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Dealing with employment risk: Policy options for emerging markets[1]

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Simon Commander is Managing Partner at the EBRD, IE Business School and Altura Advisers. E-mail: scommander@alturaadvisers.com

Comments should be addressed by email to the author(s).

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Abstract

The paper looks at the experience of advanced economies in dealing with employment volatility. It examines in detail the impact of labour market institutions on equilibrium unemployment and the possible lessons for emerging market economies trying to design policy for dealing with unemployment and a wider, growing demand for social protection from their citizens. Part of the paper concentrates on the transition economies whose institutional context may be relevant to other emerging markets. Some leading principles in policy design are elaborated that take into account some of the common features of emerging markets, notably a protected public sector, large informal sectors and weak institutions.

Keywords: employment, unemployment, labour market, emerging markets, social protection

JEL Classifications: H53, J21, J65, J68

1. Introduction

Most individuals' welfare is determined by their place in the labour market and by the efficiency with which they are individually matched to employment, as also by the aggregate efficiency of that market. Fluctuations in income and employment that accompany the business cycle remain substantial with unemployment also experiencing considerable volatility. The recession that started in 2007 has, for example, seen sharp movements in all these aggregates. At the extreme, the Spanish unemployment rate has doubled to over 20% in less than 24 months! Elsewhere within the OECD, less dramatic but still significant, changes to both employment and unemployment rates have been induced with implications for earnings and income.

While less transparent, many of the same features are at work in developing and/or emerging markets. Although fluctuations in open unemployment are generally harder to observe – and sometimes a less meaningful indicator – the extent of underemployment involving variation in hours worked and therefore in income, tends to be substantial[1]. Certainly, the current downturn has exerted a large impact on employment in a range of emerging markets, although the elasticity of employment to output changes has varied very widely across countries[2]. A widely cited instance has been China where job losses in the coastal regions in 2008-2009, linked to falling demand for exports, have resulted in significant numbers of workers returning to the

[1] Interestingly, the US under-employment rate, which includes those whose hours have been cut and those working part time for lack of full time positions, was 16.8% in February 2010 at a time when the unemployment rate was 9.7%. Recourse to adjustment to hours worked has been a feature of the current recession in a range of OECD countries, most notably, in Germany.

[2] For example, between 2008-2009 output fell by over 5% but unemployment increased by less than 1.5% in Mexico, whereas in Turkey unemployment increased faster than the fall in output over the same period. See ILO (2010)

countryside. Yet, even absent the current recession, the question of employment volatility and, in particular, the issue of what to do about unemployment, has become an increasingly prominent policy challenge. Indeed how to address employment volatility in middle income emerging markets, where both income levels and institutions are potentially capable of supporting an organised response, is the subject of this paper.

In the advanced market economies, employment volatility and its associated individual risk has been widely addressed since the 1940s - particularly in Western Europe - through a variety of welfare programmes, most notably, unemployment insurance. Spending on social protection in most Western Europe countries now ranges between 25-30% of GDP[3]. While the architecture and coverage of such programmes has remained notably leaner in North America, even there the trend has been towards providing more fall-backs in the case of job loss in terms of both generosity and coverage. The current recession has also forced some further convergence. In the USA discretionary social spending – including unemployment benefits - has accounted for nearly 40% of additional fiscal or stimulus spending. In the G-20 grouping of countries almost half have extended the duration of unemployment benefits in 2009-10 while over a third have expanded the coverage of unemployment benefits[4]. By 2009 around 150 countries worldwide were actually operating some form of unemployment compensation programme, including a large number of developing countries. Even so, while roughly

[3] This is when using Eurostat data where social protection comprises spending on sickness and health care, disability, old age, survivors, family/child benefits, unemployment, housing and social exclusion.

[4] Note, however, that the share of the unemployed receiving benefits continues to vary very substantially across countries. In the USA and Canada only around 40% received benefits in 2008 compared to between 60-90% in the major Western European countries (excluding the UK where the share was closer to 50%), see ILO (2010).

half the world's population in 2009 lives in countries with some form of unemployment compensation, the average amount of compensation – defined as wage loss replacement - remains small at around 10%[5]. Nevertheless, even if self-insurance and/or household based fallbacks continue to be the dominant mechanism for coping with employment shocks in developing countries[6], there is a clear increase in the incidence of publicly supported schemes for introducing or augmenting income/employment risk mitigation – not least because of growing demand from citizens and other interest groups.

