacity to monitor continuing eligibility.

Argentina's administrative hurdles connected with the introduction of unemployment insurance are instructive. Argentina introduced its unemployment insurance program in 1992, following a macroeconomic crisis that raised the fear of large-scale, open unemployment.<sup>12</sup> While the administration of benefits has seemingly proceeded smoothly (workers are informed of their eligibility and receive payments on a timely basis), the program only recently acquired the capacity to detect recipients who have found new jobs in the formal sector – and still applies few measures to prevent the leakage of benefits to those who have found jobs in the informal sector (Mazza 1999). Through a newly introduced program of common personal identification numbers, the government has been able to cross-check whether unemployment insurance recipients are also on social security payment rolls. (Personal identification numbers were introduced in 1994, and it took several years to develop this cross-checking capability.) This way, significant numbers of benefit recipients actually working in the formal sector are purged from the benefit receipt lists. A far greater number of recipients are likely to be working in the informal sector, but currently no measures are being taken to detect them.

Since it offers a very interesting example, below we provide a more detailed description of the Chilean program. In October 2002, Chile introduced a new, innovative UI program which combines social insurance with self-insurance. Unemployment contributions are split between individual accounts and a common, solidarity account, which is partly financed also by the government. Both workers and employers pay contributions. By doing so, employers reduce their severance payments obligations, so severance pay is being partly replaced by the new UI program. The new program is effectively a funded program, with individual accounts being managed by a freestanding administrator selected through a competitive tender. To stimulate reemployment, benefit recipients first draw resources from their own accounts, and upon depletion from the solidarity account. Withdrawals from individual accounts are triggered by separation from the employer, regardless of the reason. Withdrawals from the common fund are triggered by insufficient resources on individual accounts, if the claimant satisfies the usual conditions of continuing eligibility under UI (such as not working and being available and searching for job), but are limited to 2 withdrawals per 5 years. Benefits are linked to past earnings, with a declining schedule.

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<sup>12</sup> The total number of recipients has been relatively small – on average, about 100-125,000 workers receive benefits, out of 2 million officially unemployed workers. Administration of the program (processing of claims and payment of benefits) was handed over to the social security system (ANSES – Administración Nacional de la Seguridad Nacional), which operates a national network of offices and which reports to the Ministry of Labor and Social Security. Workers go to one of 150 local ANSES offices to register and receive their checks; there are no job placement or other reemployment services provided (Mazza, 1999).



The Chilean example offers several advantages. It enables widespread risk pooling and offers other advantages the public provision of UI (for example, in comparison to private insurers it public agencies can better monitor benefit eligibility) – while, at the same time, addresses the moral hazard problem inherent in UI by introducing “self-policing.” This version can therefore improve: (i) incentives in comparison to the traditional UI program, particularly in countries with ineffective monitoring programs, and (ii) income protection in comparison to pure forced savings mechanism (such as in pre-funded severance pay programs in Brazil, Colombia, Ecuador, Panama, Peru, and Venezuela), because it allows widespread risk-pooling.<sup>13</sup>

To summarize, the experience of transition countries with unemployment benefit programs has been quite positive, but it has to be remembered that in comparison to developing countries, they have relied on relatively better administrative capacity and a more limited informal sector. Moreover, some of these countries would probably benefit from tailoring the program according to their circumstances (for example, particularly for low-income countries, introducing a flat-rate benefit instead of earnings-related one could be a better option, as it would reduce costs and simplify the administration). That the influence of these programs in developing countries has remained quite modest is suggested by the limited coverage of unemployment benefit programs in Asian and Latin American countries. Moreover, some countries have formally introduced such programs, but they have failed to implement them (Venezuela and Egypt).

#### **4. Case Study: Facilitating Sri Lanka’s Severance Pay Reform by Introducing UI?**

If a country is faced with overly restrictive employment protection legislation, introducing UI may be the way to proceed – and it may be worthwhile even though other considerations would suggest that such an introduction is premature. Sri Lanka is facing just such a dilemma: the country’s severance pay program – embodied in the Termination of Employment of Workman Act (TEWA) of 1971 – is one of the costliest and most restrictive severance pay programs in the world. The TEWA requires employers with more than 14 workers to seek the authorization of the Commissioner of Labor for intended layoffs. It not only requires that employers pay high compensation to laid off workers, but its discretionary nature and lengthy procedures further restrict the ability of employers to lay off workers (see Abidoye et al, 2009). The likely consequences of high separation costs are discussed above; in the Sri Lankan context, World Bank (2007) attributes low job creation and destruction flows in Sri Lanka to TEWA, and Abidoye et al show that the TEWA program is constraining firms’ growth.

A self-standing, radical reform of the Sri Lankan severance pay program would thus be beneficial from both efficiency and equity standpoint – but for political economy reasons, it is clear that relaxing job protection legislation can only go hand in hand with

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<sup>13</sup> Simulations of Hopenhayn and Hatchondo (2002) show that when its parameters are appropriately selected, a system which combines self- and social insurance indeed comes very close to the welfare properties of the optimal unemployment insurance system.

strengthening of worker protection. Under these circumstances, introducing UI may make sense, provided, of course, that the reform indeed leads to substantially more flexible employment protection legislation, including severance pay, and that the design of the unemployment program is adapted to Sri Lanka's realities, minimizing the creation of disincentives and ensuring affordability.

