6 Social protection in labour markets exposed to external shocks

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6.1 Introduction

Social protection refers to publicly provided safety nets of two kinds. The first type is poverty alleviation measures which help people who are born poor or who lack the productive assets or skills to get out of poverty. The second type consists of social insurance programmes or other labour market interventions that allow people to deal with labour market risk. The focus of this chapter is on the social protection systems of the latter type which protect individuals against the negative consequences of labour market changes caused by external shocks.

In section 6.2 we discuss in detail the reasons for the need for such social protection when workers are vulnerable to shocks, especially in a more globalized world. The main reasons we discuss are: (1) for various reasons, the market for private unemployment insurance is missing, making it imperative for the government to step in to fill this void; (2) social protection increases efficiency by addressing market failures stemming from externalities such as labour-market crowding; (3) social protection promotes distributional equity by aiding displaced workers facing long unemployment spells or moving costs; and (4) finally, and very importantly, by addressing the above concerns social protection also makes globalization more palatable politically.

There is a case for social protection when workers are exposed and vulnerable to shocks. Globalization, the major components of which are trade reforms and openness to capital flows, is in large part driven by policy. There is, therefore, some control that governments have over the kinds of shocks caused by globalization. Political support for globalization means that in democracies a majority of voters

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support reforms that promote globalization. However, it does not imply that globalization, even in the presence of compensation schemes which make it politically feasible, improves everyone's welfare. The question then is with what kind of social protection regime in place does globalization lead to an improvement in the welfare of some without hurting anyone else (at least without hurting the majority)? Also, what social protection measures lead to greater improvement in welfare? These are some of the questions we address in this chapter. These issues are intimately related to the government's choice of compensation schemes or trade adjustment assistance programmes. Even if we believe that we already live in a globalized world and the process of globalization is virtually almost complete, the issue of compensation to promote support for globalization still remains important. The reason is that, based on past experience of the world economy, by no means can we assume globalization to be irreversible.

In section 6.3, we review any literature on the effectiveness of social policies in mitigating employment disruptions caused by globalization. Here we discuss the record of social protection systems in developed and developing countries. We describe and analyse in detail the experiences of East Asian countries in dealing with the financial crisis of the late 1990s. Governments adopted a wide range of policies to mitigate the consequences of the crisis (Cox Edwards and Manning, 2001). These included labour-intensive public infrastructure projects, skill–training intervention, provision of employment services and wage subsidies. We examine in detail the relative success of these policy interventions in mitigating employment disruptions. We find that even though East Asian countries used a variety of policy measures to mitigate the consequences of the crisis, probably the single most important measure was the public works programme, given the large relative size of the informal sector in most of these countries. As these economies develop more and the size of the informal sector shrinks, they can move towards social protection instruments used in developed countries, something that we describe in detail later.

In section 6.4 we compare the different systems of social protection within the developed world. We also examine different approaches to funding social protection systems and their effect on markets. Countries differ in the way these programmes are financed. For example, in most countries unemployment insurance is financed by a flat tax on employers. In the United States it is experience rated, whereby firms with greater turnover end up paying more. This comparison of these alternative ways of financing these social protection programmes turns out to be quite useful.

In developing countries, given the large size of the informal sector, even if unemployment insurance is offered, it has very limited coverage. These countries have relied heavily on employment protection policies in the formal sector, including mandatory severance packages and firing restrictions. However, these measures lead to high costs of separation between firms and workers, discouraging firms from hiring workers, and a more than optimal capital intensity in the input mix in labourabundant countries. Studies have shown that this hurts overall productivity and income levels. This raises the question of what kind of reform in social protection developing countries need. Given the large size of the informal sector, public works programmes are going to remain an important instrument of social protection. However, these programmes are often plagued by corruption. Also, since these programmes are funded by general revenue, the underdeveloped internal revenue infrastructure is a constraint here.

Finally, in section 6.5 we discuss the "best practice" among governments. The Danish "flexicurity" system, which combines generous unemployment benefits with strict monitoring of the job search activity of the unemployed, has received much praise and we incorporate some elements of that into our discussion of best practices. We also discuss the recent modifications and redefinitions of it by the European Commission that takes a broader view of flexibility and security and supports more flexibility in the model based on cultural and social norms. For example, the extent of moral hazard associated with unemployment insurance that monitoring tries to alleviate may depend on the social norms in a country. Therefore, what works in one country may not work in another.

6.2 Rationale for social protection in a more globalized world

Missing market for insurance against income risk

In addition to improving welfare by providing consumption-smoothing opportunities, insurance against labour market risk has other benefits too. As pointed out by Acemoglu and Shimer (1999), insurance against labour market risk can increase efficiency by promoting the emergence or expansion of more risky jobs and industries. In a similar vein, lack of insurance can lead to outdated and less efficient production technologies or portfolio choices such as holding livestock as a form of precautionary saving (Rosenzweig and Wolpin, 1993). It can also adversely affect human capital accumulation as households use child labour to smooth consumption in response to a negative income shock to the family.

The next question to answer is why in market economies do we need governments to provide protection against labour market risk? Why cannot individuals self-insure? Why does the market not provide insurance against the labour market risk?

According to Ehrlic and Becker (1972), self-insurance works well when the shocks are relatively frequent and losses are moderate. Therefore, if unemployment spells

are short and frequent, self-insurance can work to some extent. However, selfinsurance may lead to too little saving for consumption smoothing during times of crisis, particularly among low-income people. Also, self-insurance is clearly inadequate during times of large aggregate shocks such as recessions or financial crises.

The reasons for the non-existence of a market for insurance against labour market risk have to do with adverse selection, moral hazard and covariant risk problems that plague any kind of insurance, but may be more acute in this particular case. We can explain them as follows.

- 1. Adverse selection: If individuals buy unemployment insurance (UI), then it is possible that only those who intend to quit their jobs will buy insurance and, knowing this, the private sector would be reluctant to provide insurance. However, this argument may not be strong enough in many contexts, such as in the United States, because UI benefits are given only to those who have been laid off and not those who quit or were fired. In any case, verifying whether a person has quit or been laid off could be costlier for the private sector lacking a comprehensive administrative machinery. There could also be adverse selection on the part of firms buying UI. Only those firms which are likely to face high turnover may buy UI. Again, knowing this, the private sector would be reluctant to provide insurance.
- 2. *Moral hazard:* People with UI may have fewer incentives to look for jobs while they are getting their benefits. Having UI increases the opportunity costs of finding a new job.
- 3. Covariant risk: Probably the single most important reason for the non-existence of a market for UI is that unlike health, fire, auto insurance and so on, where the shocks are idiosyncratic, UI has to deal with aggregate (non-diversifiable) shocks during recessions or financial crises, as in the case of East Asia. A large aggregate shock can result in huge claims bankrupting private providers of UI.

Externality-related arguments for social protection

Having discussed the reasons for the non-existence of private insurance against labour market risk, which itself is a rationale for providing social insurance, we look at some other rationales for providing social insurance which would be relevant even if a private market existed.

One of the arguments for social protection is based on the possibility of labourmarket crowding arising from adverse shocks. In a sector adversely affected by import competition, the lay-off decision by a firm leads to an increase in the pool of unemployed or people searching for jobs. At the point of impact, this decision reduces the matching probability for every worker searching for a job. This is an externality that is not internalized by anyone and so leads to labour market congestion. An adjustment subsidy can reduce the number of searchers or reduce search intensity and therefore ease this labour-market congestion (see, for instance, Aho and Bayard, 1984).

Barry (1995) has a slightly different argument. A sector in which a union operates has fewer than optimal number of lay-offs as a result of import competition or a negative price shock. The reason is that the union tries to protect employment and reductions in employment have to be bought from the union for higher wages. Thus, the optimal transfer of workers from the declining to the expanding sector does not take place. Therefore, government financing of severance payments might aid in taking the intersectoral transfer of labour closer to the optimum.

Riordan and Staiger (1993) have an argument along similar lines. When a trade shock hits an industry negatively, it lays off some of its workers. These workers are the ones that are the lowest in quality among the workers it was employing. The higher-quality workers are retained. The larger the shock, the better would be the average quality of the pool of workers laid off. Potential employers in the expanding sectors will not know the true quality of each worker laid off but know the average quality of laid-off workers. A large shock leads to an increase in the quality of the pool of laid-off workers and in turn leads to an increase in the inducement for firms in the expanding or the "favoured" sector to hire from this pool. This is a positive externality of lay-off decisions of a declining sector firm on the favoured sector, and is not internalized in the absence of any policy intervention. Therefore, there are too few lay-offs. Adjustment assistance to workers leaving employment in the declining or injured sector can help with internalizing this externality.

Among other reasons, there could be a positive externality resulting from efficient job matches. If workers devote time and resources to job search, the match can be better for both the firm and the worker. However, job search is costly and in the absence of a complete market for credit, a case can be made for the public provision of UI. It is unlikely that an unemployed worker can get too much credit while searching for a good job. Therefore, subsidizing job search by the unemployed through UI would increase social welfare.