This paper has several goals. It aims, first, to look at the experience of the advanced market countries in dealing with employment volatility, paying particular attention to the role of policies dealing with employment protection and unemployment benefits. It considers the evidence regarding the impact of labour market institutions on equilibrium unemployment and hence what sorts of lessons might be derived from cumulative experience in these countries. In addition, it places this in the context of the demand for policy changes induced by wider integration into global markets and the associated risk that this has implied. The emphasis in the paper is mainly on to two sorts of interventions; those relating to the provision of unemployment benefits – normally financed on an insurance basis – and employment protection. In addition, special attention is paid to a set of emerging markets – namely the so-called transition countries of Central and Eastern Europe – that emerged from the planned economy with a more developed institutional structure and commitment to employment stability than most comparator countries at similar income levels. It is conjectured that these countries might

[5] Vroman and Bruntseva (2009)

[6] Not only is the replacement rate low, but coverage is often small. Data for Argentina, Brazil, China, South Africa and Turkey put coverage in the range of 7-12%, rising to around 25% in Russia.

offer insight into the ways in which labour market institutions affect the overall performance of the labour market and hence offer some partial clues to their suitability elsewhere in the emerging market world. The final part of the paper addresses the question of what other emerging markets, such as China or Brazil, should do in terms of designing labour market interventions and institutions that can help cope with unemployment in ways that avoid many of the pitfalls experienced in the advanced market economies and are also feasible from both a financing and institutional perspective.

2. Mitigating employment risk

Explicit publicly supported programmes addressed to unemployment date back in Europe to the end of the nineteenth century but in the main have emerged in the aftermath of the two world wars. One argument has explained the timing not only in terms of avoiding a repeat of the Great Depression of the 1930s, but also to a trade-off between providing greater income protection to citizens while pursuing greater trade opening and exposure to the world economy. For example, Rodrik (1998) has argued that larger governments have resulted as the price for citizens accepting greater external risk. That risk – as measured by volatility of the terms of trade and the product concentration of exports - has in turn been argued to lead to greater volatility in domestic income and consumption. The operative assumption is that larger government size will be associated with lower volatility, for example by controlling a larger share of government resources or funding counter-cyclical policies, such as unemployment benefits. Indeed, in the richer countries, greater external risk has no statistically significant impact on government consumption

but rather spending on social security and welfare or transfers is correlated with external risk. For countries with less robust institutions – including most emerging markets – the prediction is that government size – as primarily measured by government consumption - will tend to be larger the more open the economy. This is not because of openness *per se* but because of the external risk that openness implies.

As a simple measure of external risk, *Chart 1* indicates for a sample of emerging markets that openness has clearly increased since the early 1980s and often very significantly. A measure of income terms of trade risk that compares the 1980s with the period since 2000 gives more ambiguous results but suggests that for some of these emerging markets volatility – as measured by the standard deviation of the income terms of trade - has also increased. In this context, it appears – in an echo of what occurred in Europe post-1945 - that there has been a shift in the preferences of citizens towards greater social insurance against external risk. While the exact causality is hard to identify, it would appear that this shift traces to a combination of growth in incomes (Wagner's Law) – and with it the size of the middle class – but also the independent effect of the growth in externally conditioned risk. This risk has, of course, been recently accentuated by the impact of the 2007 recession and the slowdown in trade that resulted. Public policy is increasingly been pushed to extend beyond compensatory transfers – conditional or unconditional – for those facing persistent income inadequacy to addressing the wider concerns of citizens for more protection against income and employment variability and risk[7].