In this section we try to formulate the design features of the unemployment benefit program suitable to Sri Lankan circumstances. Above we argued that effective and smooth operation of the UI program depends on the several country-specific factors, and that these factors have to be carefully evaluated and accounted for in the design of the program. We also derived some specific recommendations about the program design. Using the above framework, we examine how to adapt unemployment benefit by reviewing the most important country-specific features relevant to the working of the UI program in Sri Lanka, and, based on this review, propose both short-term and long-term building blocks of a UI program adapted to Sri Lankan circumstances.

We argue that the introduction of the UB program in Sri Lanka calls for a gradual approach and the need for creative adaptation of the standard UI program. Consistent with guidance derived in Section 2, we argue for incorporating strong financial incentives to counter work disincentives, the elimination of personalized monitoring of beneficiaries, simplified administration, the use of existing financial networks, and exclusive financing by employers' and workers' contributions.

### **Reviewing Sri Lankan circumstances**

Below we review the most important specific circumstances prevailing in Sri Lanka that would affect the performance of an UI program.

*Low stage of development of the labor market.* The Sri Lankan labor market is still at a relatively low level of development:

- Unemployment is not a “discrete event:” a large proportion of the workforce is underemployed, and World Bank (2007) estimates that two thirds of workers are engaged in the informal sector; and entry to informal employment, and exit from it, is easy.
- Unemployment is more prevalent among richer segments (and thus it can be expected that the majority of claimants will come from better-off segments of population) – see World Bank (2007).

*Weak administrative capacity.* At present, no employment offices as known in developed countries exist in Sri Lanka. Since 2003, however, the government – in partnership with the private sector – is building such a network (JobsNet), and regional JobsNet centers have been put in place in all 9 provinces. These centers are meant to provide counseling, information about vacancies in the local and foreign market (interactive databases), linkages to training providers, and information about benefits available to the unemployed. The JobsNet network seems to be quickly gaining the capacity to provide quality job-

matching services, but there are many other requirements (discussed above) on which an effective administration of a standard UI program is based that the current network is ill-prepared to carry out.

*Susceptibility to political risk.* In Sri Lanka there are concerns about the availability of the accumulated Employees Provident Fund (EPF) funds for retirement benefits, because of the ability of the government to utilize EPF funds to finance budgetary expenditures (World Bank, 2007).

The above review, coupled by the discussion about the transferability of the UI program in Section 2, allows us to provide the following assessment of the likely performance of a *standard* UI program if applied to Sri Lanka:

- Monitoring of continuing benefit eligibility conditions (that is, monitoring whether the beneficiaries are actively seeking for a job and whether they are available for and capable to work) would be ineffective. Ineffectiveness would produce large employment disincentives (moral hazard) and/or misuses (double-dipping), so that many recipients would collect their benefits until the end of their potential benefit duration (and, possibly, work in the informal sector at the same time).
- The program would stimulate corruption: because of the personal nature of the monitoring of continuing benefit eligibility conditions, and because of the vague definition of conditions and the lack of precise procedures to verify them, recipients would have to share the “rent” arising from the continuation of benefit eligibility with employment office councilors.
- If substantial reserves of the UB program are accumulated, they might be used for other purposes.
- There would be large start-up costs and also large processing costs of benefit claims. Because the design of such a program calls for specific monitoring functions, the program administration would be costly, as its ability to piggy-back on other administrative systems (social security, in particular) would be limited.
- There would be problems with the enforcement of the payment of contributions to the UB fund, particularly in industries with low layoff probability.

### **Building blocks of a unemployment benefit program adapted to Sri Lanka**

How can Sri Lanka adapt the standard UI program so as to avoid or mitigate the above-identified problems? Based on the argumentation in Section 2, several important features of UI program – some sharply deviating from the standard, OECD-style program – can be recommended:

- (i) rely on individual unemployment insurance savings accounts (UISAs) to provide unemployment benefits, thereby introducing strong financial incentives to prevent work disincentives (in the longer term, UISAs can be complemented by solidarity funding),
- (ii) eliminate the conditions for continuing benefit eligibility which require a subjective assessment of recipients’ behavior and status, retaining working in the formal sector as the only disqualifying continuing eligibility condition;

- (iii) use existent Employees Provident Fund (EPF) network for paying out unemployment benefits, thus piggybacking on its existing channels and administrative capacity to administer benefit claims;
- (iv) avoid the use of other sources of financing but employers' and workers' contributions; and
- (v) complement the financial side of the scheme by employment support services provided by the newly established "JobsNet" network.

In the long run, the above framework could easily be adjusted to strengthen the social insurance component of the program while keeping strong (re)employment incentives.

The substantiation and further elaboration of these features follows, distinguishing between the short- and long-term. In discussing short-term features, particular attention is paid to the delivery mechanism, that is, an attempt is made to provide operationally simple and relevant solutions.