Finally, UI can be an automatic stabilizer during recessions by propping up demand through income support to the unemployed. This argument is based on the fact that downturns are caused by insufficient aggregate demand. However, if they are caused by the productivity shocks as in the Real Business Cycle literature, then UI could decrease efficiency.

Distributional equity-based argument for social protection

Globalization has distributional effects. Even when there are no costs associated with the mobility of workers from one sector to another or from one region to another, globalization can create winners and losers at the same time. For example, let us say factors can be divided broadly into two categories, say capital and labour, and they are both mobile. International trade will benefit one of these two factors and hurt the other: the abundant factor gains and the scarce factor loses.¹ If we introduce equilibrium search unemployment, the prediction from a Heckscher–Ohlin type of model is that the unemployment rate of labour could go down in a country abundant in labour (developing country) and could go up in a country abundant in capital as a result of trade (see, for instance, Dutt et al., 2009).

Work by Kletzer (2001) for the United States shows that an average worker experiences a lifetime income loss of US\$ 80,000 from displacement due to import competition. In addition, survey evidence shows that short spells of unemployment have extreme longer-term scarring effects (Davidson et al., 2010). A state of unemployment is considered by many who have experienced it as more traumatic than separation or divorce (Helliwell, 2003). Thus, normal inequality measures serve only as a lower bound on the extent of the lack of equity in society.

Recent work by Bardhan (2010) argues that income inequality has risen during the period of liberalized trade in India and China, despite the fact that poverty has fallen in these countries at the same time (see also Hasan et al., 2007b). In addition, Ahsan and Mitra (2010) find that trade reforms have reduced the share of wages in output.

While there is evidence that greater trade openness leads to lower steady state unemployment rates, there is also evidence that the short-run impact effect of trade liberalization is an increase in the unemployment rate, which is followed by a reduction in the steady state unemployment rate (see Dutt et al., 2009). The reason for that comes from search unemployment theory with endogenous job destruction and creation (Pissarides, 2000). This can be explained as follows. Trade liberalization unleashes forces that lead to the shrinkage of the import-competing sectors and almost instantaneously leads to the destruction of jobs in those sectors. At the same time, it promotes the expansion of export sectors. However, jobs take time to be created there. This leads to an increase in the overall unemployment rate in the interim.

Based on the above evidence and arguments, it is important from the point of view of social equity to have a programme of social protection in place. This will counter increases in income inequality as well as the additional scarring effects of unemployment in addition to providing insurance against labour market risk.

Social protection makes globalization more palatable politically

As discussed earlier, trade liberalization benefits the abundant factor and hurts the scarce factor of production. Let us consider the simple case in which the majority are workers (even though the country can be abundant in labour or capital). Then in a capital-abundant (rich) country, the majority loses from opening up to trade, even though aggregate welfare increases. Thus the majority can block reforms in such a situation. The question is whether compensation of workers (where they are made just a tiny bit better off than their pre-reform situation), say through some kind of lump sum redistribution, by capitalists can lead to a vote for reforms. It is important to note that if we take as given that compensation will take place, then everyone will vote for reforms as nobody now loses from reforms. Now, if there is a vote on whether workers should be compensated or not by capitalists, the majority will always vote for it, irrespective of the order in which the two votes (the one on reforms and other on compensation) take place. Thus with this economic structure, we are going to get reforms if both reforms and compensation are democratically determined.

Most of the social protection programmes target displaced workers. In that case, only workers who get displaced from their current job as a result of trade reforms get compensated. This can create problems as has been pointed out by Davidson et al. (2007). To see their argument, suppose the political support of those who get displaced as a result of reforms is crucial for any reform to go through. In the absence of their support, the winners from reforms do not have enough votes to get the reform through. Now, if the vote on compensation takes place before the vote on reforms, then all those who gain from reforms vote for the compensation in addition to those who expect to be compensated. Subsequently, these voters vote for the reform as well. On the other hand, if the vote on compensation takes place after the vote on reform, then those who stand to gain from reforms do not have an incentive to vote for the compensation given that the vote for the reform has already taken place. In that case, the vote for compensation fails and anticipating that, the vote for reforms fails as well. In other words, if compensation is going to be only for displaced workers, societies should agree on compensation beforehand. (Note that, in this case, the majority of the people lose from reforms in the absence of any compensation, even though gainers gain more than what losers lose.)

The above logic can also hold when all movers benefit and the majority gain from reforms, but there is uncertainty about who ends up moving. In the words of Fernandez and Rodrik (1991), there is "individual-specific uncertainty" regarding who ends up moving and who ends up staying in the import-competing sector upon reforms. Let us say all those who are in the export sector prior to reforms gain from reforms. Let us assume 40 per cent of the population is in that sector to begin with. After reforms, this sector will have 70 per cent of the population. Each mover will

gain x and each person stuck in the import-competing sector will lose y. Let us assume y > x, in which case prior to reform, any producer in the import-competing sector initially views her expected change in welfare as 0.5(x - y) < 0. Thus, we get a vote against the reform *ex ante* even if *ex post* a majority of the people benefit. If movers are promised compensation such that x plus the compensation is a little more than y, then the compensation wins the vote if it takes place prior to the vote on reform and if we assume that the winners (the people in the export sector to begin with) are still better off after the compensation. Following this, a majority will vote for reforms. If a vote on compensation is taken after reforms, then the majority will vote against compensation. This negative majority vote on compensation, conditional on trade reforms, will be taken into account when a vote on reforms is taken in a prior stage. Thus, in this case, there will be a negative vote on reforms.

Thus just the possibility of compensation does not ensure making reforms politically more feasible. Some commitment to a principle of compensation to those vulnerable to shocks in general might be required to make trade reforms politically more palatable and feasible. Also, most kinds of social protection are for displaced workers. An example of that is trade adjustment assistance in the United States. However, extending protection to workers stuck and employed in declining sectors might help with gathering support for trade reforms.

Brander and Spencer (1994) suggest that trade adjustment assistance may have a special role as a mechanism for weakening the political attractiveness of protection. Their argument follows similar arguments made by Bhagwati (1989) earlier. Magee (2003) has examined such arguments in a model of endogenous protection in the presence of trade adjustment assistance. He finds two opposing effects. First, trade adjustment assistance subsidizes exit from the import-competing sector, which makes the sector smaller than it would be in its absence. Thus, it reduces this sector's lobbying strength. However, second, a smaller import-competing sector also means a smaller production distortion cost for the government of providing protection, thereby affording a higher level of protection. Thus, if the second effect dominates, the tariff might actually increase. In a model with endogenous tariffs and trade adjustment assistance, Magee actually shows that tariffs and trade adjustment assistance could be complements. He argues: "A large tariff requires a generous adjustment subsidy in order to pull workers out of the import-competing industry and offset the tariff's production distortion. A large adjustment subsidy creates an incentive to keep the tariff high and maintain employment in the import-competing industry" (p. 217).

We next examine whether providing compensation to displaced workers makes trade agreements self-enforcing and increases their sustainability. Here we outline and try to simplify the argument made by Fung and Staiger (1994). Consider two countries that enter into a trade agreement to lower their tariff with a trade adjustment assistance built into it. Each country has an incentive to increase its tariff as it improves its terms of trade. However, each country's trade adjustment assistance programme reduces this incentive for its partner country. The reason is that the trade adjustment assistance promotes the expansion of the export sector (and the contraction of the import-competing sector) in each country. This makes the production structure of the two countries more different from each other and increases possible gains from trade (and reduces the gains from tariffs). Basically, the size of the potential market for exporters in each country grows in the partner country. Thus trade adjustment assistance sustains lower reciprocal tariffs, that is, can lead to reciprocal trade liberalization.

Thus, social protection can potentially lead to freer trade. However, one needs to be careful in making this argument. First, the decision on social protection will have to be finalized prior to carrying out trade reforms. Second, apart from displaced workers, workers stuck in a declining sector may also have to be provided with transfer to win their support for trade liberalization. Finally, countries that enter into a trade agreement with a trade adjustment assistance scheme built in have a better chance of being able to liberalize trade reciprocally.

Having seen the usefulness of compensation schemes in providing political support for globalization, we next look at some compensation schemes that can make reforms Pareto improving (ensuring that at least some people gain while no one loses) and thus have a normative appeal. In this context, it is appropriate to mention the seminal work of Dixit and Norman (1980). They argue that if lump sum compensation can be provided (and lump sum taxes can be levied) to ensure that at the free trade commodity and factor prices each individual consumes his or her autarky consumption vector, then the government collects positive net revenues. Therefore, if these net revenues are returned to consumers on a lump sum basis, trade leads to higher welfare. Alternatively, commodity and factor taxes and subsidies (that maintain the autarky commodity and factor prices faced by consumers), which require much less individual-level information, also lead to positive net revenues.