[7] There is some debate over the evolution of the labour share, particularly in the advanced market economies. Rodriguez (2009) argues that the labour share has fallen in recent decades. While the factors behind this are complex, it is possible that trade

Table 1 reports some responses from the 2005/6 round of the World Values Survey for a number of emerging markets. The table reports responses to two related questions. The first asked about the respondent's view of the desirability or otherwise of democracy. Depending on whether the respondent considered democracy desirable or not, they were then asked whether the provision of state aid for unemployment was a key feature of democracy. Responses to the latter question were in ascending order between 1 and 10. For those considering democracy to be broadly desirable, the table shows that the mean response ranged between 5 and 7.7. For a minority of respondents considering democracy not to be desirable, responses had a broadly similar range, albeit with some differences in the direction of change across countries. While these responses in the World Values Survey are – it should be stressed - only very indicative, they do suggest that citizens mostly consider state support for the unemployed to be an important feature of democracy. Country level opinion surveys also tend to confirm the view that citizens in an increasing group of countries view protection against employment risk as important.

Two strands of the argument so far have emerged. The first is that external risk appears to have increased for a number of middle income emerging markets. The second is that, for a variety of reasons, there appears to be an increased appetite among citizens of some of these countries for publicly led abatement of this risk. There is also a further dimension that is particularly relevant in East Asia, notably China. That is the current need for rebalancing the economy and raising domestic consumption. The latter has been kept in check by savings rates and consumption decisions that have been driven by low insurance and absent public provision of services and fallbacks. In short, macroeconomic

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opening has played a role. Data for the UK show no clear trend for last 35 years, but excluding top 1% shows a clear decline after 1989/90 (see Atkinson (2005)).

imperatives, as much as those emanating from long run structural change, make consideration of how to deal with individual risk increasingly central to the policy agenda. However, these pressures are also occurring in the continuing context of limits (often quite severe) on institutional abilities and integrity. These limits materially affect what can be done and how (and are dealt with in more detail in Section 7 below).

While there is some evidence that there has been an increase in risk and hence in employment volatility in many emerging markets, it has also been argued that increased external risk has been present in many OECD countries. There, this increased risk may have interacted with existing labour market institutions in ways that have not necessarily been beneficial. Thus, employment protection may have become more binding raising costs to firms, while unemployment benefits may have also become more costly as more people pass into unemployment. But the empirical evidence for the OECD countries regarding the conjectured increase in risk is, however, not that convincing. Even so, the interaction between institutions and shocks over time can have consequences for employment that are long lasting and not necessarily beneficial. An example widely cited is that the shocks of the 1970s and 1980s in Western Europe gave rise to a change in institutions that has only been partially undone decades later with negative consequences for employment[8]. But the possible longer term impact of policies designed for particular episodes or shocks in the OECD suggests the need for very careful attention in design in today's emerging markets.

Despite the common role that external factors may have played in raising the demand for risk abatement, the model for achieving that purpose is far from obvious or

[8] See Blanchard (2006), Ljungqvist and Sargent (1998)

indeed unique. In fact, of the many elements of the policy armoury in the advanced market economies – a natural reference point - those relating to the labour market remain ones where a persistent sense of failure in design is widely present. These perceived failures may straddle many elements, including affordability – the sheer cost of providing not only unemployment insurance - but also the associated costs of other interventions, whether direct – such as training – or indirect, as through the externalities arising from particular interventions, such as employment protection. And, of course, there are the issues of the impact of publicly financed transfer programmes on individual incentives where experience suggests that reduced incentives for job search, increased dependency and even across-generation transmission of habits and tastes can result from flawed design. In short, the demand for labour market-centred risk reduction policies is clearly present, but how best to tailor design is still problematic. The next section looks at experience with employment related risk reduction policies in the advanced market economies – notably in Europe – and tries to extract some of the main lessons from these rather heterogeneous experiences.

3. Institutions of the Labour Market

The core features of most OECD countries include elements of employment protection and income protection, through unemployment insurance. Over the last 30 years there has been widespread reappraisal of the design of policies addressed to the labour market and, in particular, the unemployed in the OECD. The reasons for this reappraisal are clear. As *Table 2* shows, unemployment in much of the OECD increased substantially in the 1970s and 1980s and mostly did not revert back to the low rates that existed in the 1960s. In

addition, large shocks – such as that to Finland or Japan in the 1990s and to the global economy post 2007 – have led to further jumps in unemployment rates. However, there has remained considerable heterogeneity in unemployment across countries and across time.