### **Desirable features of the unemployment benefit scheme in the short run**

*The nature of the scheme and financial arrangements.* Unemployment benefit scheme would be based on UISAs that would be maintained and administered by the EPF (the mandatory retirement savings fund). The unemployment benefit scheme would allow workers to finance benefits by drawing on savings generated while working (and financed by contributions by both employers and workers). To enhance consumption smoothing properties of the scheme, workers would have a possibility to borrow from these accounts within predetermined limits (say three monthly wages) – and, possibly, with subsidized interest rate for accounts with the negative balance. Upon the end of their working career, positive balances on unemployment benefit accounts would be paid out to workers and negative balances would be subtracted from their individual accumulations on their EPF accounts. The scheme would thus provide income protection without worsening employment incentives.

*Eligibility.* Both starting and continuing eligibility conditions would deviate significantly from the standard, OECD-style UI models. Starting eligibility conditions for unemployment benefits would be essentially the same as under the severance pay program (TEWA). That is, all workers whose employment is terminated by the order of the Labor Commissioner and thus become eligible for a lump-sum payment under the amended TEWA, would, in addition, become eligible to unemployment benefits (eligibility for workers whose employers go bankrupt as – and who currently do not qualify for TEWA payments – would also have to be worked out).

Another, even sharper deviation from OECD blueprints is suggested for continuing eligibility conditions. Because it relies on the subjective assessment of recipients' behavior and status, we suggest to eliminate monitoring whether the beneficiaries are actively seeking a job, and whether they are available for and capable to work. As discussed above, such a waiver would not only save on administrative costs, but it also is attuned to the

stage of development of the labor market – this would increase efficiency by encouraging self-protection behavior.

The only condition for continuing eligibility that seems sensible to keep is non-employment in the formal sector. That is, in case that the beneficiaries start working in the formal sector, they would become ineligible for unemployment benefits. This condition could easily be implemented even from the very start, given the possibility that the existing, Employment Provident Fund (EPF) network, is used to administer and disburse unemployment benefits (EPF's current information program allows for that).

*The level of benefits.* Affordability and employment incentives dictate a modest level of benefits, for example, a maximum potential duration of 6 month and a replacement rate of 50 percent. In principle, the self-policing nature of benefits (see above under financing) should take care of work disincentives, but because of myopia, keeping benefits modest would still be a good idea.

*Administration of scheme.* To minimize administrative costs and to enable smooth implementation, it is advisable for the unemployment benefit scheme to use the existing social security network for its benefit administration. Such an arrangement would eliminate the need to create another expensive bureaucracy, only to duplicate existing capacities. Indeed, by choosing eligibility criteria which are administratively simple and, in given circumstances, desirable on their own right, the administration of the unemployment benefit scheme could simply piggyback on existing EPF channels – and its existing capacity – to effect the unemployment benefit payments.<sup>14</sup>

*Coverage.* The scheme would cover the same employers and workers paying contributions to the EPF.

*Employment services for the UB recipients.* In the initial phase of the implementation of the scheme and until their adequate scope in a country like Sri Lanka can be better assessed, such services could be kept at a modest level, for example, requiring that benefit recipients register as jobseekers with the JobsNet and maintain such a status during the period of benefit receipt.

### **Desirable features of a UB scheme in the long run**

Above we described desirable features of the UB scheme attuned to the current circumstances. In a longer run, a country will be able to modify and improve the scheme based on the experience of the first, developmental phase the scheme, as well as taking

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<sup>14</sup> For example, if left on its own, the UB scheme would have to acquire the capacity to check whether employers' contributions for prospective beneficiaries have been paid – the capacity already residing by the EPF. Moreover, the UB scheme would also have to set up a new network to determine starting and continuing eligibility, to keep the balance of benefits to be paid, and effect the payments when they become due. Under the arrangements proposed below, some of these functions are simplified and in such a case, existing capacity of EPF would suffice to implement the system.

advantage of possible other developments relevant to the functioning of such a scheme. Below we provide some features which may be considered in such a scheme.

One appealing option for longer-term reforms is replacing current, conditional severance payments as required under the TEWA to unconditional, regular payments to all workers that are deposited directly to their individual accounts, thus strengthening the system introduced in the short run (such a reform would introduce room for higher contribution rates and hence for more generous unemployment benefits). This would bring a complete and full transformation of employers' obligations under TEWA into their regular monthly contributions to the individual account of workers (note that gratuity pay program would still provide severance pay comparable to such schemes in developed countries). Employers would gain by getting rid of the non-transparent, discretionary costs incurred by TEWA; workers would gain by receiving payments to their UISAs (Austria introduced such a reform in 2002 – see Koman et al, 2005).<sup>15</sup>

One possible modification of the scheme introduced in the short run is to add an explicit solidarity component to supplement life-time individual savings as the basis of insurance. To minimize work disincentives, the payment of unemployment benefits at the beginning of unemployment spell would still be drawn from UISAs, but upon its depletion (alternatively, upon reaching the limit of borrowing from this account) and if fulfilling continuing eligibility criteria, benefits could be drawn from the solidarity fund (a version of such a program was introduced in 2002 in Chile – see above).