Feenstra (2004) has argued that there are several problems with the Dixit–Norman schemes when factor supplies are not perfectly inelastic resulting in imperfectly observable factor supplies and factor prices. Also, as argued by Feenstra and Lewis (1994), the real challenge comes when there are worker mobility costs. Then, if industries have fixed locations, factor and commodity taxes and subsidies will not work as workers will stay put at the initial wages and prices. An additional employment relocation subsidy, which is very similar to trade adjustment assistance, however, will do the job.²

Before concluding this section, it is worth reiterating that globalization, in the form of trade liberalization or capital account liberalization or immigration, can be a source of increased volatility in open economies. Therefore, in the absence of a strong social protection regime, the political support for globalization can become weak or there could even be a backlash against globalization. This makes it imperative to provide strong social protection in open economies. However, according to Tanzi (2002), forces of globalization themselves may reduce a state's capacity to provide social protection. Increased foreign competition can reduce the capacity of states to raise tax revenues. Countries with higher tax burdens will see capital and skilled labour flee to other countries with lower taxes. Also, technological progress in the form of e-commerce allows many products that had a tangible form earlier, such as travel services, banking, education, medical advice and so on, to be delivered over the internet and therefore not leave any paper trail. This reduces the ability of states to collect excise, sales taxes and so on. Finally, since people can take their savings abroad, it becomes difficult to tax wealth. Lower tax revenues, in turn, constrain the abilities of states to provide social protection.

6.3 Social protection measures used to deal with the East Asian financial crisis

We next turn our attention to some actual social protection measures to deal with the consequences of globalization and we start with East Asia. As mentioned before, trade liberalization is an important component of globalization. Another component of globalization is capital account liberalization, whose wisdom has been guestioned by many prominent economists (see, for instance, Bhagwati, 1989 and Krugman, 2004). However, there are sometimes strong internal and external pressures to bring about such liberalization, and if capital account liberalization has already taken place, there is pressure not to reverse it. This is illustrated by the fact that of all the Asian countries hurt by the financial crisis of the late 1990s (the financial crisis itself being a result of free short-term international capital flows), only Malaysia ended up imposing capital controls through a system of selective exchange rate controls. The very fact that there is difference of opinion and not a consensus on this issue, with some prominent people also supporting capital account liberalization, makes it clear that there will be a lot of variation across countries in their ability to impose capital controls. However, if crises do result from capital account liberalizations, appropriate social protection measures need to be in place.

The crisis that began in July 1997 in Thailand quickly spread to the rest of East Asia. The decrease in GDP in 1998 was as follows (Betcherman and Islam, 2001): 0.4 per cent in the Philippines, 5.8 per cent in the Republic of Korea, 7.5 per cent in Malaysia, 10 per cent in Thailand and 13.7 per cent in Indonesia. In addition, from 1996 to

1998, the unemployment rate went up from 8.6 to 10.1 per cent in the Philippines, from 2 to 6.8 per cent in the Republic of Korea, from 2.6 to 4 per cent in Malaysia, from 2 to 5.2 per cent in Thailand and from 4.9 to 5.5 per cent in Indonesia. There was also a significant increase in underemployment. During 1997–98, underemployment increased by 29.2 per cent in the Republic of Korea and by 33.3 per cent in Thailand. In other countries, the increase was smaller. Given the magnitude of the crisis, all the countries adopted social protection measures to mitigate its impact.

Unemployment insurance (UI)

The Republic of Korea was the only East Asian country with a programme of UI at the time of crisis. Even there the programme had started in 1995, only a couple of years before the crisis. The programme was initially limited to firms with more than 30 employees, but the coverage was extended to businesses with more than ten employees in January 1998 and to businesses with more than five employees in March 1998, and was extended to businesses with less than five employees in October 1998. However, the eligibility requirement that a worker must have been insured for at least six months in the 12-month period prior to the dismissal meant that only a few of the unemployed actually benefited from the programme. In August 1999, only 12.3 per cent of the unemployed received unemployment benefits (Kang et al., 2001).

Employment protection (EP)

All countries in East Asia had some type of EP in place at the time of crisis. In particular, all countries had some kind of firing restriction(s). In Indonesia, dismissals had to be approved by a tripartite committee. In Malaysia, the Philippines and Thailand, advance notice of dismissal was required. In the Republic of Korea, a dismissal article was enacted in February 1998 and was to be enforced from 1999.

These countries also required severance payments in case of dismissal. In addition, in Malaysia and the Republic of Korea, laws were amended during the crisis to make the severance pay available to employees leaving their jobs under voluntary separation. However, compliance was a problem, particularly in Thailand among small employers (Mahmood and Aryah, 2001). In Malaysia only 83 per cent of the claims were paid in 1998 (Mansor et al., 2001). To alleviate the problem of non-compliance arising from bankruptcy, the Republic of Korea and Thailand introduced guarantee funds to pay these workers. There are no quantitative analyses of the impact of these employment protection measures on reducing job destruction during the financial crisis, but evidence from developed countries provided in Messina and Vallanti (2007) suggests that they are likely to have reduced job destruction.

Another employment protection instrument, less common in developed countries except for Japan, was wage subsidies. In the Republic of Korea, wage subsidies were given under the Employment Stabilization Scheme which was a component of the comprehensive Employment Insurance System established in 1995 of which UI was also a part (Kang et al., 2001). Hiring subsidies were given to employers who hired laid-off workers from restructuring enterprises. Employment maintenance subsidies were given to firms that retained redundant workers during times of temporary financial difficulty. An enterprise survey done during the crisis suggests that 22 per cent of the subsidized jobs would have been lost in the absence of wage subsidies. Also, the impact on employment maintenance was larger in smaller firms. Since only 1 per cent of private employers participated in the wage subsidy programme, the impact of the programme on protecting jobs was minimal (see Kang et al., 2001, for further details). In Malaysia, there were no explicit wage subsidies but the government agreed to bear the full cost of training of workers from registered employers at government-approved training centres. The government also made some recommendations like pay cuts, temporary lay-offs, voluntary separation schemes and so on. Employers preferred voluntary separations rather than pay cuts or temporary lay-offs.

It is worth mentioning that these employment protection measures affected only workers in the formal sector of the economy.

Public works programmes

All East Asian countries launched massive public works programmes to transfer income to the large number of unemployed during the financial crisis (Betcherman and Islam, 2001). In Indonesia these programmes were expected to generate 300 million person days of work in 1998. In the Republic of Korea, they generated 440,000 jobs in 1998 and 1.2 million jobs in 1999. This provided work to 70 per cent of the country's unemployed in 1999. In Malaysia the government undertook several huge infrastructural projects like railroads, ports, highways and so on during 1996–98. These public projects were given special attention during the period of financial crisis because of their importance in income transfer to the poor. In the Philippines the government launched the 14 million pesos pilot Rural Works Programme in collaboration with non-governmental organizations (NGOs). This programme engaged in building rural infrastructure such as schools, roads, bridges, health clinics and so on. The government in Thailand undertook 68 rural job creation projects to improve rural infrastructure and provide income support to the poor in addition to encouraging reverse migration from cities to villages.

While the imperatives of launching a public works programme during times of crisis are obvious in societies lacking other social protection measures, such as

unemployment benefits, designing them appropriately to meet the twin targets of asset creation and income transfer to the targeted groups is not easy. Setting the wage right can result in self-targeting. However, in the case of East Asia wages were set high resulting in these programmes attracting non-poor and people employed elsewhere, thereby reducing the net benefit from these programmes. The project selection in many cases – such as the construction work or project site being far from the village – meant that women could not participate in these programmes. The Republic of Korea was an exception where women accounted for 50 per cent of the participants in the public works programme in 1999. In Indonesia many of the projects were not labour-intensive enough, with the wage bill accounting for a small part of the total project cost. However, these programmes were still more efficient than some alternative ways to transfer income to the poor. For example, the cost of Indonesia's rice subsidy programme was much larger than its public works programmes for each dollar of transfer (Betcherman and Islam, 2001).

In addition to the above programmes, some temporary measures used included the permission by the governments in Indonesia, Malaysia and Thailand to allow people to withdraw money from their provident funds to smooth consumption during the crisis. In the Philippines and the Republic of Korea emergency loans were made available to people affected by the crisis. In the absence of borrowing opportunities from banks, such ad hoc measures played an important role in cushioning the blow from the financial crisis on consumption.