Turning to employment, the picture is also again variable. In Europe alone, recent employment rates have ranged from lows of around 55% in Italy and Spain to highs of 78% in Norway and Switzerland, respectively. Inactivity rates would similarly show large variation. Insofar as there are patterns, those countries with high unemployment rates are mostly those that also have high inactivity rates and low employment rates. Disaggregating this information further by age and gender, the picture is also very varied. Certainly, it appears that incentives for work of different types of individuals and families – older males, females with children and so on – varies significantly across countries being influenced by policies on, inter alia, retirement age, child care availability as well as the structure of the tax system. Indeed, evidence from the OECD, suggests that marginal tax rates for women when their husbands work has proven important in explaining inactivity among women. In similar vein, benefit levels for workers at the lower end of the earnings spectrum have affected choices over labour force participation.

3.1 Unemployment benefits

In response to upward spikes in unemployment, policy changes have been far from uniform but have tended to have several common components. Aimed at reducing the duration effects of unemployment benefits, one general direction of change has been to limit the duration and level of benefits and/or make them more conditional, not least to

try and reduce dependency. Yet, no uniform configuration has emerged. For duration of benefits, currently the USA, UK, Canada and Italy limit benefits receipt to between 6-8 months. By contrast, in Denmark workers can draw benefits for up to 48 months, while in Spain, Portugal, France, Finland and Norway this can extend for up to 23-24 months. Other material differences relate to the earnings base on which benefits are calculated – some countries using net, some gross earnings, the level of payments for family members and dependents, the extent of previous employment for eligibility, as well as whether insurance for workers is compulsory or voluntary – the Scandinavian countries having voluntary systems in contrast to all other countries in the OECD sample[9].

The UK is, more generally, an interesting instance of reform, as the changes that have been introduced in the last 20 years have pushed the current system rather closer to the North American model than the approach still applied through much of Western Europe. By the early 2000s the UK unemployment rate had fallen to around 5% and UK unemployment rates had been significantly lower than in the large continental countries, such as France or Germany although generally higher than in Japan, Holland or the Scandinavian countries. The share of long term unemployed (> 12 months) has fallen to around 20% of total unemployed from a peak of over 40% in the mid-1990s. Parallel to these developments, the number of claimants for unemployment benefits has fallen sharply since the mid-1990s although this has been partly offset by a sharp rise in incapacity benefits, part of which can probably be attributed to 'gaming' the benefits system.

[9] The OECD provides a very useful template of characteristics for 29 member countries, stylizing around a 40 year-old single worker without children and an uninterrupted employment record. See OECD, Benefits and Wages, Paris 2007

The principal elements of policy have been reductions in the generosity of benefits, enhanced monitoring of claimants to stimulate job search and targeted employment programmes for specific groups, such as the disabled, lone parents and the long run unemployed. For low wage workers, earned income tax credits have been applied, albeit with mixed results. In terms of generosity, benefits have been capped at very low levels and have come more to resemble social assistance. However, for low wage workers with particular family characteristics, replacement rates can still be relatively high. For instance, OECD data show that net replacement rates for a married couple with one earner and two children in both the initial and long run stage of unemployment can approach 80% for those with relatively low ex ante earnings (defined as 67% of the average wage).

In general, replacement rates have declined significantly over the past couple of decades. Yet looking only at average replacement rates can be misleading. Take the example of France; in 2007 the minimum benefit as a share of the average wage was around 30% but the maximum benefit was 240%. By contrast, in the UK benefits have been at 9% of the average wage. Indeed, when looking at net replacement rates across countries, there is very large variation not only by country but also by family type. The OECD's disaggregation of net replacement rates for three family types with and without children at different ex ante earnings levels brings out very clearly that for some family types – mainly those with ex ante low earnings (67% of average wages) – replacement rates can still be high. To give a sense of the variation: in the Netherlands, families having average or above (150%) average wages with children can expect to get a replacement rate of between 56-78%, those with low earnings would get replacement

rates of between 83-107%. This type of difference is common across many countries ranging from Japan and the USA to many European countries. Some of this difference also carries over into long run unemployment. In Japan low earnings families in long term unemployment would receive replacement rates of between 53-108% as against 35-76% for high ex ante earnings groups. These differences not only reflect distributional considerations at work but also carry implications for work incentives.