Other important dilemmas about the long-term features of the UB scheme would also have to be carefully examined. For example, the effectiveness and efficiency of employment services, such as job-search assistance, job development, and training, for benefit recipients would have to be carefully assessed, and on that basis the employment support services to beneficiaries redesigned, if necessary. Moreover, the feasibility and options for introducing monitoring of job search behavior and labor market status of UB recipients could be explored, so as to check whether the standard conditions for continuing benefit eligibility can be fruitfully introduced. In that case, the options of declining level of benefits over individual unemployment spell could be considered, so as to minimize work disincentives.

## **5. Concluding Remarks**

The performance of UI depends not only on the design of the program, but also critically on country-specific factors. A successful and smooth performance of the standard, OECD-type of UI program is based on a developed labor market and it relies on a strong administrative capacity, an informal sector of modest size, a low incidence of underemployment, and low political risk – conditions that are typically lacking in

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<sup>15</sup> Parsons (2003) explores the conditions under which mandated unemployment insurance savings accounts are superior to mandated severance pay as a mechanism for smoothing the consumption of workers permanently separated from their jobs.

developing countries. The design of UI program must therefore be adapted when applied to developing countries.

The main implications for the design of the program, arranged by the features from which they are derived, are as follows:

- Because of *their weak administrative capacity*, developing countries should (i) consider strengthening financial incentives by basing unemployment benefits on unemployment insurance savings accounts (UISAs) and by keeping benefits modest, avoid relying on the judgment when awarding benefits, and (ii) avoid personalized monitoring of benefit eligibility that is likely to be ineffective and/or prone to corruption, at least in the initial phase.
- Because of a *low stage of development of the labor market*, the OECD-style monitoring of availability for work and job search is likely to be prohibitively expensive. This again speaks in favor of a simplified monitoring of continuing eligibility requirements.
- Because *UB recipients tend to come from better-off segments of population*, the program should avoid using any other sources of financing but employers' and workers' contributions.
- Because of *the high political risk and environment prone to corruption*, the program would benefit from a transparent and simple payment mechanism in the form, for example, of individual accounts.
- The above factors combined speak in favor of modest benefits in terms of both the replacement rate as well as potential duration of benefits.

Although some warn against its premature introduction, the options proposed in this paper offer an attractive approach for developing countries wishing to introduce unemployment benefits. Assessing the desirability and prospects of the introduction of UI program to developing countries, Yoo (2001), for example, argues against its immediate introduction to a country like the Philippines, but maintains that the program should be seriously considered in the medium term, once some preconditions are fulfilled.<sup>16</sup> Similar is the assessment of Gill and Ilahi (2000) for Latin American countries that note the lack of capacity to run an efficient UI program. This paper explicitly addresses the circumstances that render the UI program difficult to transfer to developing countries, and offers creative solutions about how to address the problem of work disincentives and “double-dipping” via the work in informal sector, two most important problems. Particularly attractive is the innovative proposal of the UISAs-cum-borrowing that uses pension wealth as the collateral that makes the system completely proof to moral hazard and strategic behavior.

Let us conclude with emphasizing another motivation for the above proposed design of unemployment benefits: such a scheme could be deployed rapidly, for example, in response to global economic crises such as the one we are witnessing at the beginning of

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<sup>16</sup> Yoo (2001) cites a number of pre-conditions for introduction of the UI, including a national dialogue among the social partners to determine the best unemployment benefits system for the future, and capacity building in terms of both employment and training systems as well as record-keeping and fee-collection within the social security administration.

2009. By relying on past social security contributions as a qualifying condition and by piggybacking on existing administrative capacity of the social security system to deliver unemployment benefits, such a scheme could become operational in 4-6 months and could thus help boosting incomes of workers affected by the crisis.

## References

- Abidoye B., P.F. Orazem, and M. Vodopivec (2009). Firing Cost and Firm Size: A Study of Sri Lanka's Severance Pay System, World Bank, Social Protection Discussion Paper series (forthcoming).
- Acemoglu, D., and R. Shimer (2000). "Productivity Gains from Unemployment Insurance." *European Economic Review* 44: 1195-1224.
- Acemoglu, D., and R. Shimer (1999). "Efficient Unemployment Insurance." *Journal of Political Economy* 107(5): 893-928.
- Addison, J.T. and M.L. Blackburn (2000). "The Effects of Unemployment Insurance on Post-unemployment Earnings." *Labour Economics* 7: 21-53.
- Atkinson, A. B. (1995). "On Targeting Social Security: Theory and Western Experience with Family Benefits." In D. van de Walle and K. Nead, eds., *Public Spending and the Poor: Theory and Evidence*. Baltimore: John Hopkins University Press.
- Attanasio, O., and J. V. Rios-Rull (2000). "Consumption Smoothing in Island Economies: Can Public Insurance Reduce Welfare?" *European Economic Review* 44(7) (June): 1225-1258
- Barr, N. (2001). *The Welfare State as Piggy Bank: Information, Uncertainty and the Role of the State*. Oxford: Oxford University Press.
- Barron, J. and W. Mellow (1979). "Search Effort in the Labor Market." *Journal of Human Resources* 4 (3): 389-404.
- Belzil, C. (2001). "Unemployment Insurance and Subsequent Job Duration: Job Matching versus Unobserved Heterogeneity." *Journal of Applied Econometrics* 16: 619-636.
- Blanchard, O. (1997). *The Economics of Post-Communist Transition*. Oxford: Oxford University Press.
- Blanchard O. and J. Wolfers (2000). "The Role of Shocks and Institutions in the Rise of European Unemployment: The Aggregate Evidence." *The Economic Journal*, March 2000, vol. 110, no. 462, pp. 1-33(33).
- Blau, D.M. and P.K. Robins (1986). "Job Search, Wage Offers, and Unemployment Insurance." *Journal of Public Economics* 29: 173-197.



