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Income Support Systems for the Unemployed: Issues and Options

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Executive summary

In recent decades, unemployment has become a serious problem in many parts of the world, and the task of helping the unemployed has gained increased importance and the interest of policymakers. The purpose of this report is to provide guidelines for developing and transition countries wishing to introduce or improve their income support systems for the unemployed.

The report builds on the fact that public income support systems for the unemployed are a subset of formal and informal mechanisms of social risk management. Participation in a public income support program, for example, may reduce the amount of private transfers received by participants and/or their incentives to save and to take training. Viewing the system in its entirety and considering links among various components brings an important advantage, as it enables to strike the right balance between public programs and private mechanisms of risk management.

To derive guidelines about income support programs for the unemployed, the report develops two sets of criteria. One set consists of the following *performance criteria* of the programs:

- how they affect distribution of income;
- how they affect efficiency;
- how suitable they are to confront different types of economic shocks, and
- how resistant they are to political interference.

To “find what fits” developing and transition countries, their specific features have to be appropriately recognized. In obtaining the guidelines, besides performance criteria, the report also uses the following *design and implementation criteria*:

- interactions of income programs with labor market institutions and shocks,
- administrative capacity for program implementation,
- the characteristics of the unemployed,
- the size of the informal sector,
- the prevalence and pattern of inter-household transfers,
- the ability to self-insure and self-protect,
- the nature of shocks, and
- cultural and political factors.

Based on the above criteria, the report evaluates the strengths and weaknesses of alternative income support programs for the unemployed, as well as their suitability for developing and transition countries. This procedure produced the following guidelines:

- *Unemployment insurance*, thanks to its wide risk-pooling, enables a high degree of consumption smoothing for all categories of workers, performs well under idiosyncratic, sectoral, and regional shocks, and acts as an automatic macroeconomic stabilizer. But it

also creates reemployment disincentives and wage pressures which increase the equilibrium unemployment rate, and it contributes to the persistence of unemployment. Because its smooth and successful performance relies on strong administrative capacity to monitor program eligibility, conducive labor market conditions, modest size of the informal sector, and an environment of low political risk – the conditions which are typically lacking in developing and transition countries – the case for the introduction of unemployment insurance in these countries is less compelling than it is in developed countries. Its existence may also reduce incentives for self-protection and break down the habit of self-help among local communities, which may be welfare-reducing. Introducing unemployment insurance is thus viewed as a longer-term goal for many of these countries.

- *Unemployment assistance*, while enabling more effective targeting, may not bring savings in comparison to unemployment insurance – and in fact may prove fiscally unsustainable, due to the increased pool of potential applicants created by the programs failure to base eligibility on contribution payments. In addition, in comparison to unemployment insurance, it offers a lower level of protection for high income workers, imposes larger administrative costs, and suffers from similar employment disincentives. Its applicability is thus limited, perhaps to countries with relatively developed administrative capacity and a small informal sector – a rare breed among developing and transition countries.
- *Unemployment insurance savings accounts* are recognized as a promising option. By internalizing the costs of unemployment benefits, the program avoids the moral hazard inherent in unemployment insurance program and thus improves reemployment incentives – given the weak monitoring capacity of developing countries, an important advantage. In its integrated version with public insurance – thus avoiding its main weakness of the absence of risk pooling among individuals – the program promises both superior protection and improved incentives, and also has the potential to attract informal sector workers. By allowing individuals to borrow from his or her savings account, this version of the program creates problems of its own – it creates incentives to withdraw from a formal sector so as to avoid the repayment of the debt, and reduces the gains in terms of reemployment incentives. Because the system has been largely untested, further investigation of its effects and design parameters, including piloting of the program, is needed.
- *Public works* program is effective in reaching the poor, has good targeting properties and substantial capacity to redistribute income from the rich to the poor, is able to attract informal sector workers and to provide flexible and fast response to shocks, and is administratively less demanding than other public income support programs. Despite its weaknesses – high non-wage costs, the likely counter-cyclical pattern of funding, and, in some countries, stigmatization of participants – it is found suitable for developing countries, particularly as a complementary program.
- *Severance pay* offers few advantages. Because it adversely affects efficiency, produces high litigation costs and offers limited risk-pooling, severance pay is recognized as one of the least appropriate options.

Among the future research needs, the report identifies several key areas which need further investigation, with the knowledge gap about developing countries being particularly large:

- Feasibility, incentive effects, and design of unemployment insurance savings accounts.
- Incentive effects and effects on equilibrium unemployment of unemployment insurance and other income support systems for the unemployed.
- Consumption smoothing effects of income support programs in developing countries.
- Political economy of income support systems.
- The interaction of various income support systems, and determination of optimal combinations of various programs.

INCOME SUPPORT SYSTEMS FOR THE UNEMPLOYED: ISSUES AND OPTIONS

*Milan Vodopivec, Dhushyanth Raju **

1. INTRODUCTION

In recent decades, unemployment has become a serious problem in many parts of the world. Macroeconomic crises and increased globalization have put more workers at risk of job loss in Latin America and, more recently, in East Asia as well. In an effort to transform themselves into market economies, former socialist countries have faced the enormous task of efficiently reallocating workers and jobs across sectors and firms, which has led to the emergence of unemployment and poverty of large proportions. Moreover, since the 1970s, Europe has witnessed a reduction in economic growth and an increase in unemployment, most worrying of which is the rise in the share of long-term unemployed.

Given the above trends, the task of helping the unemployed has gained increased importance and the interest of policymakers. Several aspects of this task must be emphasized. Because job loss entails the loss of income, providing effective income support is obviously a prime concern and a necessary component of assistance to the unemployed (be it in a form of a pure transfer, or through jobs created by public programs).¹ But other aspects must also be considered. In conjunction with income support, it is important to consider how to increase the “employability” of the unemployed, that is, the capacity of the unemployed to search for a job and to match skills with existing vacancies. Moreover, adverse labor supply incentives created by income transfers need to be carefully studied and addressed. And last but not least, reducing the risk of unemployment, by both designing appropriate income support programs as well as by increasing employment opportunities, should figure prominently.

While the task of increasing employment opportunities reaches far beyond labor market policies and programs, important links between job creation capacities of the economy and income support programs – and social protection systems in general – should not be overlooked. Indeed, income support systems for the unemployed should be developed in line with a broader conceptual framework that lays out complex inter-linkages of

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¹ An important recent contribution to the analysis of policy options for income support for the unemployed, focusing particularly on the Latin American context, is provided by de Ferranti et al (2000).

institutions and policies in the area of social protection and labor markets in a systematic and comprehensive way. This report relies on such a comprehensive framework developed by the Human Development Network (World Bank, 2001). By formulating various strategies to manage social risk, the framework sets analytical foundations for the formulation of social protection approaches and policies.

The purpose of this report is to provide guidelines for developing countries wishing to introduce or improve income support systems for the unemployed. To arrive at such guidelines, the report summarizes the results in the literature on the performance of various income support systems viewed from four aspects: how desirable are their distributive effects; how they affect efficiency; how suitable they are to confront different types of shocks; and how resistant they are to political interference. Based on this evaluation, and taking account of countries' specific circumstances – chief among them being labor market and other institutions, the administrative capacity needed for administering income support programs, the prevalence of private transfers, cultural factors, the types of shocks typically faced, and the size of informal sector – the suitability of individual programs for developing and transition countries is then evaluated.

The main conclusions can be summarized as follows:

- *Unemployment insurance* enables a high degree of consumption smoothing, performs well under various types of shocks, and acts as an automatic macroeconomic stabilizer – but it found to create reemployment disincentives and wage pressures, which increase the equilibrium unemployment rate and make unemployment persistent. Because its successful performance relies on conditions which are typically lacking in developing and transition countries, the case for the introduction of unemployment insurance in these countries is less compelling than it is in developed countries.
- *Unemployment assistance* is found to enable more effective targeting, but in comparison to unemployment insurance may not bring savings, offers a lower level of protection for high income workers, imposes larger administrative costs, and suffers from similar employment disincentives. Its applicability is thus limited, perhaps to countries with relatively developed administrative capacity and a small informal sector.
- *Unemployment insurance savings accounts* are recognized as a promising option. By internalizing the costs of unemployment benefits, the program avoids the moral hazard inherent in the traditional unemployment insurance program and thus improves reemployment incentives – given the weak monitoring capacity of developing countries, an important advantage. In its integrated version with public insurance – thus avoiding its main weakness of not pooling the risk among individuals – the program promises to yield both superior protection and improved incentives, and also has the potential to attract informal sector workers. By allowing individuals to borrow from his or her UISA account, this version of the program creates problems of its own – it creates incentives to withdraw from a formal sector so as to avoid the repayment of the debt, and reduces the gains in terms of reemployment incentives. Because the system has been largely untested, further

investigation of its effects and design parameters, including piloting of the program, is needed.

- *Public works* program is effective in reaching the poor, has good targeting properties and substantial capacity to redistribute income from the rich to the poor, is able to attract informal sector workers and provide flexible and fast response to shocks, and is administratively less demanding than other public income support programs. Despite its weaknesses – high non-wage costs, the likely counter-cyclical pattern of funding, and, in some countries, stigmatization of participants – it is found suitable for developing countries, particularly as a complementary program.
- *Severance pay* offers few advantages. Because it adversely affects efficiency, produces high litigation costs and offers limited risk-pooling, severance pay is recognized as one of the least appropriate options.

The report proceeds as follows. We first discuss the conceptual issues that arise in evaluating and designing income support systems for the unemployed (Chapter 2). The need to evaluate these systems in a broader framework and to allow for various interactions (within the labor market, for example) is particularly emphasized. We then review existing income support systems for the unemployed in different parts of the world and present their stylized design features (Chapter 3). The presentation emphasizes the richness of the approaches and the complexity of the programs, highlighting important features that should be considered when improving such systems or introducing new ones. In Chapter 4, we evaluate the performance of various income support systems, based on a review of theoretical predictions and empirical evidence. Distributive and efficiency effects are taken into account, as well as how well are different systems suited to confront various types of economic shocks and to resist the political risk. Because the review of the performance of these systems is derived under typical conditions prevailing in developed economies, we devote Chapter 5 to the discussion of the most important country-specific features which affect the choice and design of income support programs. The two concluding chapters present the findings of the report. Combining both performance and design and implementation criteria developed earlier, Chapter 6 provides tentative guidelines for improving incomes support systems in developing and transition economies. The last chapter describes the main areas for future research.

2. CONCEPTUAL ISSUES

Faced with the risk of unemployment, individuals choose among a variety of risk management mechanisms. Some try to get a good education or enter jobs that are known to be stable, so as to reduce the risk of becoming unemployed; others may accumulate real or financial assets, or participate in unemployment insurance programs, so as to have financial means at hand if unemployment occurs; yet others may rely on private transfers of cash, food, and clothing, draw down financial and real assets, participate in public works or public training, or receive social assistance, so as to cushion the loss of earnings associated with job loss.

How to judge the desirability of such mechanisms from the viewpoint of society? Successful smoothing of consumption is important, but there are other considerations. Do public systems displace other mechanisms, formal or informal? Do they affect job search effort and the type of post-unemployment job? How successful are they in reaching the most hard-hit segments of the population and the very poor? What are the tradeoffs between pure income transfers compared with programs which combine transfers with other requirements – and opportunities – such as public works or training? How to prevent the loss of human capital associated with prolonged unemployment spells?

In this chapter, we present conceptual issues in evaluating various mechanisms available to workers in dealing with the risk of unemployment. The starting point – and the recurrent theme of this report – is the recognition that public income support programs available to the unemployed are just a subset of risk management mechanisms. It is of utmost importance, therefore, to look at the system of social risk management in its entirety, so as to consider links among its various components, and the repercussions of introducing new public programs on other mechanisms. The richness of mechanisms and strategies available to individuals, families and communities is staggering – implying, among others, that theoretical models of necessity focus on specific aspects of income support, and therefore the validity of their conclusions has to be checked against the circumstances prevailing in a specific country. The same is true for empirical findings obtained from the experience of developed countries when applied to developing and transition countries.

The complexity of interactions and the lack of generality of theoretical results, coupled with the dearth of empirical studies on income support programs in developing and transition countries, led us to develop the following two sets of criteria to judge the desirability of income support programs in a particular country. The first set consists of performance criteria, and the second set of design and implementation criteria. Performance criteria relate to various effects of income support programs and their other features as established by theoretical models and validated by empirical studies. This set includes programs' effects on distribution of income and efficiency, as well as their suitability to confront different types of shocks and resiliency to political risk. But when transferring the experience of other countries, the “initial conditions” – particular features of the country in question – also have to be taken into account, both to check the implications of the lack of generality of theoretical models as well as to address the lack of empirical studies on developing countries. Therefore, we also propose a second set of criteria, which we call design and implementation criteria. They include country-specific features such as the nature of labor market institutions, the administrative capacity of the country to deliver specific programs, the characteristics of the unemployed, the size of the informal sector, the prevalence and pattern of inter-household transfers, the ability of individuals to self-protect, the nature of shocks typically faced by the country, and cultural and political factors. For example, the degree of informality of the economy determines how many individuals can take advantage of formal sector programs (such as unemployment insurance and severance pay), and the administrative capacity of the economy is a strong predictor of the success of programs which require strong monitoring or information capacity.

In the continuation of this chapter, we first place income support programs in the context of social risk management. The interaction with other formal and informal mechanisms has an important bearing on the success of these programs and hence on their desirability. We also discuss the arguments that speak in favor of the public nature of programs to help the unemployed. We then develop criteria that we use for the evaluation of the suitability of alternative income support programs. As mentioned, we propose performance evaluation criteria (stressing distributive and efficiency aspects, as well as suitability to confront shocks and resistance to political interference), and design and implementation criteria (stressing a country's specific conditions as factors for selection). Using the above analytical instruments, in subsequent chapters we evaluate various income support programs and judge their desirability for developing and transition countries. We conclude the chapter by discussing the weaknesses of the standard ILO definition of the unemployed when applied to developing countries.

2.1 Public income support in the context of social risk management

Public income support programs for the unemployed are just a subset of risk management mechanisms available to them. These mechanisms can be divided into three categories: (i) those that reduce the risk of unemployment (that is, reduce the probability of becoming unemployed and/or increase the probability of leaving unemployment if unemployed); (ii) those that mitigate that risk (reduce the impact of a future unemployment spell if it happens), and (iii) those applied in response to the undesirable event – coping mechanisms.² Within all three categories, both informal and formal mechanisms are usually available, with formal ones further divided into market-based and public (see table 2.1).

² For a comprehensive framework of social protection based on social risk management, see World Bank (2001).

Table 2.1: Income support systems for the unemployed in the context of social risk management*

Arrangement Strategies	Informal	Formal	
		Market Based	Public
Risk reduction	Less risky production. Migration. Proper feeding and weaning practices. Maintaining good health.	Training. Financial market literacy. Company-based and market-driven labor standards.	Sound macroeconomic policies. Public health policy. Labor market policies (including employment protection policies – severance pay , for example).
Risk mitigation			
(a) Portfolio diversification	Multiple jobs. Investment in human, physical and real assets. Investment in social capital (rituals, reciprocal gift-giving).	Investment in multiple financial assets. Microfinance schemes.	Multi-pillar pension systems. Asset transfers. Protection of property rights. Support for extending financial markets to the poor.
(b) Insurance	Marriage/family. Community arrangements. Sharecrop tenancy.	Old-age annuities. Disability, accident and other personal insurance. Crop, fire and other damage insurance.	Unemployment insurance/assistance. Individual savings accounts. Pensions (including early retirement), disability, and sickness insurance.
Risk coping	Selling of real assets. Borrowing from neighbors. Intra-community transfers/charity. Child labor. Dis-saving in human capital.	Sale of financial assets. Commercial loans.	Social assistance. General subsidies. Active labor market programs (job-search assistance, training, employment subsidies, public works). Social funds.

Source: Adapted from World Bank (2000).

*Major mechanisms used to manage the risk of unemployment are shown in bold

The interaction of risk management mechanisms. The above risk management framework enables one to position income support systems for the unemployed in the context of other – informal and formal – mechanisms which may also be used to manage the risk of unemployment. Viewing the system in its entirety and considering links among various components brings an important advantage when evaluating the effects of individual programs or assessing the effects of introducing public programs on other mechanisms. For example, the introduction of unemployment insurance may encourage the emergence or expansion of more risky industries – which may or may not increase efficiency. Similarly, participation in a public income support program may reduce the amount of private transfers received by participants, and their incentives to save and to take training.

But links are even more complicated. The financing of social insurance typically requires contributions of both employers and employees, thus creating a wedge between the wage received and the labor costs and possibly reducing labor demand. Similarly, increasing

the generosity of severance pay may slow down labor market flows – from employment to unemployment, and from unemployment and inactivity to employment. Thus, the introduction of a risk mitigation mechanism (such as social insurance) or a risk reduction mechanism (such as severance pay) may increase the unemployment rate or negatively affect the job creation capacity of an economy – and thus worsens the effectiveness of other risk reducing mechanisms. Income support programs may also have dynamic effects, for example, they may interact with adverse shocks to the economy, typically slowing down the reduction of unemployment to the shock and thus contributing to the persistence of unemployment.

The social risk management framework thus makes clear not only that there are multiple mechanisms for dealing with the risk of unemployment, but also that there are complex links and interactions among them. Recognizing – and appropriately accounting for – such interactions is a must for the successful choice and design of public income support programs. For example, when a low-income country is trying to improve its income support systems for the unemployed, diverse and far-reaching implications of public actions should be taken into account. These implications range from the impact on self-protection mechanisms of individuals (for example, changes in the intensity of job search and propensity to take training), to the effects on labor market outcomes (for example, on the unemployment rate and the intensity of labor market flows), to the appropriateness of a certain program from the standpoint of the existing capacity to administer the program (see box 2.1).

Box 2.1: Recognizing interactions among different risk management mechanisms

In dealing with the risk of unemployment, Filipino workers employed in the formal sector rely on severance pay, although it may be difficult to obtain. Even then, such workers are better off than the informal sector workers for whom there is little or no protection. It is therefore not surprising that Filipino workers have relied greatly on informal mechanisms to manage the unemployment risk – many of which are costly, inefficient, and above all, inadequate.

How to improve public policy to better assist Filipino workers to deal with unemployment? The social risk management framework suggests that the answer should rest, among others, on the following considerations:

- How well does the program fit into existing mechanisms of risk management? For example, would its introduction disrupt existing self-protection mechanisms, or displace existing coping mechanisms (such as an existing system of private transfers, especially for the non-poor population) that may have superior efficiency properties to public programs? Is the program well attuned to the prevailing norms and culture? Are there existing institutions that can be “upgraded” to provide better protection and increased coverage?
- How do the likely beneficiaries compare with other population groups? What are the likely effects of the program on income redistribution and poverty reduction?
- Is the program compatible with other public support mechanisms and policies? Above all, does it promote labor reallocation and job creation as sources of productivity growth?
- How well does the program respond to a country’s income shocks, such as economic recessions, structural imbalances caused by liberalization and globalization, and shocks arising from natural calamities?
- And last and certainly not least, is the program well attuned to local circumstances so that the program itself functions well? For example, can it be supported with the existing administrative capacity of the country? Are there mechanisms that allow effective ways of program selection?

Source: Esguerra et al (2001).

Theoretical models offer increasingly complex insights into the working of income support systems and their implications for economic policies. For example, by using a comprehensive insurance approach pioneered by Ehrlic and Becker (1972), important implications about the relative use of different risk management instruments are obtained by Gill and Ilahi (2000). Their results are summarized in box 2.2. Furthermore, pursuing the optimal unemployment insurance approach, Hopenhayn and Nicolini (1997) and Hopenhayn (2001) model the tradeoff between insurance and incentives, created by the moral hazard problem which is present in social insurance when it is difficult to monitor job-search effort of benefit recipients, and derive implications for the time pattern of the optimal replacement rate (see Chapter 6).

Box 2.2: A theory of “comprehensive insurance”

A conceptual framework for dealing with unemployment risk in a comprehensive way is provided by Gill and Ilahi (2000). It is based on a utility maximization model where the individual decides how much to spend on three different risk management instruments: market insurance, self-insurance and self-protection (individuals insure by transferring income from the good to the bad state, and self-protect by taking actions which reduce the probability of the bad state).

Among the important insights produced by the study are the following ones:

- Market insurance and self-insurance are substitutes, and so are self-insurance and self-protection; market insurance and self-protection may be substitutes or complements. An important implication of the latter finding is that the existence of market or social insurance may not necessarily reduce self-protection and thus produce a moral hazard problem. For example, if more intense job search is rewarded by subsequent lowering of the unemployment insurance premium, moral hazard is not inevitable (note that this assumes that self-protection behavior is detectable).
- Relatively rare and large losses are better insured through market insurance, and relatively frequent and moderate losses through self-insurance. This follows from the fact that while the price of market insurance is lower if the probability of loss is lower, the (shadow) price of self-insurance (for example, the cost of precautionary saving) does not vary with the likelihood of loss.
- Individuals enjoy higher welfare when all three instruments are available than when one of them is missing.
- Introducing a social safety net will reduce self-protection, but not necessarily self-insurance measures.

Gill and Ilahi also offer important insights about the rationale for social policies:

- One rationale for publicly provided insurance is the non-existence of market insurance. An important example is public unemployment insurance.
- Private agents may self-insure using “bad” instruments (for example, using cattle or land as a medium of precautionary saving) because “good” instruments (such as diversified financial assets) are not available.
- The government can step in to foster the development of insurance and financial markets. In particular, financial market strengthening should be a central component of social policy, because it can foster self-insurance, market insurance, and self-protection (for example, through prudential regulation of capital markets).
- One of the best ways of self-protection is investment in human capital, but this investment offers poor collateral. By subsidizing the acquisition of human capital, the government can mitigate the resulting tendency to underinvest.

However, one implication of the richness and complexity of the issues that arise in the context of social risk management is the limited ability of formal modeling to capture all relevant aspects. Thus theoretical modeling often fails to include all relevant labor market features, and/or disregards important features of programs themselves. While advances in theoretical modeling offer increasingly complex insights into the working of public income support systems, often models cannot be solved analytically. For example, theoretical models of labor reallocation which explicitly treat job creation and destruction processes are often analytically intractable, forcing researchers to use calibration models which yield solutions under less general conditions.³ Similarly, as Atkinson and Micklewright (1991, p.1706) complain, “the great generality of research reaching conclusions about unemployment compensation has paid scant attention to the institutional details, and some elements have been almost totally ignored. ... The importance of the institutional features aspects is a matter on which we would like to insist.”

To summarize, the above considerations suggest that there is a host of issues which countries should take into account when changing public income support programs or considering the introduction of new ones. Besides considering direct effects of programs, they should also worry about the interactions of proposed income support programs with many other mechanisms and institutions. In this study, we have therefore devoted a lot of attention to country-specific conditions which influence the functioning of public income support programs and thus affect their choice and design (see Chapter 5). This is even more important because theoretical modeling, while producing increasingly complex insights, fails to provide general solutions.

Why public income support programs? The above social risk management framework is also useful when considering whether or not there should be formal, public income support programs for the unemployed. Indeed, some studies cast doubt on the welfare benefits of public programs, because such programs may displace old mechanisms of dealing with unemployment risk. For example, Cox and Jimenez (1995) estimate that the introduction of unemployment insurance in the Philippines would displace a striking 91 percent of private transfers to the unemployed, and Attanasio and Rios-Rull (2000) show that such an introduction can be welfare reducing.

While precise conditions for the introduction of formal programs are difficult to pinpoint, experience shows that these can offer important advantages. Informal insurance mechanisms may often be ineffective, because the loss of employment is too large a shock – and may occur too frequently. As Murdoch (1999) points out, informal insurance (for example, reciprocal transfers, but also other forms) tends to be least effective when insurance is most needed. Moreover, he shows that in poor countries the beneficiaries of private transfers are the elderly, and keeping more income for themselves would enable the young – who are often also poor – to obtain more education. Another advantage of formal systems is the ability to pool resources across larger groups and across time. Providing formal income

³ Davis and Haltiwanger (1999), Hopenhayn and Rogerson (1993), and Mortensen (1994) provide calibrations/simulations of the distortions in the magnitude of reallocation that can occur from various labor market interventions.

support may also improve fairness; for example, many informal insurance mechanisms militate against women.

If informal insurance mechanisms are not satisfactory and unemployment insurance is a desirable benefit, why cannot the market itself provide insurance against the risk of unemployment? There are compelling arguments for public programs:

- There are strong informational problems (leading to adverse selection) as well as incentive problems (leading to moral hazard) involved in the provision of unemployment insurance (Barr, 1992). Market insurance may fail if low risk individuals are allowed to opt out; compulsory membership enables widespread membership and thus a wide pooling of resources. Moreover, the state has an advantage in providing mechanisms to deal with the moral hazard problem as well; that is, it can more effectively monitor and penalize behavior that aggravates the risk of unemployment.
- Unemployment risks are covariant and thus cannot be diversified by private insurance. A severe recession may dramatically increase the number of claimants and jeopardize the existence of private insurers.

2.2 Performance evaluation criteria

In judging the desirability of income support programs for the unemployed, one important measuring rod is how successful are the programs in achieving their objectives – and what are their other intended and unintended effects and features. From the standpoint of individuals, the most important effects relate to the replacement of income in the case of job loss, thereby contributing to consumption smoothing and possibly to the prevention of poverty. Moreover, countering psychological effects of unemployment and maintaining and acquiring human capital may also be important individual level objectives. From the standpoint of society, the objectives are wider and also include promoting distributive justice (reducing income inequalities, helping the poor and long-term unemployed), as well as efficiency aspects.

We therefore propose four subsets of criteria which we use in Chapter 4 to evaluate income support programs for the unemployed:

- distributive criteria,
- efficiency criteria,
- suitability to confront shocks, and
- resistance to political risk.

Distributive and efficiency effects are natural measuring rods, the ones that follow closely from the objectives of income support programs for the unemployed. To determine distributive effects, we will look at the coverage and the adequacy of support as well as the redistribution of income implied by the program. To determine efficiency effects, a multitude of aspects will be examined, including the intensity of job-search effort, post-unemployment wages, equilibrium labor market outcomes, and effects on programs on output and growth.

Besides distributive and efficiency criteria, we will apply two other performance criteria. The first is the programs' *suitability to confront economic shocks*: for example, how suitable are different programs for a country which is frequently plagued by sudden, regionally concentrated shocks due to natural disasters? Or with long-lasting, covariant shocks? The other criterion is the programs' *resistance to political risk*, the criterion which emphasizes political economy considerations in providing income support – that is, what particular circumstances are conducive to the introduction of programs that benefit the unemployed, and how to raise support for reforms to improve such systems. (These last two evaluation criteria of income support programs could also be considered under the rubric of efficiency, but we discuss them separately to emphasize their importance.)

2.3 Design and implementation criteria

Programs do not operate in a vacuum – country-specific circumstances affect their performance. They also determine suitability of alternative programs to meet the specific needs of a country. Beside performance criteria, which evaluate income support programs based on their performance under typical conditions (at that, due to the bias in empirical research, conditions that usually prevail in developed economies), we therefore also introduce another set of criteria – design and implementation criteria – which reflect specific features of the country under investigation.

To illustrate: in a country where certain regions are often affected by natural disasters, it is important to have income support programs in store which are flexible and can be quickly deployed in affected areas. Moreover, a large informal sector calls for a stronger representation of programs which are also accessible to the self-employed and other informal sector workers. Furthermore, when choosing a program, a country's *administrative capacity* has to be taken into account. For example, unemployment insurance/assistance requires monitoring of recipients (to ensure compliance to continuing eligibility rules); in addition, unemployment assistance relies on means testing. The performance of such programs depends crucially on the administrative capacity to provide quality monitoring and testing. And *interactions* with other programs and policies are also important. For example, to avoid incentive incompatibility, unemployment insurance savings accounts need to be harmonized with old-age income support programs to preclude scenarios where unemployment insurance savings accounts are depleted in anticipation of forbearance and generosity on the part of the pension system. Moreover, introducing or increasing the generosity of unemployment benefits may have different effects in an economy with different levels of centralization and coordination of wage bargaining – under uncoordinated and fragmented bargaining, unemployment benefits are more likely to increase wage pressures and hence the equilibrium unemployment rate than under alternative arrangements (see Chapter 4). Because we believe that the above aspects have to be taken very seriously, we devote Chapter 5 to specific features of countries which – coupled with the performance criteria discussed in Chapter 4 – are important when considering policy changes in the area of income support for the unemployed. We discuss the following features:

- interactions with labor market institutions and shocks,
- administrative capacity for program implementation,
- the characteristics of the unemployed,
- the size of the informal sector,
- the prevalence and pattern of inter-household transfers,
- ability of individuals to self-insure and self-protect,
- the nature of shocks, and
- cultural and political factors.

2.4 Who is unemployed: definitional problems

According to the International Labor Organization (ILO) definition of unemployment (Resolution I of the 13th International Conference of Labour Statisticians, Geneva, October 1982), the “unemployed” comprise all persons above a specified age who, over a specified reference period, are:

- (a) “without work,” that is, are not in paid employment or self-employment,
- (b) “currently available for work,” that is, are available for paid employment or self-employment during the reference period; and
- (c) “seeking work,” that is, are taking specific steps in a specified recent period to seek paid employment or self-employment. The specified steps may include registration at a public or private employment exchange; application to employers; checking at work sites, farms, factory gates, market or other assembly places; placing or answering newspaper advertisements; seeking assistance of friends or relatives; looking for land, building, machinery or equipment to establish own enterprise; arranging for financial resources; applying for permits and licenses, etc.

The above definitions have severe limitations when applied to developing countries. First, many workers in developing countries who qualify as employed under the ILO definition are in fact not fully employed or “underemployed” (especially in rural areas).⁴ These workers may work less hours than they would like or work in low productivity jobs, and earn low wages. But they are so poor that they cannot afford to be without a job, and so open unemployment is rare. Edwards and Manning (2000) note that “the transition from underemployment to open unemployment can be partly explained as an income effect: as economies grow and household incomes rise, it becomes possible to go through periods without work while waiting for a job to open.”

Second, some unemployed may be classified as inactive. Individuals who have a marginal attachment to the labor force, that is, those who are available for and desire work, but are not actively seeking work because they perceive, rightly or wrongly, that no jobs are available, are often considered economically inactive when they should be more

⁴ According to the ILO, “underemployment exists when a person’s employment is inadequate in relation to specified norms of alternative employment account being taken of his or her occupational skill” (Resolution I of the 13th International Conference of Labour Statisticians, Geneva, October 1982).

appropriately classified as unemployed (sometimes they are called discouraged workers). Moreover, the conventional application of the term “actively seeking work” also falters in light of a fair share of economic activity occurring through informal employment arrangements or where self-employment is the norm.

Third, some employed workers may be classified as inactive. Per ILO guidelines, an individual who works at least one hour in a week, or who is temporarily absent from work (for example, on vacation or due to illness) is in employment. Those who are out of work but do not meet the criteria of ILO unemployment are classified as economically inactive. However, some forms of informal economic activity may escape this definition of employment (for example, home-based work, typically undertaken by women). And because such workers are not available for work, they do not qualify as unemployed either.

As a consequence, it is sometimes advisable to complement the unemployment rate with other measures of labor market slack (for example, with measures of underemployment). The ILO acknowledges the possible restrictiveness and “industrialized country” bias of the definition, advising the relaxation of these clauses and the formulation of criteria suitable to the labor market characteristics of the particular developing country. For the purpose at hand, the above discussion implies that besides those counted as unemployed, unemployment support programs may also include the underemployed – and that the unemployed may not be the most underprivileged group in the labor market.

2.5 Summary of conceptual issues

The above discussion pointed out that there is a multitude of mechanisms available to individuals, families, and communities in dealing with the risk of unemployment. When changing public income support programs or considering the introduction of new ones, countries should worry about the interactions of these programs with other mechanisms and institutions. Theoretical models offer increasingly refined and in-depth insights into the working of income support programs for the unemployed; numerous aspects, however, do not lend themselves to formal modeling as the underlying theoretical models cannot be solved analytically. Empirical evidence to test the generality of the theoretical models, as well as to determine the effects which are theoretically ambiguous, is therefore called for.

Realizing a need for a holistic approach and given the state of theoretical and empirical research of the field, our approach to evaluate alternative income support programs for the unemployed thus relies on two sets of criteria. One set evaluates the performance of these programs, stressing, among others, distributive and efficiency effects. The other set – design and implementation criteria – recognizes the wide differences among countries and builds on their specific features to arrive at the desirability of alternative programs in a specific developing or transition country. We also used this introductory chapter to point out weaknesses in the standard ILO definition of unemployment when applied to developing countries, and describe the arguments that speak in favor of a public nature for income support programs for the unemployed.

3. REVIEW OF INCOME SUPPORT SYSTEMS FOR THE UNEMPLOYED

Countries differ widely in the way they provide income support for the unemployed. For example, the social insurance program for the unemployed with the richest tradition – unemployment insurance – exists predominately in developed countries. In developing countries, aside from transition countries where it was introduced widely about a decade ago, unemployment insurance is uncommon. The prevalence of unemployment assistance programs across the world shows a similar pattern. Legislated severance pay as well as voluntary indemnity provisions as part of collective agreements are also most common in developed countries. Mandatory severance pay, however, is also found widely in Latin America and East Asia, often serving as the primary if not sole form of income support for unemployed workers there. In Latin America, some countries also use unemployment insurance savings accounts (UISAs), a relatively new program of income support. As with unemployment insurance and assistance, there is a paucity of legislated severance pay programs in the rest of Asia and in Africa. By and large, developing countries rely more on other public programs, such as public works, training, and other active labor market programs, if at all – and the proportion of the labor force covered by these programs is in general considerably lower than in developed countries.

This chapter presents a typology and describes the prevalence and stylized features of existing programs in developing countries. In a limited way, it also examines what kind of factors contribute to the existence of social insurance type of programs, and discusses the reasons for the diversity of approaches in income support.

3.1 Typology and description of main income support programs

As proposed in table 3.1, we distinguish two main types of public income support programs for the unemployed: income maintenance programs and active programs. The first group of programs are based on program participation rules – including the payment of a premium under unemployment insurance – which entitle the qualifying individuals to benefits. There are no offsetting services to be performed in exchange for these transfers, although certain actions on the part of recipients may be required such as job search. According to the nature of the link between contributions and benefits, we further distinguish three subgroups: defined benefit, defined contribution, and means-tested programs. The second broad type of income support programs are active programs, which require certain services or activities to be performed by the unemployed in exchange for income support or subsidy (for example, public works and training). We include such programs under the heading of income support because they do provide income to their participants – and, sometimes, this goal is quite explicit in the design of the program. Both groups of programs differ further in regards to their benefit levels and durations, eligibility conditions, financing, and sometimes also in their main objectives (see table 3.1).

Table 3.1: Typology of income support programs for the unemployed

	Benefit level	Duration	Eligibility	Financing	Main objective
I. Income maintenance programs					
A. Defined benefit programs					
Unemployment insurance	Benefits are usually a percentage of past wage, sometimes declining over period.	Limited.	Conditional on past contributions, no-fault dismissal, availability and willingness to work, and job search.	Contributions of employers and/or employees, often additional financing from general tax revenues.	Social insurance for the unemployed – consumption smoothing.
Severance pay	Lump-sum payment, generally based on years of service.	One-time payment.	Laid-off workers.	Paid by the employer (could be either unfunded or funded via book reserves or insurance contracts).	Links income support with human resource management objectives of the employer
Early retirement	Special program that grants retirement rights several years earlier as stipulated by law. Pensions are reduced, but typically at less-than-actuarially-fair rate.	Not applicable.	Any worker.	Paid by other social security contributors (sometimes partly financed also by the employer and state revenues, if pension credits have to be purchased).	Human resource/political objectives – reducing overstaffing without directly increasing unemployment.
Public sector retrenchment (may include some type of active involvement of workers)	Special program that sheds redundant labor in the public sector through mass layoffs.	Limited.	Any worker.	Employer/government subsidy.	Reducing overstaffing: human resource /efficiency/political objectives.

Table 3.1: Typology of income support programs for the unemployed (cont.)

Benefit	level	Duration	Eligibility	Financing	Main Objective
B. Defined contribution programs					
Unemployment insurance savings accounts	Replacement rate as under UI.	Limited	Conditional on the availability of funds in the individual's savings account (with optional, limited borrowing).	Contributions of employers and/or employees deposited on individual accounts (funded scheme).	Providing insurance without distorting incentives (strong link between benefits and contributions).
C. Means tested programs					
Unemployment assistance (UA)	Topping the income to reach a specific threshold in terms of average family income, or flat.	Unlimited (if instead of UI) or limited (or after UI has expired).	Means-Tested	From general revenues (or contributions, if after the expiration of UI).	Social insurance for the unemployed – consumption smoothing
Social assistance (SA)	Topping the income to reach a specific threshold in terms of average family income, or flat.	Unlimited.	Means-tested.	General revenues.	General means-tested income support scheme for population.
II. Active programs					
Public works (PW)	Typically a below-market wage.	Typically limited.	Anyone (self-selection based on the wage).	General revenues.	Links the benefit receipt with labor supply, typically for community.
Training	A stipend (and a service).	Limited.	If deemed appropriate by program officials.	General revenues.	Links income support with investment in human resources.
Wage subsidies	Wage-related or flat.	Typically limited.	Selected categories of unemployed.	General revenues.	Links income support with job creation.

The stylized features of the most important programs are detailed below. As in the rest of the study, we concentrate on the following five programs where income support is a key if not their primary function:

- unemployment insurance,
- unemployment assistance,
- severance pay,
- unemployment insurance savings accounts, and
- public works.

In addition, for the sake of completeness, we will describe some other programs that are important in the context of providing income support to unemployed workers and reducing the risk of unemployment. For each program, we describe qualifying conditions, the structure of benefits, and financing.

(a) Unemployment insurance. Unemployment insurance is typically mandatory. The few voluntary programs that exist (for example, Finland, Sweden, Denmark) are subsidized by the state, but essentially resemble the compulsory systems of developed economies in both function and form (Holmlund, 1998). Most mandatory programs cover the majority of employed persons, irrespective of occupation or industry. Non-insured persons such as university graduates and the self-employed are sometimes eligible, while casual workers and domestics are most often not (see table 3.2 for stylized features of unemployment insurance by groups of countries). A few programs, particularly in developing countries, only cover workers in industry and commerce. In order to qualify for unemployment insurance, the individual must satisfy the minimum covered employment or contribution requirement, the most common length being 6 months in the past year. The cause of dismissal may affect if and when the individual is entitled to benefits, especially in developing countries. A usual condition for maintaining entitlement to unemployment benefits is that applicants are capable of, searching for, and available for work. Non-compliance with other labor market requirements can also result in the permanent or temporary suspension of benefits.

Benefits are usually a proportion of average earnings over some stipulated period of the most recent employment spell. Generally, the initial replacement rate is between 40 and 75 percent of average earnings. In some countries, particularly transition countries, the benefit level may be some function of official minimum wage rather than the individual's past earnings. Wage or benefit ceilings are used to limit the range of the benefits; benefit floors, typically at minimum wage, are also sometimes present. In addition to the basic benefit, dependent supplements (either flat-rate benefits or an extra percentage of average earnings) are sometimes provided. Benefits commonly decline over time and are limited in duration. However, extensions are sometimes given to those with long, continuous employment records or to those near early or regular retirement age. It is also possible in many countries to move into means-tested unemployment assistance after exhaustion of unemployment insurance benefits.