The bottom line is that even though East Asian countries used a variety of policy measures to mitigate the consequences of the crisis, probably the single most important measure was the public works programme given the large size of the informal sector in most of these countries. Additionally, this is also consistent with an important feature of the development strategy in East Asia which relies on public investment in infrastructure. Public works may also be preferred because they tend to have a smaller leakage into imports and therefore have a high fiscal multiplier. As these economies develop further and the size of the informal sector shrinks, they can move towards social protection instruments used in developed countries, something that we describe in detail later. One important point to note here is that in East Asian countries there has been considerable reliance on self insurance based on these countries' high personal saving rates, which are encouraged by their governments as part of their overall development strategy. In addition, East Asian countries also have a high rate of government saving, including foreign exchange reserves. This has been a protection strategy adopted by these governments since the Asian financial crisis. Further, the high degree of flexibility of all markets, including labour markets, is considered by some to add to the resilience of East Asian economies to the various types of external shocks.³

6.4 Social protection plans and their financing in developed and developing countries

We now move away from the specific case of East Asia where, importantly, countries were subjected to a huge negative shock in the recent past, and look at the social protection measures more generally. In the developed countries the social protection measures used can be classified into the following categories:⁴ (1) unemployment insurance; (2) employment protection; (3) public works programmes; (4) trade adjustment assistance programmes. Apart from trade adjustment assistance programmes, the other three have been used to different degrees in developing countries (discussed earlier in the case of East Asia).

Unemployment insurance (UI)

Virtually all developed countries have publicly provided unemployment insurance (UI) programmes. These programmes try to alleviate the adverse selection problems by making membership compulsory, and reduce moral hazard through the effective monitoring of job search activities by the beneficiaries and the use of information from other public programmes to verify eligibility and other details. Finally, the government financial guarantee takes care of the covariant risk or the aggregate shock problem.

Below we describe in some detail the UI programme in the United States and note how some key features of programmes in other countries differ from the US programme (the discussion of UI in the United States draws upon Meyer, 2002).

UI within the United States

Approximately 97 per cent of wage and salaried workers are in jobs covered by UI. Not covered are the self-employed, employees of small farms and household employees. Despite this, only 40 per cent of the unemployed received UI in many years primarily because they failed to meet the minimum earning requirement. The programme details vary considerably across states in the United States. The benefits are usually between 50 and 60 per cent of the previous earnings subject to a maximum and a minimum, and they usually last up to 26 weeks. When a state's insured unemployment rate is sufficiently high, weeks of benefits are extended 50 per cent beyond the eligibility under the state law. The extension must not exceed 13 weeks. During times of high unemployment, Congress passes laws to temporarily extend the benefits.

The UI programmes in the United States are financed by contributions from the employers. A federal levy of 6.2 per cent is imposed on the first US\$ 7,000 in wages a year per employee. A credit of 5.4 per cent is given to employers that pay state

taxes under an approved UI system, so that all employers pay 0.8 per cent. Forty states have a tax base higher than the federal base of US\$ 7,000. In 1998, UI taxes were 1.9 per cent of taxable wages and 0.6 per cent of total wages.

The most distinguishing feature of UI in the United States is the use of the experience-rated contribution whereby a firm's tax rate depends on its lay-off history. The experience rating system is not uniform across states but takes two common forms: (1) the reserve ratio (30 states and the District of Columbia) and (2) the benefits ratio (17 states). Under the reserve ratio, a firm's tax rate depends on the difference between taxes paid and benefits accrued divided by average covered payroll. Taxes paid and benefits accrued are summed up over the past three years while the average payroll is the average of the last three years. Under the benefits ratio, a firm's tax rate depends on the ratio of benefits paid to taxable wages, both averaged over last three years.

Even though a firm's tax rate changes with these ratios, however, tax rates do not adjust sufficiently to make the firm bear the full marginal UI cost of laying off a worker. There are large ranges at the top and bottom where a firm's lay-off history does not affect its tax rate. This, in effect, subsidizes industries with a greater turnover.

In terms of financing, the US experience rating seems to be an exception rather than the norm. In addition to making the employers bear the marginal UI cost of lay-offs, an additional benefit of experience rating is that employers have an incentive to enforce eligibility rules because higher UI benefits accrued to their former employees are going to raise their tax rate. For example, in Canada an unemployed individual is three-and-a-half times more likely to receive UI than in the United States. This is partly due to the fact that those who have left their previous jobs are not eligible in the United States, but are often eligible in Canada. However, part of the explanation has to do with the fact that without experience rating in Canada, employers have less incentive to enforce eligibility rules. That is, experience rating not only reduces layoffs by making firms bear the marginal cost of UI due to lay-offs, but also reduces moral hazard by incentivizing firms to enforce eligibility rules.

The impact of experience rating on unemployment is theoretically ambiguous because it is likely to reduce both lay-offs and hiring. That is, experience rating reduces both flows into and out of unemployment. In Europe, employment protection legislation may be playing the role of experience rating by reducing job flows whereas conversely, in the US, experience rating may be playing the role of employment protection in reducing job flows.

Whether the employers or the workers should finance UI is another question worth asking. In general, the incidence of a payroll tax to finance UI depends on the

elasticities of demand and supply for labour. Therefore, if demand is elastic then employers can shift the burden on employees. However, wage-setting institutions seem to matter in determining the impact of UI on employment and unemployment. If wages are inflexible downwards, as in the case of decentralized collective bargaining, then making the employers contribute can reduce labour demand and employment.

UI outside the United States

Outside the United States benefits are usually in the range of 40-75 per cent of the previous earnings. Denmark is an exception with a replacement rate of 90 per cent. France, Ireland and the United Kingdom provide benefits at a flat rate. In the United Kingdom it is set at a very low level: \$51.40 per week in 2000 (a quarter of the typical maximum benefit in the United States), however, additional benefits are paid to workers with families. The maximum entitlement period varies considerably across countries, usually in the range of 3-12 months. In Belgium the duration is unlimited while in France it is capped at 60 months. In most countries the programme is financed by contributions from both employers and employees, but there are exceptions. In Iceland, Italy and the United States only employers contribute, while in Luxembourg only employees contribute.

Outside the group of OECD countries, all East European countries, several Latin American countries such as Argentina, Barbados and Brazil and some East Asian countries such as China, Chinese Taipei and the Republic of Korea, provide UI. Among African countries, Algeria, Egypt and South Africa provide UI.

Empirical evidence on the impact of UI

Since the chief goal of UI is consumption smoothing, its effectiveness should be judged primarily in those terms. Gruber (1997) finds a large consumption-smoothing role for UI in the United States: a 10 percentage point rise in the replacement rate reduces the fall in food consumption upon unemployment by 2.65 per cent. Bentolila and Ichino (2001) provide evidence on the consumption-smoothing effects of UI using data from Germany, Italy, Spain, the United Kingdom and the United States. They find that consumption falls less with unemployment in Italy and Spain because of more extensive transfers from family members.

In a study that has implications for social protection policies in developing countries, Chetty and Looney (2007) find that there is a 10 per cent decrease in consumption in response to unemployment for both Indonesia and the United States. While the United States has UI, Indonesia does not. This may suggest that not much can be gained by providing social insurance in Indonesia, although this would be wrong. The reason is that households in Indonesia use coping mechanisms which are costly from the welfare point of view. They reduce investment in the education of their children and increase the labour supply of other members of the household when the head of the household becomes unemployed. In contrast, in the United States, consumption smoothing is attained through UI benefits, a decline in the tax burden and withdrawal from savings.

While UI succeeds in its role of consumption smoothing, it also has a downside in terms of increase in unemployment (see Nickell, 1998, for evidence). In a recent influential paper, Chetty (2008) finds that the bulk of the rise in unemployment duration due to increased UI benefits comes from a liquidity effect (60 per cent) rather than moral hazard. That is, an increase in UI eases the liquidity constraint of the households which allows them to reduce their search intensity and hence increases unemployment duration. Intuitively, in the presence of liquidity constraints, the search intensity of households is above optimal (it is probably too large). Therefore, UI takes it closer to the optimal by relaxing the liquidity constraint and hence is welfare improving. Chetty also derives a formula for optimal UI benefits and finds it to be in excess of 50 per cent of the wage. Empirically, he identifies the liquidity effect from the fact that the increase in UI benefits has a much larger effect on the duration of liquidity-constrained households. Second, lump sum severance payments (which presumably do not lower the returns from job search) increase duration substantially among constrained households.

Some fear that UI crowds out savings for self-insurance purposes. Engen and Gruber (2001) find that more generous UI leads to lower savings; however, the magnitude is very small. The above points to the fact that there is little saving for self-insurance purposes.⁵

Unemployment insurance savings account (UISA)

Several Latin American countries such as Argentina, Brazil, Chile, Colombia, Ecuador, Peru, Panama, Uruguay and Venezuela have introduced UISA or versions of it (see Ferrer and Riddell, 2009, for an overview of UISA). In its purest form, UISA is like a mandatory saving programme for self-insurance purposes whereby employers put aside a part of the wages of a worker in an account which the worker can access upon separation from the job. The key benefit of UISA is that it overcomes the moral hazard problem associated with the traditional UI programmes of lowering the incentive for job search. This could be an advantage in countries with limited monitoring capacity to monitor the unemployed. Both UISA and severance pay avoid the moral hazard on the part of workers. However, an unfunded severance pay programme can lead to moral hazard on the part of firms, in turn, leading to noncompliance (as in the case of Peru to be discussed later). UISA can potentially avoid this kind of moral hazard on the part of firms by keeping the contributions in accounts with third party financial institutions. Therefore, UISA can be a substitute for severance pay programmes as was done in Colombia in 1990. However, UISA may lead to excessive turnover by encouraging workers to separate to access their funds, as has been observed in Brazil.