- Böheim R. and M.P. Taylor (2002). "The Search for Success: Do the Unemployed Find Stable Employment?" *Labour Economics* 9: 717-735.
- Burgess, P.L., and J.L. Kingston (1976). "The Impact of Unemployment Insurance Benefits on Reemployment Success." *Industrial and Labor Relations Review* 30 (1): 25–31.
- Calmfors, L., and B. Holmlund (2000). "Unemployment and Economic Growth: a Partial Survey," *Swedish Economic Policy Review* 7(1): 109-153.
- Card, D., R. Chetty and A. Weber (2006). "Cash-on-hand and Competing Models of Intertemporal Behavior: New Evidence from the Labor Market." Working Paper, NBER 12639.
- Centeno, M. (2004). "The Match Quality Gains from Unemployment Insurance." *Journal of Human Resources* 39: 839-863.
- Chimerine, T., T. S. Black, and L. Coffey (1999). "Unemployment Insurance as an Economic Stabilizer: Evidence of Effectiveness Over Three Decades." Unemployment Insurance Occasional Paper 99-8, Washington, D.C.: U.S. Department of Labor.
- Classen, K. (1977). "The Effect of Unemployment Insurance on the Duration of Unemployment and Subsequent Earnings." *Industrial and Labor Relations Review* 30: 438-444.
- Cox Edwards, A. C., and C. Manning (2001). "The Economics of Employment Protection and Unemployment Insurance Schemes: Policy Options for Indonesia, Malaysia, the Philippines, and Thailand." In G. Betcherman and R. Islam (eds.) *East Asian Labor Market and the Economic Crisis: Impacts, Responses, and Lessons*. Washington, D.C.: The World Bank.
- De Ferranti, D., G.E. Perry, I. S. Gill, and L. Serven (2000). *Securing Our Future in a Global Economy*. World Bank Latin and Caribbean Studies, Washington, D.C.: World Bank.
- Devine T. and N. Keifer (1991). *Empirical Labor Economics: The Search Approach*. Oxford University Press.
- Ehrenberg, R.G., and R.L. Oaxaca (1976). "Unemployment Insurance, Duration of Unemployment, and Subsequent Wage Gain." *American Economic Review* 66 (5): 754–766.

- Esguerra, J., M. Ogawa, and M. Vodopivec (2001). "Options of Public Income Support for the Unemployed in the Philippines." *The Philippine Review of Economics*, Vol. 38, No.2, pp. 37-66.
- Feldstein, M. and D. Altman (1998). "Unemployment Insurance Savings Accounts." NBER Working Paper No. 6860.
- Forster, M. (2000). "Trends and Driving Factors in Income Distribution and Poverty in the OECD Area." OECD Labour Market and Social Policy Occasional Papers No. 42.
- Folster, S. (1999). "Social Insurance Based on Personal Savings," *Economic Record*, 75, 5-18.
- Folster, S. (2001). "An Evaluation of Social Insurance Savings Accounts," *Public Finance and Management*, 1 (4), 420-448.
- Fredriksson, P. and B. Holmlund (2006a). "Improving incentives in unemployment insurance: a review of recent research." *Journal of Economic Surveys*, 20 (3), 357-386.
- Fredriksson, P. and B. Holmlund (2006b). "Optimal unemployment insurance design: time limits, monitoring, or workfare?" *International Tax and Public Finance*, 13(5), 565-585.
- Gill I. S., and N. Ilahi (2000). "Economic Insecurity, Individual Behavior and Social Policy," paper prepared for the Regional Study "Managing Economic Insecurity in Latin America and the Caribbean," The World Bank.
- Gruber, J. (1997). "Consumption Smoothing Effects of Unemployment Insurance." *American Economic Review* 87: 192-205.
- Gruber J. (1999). "The Wealth of the Unemployed: Adequacy and Implications for Unemployment Insurance." NBER Working Paper No. 7348, National Bureau of Economic Research, Cambridge, MA.
- Ham, J., J. Svejnar, and K. Terrell (1998). "Unemployment and the Social Safety Net During Transitions to a Market Economy: Evidence from the Czech and Slovak Republics," *American Economic Review* 88:1117-1142
- Hamermesh, D. S., and D. T. Slesnick (1995). "Unemployment Insurance and Household Welfare: Microeconomic Evidence 1980-93." NBER Working Paper No. 5315.
- Heckman, J. and C. Pagés (2004). "Law and Employment: Lessons from Latin America and the Caribbean". National Bureau of Economic Research. Cambridge, Mass.