Programs are typically financed through regular contributions based on wages by employers and/or employees. The contribution rates are often commensurate for employers and employees or higher for the former group. Sometimes, employees are altogether excluded from this obligation. The converse (employee contributions only), however, is very rare. In the U.S., employer contributions depend on the employer's layoff experience – employers who layoff workers more frequently and thus impose heavier financial burden on the system are assigned a higher rate (this is called *experience rating*). In some countries, the state provides subsidies or finances any program deficits that arise.

(b) Unemployment assistance. Unemployment assistance is means-tested minimum income granted to working age individuals who are unemployed *and* do not have the necessary financial resources to maintain a minimum standard of living for themselves and their families. Australia, for example, provides means-tested unemployment benefits through two back-to-back programs: the Job Search Allowance which is offered initially for a maximum duration of 12 months followed, if needed, by the NewStart Allowance which is offered indefinitely. Self-standing unemployment programs currently exist in only four countries, namely, Australia, Estonia, Hong Kong (China), and New Zealand. In all other countries where present, unemployment assistance exists in tandem with unemployment insurance (Vroman, 2001).

Like unemployment insurance, unemployment assistance programs require applicants to be capable of, looking for, and available for work (see table 3.3). Claims are reviewed at regular intervals to assess job-seeking intensity and to determine changes in household circumstances that may require a change in the benefit level. In some countries, eligibility for unemployment assistance is not conditional on previous employment or contribution history. However, in most countries, particularly those with dual unemployment insurance/assistance programs, unemployment assistance is an extension to unemployment insurance offered to the long-term unemployed who have satisfied some minimum length of employment and do not have the economic means to support their households. The two primary groups that enter unemployment assistance are: (1) those that have exhausted their unemployment insurance entitlement and (2) those that are ineligible for unemployment insurance due to insufficient employment records. Some countries penalize applicants whose unemployment was voluntary by limiting the length of unemployment assistance entitlement or extending the waiting period.

Benefits are usually in cash, but can be in kind as well. Cash benefits are typically flat-rate at some officially stipulated level (usually guaranteed minimum income at uniform rates). Means- or income-testing is conducted not only on the personal financial resources of the applicant but also on that of his/her spouse and other adult members within the household.

Table 3.2: Stylized features of unemployment insurance programs, by groups of countries

Coverage	Level of benefit	Benefit duration	Eligibility conditions	Conditions for keeping benefits	Source of financing
OECD Countries					
<p>Most countries offer UI. Majority of programs cover all employed individuals irrespective of type of industry or sector. Austria, Germany, and Luxembourg: coverage extended to apprentices and training graduates. Many exclude the self-employed, whether generally, special occupation groups, or based on other conditions. Public sector employees excluded in Austria and Canada (voluntary provisions exist for provincial government employees). Few exclude domestic and/or casual workers (e.g., Ireland, Japan, Portugal, Spain, U.S.). Denmark, Finland, and Sweden: voluntary UI.</p>	<p>Generally, initial replacements rates vary between 40 and 75% of recent average earnings. Exceptions on high side include Sweden (80%) and Denmark (90%). However, ceilings on wages and maximum benefit provisions limit range. Flat rate benefits, independent or in combination, offered in Ireland, France, and the U.K. Waiting period: between 3 to 7 days. In some countries, in cases of voluntary quit or dismissal due to misconduct, waiting period is extended (range: 6 weeks to 6 months). Additional flat rate benefits or additional percentage of average earnings for workers with spouses or children (e.g., Belgium, Germany, U.K.). Most countries tax benefits (e.g., Belgium, Canada, Netherlands, U.S., U.K., Denmark, France). In some countries, long-term UI recipients transit into unemployment assistance.</p>	<p>Most countries limit length of UI entitlement. Belgium: benefit duration is indefinite. Maximum entitlement period usually is between 8 to 36 weeks. UI entitlement duration is also sometimes related to length of the most recent period of contributions, employment and/or age.</p>	<p>General minimum employment requirement: 6 months in the 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 the employment office. Residency required in Iceland and France. Benefits denied in cases of voluntary quit, misconduct, work stoppage, or refusal of suitable offer in almost all countries.</p>	<p>Almost all programs require the recipient to be capable, available, and willing to work. Exceptions are Finland, Iceland, and Spain. Disqualification if failure to undergo training, unjustified refusal of suitable job offer, or non-compliance with job search requirements. Degree of offense determines period of disqualification; however usually between 1-4 months. Regularly reporting to employment office is required in a number of countries.</p>	<p>Most UI programs financed by contributions from employers and employees; in cases where both employees and employers contribute to the UI fund, the rates are equal or higher for the latter. There are only a few cases where only employers or employees contribute (Employer: Iceland, Italy, U.S.A; employee: Luxembourg) Typically the state covers any deficits that arise. In both Italy and Spain, the state provides subsidies. In the U.S., Japan, and Italy the state covers administrative costs. Although, very atypical, the State also contributes to UI. Contribution rates vary significantly between countries. The majority of countries however have contribution rates below 3%. Most of the remainder, have contributions rates in the range of 3-8%.</p>

Table 3.2: Stylized features of unemployment insurance programs, by groups of countries (cont.)

Coverage	Level of benefit	Benefit duration	Eligibility conditions	Conditions for keeping benefits	Sources of financing
East Europe and Central Asia (Transition countries)					
<p>Majority of programs cover employed workers (citizenship or residency required). Coverage by age: usually 16-59 for men and 16-54 for women. Croatia, Romania: discharged military personnel eligible for UI. University or training graduates eligible. Usually domestic and casual workers are excluded.</p>	<p>Initial income replacement rates generally vary between 50 and 75%. Level range limited by wage floors (usually the min. wage) and ceilings (usually the local, regional, or national avg. wage, or double the min. wage). Benefits level can sometimes be dependent on cause of job loss. Some countries provide flat rate benefits (usually f(minimum wage or average wage)) instead or in addition to the earnings-related benefits (e.g., Albania, Croatia, Estonia, Georgia). Earnings-related or flat-rate benefits can be graduated over time. Typically, new unemployed labor market entrants receive flat-rate benefits \leq min. wage. Albania, Azerbaijan, Kyrgyz Republic, Russia, Ukraine, Uzbekistan: provide dependent supplements; usually a percentage of the minimum wage or benefit level for each dependent (ceiling present).</p>	<p>In most countries, the maximum entitlement duration is 6 months (26 weeks). High end: Hungary, 2 years. In some countries, entitlement duration varies depending on length of employment, contribution period, and/or age (Azerbaijan, Bulgaria, Croatia, Poland, Russia, Slovenia, Slovak Republic). University and training graduates usually have shorter entitlement periods. Some countries provide extensions for those near early retirement age.</p>	<p>Minimum past employment requirement ranges from 4 months (Armenia, Russia) to 4 years (Bulgaria). Commonly, countries require employment between 6 months in the last year to 12 months in the last 2 years. Registration at employment offices required by all countries. Income level in Latvia, Romania and Ukraine must be below minimum wage. In Serbia and Montenegro, household income must be below stipulated income. In few countries (e.g., Armenia, Belarus, Bulgaria, Georgia, Moldova), workers not eligible if dismissal due to misconduct. In Bulgaria and Hungary, workers not eligible if unemployment due to refusal of suitable offer.</p>	<p>About half, require the recipient to be able and willingness to work. Benefits are reduced, postponed, or terminated if recipient does not comply with labor market requirements (job search, training, etc.) or files fraudulent claim.</p>	<p>Almost all countries require employer contributions. 9 (out of 21) require employee contributions. Only exception: Estonia, UI state financed entirely. Employee contribution rates generally vary between 0.06% (Slovenia) and 1% (Slovak Republic). Employer contributions vary between 0.06% (Slovenia) and 6% (Albania). State subsidies (when needed) or deficit financing is common, Latvia: state finances UI for special groups. Slovak Republic: state finances special programs.</p>

Table 3.2: Stylized features of unemployment insurance programs, by groups of countries (cont.)

Coverage	Level of benefit	Benefit duration	Eligibility conditions	Conditions for keeping benefits	Sources of financing
Latin America and the Caribbean					
<p>Argentina, Barbados, Brazil, Chile, Ecuador, Mexico, Uruguay, and Venezuela.</p> <p>Most provide coverage to all employed workers. Exceptions: Uruguay (excludes workers outside industry and commerce), Venezuela (excludes domestics and casual workers), and Barbados (excludes public sector employees and the self-employed).</p>	<p>Income replacement rate varies between 50 and 60% of average earnings. Chile: graduated flat-rate benefits. Ecuador: lump-sum benefits (based on earnings and service length). Argentina, Brazil, Uruguay: minimum and maximum benefit limits are proportional functions of the minimum wage. Uruguay: 20% dependent supplement. Waiting period: Barbados (3 days), Brazil (60 days), Venezuela (30 days).</p>	<p>All countries, maximum entitlement period ≤ 1 year (range: 3-12 months). Argentina, Brazil: entitlement period dependent on employment length. Brazil: in special cases/circumstances, entitlement durations are increased.</p>	<p>Generally, must have been employed for 6-12 months in some stipulated period of recent employment. Argentina and Chile require registration at employment offices. Brazil, Chile, Uruguay: applicants ineligible if dismissal due to misconduct. Argentina: applicants cannot be recipients of other social security benefits. Brazil: claimant must lack other means to support self or household.</p>	<p>In Argentina, Chile, and Venezuela, recipients must be able and willing to work.</p>	<p>Contribution rates vary between 0.75-2%. In 5/7 countries both employers and employees contribute. Except for Ecuador (employees, 2%; employers, 1%), employers contribute an equal or higher percentage of payroll (N=4). Uruguay: contributions (employees, 15%; employers, 12.5%) for social security including UI (state finances deficits). Chile: state finances total cost. Brazil: employer financed through various ear-marked taxes, but mainly through a business sales tax of 0.65%.</p>

Table 3.2: Stylized features of unemployment insurance programs, by groups of countries (cont.)

Coverage	Level of benefit	Benefit duration	Eligibility conditions	Conditions for keeping benefits	Sources of financing
Asia					
<p>Bangladesh, China, Iran South Korea, Taiwan</p> <p>Coverage differs significantly. Iran: excludes the self-employed, voluntarily insured persons; and those covered under other provisions. Bangladesh: only commerce and industry. China: permanent and contract workers in public sector enterprises, and some collective enterprises. South Korea: all firms. Taiwan: excludes the self-employed and firms with less than 5 workers.</p>	<p>Iran, Taiwan: initial replacement rate is 55% of average earnings. Bangladesh: 50% of basic wages + lump sum benefits based on length and nature (permanent/casual) of employment. China: flat rate below minimum wage. Iran: 10% benefit supplement per dependent up to 4 dependents. South Korea: 50% of "basic daily wage" (minimum: 90 percent of minimum wage, maximum: 30,000 Won per day). A reemployment bonus is offered if claimant leaves before half the duration period. Waiting period: South Korea and Taiwan, 14 days.</p>	<p>Bangladesh: 30-120 days, based on type of employment; China: 1-2 years, South Korea: 90-240 days, based on age of claimant and length of previous employment (benefits extended in special cases); Taiwan: 3-16 months, based on employment length; and Iran: 6-50 months, based on employment length and marital status.</p>	<p>Insured employment requirement: Iran: 6 months; China: 1 year; South Korea: 6 months; and Taiwan: 2 years. South Korea, Taiwan: unemployment must be involuntary. In Iran, unemployment also cannot be due to misconduct or refusal to accept suitable offer. Registration at employment office required.</p>	<p>China, Iran, South Korea, and Taiwan: must be capable, available, and willing to work.</p>	<p>Bangladesh, employers: total cost. China, employers: 0.6-1% (rate dependent on local govt. provisions); state: subsidies. Iran, employers: 3%; state: finances deficit. South Korea: employers: 0.5%; employees: 0.5%. Taiwan, employees: 0.2%; employers: 0.7%; state: cost of administration, 0.1% of employee wages, and allocations from other social insurance funds.</p>

Table 3.2: Stylized features of unemployment insurance programs, by groups of countries (cont.)

Coverage	Level of benefit	Benefit duration	Eligibility conditions	Conditions for keeping benefits	Sources of financing
Africa					
<p>Algeria, Egypt, South Africa, and Tunisia.</p> <p>Coverage differs between countries. Algeria: laid-off salaried workers from economic sector. Egypt: excludes public sector employees, casual and agricultural workers. South Africa: excludes domestics and highly paid employees (>76,752 Rand/year). Tunisia: excludes agricultural workers.</p>	<p>Egypt: 60%; South Africa, 45%. Tunisia: minimum wage of industrial and commerce sectors.</p> <p>Algeria: mean of average earnings and national minimum earnings with a floor of 75% of the latter; graduated benefits; spousal allowances provided.</p> <p>Waiting period: South Africa and Egypt: 7 days.</p>	<p>Algeria: duration varies based on length of employment (12-36 months). Egypt: maximum entitlement duration varies between 16-28, based on contribution length. Tunisia: 3 months. South Africa: 26 weeks</p>	<p>Algeria: 3 years of covered employment; employer must be current with contributions. Egypt: 6 months; Tunisia: 12 quarters; South Africa: 13 weeks in last 52 weeks. Algeria and Tunisia require that applicants have no other sources of income. Algeria also requires 3 months of active search prior to application. Tunisia: applicants must have dependents. Unemployment cannot be due to voluntary quit (Egypt, Tunisia) misconduct (Egypt), refusal of suitable job offer (Egypt, South Africa) or participation in strike (South Africa).</p>	<p>Egypt, Tunisia, and South Africa: must be able, available, and willing to work.</p>	<p>Algeria, employees: 1.5%; employers: 2.5%. Egypt, employees: 2%, state: finances deficit. South Africa, employees: 1%; employers: 1%. Tunisia, state: total cost.</p>

Sources: Tzannatos, Z., and S. Roddis (1998). *Unemployment Benefits*. Social Protection Discussion Paper No. 9813. Washington, D.C.: World Bank.
 United States. Social Security Administration. (1999). *Social Security Programs Throughout the World 1999*. Washington, D.C.: SSA.
 OECD (2000). *Pushing ahead with reform in Korea: Labour market and social safety net policies*. Paris: OECD.

Table 3.3: Stylized features of unemployment assistance programs, by groups of countries

Coverage	Level of benefit	Benefit duration	Eligibility conditions	Conditions for keeping benefits	Sources of financing
OECD countries					
<p>Present in about half of member countries (complement UI systems). Only Australia and New Zealand have self-standing UA systems.</p> <p>Available for all unemployed workers, irrespective of sector, industry, or occupation.</p>	<p>Generally, means-tested minimum income at uniform rates to meet the basic needs of unemployed individuals and their families. Typically, benefit level depends on marital status and presence or number of dependents. Benefits are flat-rate over time. Some countries have threshold income levels, above which benefits are reduced and/or completely eliminated. Usually, special provisions exist for the older unemployed. Sometimes, special provisions also granted to younger persons. Generally, no waiting periods. However, waiting period sometimes applied to applicants not transiting from UI (e.g., Ireland, 3 days; Sweden, 5 days).</p>	<p>Indefinite, as long as conditions are fulfilled. Exceptions include Netherlands (1 year); Spain (6 months; 30 months for those with dependents); Sweden (150 days; 5 day week basis). In Portugal, duration depends on age and if claimant is an UI exhaustee or not (longer duration for the latter).</p>	<p>Typically, must satisfy means-test (household income and assets test; excludes state assistance such as family and housing benefits). Generally, offered irrespective of employment or contribution history. Some exceptions: Netherlands (4 years of employment in 5 years preceding unemployment); Portugal (6 months of contributory employment in the year preceding unemployment); France (5 years of employment in 10 years preceding unemployment). In some countries, employment or contribution conditions only applicable for UA applicants ineligible for UI (e.g., Germany, 6 months). In some countries: UA only available for UI exhaustees (e.g., Austria). In Australia: if unemployment is voluntary, due to labor dispute, or refusal of suitable job offer, then benefits are reduced and limited or waiting period is extended to 8 weeks.</p>	<p>Many programs require the claimant to be fully unemployed, capable and available for work; and actively seeking work. Eligibility conditions must be satisfied throughout the period of receipt (periodic checks conducted).</p>	<p>Government financed through general tax revenues.</p>

Table 3.3: Stylized features of unemployment assistance programs, by groups of countries (cont.)

Coverage	Level of benefit	Benefit duration	Eligibility conditions	Conditions for keeping benefits	Sources of financing
East Europe and Central Asia (Transition countries)					
<p>Bulgaria, Czech Republic, Estonia, Hungary, Poland, Romania, Russia, Slovak Republic, Slovenia.</p> <p>Dual systems of unemployment insurance and assistance in most countries. Estonia has an UA system only.</p> <p>All salaried workers. Special provisions for recent graduates and discharged military officers.</p>	<p>Means-tested minimum assistance at flat rates. Generally, benefit level depends on marital status, number of dependents, household size, and age of children. Usually, the receipt of other social assistance does not affect benefit level. However, any earnings, either full or above a certain stipulated amount are fully deducted from UA benefits (e.g., Czech Republic, Hungary). Poland: benefits can be in cash or in kind.</p>	<p>In some countries, entitlement length is indefinite, so long as eligibility conditions are fulfilled. Exceptions include Estonia (180 days), Hungary (2 years), Romania (18 months, renewal possible), Russia (6 months for the unemployed; 12 months for dependents of unemployed), Slovenia (6 months). Entitlement is sometimes limited for certain groups such as recent graduates (e.g., Bulgaria, 3 months). In Poland, entitlement duration decided by social workers. In Estonia, duration extended if claimant is near retirement, has 3 or more children, or if income is below poverty level.</p>	<p>Provided irrespective of employment or contribution history. Must be registered as unemployed. Regular visits to the Labor/Employment office required. Generally, must satisfy household income (and assets) test. Capable and willing to work.</p>	<p>Most programs require the claimant to be capable, available, and willing to work. Refusal of training or acceptable job offer results in benefit cancellation. Eligibility conditions must be satisfied throughout the period of UA receipt.</p>	<p>Government financed through general tax revenues.</p>

Table 3.3: Stylized features of unemployment assistance programs, by groups of countries (cont.)

Coverage	Level of benefit	Benefit duration	Eligibility conditions	Conditions for keeping benefits	Sources of financing
Asia					
Hong Kong (China)	Means-tested, flat rate benefits based on marital status and presence of dependents.				Government financed through general tax revenues.
Africa					
Tunisia, Mauritius Tunisia: all non-agricultural salaried workers covered under National Social Security Fund.	Mauritius: means-tested income to households after 30 days of registered unemployment. Tunisia: minimum wage in industry and commerce.	Tunisia: 3 months	Tunisia: 12 quarters of contributions to the Fund, registered as unemployed, and capable of work. Worker must be involuntarily unemployed, have dependents, and have no other source of income.		Government financed through general tax revenues.

Sources: United States Social Security Administration (1999). *Social Security Programs Around the World 1999*. Washington, D C.: SSA.
 Boeri, T., and S. Edwards. *Unemployment and Social Assistance Benefit Schemes in Central and East European Countries*. (incomplete ref.)
 OECD. *Benefit Systems and Work Incentives in OECD Countries: Country Chapters 1995*. <http://www.oecd.org/els/socpol/BenefitsCompendium/index.htm>.

Aside from incomes, the level of benefits can vary according to factors such as marital status, the presence or number of dependents, and the ages of children. Benefits are periodically adjusted for inflation. Unemployment assistance benefits are sometimes offered indefinitely, so long as the recipient satisfies the eligibility conditions. Benefit duration is sometimes limited for recent graduates and other groups while extended for claimants near early or regular retirement age.

Unemployment assistance is typically financed by governments through general tax revenues. In countries with dual unemployment insurance/assistance programs, the source of financing can be the same as for unemployment insurance.

(c) Severance pay. Severance pay are lump-sum payments made to discharged workers either voluntarily by employers (through collective agreements or as part of firm policy) or as mandated by governments. They are offered for both individual and collective dismissals, usually with no special dispensations for the latter. Coverage is generally broad, encompassing both white- and blue-collar workers (see table 3.4). However, in some countries, severance pay is provided only in some sectors, industries, or firms above certain sizes (these practices are more common in developing countries). Severance pay is typically provided to individuals who are discharged due to redundancy; those who are dismissed due to gross misconduct lose the entitlement. Minimum years of service requirements are also sometimes used to limit eligibility.

As a rule, severance benefits depend on the years of service. The standard formula is one month's pay for each year of service. More complex formulae exist wherein compensation is adjusted according to years of service and/or age tiers; under such structures, individuals with long records of service and/or older age are usually entitled to more generous severance pay. In some countries, the generosity of severance benefits may differ based on whether the individual was a white- or blue-collar worker, permanent or fixed-term, and whether s/he was covered by a collective agreement or not.

Table 3.4: Stylized features of severance pay programs, by groups of countries

Coverage	Level of benefit	Eligibility Conditions	Sources of financing
OECD Countries			
Scandinavia			
Denmark, Finland, Norway, Sweden Except for white collar workers in Denmark and long-serving, older employees affected by restructuring in Finland, no legislated severance pay for individual or collective dismissal. Severance pay sometimes provided through collective agreements in private sector.	Denmark (white collar): 12+ years of service: 1 month's pay 15+ years: 2 months' pay 18+ years: 3 months' pay Finland: (age: 45+; years of service: 5+): 1-2 months' pay.	Separation due to personal reasons or economic redundancy. Minimum years of service: Denmark: 12; Finland: 5.	Employer financed. Firms sometimes receive state assistance.
Western Europe			
Austria, Belgium, France, Germany, Ireland, Netherlands, Switzerland, U.K. All workers covered. Germany, Netherlands, and Switzerland: no legislated severance pay for individual or collective dismissals (exceptions for special cases), but severance pay often part collective agreements or social compensation plans. Except for Belgium, where severance pay only for collective dismissal, no special regulations for collective dismissals.	Benefit formula varies significantly. Belgium: ½(net earnings-UI benefits) over 4 months; France: 0.10 month's pay per year of service + an additional 0.067 month's pay after 10 years. Ireland: 1 week's pay + half week pay per year of service under age 41 + week's pay per year of service over age 41 (maximum amount: Ir£ 15,600). U.K.: 0.5 week's pay/year of service (age: 18-21) 1.0 week's pay/year (age 22-44) 1.5 week's pay/year (age 41-65).	Separation due to personal reasons or economic redundancy. Minimum years of service: Austria: 3; Ireland: 2; U.K.: 2.	Employer financed. Firms sometimes receive state assistance

Table 3.4: Stylized features of severance pay programs, by groups of countries (cont.)

Coverage	Level of benefit	Eligibility Conditions	Sources of financing
OECD Countries			
Southern Europe			
<p>Greece, Italy, Portugal, Spain, Turkey</p> <p>All countries: legislated severance pay for both individual and collective dismissals; no special regulations for collective dismissal. All workers covered.</p>	<p>Standard formula: 1 month per year of service. Collective agreements in Italy and Turkey can increase generosity. Greece: severance pay reduced if advance notice given. Greece: more generous severance pay for white collar workers. Spain: less generous severance pay for fixed-term contract workers.</p>	<p>Minimum years of service: Greece: 5; Turkey: 1. Separation not due to own fault.</p>	<p>Employer financed. Firms sometimes receive state assistance.</p>
Non-Europe			
<p>Australia, Canada, Japan, New Zealand, USA</p> <p>Australia (only for redundant workers). Certain areas of Canada possess legislated severance pay for individual and collective dismissals; no special regulations for collective dismissal. In some countries, severance pay provided as part of collective agreements or as firm practice.</p>	<p>Benefits vary significantly across</p> <p>Australia (for redundant workers): 4 weeks for less than 2 years of services to 8 weeks for more than 4 years of service. Japan (common firm practice): 1 month's pay per year of service; lower for voluntary quits and higher for lay-offs. New-Zealand (for redundant workers; common firm practice): 6 weeks' pay for first year of service then 2 weeks' pay for each additional year. Canada (federal): 2 days' pay per year of service with minimum of 5 days.</p>	<p>Separation due to personal reasons or economic redundancy. Minimum years of service: Australia & Canada (federal): 1.</p>	<p>Employer financed. State assistance possible.</p>

Table 3.4: Stylized features of severance pay programs, by groups of countries (cont.)

Coverage	Level of benefit	Eligibility Conditions	Sources of financing
East Europe and Central Asia (Transition countries)			
<p>Czech Republic, Hungary, Poland</p> <p>All workers covered. Czech Republic, Hungary: legislated benefits for individual and collective dismissal; no special regulations for collective dismissal. Poland: legislated benefits only for collective dismissal.</p>	<p>Czech Republic: redundant workers obtain 3 months' pay. Hungary: 1 month's pay for less than 5 years of service to 6 months for 25+ years of service. Poland: 1 month's pay for less than 10 years of service to 3 months' for 20+ years of service.</p>	<p>Dismissal due to personal reasons or economic redundancy. Minimum years of service: Hungary: 3.</p>	<p>Employer financed. Firms sometimes receive state assistance.</p>
Latin America and the Caribbean			
<p>Argentina, Barbados, Belize, Bolivia, Chile, Colombia, Ecuador, Mexico, Nicaragua, Panama, Peru, Venezuela, Uruguay</p> <p>Coverage is usually all workers (public and private sectors).</p>	<p>Argentina, Colombia: 1 month's pay per year of service. Mexico: 3 months' pay + 20 days' pay per year of service. Peru: 1.5 months' pay per year of service. Belize: 1 month's pay per year of service after 5 years of service. Barbados: 2.5-3.5 weeks' pay per year of service, depending on length of service. In some countries, employers are required to make an additional payment as seniority premium, regardless of the cause of job termination. In Ecuador, Colombia, Panama, Peru, and Venezuela, this benefit is provided to the worker in the case of unjustified dismissal (in addition to the regular indemnity) and/or voluntary quit. Upper limits are sometimes placed on compensation packages: Chile: 11 months of wages; Peru: 12; Nicaragua, Panama, and Venezuela: 5; Uruguay: 6.</p>	<p>Venezuela: only for dismissal without due notice, for unjustified dismissal, or retirement for justified cause. In Latin America, only in Argentina and Chile are dismissals for economic causes allowed. In the Caribbean, severance pay is offered to workers made redundant due to labor adjustment. In Belize, Bolivia, Chile, and Nicaragua, severance pay is offered for voluntary quits.</p>	<p>Employer financed.</p>

Table 3.4: Stylized features of severance pay programs, by groups of countries (cont.)

Coverage	Level of benefit	Eligibility Conditions	Sources of financing
Asia			
Bangladesh, India, Indonesia, Malaysia, Pakistan Covers formal sector workers. Pakistan: firms must have more than 20 employees.	Bangladesh: casual workers: 14 days' pay per year of service; permanent workers: 1 month's pay per year of service. India: 15 days' avg. pay per year of service. Indonesia: 1 month's pay per year of service; double if redundancy is due to economic reasons or dismissal is due to unjust cause. Merit allowances also may double severance pay. Malaysia: 10-20 days' pay per year of service, depending on length of service. Pakistan: 30 days' pay per year of service.	Malaysia: at least 12 months of continuous service.	Employer financed.
Africa			
Botswana, Libya, Tanzania	Libya: 100% of earnings up to 6 months	Minimum months of continuous service: Botswana: 60; Tanzania: 3.	Employer financed.

Sources: 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 Markets and the Economic Crisis: Impacts, Responses, and Lessons*. Washington, DC: World Bank.

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In general, severance pay is financed by employers. However, in some countries, the government provides financial assistance, particularly for large-scale restructuring operations which involve worker retrenchment *en masse*.

(d) Unemployment insurance savings accounts. Unemployment insurance savings accounts (UISAs) are relatively new (and less known as a result), although the system has been in place in Brazil since the 1960s. More recently, several other Latin American countries (Chile, Colombia, Ecuador, Panama, Peru, and Venezuela) have introduced savings accounts in some form as well.

The system functions as follows. Employers deposit for each worker some specified fraction of his or her earnings into a special individual savings account on a regular basis (see table 3.5). In some countries (Chile), workers are also required to make regular contributions into their accounts. Upon separation and regardless of the reason for separation, workers can make withdrawals from their savings accounts as they deem fit. However, in Brazil, workers can only access their accounts in the case of involuntary separation. Furthermore, employers are required to make an additional payment of 40 percent of the account balance (plus interest) to the individual as penalty. In Panama and Venezuela, the penalty is set as a multiple of previous wages, and offered regardless of the reason for separation. In all countries, at retirement, positive account balances are added to old-age pensions. Some programs allow workers to access their savings accounts for reasons other than unemployment, such health and education.

According to some proposals (see, for example, Cortazar, 1996, and Feldstein and Altman, 1998), unemployed workers would be able draw benefits monthly as under the traditional unemployment insurance, and the government would lend money to accounts where the balance falls below zero. A close variant of this arrangement has recently been introduced in Chile. In the Chilean system, employers and workers make contributions into individual savings accounts. At the same time, workers and the government make contributions into a separate fund called the "Solidarity Fund." After separation, if the unemployed worker's account balance falls below a stipulated minimum, the difference is made up via transfers from the Solidarity Fund (Heckman and Pages, 2000).

Table 3.5: Stylized features of unemployment insurance savings accounts programs, Latin America

Coverage	Level of benefit	Eligibility Conditions	Sources of financing
<p>In Brazil (Fundo de Garantia de Tempo do Serviço – FGTS, established in 1967), Chile, Colombia, Ecuador, Columbia, Panama, Peru, Venezuela,</p> <p>All formal sector workers.</p>	<p>Amount accumulated in the individual savings account (deposits plus interest earned). In Brazil, if dismissed, employer must pay an additional 40 percent (plus interest) as penalty. In Panama and Venezuela, penalty set a multiple of previous wages.</p>	<p>Upon separation (regardless of the reason of separation). Exception: Brazil, only if worker is dismissed. Some programs allow access for other reasons as well (e.g., health and education expenditures).</p>	<p>Brazil, Ecuador, Columbia: 8 % contribution rate; Peru: one half of a monthly salary each six months; contributions are paid by employers in workers' individual savings accounts.</p> <p>In Uruguay employees contribute 15 percent of earnings: the first 7.47 new pesos goes to social insurance and the balance, less a 3 percent administrative fee, goes to an individual account. Employers contribute a further 12.5 percent of payroll to the system and the government, if necessary, finances deficits (this is a dual social/ private insurance system which covers old age, disability, death, sickness and maternity benefits, family allowances and unemployment).</p>

Sources: Lipsett (1999), Heckman and Pages (2000), Mazza (2000)

(e) Public works. Generally introduced in response to economic and natural shocks as a temporary measure, public works programs (also known as workfare) provides low-wage employment to individuals suffering from economic deprivation or distress. In India and Bangladesh, for example, public works programs have been introduced in order to provide relief during famines and droughts as well as to attenuate seasonal dips in income (Ravallion, 1991). In general, programs are highly labor-intensive; the use of non-labor inputs are limited. These programs also allow for significant control of participation. For example, program rules may favor certain groups such as discouraged workers or the long-term unemployed. Although the rationale for public works programs vary somewhat, these programs are motivated primarily by one or more of the following objectives: poverty alleviation (transfers to the poor), consumption-smoothing or income stabilization, local and community development, construction and maintenance of basic rural infrastructure (asset creation), and food security. Among these, the income support function is usually the most stressed. Public works programs are found mainly in the developing world, particularly in sub-Saharan Africa (for example, in Senegal and Kenya), South Asia (for example, in India and Bangladesh), and Latin America (for example, in Chile and Argentina). Transition countries (for example, Bulgaria, Hungary, and Poland) have also introduced them in recent years to help address their growing unemployment problem.

Typically paid on a piece-rate or time-rate basis, remuneration for public works participation can be in cash, in kind (usually in the form of food aid), or some combination of both. Program wages are usually set at a low level – around prevailing market wages or statutory minimum wages for unskilled labor – so as to attract only the poor to participate. This also lowers the likelihood that the program displaces alternative low-wage local employment, and encourages participants to seek more remunerative employment outside the program. Subbarao (1997) reports cross-country evidence which reveals that the statutory minimum wage usually plays a more important role in the determination of program wages than the prevailing market wage. With few exceptions (for example, Chile and Botswana), due to political and legal constraints, program wages are usually not set below the statutory minimum wage. If the prevailing market wage is lower, this creates perverse incentives for program participation. Such an example is the Philippines, where Subbarao (2001) reports that the pay consists of cash wages equal to the minimum wage *plus* some food aid.

In principle, participation in public works programs is open to anyone. In practice, a strong self-selection mechanism is self-selection based on program wages. In programs where the wage rate fails to limit participation to a sustainable level, administrators have to ration the jobs. This has occurred, for instance, in programs in Botswana, Tanzania, and India (Subbarao, 1997).

Public works programs are generally financed by the government through general tax revenues. They are also sometimes funded by non-governmental organizations or the international donor community. The Maharashtra Employment Guarantee Scheme in India has a somewhat unique financing mechanism – the program is financed primarily by special taxes which fall disproportionately on the non-poor and partly by general tax revenues (Ravallion, 1991).

(f) Other programs. We also describe here some other programs which help unemployed workers to reduce the risk of unemployment (such as work sharing and early retirement), or cope with the risk of unemployment (social assistance and short-time compensation), or combine various risk management mechanisms (public sector retrenchment programs).

Social assistance. Social assistance benefits are not targeted directly at the unemployed but at the poor generally. They are available mostly in developed countries (in 1990, the social assistance expenditures of OECD countries ranged from 0.3 percent in Finland to 4.3 percent in Ireland). The program provides a range of benefits (cash and in-kind) on a means-tested basis to applicants with insufficient resources to maintain a minimum standard of living as officially determined. Benefits are typically provided indefinitely, subject to periodic checks to determine continuation in the eligibility status of the claimant. In countries where unemployment assistance is unavailable, social assistance programs are often the next destination for the poor unemployed who lose unemployment insurance eligibility (for example, in Denmark and the Netherlands). As with unemployment insurance and unemployment assistance, the majority of social assistance programs require that the unemployed are capable of, searching for, and available for work, and that they comply with other applicable labor market requirements (training, public works participation, etc.). Non-compliance is generally met with a temporary or permanent termination in social assistance benefits (see box 3.1 for recent changes in the U.S. social assistance program geared towards promoting employment).

Box 3.1: Temporary assistance for needy families in the U.S.

Enacted in 1996 to replace the Aid to Families with Dependent Children (AFDC) and Job Opportunities and Basic Skills Training (JOBS) programs, the Temporary Assistance for Needy Families (TANF) program provides means-tested cash assistance to families in economic need. Under TANF, states are allotted a block grant from the federal government and are responsible for the design and administration of their programs. Two key features of the TANF program are its stringent work requirements and the limited duration of benefits.

Work requirement: Under the TANF block grant, with a few exceptions (for example, persons who are ill or incapacitated, 60 years of age or above, pregnant, caring for young child), claimants must work or participate in some work-related activity (vocational training, community service, etc.) as soon as they are able to, or after 24 months of benefit receipt, whichever comes first. In fact, some states require TANF applicants to begin job search prior to application. In most states, the minimum work hours requirement for single adult families is 25 hours per week. Up to 6 weeks of job search (4 weeks if consecutive) count towards the work requirement. Failure to meet program work requirements can result in either a reduction or termination of benefits.

Duration limit: In most states, claimants can receive TANF for a maximum lifetime duration of 60 months. Some states have adopted shorter durations (e.g., Georgia: 48 months; Idaho: 24 months). States are allowed to relax their time limits for up to 20 percent of claimants for various reasons as determined by them. Furthermore, states intermittently disturb benefit receipt such as through temporary or permanent reductions in benefits, limits on the duration of benefits over some specified period of time, as well as waiting periods between benefit receipt spells.

Source: Rowe (2000)

In most countries, social assistance benefits are flat-rate at a low level (for example, below the average earnings of unskilled industrial workers), so as to encourage employment. The composition and type of household, the number of income-earners in the household, and housing costs as well as other characteristics are also sometimes taken into account in the determination of benefit amounts.

Social assistance is generally financed by the government through general tax revenues. These programs are sometimes administered at the national level, but more often at the local level.

Early retirement programs. In contrast to programs which compensate the unemployed for temporary income loss, early retirement programs facilitate the early withdrawal of older workers from the labor force. These programs were introduced in developed countries in the late 1960s in response to increasing unemployment and the deterioration of reemployment prospects of the older unemployed. More recently, they have also been introduced by some transition countries.

There are several types of early retirement programs. As described by Blöndal and Scarpetta (1997), under some programs, the older unemployed are entitled to early pension benefits at full, or more often, reduced value. Other programs enable older workers to avoid unemployment altogether – under these programs, workers with sufficiently long periods of contributions into the pension fund can retire early and receive pensions at full or reduced value. In the U.S. and Canada, for example, individuals can retire early, but with their pensions actuarially reduced. In many countries, early retirement pensions at full value are offered to those employed in hazardous workplaces or arduous work.

Other early retirement schemes include “*job release schemes*” which allow older workers to retire early and receive pension benefits at full value (or a special allowance), conditional on employers replacing the “early retiree” with a younger unemployed individual. Although less common today, some countries have also resorted to *disability pensions* to encourage early retirement. The older unemployed with even minor infirmities were entitled to full disability pensions if suitable jobs were hard to find (e.g., Germany, Denmark, Netherlands) until they retire. Likewise, in several OECD countries, the older unemployed are allowed to draw unemployment insurance benefits at relaxed conditions and for extended periods until they retire.

In addition to public schemes, employers use *private pension plans* to facilitate early retirement. Moreover, in the Netherlands and Germany, for example, under negotiated “social” plans, employers are required to *top up* the unemployment insurance benefits received by older redundant workers up to the level of previous net earnings.

Work sharing. This program is aimed at enabling employers to retain skilled workers, and workers to avoid layoffs associated with temporary economic downturns. Under such arrangements, workers agree to a reduction in working time accompanied with a cut or proportional reduction in wages. Usually undertaken at the firm or sectoral level on a voluntary basis, the primary objective of work-sharing is to preserve jobs during difficult

economic times. With recovery, normal working hours and wages are usually restored. In addition, there are instances of mandatory work-sharing imposed by governments for the purpose of job creation. These take the form of reductions in working time, limits on overtime, increases in the duration of leave, as well as other strategies. Some mandated work-sharing programs (for example, in Canada) have also been undertaken in the context of public sector downsizing. Work-sharing programs are most prevalent in Western Europe, followed by, in a limited scale, in North America. They are uncommon elsewhere.

Short-time compensation. This program permits employers to reduce the number of work hours of workers with proportional cuts in wages; however, here, the lost wages (as a result of the reduction of hours) of affected workers are partially compensated using unemployment insurance benefits. In other words, short-time compensation programs are a form of compensation for lost working time as part of work-sharing agreements. These programs are well-established and widespread in Western Europe (for example, Germany, the U.K., the Netherlands, Sweden, etc). The first such programs appeared in the United States and Canada in the mid-1970s. As of the mid-1990s, 17 U.S. states have introduced short-time compensation programs. These programs are non-existent in developing countries.