The main weakness of UISA is that it involves intertemporal risk pooling for an individual rather than pooling risks across individuals which is one of the key motives behind a traditional UI programme. It is easy to see that self-insurance would result in too little saving for consumption smoothing during unemployment. Therefore, UISA cannot be a substitute for the traditional UI programme. There are versions of UISA that combine some social insurance features with self-insurance. One such version is the UISA combined with a solidarity fund in Chile which has received some praise. In this case the employers contribute to both UISA and a solidarity fund which pools risk across the economy. Once individuals run out of funds in their UISA account, they get money from the solidarity fund.

Employment protection

Employment protection refers to all the restrictions that governments impose on hiring (for instance rules favouring disadvantaged groups, conditions for using temporary or fixed-term contracts, training requirements) and firing (for example redundancy procedures, mandated pre-notification periods and severance payments, special requirements for collective dismissals) by firms with the objective of improving job security. Most developed and developing countries have a host of such restrictions. The OECD compiles an index of employment protection legislation (EPL) across countries. According to the latest OECD data, available on stats.oecd. org, this index varies from a low of 0.21 in the United States to a high of 3.72 in Turkey in 2008. Among developing countries, the index takes the value of 2.65 for China, 2.75 for Brazil, 2.77 for India and 3.68 for Indonesia.

Theoretical models such as Bentolila and Bertola (1990) show that stringent regulations reduce job flows but the impact on unemployment is ambiguous. Blanchard and Portugal (2001) contrast the EPL in Portugal (3.85 in 1995) with that in the United States (0.21 in 1995). Despite having very different EPL regimes the two countries had similar unemployment rates in the 1990s. The difference in the EPL regimes shows up in employment flows. The flows out of unemployment into employment and those out of employment into unemployment are lower in Portugal. As a result, the duration of unemployment in Portugal tends to be higher than in the United States.

Messina and Vallanti (2007), using data from 14 European countries, find a negative effect of employment protection legislation on job flows. They also find that stringent regulations reduce job turnovers during recessions.

One aspect of employment protection legislation, severance pay, refers to the lump sum payments made to workers upon separation. While severance pay is mandated in several countries, in others such as the United States it is provided voluntarily by many employers. Also, in many European countries such as Germany, the Netherlands and Switzerland, where severance pay is not mandated, it is provided through collective bargaining agreements. Severance pay is typically tied to the years of service with the employer and is financed by the employers. In addition to providing job security it also aims to provide consumption-smoothing opportunities. MacIsaac and Rama (2000) show that severance payments had a large effect in protecting the consumption of the unemployed in Peru. In the absence of severance payments, the per capita consumption of the unemployed fell 10 to 20 per cent. However, the receipt of severance payment more than offset the decline in consumption. One problem with severance pay, particularly in developing countries, is non-compliance. For example, according to MacIsaac and Rama (2000), in Peru only about half the workers who are entitled to receive severance pay actually receive it. Part of the problem arises from the fact that severance pay involves risk pooling only within the firm and additionally that liabilities arise usually when the firm is in financial trouble (as was the case during the East Asian financial crisis discussed above).

Finally, severance pay does not create the moral hazard associated with UI in terms of lower search intensity while being unemployed, although it may create a moral hazard of entering unemployment. That is, workers may want to separate to access severance payments. This also may lead to large litigation costs arising from disputes related to the cause of separation. The reason is that in many countries, such as Brazil, eligibility is restricted to dismissals for unjustified reasons.

Public works programmes

In countries lacking unemployment insurance, public works programmes play an important means of providing social insurance. These programmes are financed by governments from general tax revenue. Some general principles to keep in mind while designing these programmes are (Vodopivec, 2004): (1) foregone earnings should be minimized by attracting workers with low alternative earnings opportunities; (2) wages should be low enough to induce self-selection by the needy; and (3) the non-labour cost should be minimized.

While these programmes are generally used to provide income support to the poor during times of economic and natural shocks, Ravallion (1999) argues for making well-designed public works programmes permanent to provide social insurance against covariant risks during crises and idiosyncratic risks during non-crisis times. It is interesting that following the success of the Maharashtra Employment Guarantee Scheme in India, the government launched an ambitious social protection plan under the name of the National Rural Employment Guarantee Act (NREGA) in 2006. It guarantees a minimum of 100 days of employment to every household in rural areas in all districts of India. The wage cannot be less than the state minimum wage. The programme has received positive reviews in several well-governed states. As mentioned in the case of East Asia, India also needs to establish a UI scheme; however, it is unlikely to cover the large number of workers employed in the informal sector of the economy. Until then, public works programmes like NREGA are going to remain an important instrument of social protection in developing countries like India.

Globalization adjustment programmes

Given that globalization and import competition have become important issues for workers and workers' unions, several countries have introduced social protection programmes specifically to protect labour from policies promoting globalization and shocks related to globalization.

Trade adjustment assistance (TAA) programme in the United States

The TAA is a programme of social protection in the United States targeted towards workers affected by international trade.⁶ The reason for special treatment of workers affected by international trade has to do more with politics than economics. For reasons explained earlier in this chapter, it is widely believed that the political support for trade liberalization would be enhanced if the workers adversely affected by such a move are compensated adequately. Since trade provides efficiency gains, redistributing some of the gains to those who are adversely affected also goes in the direction of enhancing distributional equity.

In order to be eligible for TAA, a worker must show that the job loss was due to at least one of the following reasons: (1) an increase in imports; (2) a shift in production to another country; or (3) import competition faced by the downstream firm to which the worker's upstream firm is a supplier. Workers eligible for TAA get the following benefits: 78 weeks of income maintenance payments, in addition to the initial 26 weeks of UI, if enrolled in training; all training expenses; health insurance tax credit; wage insurance which covers half the difference between the old wage and the new wage for two years for workers older than 50 subject to a cap of \$10,000; 90 per cent of the cost of job search up to a cap of \$1,250; and 90 per cent of the cost of relocation up to a cap of \$1,500. The programme is financed from general revenue even though there has been a proposal for setting up a trust fund for a long time.

In addition to the TAA for workers, there is also a small TAA providing technical assistance to firms adversely affected by import competition and a TAA for farmers

and fisherfolk which covers a part of the drop in their earnings due to a decline in the international price of their products.

European Globalization Adjustment Fund (EGF)

Set up by the European Union in 2006, the objective of the EGF is similar to the TAA in the United States in terms of assisting workers affected adversely by trade liberalization. To be eligible for assistance from this fund, a request must be made by a member state that at least 500 jobs have been lost in a firm or in a sector within a region due to changing world trade patterns. The fund provides support in the form of:

- job search assistance and training;
- job search allowances to individuals participating in lifelong learning and training activities.

Since its inception in 2007, the EGF has spent \in 67.6 million, helping 15,000 workers. Some examples are: help to 2,400 workers at the two German subsidiaries of mobile phone manufacturer BenQ because of shift in production to Asia; and help to workers at the suppliers of car makers Renault and Peugeot in France, facing increased competition from imports of small cars from Asia.

Other social protection measures

In addition to the above programmes, countries also use several other measures like unemployment assistance programmes in Australia and New Zealand which are means-tested programmes benefiting the poor. Another programme worth mentioning is the Public Distribution System (PDS) in India, which is a way of making some basic food items available at an affordable price. Since the economic reforms in the early 1990s, the PDS has become a safety net for the poor against the possible short-run spikes in food prices in the wake of economic reforms and the forces of globalization. Since 1997, the PDS is being targeted towards people living below the poverty line and the subsidies for those above the poverty line are being phased out.

Some problems with social protection policies in developing countries

Problems with labour protection laws

As we mention elsewhere in the chapter, the main methods of offering protection to workers in developing countries are public works or infrastructure projects as well as labour market policies that put constraints on employers especially when it comes to laying off or firing workers. Labour market regulation has often been argued to be an important reason for the poor performance of the manufacturing sector in some developing countries, especially those in South Asia (see, for instance, Besley and Burgess, 2004, for India).⁷ While meant for protecting labour, it can adversely affect labour demand. For example, Chapter VB of India's Industrial Disputes Act (IDA) requires employers with more than 100 workers to seek prior government approval before the dismissal of any workers. In practice, governments have often been unwilling to grant such permission (Datta-Chaudhuri, 1996). Therefore, critics argue that these laws have created a bias against hiring (abundant) labour relative to (scarce) capital, leading to weak employment growth (see Hasan et al., 2010, for some cross-country evidence). Panagariya (2008) argues that restrictions on layoffs can prevent producers from attaining economic scales of production since firms may be reluctant to hire workers who they cannot fire or lay off in response to adverse shocks. Other restrictions, such as minimum wage laws, the rules governing collective bargaining and so on, also meant to protect workers, may have similar effects. For example, with the Trade Union Act allowing multiple unions within the same establishment, a requirement of worker consent for, say, job description changes "can become one of consensus amongst all unions and groups, a virtual impossibility" (Anant, 2000, p. 251).