- Hoelen, A. (1977). Effects of Unemployment Insurance Entitlement on Duration and Job Search Outcome. *Industrial and Labor Relations Review* 30: 45-50.
- Hopenhayn H. and J.C. Hatchondo (2002). “The Welfare Consequences of Alternative Designs of Unemployment Insurance Savings Accounts.” University of Rochester, processed.
- Hur, J. (2001). “Expanding the Coverage of Korea’s Unemployment Insurance.” In Labor Market Reforms in Korea: Policy Options for the Future, eds. F. Park, Y. Boom, G. Betcherman and A. Dar, 25–45. Washington, DC: World Bank and Korea Labor Institute.
- Katz L. F., and B. D. Meyer (1990). “The Impact of the Potential Duration of Unemployment Benefits on the Duration of Unemployment.” *Journal of Public Economics* 41:45-72.
- Kiefer, N.M. and G.R. Neumann (1989). *Search Models and Applied Labor Economics*. Cambridge: Cambridge University Press.
- Koman, R., U. Schuh, and A. Weber (2005). The Austrian Severance Pay Reform: Toward a Funded Pension, *Empirica* 32:255–274.
- Kugler, A. (2002). “From Severance Pay to Self-Insurance: Effects of Severance Payments Savings Accounts in Colombia.” Discussion Paper No. 3197, Centre for Economic Policy Research, London.
- Lalive, R. and J. Zweimuller (2004). “Benefit Entitlement and Unemployment Duration: Accounting for Policy Endogeneity,” *Journal of Public Economics* 88(12): 2587-2616.
- Layard, R., S. Nickell, and R. Jackman (1991). *Unemployment: Macroeconomic Performance and the Labour Market*. New York: Oxford University Press.
- Martin, J., and D. Grubb (2001). “What Works and for Whom: A Review of OECD Countries’ Experiences with Active Labour Market Policies.” Working Paper 2001/14, Institute for Labour Market Policy Evaluation (IFAU), Uppsala, Sweden.
- Mazza, J. (1999). “Unemployment Insurance: Case Studies and Lessons for Latin America and the Caribbean.” Inter-American Development Bank, RE2/SO2, Technical Study.
- Meyer, B. D. (1995). “Lessons from the U.S. Unemployment Insurance Experiments.” *Journal of Economic Literature* 33, March: 91-131.

- Micklewright, J., and G. Nagy (1998). "The Implications of Exhausting Unemployment Entitlement in Hungary." Budapest Working Papers on the Labour Market, No. 1998/2, Budapest University of Economics, 31 p.
- Mortensen, D. T. (1994). "Reducing Supply-side Disincentives to Job Creation." In Federal Reserve Bank of Kansas City, *Reducing Unemployment: Current Issues and Policy Options*, Proceedings of a symposium, Jackson Hole, Wyoming, August 25-27, 1994.
- Nickell S., and R. Layard (1999). "Labor Market Institutions and Economic Performance." In Ashenfelter and Card, eds., *Handbook of Labor Economics*, Vol.3. North Holland, 1999.
- OECD (2007). *Employment Outlook*. Paris: OECD.
- O'Leary, C.J. 1997. "Adequacy of the Weekly Benefit Amount." In *Unemployment Insurance in the United States, Analysis of Policy Issues*, eds. C.J. O'Leary and S.A. Wandner, 163–210. Kalamazoo, MI: Upjohn Institute for Employment Research.
- Orszag, J.M., P.R. Orszag, D. J. Snower, and J.E. Stiglitz (1999). "The Impact of Individual Accounts: Piecemeal versus Comprehensive Approaches." Paper presented at the Annual Bank Conference on Development Economics, World Bank, Washington, DC, April 29.
- Orszag, J.M., and D. Snower (2002). "From Unemployment Benefits to Unemployment Accounts." IZA Discussion Paper 532, Bonn.
- Parsons, D. (2003). Savings Accounts as An Alternative to Job Separation Pay: Theoretical Considerations. Paper presented at the World Bank conference "Severance Pay Reform: Toward Unemployment Savings and Retirement Accounts, Laxenberg/Vienna, November 2003.
- Portugal, P. and J.T. Addison (2003). Six Ways to Leave Unemployment. Discussion Paper, no. 954, IZA, Bonn.
- Ravallion, M. (2003). "Targeted Transfers in Poor Countries: Revisiting the Trade-offs and Policy Options." World Bank, Policy Research Working Paper 3048.
- Subbarao, K. (2003). "Systemic Shocks and Social Protection: Role and Effectiveness of Public Works Programs." Social Protection Discussion Paper No. 0302, World Bank, Washington, DC.
- Tatsiramos, K. (2006). The Effect of Unemployment Insurance on Unemployment Duration and Subsequent Employment Stability. Discussion Paper, IZA, Bonn.