The structure of short-time compensation benefits, eligibility conditions, financing, and administration varies greatly between countries. In the U.S., for example, under these programs, workers who observe a reduction in work hours receive unemployment insurance benefits pro-rated for the hours lost due to work-sharing. Benefit duration is usually limited to 20-30 weeks, depending on the state. In order to become eligible for short-time compensation, the work-sharing (hours reduction) plan must be agreed by the employer, relevant union(s) if present, and the state. Furthermore, to qualify for short-time compensation, employers are required to show that at least some 10-20 percent of the workforce to be affected. However, some states limit benefit receipt to between 40-50 percent of the work force (Abraham and Houseman, 1993).

Public sector retrenchment programs. Overstaffing, excessively high wages, generous benefits, and gross inefficiencies may be present in the public sectors of many countries. In addressing these issues, labor retrenchment programs have increasingly become an integral part of public sector reforms. These programs can take various forms: they can be voluntary or involuntary; compensation packages can be standard or tailor-made, and they may or may not include active labor market programs.

In a review of 41 public sector retrenchment programs in 37 countries worldwide, Haltiwanger and Singh (1999) find that program design is closely associated with the underlying causes for retrenchment. When retrenchment was perceived as an one-time event to address issues such as “ghost workers” or low worker productivity, compensation typically consisted of severance and enhanced pensions, and the retrenchment programs were voluntary in nature. On the other hand, if retrenchment was perceived as part of a fundamental, radical transformation of the public sector including a restructuring of the labor market, such as in transition countries, these programs were richer – provisions for severance and enhanced pensions were accompanied by worker safety net measures such as

unemployment benefits, job placement services, and worker retraining. In addition, these programs more often included a mandatory component. Severance pay was the most common instrument (used in 68 percent of projects), followed, in turn, by enhanced safety nets (63 percent) and enhanced pensions (29 percent). The authors also find that for every dollar spent on severance pay, additional 1.2 dollars were spent on enhancing safety nets, and 2.2 dollars on enhancing pensions.

For political reasons, voluntary retrenchment programs have been increasingly popular (Rama, 1999). However, standard voluntary retrenchment programs, offering benefits primarily based on years of experience, may lead to severe adverse selection problems, because the most productive workers often have superior labor market opportunities outside the public sector. Special tailor-made programs may increase the efficiency of downsizing by disclosing worker characteristics. For example, the use of confidential individual bids for exit compensation with safeguards to prevent collusion can be one procedure that leads to such a disclosure (Jeon and Laffont, 1999). Unproductive workers tend to be those with the highest bids as they stand to lose the most from separation. Because determining the right menu may be difficult in practice, Rama (1999) recommends the use of other, simpler procedures as well.

One such procedure that is considered more cost-effective is determining (“indexing”) severance pay by welfare losses arising from the worker’s separation. Severance pay can be indexed to a wide selection of observable worker attributes including present wages, job security, gender, years of past service, expected duration of the unemployment spell, and prevailing wages which the separating worker can expect to earn in the private sector. For state-owned enterprises in Egypt, Asaad (1999) finds that a tailor-made program could reduce total compensation by 31 percent in comparison to a standard program, and that a severance pay program that provides higher payments to long-tenured workers are likely to overpay them.

When is the decision to downsize justified? One can look at the financial return – the impact of downsizing on the consolidated government budget (positive financial returns occurs when the net present value of reduced wage and benefit expenditures exceeds the net present value of the retrenchment costs). But one should also consider economic returns, the increase of output and welfare arising from improved allocation of labor, and from the reduced level of taxes, although many of the relevant private and social costs and benefits are difficult to quantify.

3.2 Determinants of the incidence of unemployment benefit systems

Is it possible to identify common factors which contribute to the existence of income support programs? Below we try to do so by examining the determinants of the incidence of unemployment insurance and/or unemployment assistance programs.

Out of 163 countries for which we have information, 65 of them (or 40 percent) have unemployment insurance or assistance systems. Most of them are developed or transition countries. Other countries with such systems are scattered across the developing world with Africa and Asia exhibiting a clear dearth of such systems, the exceptions being Bangladesh,

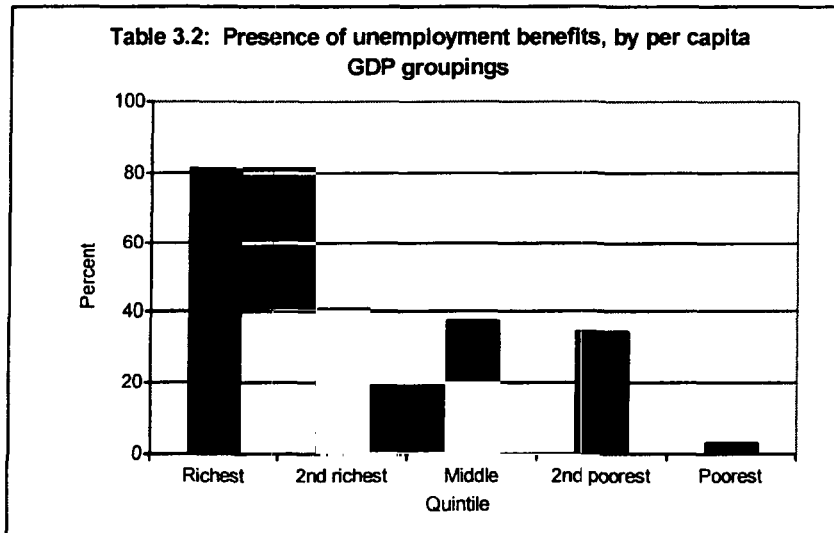
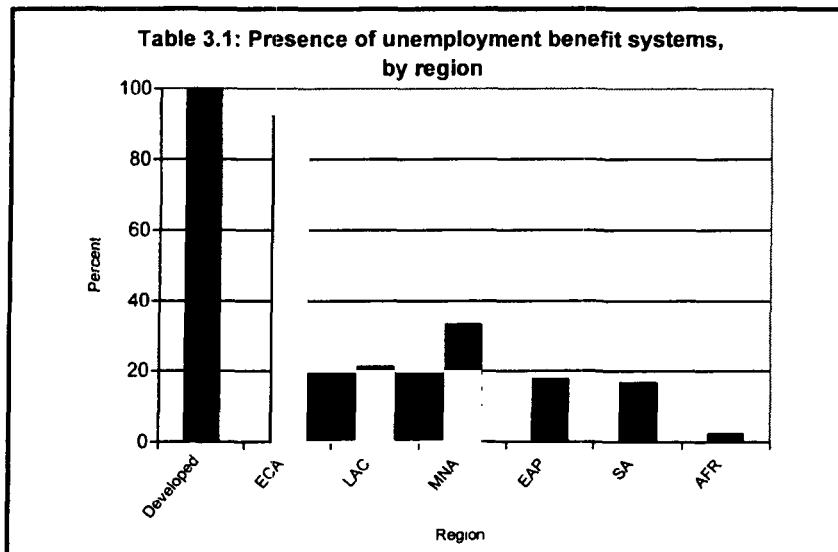
South Africa, South Korea, China, and Taiwan (see Figure 3.1). (The acronyms for regions are: ECA – Europe and Central Asia; LAC – Latin America and Caribbean; MNA – Middle East and North Africa, EAP – East Asia and Pacific; SA – South Asia, and AFR – Africa.)

It seems that the incidence of unemployment benefit is correlated with GDP per capita. Over 60 percent of the countries with unemployment benefit systems are in the top two GDP per capita quintiles, or more markedly, over 80 percent are in the top three quintiles (see

Figure 3.2). Of the 45 countries with over \$8,000 in per capita GDP, nearly 75 percent have unemployment benefit systems. In contrast, of the 48 countries with under \$2000 in per capita GDP, only 1 in 10 has such a system.

To test empirically the determinants of the incidence of a public unemployment benefit system, we stipulate that its presence depends on (i) the vulnerability of the country to unemployment risk (on the demand side), as well as on (ii) the ability of citizenry to translate their demand for the public provision of unemployment benefits to legislated action – that is, on the ability of the public to influence government decision-making (on the supply

side). Of course, both the vulnerability to unemployment risk and the ability of citizenry to affect decision-making do not lend themselves to easy measurement. We therefore rely on the use of proxy variables. On the demand side, we use the size of the urban population as a proxy for the level of a country’s vulnerability. Urban populaces’ capacity to absorb shocks is lower, because its ability to self-protect and to cope with unemployment is likely to be limited, due to the covariant nature of unemployment shocks (for example, Horton and



Mazumdar (2001) report that during the recent crisis in Thailand, many recent migrants to urban areas returned to their regions of origin and agriculture). On the supply side, to proxy the ability of citizenry to affect the political decision-making process, we use the variable indicating whether or not a country has ratified the ILO freedom of association convention (the right of workers and employers to freely establish associations or organizations). Moreover, we also include in the regressions the level of per capita GDP, as simple correlations of the incidence of benefit systems suggest. Among other things, the level of per capita GDP reflects the capacity of an economy to redistribute income, as unemployment benefit programs may entail redistribution from the rich to the poor.

Table 3.6: Determinants of the incidence of unemployment benefit systems
(probit estimates, standard errors in parentheses)

Independent Variables	Specifications	
	Equation 1	Equation 2
GDP per capita, PPP (in 1000 current US\$)	0.052* (0.023)	0.081** (0.028)
Urban population (percent of total)	0.021** (0.007)	0.011 (0.009)
Signed the ILO Freedom of Association Convention	—	1.05** (0.314)
Constant	-1.791** (0.333)	-2.12** (0.506)
Sample Size	160	114
Log Likelihood	-82.7	-56.5

** Significant at the 1% level

* Significant at the 5% level

Data sources:

Presence of unemployment benefits: US Social Security Administration, *Social security programs around the world – 1999*, <http://www.ssa.gov/statistics/ssptw99.html>.

Signed ILO Freedom of Association Convention: Martin Rama and Raquel Artecona, "A Database of Labor Market Indicators across Countries", unpublished, The World Bank, Washington DC, 2000.

All other data: World Bank Statistical Information Management and Analysis (SIMA), *World Development Indicators and Global Development Finance Central database*, <http://sima>.

Our empirical results offer support to the above reasoning.⁵ On the supply side, the results in table 3.6 confirm that the likelihood of a country possessing an unemployment benefit system is indeed positively and significantly related to the ratification of the freedom of association convention; density of trade unions (the percent of organized labor force) produced similar results (they are not reported). These results shows that the existence of trade unions indeed increases the likelihood that a country possesses a formal unemployment benefit system (see boxes 3.2 and 3.3 for the role of trade unions in the emergence of unemployment insurance in Algeria and Brazil, respectively). On the demand side, there is

⁵ As common with cross-country analysis, the results may suffer from the problem of reversed causality and thus should be taken as preliminary.

some support that the percent of urban population is also related to the incidence of benefits, but the variable lost significance once the ratification variable was included in the regression. And as expected, the results also confirm the link of GNP per capita to the existence of benefits – perhaps reflecting the overall capacity of the country for income redistribution.

Box 3.2: Facilitating downsizing by introducing unemployment insurance in Algeria

Algeria has historically followed a planned economy model with large, woefully inefficient public enterprises dominating the economy. These enterprises survived on sizable government subsidies and infusions of credit from state-owned banks. Prior to 1990, several attempts at economic reforms were made but strong resistance from trade unions against the accompanying displacement of labor coupled with periodic episodes of political and social upheaval led to their prompt abandonment.

During the early 1990s, Algeria was in a difficult economic situation brought about by depressed world prices for oil, its principal export. In 1994, the government was, as a result, forced to initiate broad-based structural reforms which included the restructuring of public enterprises. Efforts to revitalize enterprises involved shedding large numbers of redundant workers.

As part of the public enterprise privatization program, a retrenchment program was designed to facilitate restructuring through mass layoffs from distended industries. Instead of relying only on severance pay as previously, laid-off workers were also eligible to a newly introduced unemployment insurance. While under the old system unions had to approve layoffs for economic reasons on a case by case basis, the new system does not have this requirement, taking unions out of the decision-making on individual downsizing cases. Unions were however consulted over the design of the new system.

Source: Ruppert (1999).

Box 3.3 Reasons for introduction of the unemployment insurance in Brazil

The 1986 Cruzado Plan introduced a universal unemployment insurance program in Brazil. There is no consensus regarding the forces that contributed to its emergence. One theory states that it was provided in response to increased union pressure, demanding the implementation of the program which had been promised earlier. An alternative theory identifies as the primary motivating factor the growing public dissatisfaction arising from urban population pressures and economic instability. Yet a third theory suggests that unemployment insurance was included in the Cruzado Plan merely as a trade-off for less favorable labor clauses.

Source: Cunningham (2000).

3.3 Concluding remarks

The above review shows that countries use widely different approaches when providing income support to the unemployed. While developed countries have multiple programs, many developing countries do not have any special programs for the unemployed. Moreover, parameters of a particular income support program differ sharply across countries, contributing to differences in coverage and the degree of protection provided. And even countries which are geographically proximate and at a similar level of economic

development may choose quite different welfare regimes, as the diversity of regimes across European countries suggests (Gough, 2000).

How can we explain such a diversity of approaches? There are many possible explanations why the “one size fits all” rule does not apply. Countries have chosen and designed programs to fit their specific circumstances and needs (for example, cultural, administrative, nature of shocks). Moreover, special interest groups and political economy considerations also seem to be important. And different programs have different distributive and efficiency objectives – and effects. For example, reaching the chronic poor requires different programs than providing income smoothing for skilled workers.

The analysis of the determinants of the incidence of unemployment benefits revealed that there are also common factors which contribute to the emergence of income support for the unemployed. In addition to the level of economic development, it seems that country specific circumstances – most strongly connected with the existence of trade unions – affect the introduction of unemployment insurance and assistance programs.

One implication of the above findings is that in reforming their systems, countries may well follow different transition paths – and that these systems may never converge. For example, as claimed by Edwards and Manning (2001), Latin American countries may be amenable to replacing their severance pay systems with UISAs, while such an introduction may be just a remote possibility in transition countries. And even economies with similar technologies and preferences can reach very different, stable equilibria regarding the level of unemployment insurance. For example, in explaining differences in unemployment insurance systems in Western Europe and the United States, Hassler et al (1999) argue that the interaction of skill specificity and preferences reinforces differences in initial skill distributions of the society to generate one equilibrium with high unemployment, low turnover, and a high level of insurance, and another one with low unemployment, high turnover, and a low level of insurance.

4. PERFORMANCE OF INCOME SUPPORT SYSTEMS – THEORETICAL ASPECTS AND EMPIRICAL EVIDENCE

This chapter reviews the evidence on the performance of various income support systems for the unemployed. It evaluates the distributive and efficiency effects of these systems, and examines how suitable they are to confront various types of shocks and how resistant they are to political risk. The discussion focuses on programs whose main objective is to provide compensation for the loss of earnings due to unemployment: unemployment insurance, unemployment assistance, severance pay, unemployment insurance savings accounts (UISAs), and public works. Selective outcomes of some other programs (social assistance and early retirement) are also reviewed.

Before proceeding with the evaluation, three caveats about the pitfalls of such a task should be mentioned. First, as the above review of existing income support programs shows, many of the programs tend to be very complex, because they rely on various design parameters that interact in numerous ways. In evaluating the performance of these programs, **it is of utmost importance to appropriately account for their design parameters (the**

program's "architecture"), as well as for the degree of enforcement of the programs' rules, that is, whether or not laws on the books are actually implemented (Atkinson and Micklewright, 1991). Differences in the design of income support programs may help to explain not only variations in their coverage, but also other effects these programs have on different labor market outcomes (the incidence of part-time workers, the share of women and long-term unemployed among the unemployed, the duration of unemployment, to name just a few). For example, long periods of insured unemployment may be attributable not only to low labor demand, but also to a generous replacement rate, long maximum duration periods for benefit collection, lax monitoring of job search, ineffective job-search assistance, as well as eligibility rules that attract workers with weak labor-force attachment and poor motivation (for example, when Poland introduced its unemployment benefit program in early 1990s, no prior work experience was needed to qualify for benefits). Similarly, a high share of women among benefit recipients may be attributable to low relative demand for women's labor, but it may also reflect program rules that extend benefits to mothers until children reach a certain age (Estonia is an example).

The second caveat relates to the fact that the **working of such programs cannot be evaluated in isolation, that is, separately from other important institutional features of the economy**. In conjunction with structural parameters of income support systems, a host of institutional and other features – primarily those affecting the performance of the labor market, such as labor legislation and collective bargaining arrangements – as well as labor market conditions have to be considered so as to more accurately determine and attribute the effects of income support programs. For example, an increase in the intensity of job-search monitoring may well produce different results depending on the rate of unemployment. Similarly, the effects of experience rating on layoffs depend largely on the strictness of employment protection legislation – if the latter is in place, additional effects of experience rating may be small. Unemployment benefit systems are also affected by wage setting arrangements: under flexible wage arrangements, more adjustment is likely to be achieved via real wage reductions as opposed to employment reductions. In contrast, more rigid wage determination may prompt more employment adjustment and larger inflows to insured unemployment; in turn, higher costs of unemployment benefits stifle job creation and contribute to higher unemployment on its own, particularly for marginal groups of workers (for a modeling along these lines, see Aghion and Blanchard, 1994, and Layard et al, 1991). Recognizing the above, in discussing the effects of income support systems we will try to emphasize whether these effects are of partial or general equilibrium nature.

Various **simultaneous programs and policies can also have offsetting effects, or can reinforce each other**. For example, the employment effects of liberalization of fixed-term work depends not only on job protection of regular jobs but also on whether or not fixed-term workers qualify for unemployment benefits. Or increasing monitoring of job search may not help if monitoring of informal employment remains lax. Moreover, the effects of the generosity of the unemployment benefit program may well depend on a host of labor market policies (from wage setting behavior and minimum wage regulations to employment protection legislation) that influence the job creation capacity of the economy and thus the demand side of the market. For example, Orzsag and Snower (1998) argue that positive effects of lower benefits on the intensity of job search are reinforced by tax cuts that

induce employers to hire more workers (indeed, this speaks in favor of broader reforms, which tend to be more effective and politically more acceptable – see below). Changing only one program may not produce the desired effects. In line with the interdependency of social risk management mechanisms emphasized in Chapter 2, one should therefore judge the effects of a particular program in the context of the whole economic system rather than in isolation. (Examining the adjustment of the system in its entirety allows one, among others, to set the appropriate counterfactual, for example, by taking into account existing distortions which prevent the economy from being perfectly competitive.)

4.1 Distributive effects of income support systems for unemployed

The main objective of income support systems for the unemployed is to provide for a lost job, that is, to compensate workers for the loss of income when they become unemployed. When evaluating these systems, it is therefore natural and legitimate to investigate their distributive effects. Below we examine three interrelated aspects: (i) coverage – how widespread are different support systems, (ii) adequacy – how successful these systems are in smoothing consumption and reducing poverty, and (iii) redistribution – how they change income distribution, in particular, whether they result in a redistribution of income from the rich to the poor.

Coverage. In developed countries, workers are usually protected by several income support programs. As described above, the majority of unemployment insurance programs are government mandated and cover all employed individuals irrespective of the type of industry or sector (see table 3.2). Many exclude the self-employed, and some other groups such as agricultural workers and household workers. Similarly, coverage by legislated severance pay tend to be wide. All countries also offer social assistance-type programs providing assistance of the last resort, usually open-ended in duration. Developed countries also offer other types of income support programs (early retirement, public works, training, employment subsidies) which are usually targeted to specific groups.

In contrast, workers in transition and particularly in developing countries are covered by few, if any, public income maintenance programs. Formal sector workers enjoy important advantages over those employed in the informal sector. For example, unemployment insurance in transition economies covers most of the labor force, and workers are usually also eligible for severance pay. In developing countries, unemployment insurance is available only in a limited number of countries, and it does not necessarily cover all workers in the formal sector. In addition, Latin American and East Asian countries also typically mandate severance pay (see the previous chapter). In contrast, workers in the informal sector are much more exposed to income/unemployment risk.⁶ They are excluded from programs which require payment of social security contributions, and typically there are few other public programs they can participate in.

Because of a large informal sector, the coverage of unemployment insurance and legislated severance pay tends to be low in developing countries. For example, in their study

⁶ Informal sector is increasingly viewed as “unregulated entrepreneurial sector,” which itself generates many unemployed (see Arango and Maloney, 2000).

of the mandatory severance pay program in Peru, MacIsaac and Rama (2000) estimate that only about 20 percent of private sector workers are legally entitled to severance pay, most of them being wealthier workers. The coverage is so low because many private sector workers are self-employed or work in household enterprises, and many salaried workers do not have the minimum seniority needed to qualify for severance pay. But what is noteworthy is that legal entitlement does not guarantee the actual receipt of the benefit. MacIsaac and Rama (2000) estimate that only about half of the workers who are legally entitled to severance pay are likely to get the benefit if dismissed. The actual payment is more likely if the worker has a written contract, and if s/he works in a larger, unionized firm which pays social security contributions.

There is also a more subtle point about the coverage of some groups of workers – namely, the generosity of severance payments militates against the access of particular groups of workers to jobs and thus prevents them from being covered by formal income support programs. Blanchard (1998) shows that an increase in firing costs leads to higher unemployment of marginal groups of workers because of their inferior access to jobs. Productivity of these workers before hiring is not easily revealed and therefore their probability of being hired in the presence of increased firing costs is lower. Indeed, OECD (1999) finds that stricter employment protection legislation reduces employment among prime age women and youths, thus rendering them more susceptible to unemployment risk. Similarly, Kugler and Saint-Paul (2000) show that larger firing costs increase discrimination against unemployed workers, because they increase the costs associated with hiring a bad worker. Moreover, in the presence of higher severance costs for older workers, separations decisions may be biased against young workers. In other words, it seems that large firing costs contribute to the emergence of dual labor markets, with well protected formal sector workers (which tend to be predominantly prime-age males) contrasted by much less protected informal sector workers and the unemployed (see also below on efficiency effects of severance pay).

Unemployed workers may also qualify for some other income support programs. As noted earlier, unemployment assistance is available in some transition countries after exhausting unemployment insurance entitlement, as are early retirement programs. Social assistance is rarely available in developing countries, and if it is, it is often provided on a one-time basis. Workers may also benefit from public sector retrenchment programs. One program that – in the absence of social assistance – provides assistance of the last resort are public works, although the program is 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 received some training; see de Ferranti et al, 2000). Recently, other innovative programs have also been emerging besides from already mentioned UISAs. For example, one such program is the Emergency Loan Facility available to displaced workers in the Philippines, contingent on their previous payments into the Social Security Fund.

Among the programs available to informal sector workers, public works programs are probably the most important ones.⁷ Although they are not universally found in the

⁷ Being without much of external assistance, the informal sector has shown great ingenuity in developing informal, community-based measures to deal with adverse income shocks. They include livelihood (self-

developing world, several developing countries, particularly those in South Asia, have longstanding traditions in the provision of such programs. Employment generation in these programs can also be quite significant. For example, in Africa the scale of operations ranged from 0.17 million person-days annually in Tanzania during the period 1980-86 to 4.6 million person-days annually in Botswana between 1982-87. In 1985-86, public works participation in Botswana was as high as 21 percent of the total labor force. The cash for work programs in Latin America were usually much larger. For instance, Chile's program provided 40-45 million person-days of employment in 1987; participation was about 13 percent of the labor force (in 1983). But even these programs pale in comparison to those in South Asia. India's nationwide Jawahar Rojgar Yoguna program generated 830-850 million person-days annually in employment between 1991-92, reaching 1 billion person-days by 1995 (Subbarao et al, 1997). In addition, public works have been used in transition economies, but participation has been kept at a modest level, usually below 1 percent of the labor force a year (the highest participation, reaching 3.2 percent of the labor force, was in Hungary in 1996; see Vodopivec et al, 2001).

Adequacy of support. To gauge the adequacy – undoubtedly an elusive concept – we discuss below (i) the replacement rate and the entitlement duration of unemployment benefit programs, and (ii) consumption smoothing and (iii) poverty reduction effects of income support programs.

Replacement rates and entitlement durations of unemployment benefits. Replacement rates among countries differ widely. In developed countries, they are in the range of 20 to 75 percent, and even higher in Nordic countries (for example, the replacement rate in Denmark is 90 percent). In the U.S., a broad consensus has emerged that an adequate income replacement rate is 50 percent (O'Leary, 1997). The replacement rates in developing and transition countries are mostly in the range of 45 to 70 percent, although there are also notable exceptions (there is a very low imputed replacement rate in Estonia – see Vodopivec et al, 2001). Similarly, the range of the potential entitlement duration of benefits is also very large. In developed countries, it ranges from 6 months to long-term/indefinite; in developing and transition countries, from 6 months to 24 months (with some extensions close to retirement age).

With the above wide-ranging differences in the replacement rate and in the entitlement duration, a better comparison of adequacy is obtained by combining the two measures in an “index of generosity.”⁸ Judged by this measure, unemployment benefits systems in transition economies on average lag significantly behind OECD systems, but there also are substantial variations within the two groups of countries (see Vroman, 2001, for OECD countries, and Vodopivec et al, 2001, for transition countries). Among European transition countries, for example, unemployment benefits are the most generous in Slovenia

employment) and micro-credit programs, often supported by NGOs and cooperatives, and micro-insurance programs to cover contingencies such as death, disability, and maternity.

⁸ The index of generosity is defined as the product of the replacement rate and the share of benefit recipients in total number of unemployed, times 100, and equals the cost of unemployment benefits per percentage point of unemployment (see Vroman, 2001).

and Hungary (with a generosity index of 23), and the least generous in Estonia (with a generosity index of 2.8).

Consumption smoothing effects. Research on developed countries (primarily the U.S.) suggests that unemployment benefits fairly adequately smoothen consumption. For example, 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. Similarly, Gruber (1997) finds that in the absence of unemployment insurance, average consumption expenditures would fall by 22 percent.

There are only a few studies on the consumption smoothing effects of income support programs in developing countries. For example, similar to the findings for the U.S., MacIssac and Rama (2000) report that per capita consumption by the unemployed decreases by 10 to 20 percent. But the receipt of severance pay more than outweighs this effect of unemployment, so that the consumption per head of those unemployed who received severance pay is higher than otherwise similar workers who are employed – suggesting that severance pay may be overly generous in Peru. Kugler (2000) also finds some support that withdrawals from UISAs in Colombia helped mitigate the consumption losses during unemployment (her estimates of coefficients indicating withdrawal are positive but insignificant).

Poverty reduction. Unemployment benefits appear to have a rather small effect on the reduction of poverty; in contrast, the effects of public works are much stronger.

In European transition economies, unemployment benefit programs have only mildly reduced poverty – not an unexpected finding given that poverty reduction is not one of the stated goals of unemployment benefits. For most of the European transition economies, benefits reduced poverty by less than 2 percent; sizeable effects were found only in Hungary and Poland (see table 4.1). Why are the effects small? Few of the poor were eligible for these benefits, and even when they were, the benefits did not represent a substantial share of household incomes. As shown in table 4.1, the share of the poor who were recipients of unemployment benefits was below 11 percent, and this share was the lowest in those countries where the reduction of poverty was minimal. Moreover, the share of unemployment benefit payments in total household incomes was quite low as well – it was the highest in Poland with 34 percent, and particularly low in those countries with the smallest effect of benefits on poverty (except in Latvia). Unemployment benefits are also not targeted to the poor. The share of benefits received by the poor was highest in Estonia (31 percent); the shares were much smaller in other countries, with the share in Slovakia amounting to a mere 0.5 percent. Interestingly, despite channeling quite a high share of benefits to the poor, the overall effect on the reduction of poverty in Bulgaria was the least among the countries in question, presumably because poverty was so deep.

Table 4.1: Poverty-related effects of unemployment benefits and their share in household incomes, transition economies, mid-1990s*

	Bulgaria	Estonia	Hungary	Latvia	Poland	Slovakia	Slovenia
Poverty reduction (change in poverty headcount brought about by UB receipt, in percent)**	1.1	0.5	14.8	2.2	16.7	2.7	6.8
Coverage (the share of poor who were UB recipients, in percent)	3.8	3.8	7.5	2.5	5.6	0.6	11.5
Targeting (the share of UB received by the poor, in percent)	17.4	31.1	4.9	12.4	6.8	0.5	16.0
Average share of UB in total household income of recipients (in percent)	13.0	15.2	25.4	29.8	34.1	7.3	21.2

Sources: Own calculations from online HEIDI data (Household Expenditure and Income data for Transitional Economies), World Bank and Slovenia Statistical Office. Survey year: Bulgaria, 1995; Hungary, 1993; Latvia, 1997; Poland, 1993; Slovak Republic, 1993; Slovenia, 1997-98. Sample Size: Bulgaria: 2,466; Hungary: 8,105; Latvia: 7,690; Poland: 16,051; Slovakia: 2,129; Slovenia: 2,577.

Notes:

*Unemployment benefits include both payments of unemployment insurance and unemployment assistance.

**Poverty reduction is defined as the difference in the headcount of poor UB recipients in a hypothetical case when UB is removed from total household incomes and the actual headcount, divided by the total number of the poor. The poverty line is 50 percent of median household income.

The poverty reduction effects of public works – a program often introduced in response to economic and natural shocks to provide income to the poorest segments of population – seem to be larger. Subbarao et al (1997) state that evaluations of public works programs show significant improvements in the economic circumstances of participants, citing India’s Maharashtra Employment Guarantee Scheme (MEGS) as case in point. Evidence shows MEGS participants to have higher annual incomes than non-participants, with wages from the scheme contributing highly to total income. Relatedly, Datt and Ravallion (1994) estimate that poverty severity declines from 5 to 3.2 percent due to MEGS participation. One reason attributed to the superior poverty reduction performance of MEGS was its low cost of participation – the program was structured to minimize earnings foregone from other sources due to participation. Although public works programs have had some success in preventing greater impoverishment, due to the temporary nature of most of these programs, their impact on poverty is often transitory.

As for other programs, family assistance schemes have been shown to protect families from poverty in developed countries. For example, Subbarao et al (1997) show that the percentage of family poverty reduced due to the receipt of social insurance benefits in OECD countries range between 7 and 93 percent. Other means-tested programs show an almost identical range of impact. Evidence for non-OECD countries has been harder to come by. However, the impact on poverty has been considered weak due to, in varying degrees, meager public spending on such provisions, low levels and short durations of benefits, and poor targeting.

Income redistribution generated by income support systems. Do different programs have different effects on income redistribution? In table 4.2 we report evidence on the incidence of benefits/beneficiaries for different programs, from which we derive the implied income redistribution. Except for unemployment insurance, data for other programs refer to one country only, so conclusions are preliminary.

Table 4.2: Distribution of benefits and beneficiaries of unemployment support programs, mid-1990s*

	Poorest quintile	2 nd poorest quintile	Middle	2 nd richest quintile	Richest quintile
Unemployment insurance					
Average	15.4	22.3	22.5	20.0	18.9
Brazil	10.6	24.6	19.1	25.1	13.6
Bulgaria	17.8	14.9	32	13	22.4
Estonia	31.1	17.7	19.6	18	13.6
Hungary	7.8	20.4	28.2	24.6	19.1
Latvia	15.7	13.8	18	26	26.5
Poland	14.8	24.1	22.9	21.6	16.6
Slovakia	3.1	33.2	20.8	18.8	24.1
Slovenia	22.5	30	19	13.1	15.4
Unemployment insurance savings accounts					
Colombia	0.0	4.3	n.a.	19.1	76.6
Severance pay					
Peru	4.7	9.5	28.6	33.3	23.8
Public works					
Argentina	78.6	15.3	3.5	2.1	0.4
Training					
Mexico	69.9	15.5	8.1	5.0	1.5

Sources: Same as table 4.1 for transition countries; de Feranti et al (2000) for Latin American countries.

Notes:

*Share of benefits received by individual quintile, for transition economies, and share of beneficiaries in population group, for Latin American countries.

**Unemployment insurance benefits include both payments of unemployment insurance and unemployment assistance.

The evidence shows that by far the most progressive programs are public works and training: among the poorest 20 percent of the households, there are 79 and 70 percent of participants in these two programs, respectively. This means that, given that both programs are

Table 4.2 also suggests that the redistributive effects of unemployment insurance programs are rather modest. While the share of unemployment benefits collected by the richest quintile exceeds the share collected by the poorest quintile in quite a few countries (similar finding also applies to the 40 percent cut), overall effects are neutral or may be progressive, because unemployment insurance contribution rates are earnings related. Still, evidence shows that unemployment benefits offer only limited scope for redistribution of income from the rich to the poor. Similarly, unemployment benefits are not an important tool for income redistribution in developed countries either. As shown by Forster (2000), the effects of benefits are progressive in about half of the OECD countries, and neutral in the other half. Note that a limited scope of redistribution carried out by the UI system is not surprising, since the primary objective of UI is consumption smoothing and thus it is not designed to bring about income redistribution.

Table 4.2 also shows that the participants of both the Colombian UISA program and the Peruvian severance pay scheme belong mostly to the richest segments of population (this fact is not an immanent property of these programs, but it is probably quite typical for low-income countries). Because of the limited direct redistribution involved in these two programs, this fact alone does not allow implications about income redistribution effects of these programs. But some efficiency properties of these programs may also have distributive effects. This applies to severance pay: as shown above, it hinders access to jobs by disadvantaged groups. By contributing to labor market dualism, severance pay increases the advantage of already privileged formal sector workers, thus increasing inequalities in society.

Let us also devote some attention on the distributive effects from introducing unemployment insurance savings accounts (UISAs). The UISA system can in principle provide the same income protection as the traditional unemployment insurance system (with less adverse incentives, as claimed above). Switching from an unemployment insurance system to an UISA system, however, does have distributive consequences, because the benefits are financed in a different way. According to Feldstein and Altman (1998), distributive effects for the U.S. are likely to be small – with the caveat that they work in the “wrong” direction, that is, they tend to hurt the poor. Feldstein and Altman find that individuals in all quintiles slightly gain, and individuals in the bottom quintile slightly lose (the fact that these estimates do not take account of behavioral responses to the changed system most likely makes the distributive effects worse). It is hard to predict what distributive effects the switch to an UISA system would have in the context of developing countries. Under some proposed designs, however, the government would subsidize savings accounts of low income workers, thereby improving their ability to smooth consumption and making the system more progressive (see Chapter 6).

Distributive effects: a summary

Coverage: In comparison to their counterparts in developed economies, formal sector workers in developing countries have much more limited choice of income support systems for the unemployed (see table 4.3). For example, the most prevalent form of insurance against unemployment in Latin America is severance pay; however, not all formal sector workers are legally entitled to this benefit. Moreover, if dismissed, even those who are entitled often do not receive severance pay. Workers in the informal sector are the least protected. They are excluded from all programs where eligibility is conditional on social security contributions. Their options are thus limited to a subset of formal programs (such as public works), and, increasingly, to innovative programs offered by self-help organizations.

Table 4.3: Summary of distributive effects of income support programs for the unemployed

	Coverage	Adequacy	Effects on income redistribution
Unemployment insurance/assistance	<ul style="list-style-type: none"> • In developed economies, wide coverage (self-employed, agricultural and household workers excluded). • In developing countries mostly not available or available to segments of formal sector workers. 	<ul style="list-style-type: none"> • <i>Consumption smoothing:</i> in developed economies, the consumption level of claimants fairly well preserved. In most transition countries, benefits less generous. • <i>Poverty reduction:</i> in transition economies, benefits mildly reduce poverty. 	Mildly progressive (in some developed countries) or neutral effects on redistribution.

Table 4.3: Summary of distributive effects of income support programs for the unemployed

	Coverage	Adequacy	Effects on income redistribution
Severance pay	<ul style="list-style-type: none"> • Available to a subset of formal sector workers, not always de-facto provided in spite of legal entitlement. • Hinders access to jobs by disadvantaged groups. 	<p>Little evidence.</p> <p>Consumption per head of those unemployed who received severance pay is higher than otherwise similar workers who are employed (Peru).</p>	<ul style="list-style-type: none"> • Little evidence. • Program participants concentrated among the rich (Peru). • By contributing to labor market dualism, severance pay increases the advantage of already privileged formal sector workers, thus increasing inequalities in society.
Unemployment insurance savings accounts	<p>Available to a subset of formal sector workers.</p>	<p>Inconclusive evidence.</p>	<ul style="list-style-type: none"> • In its pure form, redistributive effects eliminated by design. • Program participants concentrated among the rich (Columbia). • Redistributive effects of its introduction are likely to be small (simulation results obtained on the U.S.).
Public works	<ul style="list-style-type: none"> • In principle, available to all (participation rates in some developing countries reach double digits; in transition economies, they have been typically kept below 1 percent). • In reality, jobs often rationed. 	<p>Strong effects on poverty reduction.</p>	<p>Strongly progressive.</p>

Source: Derived from the discussion on distributive effects in the text.

Adequacy of support: In developed economies, replacement rates and entitlement duration periods of unemployment benefits vary widely, providing little guidance to developing and transition countries; overall generosity of the benefits in developed economies, however, exceeds the generosity found in transition economies. There is abundant evidence that unemployment benefits are effective in smoothing consumption in developed economies; there is little evidence of such effects for either unemployment benefits or other income support programs in developing and transition countries. Most effective in reducing poverty in developing countries seems to be public works;

unemployment insurance also contributes to the reduction of poverty, but its scope seems to be limited.

Income redistribution: By far the most progressive programs are public works and training. Unemployment insurance in transition countries seems to have little redistributive effects. By design, the UISA system offers little redistribution – only individuals who deplete their savings in their accounts may be entitled to transfers from the public purse. Severance pay seems to increase the advantage of already privileged formal sector workers, contributing to labor market dualism.

4.2 Efficiency effects of income support programs

This subsection reviews some of the most studied effects of income support programs for the unemployed – effects on economic efficiency. Where pertinent, the following aspects are considered:

- *Unemployment and labor force participation.* By changing the opportunity cost of leisure and through a variety of other channels, unemployment support programs are often hypothesized to affect unemployment, employment and labor force participation. Moreover, effects on job search intensity, post-unemployment wages, labor supply of other family members, and on the promotion of regular vs. informal jobs are also examined.
- *Persistence of unemployment.* Recent research points to the interaction of unemployment benefit systems with adverse shocks, so the effects of benefit systems on the persistence of unemployment are considered in its own right.
- *Output and growth.* Income support systems may interfere with allocation and reallocation decisions, thus affecting output and growth of the economy (and not just unemployment). For example, recent research on worker and job flows shows that reallocation contributes significantly to aggregate productivity growth – in the U.S. manufacturing sector, roughly half of total factor productivity growth can be accounted for by the reallocation of outputs and inputs away from less productive to more productive businesses (see Davis and Haltiwanger, 1999). Effects on facilitating restructuring of enterprises are also considered.

Below we present the effects for each income support program separately; a more technical and detailed discussion is relegated to the annex of this chapter.

(a) Unemployment insurance

Benefits influence unemployment by affecting job search intensity and wage bargaining. These effects are theoretically ambiguous, but empirical studies – both micro and macro – overwhelmingly show a positive effect on equilibrium unemployment. Effects on employment and labor force participation are less clear cut. In addition, by interacting with shocks, benefits contribute to the persistence of unemployment. Benefits may also affect output and growth, for example, by influencing the pace of enterprise restructuring and the intensity of layoffs. Below we examine above issues in more detail.