Furthermore, since restrictive labour laws inhibit firms' ability to adjust their employment of regular wage workers to demand and technology shocks like those arising from trade liberalization, firms can resort to hiring informal or casual workers often operating in inferior working conditions without basic labour protection, thereby defeating the very purpose of these employment protection laws. Goldberg and Pavcnik (2003) have provided evidence that in Colombia the ill-designed labour regulations have resulted in trade reforms leading to an increase in informal employment. However, the authors find no evidence in the case of Brazil of any relationship between trade policy and informality in the presence of labour market regulations. Other papers showing the adverse effects of labour laws taking the form of an increase in informal employment in Colombia are Kugler and Kugler (2003), Maloney and Nuñez Mendez (2003) and Arango and Pachon (2004). However, Maloney and Nuñez Mendez (2003) and Arango and Pachon (2004) also show a decline in informal employment in Brazil that has accompanied the recent increase in the minimum wage there. A recent paper by Kucera and Roncolato (2008) surveys the theoretical literature as well as the empirical studies on the relationship between labour regulations and informal employment. Surveying various cross-country as well as intra-country studies, they conclude that: "Some of the statistically strongest results in the literature show a positive relationship between the strength of labour regulations and shares of formal employment ... Most of the studies essentially show no relationship" (p. 340). However, they do not deny that some of the studies also show a negative relationship between labour regulations and the formal employment share (positive relationship between labour regulations and the informal employment share). While their conclusion is that "the empirical evidence does not support the view that weakening labour regulations is an effective policy for reducing informal employment" (p. 341), we would not recommend using labour regulation as a tool for reducing informality. In a recent cross-country study, Hasan et al. (2011) look at the determinants of three-digit industry-level capital intensities in formal manufacturing. They find that less restrictive labour regulations (after controlling for other relevant factors) are associated with lower capital intensity. This is especially true in sectors that require more frequent labour adjustment. This suggests that stringent labour regulations can impose costs on labour use, thereby pushing firms towards greater capital intensity in labour-abundant developing countries, in turn reducing labour demand and curtailing gains from trade based on comparative advantage driven by factor abundance.

Public works programmes

Finally, we discuss a couple of problems related to the financing of public works (infrastructure) projects that are used as a tool for social protection in developing countries. These public works projects can potentially be very important since they provide protection to workers outside the organized sector or the formal sector that forms a small part of the overall employment. These projects are financed by either income tax revenues or sometimes foreign aid including aid from international organizations. The first problem is that the tax collection machinery in developing countries is very weak. There are serious problems with tax evasion. Raising tax rates does not lead to higher revenues. In fact, it has been well documented that tax revenue could decline as a result of increasing tax rates as that triggers more evasion. Therefore, the size of public works programmes as a source of worker protection remains limited as there are serious constraints on expanding them. In addition, corruption is a problem with public works projects. The objective of social protection cannot be viewed as totally divorced from other social objectives including the control of corruption in developing countries. However, as pointed out earlier, these programmes have proved to be more cost-effective than some food subsidy programmes.

6.5 Best practices with regard to social protection

As discussed earlier, in the developed countries, the two main instruments of social protection are unemployment insurance and employment protection measures. A liberal unemployment insurance regime creates moral hazard in terms of the search activities of the unemployed, while employment protection measures reduce the ability of firms to hire and fire workers, thereby creating misallocation of resources. Finding the right mix of policies to provide social protection is a tricky issue.

Sapir (2006) classifies European social protection systems into four groups: the Mediterranean model, the Nordic model, the Continental model and the Anglo-Saxon model. The Mediterranean model combines parsimonious unemployment benefits with high employment protection while the Nordic model has generous unemployment benefits and low employment protection. The Continental model has generous unemployment benefits but lower employment protection than the Mediterranean countries while the Anglo-Saxon model has very little employment protection but similar unemployment benefits. In terms of outcomes, the Nordic model achieves both equity and efficiency, while the Mediterranean model achieves neither and is also fiscally unsustainable. The Continental model achieves equity but the efficiency is low while the Anglo-Saxon model achieves efficiency, but equity is low. Also, the public resentment against globalization is far more severe in the Continental and Mediterranean countries than in the Nordic and Anglo-Saxon countries (see Sapir, 2006, for evidence). This, combined with the low efficiency, makes it imperative to reform the labour markets in the Continental and Mediterranean countries.

Given the superiority of the Nordic model in terms of outcomes such as poverty and employment rates, it has received closer scrutiny. In particular, the Danish flexicurity system which combines low employment protection with generous unemployment benefits has received a lot of positive attention. The labour market reforms in Denmark in the mid 1990s brought the EPL index down from 2.4 in 1994 to 1.5 in 1995 and it has remained at that level since then. To alleviate the moral hazard associated with generous unemployment benefits, the government relies on the strict monitoring of the job search activity of the unemployed. Given the success of the Nordic model in achieving the twin objectives of equity and efficiency, other countries may be tempted to copy this approach; however, Algan and Cahuc (2006) argue that the success of the monitoring efforts in reducing moral hazard depends on the social norms in a country. Therefore, what works in Denmark, which has a strong public-spiritedness, may not work in the Continental and Mediterranean European countries because of the lack of public-spiritedness in the latter.

It is important to note here that there is now a growing consensus across Europe in favour of a modified version of the original concept of flexicurity (see Spidla and Larcher, 2008). The European Commission takes an integrated approach and redefines flexicurity to consist of a set of "more flexible and secure contractual arrangements, from the point of view of both employer and worker". It also wants to incorporate "lifelong learning strategies" so that people are better able to adapt to change and transitions. Also, transitions to new jobs need to be supported by effective labour market policies and modern social security systems. Just based on how it is being defined, there seems to be considerable flexibility in the design of the system and it is being emphasized that the actual design of it within any country or

region should take into account cultural norms. While the European Commission (Spidla and Larcher, 2008) has laid out "certain common principles of flexicurity", there is no one single model. Whatever model is adopted by a region or country, it needs to be one that provides adequate flexibility to employers, especially in responding to the forces of globalization, and at the same time it should provide job security to employees. This implies support in job search, income support during transitions as well as the provision of training opportunities to assist in adapting to change. Also, a broader view of flexibility and security is taken. In other words, flexibility is not specific to employees may seek greater flexibility in reconciling work and family obligations, while employers might need more secure employment relationships through, say, legal security.

Some actual applications of this concept of flexicurity outside Denmark are in France, where 36-month specific-purpose "mission contracts" have been introduced. At the end of the contract, depending on need and performance, a firm decides whether to convert the contract to an open-ended one. This provides the firm with more flexibility especially in dealing with shocks such as greater import competition. Also in France, the national public employment service agency has been placed in charge of unemployment insurance. That has made possible better monitoring and at the same time better services. In addition, the vocational training system is being reformed to aid better adjustment.

In Poland, personalized jobseeker support is being provided and special assistance is being provided to older jobseekers. In Sweden, reforms such as reductions in social contributions, tax credits and medical and occupational rehabilitation schemes have been brought about to promote the employment of people who have been on long-term sick leave. This is intended to promote efficiency and growth. Compared to Denmark, employment protection laws are stronger in Sweden. In addition to what is captured in the EPL index, there is extra employment protection obtained through union contracts in Sweden, although unemployment benefits are quite a bit higher in Denmark and active labour market policies to help people cope with change are stronger and more prevalent in Denmark as compared to Sweden. However, Sweden provides better lifelong learning programmes to reduce adjustment required in response to shocks. Thus, while flexicurity is present in both Denmark and Sweden, the systems are somewhat different from each other along their individual dimensions (see Bergland and Furaker, 2010).

The US model is closer to the Anglo-Saxon model in terms of employment protection but less generous in terms of unemployment benefits. These policies have kept the US labour market flexible and, since the duration of unemployment has been low, parsimonious unemployment benefit has not had a significant detrimental impact on the welfare of the unemployed. However, things have changed in the US economy since the recession of 1990–91. In previous recessions output recovered to the prerecession level within two quarters, and lost jobs were recovered eight months after the recession trough. In the 1990-91 recession, however, whereas production recovered within three quarters, it took 23 months from the trough of the recession to recover the lost jobs. After the 2001 recession, output recovered in just one guarter, but it took 38 months after the trough of the recession for all the lost jobs to recover.⁸ If the trend continues, the recovery from the current recession is likely to be even longer. These so-called "jobless recoveries" have meant longer spells of unemployment which, combined with a weak safety net, are a recipe for political unrest. The problems for an unemployed person in the United States are compounded by the loss of medical insurance which is mainly provided by employers while private insurance remains unaffordable for most people.⁹ Responding to the crisis, the politicians in Washington, DC have extended unemployment benefits and enacted several ad hoc policies to spur job creation in addition to providing other types of fiscal stimulus. However, in the long run, rather than relying on discretionary spending during times of crises, it may be a good idea to strengthen the safety net by making the unemployment insurance programme more generous and healthcare more affordable.