- Van Ours, J.C. and M. Vodopivec (2006). "How Shortening the Potential Duration of Unemployment Benefits Affects the Duration of Unemployment: Evidence from a Natural Experiment." *Journal of Labor Economics* 24 (2): 351:378.
- Van Ours, J.C. and M. Vodopivec (2008). "Does Reducing Unemployment Insurance Generosity Reduce Job Match Quality?". *Journal of Public Economics*. 92 (3-4): 684-695.
- Van Ours, J.C., G. Reyes Hartley and M. Vodopivec (2009). "Incentive Effects of Unemployment Insurance Savings Accounts: Evidence from Chile," World Bank, Social Protection Discussion Paper, forthcoming.
- Vodopivec, M. (2004). *Income Support Systems for the Unemployed: Issues and Options*, The World Bank, Regional and Sectoral Studies Series.
- Vodopivec, M. (2008). "How Viable Are Unemployment Insurance Savings Accounts: Simulation Results for Slovenia," IZA Discussion Paper No. 3438.
- Vodopivec, M., A. Woergoetter, and D. Raju (2005). "Unemployment Benefit Systems in Central and Eastern Europe: A Review of the 1990s." *Comparative Economic Studies*, 47(4): 615-651.
- Vodopivec, M., and M. Hang Tong (2008). "China: Improving Unemployment Insurance," World Bank, Social Protection Discussion Paper No. 0820.
- Vodopivec M, D. Robalino and A. Bodor (2009). "Savings for Unemployment: Introducing Unemployment Benefits in Developing Countries." World Bank, Social Protection Employment Primer Series (forthcoming).
- Vroman W. and V. Brusentsev (2005). "*Unemployment Compensation Throughout the World*." Kalamazoo, Michigan: Upjohn Institute.
- World Bank (1999). "Sri Lanka: A Fresh Look at Unemployment." Report. No. 19609-CE, Washington, DC: The World Bank.
- World Bank (2007). *Sri Lanka: Strengthening Social Protection*, World Bank: Human Development Unit, Report No. 38197-LK.
- Yoo, K-S. (2001). "The Feasibility of Introducing an Employment Insurance Scheme in the Philippines." Paper prepared for the World Bank-ILO-JMOL-PDOLE seminar on "Labor Market Policies: Their Implications for East and South East Asia," Manila, March 2001.

**Table 1. Stylized Features of Unemployment Insurance Programs, by Groups of Countries**

<i>Coverage</i>	<i>Level of benefit</i>	<i>Benefit duration</i>	<i>Initial eligibility conditions</i>	<i>Continuing eligibility conditions</i>	<i>Source of financing</i>
<i>OECD countries</i>					
Offered by most countries. Majority of programs cover all employed individuals irrespective of sector. In Austria, Germany, and Luxembourg, coverage extends to apprentices and training graduates. Many programs exclude the self-employed, either generally, by occupation groups, or based on other conditions. Austria and Canada exclude public sector employees (voluntary provisions exist for provincial government employees). Ireland, Japan, Portugal, Spain, and the United States exclude domestic or casual workers.	Initial replacement rates are usually 40–75 percent of recent average earnings. Notable exception is Denmark, with 90 percent replacement rate. However, ceilings on wages and maximum benefit provisions limit range. Ireland, France, and the United Kingdom provide flat-rate benefits. Waiting period is 3–7 days. In some countries, in cases of voluntary quitting or dismissal due to misconduct, waiting period is extended by 6 weeks–6 months. Belgium, Germany, and the United Kingdom provide additional flat-rate benefits or additional percentages of average earnings for workers with spouses or children. Most countries, including Belgium, Canada, Denmark, France, the Netherlands, the United Kingdom, and the United States, tax benefits. In some countries, long-term unemployment insurance recipients transit into unemployment assistance.	Most countries limit length of unemployment insurance entitlement. Maximum entitlement period is usually 3–12 months, but in some European countries it is much longer (60 months in France, 48 months in Denmark, 36 months in Norway, and 32 months in Germany); in Belgium benefit duration is unlimited. Benefit duration is sometimes related to factors such as duration of social security contribution payments within a certain period, employment, and age.	To qualify, a person must in general be employed at least 6 months in past year. Range: 10 weeks in last 52 weeks in Iceland to 540 days in last 24 months in Portugal. All countries require registration at employment office. France and Iceland have residency requirements. Almost all countries deny benefits in cases of voluntary quitting, misconduct, work stoppage, or refusal of a suitable job offer.	Programs typically require recipient to be able, available, and willing to work, as well as searching for work. Recipients are disqualified if they fail to undergo training, unjustifiably refuse of suitable job offer, or fail to comply with job search requirements. Severity of offense determines period of disqualification (usually 1–4 months). Regularly reporting to employment office is typically required.	Most programs financed by contributions from employers and workers, with equal or higher contribution rates levied on employers. In only a few countries do solely employers or solely workers contribute (solely employers contribute in Iceland, Italy, and the United States; solely workers contribute in Luxembourg). Typically, the state covers any deficits that arise. In Italy and Spain, the state provides subsidies. In Italy, Japan, and the United States, the state covers administrative costs. Contribution rates vary significantly across countries. In most, contribution rates are less than 3 percent (but some require contributions of as much as 8 percent).

*Eastern Europe and Central Asia (transition economies)*

Majority of programs cover employed workers (citizenship or residency required). Coverage by age: usually 16–59 for men and 16–54 for women. In Croatia university or training graduates are also eligible. Domestic and casual workers are usually excluded.