Effects on unemployment and labor force participation. Undoubtedly the most researched effects of unemployment insurance are its **effects on unemployment**. Conceptually, benefits affect unemployment through two main channels. First, they influence job search effort and the reservation wage of recipients – with theoretically ambiguous effects on efficiency. As described in the annex, models can be constructed which predict that benefits prolong unemployment spells (for example, by emphasizing the fact that leisure becomes more attractive), as well as shorten them (for example, by stressing that more resources enable more effective job search). Second, unemployment benefits improve the bargaining position of workers, which leads to higher wages – and hence to a higher equilibrium unemployment (Blanchard, 1999).

In the light of these theoretical ambiguities, empirical studies are of particular relevance. By and large, they show that unemployment benefits *increase* unemployment. For example, summarizing the evidence, Calmfors and Holmlund (2000, p. 145) argue that “there is considerable support for the hypothesis that lower benefit levels and shorter entitlement periods associated with unemployment insurance reduce unemployment” (a similar conclusion is reached by Decker (1997) for the U.S.). As shown in the annex, many studies of individual countries using microdata find that both a higher level and a longer duration of benefits increase unemployment (for the evidence on OECD economies, see table 4.4. and on transition economies, table 4.5).⁹ Typically, cross-country studies – directly investigating the relationship between equilibrium unemployment and the generosity of the benefits – corroborate such findings (for example, Layard et al, 1991, Elmeskov et al, 1998, and Nickell and Layard, 1999). True, there are also studies which find effects of unemployment insurance on unemployment insignificant, but most observers agree that the evidence on positive effects is more compelling.

In particular, the evidence based on microstudies is very credible.¹⁰ First, there is a large number of studies, both in developed and transition economies, which find a positive elasticity of unemployment with respect to the level and duration of benefits (see box 4.1 for the size of these effects). 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 third, strong evidence on moral hazard is provided by the U.S. unemployment insurance experiments. Those unemployed who were offered a bonus for fast reemployment significantly reduced their unemployment spells, without affecting their reemployment earnings.

⁹ If one assumes that the inflow of workers into unemployment is invariant to the increase of unemployment benefits, then the increase of unemployment duration also increases the equilibrium unemployment (the latter being determined by the average duration of unemployment and the inflow into unemployment).

¹⁰ Cross-country studies are, among others, criticized as suffering from the problem of reversed causality.

Table 4.4: Incentive effects of unemployment insurance, OECD countries

Study	Data	Model/Methodology	Findings
Marston (1975)	Household survey of exhaustees in Pennsylvania, 1966-67.	Empirical hazard	UI system causes an increase of unemployment by 0.2-0.3 percent of the labor force. Weekly escape rates rise dramatically from 1.1 percent just before exhaustion to 13.4 percent just afterward.
Lancaster (1979)	U.K., 1973 Survey data for the registered unemployed	Proportional hazard, alternative specifications including Weibull	Unemployment spell increases significantly with age, the unemployment rate, and benefit level Benefit elasticity=0.43-0.60 10% rise in benefit level increases duration by 1 week if the duration was 17 weeks (benefit elasticity=0.6)
Moffit and Nicholson (1982)	U.S., 1974-77 Benefit recipients eligible for Federal Supplemental Benefits extension	Regression, static labor-leisure choice model	10% increase in replacement rate increases avg. unemployment spell – males: 1.5-2.3 weeks; females: 1.3-1.7 weeks
Moffit (1985)	U.S., 1983 Continuous Wage and Benefit History file for 13 states	Non-parametric proportional hazard, alternative specifications	10% increase in the weekly benefit level increases unemployment duration by about 1.5 week (benefit elasticity =0.36) 1 week increase in benefit duration increases unemployment duration by 1 day (duration elasticity=0.16)
Narendranathan, Nickell, and Stern (1985)	United Kingdom, 1978-79 Survey and administrative data for DHSS benefit recipients	Weibull model, alternative specifications	Benefit elasticity = 0.28-0.36 Benefit effect declines with duration for the first six months. After six months, benefit effect becomes negligible.
Ham and Rea (1987)	Canada, 1975-80 Sample: males (ages 18-64) from Canadian Employment and Immigration Labor Force File	Discrete-Time-Duration Model, alternative specifications	Exit rates first decline (until 24th week) and then rise, with a “spike” near benefit exhaustion
Meyer (1990)	U.S., 1983 Continuous Wage and Benefit History file for 12 states Male UI recipients (age<55)	Semi-parametric proportional hazard, alternative specifications	10% increase in the benefit level increases duration by 1.5 weeks (benefit elasticity=0.88) Exit rates varies over benefit duration – first decline, then steady, and then sharp increase near benefit exhaustion. Over the six weeks prior to benefit exhaustion, exit rates triple.

Table 4.4: Incentive effects of unemployment insurance, OECD countries (cont.)

Study	Data	Model/Methodology	Findings
Carling, Edin, Harkman, & Holmlund (1996)	Sweden, 1991	Semi-parametric proportional hazard	Exit rate increases sharply close to benefit exhaustion. In the period 3 weeks prior to benefit exhaustion, job-finding rates increase by 170%
Nickell (1979)	U.K., 1971-72 Unemployed males from 1971-72 General Household Survey	Logit, alternative specifications	Presence of negative duration dependence for first 20 weeks (benefit elasticity: 0.84-0.95) of spell, negligible effect thereafter
Katz and Meyer (1988)	U.S., 1983 Male UI recipients from Continuous Wage and Benefit History file for 12 states	Semi-parametric proportional hazard, alternative specifications	Benefit elasticity=0.8-0.9 Potential benefit duration elasticity: 0.36-0.44 at 26 weeks; 0.48-0.5 at 36 weeks Exit rates rises sharply before benefit exhaustion; exit rates decrease from 26 to 12 weeks until benefit exhaustion.

Table 4.5: Incentive effects of unemployment insurance, transition economies

Study	Data	Model/Methodology	Findings
Bulgaria			
Jones and Kotzeva (1998) Study of the effects of the transition to social assistance	Bulgaria, 1993-1996 Aggregate data from the Ministry of Labor, household survey data, and data from labor office registers	Survivor functions, binary logit	Exit rate to employment increases markedly between the 18 th and 26 th month of the spell, that is, after social assistance benefit exhaustion. Survival functions for SA recipients and non-recipients indicate "waiting behavior" for the former.
Cazes and Scarpetta (1998)	Administrative data of entry to registered unemployed, 1991-93.	Empirical hazard function, piece-wise constant hazard function	Exit probability toward the end of the entitlement period increased dramatically. Benefit recipients exit unemployment more slowly than non-recipients, but many leave to inactivity, especially in backward areas.
Kotzeva, Mircheva, and Woergoetter (1996)	Registered unemployed, December 1992 – July 1994	Binomial logit	Recipients of UI are significantly less likely to take a job.
Czech Republic			
Ham, Svejnar and Terrell (1998)	Registered unemployed, October 1991 – March 1992	Hazard model	Elasticity of duration with respect to: - increase of replacement rate = 0.34 - increase in duration of benefit = 0.44
Estonia			
Vodopivec, Woergoetter, and Raju (2000)	Labor force survey, 1991-1995	Empirical hazard function	Exit to employment significantly increases around the point of benefit exhaustion.
Hungary			
Micklewright and Nagy (1998)	Hungary, March-April 1994 Sample: Mar-Apr 94 recipient inflow into the UI register Source: UI register; follow-up surveys	Non-parametric and parametric proportional hazard, discrete time-duration model	High proportion of UI recipients remain until benefit exhaustion. Exit rates are characterized by a large spike in the period immediately after benefit exhaustion: job-exit hazard increases six- to eight-fold compared to the period prior to exhaustion.

Table 4.5: Incentive effects of unemployment insurance, transition economies (cont.)

Study	Data	Model/Methodology	Findings
Poland			
Adamchik (1999)	Poland, 1994-1996 Labor force surveys	Proportional hazard	Negative effect of the receipt of benefits on probability of exit to a job, dramatic increase of the hazard as the benefit is about to expire.
Puhani (1996)	Poland, 1992-1994 Labor force surveys	Hazard Weibull model, different specifications	Entitlement to unemployment benefits significantly prolongs duration of unemployment. The magnitude of the effect stays roughly the same after the UI reform that reduced the potential length of the entitlement.
Steiner and Kwiatkowski (1995) (cited in Kwiatkowski, 1998)	Poland, 1992-1993 labor force surveys	Multinomial logit	UI recipients had lower exit rates than non-UI recipients, particularly with respect to the exit rate from unemployment to inactivity.
Boeri and Steiner (1996)	Poland, Administrative data	Hazard	Exit rates increase as entitlement duration approaches exhaustion, especially in the capital (males: increased flow to employment; females: increased flow to inactivity). Exit rate to inactivity increased markedly in the month after benefit exhaustion.
Gora (1996) (cited in Kwiatkowski, 1998)	Poland, 1992-1994 Labor force surveys	Binomial logit	UI recipients had a lower exit rate to employment than non-UI recipients.
Cazes and Scarpetta (1998)	Administrative data of entry to registered unemployed, 1990-93.	Empirical hazard function, piece-wise constant hazard function	Exit probability related to differentiated maximum lengths of UB entitlement. Unemployment benefit recipients exit unemployment much more slowly than non-recipients, but many leave to inactivity rather than to employment, especially in backward areas.
Romania			
Earle and Pauna (1998)	Labor force survey, administrative sources	Hazard model	Receipt of benefits increases probability of leaving unemployment (no disincentive effects).

Table 4.5: Incentive effects of unemployment insurance, transition economies (cont.)

Study	Data	Model/Methodology	Findings
Slovakia			
Lubyova and Ours (1999)	Labor force surveys, 1994-96	Proportional hazard	Little evidence of disincentive effects.
Ham, Svejnar and Terrell (1998)	Registered unemployed, October 1991 – March 1992	Hazard model	Elasticity of duration with respect to: - increase of replacement rate = 0.06 - increase in duration of benefit = 0.41
Slovenia			
Vodopivec (1995)	Slovenia, 1990-92	Semi-parametric proportional hazard	Strong waiting effect – exit to employment significantly increases just before benefit exhaustion.

Box 4.1: How large are employment disincentive effects of unemployment insurance?

The effects are measured by the *benefit elasticity* (the elasticity of the duration of unemployment with respect to the benefit replacement rate), and *duration elasticity* (the elasticity of the duration of unemployment with respect to the potential duration of benefits).

According to Layard et al (1991), the *benefit elasticity* ranges from 0.2 to 0.9, depending on the state of the labor market and the country concerned (for example, a 0.6 elasticity means that in response to a 10 percent increase in the replacement rate, the duration of an unemployment spell increases by one week, at the average duration of 17 weeks). According to Katz and Meyer (1990), the *duration elasticity* in the U.S. is in the range of 0.4-0.5 (that is, a one week increase in the potential entitlement duration of unemployment benefits is associated with one to one and a half day increase in the average unemployment spell of recipients).

Katz and Meyer (1990) estimate that increases in potential benefit duration have much larger adverse incentive effects on unemployment than do changes in unemployment benefit that leave benefit expenditures unchanged. Moreover, they suggest that longer duration of benefits explains about 10-30 percent of the difference in mean unemployment spell duration between the U.S. and U.K.

Several other results related to the effects of benefits on unemployment should be mentioned. First, direct evidence on the intensity of job search by benefit claimants is scarce and inconclusive. Second, there is no compelling evidence that unemployment benefits, by subsidizing job search, facilitate better job matches as indicated, for example, by the level of post-unemployment wages. While several studies from the seventies confirmed such effects, newer studies show weak or negligible effects. Third, there is no conclusive evidence that benefits facilitate entry into regular jobs. In fact, Cunningham (2000) shows that an increase in the generosity of unemployment insurance in Brazil – by relaxing a liquidity constraint – led to increased participation in the self-employment sector. Fourth, empirical studies confirm theoretical predictions that more generous replacement rates suppress the labor supply of other family members (see annex for details on the above results).

Higher **taxes on labor** – which include unemployment benefit contributions – are also shown to significantly increase unemployment (see, for example, Nickell and Layard, 1999, and Daveri and Tabellini, 2000). By creating a wedge between the costs of labor and real consumption wage, labor taxes reduce the demand for labor and (if demand for labor is not perfectly inelastic) employment, and hence increase unemployment. Although estimates vary, Nickell and Layard (1999) report that a 5 percentage point decrease of aggregate tax wage (which include payroll, income, and consumption taxes) would reduce the unemployment rate by 13 percent (for example, from 8 to 7 percent).¹¹ They also argue that different types of taxes have the same effect on unemployment. Recently, Elmeskov et al (1998) showed that there are significant interactions between taxation and collective bargaining arrangements, and that the effects of the tax wedge are less pronounced in both

¹¹ Negative effects may only apply in the short run (long run effects may be less pronounced, as some studies find that employment is insensitive to the level of total taxes in the long-run – see, for example, Gruber 1997).

highly centralized/coordinated and decentralized countries (this is consistent with the hump-shaped influence of wage bargaining systems on unemployment of Calmfors and Drifill, 1988).

Does it matter whether employers or workers pay contributions for unemployment insurance? In essence, no. Who bears the tax depends primarily on the elasticity of demand for and supply of labor (see de Ferranti et al, 2000). For example, even if employers are nominally paying the contributions, they may be able to shift the burden to workers, the more elastic the supply of labor, the more so. But wage setting mechanisms seem to matter here as well. To the extent wages are prevented from adjusting, taxation may have a more pronounced effect on employment (and hence on unemployment) than in the case of flexible wage setting. Moreover, there may also be a demonstration effect – if workers are paying contributions, they will be more aware of the costs and less likely to support generous systems (World Bank, 1994).

Effects of **unemployment benefits on labor force participation** are not well researched. Atkinson and Micklewright (1991) report studies which find that specific groups are attracted into the labor force (both employment and unemployment) by the entitlement to unemployment insurance. The OECD's Jobs Study (OECD 1994, p.192) reports the entitlement effect for women and older workers: the availability of benefits seem to be positively correlated with the unemployment rate of women and older workers. But the entitlement effect had little effect on employment of these groups, as increases in unemployment are attributable to reductions in inactivity. For the U.S., Clark and Summers (1982) estimate that benefits increased labor force participation rate by increasing both the unemployment and the employment rate. In contrast, Nickell and Layard (1999) find the effects on the increase of unemployment and labor force participation canceling each other, with no net effect on employment.

Effects on persistence of unemployment. Another efficiency aspect relates to the capacity of the economy to reduce unemployment to equilibrium level in the wake of an adverse shock. Theoretical models show that benefits slow down the adjustment to such a shock – and precisely the interaction of shocks and institutions (unemployment benefits being one of them) has been recently advanced as the main explanation for the persistence of European unemployment. Below we examine these issues further.

Theoretical models predict that economies with unemployment benefits experience larger and more prolonged unemployment following a transient shock. For example, Ljungqvist and Sargent (1997) develop a model to study the dynamics of two economies, one with a unemployment insurance system and one without, when a transient economic shock is introduced. The “non-unemployment insurance” economy recovers more rapidly as reservation wages adjust quicker and job search intensity is higher than in the “unemployment insurance” economy. The economies also respond differently to “economic turbulence.” Unemployment in the “non-unemployment insurance” economy remains more or less constant, while the “unemployment insurance” economy experiences a large increase in unemployment as more workers experience a significant skill loss. Moreover, Millard's

(1996) modeling exercise finds that a transient productivity shock leads to prolonged unemployment when replacement rates are high.

The interaction of institutions with adverse shocks seems to also offer a dominant **explanation for the rise of European unemployment** in the last several decades. Indeed, one of the stumbling blocks for proving that institutions (and unemployment insurance in particular) have affected aggregate unemployment has been a lack of empirical support for such a link in explaining the rise of European unemployment over the last several decades. The same institutions existed when unemployment was much lower, and their changes alone cannot explain the persistent rise in the average unemployment rate in European economies.

Recently, Blanchard and Wolfers (1999) and Blanchard (1999) offered an explanation for the above puzzle based on the interaction between shocks and institutions. They show that the impact of a shock on the persistence of unemployment can be amplified by a more generous unemployment insurance system and higher employment protection (including more generous severance pay). More generous unemployment insurance and employment protection change the nature of unemployment: they increase the average duration of unemployment and thus increase the number of the long-term unemployed. Moreover, Blanchard and Wolfers argue that the long-term unemployed who are not searching for a job do not matter for wage formation – they do not exert enough pressure on wage moderation – and thus slow down the adjustment of unemployment after an adverse shock. According to Blanchard and Wolfers, there are two channels through which this effect works: duration dependence (less intense job search activity and the loss of skills due to the prolonged duration of unemployment) and marginalization (risky workers are less likely to be hired, due to higher expected firing costs in the presence of employment protection). Fehn et al (2000) provide another explanation, showing that institutional shocks contribute to high unemployment via encouraging a long-term substitution of labor with capital.¹²

Effects on output and growth. Unemployment benefits may also affect output (for example, by attracting workers to risky, but highly productive jobs), as well as growth (for example, by affecting the pace of job creation). Unemployment benefits may affect growth also by stimulating enterprise restructuring and intensity of layoffs; here experience rating is likely to play a role. Moreover, benefits may also affect the cyclical pattern of growth by acting as an automatic stabilizer. Below we examine these and related issues in more detail.

The effects of unemployment insurance on output and growth have not been well researched, let alone quantified. The predictions of the theoretical models about the **effects on output** are conflicting. On the one hand, general equilibrium modeling of Acemoglu and Shimer (1999, 2000) suggests that unemployment insurance helps the economy to achieve a higher output by contributing to the creation of high-quality, high-wage jobs with greater unemployment risk. Similarly, Hassler et al (1999) argue that more generous benefits help

¹² Daveri and Tabellini (2000) point to yet another cause of high European unemployment: a rise in labor costs and thus the cost of a generous European welfare state in general (see below).

workers to obtain and retain specialized skills – which may be efficiency enhancing. On the other hand, Attanasio and Rios-Rull (2000) arrive at opposite results – they show that government-mandated programs may crowd out private insurance programs and thus hurt the efficiency of the economy (their results also point to the importance of crowding out effects).

One channel through which unemployment insurance may influence growth is by encouraging labor reallocation and, in particular, **restructuring of enterprises**. While partial equilibrium results indeed suggest this is the case, it seems that these results are overturned by general equilibrium models. For the U.S., there is considerable empirical evidence that the availability of benefits strongly increases the probability of temporary layoffs (Clark and Summers, 1982; Feldstein, 1978; and Topel, 1983), although benefits have little effect on quit and permanent layoff probability. In other words, when deciding about temporary layoffs, employers do take into account the availability of unemployment insurance. Similarly, restructuring programs that provide workers with sufficiently generous compensation are successful in the sense that they facilitate the downsizing of that particular enterprise to a desirable level, although some may suffer from rehiring problems (Haltiwanger and Singh, 1999).

These partial equilibrium results do not necessarily carry over to the general equilibrium framework. For example, the theoretical modeling of Blanchard (1997) does not support the argument that restructuring could be facilitated by more generous unemployment benefits (see annex). Similarly, in the context of a job creation/job destruction model, Mortensen (1994) finds that an increase in the replacement rate of unemployment insurance would reduce job creation and thus aggregate output (because his computations fail to account for the insurance value of the unemployment insurance program, welfare consequences are not clear). Therefore, the overall potential of income support programs in spurring enterprise restructuring is likely to be limited.¹³

In the context of enterprise restructuring, it is worth looking at the effects of **experience rating**. By imposing additional costs on employers, Feldstein (1976) shows that experience rating curbs layoffs and thus increases employment. But again, this is a partial equilibrium result. In a more complex model, Burdett and Wright (1989) show that the effect on employment is ambiguous – namely, by increasing labor costs, experience rating reduces the number of workers the firm is willing to hire. In a similar vein, Mortensen's (1994) model of job creation and job destruction, shows that the transition of the current U.S. system to one of full-experience rating would discourage layoffs, but only by a relatively small amount. Because job creation would also be adversely affected, the net effect, according to Mortensen, would be “a small although probably insignificant increase in the unemployment rate.” The effects of experience rating thus show primarily as a reduction of inflows to and

¹³ But Forteza and Rama (2000) show that greater mandated benefits (represented by the wedge on wages created by social security contributions) do not stand in the way of recovery after economic reforms are undertaken.

outflows from unemployment, but not as an increase in employment.¹⁴ It has to be emphasized that experience rating is more important when employment protection is low, as it is in the U.S.; in the European context, employment protection legislation takes over the role of experience rating – with similar effects on labor market flows and employment (see below).

Another aspect of unemployment benefits systems that may affect growth is the **taxation of labor**. Summarizing the literature, Nickell and Layard (1999) conclude that total labor taxes (which include payroll, income and consumption taxes) may negatively affect the growth rate but the result is not robust. They also argue that there are no differential effects of different types of taxes on labor costs and hence on unemployment. Recently, however, Daveri and Tabellini (2000) found that in the Continental European context (in the presence of strong unions, but with low density and lack of coordination) distorting effects of labor taxes are much bigger than those produced by either capital or consumption taxes. They claim that higher labor taxes (which exclude consumption taxes) have been shifted to higher real wages, which led firms to substitute labor with capital and slowed down growth and investment. They suggest that by reducing the wedge between wages and the cost of labor to employers, general taxation is more conducive to job creation and growth than financing based on contributions.

Finally, let us consider whether **unemployment insurance** acts as an **automatic stabilizer**. In contrast to contributing to the persistence of unemployment by interacting with adverse shocks, unemployment benefits, in their role of an automatic macroeconomic stabilizer, soften the impact of adverse shocks on GDP – but, by the same token, they also restrain expansion when the economy starts growing again. Theoretical modeling by von Furstenburg (1976) shows that benefit expenditures and taxes work in opposing directions to moderate economic contractions and expansions. During downturns, unemployment insurance benefit payments increase and unemployment insurance taxes fall, and the net injection of purchasing power moderates the severity of the contraction. During upturns, however, unemployment insurance taxes increase and unemployment insurance benefits decrease, restraining the expansion.

Empirical evidence seems to show that unemployment insurance reduces GDP losses during downturns by 10-15 percent. For example, Dungan and Murphy (1995) find that the Canadian unemployment insurance program reduced the loss in GDP by 13-14 percent during the 1983-84, as well as the 1990-91 recession. For the U.S., Chimerine et al (1999) find that the unemployment insurance program reduced the loss in real GDP by about 15 percent during recessions. Other researchers find that the effect of unemployment insurance is weaker. For example, Hamermesh (1992) cites studies which indicate that unemployment

¹⁴ Indeed, the evidence shows a strong positive effect of imperfect experience-rating – where employers bear only a part of the cost of unemployment benefits drawn by their laid off workers – on temporary layoffs. This introduces incentives for increased temporary layoffs during economic downturns. For example, Topel (1983) attributes as much as 30 percent of temporary layoff spells to imperfect experience rating, Card and Levine (1994) 50 percent, and Anderson and Meyer (1994) over 20 percent.

insurance reduced the magnitude of cyclical output fluctuations by no more than 10 percent. Furthermore, Dunson et al (1991) finds that the effectiveness of the U.S. unemployment insurance program as a counter-cyclical macroeconomic stabilizer has diminished over time.

To summarize, the discussion above provides evidence that 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 a firmly established parameter. Benefits also contribute to the persistence of unemployment. Their effects on restructuring and growth are less researched and are probably not very significant; there is also inconclusive evidence on some other effects (for example, on the effects of benefits on post-unemployment wages).

Let us conclude the discussion of the efficiency effects of unemployment insurance by remarks about why – despite a wealth of studies devoted to these effects – a consensus has not been reached in quite a few areas. First, one obstacle is the fact that many theoretical and empirical results are of partial equilibrium nature, and these results may or may not be validated in a general equilibrium framework. Second, as it is made clear in laying out conceptual issues in Chapter 2, there are many institutional and program features with rich possibilities of interaction, and only a subset of these features is usually incorporated in a general equilibrium model. Leaving out relevant aspects may be responsible for different results of various models. And third, some of the empirical estimates are “country specific” and no corrections have been made to account for country differences. For example, while most studies find a positive relationship between benefits and the duration of unemployment spells of recipients, estimates of the magnitude of these effects vary. Quite likely, some of the differences in magnitudes among countries could be attributed to differences in the effectiveness of monitoring and enforcement of job search. If job search requirements and work tests are strictly enforced and benefits withdrawn when job offers are rejected, the generosity of benefits is less important and moral hazard problems less pronounced. That is, given the generosity of benefits, the stricter the monitoring, the less disincentives benefits create. Indeed, OECD (2000) reports that the recorded incidence of benefit sanctions varies greatly across OECD countries, and that such sanctions have a fairly large impact on individual rates of exit from unemployment. Monitoring and enforcement features of benefit systems, being hard to measure, have been inadequately controlled for in empirical research on disincentive effects of unemployment benefits, which has contributed to differences in their estimates across different countries.

(b) Unemployment assistance

With benefits contingent on the family income (and assets) of the unemployed individual, unemployment assistance is susceptible to several types of disincentive problems. First, the program may encourage longer unemployment spells, because, *ceteris paribus*, the largest payments are received by persons with zero earnings, and a lower wage rate and/or lower hours worked cause the payments to be larger. Second, payment of unemployment assistance benefits to an unemployed family member may influence labor supply decisions of

other family members. If one of the spouses is unemployed, the other may be less likely to work since his/her earnings could either make the family ineligible for benefits or reduce the size of the payment. Third, knowing that they would qualify for unemployment assistance benefits, workers have an incentive to quit and become unemployed. And fourth, young individuals might claim to be unemployed for purposes of collecting benefits when they are not seriously searching for work or engaged in training.

Box 4.2: Activation policies under unemployment assistance in Australia

Australia has undertaken a variety of initiatives to promote activation among unemployment assistance recipients. These initiatives include adjustments in the way suitable job has been defined, and the work search requirement administered.

Prior to the large increase in unemployment in the mid 1970s, emphasis was placed mainly on the acceptance of suitable work (that is, work which could not be refused while retaining an entitlement to benefits). With a sharp increase in the unemployment-vacancy ratio, there were changes in the definition of suitable work. Guidelines were broadened in 1976 to require acceptance of work in line with local job availability even if it meant a reduction in wages and/or status. By 1989, this definition had been further modified to require acceptance of casual, part-time or temporary work.

Moreover, work search requirements have become more formal, and the evidence of active search emphasized. Changes effective in 1991 required both the short-term and the long-term unemployed to satisfy an activity test. For those unemployed less than twelve months the activity test included active work search or participation in labor market or vocational training. For the long term unemployed there was a requirement to participate in an activity agreement (which could include unpaid volunteer work) intended to secure reemployment but tailored to individual circumstances. Further changes in the activity test became effective in 1995, when increased emphasis was placed on the early identification of those recipients who were likely to be unemployed long term.

Source: Vroman (2001).

Vroman (2001) reports that the disincentive problems related to unemployment assistance have been less researched than those related to unemployment insurance. His analysis of the Australian unemployment assistance system suggests that a lower income guarantee would probably result in shorter spells of unemployment (although no hard evidence is presented). Suggestive of incentive problems are frequent changes in policies aimed at promoting employment among benefit recipients (see box 4.2). Vroman also points to another body of literature that is relevant in this context – the analysis of the work disincentives of social assistance programs. Those studies find high effective marginal tax rates (related to phasing out of benefits when family income exceeds the maximum allowable for the receipt of full benefits, as well as to the taxation of earnings and income of the family) and poverty traps as impediments to work by the social assistance recipients (see below). Moreover, studies of the Czech Republic and Poland provide empirical evidence that the presence of an unemployed spouse lowers the hazard rate of exit from unemployment to employment (see annex). Vroman (2001) also reports that part of the reason for Australia changing to a more individualized unemployment assistance system in 1995 was to

encourage work among other persons in families (often wives) where one member is unemployed.

(c) Severance pay

Theoretical predictions. There are both potential efficiency gains and losses associated with severance pay (see Addison and Teixeira, 2001, for an excellent, recent review of both theoretical and empirical effects). Among the gains, severance pay may promote longer-lasting employment relationship and thus improve incentives on the part of employer to provide training, thus increasing the current productivity of workers as well as their future employability (employers may be reluctant to provide training if the propensity of workers to leave is high). Moreover, longer-lasting employment is conducive to instilling trust, cooperation, and loyalty between the employer and workers, as well as to encouraging team spirit among workers, which may contribute to higher productive efficiency and reduce the resistance of workers to the introduction of new technologies (OECD, 1999).

Among the costs, severance pay is recognized as a source of labor market “sclerosis,” that is, it reduces the intensity of labor market flows, particularly to and from unemployment. As Blanchard (1998) shows, severance pay increases firing costs and thus reduces the probability of exit from employment to unemployment, but at the same time it imposes additional costs on employers and thus hinders job creation. (Interestingly, the predicted effects of severance pay on unemployment are therefore ambiguous.) Calmfors and Holmlund (2000) also note that high firing costs slow down the pace of structural change, by reducing the incentives of employers to introduce new technologies. Moreover, as pointed out when discussing distributive effects, Blanchard’s (1998) model shows that severance pay contributes to labor market dualism.

Empirical evidence. We are not aware of direct empirical evidence on the positive effects of severance pay on firm productivity (based on firm-level data). Nickell and Layard (1999) find a positive effect of employment protection on aggregate growth, but the effect disappears once differences in the level of productivity among countries are controlled for. Moreover, it is not clear which circumstances and interactions may be instrumental for such effects.¹⁵

On the other hand, there is considerable evidence on the negative effects of severance pay. There are a number of studies which show that strict employment protection reduces employment. One of the early studies is Lazear (1990), which finds that severance pay reduces both employment and labor force participation. Newer studies confirming the link between job security and lower employment include Haffner et al (2001), for OECD countries, and Heckman and Pages (2000), for OECD and Latin American countries. The

¹⁵ A stream of literature on the effects of worker-management, cooperation, and participatory approaches in management finds mildly positive effects of these features on productivity of firms, but cannot pinpoint the exact ingredients and their interactions which contribute to the success. Tyson and Levine (1990) do single out measures to enhance substantive participation as instrumental for higher productivity – but it is unclear to what extent employment protection boosts such measures.

latter study attributes a reduction in employment of 5 percentage points to job security provisions in Latin America. OECD (1999) finds insignificant effects on overall employment rates, but points out that negative effects are concentrated among prime age women, the youth, and older workers. To the extent severance pay increases youth unemployment, this has additional negative consequences in terms of the persistence of their unemployment and their reduced future earnings capacity (on new evidence on the long-term effects of youth unemployment, see Mroz and Savage, 2000). Studies also show that severance pay contributes to part-time employment and self-employment. Consistent with the theoretical predictions, the effects of employment protection legislation (of which severance pay is one of the most important determinants) on unemployment are largely inconclusive.

There is also a mounting evidence that severance pay reduces inflows to and outflows from unemployment. By doing so, it contributes to longer unemployment spells (stagnant unemployment pool); flows through employment may not be affected that strongly (for a recent survey, see OECD, 1999). Reduced labor market flows may hinder labor force adjustment and the reallocation of jobs, and may thereby slow down aggregate productivity growth (see Davis and Haltiwanger, 1999, for a survey of the effects of job reallocation on aggregate productivity growth). But the question whether job security stands in the way of productivity and growth has hardly been settled in advanced economies. Although recent studies show that efficiency in these countries depends critically on the ability to reallocate resources rapidly, Nickell and Layard (1999) argue that it would be wrong to assume a simple linear relationship between the pace of reallocation and economic growth.¹⁶ To be able to evaluate the desirability of worker and job flows, one should therefore examine the scope and size of the contribution of worker and job flows to productivity and overall growth in transition and developing countries – an area that has hardly been addressed by researchers. In all likelihood, however, individual country characteristics may well dictate different levels of labor reallocation; for example, the reallocation should undoubtedly figure prominently in transition economies.

It is worth mentioning that severance pay does not create a moral hazard problem by lowering job search effort – but it does affect incentives to enter unemployment and hence creates another moral hazard problem. Relatedly, De Ferranti et al (2000) report that large litigation costs arise from disputes over the cause of separation in Latin America.

(d) Unemployment insurance saving accounts

Theoretical predictions. The main rationale and key advantage of the UISA system as an alternative to the traditional unemployment insurance system is its potential of improving the incentives of employed workers and job seekers while conceivably providing the same protection as traditional unemployment insurance. As shown by several theoretical papers, unemployment insurance savings accounts would radically change workers' incentives

¹⁶ For example, Abraham and Houseman (1994) find that despite slower employment adjustment, stricter employment protection legislation in Europe leads to similar hours adjustment to the one in United States.

(Orszag and Snower, 1997; Orszag et al, 1999). By internalizing the costs of unemployment benefits, the UISA system avoids the moral hazard inherent in traditional unemployment insurance. The system is thus credited with a potential to substantially decrease overall unemployment and, by lowering payroll taxes, increase wages. In particular, Orszag and Snower (1997) show that unemployment insurance savings accounts reduce unemployment by both increasing on-the-job effort of employed workers as well as job-search effort of unemployed workers. Orszag et al (1999) also recommend a comprehensive vs. a piecemeal approach when introducing savings accounts. They warn that a potential complementarity problem exists if the savings account is not set up for multiple uses: under the traditional unemployment system, workers who have built up substantial resources in their pension accounts have the incentive to withdraw from the labor force and claim unemployment benefits until they retire. Setting up an integrated savings account reduces such incentives.

One important caveat about the feasibility of unemployment insurance savings accounts applies, however. Unemployment insurance savings accounts eliminate pooling of resources across individuals and, instead, rely on incomparably more restrictive inter-temporal pooling of resources of one individual only. This raises an important feasibility question: if a significant proportion of workers cannot save enough – via modest contributions from their earnings –during their productive life to draw upon their accumulated savings during their unemployment spells, then such a system is non-viable. In other words, if unemployment is concentrated among a group of workers, these workers may not be able to finance their unemployment benefits through their own savings (and there may be a large group of workers who would never use their savings accounts to draw unemployment benefits). Under such circumstances, the UISA system would be irrelevant as an alternative to the traditional unemployment insurance system.

Empirical evidence. Unemployment insurance savings accounts are still largely an "uncharted territory." Much less empirical evidence exists about this system than about other systems of income support, and – apart from Kugler's (2000) evaluation of the Colombian program – there has been no rigorous analysis of existing UISA programs. It is thus premature to give a reliable evaluation of this system.

In the first study providing empirical evidence on the effects of unemployment insurance savings accounts (UISA), Kugler (2000) examines the effects of a 1990 conversion of the severance pay program into an unemployment insurance savings accounts program (similar to the one described above) in Colombia. She finds that the lion's share of the costs of the transfer that firms make to individual workers' accounts (75-87 percent) show up as a reduction of wages; that implies that the likely effects of the new program on the reduction of labor demand and employment are small. She also finds that, in accordance with the theoretical predictions, the conversion increased both firing and hiring by firms, in comparison with the previous system of severance pay. Her work, however, does not shed light on the interesting question of the effects of UISAs on the reemployment probability, that is, whether or not the system improves job search incentives. There has been no other rigorous empirical work about the effects of real world UISA-like systems – although some

researchers report problems with the Brazilian FGTS system (see box 4.2). More research as well as piloting is needed to learn whether problems of the Brazilian program can be avoided.

Box 4.2: Incentive problems with Brazilian individualized severance funds

Because of difficulties in monitoring the eligibility conditions under the traditional unemployment insurance, in 1966 Brazil introduced a variant of unemployment insurance savings accounts called FGTS. Eight percent of wages is deposited into an individual account. If dismissed, the worker receives the resources accumulated in the account; if the dismissal is without a cause, the employer must pay an additional 40 percent of the balance.

While the program avoids the problem of disincentives in job search found under unemployment insurance, it creates incentive and other problems of its own. First, the system creates perverse incentives on the part of the worker to precipitate a firing so as to be able to access the funds in the savings account. It is estimated that the system increases the labor turnover rates by 30 percent. Second, it also creates additional litigation costs incurred in deciding whether or not the cause for dismissal is "just."

Source: Gill et al (2000).

In the absence of suitable real world practices, Feldstein and Altman (1998) simulate the working of an UISA system for the U.S., so as to be able to draw inferences about the feasibility of the system. In their simulations, the protection provided by unemployment benefits is the same as under the current system, but it is financed through unemployment insurance savings accounts, to which individuals are required to contribute 4 percent of their wages. Their simulations show that over a 25 year period, only a small proportion of workers (5-7 percent) end their working life with negative balances (these estimates are conservative in the sense that they do not account for behavioral responses to changes in incentives), and that the cost to taxpayers is reduced by more than 60 percent. Feldstein and Altman thus conclude that the UISA system is a viable alternative to the standard unemployment insurance system. Of course, their conclusion is valid for the U.S. economy. Since in other countries the probabilities of entry into and exit from unemployment differ substantially from those of the U.S., the conclusion of the viability of the UISA system cannot be extrapolated to other countries, particularly not to developing ones.

(e) Public works

By providing job opportunities, although in somewhat artificial environment, public works programs address equity considerations – but what are their efficiency consequences? For example, how helpful are they in increasing the probability of the unemployed to obtain a regular job and how they affect participants' reemployment wages?

Evaluations show that public works mildly reduce unemployment and increase employment. But they have strong substitution effects (which can reach 100 percent), and reduce the probability of employment in non-assisted jobs and reemployment wages (see, for

example, Dar and Tzannatos, 1999, or Calmfors, 1994). Fretwell et al (1998) find that public works participants in the Czech Republic, Hungary and Poland have no different or even worse chances of finding a job, and that their wages in jobs following public works participation are likely to be no different or lower than the wages of non-participants. They argue that public works thus proved to be mostly a way to provide income to the needy and are less suitable as a vehicle of increasing the employability of the unemployed.

The effects, however, may depend strongly on country-specific circumstances and the design of the program. For example, by shifting the focus from manual to skilled work, the Slovenian public works program succeeded in attracting more educated and younger individuals than did such programs in other transition economies (Vodopivec, 1999). This may be the reason that the program increased the chances of obtaining a regular job immediately upon leaving the program (due to stigmatization, the longer-term effects are found to be negative). The study also finds that the positive effects on job finding probability are concentrated among younger workers, and that public works reduce the exit rate to inactivity.

Public works can also be expensive. For example, Betcherman et al (2000) report annual cost per participant ranging from \$786 in Madagascar to \$5,445 in Senegal. Moreover, Maloney (2000) reports that it takes typically \$3 or more to generate \$1 of additional income for the poor.

(f) Evaluation of efficiency effects of other programs

Let us also present summary evaluations of three other programs which are – primarily in developed economies – used to address unemployment problems.

Social assistance. As argued by Atkinson (1995), high rates of withdrawal of a targeted transfer may create a poverty trap. He quotes a study by Burtless (1990) showing that means-tested transfers have a statistically significant, but small, effect on the labor supply of low-income men and women with children. Although assessments vary, incentives may be better structured under decentralized administration and financing of these programs, which facilitates flexibility in the formulation and implementation of appropriate solutions to local and individual problems. Moreover, the integration of social assistance with active labor market programs in Nordic states has been attributed to local governments being responsible for the financing of these programs. In order to strengthen incentives, the national government may resort to dispensing subsidies for the enforcement of labor requirements and employment promotion.