In developing countries, we have noted that social insurance is constrained due to serious limits on the state's ability to raise revenues. Evasion of direct and indirect taxes is a real problem. While there are problems of leakage and corruption with public works programmes, the problems with other kinds of social protection systems are more severe in developing countries. Public works programmes are also the best available means of alleviating poverty as food subsidy programmes can potentially lead to more leakage, as has been seen in the Indonesian case. In addition, in developing countries, the large informal sector, the high incidence of poverty and the harmful effects of rigid labour laws regarding lay-offs (and changes in job description) increase the attractiveness of public works programmes. However, governments there need to find more innovative ways of raising revenues and probably should invest more in tax collection mechanisms that minimize evasion. Recent efforts in India to assign every citizen an identification number (just like social security numbers in advanced countries) are a significant step in that direction.

6.6 Concluding remarks

In this chapter, we have discussed social insurance programmes or other labour market interventions that allow people to deal with labour-market risk arising from shocks in general and external shocks in particular. We have considered the main reasons for the need for social protection, including the reduction of political

opposition to globalization, the promotion of distributional equity, the absence of markets for unemployment insurance and the presence of labour-market inefficiency resulting from various externality-based market failures.

While we have made a case for social protection when workers are exposed and vulnerable to shocks in general, in certain parts of the chapter we have focused on shocks arising from globalization, a major part of which is driven by trade policy; something over which governments have some control. The question we have asked here is under what kinds of social protection does freer trade lead to an improvement in the welfare of some without hurting anyone else in the economy? We have studied the conditions under which social protection leads to greater political support for (or less opposition to) trade reforms. In this context, we have also dealt with the choice of social protection policy instruments.

We have considered the issue of the effectiveness of social protection policies in mitigating employment disruptions caused by globalization. We have done this in the context of the record of social protection systems in developed and developing countries, with special focus on how such systems in East Asia were able to deal with injuries to workers caused by the financial crisis of the late 1990s. While East Asian countries used a variety of policy measures to mitigate the consequences of the crisis, probably the single most important measure was the public works programme, given the large size of the informal sector in most of these countries. Unless the size of the informal sector shrinks (which will happen with development), developed country social protection instruments will not be that useful.

We have also examined different approaches to funding social protection systems which vary, but not by much, across developed countries. The tax on firms to finance social protection ranges from flat to mildly progressive in the extent of turnover. In developing countries with underdeveloped income tax systems, employment protection policies such as mandatory severance packages or labour laws are mainly in place. Globalization or trade adjustment assistance programmes are also not prevalent in developing countries.

Finally, we have discussed the "best practice" among governments. We have looked at the different types of European social protection systems and come out in favour of the Nordic model which achieves both equity and efficiency at the same time. In particular, we have drawn attention to the Danish flexicurity system which combines generous unemployment benefits with strict monitoring of job search. We have also discussed the recent modifications and redefinitions of flexicurity by the European Commission that emphasize more flexibility in the model based on cultural and social norms. In developing countries public works programmes are the best option, despite problems with leakage, given the large informal sector, the high incidence of poverty and the harmful effects of rigid labour laws regarding lay-offs. However, governments in these countries need to invest in improving their income tax collection infrastructure to enhance tax compliance.

Endnotes

1. Autor (2010) discusses the recent polarization of job opportunities in the United States in the sense that expansion of opportunities is taking place in high-wage and low-wage employment with middle-wage job opportunities suffering a contraction. Autor argues that international trade in the form of offshoring is a major contributor to this polarization.

2. It is important to note that Davidson and Matusz (2006) make an argument where they do not exactly side with Feenstra and Lewis (1994). They argue that an employment (relocation) subsidy should be given to stayers (in the shrinking sector(s)) while a wage subsidy should be given to movers (to the expanding sector(s)). Brander and Spencer (1994) find that when the cost of raising revenue is high, trade adjustment assistance conditional on employment status is better despite the resource-use distortion. When people value their leisure arising from unemployment relatively highly (or the scarring effect of unemployment is relatively low), and the distribution of wage offers across actual and potential employees in the new open trade situation is concentrated at the higher wage level, the unconditional programme is relatively more attractive to the government.

3. The points about the role of public infrastructure investment, high saving rates and flexible labour markets in East Asia were brought to our attention by an anonymous referee.

4. Vodopivec (2004) provides a comprehensive discussion of income support measures. Our discussion of these programmes draws upon this work in addition to the other sources mentioned throughout the text.

5. While inequality has been growing in the United States over the last couple of decades, UI is not the right instrument for attacking this problem. An instrument such as a progressive income tax, that targets this objective more directly, is more efficient in this regard.

6. See Rosen (2008) for the details of TAA in the United States as well as suggestions for strengthening it.

7. For a critique of the Besley–Burgess index of labour-market rigidity, see Bhattacharjea (2006, 2010), where he also challenges the results obtained by Besley and Burgess (2004), showing them to be not robust to the addition of important controls including state-specific time trends and deletion of what he believes are irrelevant controls. Work by Hasan et al. (2007a, 2007b, 2011) and Mitra and Ural (2008), which use various modifications of the Besley–Burgess index (including incorporating some of Bhattacharjea's criticisms and concerns) shows that labour-market flexibility in general magnifies the effects, irrespective of whether they are beneficial or adverse, of trade liberalization. The beneficial effects of trade reforms include those on poverty, unemployment, productivity, investment, employment and so on, while the harmful effects include an increase in labour-demand elasticities that possibly leads to the decline in the bargaining power of workers (see Rodrik, 1997).

8. These numbers are from Rajan (2010).

9. While the Medicaid programme in the United States is aimed at providing medical insurance to the poor, poverty by itself does not qualify one for these benefits. Other eligibility criteria regarding assets, age, pregnancy, disability, blindness, income and resources and so on, also have to be met.

References

Acemoglu, D.; Shimer, R. 1999. "Efficient unemployment insurance", in *Journal of Political Economy*, Vol. 107, No. 5, pp. 893–928.

Aho, C.M.; Bayard, T. 1984. "Costs and benefits of trade adjustment assistance", in R. Baldwin and A. Krueger (eds): *The structure and evolution of recent US trade policy*, (Chicago, University of Chicago Press), pp. 151–193.

Ahsan, R.; Mitra, D. 2010. "Trade liberalization and labor's slice of the pie: Evidence from Indian firms", mimeo, Syracuse University.

Algan, Y.; Cahuc, P. 2006. "Civic attitudes and the design of labor market institutions: Which countries can implement the Danish flexicurity model?", IZA working paper No. 1928 (Bonn, Institute for the Study of Labour).

Anant, T.C.A. 2000. "Reforming the labour market", in S. Gangopadhyay and W. Wadhwa (eds): *Economic reforms for the poor* (Delhi, Konark).

Arango, C.A.; Pachón, A. 2004. "Minimum wages in Colombia: Holding the middle with a bite on the poor", Borradores de Economía No. 280 (Bogotá, Banco de la República de Colombia).

Autor, D.H. 2010. "The polarization of job opportunities in the U.S. labor market: Implications for employment and earnings", Center for American Progress and The Hamilton Project (Washington, DC, The Brookings Institute).

Bardhan, P. 2010. Awakening giants, feet of clay: Assessing the economic rise of China and India (Princeton, NJ, Princeton University Press).

Barry, F. 1995. "Declining high-wage industries, efficient labor contracts, and optimal adjustment assistance", in *Canadian Journal of Economics*, Vol. 28, pp. S94–S107.

Bentolila, S.; Bertola, G. 1990. "Firing costs and labour demand: How bad is eurosclerosis?", in *Review of Economic Studies*, Vol. 57, pp. 381–402.

-; Ichino, A. 2001. "Unemployment and consumption: Are job losses less painful near the Mediterranean?", mimeo, CEMFI.

Bergland, T.; Furaker, B. 2010. "Flexicurity institutions and labour market mobility: An intra-Nordic comparison", mimeo, Department of Sociology, University of Gothenberg, Sweden.

Betcherman, G.; Islam, R. 2001. "East Asian labor markets and the economic crisis: An overview", in G. Betcherman and R. Islam (eds): *East Asian labor market and the economic crisis: Impacts, responses, and lessons* (Washington, DC, World Bank).

Besley, T.; Burgess, R. 2004. "Can labor regulation hinder economic performance? Evidence from India", in *Quarterly Journal of Economics*, Vol. 19, No. 1, pp. 91–134.

Bhagwati, J. 1989. Protectionism (Cambridge, MA and London, MIT Press).

-. 2004. In defense of globalization (New York, Oxford University Press).

Bhattacharjea, A. 2006. "Labour market regulation and industrial performance in India: A critical review of the empirical evidence", in *The Indian Journal of Labour Economics*, Vol. 49, No. 2, pp. 211–232.