Initial income replacement rates are usually 50–75 percent of recent average wages. Benefits are limited by floors (usually the minimum wage) and ceilings (usually the local, regional, or national average wage). Benefit level sometimes depends on cause of job loss.

Some countries (Albania, Poland) provide flat-rate benefits (usually in proportion to minimum or average wage) instead of or in addition to earnings-related benefits. Earnings-related or flat-rate benefits can be graduated over time. Sometimes first-time job seekers receive flat-rate benefits that are lower than minimum wage. Albania, Azerbaijan, the Kyrgyz Republic, the Russian Federation, Ukraine, and Uzbekistan provide supplements for dependants.

Maximum entitlement duration is 6–24 months. In some countries (Azerbaijan, Bulgaria, Croatia, Poland, the Russian Federation, the Slovak Republic, Slovenia), entitlement duration varies depending on length of employment, contribution period, and/or age. University and training graduates have shorter entitlement periods. Some countries provide extensions for people near retirement age.

Minimum past employment requirement ranges from 3 to 12 months. Registration at employment offices required by all countries. In Latvia, Romania, and Ukraine income level must be below minimum wage. In most countries workers are ineligible if they are dismissed because of misconduct.

Programs typically require the recipient to be able, available, and willing to work, as well as searching for work. Recipients are disqualified if they refuse to undergo training. Benefits are reduced, postponed, or terminated if the recipient refuses a suitable job offer or does not comply with labor market requirements (job search, participation in public works or training) or files a fraudulent claim.

Almost all countries require employer contributions; some also require worker contributions. Worker contribution rates range from 0.06 percent (Slovenia) to 1 percent (the Slovak Republic). Employer contributions range from 0.06 percent (Slovenia) to 6 percent (Albania). State subsidies (when needed) or deficit financing is common. In Latvia the state finances unemployment insurance for special groups. In the Slovak Republic the state finances special programs.

### *Latin America and the Caribbean*

<p>Argentina, Barbados, and Brazil provide unemployment insurance. Unemployment insurance legislation was introduced in Venezuela (last amendments in 1991), but the program has yet to be implemented. Argentina and Brazil cover all wage workers. Venezuela excludes domestics and casual workers. Barbados excludes public sector employees and the self-employed.</p>	<p>Income replacement rates are 50 and 60-percent of recent average wages. In Argentina and Brazil, minimum and maximum benefit limits are proportional to the minimum wage. Waiting period is 3 days in Barbados, 60 days in Brazil, and 30 days in Venezuela.</p>	<p>Maximum entitlement period is 3–12 months. In Argentina and Brazil, the length of entitlement depends on the length of employment. In Brazil entitlement durations are increased under special circumstances.</p>	<p>Generally, recipients must have been employed for 6–12 months in some stipulated period of recent employment. In Brazil applicants are ineligible if dismissal due to misconduct, and claimants must lack other means to support self or household. In Argentina applicants cannot receive other social security benefits.</p>	<p>In Argentina and Venezuela, recipients must be able, available, and willing to work. In Argentina, continuing eligibility is not conditioned by job search requirement.]</p>	<p>Contribution rates range from 0.75 percent to 2 percent, with both employers and employees usually contributing. In Brazil the program is financed by employers, mainly through a business sales tax of 0.65 percent.</p>
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### *Asia*

<p>China, Iran, Kuwait the Republic of Korea, Taiwan (China), and Turkey provide unemployment insurance. Coverage differs significantly. Iran excludes the self-employed, voluntarily insured people, and people covered by other provisions. China excludes permanent and contract workers in public sector enterprises and some collective enterprises. The Republic of Korea includes all firms. Taiwan (China) excludes the self-employed and firms with fewer than five workers.</p>	<p>Income replacement rate are 50–60 of recent average wages except in China, which pays flat-rate benefits below the minimum wage. Iran provides a 10 percent benefit supplement per dependent for up to four dependents. The Republic of Korea offers a reemployment bonus if claimant leaves unemployment before exhausting half of the entitlement. Waiting period in the Republic of Korea and Taiwan (China) is 14 days.</p>	<p>China: 1–2 years, Republic of Korea: 90–240 days, based on age of claimant and length of previous employment (benefits extended in special cases); Taiwan (China): 6 months; Iran: 6–50 months, based on employment length and marital status</p>	<p>Insured employment requirement: 6 months in Iran, 1 year in China, 6 months in the Republic of Korea, 2 years in Taiwan (China). In the Republic of Korea and Taiwan (China), unemployment must be involuntary. In Iran unemployment cannot be due to misconduct or refusal to accept suitable offer. Registration at employment office required.</p>	<p>Recipients must be able, available, and willing to work, and looking for a job. In Turkey, job-search requirement is not effectively imposed.</p>	<p>In China employers contribute 0.6–1.0 percent (rate depends on local government. provisions), the state provides subsidies. In Iran employers contribute 3 percent, the state finances deficit. In the Republic of Korea, employers contribute 0.5 percent, workers 0.5 percent. In Taiwan (China), workers contribute 0.2 percent, employers 0.7 percent, and the state covers the cost of administration, pays 0.1 percent of worker wages and, if needed, transfers resources from other social insurance funds.</p>
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