Early retirement. Compared to the 1970s and 1980s, the prevalence of public early retirement programs has fallen drastically, as they proved financially very costly and did not free up jobs for younger workers as envisioned. As mentioned in Chapter 3, instead of encouraging exit to employment as a means to address unemployment, early retirement programs seek to promote exit to inactivity or to pre-empt the occurrence of unemployment by encouraging exit from employment to inactivity. Gruber and Wise (1998) report findings

which confirm the success of these programs with respect to this objective. They state that the structure of incentives and disincentives created by early retirement programs in Europe strongly encourage the early exit of older workers from the labor force. This association is supported by a number of studies conducted in recent years on the effect of social security on early retirement in OECD countries.

But this apparent success of early retirement programs has to be qualified in several ways. First, the withdrawal of older workers brings significant efficiency losses. Gruber and Wise (1998) show that the foregone productive capacity of older workers due to early withdrawal from the labor force was sizeable, ranging from 22 percent in Japan to 67 percent in Belgium for those between 55 and 65 years of age. Second, the programs failed to achieve their goal of stimulating youth employment – Boldrin et al (1999) report that the early retirement of older workers has not induced a lower unemployment rate among young workers in Europe. This is not surprising: if younger workers are complements for – and not substitutes of – older workers, early retirement programs may even have a negative effect on the employment of young workers. And third, overall evaluations of early retirement programs have to account for complex general equilibrium effects. For example, the additional financial burden of supporting the pensions of early retirees may well contribute to an increase in social security contribution rates (higher tax on earnings), thereby adding to labor costs. This may, via reduced labor demand, contribute to a higher equilibrium unemployment.¹⁷

Work-sharing. How valid is a popular belief that if each worker works shorter hours, more workers will be employed? Obviously, the increase of employment is not the only possible outcome: if, for example, shorter hours put upward pressure on wages, employers may substitute labor with other inputs, and they may also be forced to reduce output. A recent evaluation of hours reduction in Germany in the 1980s raises some doubts about employment enhancement effects (Hunt, 1996). In response to a one hour reduction of hours worked, employment did increase, but very little (by 0.3-0.7 percent for hourly workers and by 0.2-0.3 percent for salary workers), and the wage bill rose. But total hours worked fell sharply, which possibly led to output losses.

(g) Summary of efficiency effects

The main findings about efficiency effects of income support programs are summarized in table 4.6. As evident from the table, it seems that a consensus is emerging in some areas, but in others researchers are still far from agreement.

As for **unemployment insurance**, its efficiency score card is heavier on the negative than on the positive side. There is mounting evidence that the generosity of unemployment insurance reduces the probability of exit from unemployment to employment, a result that is fairly robust across countries and labor market regimes. Another significant agreement is that unemployment insurance increases the equilibrium unemployment rate (the transmission

¹⁷ The view that increased labor costs contribute to unemployment and slowdown in economic growth has received strong endorsement in a recent work by Daveri and Tabellini (2000).

channels being job search intensity, wage bargaining, and possibly labor taxation). By interacting with adverse shocks, benefits also contribute to the persistence of unemployment (the argument that has recently been offered to explain the rise of European unemployment). Moreover, while benefits make restructuring more attractive – and increase temporary layoffs, general equilibrium analyses show that overall adjustment is not assisted, because job creation is hindered. On the positive side, there is agreement that unemployment insurance is effective as an automatic macroeconomic stabilizer. There are also important areas of disagreement: the evidence is inconclusive on the effects of benefits on post-unemployment wages and thus on the quality of job matches; whether benefits enhance entry into regular jobs; and whether they contribute to higher output and growth.

There is a remarkable agreement that severance pay reduces employment rates, as well as that it reduces inflows to and outflows from unemployment. While the first effect is clearly negative, various interpretations exist on the efficiency effects of the latter. Under some circumstances, however, the likely efficiency effects of reduced dynamics are negative: transition economies are a case in point. No evidence, however, exists about the effects of severance pay on job matches and on employment in regular jobs as opposed to informal ones.

As for other income support programs examined above, there is little evidence on the effects of unemployment assistance as a self-standing program. The most significant gap in understanding of the working of income support systems, however, relates to the effects of unemployment insurance savings accounts. Because only few such programs exist, and because most of them have only recently been introduced, such a gap is understandable – but addressing this gap should figure prominently on the research agenda in the near future.

The above review shows that different income support programs for the unemployed produce quite different efficiency effects. Nonetheless, there is a common thread through these results: none of the programs seem to be without negative effects on efficiency. This is just another confirmation that income security does come – and can only come – with significant costs to the economy. The challenge is, of course, to choose programs which minimize the negative effects while providing adequate income security to the unemployed. We tackle this challenge in chapter 6.

Table 4.6: Summary of efficiency effects of income support programs for the unemployed*

	Job-search effort and post-unemployment wages	Equilibrium labor market outcomes and persistence of unemployment	Enhancing restructuring of enterprises and overall adjustment	Labor supply of other family members	Encouragement of taking regular vs. informal jobs	Output and growth
Unemployment insurance	<ul style="list-style-type: none"> • Significant disincentives for leaving unemployment (moral hazard problem). • Inconclusive evidence on the improvement of job matching (via post-unemployment wages). 	<ul style="list-style-type: none"> • A benefit increase in increases the equilibrium unemployment rate. • For some groups positive effect on labor force participation, but reductions in inactivity primarily show up as increases in unemployment. • Benefits slow down adjustment to shocks – make unemployment more persistent (European unemployment). 	<ul style="list-style-type: none"> • Attractiveness of restructuring increases; in U.S., strong evidence on increase of temporary layoffs (partial equilibrium results). • Because job creation is hindered, overall adjustment not assisted (Blanchard, 1997). 	Reduces labor supply of the spouses of unemployed workers.	<ul style="list-style-type: none"> • Inconclusive evidence on entry into precarious jobs. • In Brazil, UI payments increase probability to enter self-employment. 	<ul style="list-style-type: none"> • By acting as automatic macroeconomic stabilizer, UI reduces GDP losses during downturns by 10-15 percent. • Theoretical predictions about the effects on output inconclusive. • The effects on growth insignificant.
Unemployment assistance	Significant disincentives for leaving unemployment, particularly for low-wage earners.	Similar, but milder effects as under unemployment insurance.	Similar, but milder effects as under unemployment insurance.	Strong disincentive for other family members to taking a job.	Similar effects as under unemployment insurance.	Similar, but milder effects as under unemployment insurance.

Table 4.6: Summary of efficiency effects of income support programs for the unemployed* (cont.)

	Job-search effort and post-unemployment wages	Equilibrium labor market outcomes and persistence of unemployment	Enhancing restructuring of enterprises and overall adjustment	Labor supply of other family members	Encouragement of taking regular vs. informal jobs	Output and growth
Severance pay	No moral hazard problem with job-search effort, but incentives to enter unemployment increased. (Large litigation costs from disputes over the cause of separation.)	<ul style="list-style-type: none"> • Strongly reduces employment, particularly of young workers. Increases participation in self-employment. • Effects on unemployment inconclusive. 	Negative effects on labor reallocation – economy’s “sclerosis” increased: inflows into unemployment reduced, but so is job creation.	No evidence.	No evidence.	The effects on growth not well researched.
Unemployment insurance savings accounts (UISA)	No moral hazard problem (theoretical prediction).	In comparison to unemployment insurance, the reduction of unemployment (theoretical prediction)	Conversion of severance pay into UISA increased both firing and hiring by firms (Columbia).	No evidence.	No evidence.	No evidence.
Public works	If wages kept sufficiently low, little effects on job-search efforts.	Mildly reduce unemployment and increase employment.	Negligible effects.	Negligible effects.	In transition economies, participants are stigmatized – more likely to take informal jobs or leave labor force after the completion of public works.	Negligible effects.

*Source: Derived from the discussion of efficiency effects in the text; findings for which empirical support is provided are printed in bold.

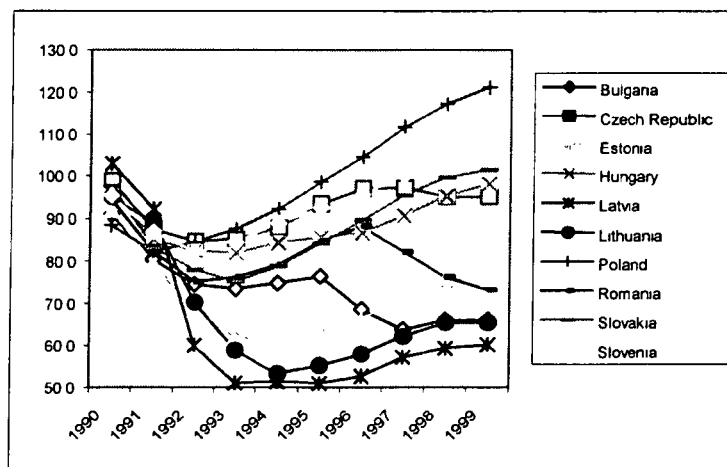
4.3 Suitability to confront different shocks

When countries are affected by adverse shocks, do they adjust their income support programs for the unemployed and/or introduce new ones? How suitable are different programs to deal with different types of shocks? Are income support programs for the unemployed counter-cyclical, that is, do they get increased funding when an economy suffers from a recession and needs income support programs the most? Moreover, what happens to marginal groups during a crisis? Below we examine these issues by summarizing the experiences of different regions in dealing with crises, focusing on the ability of various programs to confront shocks. Specifically, we review the responses of three groups of countries to their respective “shock” experiences, namely, the economic system transformation in European transition countries, the financial crisis in East Asia, and high macroeconomic instability in Latin America.

(a) European transition countries

In the early 1990s, reforms in transition countries drastically reduced output and severely affected employment. Output decline was predominately related to supply side shocks and structural imbalances which have accumulated for decades under the socialist regime (Holzmann et al, 1995). The cumulative GDP decline was about 25-35 percent for Central and Eastern European countries and about 40-50 percent for the Baltic Republics (see figure 4.1). Reductions of output invariably reduced employment and increased both the number of unemployed and inactive individuals. Due to the low probability of exit from unemployment, long-term unemployment also became a serious problem.

**Figure 4.1: Evolution of GDP, European transition economies, 1989–99
(1989 = 100)**



The responses of countries to the emergence of large-scale unemployment varied. To reduce inflows into unemployment, some countries relied on employment protection (including severance pay) and job preservation subsidies. In addition, Poland, Hungary,

Slovakia, and Slovenia devoted considerable resources towards promoting early retirement (for example, in 1992 the expenditures on early retirement in Poland reached 0.8 percent of GDP – Vodopivec et al, 2001). Moreover, to assist the unemployed, all countries introduced new labor market programs, both income support programs as well as active labor market programs.

In overhauling their cash benefit systems, European transition countries followed the blueprints of the EU welfare states. Most importantly, they added two new systems: unemployment insurance and social assistance to their existing systems of severance pay, family benefits and pensions. In most countries, overall expenditures on unemployment benefits were below one percent of GDP; in a few countries, however, they exceeded that level (Hungary, Poland, and Slovenia).

In addition, all transition countries employed active labor market programs, including training, youth measures, employment subsidies, public works, and support for self-employment. With the exception of Hungary and Slovenia, the level of active support was much lower than in OECD countries (in most countries, it was between 0.15 and 0.30 percent of GDP). Hungary spent considerable resources on training, and Slovenia on job preservation subsidies (a record 0.8 percent of GDP in 1992).

In evaluating income support programs for the unemployed in transition economies, Vodopivec et al (2001) note that due to fiscal pressures (and perhaps also to improve incentives), the initial generosity of unemployment insurance systems had to be scaled down – in comparison to the early 1990s, several countries reduced both replacement rates and maximum potential entitlement durations of benefits. They also point out significant implementation problems of these programs. Scarpetta and Reutersward (1994) also observe that the real value of unemployment benefits was reduced by imperfect indexation. Vodopivec et al (2001) also note that while they were effective in promoting early exit from the workforce, early retirement programs proved fiscally expensive and did not increase the employment chances of young workers. To increase the likelihood of receiving severance pay, some transition countries also introduced public guarantee funds (for example, Slovenia). As noted earlier, Fretwell et al (1998) assess that public works in transition economies proved mostly to be a way of providing income to the needy than a vehicle for increasing the employability of the unemployed.

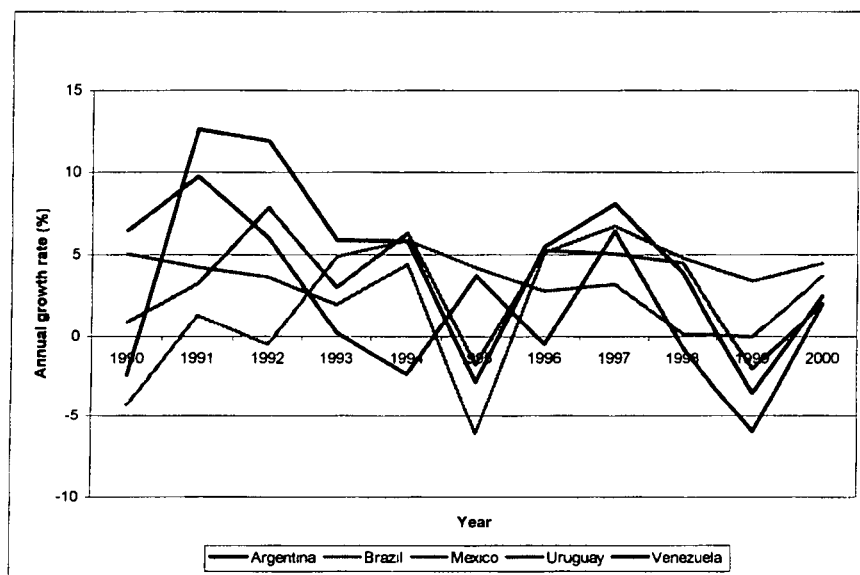
(b) Latin America and the Caribbean

Despite efforts to strengthen macroeconomic stability, many Latin American countries continue to be characterized by a high level of macroeconomic volatility (see figure 4.2). This environment has proven to be quite unfavorable to the performance of labor markets, with unemployment sometimes persisting at high levels even during periods of economic expansion.

Under such circumstances, providing income security through severance pay and relying on the state to absorb labor surpluses – the dominant income support mechanisms in

the past – have become untenable, particularly as they served the needs of only a small subset of the labor force. Consequently, additional income support mechanisms including labor-intensive public works (for example, Argentina’s Trabajar program), short-term training programs targeted at the unemployed (for example, Mexico’s Probecat program), wage subsidies for private sector employment, and credit for micro-enterprises were introduced.

Figure 4.2: Annual GDP growth rate of selected Latin American countries (1990-2000)



In comparison to OECD countries, Latin American countries spend much less on labor market programs. For example, in the mid-1990s, OECD countries spent an average of 0.38 percent of GDP on training compared to an average of only 0.19 percent in Latin America (Argentina, Brazil, Chile, Costa Rica, Jamaica, Mexico, and Peru) (Marquez, 1999). Similarly OECD countries spent 0.34 percent of GDP on public works and subsidized employment compared to 0.22 percent in Latin America. Because Latin American countries spent very little on unemployment insurance programs, the difference in total expenditures on labor market programs is even greater (OECD countries spent on average 2.4 percent of GDP, while Latin America, 0.46 percent).

Despite the limited number of options used, there was wide heterogeneity in the response to volatility and crises as well as in the character of programs across countries. For example, when youth unemployment was considered a critical problem, training programs were introduced in combination with scholarships, job search assistance, and practical training opportunities. Although training was financed by the government in most cases, delivery varied from the traditional public training institutions to private entities and NGOs.

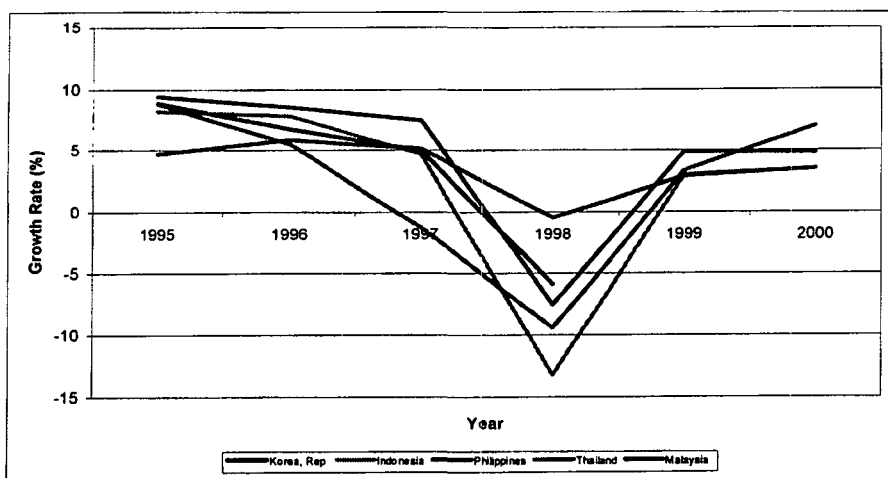
Many of the emergency programs were reintroduced or strengthened during the crises (such as the Tequila shock of 1995), and the virulence of the shock contributed to hastening the development and deployment of an assortment of programs, often at the expense of

judicious planning and preparation. This resulted in programs being poorly designed and incompatible with each other. In addition, contrary to the stated intent to assist workers in the most precarious positions, many of the emergency programs failed to reach them (Marquez, 1999). De Ferranti et al (2000) report evidence for selected income support programs for the unemployed which show that with the exception of the Probecat training program in Mexico and the Trabajar public works program in Argentina, program beneficiaries tend to come from the top three income quintiles. Furthermore, although potential coverage rates are somewhat higher, actual labor force coverage rates for these programs tend to be extremely low (for example, 11.8 percent for Brazil's unemployment insurance program and 3.6 percent for Peru's mandatory severance pay program). In the 1990s, several Latin American countries also introduced a relatively new program – unemployment insurance savings accounts (see above).

There is also evidence that fiscal pressures associated with recessions reduced the capacity of governments to finance social spending. For example, with a decline in output by 5.3 percent in 1995, targeted spending per poor person fell by 28 percent in Argentina, and the poverty rate increased by 5 percentage points (Wodon, 2000). But it is interesting to note that the only class of programs with a counter-cyclical pattern of spending were income security programs such as old-age pensions, unemployment insurance, and family assistance (de Ferranti et al, 2000).

(c) East Asia

The precipitous decline in economic growth rates during the recent East Asian financial crisis (see figure 4.3) increased unemployment and reduced wages; interestingly, while in some countries employment decreased, in Indonesia and the Philippines it increased (the so-called added worker effect). In the worst affected countries of South Korea, Thailand, and Indonesia, the unemployment pool increased by the order of a million workers in each country. Between 1997 and 1998, the unemployment rate more than doubled in both Thailand and South Korea (from 2.2 to 5.2 percent and from 2.6 to 6.8 percent, respectively),



while Indonesia and the Philippines showed small increases. In 1998, real wages fell in all countries, with Indonesia experiencing a staggering 37.8 percent decline from the year before.

Figure 4.3: Annual GDP growth rate of selected East Asian countries (1995-2000)

Before the crisis, East Asian countries did not possess much in terms of income support programs for the unemployed *ex ante* – the high economic growth environment during the 1980s and early 1990s acted as an effective emollient for many of the ails of the labor market. Apart from South Korea which instituted public mandatory unemployment insurance for firms employing more than 30 workers in 1995, and Thailand, where private pension schemes (Provident Funds) were sometimes used to provide unemployment benefits, workers did not have access to unemployment insurance. Furthermore, labor-intensive public works programs had been phased out in all the countries, Indonesia being the last in 1994. The only longstanding program available for workers was legislated severance pay, with coverage limited to the formal sector (Edwards and Manning, 2000).

The response to the crisis was similar across the worst-hit countries; both income maintenance and employment generation programs were deployed (Betcherman et al, 2000). Most countries adopted large-scale, labor-intensive public works programs as emergency measures. Other programs were also introduced; for example, Indonesia provided subsidized credit to small-scale firms and cooperatives; South Korea introduced wage subsidies to assist firms in dire circumstances; Indonesia, South Korea, and Thailand all created programs to promote self-employment.

Some changes were made in job security legislation to help displaced workers. In both South Korea and Malaysia, laws were amended to entitle workers who quit voluntarily to severance pay. In Thailand, separation payments were made more available with emergency funds set up for workers of insolvent firms. In the same spirit, public unemployment insurance was extended in South Korea to cover smaller firms, but since contributory requirements were left unchanged, the effect was minor. Only about 10 percent of unemployed workers received unemployment insurance compensation during the crisis. An interesting program where workers were able to borrow funds conditional on their previous payments of social security contributions was introduced in the Philippines (Emergency Loan Facility For Displaced Workers). This program has a striking resemblance to unemployment insurance savings accounts systems in some Latin American countries.

Although evidence on the performance of various income support programs for the unemployed during the crisis is lacking, the limited evidence suggests that program coverage rates were often very low, leaving large numbers of displaced workers and their households to fend for themselves. Furthermore, the effectiveness of public works programs was impaired by poor design and implementation, resulting in poor targeting of benefits (leakage of benefits to the non-poor), and low female participation rates (Horton and Mazumdar, 2001).

Summary of the responses. Although the nature of the crisis differed, the response in terms of income support programs to the unemployed by the three groups of countries were similar – they introduced active labor market programs: public works, training programs targeted at the unemployed, wage subsidies for private sector employment, and programs to assist self-employment. But in contrast to the other two groups of countries, transition countries also introduced new cash benefit systems, chief among them, unemployment insurance and social assistance. This difference can be attributed to a more acute contraction in the output of transition countries as well as to the dearth of informal risk management mechanisms at the outset of the transition. The above evidence also shows that crises function as a strong promoter of institutional innovations – but also that there are advantages of having institutional support ready before a crisis hits.

The above review also allows the following tentative evaluation of different income support programs with respect to their suitability in dealing with different types of shocks:

- *Unemployment insurance/assistance.* The experience of transition countries shows that a massive increase of unemployment and the resulting increase of unemployment insurance expenditures can result in the scaling back of the generosity of benefits. While unemployment insurance can effectively insure against individual (idiosyncratic) shocks, it may not be equally effective against large structural shocks (partly because of its vulnerability to political risk – see below).
- *Severance pay.* Effective in smoothing consumption regardless of the nature of the shock, but it may require a public guarantee fund/pre-funding arrangement to enhance availability.
- *Unemployment insurance savings accounts.* This system require a relatively well functioning financial sector (saving instruments, regulations, supervision); it is more suitable for frequent but modest risks (this evaluation is based on the theoretical insights of Gill and Ilahi, 2000, presented in Chapter 2, who show that self-insurance through savings is more appropriate for smoothing consumption under frequent and moderate risks but not very good for persistent shocks, an observation particularly relevant for unemployment insurance savings accounts).
- *Public works.* Large-scale, labor-intensive public works programs proved to be the popular emergency measure, providing both income support and employment generation. But evidence shows no or negative effects on the employability of participants. Moreover, funding per poor person declined during crises, showing vulnerability to covariant shocks.
- *Early retirement programs.* Effective in dealing with sector/branch risk (meso-level) – but they entail high efficiency and equity costs.

Based on the above evidence as well as postulating the properties of individual programs from their functioning, a preliminary assessment of various income support programs is presented in table 4.7.

Table 4.7: Suitability to confront various shocks of income support programs for the unemployed

	Suitability	Remarks
Unemployment insurance	Effectively insures against idiosyncratic, sectoral, and regional shocks, less effective against large covariant shocks (experience of transition economies).	A massive increase of unemployment can result in the scaling back of the generosity of benefits.
Unemployment assistance	Similar as unemployment insurance.	
Severance pay	Suitable for all types.	May require public guarantee fund/pre-funding arrangement.
Unemployment insurance savings accounts	More suitable for frequent but modest risks	Requires appropriate financial sector (instruments, regulations, supervision).
Public works	Suitable for idiosyncratic, catastrophic shocks. Vulnerable to covariant shocks.	More effective if strong self-selection; may have a “low bang for a buck.”

Source: Derived from the discussion of the suitability of various programs to different types of shocks in the text.

4.4 Resistance to political risk (political economy considerations)

By design or by default, income support programs typically involve income redistribution. To bring about this redistribution and to pay out benefits as stipulated by program rules, unpopular measures – such as increasing contribution rates – may be necessary. Moreover, some of these programs may be particularly prone to pressures seeking to increase the generosity of benefits and/or to expand coverage. Similarly, once introduced, these programs develop their own constituencies, making reforms or their dismantlement difficult. Below we elaborate on these issues, distinguishing the following three aspects of political risk: the ability of the program to maintain benefit levels during downturns; its susceptibility to pressures seeking to increase benefit generosity; and its tolerance to reforms which attempt to reduce benefit generosity.

Protection of benefit levels during downturns. Being largely financed on a pay-as-you-go basis, unemployment insurance programs create significant unfunded liabilities, which make payments of program benefit uncertain – it may not be possible to raise payroll contribution rates and/or obtain budgetary support necessary to provide benefits at levels as promised by the program, especially during economic downturns. For example, in transition countries in the 1990s, a substantial decline in payroll tax revenues together with a sharp increase in the number of unemployment benefit recipients resulted in the reduction of

benefit levels of unemployment insurance programs (statutory replacement rates were reduced and benefits were imperfectly adjusted to inflation – see Vodopivec et al, 2001).¹⁸ In principle, programs which require pre-funding of liabilities can reduce this kind of political risk – and as the analysis of Smetters (2000) shows, the political risk under publicly managed funds is higher than the one under privately managed funds (see box 4.3).

Box 4.3: Should assets be held by the government or on private accounts?

Assets accumulated under insurance programs can be managed either by the government, as in public insurance programs, or in private accounts, as under individual retirement accounts or the UISA system. What is the likelihood that mismanagement or high administrative costs will eventually lead to the reduction of benefits under the two options? For the U.S., Smetters (2000) concludes that political risks under public management are higher than under a private one. He bases his conclusion on the examination of explicit risks arising from the following: the use of accumulated funds for other purposes, investment decisions and restrictions; conflict of interest; reduced redistribution; failure to set aside enough money; and high administrative costs.

Such a conclusion can be extrapolated to many developing countries – those which have the capacity to effectively regulate and supervise the financial institutions that will manage these funds. As shown by the World Bank (1994), publicly managed funds (particularly those in developing countries) have lower returns than privately managed funds. Iglesias and Palacios (2000) also find that public funds are often channeled to politically-favored projects. In countries with high prevalence of corruption, the likelihood of the use of accumulated funds for other purposes, if held publicly, is particularly high. Moreover, the use of individual accounts also reduces the danger that the level of benefits is increased, and/or new beneficiaries are added to the program.

Susceptibility to pressures to increase benefit generosity. As a largely pay-as-you-go program, unemployment insurance is highly non-transparent and as such, subject to a high degree of political interference (for example, to increase/maintain benefits for selected groups, or to expand program coverage). The experience of transition countries supports this conclusion (for example, many countries maintained generous benefits for older workers near retirement, while the generosity of benefits for others was reduced). Holmlund (1998) also shows that higher union coverage leads to higher replacement rates. This hypothesis is confirmed empirically for OECD countries (note that this is consistent with the analysis of the incidence of unemployment benefit programs in Chapter 3, where the presence of trade unions is found to facilitate the introduction of these programs). At the other extreme, the most resistant to political interference is the UISA system, where the link between benefits and contributions is most direct. The system also allows self-policing, that is, workers can monitor their own accounts.

¹⁸ This has even been the case also with pension benefits in the advanced OECD countries, where these benefits have been systematically cut since the 1980s (see Schwarz and Demirguc-Kunt, 1999).

Tolerance to reforms which reduce benefit generosity. Evidence shows that once instituted, income support programs for the unemployed are difficult to reform. For example, Peru attempted to reduce the amount of severance pay in 1996, but ended up increasing its generosity after a popular backlash (MacIsaac and Rama, 2000). Similarly, France attempted to reduce pension benefits for its privileged public service employees at the end of 1996, but mass protests prevented it from doing so.

Several arguments have been furnished to explain why introducing labor market reforms may be politically difficult. First, Meltzer and Richard (1983) analyze redistribution via government programs using a median voter model and argue that reforms that put middle class at disadvantage may be difficult to implement, and that government programs are likely to favor the middle class, thus failing to reach the very poor (on the evidence, see Lal 1994). Second, Lindbeck (1995) argues that the combination of specific benefits and general taxes creates pressures for increased social security spending which also makes it hard to curb this spending when needed. The perception that social security constitutes a “social contract” between the government and its citizenry makes it even more difficult to scale benefits back. Third, in a similar vein, Hussler et al (1999) argue that social insurance institutions are naturally persistent. They offer an example of highly specialized workers, who prefer more generous benefits so as to be able to pursue more selective search strategies – and in turn, more generous benefits reinforce higher specialization. Fourth, Elmeskov et al (1998) apply the insider-outsider argument to contend that employed workers oppose labor market reforms which would reduce labor market rigidities, as they themselves are unaffected by these rigidities and fear that the reforms would reduce their bargaining power in wage negotiations. Fifth, Elmeskov et al (1998) also point to equity concerns as inhibiting reforms, given the widely held opinion of a trade-off between efficiency and equity. Sixth, Buti et al (1999) argue that reforms may be opposed if benefits are uncertain and remote, and the costs are felt immediately. Under such circumstances, there may be more losers than winners, and there may be large uncertainty among groups who would actually gain. This view is supported by Forteza and Rama (2000) who shows that organized political groups which stand to lose from economic reforms are successful in diluting these reforms (they find that countries with more organized groups and public employment are associated with weaker recoveries after adjustment programs).

Interestingly, Ravallion (1991) suggests that poorer targeting may not necessarily be undesirable as it could strengthen political support for income support programs. He finds that the “leakage” of benefits to non-poor participants in the Maharashtra Employment Guarantee Scheme in India may have been instrumental in obtaining sustained budgetary support. The importance of leakages is suggested also by the fact that the ability of Argentina’s public works (Trabajar) program to reach the poor worsened sharply with cuts to the program’s aggregate budget (Ravallion 1999b). Moreover, Saint-Paul (1993) shows that reforms aimed at increasing the flexibility of the labor market are more likely if this flexibility is sufficiently high even before the reforms, that is, when the employed are more vulnerable to unemployment. He thus points to the complementarity of the economic and political aspects: the more flexible the labor market, the more the employed are exposed to unemployment, and the greater the political will to fight it. Ravallion and Lokshin (1999)

reach similar conclusions, pointing to the importance of future mobility (as opposed to “downward mobility” as in Saint-Paul’s model) in explaining government redistribution. They find that in Russia, government redistribution is motivated not by considerations about current losses and gains, but largely by expectations about future welfare – rich people who expect their welfare to decline are in favor of redistribution, and poor people who expect their welfare to increase are opposed to it.

The above insights prove useful for creating a strategy for reforms: while the welfare state has been created in an incremental fashion, its scaling back may require more bold and comprehensive measures. For example, Elmeskov et al (1998) suggest that comprehensive rather than piecemeal labor market reforms may garner greater political support for two reasons: (i) the costs are more widely and evenly distributed across different groups of workers (greater fairness) and (ii). broad reforms have a higher likelihood of producing gains which can possibly be used to compensate losers. Furthermore, Orszag and Snower (1998) point out “political complementarities” associated with broad-based and concurrent reforms which facilitate their successful introduction -- losers from one reform action can potentially be winners in another reform action. Comprehensive reforms would also avoid “rule instability,” whereby expectations of future changes destabilize the economy (Lindbeck, 1995). Empirical support for the above claims is provided by Van Ours and Belot (2000), who investigate the reasons behind the success of some OECD countries in lowering their unemployment. They find that successful countries implemented a comprehensive set of labor market reforms and point to strong complementarities among institutions affecting unemployment.

Moreover, Freeman (1992) argues that one way to convince losers that they will eventually also gain from reforms is by creating clear examples of winners from reforms – a variant of Hirshman’s “light at the end of tunnel” effect. Freeman shows that even workers who initially lose from reforms may prefer greater inequality of earnings; therefore, even from a political economy standpoint, policies that will spur growth are more desirable than those that more abundantly compensate the losers (as long as political support for reforms remains).

In sum, while it may be difficult to pinpoint exact circumstances that are conducive to changing an income support system, some principles can nonetheless be arrived at. First, under stable conditions, public programs may favor the middle class, thus failing to reach the poor. Second, not only the current degree of income distribution, but the proposed or perceived change in welfare may be an important determinant of the support for income redistribution programs. Third, as Elmeskov et al (1998) show, critical developments such as an economic crisis or a change in government have often paved the way for the successful introduction of major reforms, although, clearly, these are not sufficient conditions. De Ferranti et al (2000) also point out that economic booms have not been conducive to labor market reforms, and might have even reversed some policies which made growth possible in the first place (Chile). And finally, as discussed before, reforming income support programs may be more effective and feasible if it is part of a wider, comprehensible labor market reform initiative.

Based on the above discussion, in table 4.8 we summarize the evaluation of the resistance of alternative programs to political risk:

- *Unemployment insurance* is found to offer low to medium protection of benefit levels during downturns (due to its largely unfunded liabilities and public nature of fund management); to exhibit high susceptibility to pressures to increase the generosity of benefits (because of its non-transparency); and to possess low to medium tolerance to reforms which would reduce the generosity of benefits (because social insurance may be perceived as a “social contract” and may exhibit “natural persistence”).
- *Unemployment assistance* is assessed to have similar properties as unemployment insurance (with less room for political maneuvering, since the program rules are somewhat more strict due to means-testing).
- *Severance pay* is found to offer medium protection of benefit levels during downturns (due to its largely unfunded liabilities); to exhibit low to medium susceptibility to pressures to increase the generosity of benefits; and to possess low tolerance to reforms which would reduce the generosity of benefits (because “insiders” can effectively resist reforms which would primarily benefit “outsiders”).
- *Unemployment insurance savings accounts*, being a funded system, offers high protection of benefit levels during downturns; exhibit low susceptibility to pressures to increase the generosity of benefits (due to a direct link between contributions and benefits); and possess low tolerance to reforms which would reduce the generosity of benefits (because each worker polices his/her own account).
- *Public works* program offers low protection of benefit availability during downturns; exhibits high susceptibility to pressures to increase the generosity of benefits (leakage to better off participants makes the program more resistant to budget cuts), and possesses medium tolerance to reforms.

Table 4.8: Resistance to political risk of income support systems for the unemployed

	Protection of the level of benefits in downturns	Susceptibility to pressures to increase generosity	Tolerance to reforms which reduce benefits
Unemployment insurance	Low/medium (unfunded liabilities, so difficult to raise contributions/obtain budgetary support; public management of funds susceptible to political investments and diversion of funds)	High (as a pay-as-you-go scheme – and thus non-transparent, it can be easily manipulated)	Low/medium (social insurance constitutes a “social contract,” “natural persistence”)
Unemployment assistance	Low/medium	Medium (less room for maneuver than with unemployment insurance)	Medium (the group against reforms is less vocal than in the case of unemployment insurance)
Severance pay	Medium (not always available, particularly during downturns)	Low/medium (largely outside the domain of the government, except if part of public retrenchment programs)	Low (insider-outsider argument)
Unemployment insurance savings accounts	High (funded system)	Low (direct link between the contributions and benefits)	Low (self-policing)
Public works	Low (countercyclical funding pattern)	High (leakage to the better off makes the program more resistant to budget cuts)	Medium (target constituency may not be politically vocal)

Source: Derived from the discussion on the political risk of various programs in the text.

4.5 Concluding Remarks

The above review of the performance of income support programs for the unemployed shows that these programs generate a great variety of effects, which may be intended and unintended, anticipated and unanticipated. We use the above review, together with a discussion of country specific features that affect the choice of income support programs in Chapter 6, to formulate tentative guidelines for countries wishing to introduce and/or improve income support systems for the unemployed. At this point, we would like to emphasize only some conclusions of a more general nature.

The above review makes it clear that there is no program that would outperform others in all aspects. Simple conclusions based on narrow views may be misleading: one program may offer superior provision of insurance, but may create severe labor market disincentives – and may create a constituency which will block future reforms of the program – than another. Therefore, when introducing or improving income support systems, countries are advised to carefully examine all aspects of performance. Having said that, however, countries may also want to set their priorities regarding different aspects of performance– for example, which groups they would like to target – and then choose programs accordingly.

The discussion above also reflects the fact that not all aspects of performance are well researched. Although in many areas there is no shortage of studies, the results are sometimes widely different and even conflicting. Given the complex interactions, theoretical studies of necessity abstract from important institutional features. Therefore, their validity has to be checked under country-specific circumstances by empirical studies. Because there is a dearth of empirical studies on transition and particularly developing countries, the task of replicating programs from developed countries is even more difficult and risky. When doing so, particular attention has to be paid to country specific considerations – the task which we tackle in the next chapter.

ANNEX: EFFICIENCY EFFECTS OF INCOME SUPPORT PROGRAMS

This annex complements the discussion of efficiency effects of income support programs in the main text by providing selective details. It focuses on the same programs as does the discussion above: unemployment insurance, unemployment assistance, severance pay, and unemployment insurance savings accounts. It considers the following dimensions of efficiency:

- Job-search effort
- Post-unemployment wages
- Equilibrium labor market outcomes
- Enhancing restructuring of enterprises and overall adjustment
- Labor supply of other family members
- Encouragement of taking regular vs. informal jobs
- Output and growth

Where applicable, theoretical predictions about the effects are presented before reviewing empirical evidence.

(a) Job-Search Effort

Unemployment insurance and unemployment assistance. A stylized prediction from simple theoretical models is that an increase in the unemployment benefit reduces the recipient's probability of transition from unemployment to employment, that is, it increases the expected duration of unemployment. This follows from simple job-search models (the reservation wage is assumed to rise with the benefit level), as well as from simple labor supply models (because the presence of unemployment insurance modifies the budget constraint – less income is forgone by staying unemployed, and a utility maximizing individual chooses a longer duration of unemployment). Search theory also implies that the reservation wage declines and the exit rate increases as one nears the date of expiration of the benefits.¹⁹ However, once more complexity is introduced in the models (for example, recognizing that unemployment benefits are paid only for a finite period and that by taking employment, one re-qualifies for unemployment benefits), it can be shown that the increase of the benefit rate makes the transition to employment more attractive, not less (see Atkinson and Micklewright, 1991, p. 1699). Or one can argue that unemployment benefit increases resources devoted to search and hence increases the probability of finding a job (in such a case, a job offer effect prevails over the reservation wage effect). In other words, the

¹⁹ There are three types of effects of implied by Mortensen's seminal paper (1977): (i) For the qualified unemployed worker, the exit rate increases as he (she) approaches benefit expiration. (ii) A rise in benefits reduces the exit rate for an insured worker who has recently become unemployed, and increases the exit rate for the insured worker who is close to benefit expiration. This follows from the fact that a higher benefit level increases both the value of continued search as unemployed and the value of accepting an offer. The immediate value of higher benefits is small for workers close to benefit exhaustion, because they are in similar situation as workers not qualified for the benefit. (iii) A rise in benefits increases the exit rate for an unemployed worker who is not qualified (the entitlement effect).

theoretical predictions about the effects of longer duration and higher replacement rate on the probability of transition from unemployment to employment are ambiguous.