-. 2010. "The effects of employment protection legislation on Indian manufacturing", in *Economic and Political Weekly*, Vol. 44, No. 22, pp. 55–62.

Blanchard, O.; Portugal, P. 2001. "What hides behind an unemployment rate? Comparing Portuguese and U.S. labor markets", in *American Economic Review*, Vol. 91, No. 1, pp. 187–207.

Brander, J.; Spencer, B. 1994. "Trade adjustment assistance: Welfare and incentive effects of payments to displaced workers", in *Journal of International Economics*, Vol. 36, Nos 3–4, pp. 239–261.

Chetty, R. 2008. "Moral hazard vs. liquidity and optimal unemployment insurance", in *Journal of Political Economy*, Vol. 116, No. 2, pp. 173–234.

--; Looney, A. 2007. "Income risk and the benefits of social insurance: Evidence from Indonesia and the United States", in T. Ito and A. Rose (eds), *Fiscal policy and management in East Asia: NBER East Asia seminar on economics 16* (Chicago, University of Chicago Press).

Cox Edwards, A.C.; Manning, C. 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 & lessons*, 2001, pp. 345–378.

Datta-Chaudhuri, M. 1996. "Labour markets as social institutions in India", IRIS-India Working Paper No. 10 (University of Maryland at College Park).

Davidson, C.; Matusz, S. 2006. "Trade liberalization and compensation", in *International Economic Review*, Vol. 47, No. 3, pp. 723–747.

-; -; Nelson, D. 2007. "Can compensation save free trade?", in *Journal of International Economics*, Vol. 71, pp. 167–186.

-; -; 2010. "A behavioral model of unemployment, fairness and the political economy of trade policy", mimeo, Michigan State University.

Dixit, A.; Norman, V. 1980. *Theory of international trade* (Cambridge, UK, London and New York, Cambridge University Press).

Dutt, P.; Mitra, D.; Ranjan, P. 2009. "International trade and unemployment: Theory and crossnational evidence", in *Journal of International Economics*, Vol. 78, No. 1, pp. 32–44.

Ehrlic, I.; Becker, G. 1972. "Market insurance, self-insurance and self-protection", in *Journal of Political Economy*, Vol. 80, No. 4, pp. 623–648.

Engen, E.M.; Gruber, J. 2001. "Unemployment insurance and precautionary saving", in *Journal of Monetary Economics*, Vol. 47, No. 3, pp. 545–579.

Feenstra, R. 2004. Advanced international trade (Princeton, NJ, Princeton University Press).

-; Lewis, T. 1994. "Trade adjustment assistance and Pareto gains from trade", in *Journal of International Economics*, Vol. 36, Nos 3–4, pp. 201–222.

Fernandez, R.; Rodrik, D. 1991. "Resistance to reform: Status quo bias in the presence of individual-specific uncertainty", in *American Economic Review*, Vol. 18, No. 5, Dec., pp. 1146–1155.

Ferrer, A.M.; Riddell, W.C. 2009. "Unemployment insurance savings accounts in Latin America: Overview and assessment", Social Protection Working Paper No. 0910 (Washington, DC, The World Bank).

Fung, K.C.; Staiger, R. 1994. "Trade liberalization and trade adjustment assistance", NBER Working Paper No. 4847 (Cambridge, MA, National Bureau of Economic Research).

Goldberg P.K.; Pavcnik, N. (2003), "The response of the informal sector to trade liberalization", in *Journal of Development Economics*, Vol. 72, No. 2, pp. 463–496.

Gruber, J. 1997. "Consumption-smoothing effects of unemployment insurance", in *American Economic Review*, Vol. 87, No. 1, pp. 192–205.

Hasan, R.; Mitra, D.; Ramaswamy, K.V. 2007a. "Trade reforms, labor regulations and labordemand elasticities: Empirical evidence from India", in *Review of Economics and Statistics*, Vol. 89, No. 3, pp. 466–481.

-; -; Ural, B. 2007b. "Trade liberalization, labor market institutions, and poverty reduction: Evidence from Indian states", in *India Policy Forum, 2006–07*.

-; -; Sundaram, A. 2010. "The determinants of capital intensity in manufacturing: The role of factor endowments and factor market imperfections", mimeo, Syracuse University.

-; -; Ranjan, P.; Ahsan, R. 2011. "Trade liberalization and unemployment: theory and evidence from India", forthcoming in *Journal of Development Economics*.

Helliwell, J.F. 2003. "How's life? Combining individual and national variables to explain subjective well-being", in *Economic Modelling*, Vol. 20, No. 2, pp. 331–360.

Kang, S.; Keum, J.; Kim, D.; Shin, D. 2001. "Korea: Labor-market outcomes and policy responses after the crisis", in G. Betcherman and R. Islam (eds), *East Asian labor markets and the economic crisis: impacts, responses & lessons*, 2001, pp. 97–139.

Kletzer, L. 2001. *Job loss from imports: Measuring the costs* (Washington, DC, Institute for International Economics).

Krugman, P. 2004. "Asia: What went wrong?", in Fortune, March 2.

Kucera, D.; Roncolato, L. 2008. "Informal employment: Two contested policy issues", in *International Labour Review*, Vol. 147, No. 4, pp. 321–348.

Kugler, A.; Kugler, M. 2003. "The labor market effects of payroll taxes in a middle-income country: Evidence from Colombia", IZA Discussion Paper No. 852 (Bonn, Institute for the Study of Labour).

Maclsaac, D.; Rama, M. 2000. "Mandatory severance pay in Peru: An assessment of its coverage and effects using panel data", World Bank, Development Research Group, Public Service Delivery (Washington, DC).

Magee, C. 2003. "Endogenous tariffs and trade adjustment assistance", in *Journal of International Economics*, Vol. 60, No. 1, pp. 203–222.

Mahmood, M.; Aryah, G. 2001. "The labor market and labor policy in macroeconomic context: Growth, crisis, and competitiveness in Thailand", in G. Betcherman and R. Islam (eds), *East Asian labor markets and the economic crisis: impacts, responses & lessons*, 2001, pp. 245–292.

Maloney, W.F.: Nuñez Mendez, J. 2003. "Measuring the impact of minimum wages: Evidence from Latin America", NBER Working Paper No. 9800 (Cambridge, MA, National Bureau of Economic Research).

Mansor, N.; Chye, T.E.; Boehanoeddin, A.; Said, F.; Said, S.M. 2001. "Malaysia: Protecting workers and fostering growth", in G. Betcherman and R. Islam (eds), *East Asian labor markets and the economic crisis: impacts, responses & lessons*, 2001, pp. 141–194.

Messina, J.; Vallanti, G. 2007. "Job flow dynamics and firing restrictions: Evidence from Europe", in *Economic Journal*, Vol. 117, pp. F279–F301.

Meyer, B. 2002. "Unemployment and workers' compensation programs: Rationale, design, labor supply and income support," in *Fiscal Studies*, Vol. 23, No. 1, pp. 1–49.

Mitra, D.; Ural, B.P. 2008. "Indian manufacturing: A slow sector in a rapidly growing economy", in *Journal of International Trade and Economic Development*, Vol. 17, No. 4, pp. 525–560.

Nickell, S. 1998. "Unemployment: Questions and some answers", in *Economic Journal*, Vol. 108, No. 448, pp. 802–816.

Panagariya, A. 2008. India, the emerging giant (New York, Oxford University Press).

Pissarides, C. 2000. *Equilibrium unemployment theory*, 2nd edition (Cambridge, MA, MIT Press).

Rajan, R. 2010. *Fault lines: How hidden fractures still threaten the world economy* (Princeton, NJ, Princeton University Press).

Ravallion, M. 1999. "Appraising workfare", in *World Bank Research Observer*, Vol. 14, No. 1, pp. 31–48.

Riordan, M.; Staiger, R. 1993. "Sectoral shocks and structural employment", in *International Economic Review*, Vol. 34, No. 3, pp. 611–629.

Rodrik, D. 1997. *Has globalization gone too far*? (Washington, DC, Peterson Institute for International Economics).

Rosen, H. 2008. "Strengthening trade adjustment assistance", Policy Brief No. PB08-2, (Washington, DC, Peterson Institute for International Economics).

Rosenzweig, M.R.; Wolpin, K. 1993. "Credit market constraints, consumption smoothing, and the accumulation of durable assets in low-income countries: Investments in bullocks in India", in *Journal of Political Economy*, Vol. 101, No. 2, pp. 223–234.

Sapir, A. 2006. "Globalization and the reform of European social models", in *Journal of Common Market Studies*, Vol. 44, No. 2, pp. 369–390.

Spidla, V.; Larcher, G. 2008. *Report of the mission for flexicurity* (Council of the European Union).

Tanzi, V. 2002. "Globalization and the future of social protection", in *Scottish Journal of Political Economy*, Vol. 49, pp. 116–127.

Vodopivec, M. 2004. *Income support for the poor: Issues and options, regional and sectoral studies* (Washington, DC, The World Bank).

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