The empirical results, however, are much clearer. Let us start with developed economies, where these effects have been extensively studied. First, the majority of studies find that the elasticity of the duration of unemployment with respect to the benefit replacement rate is positive (see table 4.4).²⁰ According to Layard et al (1991), the benefit elasticity ranges from 0.2 to 0.9, depending also on the time elapsed from the start of benefit receipt. On the higher side, Katz and Meyer (1990) estimate that a 10 percentage point increase in the benefit level is associated with about a 1.5 week increase in the duration of unemployment. Second, the duration of benefit entitlement significantly affects the duration of unemployment spells. Katz and Meyer (1990) estimate for the U.S. that the benefit duration elasticity of unemployment is in the range of 0.4-0.5. Moffitt (1985) finds that a 1 week increase in the benefit duration is associated with a 0.15 week increase in the duration of unemployment, and Ham and Rea (1987), with 0.26-0.33 weeks increase in the duration of unemployment in Canada. Third, studies almost invariably find a sharp increase in the probability of exit to employment just before the benefit is exhausted. For example, Meyer (1990) finds that over the six weeks prior to benefit exhaustion, the exit rate triples. Similarly, Carling et al (1996) find evidence for Sweden which shows that in the 3 weeks prior to benefit exhaustion, exit rates to employment increase by 170 percent.

Similar to the evidence on developed economies, empirical studies for transition economies overwhelmingly show that unemployment benefits reduce the probability of leaving unemployment to take a job. Except for two studies (on Romania and Slovakia), negative effects of the potential duration of benefit receipt on the probability of exit from unemployment to employment have been confirmed by all other studies (see table 4.5 for a summary of empirical findings). For example, Ham et al (1998) estimate that a 1 week increase in the benefit duration is associated with a 0.30 and 0.93 week increase in the duration of unemployment in the Czech and Slovak Republics, respectively. It is particularly interesting that adverse incentive effects can be detected even in Estonia, a country with by far the most parsimonious benefit program. The effects of the replacement ratio are less pronounced: Ham et al. (1999) 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. Micklewright and Nagy (1996) estimate for Hungary that about 8 percent of unemployment benefit recipients exit to jobs from unemployment at the point of exhaustion; Vodopivec (1995) provides an estimate of about 6 percent for Slovenia, and Vodopivec et al (2001) provide an estimate of 32 percent for Estonia. Some of the above studies confirm disincentive effects for unemployment assistance, for which replacement rates are generally lower.²¹

²⁰ See Pedersen and Westergård-Nielsen (1993) for a survey of studies which did not find significant effects of benefits on unemployment duration.

²¹ For the evidence on replacement rates in transition economies, see Scarpetta and Reutersward (1994).

Strong evidence on the moral hazard faced by the unemployment benefit recipients is provided also by the U.S. unemployment insurance experiments in the 1980s and 1990s (Meyer 1995). The experiments, partly prompted by unemployment insurance overpayments resulting from the failure of claimants to actively seek work, have taken two forms: cash bonuses for those unemployment benefit recipients who found jobs quickly and kept them for some time, and provision of varying level of job search assistance. In both cases, experiments used random assignment. The bonus experiments show that incentives faced by unemployment benefit recipients matter: when offered a bonus for speedy reemployment, treatment groups reduced unemployment benefit claims. In several cases, the reduction was statistically significant. Moreover, there was no evidence that speedier return to work reduced reemployment earnings. Job-search assistance experiments also underscore the presence of moral hazard faced by unemployment benefit recipients. For example, the experiment introducing the honor system – the oversight of the treatment group was reduced and the group did not receive any job-search assistance – was associated with a statistically significant increase of unemployment benefit claims.

There is little direct evidence on the intensity of job search of claimants of unemployment benefits in comparison to non-claimants. In his analysis of job search practices of British benefit claimants, Wadsworth (1991) finds that claimants search for jobs more extensively than non-claimants. In the absence of better information, he takes the number of search methods as a measure of job search effort.

Severance pay. Because the amount of severance pay is not contingent on duration of subsequent unemployment, it does not alter the behavior of workers when searching for a job, that is, it does not create a moral hazard problem pertaining to job-search incentives.

Unemployment insurance saving accounts. There has been no empirical work on the effects of UISAs on the reemployment probability (see the main text for theoretical predictions).

(b) Post-unemployment wages

The above evidence documents the presence of disincentives on exit from unemployment to employment created by unemployment insurance. This effect, however, could be seen in a less negative way if unemployment insurance, while increasing the duration of unemployment, at the same time produced a better match between the worker and his new employer. If so, this would show up as an increase in the post-unemployment wage. Below we discuss theoretical aspects and empirical evidence on this issue.

Theoretical predictions. Job search theory yields ambiguous predictions with respect to the relationship between unemployment benefit levels and post-unemployment wages. On the one hand, an increase in the benefit level raises the reservation wage at the beginning of the covered unemployment spell. This improves the likelihood of a post-unemployment wage gain as offered wages have to be higher to induce the recipient to exit compensated unemployment. On the other hand, a higher benefit level depresses job search intensity and

prolongs unemployment. The resultant downward adjustments in the reservation wage over the unemployment spell increase the likelihood of a post-unemployment wage loss. Wage offers are also negatively affected by the perception of greater skill obsolescence and loss of human capital from longer unemployment spells on the part of employers.

Evidence. There is no compelling evidence that unemployment benefits, by subsidizing job search costs, facilitate improved job matches (see Cox and Oaxaca, 1990). Using U.S. data, Ehrenberg and Oaxaca (1976), Burgess and Kingston (1976), Holen (1977), and Barron and Mellow (1979) find a statistically significant and positive relationship between benefit levels and post-unemployment wages. Most notably, Ehrenberg and Oaxaca (1976) estimate that a 10 percentage point increase in the benefit replacement rate increases post-unemployment wages by 7 percent for older men and 1.5 percent for older women. Similarly, using New Zealand data, Maani (1993) finds that a 10 percentage point increase in the benefit replacement rate was associated with a 4.5% increase in post-unemployment wages.²² Other studies, however, have shown a weak or negligible benefit effect on post-unemployment wages – Blau and Robins (1986) and Kiefer and Neumann (1989) find a positive but statistically insignificant relationship between benefits and earnings. Likewise, Addison and Blackburn (2000) find weak evidence in support of improved earnings, and Classen (1977) finds no effect. Meyer (1995) also finds that re-employment bonuses shortened the duration of compensated unemployment without affecting post-unemployment wages.

(c) Equilibrium labor market outcomes

Below we summarize the theoretical predictions and empirical evidence about the effects of the availability and generosity of unemployment insurance and other income maintenance systems on unemployment, employment, and labor force participation. In contrast to the discussion of the search effort effects, this discussion focuses on general equilibrium results.

Most theoretical models predict a positive effect of the increase in the level of unemployment benefits on equilibrium unemployment. In decentralized wage negotiations in *union-bargaining models*, a higher benefit level increases the negotiated wage at the firm level and hence overall unemployment. For example, in the model presented by Holmlund (1998), unemployment is very sensitive to the replacement rate – a rise in the replacement rate from 50 to 60 percent generates an increase in the equilibrium unemployment rate by almost 4 percentage points. *Equilibrium search models* also predict an increase in equilibrium unemployment in response to the increase of the replacement rate. The increase is less intense than in a union-bargaining model – Holmlund (1998) shows that a rise in the replacement rate from 50 to 60 percent is associated with an increase in the equilibrium

²² The results of some of the studies that do find a positive effect of benefits on wages are considered questionable due to shortcomings with respect to the data and approaches used (see Welch, 1977). One significant problem that afflicts studies of *earnings-related* unemployment benefit systems is the difficulty in disentangling the effect of the benefit on post-unemployment wages from previous wages.

unemployment rate of 1 percentage point (the relationship is non-linear). Similarly, calibration of models which include job creation and job destruction effects shows that halving the replacement rate would reduce a typical unemployment spell from 3 months to less than 2.4 months, thereby reducing the unemployment rate by one fourth, that is, by 1.5 percentage point from the level of 6 percent (Mortensen, 1994).

Heer (2000), drawing on Fredriksson and Holmlund (2001), provides one of the rare explicit treatments of both unemployment insurance and unemployment assistance as two components of a compensation system, with means-tested assistance available to individuals whose eligibility to unemployment insurance payments expires (as practiced in several countries). His general equilibrium model predicts that both components of the system reduced equilibrium employment, and that an increase of unemployment assistance payments has a strong disincentive effect on a worker's search effort. Optimal unemployment compensation is shown to decline over time.

Note that general equilibrium models may reinforce, but can also reverse partial-equilibrium results. For example, the prediction that a higher benefit reduces the outflow from unemployment (given the level of labor market tightness) can be reinforced by general equilibrium models that endogenize wage setting and labor market tightness. But in some other general equilibrium models, the prediction that a higher benefit reduces the outflow from unemployment is reversed. For example, if one assumes that – in response to higher unemployment benefits – the equilibrium wage distribution changes so that low-wage firms increase their wage offers, then the frequency of low wage firms declines and the outflow from unemployment increases (Holmlund, 1998). Moreover, the above predictions of general equilibrium models are quite sensitive to changes in assumptions. For example, the magnitude of the effects that an increase of the replacement rate has on unemployment in job-search models is very sensitive to the assumption about the value of leisure, for which no reliable estimates exist.

As for the effects on participation in the labor force, Friedman (1968) contends that the ability to claim unemployment benefits when unemployed makes it more attractive to enter the labor force (both to employment or unemployment) – the so-called “entitlement” effect. But this is again a partial equilibrium result. By imposing additional costs associated with labor, unemployment insurance may also induce employers to reduce their demand for labor, which may increase equilibrium unemployment and, in turn, reduce labor force participation (for example, through the discouraged worker effect). Moreover, the effects of the availability of unemployment insurance may show up primarily as increases of wages and not as increases in employment; higher wages, in turn, induce more people to enter the labor force, but they may also increase unemployment. Thus, the effects on labor force participation rate (and employment rate in particular) cannot be determined unambiguously.

Similar to the effects of unemployment benefits, the predicted effects of severance pay on unemployment are also ambiguous. Blanchard (1998) creates a model with explicit firing costs and shows that severance pay increases firing costs and as such reduces the probability of an individual transiting from employment to unemployment. But at the same

time – through stifling job creation – severance pay also reduces the probability of entry to employment.

An interesting insight about the interaction of employment protection legislation and unemployment insurance was offered also by Pissarides (2001). He argues that advance notification and severance pay, by delaying dismissals, help to avoid unemployment - but agreements on employment protection and wages must be left to the firms and workers, because government involvement can be counterproductive. Crucial for his argument is the ability of firms to lower wages so as to pay the additional costs associated with dismissal; if this is not the case, employment protection legislation reduces the demand for labor and increases equilibrium unemployment. The same conclusion is also reached by Addison et al (1998), who show that when government mandates worker protection (such as health insurance and dismissal costs), this reduces output due to a loss of productive efficiency.

Evidence. As the above review shows, by focusing on distinct features, different theoretical models make valid, yet different conclusions which may sometimes conflict with each other. Conflicting predictions are the consequence of the fact that modeling of income support programs (unemployment insurance and severance pay in particular) has to account for various and complex institutional elements that are impossible to capture in a single model if one wants to retain analytical tractability. It therefore takes empirical verification to determine which effects – and theoretical models – dominate. Indeed, several studies have tried to explain differences in labor market outcomes through differences in institutions and other control variables (such as the stage of the business cycle and differences in earnings).²³

Effects on unemployment. One of the best known studies in this area is Layard et al (1991), finding that in the mid-1980s the replacement rate of unemployment benefit systems in OECD countries significantly affected the average unemployment rate, with a 10 percentage point increase in the benefit rate producing an estimated 1.3 percentage point increase in the unemployment rate. The study also confirms the positive effect of the potential duration of unemployment benefit on the unemployment rate. Nickell and Layard (1999) obtain similar results for 1983-1994 period. Two other recent studies, also for OECD countries, are broadly in line with the above results. OECD (1999) finds significant effects of the replacement rate (but insignificant effects of the potential entitlement duration); Daveri and Tabellini (1999) find mostly significant effects of the potential entitlement duration (they do not report results for replacement rates).

Consistent with theoretical predictions, the effects of employment protection legislation (of which severance pay is one of the most important determinants) on unemployment are largely inconclusive (for a survey of the effects, see OECD, 1999). According to Mortensen (1994), however, a calibration of a general equilibrium model applied to the U.S. economy shows that the introduction of severance pay increases unemployment, because the reduction of job creation imposed by firing costs more than

²³ For example, among institutional variables, OECD (1999) uses variables characterizing wage bargaining, income support for the unemployed, taxation of labor, and spending on active labor market programs.

offset the intended effects of firing costs to reduce unemployment by discouraging layoffs. Several studies find positive effects of severance pay on long-term unemployment.

Effects on employment. In line with ambiguous theoretical predictions, the effects of unemployment benefits on employment rates are often found statistically insignificant (see, for example, Nickell and Layard, 1999). In contrast, there is quite strong evidence that strict employment protection – and severance pay in particular – reduces employment. For example, the results of Lazear (1990) show that increasing severance pay by one month reduces employment per head by about 0.4 percent and reduces labor force participation rate by 0.3 percent. Some new evidence include (i) OECD (1999), who find that negative effects are concentrated among prime age-women, youths, and older workers, (ii) Haffner et al (1999), who find negative association between the strictness of employment protection legislation and employment rates in OECD countries, and (iii) Heckman and Pages (2000), who also confirm the link between job security and lower employment and attribute a 5 percentage point reduction in employment in Latin America to job security provisions (see Addison and Teixeira, 2001, for a summary of empirical effects of employment protection). Indirect support of the negative effects of severance pay on employment is provided also by a study of severance pay in Peru by MacIsaac and Rama (2000). They find that higher firing costs due to severance pay are borne by firms, since the earnings of covered workers differed insignificantly from earnings of non-covered workers. In the Latin American context, the fact that severance pay lowers employment rates can also be interpreted as indirect evidence that severance pay also pushes workers into the informal sector.

As far as the effects on the structure of employment are concerned, Lazear (1990) shows severance pay contributes to turning full-time jobs into part-time ones. Moreover, OECD (1999) finds a strong link between stricter employment protection legislation and higher rates of self-employment. This result is also found by other studies.

(d) Enhancing restructuring of enterprises and overall adjustment

In general, theory does not support the argument that, to facilitate the restructuring process by overcoming political resistance, the optimal level of insurance protection against unemployment is higher during the transition process. Blanchard (1997, pp. 113-4) shows that more generous benefits indeed add to the attractiveness of restructuring, but at the same time hinder (private) job creation. He concludes that “the case for increasing unemployment benefits on efficiency grounds is limited.” Measured by the dynamics of job creation and job destruction, the intensity of labor reallocation in transition economies also cannot be associated in an obvious way to the generosity of unemployment benefits. For example, Haltiwanger and Vodopivec (1999) find much higher gross worker and job flows in Estonia as compared to Slovenia, with Estonia having one of the most frugal, and Slovenia one of the most generous systems of unemployment benefits among transition economies.

Of course, restructuring programs that provide workers with a sufficiently generous compensation (at an extreme, full insurance – an income support at 100 percent replacement rate) are successful in the sense that they facilitate the downsizing of a particular enterprise to

a desirable level. But in their evaluation of 41 public sector retrenchment projects, Haltiwanger and Singh (1999) provide a mixed picture about the success of these projects when gauged by a broader yardstick. Financial returns were high – most of the surveyed projects recovered their direct costs in as little as two years. But 40 percent of programs for which data existed rehired some of the same workers which they shed during the retrenchment, a sign that economic returns may not be that clear. Moreover, active labor market measures which may be part of retrenchment programs may also have dubious economic effects (Dar and Tzannatos, 1999).

Haltiwanger and Singh find that individually tailored severance payments based on skills and age, in combination with a mix of strategies for employment reduction, were less often associated with rehiring. Although they find that such an approach can be financially expensive, they argue that it has “a potentially large payoff in productivity gains and in lower adjustment costs” (p. 52). Undoubtedly, when formulating programs, the specific prevailing conditions in a particular country must be carefully evaluated before applying any of the general principles. Given that many of the relevant data to evaluate the effects of these programs are generally not available (both on the benefits and particularly on the costs side), economic effects of such programs are difficult to pinpoint.

(e) Labor supply of other family members

Unemployment insurance. Theoretical considerations suggest that more generous replacement rates will suppress the labor supply of other family members through the income effect. Empirical evidence confirms such predictions. For example, Cullen and Gruber (cited in Gruber 1999) find that the labor supply of wives of unemployed workers is very responsive to 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.

Unemployment assistance. Theoretical predictions differ from the ones associated with unemployment insurance, reflecting differences in program rules. Because unemployment assistance requires means-testing, one can expect that this will create disincentives for other family members to take a job. Empirical evidence supports such predictions: for example, Garcia (1989) shows that if such disincentives were removed, the overall participation rate of the wives of the unemployed would increase by 8 percentage points. Similar evidence is found in transition economies. For example, Terrell et al (1996) report that the presence of an unemployed spouse lowered the hazard of exit to employment of unemployment assistance recipients by 72 percent for females and by 82 percent for males. Boeri (1997) reports similar effects for Poland.

(f) Decision to enter regular vs. informal jobs

The existence of unemployment insurance may be conducive to entering regular employment versus informal jobs. This is so if the expected unemployment benefits exceed the cost of paying the contributions (for example, if the government or the employer is covering part of the cost). The evidence on this issue is scant and inconclusive. On the one hand, two French studies find that the availability of unemployment benefits significantly

reduced the entry into precarious jobs (Atkinson and Micklewright, 1991, p. 1714). A related finding is that while the occurrence of unemployment severely reduces the duration of subsequent job tenure, the duration of unemployment has no deleterious impact – in fact, longer durations of unemployment are rewarded by longer job tenures, presumably because a longer period of job search improves the probability of a better worker-job match (Boheim and Taylor, 2000).²⁴ On the other hand, Addison and Portugal (1998) find no signs that unemployment benefits facilitate entry into stable jobs in Portugal. Cunningham (2000) also shows that an increase in the generosity of unemployment insurance in Brazil led to increased participation in the self-employment sector; this result suggests that in Brazil, the lack of liquidity provides a barrier for entry into self-employment and supports the view that markets in Brazil are well integrated and participation in the informal sector is not an inferior choice.

(g) Output and growth

The dynamic general equilibrium model of Acemoglu and Shimer (1999) shows that unemployment insurance helps an economy achieve a higher output than one without unemployment insurance, since unemployment insurance contributes to the creation of high-quality, high-wage jobs with greater unemployment risk. In a subsequent paper (Acemoglu and Shimer, 2000), calibrations of their model show that moderate increases in the replacement rate or the duration of entitlement lead to a rise in the share of good jobs as well as an increase in both welfare and output (the resulting increase of unemployment is primarily due to better-insured workers looking for higher wage jobs). They also provide some empirical evidence that states in the U.S. with higher replacement ratios experience higher unemployment, but also a relative increase in the number of high wage occupations and industries, and higher productivity growth. Other literature also shows that unemployment insurance may improve allocation of resources (for example, Diamond 1981).

Central to the efficiency increasing effect argument of Acemoglu and Shimer is their claim that unemployment insurance helps create high-quality, high-wage jobs. But there is also evidence which points to the contrary: Anderson and Meyer (1993) find that the industries consistently receiving subsidies from the unemployment insurance system in the U.S. are construction, manufacturing, and mining, that is, industries which do not generate high quality and high-wage jobs. Their finding is consistent with the prediction that the system subsidizes unstable employment, as workers are more willing to take a more unstable job (for example, a seasonal one) if they can count on unemployment benefits.

Efficiency enhancing literature has to be contrasted, among others, with literature on optimal unemployment insurance. The latter focuses on the moral hazard associated with search effort and models the trade-off between efficiency and equity. Apart from insights about the design of an optimal compensation program (see below), one interesting outcome

²⁴ The latter finding may be confounding the effects of job search with the effects of other variables that are not controlled for in the analysis (for example, the receipt of unemployment insurance, which may capture the difference in unobserved differences between the recipients or non-recipients)

of this strand of literature is the finding that the introduction of optimal unemployment insurance in the U.S. would reduce the steady state unemployment rate by 3.4 percentage points and increase output by 3.64 percentage points (Wang and Williamson, 1996).²⁵ A similar finding, in the context of a job creation/job destruction model, is obtained by Mortensen (1994) – halving the replacement rate of unemployment insurance would increase job creation and thus aggregate output.

A different perspective that also points to the possibility that the introduction of unemployment insurance may be welfare-reducing is provided by Attanasio and Rios-Rull (2000). They observe that a government-mandated program may crowd out private insurance schemes, that is, break down the social fabric that maintains private transfers. Specifically, when both aggregate and idiosyncratic risks are shared among members of extended families, and idiosyncratic risk is less than fully insured because of the presence of enforceability problems, the provision of mandated insurance programs is almost surely inefficient, because it crowds out private insurance against idiosyncratic shocks. Their findings point out that before introducing unemployment support programs, the substitution effects such a program would have on private arrangements should be considered.

5. DESIGN AND IMPLEMENTATION CRITERIA: EXPLORING COUNTRY-SPECIFIC CONDITIONS

In the previous chapter, we reviewed the “generic” performance of various programs – the performance under stylized conditions that usually prevail in developed economies. Naturally, when introducing new institutions to a country or trying to improve existing ones, one has to account appropriately for country-specific features, because they determine how a certain program works in a particular country. This is even more important when we intend to introduce such programs to developing countries, yet our knowledge of various programs is based predominantly on the experience of developed countries. In a very true sense, therefore, one must “find what fits” developing countries.²⁶

This chapter reviews some of the most important country-specific features which have to be taken into consideration when introducing or improving income support programs in developing and transition countries. Some of these features relate to the interactions of income support programs with other social risk management mechanisms, some to the desirability of different programs, yet others to specific conditions which are likely to strongly affect the performance of various programs *per se*. The following features are discussed:

- interactions with labor market institutions and shocks,
- administrative capacity for program implementation,
- the characteristics of the unemployed,

²⁵ The large positive effects on employment and output are largely driven by a sharp fall in unemployment inflow which results from switching to optimal unemployment insurance system, and the empirical foundation for this sharp reduction is not very strong.

²⁶ “Finding what fits” was the topic of the keynote address “Taking Labor Market Diversity Seriously” by Richard Freeman at the World Bank’s Core Labor Market Course in June 2001.

- the size of the informal sector,
- the prevalence and pattern of inter-household transfers,
- non-social insurance and self-protection,
- the nature of shocks, and
- cultural and political factors.

5.1 Interactions with labor market institutions and shocks

The desirability of alternative income support programs for the unemployed depends, among others, on the expected impact of these programs on labor market outcomes. We discussed such impacts in the previous chapter. Here we would like to stress that the same income support program may produce more or less desirable outcomes, depending on the interaction between the income support program with other labor market institutions and shocks. Specifically, we point out below that (i) the impact of unemployment insurance benefits on the equilibrium level of unemployment depends on the interaction of benefits with wage setting mechanisms, and (ii) the impact of an adverse shock on the persistence of unemployment depends on the interaction of the shock with institutions, unemployment insurance and employment protection legislation (including severance pay) being among them.

The impact on equilibrium unemployment: the interaction of income support programs with wage-setting institutions. Theoretical studies suggest that the presence of unemployment insurance is likely to strengthen the bargaining power of trade unions and thus increase the equilibrium unemployment rate. Under decentralized wage setting in which bargaining takes place at the firm level, union-bargaining models predict a positive effect of the increase in the level of unemployment benefits on equilibrium unemployment, as the workers reservation wage increases (Holmlund, 1998). Moreover, depending on the level of coordination and centralization of collective bargaining, this effect on unemployment can be fairly pronounced. Centralized and highly coordinated systems as well as fully decentralized systems are shown to be able to restrain insiders' pressure for wage increases; on the other hand, uncoordinated and fragmented bargaining is likely to lead to larger wage pressures (see Calmfors and Drifill, 1988, and more recently, Elmeskov et al, 1998). There may also be other interactions influencing the effects of unemployment insurance. For example, Mortensen and Pissarides (1999) suggest that an increase in the benefit replacement rate has a stronger impact on the equilibrium unemployment rate when payroll taxes are higher; Orszag and Snower (1998) also argue that there are complementary effects between unemployment benefits and payroll taxes.²⁷

The impact on persistence of unemployment: the interaction of income support programs with shocks. As shown recently by Blanchard and Wolfers (1999), adverse shocks have stronger or longer lasting impacts on unemployment due to their interaction with labor market institutions, unemployment insurance system and employment protection (including

²⁷ Interestingly, Elmeskov et al (1998) do not find a empirical support of the hypothesis that the combination of restrictive employment protection legislation and generous benefits leads to particularly high unemployment.

more generous severance pay) among them (their argument is summarized under the explanations of the rise of European unemployment above) .

Implications for program choice and design. Other things equal, the level of coordination and the degree of centralization of collective bargaining matters – the introduction of unemployment insurance is less likely to raise the equilibrium unemployment rate in an economy with a centralized and coordinated wage bargaining system, as well as in a fully decentralized system. Unemployment benefits also interact with payroll taxation. Moreover, via their interaction with adverse covariant shocks, more generous unemployment insurance/assistance and more protective employment legislation contribute to the persistence of unemployment.

5.2 Administrative capacity for program implementation

One important consideration when choosing an income support program is the availability of administrative capacity necessary for its implementation. Below we focus on the capacity to evaluate initial and continuing program eligibility, as well as to pay out benefits. Specifically, we discuss the capacity to generate and process information on (i) the payment of program contributions by or on behalf of the worker, (ii) his/her employment/unemployment status, job search effort, and incomes from other sources and assets of the worker, and (iii) his/her family circumstances – number of family members, as well as their incomes and assets, and of course, to pay out benefits.

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 systems, which typically require a long history of contributions for individual workers. Precisely this kind of information system is necessary for the administration of unemployment insurance, unemployment assistance, and UISAs.

While information technology is instrumental in maintaining records on premium payments, it is only of limited help when it comes to checking additional eligibility requirements under unemployment insurance and unemployment assistance programs. The need for additional screening of applicants arises from the fact that these programs are prone to moral hazard problems: the status of unemployment, coupled with sufficiently low family earnings in the case of unemployment assistance, trigger the payment of benefits – hence disincentives to take a job or to work longer hours (see above). 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 eligibility conditions under unemployment insurance and unemployment assistance 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, recent amendments in the unemployment benefit

law of Slovenia require that benefit recipients make themselves available for contacts by employment offices for three hours per day, but preliminary results show little effect on disqualification. 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 easily be 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 (see box 5.1 for evidence on transition countries, and OECD (2000) for evidence on OECD countries).

Box 5.1: Benefits disqualification in transition countries

Micklewright and Nagy (1996) 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.

Source: Vodopivec et al (2001).

Underscoring the importance of quality monitoring and enforcement, recent studies suggest that effective monitoring and the use of sanctions strongly reduce the average duration of unemployment benefit payments, and increase the transition rate to employment. In a recent review of the literature, OECD (2000) reports the results of studies on various OECD countries, which show that compulsory intensive interviews reduced the volume of benefit claims; that the increase of job search requirements led to reduction of the average duration of unemployment benefit payments; and that the imposition of the sanction on unemployed workers strongly raised the subsequent transition rate to employment. Moreover, in a theoretical search equilibrium model, Boone et al (2001) show that

monitoring and sanctions are welfare improving and suggest that optimal rate of sanctions are well above the ones typically observed in Europe.

The task of monitoring labor market status is even more difficult in developing countries. 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 sector activities, makes verification of the status of unemployment, as well as earnings of individuals, more difficult. The task of monitoring eligibility is somewhat easier in countries with interlinked administrative bases of individuals (see box 5.2 for examples of how modern information technology, coupled with the existence of large administrative, individual –level data bases, helps prevent fraud in Poland and Germany).

Box 5.2: Fighting fraud and reducing costs through the use of advanced technology

Advanced information and communication technology and the existence of interconnected administrative data bases can help prevent fraud and reduce administrative costs. Below are two illustrative examples:

(a) Improved monitoring of benefit receipt via cross-checking of various administrative databases. In Poland, a pilot management information project in the Poznan region reduces benefit leakage by checking whether unemployment benefit recipients have already taken a job. The screening is based on advanced communications capabilities among employment offices, on one side, and Social Security Administration and Tax Office, on the other. Estimates show that by reducing this leakage, the costs of the project will be paid back in about two years.

(b) Monitoring illegal employment. In Germany, staff of employment offices make field visits to check whether workers are legally employed. Equipped with computers and mobile phones, the employment office staff can log on to institutional databases from the field and check if a particular worker contributes to the unemployment insurance and pension funds, and whether he/she is receiving unemployment compensation.

Source: Leipold, Knut (2000).

In developing countries, however, such interlinked systems rarely exist, and other information technology of local government and public employment service offices is limited. Another matter is also whether the rules, even in the absence of information problems, are strictly enforced. Faced with the above described monitoring problems, a recently introduced Argentinean unemployment insurance system altogether avoids checking the continuing eligibility of their unemployment insurance recipients, but has developed the capacity to cross-check whether benefit recipients are also on social security payment rolls (box 5.3).

Box 5.3: Administrative hurdles and the introduction of unemployment insurance in Argentina

Argentina introduced its unemployment insurance system in 1992, following a macroeconomic crisis that raised the fear of large-scale, open unemployment. The total number of recipients is 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.

While the administration of benefits has seemingly proceeded smoothly (workers are informed of their eligibility and receive payments on a timely basis), the system 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. Through a newly introduced system 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. However, a far greater number of recipients are likely to be working in the informal sector, with no measures being taken to detect them and to take the benefit away.

Source: Mazza (1999).

While the monitoring of eligibility requirements under unemployment insurance and unemployment assistance in developing countries seems to be more challenging than in developed countries, their existing capacity is much worse. For example, none of the offices of the Filipino public employment service come close to the capacity necessary for checking a claimant's labor force status and job search efforts, and for means-testing. Even in more developed regions, the majority of these offices have only one employed worker, and the offices are active only in peak periods. Such offices may also be influenced by local chief executives and therefore (mis)used for political purposes. Administrative capacity for implementing public works programs is less demanding – and usually stronger, as such tasks have become routine for many local governments in developing countries.

Additional administrative costs can be expected under means-testing programs such as unemployment assistance, eligibility criteria for which also include testing income and assets of applicants and their families. To minimize leakages of program benefits to the non-poor, experience shows that means-testing may require significant resources. For example, screening of applicants for tuition fee subsidies and allowances at the University of the Philippines – a program that imposes similar information requirements to those under unemployment assistance – is carried out at a cost of P480 (around \$10) per applicant (Esguerra et al, 2001) – a cost comparable to the total per capita social sector spending in the Philippines! Large administrative costs are also reported by Subbarao et al (1996) for government cash transfers to the extreme poor – one peso for every two pesos transferred.

Implications for program choice and design. The administrative capacity to implement income support programs varies greatly across different programs. Some income support programs – severance pay, public works, and UISAs – have relatively modest informational and organizational demands, and adequate administrative capacity is usually found in developing countries. Other programs, above all unemployment insurance and unemployment assistance, require extensive and sophisticated information which often cannot be readily provided by the existing capacity of developing, particularly low-income, countries. In comparison to developed countries, eligibility monitoring is more demanding and costly – because of a larger informal sector, which provides more abundant informal employment opportunities, and weaker administrative databases, which prevent cost-effective methods of cross-checking benefit – receipt -- and the existing capacity much weaker.

The lack of appropriate administrative capacity to effectively monitor continuing eligibility and impose sanctions suggests some of the desirable design features of the unemployment insurance system. Under such conditions, the moral hazard problem which arises from asymmetric information is particularly prominent and insurance principles suggest that there should be a high level of deductibles and co-payment. In the case of unemployment insurance, this underscores the desirability of (i) limited duration of benefits, and (ii) declining level of benefits during individual unemployment spell (see the discussion on declining benefits in Chapter 6).

5.3 The characteristics of unemployment

When contemplating the introduction or reform of an income support program for the unemployed, it is worthwhile to examine the characteristics of unemployment – for example, the frequency and duration of unemployment and the characteristics of unemployed workers. As discussed above, the choice of an appropriate policy instrument depends on the nature of unemployment spells. Moreover, the provision of income security may only come at a cost in terms of efficiency or access to (formal) employment, so policymakers should know which groups of population are the beneficiaries of different programs, or are the most likely to benefit from their introduction or reform.

As argued by Gill and Ilahi (2000), it is important to know the nature of unemployment spells when judging the desirability of public income support programs. If unemployment spells are more frequent and shorter, self-insurance measures may be more appropriate; on the other hand, less frequent and longer unemployment spells speak in favor of public insurance programs.

There are also other characteristics of unemployment in developing countries that are worth considering when choosing income support programs:

- A peculiarity of low-income countries is that unemployment may not be more common among poor workers, that is, that members of poorer households may be less than proportionally represented in the ranks of the unemployed (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 (Balisacan, 1999). Although 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. 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.

- Moreover, in some low-income countries, the most deprived groups are found not among the unemployed, but among the underemployed (that is, among employed persons who desire to work additional hours in their present or other job, or to have a new job with longer hours). In the Philippines, these are mostly unskilled workers – self-employed subsistence farmers and fishermen, seasonal workers, and informal-sector workers (Esguerra et al, 2001). It is interesting to note that in contrast to unemployment, underemployment is higher in rural areas.

Implications for program choice and design. The above facts have important implications for both equity and efficiency aspects of income support programs. First, equity considerations suggest that the underemployed – not only the unemployed – should be regarded as an important potential client group for income support programs. Second, the efficiency effects of an insurance type of income support program are difficult to predict. The fact that poor workers prefer underemployment to unemployment suggests that moral hazard problems may figure prominently once insurance-type public income support programs are offered. Some workers who in the absence of unemployment benefits choose temporary jobs because they cannot afford to stay out of work (the underemployed) would prefer unemployment if offered unemployment benefits – that is, insurance would prevent them from taking self-protection measures. Such 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. On the other hand, if unemployment benefits contribute to more effective job search, that is, if the recipients find better paying jobs or find jobs quicker, this enhances efficiency.²⁸ In the absence of empirical evidence in developing countries, it is not possible to make firm conclusions. Third, if unemployment spells are less frequent and longer self-insurance measures are less adequate and public insurance programs called for.

²⁸ According to Klassen and Woolard (2001), the absence of unemployment benefits in South Africa affects household formation and residential choices in ways that are detrimental to job finding. The system forces the unemployed to base their location decisions on the availability of economic support – generally available in rural areas, often in parental households – rather than on the availability of job openings. Klassen and Woolard thus conclude that the absence of unemployment benefits may not only lower welfare of the unemployed and their dependents, but it may also not reduce unemployment duration – and may actually increase it.

5.4 The size of the informal sector

The informal sector is a pervasive and persistent economic feature in most of the developing world, particularly in low-income countries, contributing significantly to employment creation, production, and income generation.²⁹ Recent estimates of the size of the informal sector in developing countries in terms of the share of non-agricultural employment range roughly between a fifth and four-fifths. In terms of its contribution to GDP, the informal sector accounts for a quarter to two-fifths of annual output in developing countries in Asia and Africa. The importance of the informal sector as a source of employment and income is brought into sharp relief when juxtaposed against a sluggish formal private sector and especially a shrinking public sector as is the case in several developing countries.³⁰ Consequently, much of the slack in the labor force, particularly in urban centers, is absorbed by the informal sector. Furthermore, during economic crises, the informal sector often acts as a “shock absorber” for the labor market, providing employment for numbers of workers displaced from formal sector jobs as evidenced in the recent economic crisis in South-east and East Asia.

Informal sector employment is characterized by a high degree of insecurity. As shown by Arango and Maloney (2000) for Argentina, the probability of an informal sector worker to become unemployed is double that for a formal sector worker. The adverse income and consumption consequences of unemployment are also more severe than in the formal sector as income support measures for the unemployed are typically lacking. Of particular concern is the lack of statutory social security coverage of informal sector workers in the developing world, especially since they constitute a significant proportion of the labor force if not the majority. Van Ginneken (1999) reports that coverage is lowest in sub-Saharan Africa and South Asia, roughly between 5 to 10 percent of the labor force. Other regions have higher coverage rates but also exhibit high intra-regional variation (Latin America: 10 to 80 percent; South-east and East Asia: 10 to 100 percent; and Central and Eastern Europe: 50-80 percent). Moreover, trends in social security coverage across the developing world show wide variation – coverage is generally on the decline in sub-Saharan Africa and South Asia, level in Latin America, and on the rise in South-east and East Asia.

Being excluded from programs whose eligibility is conditional on social security contributions, workers in the informal sector are much more vulnerable to the adverse effects of unemployment than workers employed in formal sector. Even small disruptions to their income flows can cause a severe, sometimes permanent, deterioration in their economic circumstances. Although they may have access to public works, informal sector workers and their households have been largely left to their own devices.

²⁹ The informal sector is defined in various ways. For statistical purposes, informal economic activities are generally defined on the basis of their legal organization (unincorporated enterprises). An approximate definition often used in household and labor force surveys is the size of the enterprise -- firms with workforces with 5 or less workers, for example, are considered informal. For a more extensive discussion on definitions, see ILO (2000).

³⁰ It has been argued that job creation in the formal sector is inhibited partly by the high costs of social security contributions, which makes “informality” a more attractive option.

Implications for program choice and design. The existence of large informal sector has important implications for both the design and mix of income support programs. First, a large informal sector underscores the importance of programs which are available to workers in the informal sector, particularly as many of these workers are less able to self-protect than formal sector workers (see below). Reinforcing the importance of wide access to income support programs is the fact that the informal sector can be viewed as an “unregulated entrepreneurial sector,” which itself generates many unemployed (Arango and Maloney, 2000). Second, given abundant and diverse employment opportunities in the informal sector, the need for monitoring the continuing eligibility of benefit recipients (particularly availability for work) is likely to be large.

5.5 Inter-household transfers

In many economies, private transfers importantly contribute to consumption smoothing and thus represent a mechanism of social risk management that should not be overlooked. For example, in the much studied case of the Philippines, Cox and Jimenez (1995) showed that in 1988, transfers generally flowed from rich to poor households and they accounted for 12 percent of the overall income of households. Urban households in the lowest quintile benefited most – their income increased by 80 percent as a result of the transfers. Absent these private transfers, income poverty rates would have been a third higher. The scope and intensity of inter-household transfers was uneven across regions. Below we examine the nature of such transfers (primarily in the Philippines), and then draw implications for the design of income support programs.

Using detailed data on gifts, loans, and asset sales, Fafchamps and Lund (1997) find that transfers among rural Filipino households are triggered by the contingency of a shock (such as the loss of work or crop failure), and they claim that the system is best described as a system of quasi-credit. In this system, mutual insurance is provided by tightly knit networks of friends and relatives through flexible, zero-interest informal loans, combined with pure transfers. Mutual insurance does not appear to take place at the village level; rather, households receive help primarily through networks of friends and relatives. This highlights the possibility that even the proximity and familiarity provided by living closely together may not suffice to provide reliable modes of monitoring, and to ensure willingness to reciprocate transfers in the future. Loans are taken for consumption purposes. Most borrowers and lenders have exchanged loans before, and many have switched roles in the transaction. Indeed, having provided transfers to other households entitles the provider to call on the support of the borrower once (s)he, in turn, requires support. Few loans require collateral or have a set repayment schedule, and loan contracts are rarely interlinked with other contracts. The majority of informal loans, 80 percent, carry no interest charge.

Fafchamps and Lund (1997) reject models of risk sharing that portray informal lending as an efficient mix of perfectly enforceable credit and insurance contracts: full insurance cannot be rejected for funerals and for the unemployment of the household head or his or her spouse, but it can be rejected for all other categories of risk such as those associated with acute sickness and mild sickness. They also find that poor households,

whose capacity to reciprocate is limited by their poor human capital endowments, may not receive as much support as they may need.

An interesting insight into the crowding out of private transfers by a public program is provided by Cox and Jimenez (1995). Based on empirical estimates of a private transfers function, they simulate the effects of the introduction of unemployment insurance in the Philippines, assuming a 50 percent replacement rate. Their simulations show that the reduction of private transfers would erode 91 percent of the income received from the public program, yielding very little net gain. As mentioned above, Attanasio and Rios-Rull (2000) show that the introduction of unemployment benefits may even be welfare-reducing, because the existence of public insurance program may destroy the social fabric necessary to support private insurance arrangements and thus crowd out private transfers. Consistent with this argument and also pointing to the cultural differences among countries as determinants of the size of private transfers, Bentolila and Ichino (2000) show that despite low unemployment benefits, the unemployed reduce their consumption less in the Mediterranean countries than in Germany, the U.S. and the U.K. In the absence of other compelling explanations, they attribute this to higher private transfers in the Mediterranean region.

Implications for program choice and design. The above findings have diverse and far-reaching consequences. First, although they may be sizeable, private transfers are vulnerable to covariant risks, and offer only limited insurance against income shocks, particularly to the poor. This suggests that there is scope for public income support programs, including those focusing on the unemployed. Second, the size and nature of private transfers, and the likely substitution effects of public insurance programs, have to be considered before such programs are introduced. Simple analyses that do not account for private transfer responses to the expansion or introduction of public income support programs exaggerate the effectiveness of these programs. Analysis suggests that these responses could consist of sharp cutbacks in private transfers, particularly for programs where the main beneficiaries are likely to be the non-poor, whose transfers are more responsive to income shocks. If the introduction of a public system of insurance breaks down the habit of self-help, the overall effect may be welfare reducing. Third, regional unevenness of the size of transfers suggests that some regions are more in need of supplementary public programs such as public works than others (indeed, the relative size of inter-household transfers may be taken as one of the indicators of targeting of such programs).

Table 5.1: Filipino household responses during the Asian financial crisis

Income decile	Number of responses	Percent of households responding to crisis by:					
		Changing eating pattern	Taking children out of school	Migrating to city or other countries	Receiving assistance from friends/relatives	Receiving assistance from gov't	Increasing working hours
Poorest	2,256	56.7	12.4	7.8	16.5	10.7	37.5
2	2,223	52.3	9.3	5.4	17.1	8.8	36.8
3	2,211	50.7	7.3	5.4	16.3	8.4	33.6
4	2,206	51.0	8.7	5.2	17.0	6.8	33.1
5	2,180	47.8	7.1	4.5	17.2	5.9	29.4
6	2,155	48.3	5.6	3.8	16.4	5.7	27.0
7	2,138	47.0	5.0	3.7	15.0	4.5	26.1
8	2,125	44.1	3.5	3.4	12.5	2.9	22.3
9	2,097	41.4	3.2	3.1	13.8	3.9	23.1
Richest	2,011	33.3	1.2	3.5	12.0	2.6	18.2
Total	21,602	47.5	6.4	4.6	15.4	6.1	28.9

Source: Esguerra et al (2001).

5.6 Non-social insurance and self-protection

While non-social insurance and self-protection mechanisms may provide adequate protection against income shocks for high-income workers, many of the other workers in developing countries, particularly those employed in the informal sector, remain vulnerable to even small income shocks. For example, surveys show that during the recent East Asian crisis, the poor in the Philippines had to resort much more frequently than the rich to changing eating patterns, taking children out of school, working longer hours, and migrating to urban areas or other countries (see table 5.1). World Bank (2000) also shows that the ability of the poor to maintain their consumption in the face of crisis-induced income shocks is more limited than the ability of the non-poor.³¹ Moreover, different types of shocks frequently result in the exhaustion of savings set aside for consumption smoothing, and – if they are covariant – in the reduction of the ability of households to provide support to each other.

The savings and wealth of the unemployed offer inadequate self-insurance even in developed economies. For example, for the United States, Gruber (1999) finds that the median worker who becomes unemployed has sufficient financial assets to replace 75 percent of his (her) realized income loss. He finds that the wealth of older and white workers relative to income losses from unemployment is larger, and that wealth holdings are much

³¹ The findings of de Ferranti et al (2000) deviate somewhat from the above ones – they find that the poor are affected more than the rich when the shocks are big, but vice versa when the shocks are small. They also report that in Latin America, school enrollment is insensitive to aggregate economic fluctuation.

less adequate for minorities and for those with long unemployment spells. On the other hand, evidence also shows that unemployment benefits do crowd out precautionary savings. For example, Engen and Gruber (cited in Gruber 1999) find that a 10 percent increase in the generosity of benefits reduces savings by 2.8 percent, and somewhat smaller elasticity (-0.18) is reported by Bird and Hagstrom (1999) for both unemployment insurance and means-tested benefits.

Workers in the formal sector have access to consumer credit, at least those higher in the income distribution, and larger companies also frequently have private retirement, education, accident insurance, and/or life plans for their workers. But access to credit and to fringe benefits is highly uneven. For example, in the Philippines, only 30 percent of the highest-paid workers have access to consumer credit, and they tend to be concentrated in metropolitan Manila and other regions in its vicinity; outside of these regions, only about 10 to 15 percent of workers have access to consumer credit (Esguerra et al, 2001). These magnitudes are also indicative of the relative adequacy of savings that poor households are capable of making. For poorer workers in urban areas, pawnshops are a means to generate cash on the basis of assets they may have accumulated – at very high interest rates.

Among poor workers in rural areas, insurance takes less institutionalized modes. Because rural financial markets are segmented and highly incomplete, in many countries only a minority of small farmers can obtain agricultural loans from banks and other lending institutions, and crop insurance is very limited. Covariance of risk and moral hazard problems make the establishment of credit and insurance programs particularly difficult, and the poor experience of programs in rural areas is testimony to this difficulty (Hazell et al, 1986). Often farmers resort to costly informal substitutes of precautionary saving such as distress sales of productive assets and accumulation of farm animals and excess grain supplies. According to Rozensweig and Binswanger (1992), “investment portfolios of small farmers reflect their difficulties in smoothing consumption in the face of high risks.”

There are also specific informal insurance mechanisms that have developed in some countries. For example, in the Philippines, one important mechanism of informal insurance used by small farmers is share-tenancy, which allows tenants to borrow from their landlords using their share in farm produce as collateral. This arrangement reduces the magnitude of the income loss to the farming household if there is crop failure.

It is important to bear in mind that in dealing with income shocks, it is *the household*, rather than just the individual, which is the locus of distress – and thus the response to the shock affects all household members. For example, in the Philippines during the recent East Asian crisis, predominantly male industries (agriculture, manufacturing, and construction) were more adversely affected, and male unemployment increased more than female. This triggered the entry of secondary income-earners into the labor markets – particularly of youths, resulting in significant declines in high school enrollment rates.

Implications for project choice and design. The ability of low-income workers and farmers to buy insurance in the market, and to self-insure and self-protect, is limited. While

the presence of social insurance is likely to reduce their incentives to self-protect (for example, to take informal jobs) and to self-insure (for example, to save for precautionary reasons), it would also reduce their vulnerability to income shocks. Interestingly, in Brazil, unemployment benefits are also found to foster self-protection via promoting self-employment (Cunningham, 2000). Possible other ways to improve self-insurance and self-protection include programs which address financial and insurance markets imperfections (such as replications of Bangladesh's Grameen Bank savings programs), and various types of publicly supported livelihood programs. Such programs not only encourage group savings institutions, they also help participants to "graduate" from being primarily beneficiaries of grants into entities capable of tapping the formal financial system. In general, strengthening the financial sector would also promote self-insurance by allowing individuals/households to hold more diversified saving portfolios and thus increase the attractiveness of precautionary savings. In addition, to discourage counterproductive coping mechanisms such as taking children out of school and reducing childcare, income support programs could be targeted at vulnerable family members of the unemployed in the form of, for example, schooling subsidies.

5.7 The nature of shocks

The choice of the income support programs also depends on the nature and frequency of the shock typically faced by a given country, in other words, on the type of unemployment risk which these sources represent. Apart from the idiosyncratic risk of unemployment resulting from the ongoing, regular process of labor reallocation in an economy (when an individual's probability of becoming unemployed is unrelated to the probability of others), there are also other significant types of risks connected by other sources of shocks. Below we will discuss shocks associated with macroeconomic volatility, structural/technological shocks, and geography and climate.

Before discussing these sources of shocks, it is useful to present a **typology of unemployment risks**. Unemployment risk can be idiosyncratic (when an individual's probability of becoming unemployed is unrelated to the probability of others), or covariant (when an individual's probability is related to the probability of others). Covariant risk can be further categorized as the risk at the middle level ("meso-risk"), for example, the risk affecting workers of an enterprise or industry in need of structural adjustment, and the risk at the macro level ("macro-risk"), affecting the whole economy, for example, recessions. Moreover, risks can be also catastrophic (large and rare) and non-catastrophic (modest and frequent).

Macroeconomic volatility. Many countries are subject to large swings in economic activity, with recessions resulting in significant reductions in employment and increases in unemployment. Vulnerability to macroeconomic volatility is underscored by trade liberalization and the ensuing increase in international competition, and the spreading of globalization in general. A further source of macroeconomic instability can be capital account liberalization and exchange rate misalignment. The recent Asian financial crisis also highlighted the problem in a part of the world that once seemed to be immune to recessions.

Structural/technological shocks. Economies may experience radical changes in input and factor prices (OPEC shocks in the seventies), systemic and political changes (transition economies), or technological shocks (for example, reduction of TFP growth for developed European countries in the last 30 years) that put workers at risk of unemployment. The magnitude, duration, and frequency of such shocks have to be considered when designing income support programs – as well as the interaction of such programs with the shocks themselves (see above).

Geography and climate. In some developing countries, geography and climate cause significant employment and income insecurity. For example, the drought brought by the El Niño phenomenon resulted in a strong decline in agricultural production in South East Asia, rendering many small farmers completely defenseless. For countries in the monsoon belt, another significant source of job and income insecurity is typhoons.

Implications for program choice and design. Not all programs are equally suited for all types of unemployment risks, and the selection of programs should take into account the prevalence and severity of shocks typically confronted. While individuals tend to self-insure against relatively frequent and modest shocks (Gill and Ilahi, 2000), they often cannot take effective protective measures if shocks are relatively large and rare – particularly if they are of a regional or covariant nature. Public systems – through the ability to pool resources across larger groups – are called for, and there should typically be a menu of such programs, so as to address the different types of shocks and the different abilities of individuals to self-insure and self-protect. For example, during recessions, many unemployed exhaust their unemployment insurance benefits, and fewer first-time job-seekers find jobs without a period of initial unemployment. Additional programs may be needed – for example, public works and public training programs (note that the latter programs also encompass other objectives besides pure income transfer). Similarly, in dealing with meso-risks, special redundancy programs may be put in place to promote enterprise restructuring. The occurrence of natural calamities points to the need for flexible, quickly deployable programs (for example, public works).

5.8 Cultural and political factors

There may be many other factors which determine the choice of income support systems for the unemployed, and influence their functioning. For example, due to differences in social norms and culture, societies differ in their propensity to resort to informal mechanisms (such as reciprocal gift-giving) to deal with economic hardships. In transition economies, for example, decades of state paternalism have reduced private transfers. As a consequence, the introduction of formal, public income support systems for the unemployed may not have crowded out private transfers on a large scale – nor displaced existing social networks that would have supported private transfers. Moreover, in some societies, the receipt of state transfers – or participation in public works – may be stigmatizing, and redistributive programs opposed. Countries also differ according to how susceptible they are to corruption.

Implications for program choice and design. Income support systems must be attuned to the prevailing social norms and culture, and take advantage of existing institutions. For example, programs which are more prone to “political risk” must be avoided in countries with more corrupt governments. Similarly, targeting income support to the poor through public works would benefit from presenting the program as being rooted in a tradition of rural communities’ collective support, such as is the tradition of *bayanihan* in the Philippines.

5.9 Concluding remarks

This chapter singled out country-specific features which warrant particular attention when introducing or improving public income support programs. The justification for this discussion is the danger that countries may adopt solutions which work well in other countries without carefully examining which prerequisites are needed and which conditions are conducive for their successful functioning – and without anticipating the likely consequences when such prerequisites and conditions are missing.

The conclusion that the rule “one size fits all” is not valid applies even more forcefully to developing and transition countries. First, these countries may deviate significantly from the typical labor market and other institutional features under which income support programs have predominantly been “tested” and their properties (as known in the literature) established. Second, the desirability of alternative income support programs depends crucially on the interactions of these programs with other existing social risk management mechanisms, which may be very different in developing and transition countries. And third, these countries may lack the capabilities necessary for the smooth and effective administration of income support programs for the unemployed.

Based on the discussion of this chapter, table 5.2. summarizes key considerations about the influence of country-specific features on the applicability of alternative income support programs for the unemployed. We will use these evaluations to provide some guidelines for choosing appropriate income support programs for the unemployed, the task we tackle in the next chapter.

Table 5.2: Design and implementation criteria and the choice of income support programs

	Unemployment insurance	Unemployment assistance	Severance pay	UISAs	Public works
Interactions with labor market institutions and shocks	<ul style="list-style-type: none"> • Benefits are less likely to raise equilibrium unemployment rate in an economy with centralized and coordinated wage bargaining system, as well as in a fully decentralized system. • Due to interaction with shocks, more generous unemployment insurance contributes to stronger or longer lasting impacts on unemployment. • Benefit replacement rate has a stronger impact on the equilibrium unemployment rate when payroll taxes are higher. 	Similar to UI.	Due to interaction with shocks, more protective employment legislation contributes to the persistence of unemployment.		
Administrative capacity for program implementation	<ul style="list-style-type: none"> • Extensive and sophisticated informational requirements for the monitoring of continuing eligibility. • Cross-linking of administrative databases is an important advantage. 	Similar to UI. Additional capacity needed for means testing.	<ul style="list-style-type: none"> • Modest informational demands for administering the benefit. • May impose a burden on the legal system to resolve disputes about the cause of separation. 	Similar informational demands as for pension systems.	Less demanding informational and organizational requirements.

Table 5.2: Design and implementation criteria and the choice of income support programs (cont.)

	Unemployment insurance	Unemployment assistance	Severance pay	UISAs	Public works
The characteristics of unemployment	<ul style="list-style-type: none"> • More appropriate if unemployment spells are less frequent and longer. • If underemployment is large, moral hazard problems may be pronounced. 	Similar to UI.		More appropriate if unemployment spells are more frequent and shorter.	<ul style="list-style-type: none"> • More suitable, if unemployment has strong seasonal component. • Potential to serve the underemployed.
	Unemployment insurance	Unemployment assistance	Severance pay	UISAs	Public works
The size of the informal sector	Abundant informal sector employment opportunities increase the costs of monitoring of the continuing eligibility of benefit recipients.	Similar to UI.		Potential to serve the informal sector workers.	Potential to serve the informal sector workers – many unemployed come from the informal sector and are ineligible for contribution based public programs.
Inter-household transfers	Crowding out likely (reduction of private transfers may be welfare reducing).	Crowding out somewhat less likely than under unemployment insurance, because transfers to poor offer more limited insurance.	Crowding-out likely.	Crowding-out likely.	Regional unevenness of the size of transfers suggests that some regions are more in need of supplementary public programs such as public works than others.

Table 5.2: Design and implementation criteria and the choice of income support programs (cont.)

Non-market insurance and self-protection	<ul style="list-style-type: none"> • Benefits are likely to reduce incentives to self-protect (for example, to take informal jobs) and to self-insure (for example, to save for precautionary reasons). • UI fosters self-employment in Brazil (Cunningham, 2000). 	Similar to unemployment insurance.	Some evidence that severance pay fosters self-employment.		Particularly valuable to the poor in rural areas, who are especially vulnerable and not eligible to public programs requiring contributions.
The existence of shocks	Suitable if country is prone to sectoral or regional, and not too large aggregate, shocks.	Similar to unemployment insurance.		Suitable if shocks are modest and frequent.	Suitable in countries with frequent natural disasters.
Cultural and political factors	Less appropriate in a country prone to corruption and political risk.	<ul style="list-style-type: none"> • Some societies may stigmatize beneficiaries. • Less appropriate in a country prone to corruption and political risk. 	Less vulnerable to political risk than most other programs.	<ul style="list-style-type: none"> • Less vulnerable to political risk than most other programs. • The program can upgrade already existing programs and institutions. 	The tradition of collective support in rural communities benefits the program.

Source: Derived from the discussion in Chapter 5.

6. IMPROVING INCOME SUPPORT SYSTEMS FOR THE UNEMPLOYED IN DEVELOPING COUNTRIES

The purpose of this chapter is to provide guidelines for developing and transition countries about choosing among various income support systems for the unemployed, as well as about some of their design features. The discussion draws from previous chapters and, in particular, from the two above-established sets of criteria. To repeat, one set consists of performance criteria and is based on the effects of alternative systems reviewed in Chapter 4. These effects reflect “stylized” properties of the various programs, established under conditions typically prevailing in developed countries. Once particular features of individual countries are taken into account, these programs may yield substantially different results. We therefore also rely on a second set of criteria, the ones discussed in Chapter 5 – design and implementation criteria. This set judges alternative programs by how they fit countries’ “initial conditions” such as labor market institutions, capacity to administer a program, and the types of shocks typically faced by a country.

In continuation, we first discuss the strengths, weaknesses, and country specific circumstances which are particularly conducive to good performance of alternative income support programs for the unemployed, and summarize evaluations for all programs. We then discuss some important design features of unemployment insurance, and present options for how to improve income support for informal sector workers. We conclude with general principles to be followed when improving income support for the unemployed.

6.1. Choosing the right system

Under what circumstances is it desirable to introduce unemployment insurance or some other income support system for unemployed workers? Below we offer some guidelines, focusing on unemployment insurance, unemployment assistance, unemployment insurance savings accounts, and public works programs.

Table 6.1: Summary of factors affecting the choice of income support system for the unemployed

	Strengths	Weaknesses	Key country specific features conducive to introduction and successful performance
Unemployment insurance	<ul style="list-style-type: none"> • Provides good protection (wide pooling) • Performs well under idiosyncratic, sectoral, and regional shocks • Acts as an automatic stabilizer and thus moderates the severity of contractions 	<ul style="list-style-type: none"> • Creates reemployment disincentives • Increases the equilibrium unemployment rate • Contributes to the persistence of unemployment • Susceptible to political risk • Does not cover informal sector workers 	<ul style="list-style-type: none"> • Strong administrative capacity to monitor continuing eligibility • Modest informal sector (lower costs of monitoring, less sensitive reemployment probability to job search) • Low political risk • Decentralized or encompassing wage bargaining structure – wage moderation effects • Low total tax wedge • Low share of underemployed workers • Low incidence of private transfers (unemployment insurance may be welfare-reducing if it breaks down social fabric that maintains private transfers)
Unemployment assistance	<p>In comparison to unemployment insurance:</p> <ul style="list-style-type: none"> • allows for the participation of workers with little prior work experience and informal sector workers • more progressive (other strengths similar) 	<ul style="list-style-type: none"> • The failure to exclude persons without prior work experience (and hence without payments of program contributions) may undermine the program’s fiscal sustainability • In comparison to unemployment insurance: <ul style="list-style-type: none"> • offers lower protection for high income workers than unemployment insurance • imposes larger administrative costs • Reduces the labor supply of family members • May stigmatize participants 	<p>Similar as under unemployment insurance, additional capacity needed for means-testing</p>

Table 6.1: Summary of factors affecting the choice of the income support system for the unemployed (cont.)

	Strengths	Weaknesses	Key country specific features conducive to introduction and successful performance
Unemployment insurance savings accounts (UISAs)	<ul style="list-style-type: none"> • Improved labor market incentives • Good protection, if combined with public insurance • Potential to attract informal sector workers • Being payable also in cases of voluntary separations, the system encourages labor reallocation and cuts on the litigation costs • <i>Low political risk</i> <i>Remark: Largely unexplored and insufficiently tested system</i> 	<ul style="list-style-type: none"> • Only intertemporal risk pooling of an individual (no cross-section pooling) • Allowing individuals to borrow from his or her UISA (i) generates incentives to withdraw from a formal sector and find a job in the informal one, thereby avoiding the repayment of the debt, and (ii) reduces the gains in terms of reemployment incentives • Requires relatively well functioning financial sector • Larger administrative costs 	<ul style="list-style-type: none"> • Modest, non-persistent shocks (if this is not the case, a combination with cross-section pooling via public insurance desirable) • Self-policing (of reemployment incentives) imposed by the UISA is a bigger advantage given the weak monitoring capacity of developing countries • The conversion of mandatory forced-savings type of schemes existing in developing countries to the UISA system would facilitate its introduction • The introduction of personal accounts would reduce non-payments of employers of social security contributions
Public works	<ul style="list-style-type: none"> • Effective in reaching the poor • Good targeting properties • Substantial capacity to redistribute income from the rich to the poor • Potential to attract informal sector workers • Allow flexible and fast response • Administratively less demanding 	<ul style="list-style-type: none"> • High proportion of material costs • Possible stigmatization of participants • Difficult to raise funding during crises • Because of the program's redistributive character, it is difficult to gain political support, so some leakage to the non-poor may be necessary • Possible problems with the maintenance of infrastructure built through public works 	<ul style="list-style-type: none"> • Public works can attract informal sector workers, an important consideration given that the informal sector is large and pervasive • Ability to attract workers with low forgone earnings • Undeveloped insurance and financial markets prevent market and self-insurance, and self-protection • The existence of large mono-crop areas make large segments of the population vulnerable to cyclical and structural shocks, and similar exposure is caused by geographic and climatic shocks • Require less complex administration, and may be quickly set up in areas affected by various shocks. • Can benefit from traditions and values which emphasize cooperation and collective support

Table 6.1: Summary of factors affecting the choice of the income support system for the unemployed (cont.)

	Strengths	Weaknesses	Key country specific features conducive to introduction and successful performance
Severance pay	<ul style="list-style-type: none"> • Does not require sophisticated administration 	<ul style="list-style-type: none"> • Does not cover informal sector workers • Reduces employment rates • Hinders access to jobs by marginal groups. • Reduces labor market dynamics • Creates significant litigation costs 	

Source: Based on evaluations provided in Chapters 4 and 5.

(a) What conditions are conducive to good performance of unemployment insurance?

The above evaluation of the unemployment insurance system suggests the following strengths of the program (they are summarized, together with weaknesses and key country specific features conducive to the successful performance of the program, in table 6.1):

- Above all, thanks to the pooling of resources across a wide base, it provides good protection by enabling a high degree of consumption smoothing for all categories of workers who are covered under the system.
- It performs well under idiosyncratic, sectoral, and regional shocks.
- By automatically injecting additional resources – and reducing taxes – in times of recessions, unemployment insurance acts as an automatic stabilizer and thus moderates the magnitude of the downturn.

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.
- By interacting with adverse shocks, the program contributes to the persistence of unemployment.
- Because the program is non-transparent, it may create large unfunded liabilities, and since the funds are held by the government, it is susceptible to political risk.
- The protection is limited to formal sector workers only.

Moreover, some of the conditions conducive for good performance of formal insurance programs are generally missing in the case of unemployment insurance, which dictates some of the design features of the program. In general, conducive conditions for insurance include the presence of large, rare, idiosyncratic shocks, and the absence of moral hazard. In contrast, unemployment insurance usually operate in environments with (i) large variations in the probability of risk – for some groups, the likelihood of becoming unemployed is very high, and for some others, very low; (ii) extreme asymmetric information and hence moral hazard problem; and (iii) highly covariant risk. Beside the need for public provision of unemployment insurance (see above) these considerations point to some of the desirable features of unemployment insurance. In particular, because frequent shocks are better insured through self-insurance, public insurance should not crowd out self-insurance completely. It follows that formal programs of unemployment insurance should impose, in insurance parlance, a non-trivial level of deductibles and co-payment, for example by limiting the duration of unemployment benefits and by imposing a declining level of benefits in time. The same conclusion is arrived at from moral hazard considerations.

Moreover, there is a host of country specific considerations that influence the choice of the program. Let us mention some key institutional and labor market features which are conducive to its introduction and successful performance:

- Strong administrative capacity to monitor initial and particularly continuing eligibility. The stricter the monitoring of the behavior of the recipients, the lesser the disincentives created by the provision of insurance.

- Modest size of the informal sector. The higher the informality of the economy, the more abundant are opportunities for undeclared paid work, and thus the higher the costs of monitoring.
- Environment not conducive to political risk (see above).
- Decentralized or encompassing wage bargaining structure. Unemployment insurance in conjunction with fragmented and uncoordinated collective bargaining is likely to generate strong pressures on wages. In contrast, decentralized and encompassing wage bargaining structure are conducive to wage moderation.
- Low total tax wedge. The higher the total tax wedge, the stronger the impact of benefits on the equilibrium unemployment rate.
- Low share of underemployed workers. The existence of benefits may attract the underemployed into insured unemployment and thus reduce their incentives for self-protection.
- Low incidence of private transfers. If the introduction of public insurance breaks down the habit of self-help among local communities (“extended families”), replacing private transfers by social insurance may be welfare-reducing.

If the above circumstances are not fulfilled, the system does not perform all that well: it creates larger inefficiencies and/or lower welfare gains. For example, reemployment incentives depend crucially on the monitoring capacity of a country. This capacity determines how strictly the conditions of initial eligibility and, perhaps even more importantly, of continuing eligibility are imposed. As the experience with Argentinean unemployment insurance suggests (see above), the capacity for screening the initial eligibility has not been a problem (the existing capacity of other social protection programs has been used) – but the country has still to acquire effective capacity to monitor continuing eligibility. And as pointed out above, OECD (2000) reports that effective monitoring and the use of sanctions can make a difference – they strongly reduce the average duration of unemployment benefit payments and increase transition rates to employment. Deficient monitoring thus not only creates leakages and thus adds to overall costs (and thus may have also indirect effects on unemployment), but it also undermines the legitimacy of the program, as the system *de facto* ignores its own rules.

How do such “child diseases” affect the decision to introduce unemployment insurance? For example, prompted by increased exposure to foreign markets and fearing future international crises, some developing countries (Thailand and the Philippines among them) are contemplating introducing unemployment insurance. According to some assessments, its immediate introduction to a country like the Philippines would be premature, but the system should be seriously considered in the medium term, once some preconditions are fulfilled (see box 6.1).

Box 6.1: Feasibility of unemployment insurance introduction to the Philippines

In a recent paper commissioned by the ILO, Yoo (2001) examines the applicability of unemployment insurance to the Philippines. For the following reasons, he recommends against its immediate introduction:

- the lack of consensus either nationally or by social partners that unemployment insurance is a top policy priority;
- concerns on the part of employers and employees about its affordability; and
- concerns about the financial stability of a system, given the low level of industrialization and per capita income in the Philippines.

Yoo proposes the introduction of unemployment insurance in the medium-term, and cites a number of pre-conditions (in fact, he proposes a more comprehensive insurance which would also provide some active measures, as it does in South Korea). His main points include:

- an immediate social protection priority of developing social assistance programs for the poor;
- an immediate economic priority on creating the conditions for sound and continuous growth;
- national dialogue among the social partners to determine the best unemployment benefits system for the future; and
- capacity building both in terms of (i) employment and training systems, and (ii) record-keeping and fee-collection within the social security administration.

Source: Betcherman (2001).

Similar is the assessment of Gill and Ilahi (2000) for Latin American countries. Noting that many countries lack the capacity to run an efficient unemployment insurance system, they argue that although introducing unemployment insurance should be a long-term goal of these countries, it is either infeasible or too costly a strategy for the medium term. They propose that the government should augment other instruments such as self-insurance to overcome the lack of market insurance in the medium term.

In box 6.2, we look at the introduction of unemployment insurance, this time emphasizing welfare and efficiency properties. Undoubtedly, many workers would benefit from such an introduction – but in a low income country, the likely beneficiaries tend to be concentrated among already better off segments of the population, and its introduction would likely bring efficiency losses, with further negative distributive consequences. Note, however, that the magnitudes of both the benefits and costs of introducing the program depend strongly on specific circumstances of individual countries, the fact that we emphasize throughout the report.

Box 6.2: Benefits and costs of introducing unemployment insurance

On the benefit side, the introduction of unemployment insurance provides welfare gains in terms of smoothed consumption patterns. This increase of security is certainly valued: for example, Bird (1995) estimates that individuals are willing to pay 5-9 percent of their disposable income for insurance that would smoothen their incomes (estimates for the U.S. and Germany).

These positive, direct effects on welfare have to be qualified in several ways. First, because the program is limited to the formal sector, the beneficiaries are limited to a subset of workers who, by and large, belong to better-off segments of the population. Indeed, as shown above, the likely effect of unemployment insurance on the reduction of income inequality is small. Second, unemployment insurance brings little reduction of poverty, as the likely beneficiaries – particularly in a low-income country – are concentrated in the non-poor segments of the population. And third, the net effect of benefits on individuals' welfare depends, among others, on the displacement of private transfers by the public program; replacing private transfers by social insurance may be welfare-reducing.

The welfare benefits of introducing unemployment insurance have to be weighed against the likely efficiency costs, above all:

- disincentives for leaving unemployment and higher equilibrium unemployment in general, and
- more persistent unemployment.

Note that these efficiency effects also have negative distributive consequences. Any increase of unemployment due to the introduction of the program would most likely affect the worse-off workers in the society: marginal workers in the formal sector (such as young workers and workers on fixed-term contracts) and informal sector workers, hindering their access to jobs.

To summarize: in light of the above, how suitable candidates are developing countries for the introduction of unemployment insurance? Typically, the administrative capacity of developing countries (even in upper-middle income group, as is the case with Argentina) lags behind the capacity of developed countries. This means that the system may not perform well from an efficiency viewpoint, particularly if low quality of administration is coupled with unfavorable labor market conditions (such as high total tax wedge and a wage mechanism not conducive to containing pressures). High informality contributes to negative effects both from an efficiency and distribution viewpoint, and high political risk (which is often the case) from a politiceconomy viewpoint. The case for the introduction of unemployment insurance in developing countries is thus less compelling than it is in developed countries. Transition countries, having relatively better administrative capacity, a more limited informal sector, and lower private transfers, were undoubtedly right to introduce this system, but as box 6.3 argues, adoption of the traditional Western-style program may not have been the best choice.

Box 6.3: Was Western-style unemployment insurance the best option for all transition economies?

For the following two reasons, the likely answer is “no:”

- Evidence shows that the new unemployment insurance systems have created disincentives for reemployment. (Given the experience of developed economies, other possible negative effects include the increase of overall unemployment, particularly in countries with strong unions, higher share of long-term unemployed, lower job creation capacity, and slower labor reallocation.)
- These systems have had, at best, only mildly progressive effects on income redistribution.

To improve incentives, make benefits more progressive, reduce fiscal costs, and simplify the administration, flat benefits – such as those introduced in Estonia and later also in Poland – would probably be a better option.

Source: Vodopivec et al (2001).

As shown above, the case for introducing unemployment insurance system in developing countries is less compelling than it is in developed ones. How appealing are, then, alternative systems? Below we discuss two of them: unemployment assistance and unemployment insurance savings accounts.

(b) Unemployment assistance: how attractive is means-tested targeting?

The distinguishing feature of unemployment assistance is that it screens potential benefit recipients with a means test, instead of granting the benefit to all workers with sufficient employment histories and paid contributions as under the unemployment insurance system. Does such targeting of the benefits to the most “needy” improve incentives and produce savings, thus making the system more desirable than is unemployment insurance?

Other things equal, the elimination of potential claimants by means testing is bound to produce savings. But the experience of Australia and New Zealand – two of very few countries that have a self-standing unemployment assistance program – apparently contradicts this claim. Measured by the average cost of unemployment benefits per percentage point of unemployment, the costs in both countries exceed the comparable costs of unemployment insurance systems in 12 OECD countries (see Vroman, 2001). As box 6.4 explains for Australia, this counterintuitive result is produced by two factors. Above all, the number of benefit recipients compared to the number of unemployed is very high – in recent years, the former even exceeds the latter, one of the reasons being that about 20 percent of recipients are full-time workers with low wages. Note also that workers without substantial prior work history are eligible for benefits, that is, that the potential pool of applicants is larger than under unemployment insurance. Moreover, because the Australian system offers a high income guarantee, it generates a relatively high replacement rate. As result, the unemployment assistance system fails to produce savings – but undoubtedly, the system effectively reaches all those whose income is below some the stipulated income guarantee, and smoothens consumption. One other feature of the Australian system is worth noting: it

is a very progressive system. Roughly 60 percent of cash benefits are paid to those in the three bottom deciles of the income distribution.³²

While the above findings show that the unemployment assistance system does not necessarily produce savings, they also suggest that the costs of the system depend on the level of income guarantee – as well as on the effectiveness of monitoring benefit eligibility. Indeed, the experience of two other countries which also have unemployment assistance programs – Hong Kong and Estonia – confirms that the generosity of unemployment assistance system (in terms of the costs per percentage point of unemployment) can be much lower, significantly below the average generosity of benefit systems in OECD countries (Vroman, 2001). Moreover, Vroman suggests that the Australian system has serious problems with labor supply incentives created by high effective marginal tax rates, which also adds to the costs of the system.

As argued by Atkinson (1995), although income- or means-testing may seem attractive, there are several elements that have to be seriously considered. First, administrative costs associated with identifying and monitoring individuals or families over their terms of reciprocity can be costly. Second, there are serious problems with the program's take-up. Experience in Western countries suggests that a third or more of potential claimants never receive the benefits (reasons include information problems, administrative complexities, and stigmatization of recipients). And third, incentives problems with programs that condition benefits with low current income tend to be particularly important.

Box 6.4: Costs under the Australian unemployment assistance system

Using “costs per percentage point of unemployment” as a metric, the Australian unemployment assistance system does not outperform unemployment insurance systems in OECD countries (the metric is defined as the percentage of unemployment benefits in total wages, divided by the prevailing unemployment rate). The average cost for 12 OECD countries was 0.25 in 1992 (ranging from 0.697 in Sweden to 0.032 in Greece); the average costs of the Australian system in the 1990s were about 0.28.

Why are the costs under the Australian system so high? First, the basic income guarantee (25 percent of the average wage) is high, producing replacement rates that typically fall into the 0.60-0.90 range. Because of the high income guarantee, most of the unemployed are benefit claimants despite the income test. In fact, since 1995, the number of recipients has exceeded the number of unemployed. Second, employed workers are also eligible to unemployment assistance, and about 20 percent of claimants are employed.

Moreover, it seems that the *administrative costs* under unemployment assistance are higher than those under unemployment insurance. Additional costs under unemployment assistance are associated with the costs of monitoring income (initial income assessments for new claims and income monitoring for ongoing claims). These costs typically exceed the costs of initial eligibility determination under unemployment insurance, which are incurred once per claim. The costs of monitoring availability for work and job search are similar in the two systems.

Source: Vroman (2001).

³² Comparative data for 13 OECD countries in 1995 show the overall share of transfers going to the bottom three deciles ranged from 20.8 percent in Italy to Australia's 58.0 percent with the second highest percentage being 53.5 percent in France. Conversely the top three deciles in Australia received 7.4 percent of transfers, the lowest percentage across the same 13 countries (see Vroman, 2001).

To summarize: the potential for providing benefits to workers with little prior work experience and informal sector workers, together with a more effective targeting, is a strong point of unemployment assistance (see table 6.1). But in comparison to unemployment insurance programs, the program does not necessarily generate savings, it offers a lower level of protection for high income workers, and imposes larger administrative costs. It also reduces labor supply of family members and may stigmatize recipients. In addition, it suffers from similar weaknesses as unemployment insurance (above all, it creates reemployment disincentives, increases the equilibrium unemployment rate, and contributes to the persistence of unemployment).

In the light of above, what are the implications for the use of this program in developing and transition countries? First, under the typical circumstances in developing countries, one potential advantage of unemployment assistance – the fact that eligibility does not require prior contributions – in fact renders the program non-viable. With large segments of the labor force either underemployed and unemployed, providing an income support program which fails to exclude persons without prior work in the formal sector (that is, in the light of above, what are the implications for the use of this program in developing and transition countries? First, under the typical circumstances in developing countries, one potential advantage of unemployment assistance – the fact that eligibility does not require prior contributions – in fact renders the program non-viable. With large segments of the labor force either underemployed and unemployed, providing an income support program which fails to exclude persons without prior work in the formal sector (that is, persons who have not paid program contributions) would be untenable on a regular basis: it would be fiscally unsustainable. Unemployment assistance programs in developing countries would therefore have to condition benefit eligibility on the prior payment of program contributions, as is done under unemployment insurance. Second, due to administrative constraints typically faced by low-income countries, few, if any, may be able to carry out the required level of monitoring (see Chapter 5). Third, because of abundant informal sector employment opportunities, the problem of employment disincentives for other members of the household would be more pronounced than in developed countries. Ineffective monitoring would produce large leakages – on the other hand, effective monitoring would not only impose large administrative costs, but also create large forgone earnings. To conclude, the applicability of unemployment assistance program seems to be limited to countries with relatively developed administrative capacity, a small informal sector, and large fiscal pressures, perhaps as a transition system to unemployment insurance (possible candidates being transition countries).

(c) The promise of unemployment insurance savings accounts

Spurred by adverse incentives created by traditional income support systems, new approaches to improve these systems have been embarked upon. The system of unemployment insurance savings accounts (UISAs) is the most radical one. Among its strengths, one should mention:

- By internalizing the costs of unemployment benefits, the system avoids the moral hazard inherent in the traditional unemployment insurance program. This is arguably the most important advantage of the system.
- Being payable also in cases of voluntary separations, the system encourages labor reallocation and cuts down on the litigation costs incurred under severance pay.
- In comparison to public insurance, the program reduces political risk.
- Particularly if backed by government subsidies, the program has the potential of attracting informal sector workers.

The above strengths of the UISA system have to be weighed against its shortcomings:

- By its very design, the program – in its pure form – does not “pool risk among individuals, and thus may be less efficient than those that do so explicitly (such as formal unemployment insurance) or implicitly (such as income support programs financed from general tax revenues),” as stated by de Ferranti et al (2000, p. 89). This is the system’s most serious shortcoming. For example, young workers may not be able to accumulate enough savings at the time of separation to be able to self-finance their unemployment.
- The version of the program which allows individuals to borrow from his or her UISA may suffer from a moral hazard problems of its own: it may generate incentives to withdraw from the formal sector and find a job in the informal sector, thereby avoiding the repayment of the debt upon reemployment in the formal sector.
- Requires a relatively well functioning financial sector.

In comparison to alternative programs, the program imposes larger administrative costs (this is partly related to new services, such as account updates).

Note that under certain circumstances, the absence of pooling across individuals may not be critical. Under modest and frequent shocks, as the analytical framework of Gill and Ilahi (2000) suggests, self-insurance through savings may provide adequate smoothing of consumption. Moreover, being aware of the limitations of the absence of cross-section pooling, some proposals combine UISAs with public insurance so as to better address large and persistent shocks (Feldstein and Altman, 1998; Guasch, 1999). For example, under the proposal of Feldstein and Altman, unemployed workers are able draw benefits monthly as under the traditional unemployment insurance, and the government lends money to accounts where the balance falls below zero. Under such as a proposal, the consumption smoothing properties of the UISA system would be no worse than under the traditional unemployment insurance system, because individuals with negative balances would still receive benefits, as rules of withdrawal would be the same as under the unemployment insurance system – yet the UISA system would reduce labor market disincentives for those workers who would end their working careers with positive UISA balances (note that this version of the program reduces the gains in terms of reemployment incentives, but increases its insurance function).

According to some proposals, the efficiency properties of an integrated private-public system can be further improved by combining several risks under one program. Orszag et al (1999) and Yun (2001) propose an integrated unemployment insurance system, which would

combine unemployment insurance not only with the pension system, but also with other programs such as health, disability, and life insurance. Such a program would thus integrate intertemporal pooling of various risks of the individual with cross-section pooling. By doing so, the system is expected to offer not only a superior provision of insurance, but also a significant reduction of disincentives as compared to the traditional unemployment insurance system (see box 6.5).

Box 6.5: Advantages of “The Integrated Unemployment Insurance System”

Recent proposals to improve both the welfare and efficiency effects of income support systems for the unemployed include also the “Integrated Unemployment Insurance System.” Under this system, unemployment insurance is provided via integrating unemployment insurance with the pension system. Benefits are financed via a combination of withdrawals from an individual savings account – on which a worker accumulates his/her contributions for unemployment as well as for old-age pensions – and, under certain circumstances, also from a public unemployment insurance (which operates on a pay-as-you-go basis). Such a program thus combines inter-temporal pooling of risk of an individual with wide-base pooling under the traditional unemployment insurance system, and therefore offers a combination of self-insurance through savings and public insurance. In addition, by pooling the self-insurance components and thus combining several risks under one program, the integrated system reduces the amount of savings necessary for providing the same insurance under separate programs (indeed, there are also proposals to include other social insurance systems, such as disability and health-care, under the same roof, which is under certain conditions again welfare improving – see Orszag et al, 1999).

By doing so, the system is expected to offer not only superior provision of insurance and thus consumption smoothing, but also to significantly reduce disincentives as compared to the traditional unemployment insurance system. In addition, the government could subsidize low wage workers, which would improve the distributive properties of the system. Moreover, because of the direct link between contributions and benefits, the system has the potential to attract informal sector workers. While details of the system still need to be determined, theoretical modeling suggests that the more risk averse is the individual and the lower is the job-search elasticity (that is, the less sensitive is the reemployment probability to job search), the higher is the level of optimal borrowing from the public part of the system (Yun, 2001).

There are also some “design and implementation” considerations that by and large speak in favor of the introduction of this system in middle- and upper-middle-income developing countries and transition countries:

- Weak monitoring capacity of these countries exacerbates the moral hazard problem inherent in the traditional unemployment insurance program and encourages other misuses of the system. Hence the self-policing nature of the UISA system represents a bigger advantage.
- In developing countries there exist various income support programs, and their conversion into an UISA-type program could greatly facilitate its introduction. For example, in the Philippines there are several mandatory forced-savings schemes, which could, together with severance pay, be merged and transformed into an UISA system (see Esguerra et al, 2001).

- Under the traditional unemployment insurance system, employers in developing countries sometimes fail to pay program contributions. By introducing personal accounts, workers themselves monitor such payments. In addition, the same feature makes the UISA system less susceptible to the political risk.
- Moreover, it has to be noted that the administrative complexities of introducing UISAs do not stand out as prohibitive; for example, old-age insurance systems introduced in many Latin American countries require similar information systems.³³

In sum, the UISA system – and its variant Integrated Unemployment Insurance System – may be promising options, particularly for countries where initial conditions seem to be especially suitable (this relates to East Asia and Latin America, where the existence of severance pay programs may ease the transition to an UISA system). There is a need, however, for further investigation – and piloting – of the program. Too little is known about the working of the UISA system to know for which groups of workers, and under what conditions, the above favorable evaluation of the system actually holds true.³⁴ And important design parameters of the system (regarding contribution rates and rules for withdrawal, for example) also need to be examined (see Chapter 7).

(d) Public works

As with other programs, we present below the key strengths and weaknesses of public works, and discuss its applicability to developing and transition countries. We also discuss the design features of the program.

The program has several strengths:

- It is effective in reaching the poor, and has good targeting properties and a substantial capacity to redistribute income from the rich to the poor.
- It can attract informal sector workers.
- It allows flexible and fast response to shocks.
- Is administratively less demanding than other public income support programs for the unemployed.

There are also several weaknesses of the program, mostly affecting its capacity to reduce poverty:

- High non-wage costs reduce the effectiveness of public works in reaching the poor. For example, Ravallion (1999a) estimates that for \$1 of additional earnings of the

³³ Smetters (2000) assesses the risk of having high administrative costs of private pension accounts in the U.S. as low to medium – and a similar assessment is valid also for UISA accounts, and for other countries as well. To keep the costs of private accounts low, Smetters proposes that investment funds are approved and regulated by the government, and subject to standard auditing controls to reduce fraud. He also proposes limits on investment charges as well as on free movements of money between funds. In such a case, most of the administrative costs would come from collecting contributions from individual workers, that is, at few extra costs in comparison to the public system.

³⁴ There has been just one serious attempt at analyzing the working of the UISA: Kugler's (2000) study on Columbia (see Chapter 4 for the summary of her results).

poor, \$5 of public transfers are needed, partly because of the leakage of the spending on the non-poor.

- The countercyclical pattern of funding shows that it is difficult to raise funding during crises, when the support is needed most (Wodon, 2000).
- Because of its highly redistributive character, it may be difficult to gain political support, so some leakage to the non-poor may be necessary.
- There may be problems with the maintenance of the infrastructure built by public works.
- Participants may be stigmatized.

Many conditions prevailing in developing countries make public works especially suitable for these countries:

- The informal sector is large and pervasive. Informal sector workers do not have access to public income support programs which require social security contributions, and thus remain vulnerable to even small income shocks.
- Due to a strong seasonal farm workload, particularly in mono-crop areas, public works can be cheaply deployed in non-farm activities in non-peak periods. The program thus provides an opportunity to productively engage temporary “surplus” labor while minimizing forgone earnings and maximizing poverty reduction effects.
- The existence of large mono-crop areas make large segments of the population vulnerable to cyclical and structural shocks. Similar exposure is caused by geographic and climatic shocks. In the absence of market insurance, public works can provide effective insurance in such cases (see box 6.6 on vulnerability of coconut farmers in the Philippines).
- In comparison to other programs, public works do not require complex administration, and may be quickly set up in areas affected with various shocks.
- Obtaining support for public works can benefit from traditions and values which emphasize cooperation and collective support, particularly in rural areas.

The experience reviewed above also shows that public works in transition countries do not increase employability and may stigmatize participants, so the program seems to be less desirable for these countries.

In designing public works programs, several general principles should therefore be followed. First, forgone earnings should be minimized by attracting workers who have low alternative earnings opportunities (Ravallion, 1999a). Second, displacement effects should be avoided, among others, by the careful selection of areas of activities. Third, while the program should in principle be open to anyone, wages should be set low enough so as to trigger a self-selection mechanism through which only those in need participate. Low wages also encourage participants to search for a regular job. And fourth, to maximize the “bang for the buck,” projects that require heavy non-labor costs should be avoided, particularly during crises (Maloney, 2000). In general, as noted by Ravallion (1999a), public works programs should be more labor intensive than required by pure maximization of present value of the assets created. He suggests that, in order to enhance their poverty impact, the design of the program should stress cost-recovery from the non-poor, labor intensity, and

provision of indirect benefits to the poor. Key design elements of a successful public works program are presented in box 6.7.

Box 6.6: Helping mono-crop coconut farmers weathering El Niño droughts

A recent disastrous drought brought severe hardship to Filipino coconut farmers – suppliers of 60 percent of the world's production of coconut oil – and exposed their extreme vulnerability to risk. The risks facing the sector are both cyclical (caused by drought) and structural (caused by emerging substitutes to coconut oil). Despite the risks, inter-cropping is rarely practiced and over half of coconut farms are mono-crop plantations.

Coconut farmers have little access to market insurance, and their ability to self-insure and self-protect is limited. There are few opportunities for generating non-farm income that do not co-vary with activity in the coconut farms. As a consequence, inter-family transfers and other community-based modes of informal insurance and collective savings provide inadequate insurance. Moreover, farmers face severe barriers for production diversification, including: (i) the limited size of the local market for non-food products, (ii) the high transaction costs of selling non-coconut products to urban markets (losses due to spoilage and difficult access to urban centers), and (iii) the lack of capital for starting new ventures.

Without discounting the possible use of other policy instruments (such as commodity price stabilization programs), an obvious program to reduce the exposure to risks of coconut growers is labor-intensive public works. The program would not only smooth income streams of the very poor workers during the lean seasons, but also put in place the infrastructure needed to improve the linkages to product and labor markets in urban areas. This can go a long way towards reducing the barriers to income and risk diversification (such as inter-cropping). Households and community organizations with more diversified income sources will also acquire an enhanced ability to tap bank credit for their investment needs. The fact that adverse shocks to the coconut sector do not necessarily coincide with those in the rest of the economy may also increase the funding possibilities of such a program.

Source: Esguerra et al (2001).

Ravallion (1998) also argues that a public guarantee program with the above features should become a permanent program. That would enable the program to address both covariant risks during crises as well as idiosyncratic risks during non-crisis times. Making the program permanent would also reduce political pressures to increase wages.

Box 6.7: Key design elements of a successful workfare: Argentina's Trabajar program

Trabajar allocates funds across provinces based on the distribution of the unemployed poor. Proposals to use the funds are made by municipalities and non-government organizations. These proposals are approved at the regional level, based on a system of points related to poverty in the area and the merits of the proposed project. The government pays for the costs of unskilled labor and the sponsoring units pay for the equipment, materials, and the skilled labor. The wages for unskilled labor is set at two-thirds of the average wage for the poorest decile in the capital city. In principle there are no restrictions on the eligibility of beneficiaries to participate in the program, but in practice there is rationing. The financing of the Trabajar program as a matching grant scheme not only induces local governments to commit to the project, but it also induces local governments to make use of more labor. The use of labor intensive approaches is thus enhanced through incentives to local governments rather than through instructions to contractors and engineers.

Source: de Ferranti et al (2000).

(e) Complementarity of programs and policies

There are reasons to expect that – rather than relying on just one program – countries will rely on several programs simultaneously, and be flexibility in their use:

- *Different programs have different objectives.* While the primary goal of some programs is compensation for the loss of earnings, other programs and policies may emphasize human resource development (training, severance pay). In some stages, the labor reallocation goal may deserve special attention (transition economies). Complementary programs should also be flexible and adaptable to changing circumstances so as to provide help when needed.
- *Workers in the informal sector are ineligible for certain programs.* Workers in the formal sector may be covered by public programs such as unemployment insurance or severance pay – but workers in the informal sector are ineligible for these. So it is important that the government also provides programs where anybody can participate – for example, public works and training programs.
- *Different programs follow different eligibility rules* (different participation criteria). In contrast to programs where participation is limited, some others are open to anyone – and individuals themselves decide whether to participate or not. Self-selection can be a very powerful targeting mechanism (Ravallion, 1999a).

Among complementary programs, those usually labeled as “active labor market programs” (training, employment subsidies, job-search assistance, promotion of self-employment, youth programs) should be specifically singled out. Depending on the country’s fiscal position, objectives, and conditions, they may be used to promote employment opportunities of the unemployed. While the discussion of these policies is beyond the scope of this report, two aspects where “active” and “passive” policies interact are worth mentioning. First, these two types of policies should be carefully coordinated. For example, if participation in an active program qualifies individuals for benefit receipt upon completion, this may create perverse incentives for enrollment in such programs, as well as weaken incentives for reemployment.

Second, active labor market programs may be used as a screening device for participants of income support programs. As discussed above, some of unemployment benefit recipients may not be searching for jobs. One way to test recipients’ willingness to work is through requiring a proof of job search (for example, regular job offers). But especially when unemployment is high, this kind of test does not serve the purpose and may impose undue costs on claimants – and employers. Placement in active labor market programs provides a suitable alternative. Those who are not genuinely looking for a job may rather lose the benefit than participate in a program. Calmfors (1994) reports that more intense counseling of the unemployed led to 5-10 percent decline in the registration of the target population.

Complementarity issues arise also from the fact that the locus of distress is often *the household*, rather than the individual. To discourage counterproductive coping mechanisms such as taking children out of school and reduced healthcare, income support programs could

also be targeted at vulnerable family members of the unemployed in the form of, for example, schooling and health subsidies. A successful example is Mexico's *Progresa* program, which gives grants to poor families provided that their children attend school and visit health centers regularly. As de Ferranti et al (2000) note, however, the ability to use such programs beyond that of just a crisis-related intervention and as an instrument of social insurance may be limited.

Important complementarities exist also between income support programs and government policies, particularly labor market and financial policies. A well functioning labor market can substantially increase chances for self-protection (by reducing the risk of unemployment), as well as for self-insurance (by contributing to short unemployment spells). Moreover, as emphasized by Gill and Ilahi (2000), to ensure balanced, market-augmented social risk management, the government should not only pay attention to income support programs, but it should also foster the development of insurance and financial markets, as they can greatly improve self-protection and self-insurance mechanisms.

(f) Summary evaluation of programs

We have seen that alternative income support programs for the unemployed have their strengths, but also weaknesses. Below we summarize the evaluation of the programs, having in mind their applicability to developing and transition economies (see also the summary in table 6.1):

- *Unemployment insurance*, thanks to its wide risk-pooling, enables a high degree of consumption smoothing for all categories of workers and performs well under various types of risks; it also acts as an automatic stabilizer. On the negative side, it creates reemployment disincentives and wage pressures and thus increases the equilibrium unemployment rate; in addition, it contributes to the persistence of unemployment and is prone to political risk. Because successful performance relies on strong administrative capacity to monitor program eligibility, conducive labor market conditions, modest size of the informal sector, and environment of low political risk – the conditions which are typically lacking in developing and transition countries, the case for the introduction of unemployment insurance in these countries is less compelling than it is in developed countries. Its existence may also reduce incentives for self-protection and break down the habit of self-help among local communities, which may be welfare-reducing. Introducing of unemployment insurance is thus viewed as a longer-term goal for many of these countries.
- *Unemployment assistance*, while enabling more effective targeting, may not bring savings in comparison to unemployment insurance – and in fact may prove fiscally unsustainable, due to the increased pool of potential applicants created by the program's failure to base eligibility on contribution payments deriving from prior work history. In addition, in comparison to unemployment insurance, it offers a lower level of protection for high income workers, imposes larger administrative costs, and may suffer from similar employment disincentives. Its applicability is thus limited, perhaps to countries with relatively developed administrative capacity and a small informal sector – a rare breed among developing and transition countries.

- In contrast, *unemployment insurance savings accounts* (UISAs) are recognized as a promising option for developing and transition countries. By internalizing the costs of unemployment benefits, the program avoids the moral hazard inherent in the traditional unemployment insurance program and thus improves reemployment incentives – given the weak monitoring capacity of developing countries, an important advantage. In its integrated version with public insurance – thus avoiding its main weakness of the absence of risk-pooling among individuals – the program promises to yield both superior protection and improved incentives, and has also the potential to attract informal sector workers. Admittedly, by allowing individuals to borrow from his or her UISA account, this version of the program creates problems of its own – it creates incentives to withdraw from a formal sector so as to avoid the repayment of the debt, and reduces the gains in terms of reemployment incentives. Because the system has been largely untested, a further investigation of its effects and design parameters, including piloting of the program, is needed.
- *Public works* program is effective in reaching the poor, has good targeting properties and a substantial capacity to redistribute income from the rich to the poor, is able to attract informal sector workers and provide flexible and fast response to shocks, and is administratively less demanding than other public income support programs. Despite its weaknesses – high non-wage costs, the likely countercyclical pattern of funding, and, in some countries, stigmatization of participants – it is found as suitable for developing countries, particularly as a complementary program.
- *Severance pay* offers few advantages. Because it adversely affects efficiency, produces high litigation costs and offers limited risk-pooling ability, severance pay is recognized as one of the least appropriate options (a similar assessment is arrived at by de Ferranti et al, 2000).

6.2. Some issues in the unemployment insurance design

Based on the results of previous chapters we offer here also some guidelines regarding improving two key parameters of unemployment insurance programs: the level and duration of benefits. As for the level of benefits, the evidence is not so clear-cut, although the support for a declining pattern in time may be stronger. As for the duration of the entitlement, we argue that allowing for different entitlement durations contributes to equalizing the probability of finding a job within the entitlement period, and is thus justified from a fairness point of view.

Should unemployment benefits decrease in time? In a world free of reemployment disincentives created by unemployment benefits, welfare maximization dictates constant (flat) benefits, so as to smooth consumption. Once we introduce moral hazard, however, insights from the optimal unemployment insurance literature suggest that benefits should be “front loaded,” that is, that the replacement rate should be a declining function of time spent in unemployment (Shavell and Weiss, 1979, Hopenhayn and Nicolini, 1997). This makes intuitive sense: in order to provide optimal incentives for reemployment, failure to find a job should be punished by reducing the unemployment benefit. Recent results of this stream of literature also show that a strongly decreasing time structure of unemployment benefits could

be avoided by imposing a permanent employment tax upon reemployment (Hopenhayn and Nicolini, 1997). The reemployment tax imposes a penalty for opportunistic behavior while at the same time allows for a higher income replacement rate later in the spell, thus providing better consumption smoothing.

There are also other considerations beside the moral hazard that lead to declining unemployment benefits. Cremer et al (1996) show that such a policy can also follow from an adverse selection problem arising from the inability of the benefit administration office to distinguish between workers who wait for a job that fits their preferences or productivity, and workers who are engaged in informal jobs and refuse to take any job offers. Wright (1986) shows that in an economy where less than half workers are unemployed, the median voter will choose a declining benefit schedule. Moreover, by increasing the escape rate from unemployment, declining benefits reduce the incidence of long-term unemployed and thus contribute to a smoother response to shocks by an economy (Blanchard and Woflers, 1999).

Recently, however, Cahuc and Lehmann (2000) showed that – when endogenous wage determination through collective bargaining is introduced in moral hazard models – the case for declining benefits is reduced. Such general equilibrium modeling shows that – given the tax rate of wages used for financing unemployment benefits – moving from a flat to declining profile of benefits, while indeed increasing the intensity of job search of the unemployed, could have two undesirable effects. First, the effects on the reduction of the equilibrium unemployment rate are much more modest than in the case of exogenous wage formation and it could even lead to higher equilibrium unemployment (the last is not a general result, as it holds only for introducing mildly declining profiles instead of a flat profile). Second, the welfare of the long-term unemployed suffers and the society moves away from the Rawlsian justice criterion.

There are two other criticisms of the declining pattern of benefits. First, Meyer (1995) notes that it overlooks the increased incentives of the unemployed to enter unemployment (this criticism assumes that when changing the time structure of benefits, the initial replacement rate is raised). Second, the finding of Gruber (1999) that the capacity of the long-term unemployed to self-insure is particularly low provides an argument against lowering unemployment benefits over time from the point of view of adequacy. (Gruber's findings also speak in favor of a waiting period before one can claim unemployment benefits.)

Should the potential length of the entitlement period be equal for all? There are grounds to argue that allowing for different entitlement durations contributes to equalizing the probability of finding a job within the entitlement period. For example, Mickewright and Nagy (1994) show that the expected length in unemployment varies tremendously among different groups of unemployed (for a male who finished college, aged 21-25, a non-manual worker who lives in the capital who lost his job and entered unemployment directly from previous unemployment, the expected length of unemployment is 9 months, and for a person with primary education, aged 45-50, a manual worker living outside the capital the expected length of unemployment is more than 3 times higher).

Several countries (among them Germany, Austria, and Slovenia) determine the potential entitlement duration on the basis of the work experience of claimants. This seems to be a suitable variable to take as a basis for differentiation: not only is it correlated with the probability of exit from unemployment, but it also allows the system to obey the insurance principle, as experience obviously determines contribution period. Micklewright and Nagy (1994) also show that age – and therefore also experience – is one of the main determinants of exit probability: according to their estimates, a 10 percent increase in age leads to a fall in the hazard of exit from unemployment to employment by 8 percent.

6.3. How to improve income protection of the informal sector?

As emphasized throughout the report, informal sector workers are often not able to adequately self-protect and self-insure against income shocks – and their chances of participation in public income support programs are often very low. Below we explore in more detail the reasons for the low coverage of social security programs in developing countries, and summarize recent innovative approaches to the protection of informal sector workers.

What are the reasons for low statutory social security coverage in developing countries and the exclusion of informal sector workers in particular? The low coverage is largely attributable to the inappropriateness of statutory programs *as is* for the informal sector – qualifying conditions and contribution requirements of statutory programs are often inconsistent with the predominant nature of informal enterprises (one-person or small workforces), employment (non-wage and often irregular), and earnings (low and often irregular), effectively precluding their participation. Furthermore, the benefits from participation in these programs are also often incompatible with the social protection needs of informal sector workers (van Ginneken, 1999).

Several other factors also hinder the extension of social protection coverage to informal sector workers. For example, in many countries, the long-standing bias against informal sector activity by the state has resulted in the neglect of the social protection needs of informal sector workers. But even if due recognition is accorded to the informal sector by the state, extending coverage poses many practical challenges of its own considering the inherent diversity, complexity, and obscurity of informal sector activities. These attributes make it difficult to ascertain the nature of risks and the demand for social protection in the informal sector (information asymmetry problem), hampering efforts to develop suitable risk management measures. For example, given that the informal labor market largely operates unmonitored, information on the extent, frequency and duration of unemployment faced by workers is for the most part unavailable. Because informal sector workers largely operate outside the purview of regulatory authorities, monitoring and enforcing social security requirements can also prove challenging. Clearly, these issues have strong implications for administrative capacity and costs. In many developing countries, the administrative burden and costs of extending coverage to the informal sector may, as a result, be prohibitively high.

Social security coverage has also been low due to the general lack of awareness about various public and private social security provisions. In addition, in many countries, the bureaucratic red tape associated with joining public provisions often discourages employers and workers from doing so. And lastly, distrust of the state by those in the informal sector stemming from the adversarial relationship they share has also hurt efforts to extend coverage, lest participation in social security programs expose them to the heavy hand of the state for not complying with other regulations (van Ginneken, 1999).

Generally, the only forms of publicly-provided income support provisions available to informal sector workers and their households are public works and social assistance programs, both of which are non-contributory and, through differing mechanisms, target benefits to individuals who are in economic need. Absent these, informal sector workers and their households have been largely left to their own devices. For the vast majority, being subsistence earners, saving to insure against risk is near impossible as current basic needs take immediate priority. Obviously, the poorest of the poor, the ones that need social protection the most, are the most vulnerable – even the slightest disruption to income flows can cause a severe, even permanent, deterioration in their economic circumstances.

Sans external assistance, the informal sector has shown great ingenuity, developing informal, community-based measures to prevent, mitigate, and cope with various risks on a limited scope.³⁵ One such mechanism has been the pooling of available resources by the community to assist members in economic need. In recent times, these traditional group arrangements have been supplemented or supplanted by private, often larger scale arrangements such as cooperatives, mutual benefit and rotating credit societies, many of them with outside assistance such as from non-governmental organizations. Furthermore, increasingly, non-governmental organizations have also introduced other programs to assist workers improve their livelihoods and strengthen their risk management strategies. The most widespread of such interventions has been in the provision of micro-credit for the establishment, continuance, or expansion of employment- and income-generating activities. Technical assistance and training for micro-enterprise development and self-employment as well as the infusion of new, innovative technologies and techniques have been less common³⁶.

The germination of these community-based arrangements have helped strengthened the capacity of the poor to address their risks – various insurance instruments have been introduced to pool risks faced by low-income households and reduce their exposure to risk-induced losses. Health insurance to cover the cost of limited health care has been the most prevalent. But, more and more, micro-insurance products and services are being designed and implemented to cover contingencies such as death, disability, maternity, as well as loss

³⁵ These arrangements however, are extremely fragile, and are particularly susceptible when a large-scale adverse event such as an epidemic or natural catastrophe occurs.

³⁶ Usually provided through non-governmental organizations (NGOs), training has mostly been ad hoc, provided on-the-job (for example, apprenticeships). Micro-finance institutions have also been known to provide some technical assistance and training to their credit clients.

of productive assets, housing, or property due to natural catastrophes or otherwise (see box 6.8). In addition, measures are being taken to reduce risk, for instance, through improvements in working and workplace conditions, disease prevention, and awareness raising. The various community-based interventions have succeeded where formal provisions have failed, mainly because they have been designed cognizant of the circumstances and social protection needs of their intended clients. However, to a large extent, these interventions have been ad hoc and narrowly targeted. Furthermore, critical questions regarding program sustainability, cost-effectiveness, feasibility, and replicability remain unanswered.

Box 6.8: The SEWA integrated social security system, India

The Self Employed Women's Association (SEWA), based in Ahmedabad, India, is a trade union organization comprised primarily of poor, self-employed women workers. Main activities include providing assistance in the form of credit, technical assistance, and training for income-generating activities. A more recent foray by the organization has been in social security. The **integrated social security system** was introduced in response to the need expressed by members broadly for protection against the adverse impacts on household incomes caused by sickness, death, and destruction to property and assets caused by natural catastrophes. Consultations and member participation was integral in the design and implementation of the program. The scheme is insurance-based and voluntary in nature. It is principally administered by SEWA Bank with the involvement of national insurance institutions. Premiums are financed in equal shares by beneficiary contributions (facilitated through flexible payment arrangements), grants, and subsidies from insurance agencies. In the late 1990s, about 32,000 members (14 percent of the total membership) were insured under this program.

In agreement with the social protection needs of the membership, the integrated social security scheme covers sickness, natural or accidental death and disability, maternity, and loss of or damage to housing and productive assets. The health insurance component, in particular, was favorably received -- members showed a willingness to pay as the service placed a strong emphasis on quality and was sensitive to their health needs. However, program effectiveness and attractiveness were undermined by the program's exclusion of household members other than the insured SEWA member, and of certain diseases and treatments. The insurance benefit amount of Rs. 1000 was inadequate in 50 percent of the cases. In addition, most clients were from the urban center of Ahmedabad, and efforts to expand the clientele base to include those in rural areas have been hampered by the over-centralization of administrative procedures. Administrative difficulties related to claims processing have also been reported. Notwithstanding, SEWA is actively pursuing strategies to strengthen the administrative capacity, long-term financial sustainability, and quality and effectiveness of the integrated scheme. Measures include decentralizing operations, expanding coverage and benefits, and restructuring premiums.

Sources: Jain (1997) and Lund and Srinivas (2000).

In conclusion, one needs to examine how existing statutory social security provisions can be extended to encompass informal sector workers – and how new institutions better serving the needs of informal workers can be introduced. Clearly, extending coverage of existing programs is only possible if they are adapted to the peculiar circumstances of informal sector workers and their social protection needs. For example, qualifying conditions for social insurance schemes need to be relaxed to allow for the unique characteristics of firms, occupations, and employment in the informal sector. In addition, innovative solutions involving new arrangements and mechanisms need to be sought. For

example, Arango and Maloney (2000) argue that income support programs need to be delinked from jobs in order to reach informal sector workers. Indeed, by making a clear link between contributions and benefits, the UISA system could function in this role, but its successful penetration might require temporary government subsidies (for example, by matching the contributions made by the poor).³⁷ Other proposals include involving non-governmental organizations in collecting contributions, delivering benefits, and monitoring beneficiaries (Sethuraman, 1997). These organizations often organize workers into associations, making it easier for the state to provide coverage. Mobilization of informal sector workers by NGOs has been successfully done in many developing countries (for example, by SEWA in India).

6.4 Concluding remarks

In this chapter we offered guidelines for countries about introducing or improving their income support systems for the unemployed, and provided a summary evaluation of alternative programs. Although knowledge about the working of these systems and other mechanisms of social risk management has increased, our guidelines are still rather general. As emphasized throughout the report, when choosing among income support programs for the unemployed, individual countries will therefore have to evaluate alternative programs for themselves, by both taking into account programs' numerous effects and features, as well as examining how the programs fit their specific circumstances. The complexity of this task will be greatly reduced if policymakers determine their priorities in terms of target beneficiaries, as well as the importance which they attach specific aspects of program performance. By doing so, they will be able to weigh different aspects of performance of the programs against each other, and thus to arrive at a country-specific ranking of options.

To conclude, let us reiterate three general principles which should be followed when building income support for the unemployed:

- *Adopt holistic view.* Income support systems must be seen in the wider context of other formal and informal mechanisms of social risk management. Relatedly, particular attention should be devoted to the development of financial and labor markets, both being of great importance for the ability of individuals to self-protect and self-insure.
- *Strike the right balance.* Primarily this means striking a balance between publicly provided programs and private self-insurance and self-protection mechanisms, and a balance between public cash benefit and in-kind benefit programs, notably public investment in basic education and health. The latter ones can significantly improve the long-term chances for self-protection.
- *Be prepared for the risk.* Safety net programs are investments (Ravallion, 1999a). The recent economic crisis in East Asia and recurrent crises in Latin America show the advantages of having income support programs in place before a crisis hits. If that is not the case, program quality suffers (it takes time to get programs approved, and to build information and monitoring mechanisms).

³⁷ For example, by subsidizing the cost of participation of low-income households, South Korea significantly expanded health insurance coverage to this group.

7. KEY ISSUES FOR FUTURE RESEARCH

The above review of the performance of income support systems shows that most of the research focuses on OECD countries. Moreover, the research has concentrated on the effects of unemployment insurance and severance pay (the latter being part of employment protection legislation). Much less is known about developing and transition countries – yet there are compelling reasons to study the experience in these countries, too. Not only is there a rich experience with different support programs from which a great deal can be learned, but also, labor market conditions and other relevant circumstances differ profoundly from those in developed economies. Crucial differences include the presence of a large informal sector, the importance of informal risk sharing arrangements, and poor administrative capacities of developing countries. These features have important implications for the performance and thus the possibility of replicating OECD-style income support programs for the unemployed.

Organized research on income support systems in developing countries is carried out by several international agencies and research centers. Let us mention a few: The InFocus Programme on Socio-Economic Security at the International Labor Organization (ILO) focuses on evaluating current transformations in unemployment benefit systems globally, understanding the implications of the changing character of labor market participation and increasing informalization, as well as investigating ways to enhancing the income security of excluded or special groups (for example, women). One of the recent outputs that, similar to this report, provides an overview of income support systems for the unemployed, is Standing (2000). OECD and the Center for Economic Policy Research (CEPR), U.K., have done a large amount of work on unemployment benefits systems either in specialized research programs or under the broad umbrella of labor economics research; they both also have programs which focus on transition economies.³⁸ And of course, research on income support programs is also supported by the World Bank, both in its research department and outside it (one excellent recent project was implemented by the Latin America and the Caribbean region, resulting in a major report “Securing our Future in a Global Economy” – de Ferranti et al, 2000 – and several high-quality background papers).

Given this background, we identify below several fruitful areas of future research, for which the World Bank is well suited to carry out.

- Feasibility, incentive effects, and design of unemployment insurance savings accounts. The UISA system is a new and promising program, which has aroused a lot of interest among the academicians and practitioners, yet very little hard evidence exists on its functioning.
- Incentive effects of unemployment insurance in developing countries.
 - For non-transition economies, little is known on the intensity of the moral hazard problem; if administrative capacity and hence monitoring of job search is low, one can expect that the moral hazard problem would be pronounced. On the other hand, low job creation of some economies and the ensuing low probability of exit

³⁸ Among other research institutions dealing with unemployment benefit systems and labor economics research in general, which focus on developed economies and the U.S. in particular, one should mention the National Bureau for Economic Research (NBER) and the W. E. Upjohn Institute for Employment Research, USA.

form unemployment to employment renders monitoring ineffective. It is important to determine the size of these effects in the context of developing countries.

- For transition economies, one should exploit frequent changes in their unemployment insurance systems which offer opportunities to examine the effects of these “quasi-experiments” on escape rates from unemployment. Of particular interest are these countries’ recent attempts to impose stricter monitoring of job search and other conditions for keeping unemployment benefits.
- Post-unemployment earnings and job-matching effects of income support programs, and unemployment insurance in particular. Disincentives for exit from unemployment to employment created by unemployment insurance would be viewed in a different light if benefits from unemployment insurance showed up as better matches between the worker and his new employer; if so, this would result in higher post-unemployment wages. The evidence so far is inconclusive.
- Effects of different labor market policies and income support programs on equilibrium unemployment and labor market flows. While there is an abundance of such studies for developed economies, these effects have not been researched for developing countries.
- Consumption smoothing effects of income support programs in developing countries. While there is large amount of literature on other distributive effects of various income support programs (for example, on the reduction of poverty and income redistribution effects), there is little evidence on consumption smoothing. (There is rich literature on the consumption smoothing effects of unemployment insurance in developed countries.)
- Evaluation of the merits and shortcomings of unemployment assistance as an alternative to the traditional unemployment insurance system. Among the possible merits, the research would examine the ability of means-testing to contain overall costs, as well as to reduce the moral hazard associated with unemployment insurance. Among the shortcomings, the research needs to look carefully into how adequate is consumption smoothing under unemployment assistance, how big are the additional costs of administering the system, and what other negative incentive effects the system produces.
- Political economy and income support systems. While there exists fragmented evidence on the ability of different income support systems for the unemployed to resist political risk and conditions conducive to sustained budgetary support, the gaps in knowledge are still sizeable. Frequent changes in income support programs in transition economies, for example, could provide the leverage needed to identify the conditions conducive to changes, and draw conclusions on the susceptibility of different programs to political risk.
- The interaction of various income support systems and which systems work well together. Usually, different programs are analyzed in isolation, but there may be important synergies among various programs, for example, from the viewpoint of the likelihood that different programs are approved, or from an efficiency viewpoint.

In what follows, we further describe the research on unemployment insurance savings accounts. It seems that the international development of this idea has reached a pivotal moment, which puts this area high on the priority list. The following research issues are identified:

1. **How feasible is the UISA system?** Unemployment insurance savings accounts eliminate pooling across individuals. If a significant proportion of workers cannot by themselves accumulate sufficient resources to draw upon during their unemployment spells, then such a system is irrelevant – it does not do away with the moral hazard problem. Providing a look at the feasibility problem, Feldstein and Altman (1998) simulate the working of the UISA system for the U.S. and conclude that the UISA system is a viable alternative; it remains to be seen if this conclusion is also valid for other, particularly developing countries.
2. **What is the impact of existing UISA systems in Latin America on job-search and other labor market incentives?** As discussed above, theory predicts that by internalizing the costs of unemployment benefits, the UISA system avoids the reduction of the job-search effort inherent in traditional unemployment insurance systems. For which groups of individuals, if at all, do we observe such an improvement in job-search incentives in the countries that have introduced such systems? (Note that the fact of no improvement over the incentives of the traditional unemployment insurance may signal that UISAs are not a feasible system. Namely, workers who expect to end their working life with negative balances face the same incentives as under the traditional unemployment system.) Moreover, do we observe incentive incompatibility – for example, withdrawals from the labor force – if the savings account is not set up for multiple uses? Do we observe an increased propensity to quit, indicating a high liquidity preference? Clearly, real-world experience can be of valuable guidance in creating a viable UISA system.
3. **What are the distributive effects of the UISA system?** The main objective of income support systems for unemployed workers is to compensate workers for a loss of income when they become unemployed. A natural and legitimate question, therefore, is to examine to what extent existing UISA systems succeed in providing adequate income support, as well as what effects these income support systems have on personal savings and private transfers. In particular, what are the effects of the UISA system on:
 - Consumption smoothing – does the UISA system help prevent the reduction of consumption following the individual's loss of income upon becoming unemployed?
 - Personal savings – does the existence of the UISA system induce individuals to increase personal savings?
 - Private transfers – does the existence of the UISA system reduce private transfers?
4. **What redistributive effects arise from replacing the unemployment insurance system with the UISA system?** A separate issue is the distributive consequences of the substitution of the traditional unemployment insurance system by the UISA system. In principle, the latter can provide the same income protection as the

traditional unemployment insurance system, but the switch is likely to have redistributive consequences, because the benefits are financed in a different way. According to Feldstein and Altman (1998), the distributive effects for the U.S. are likely to be small, but it is important to learn how large these effects are in the context of developing countries.

5. **What is the optimal design the UISA system?** Important issues to be determined are:
 - What are the rules for contribution? (for example, does contribution depend on the current balance?)
 - What are the rules for withdrawal? (for example, what is the level of replacement ratios? who qualifies? for how long?)
 - What are the limits on the account balance?
 - What are the rules that determine the contribution of a worker to the savings account?
 - What rate of interest should be applied to the funds?

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Summary Findings

The report reviews the performance of various income support systems for the unemployed and provides guidelines for developing and transition countries. It finds that:

- *Unemployment insurance* enables a high degree of consumption smoothing, performs well under various types of shocks, and acts as an automatic stabilizer. But it also creates reemployment disincentives and wage pressures which increase the equilibrium unemployment rate, and it contributes to the persistence of unemployment. Because its successful performance requires strong administrative capacity, modest size of the informal sector, and low political risk — the conditions which are typically lacking in developing and transition countries — its introduction in these countries is less compelling than it is in developed countries.
- *Unemployment assistance*, while enabling more effective targeting, may not bring savings in comparison to unemployment insurance — and in fact may prove fiscally unsustainable due to the increased pool of potential applicants.
- *Unemployment insurance savings accounts* internalize the costs of unemployment benefits and thus avoid the moral hazard inherent in traditional unemployment insurance- given the weak monitoring capacity of developing countries, an important advantage. In its integrated version with public insurance the program could offer both superior protection and improved incentives, but for the price of reduced gains in combating moral hazard problem and disincentive problems of its own.
- *Public works* program is effective in reaching the poor, can attract informal sector workers, and provides flexible and fast response to shocks. Despite its high non-wage costs and possible stigmatization of participants, it is found suitable for developing countries, particularly as a complementary program.
- *Severance pay* offers few advantages — it adversely affects efficiency, produces high litigation costs, and offers limited risk-pooling.

HUMAN DEVELOPMENT NETWORK

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The World Bank Employment Policy Primer aims to provide a comprehensive, up-to-date resource on labor market policy issues. This resource is based on the lessons from research and operational experience in designing and implementing labor market policies and interventions. The primer series includes two types of products: primer papers that present, in some detail, new research results or up-to-date assessments of the literature and experience and primer notes that summarize “best practice” on policy-relevant topics in a very concise and accessible manner. Together, these products are intended to provide a practical tool-kit for people who make or are concerned about employment policy. A flexible format with products published both on our website and in published form ensures that the latest developments are reflected.

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