Although replacement rates are critical, it is not just the level of benefits that could be likely to influence unemployment but also their duration, coverage and the strictness of enforcement. Calculations of benefits duration relating replacement rates for longer term unemployed to initial unemployed also show large variation across countries show that in most OECD countries, the replacement rate tends to fall sharply over time. Information on both coverage and strictness is less easily available, but with respect to the latter, it appears that closer monitoring of the unemployed and use of sanctions can be important in determining whether benefits have an influence on unemployment. Countries, like Denmark or the Netherlands, are often cited as instances where relatively generous replacement rates sit alongside relatively strict enforcement, thereby mitigating the potential for the first to affect unemployment[10].

While the picture that emerges is of tightening eligibility, lower generosity of benefits and stricter enforcement, there is still enormous heterogeneity throughout the OECD, and within Western Europe. For example, Sweden and Denmark look radically different from the UK or France or Germany, while in the USA, state level variation remains significant. As such, there is no single template that has been applied to benefits,

[10] Nickell (2002)

even if a broad common philosophy of trying to limit disincentives for job search has taken hold.

3.2 Employment protection

Alongside unemployment insurance and benefits, many OECD countries continue to pursue policies of employment protection either through explicit legislation or *de facto* policy. The balance between favouring more employment protection for incumbents, as against providing fallbacks to job losers through unemployment insurance and social assistance, varies quite substantially across countries. Boeri et al (2002) have argued that employment protection and unemployment benefits act more as substitutes than complements with a resulting inverse relationship between the two in Western Europe. This has also been linked to the political economy and the power of particular lobbies or vested interests in the labour market. *Chart 2* relates the OECD measures of employment protection to the net replacement rates offered in 2007. It can be seen that there is an inverse shape with countries having higher employment protection tending to offer lower net replacement rates. In addition, there are a small group of Anglo-Saxon countries that have low employment protection and low replacement rates.

Employment protection measures – as well as contractual forms – have been widely viewed as affecting the ease with which new entrants – younger workers – can get into jobs. Such protection, by definition, tends to benefit largely incumbents. By affecting the incentive for a firm to hire workers, employment protection can slow the speed at which vacancies are filled. The evidence suggests that consequently employment protection can adversely affect the duration of unemployment. However, differences in

employment protection appear to be unrelated to differences in unemployment rates across countries.

Protection may also affect the ability of insiders to extract rents in wage bargaining. Thus, while employment protection will tend to reduce volatility in the labour market by reducing the firing rate, it will also tend to lower incentives for firms to post new jobs. Indeed, in the OECD much of recent productivity growth appears to have come from entry and displacement rather than from productivity growth in existing firms. Yet, entry and displacement – the importance of rivalry – necessarily entails job losses and worker displacement as well. Bassanini et al (2009) have also used firm level data from OECD countries to examine the impact of employment protection on productivity and investment. Both papers employ a 'difference in differences' where sectors are distinguished in terms of their high and low reallocation sectors. Employment protection adversely affects productivity more in high reallocation sectors. Further, using a panel of EU firms, Leonardi and Messina (2009) find that employment protection legislation tends to reduce investment and capital per worker, as well as labour productivity, quite significantly in high relative to low reallocation sectors. Bartelsman et al (2010) have also argued that differences in innovation may also be explained by differences in employment protection insofar as higher protection reduces the incentive for firms to adopt more risky technology by raising the cost of separating workers. These considerations and the associated emergence of dual labour markets have led to reappraisal of the role of employment protection, even if the evidence for employment protection having an important and adverse impact on unemployment is far from conclusive.

A closer look at the OECD employment protection scores suggests that there is considerable heterogeneity across countries and time[11]. For example, countries such as Spain, Greece and France have markedly higher employment protection than the USA, Canada or the UK while the Netherlands, Sweden and Denmark have intermediate scores. As regards trends, the evidence points to declining protection in most countries, although in a number of places with high protection - notably France, Norway and Spain - the decline has been relatively small. However, this has camouflaged some important nuances. A notable instance has been the proliferation of temporary contracts and associated dual labour markets. France and Spain offer two clear instances of where attempts have been made to introduce greater flexibility in a segment of the labour market. New hires with temporary contracts have faced significantly different employment contracts than those workers on permanent contracts.

The introduction of differentiated contracts using temporary contracts has largely been motivated by the difficulties in reforming the existing systems of employment protection and the power of incumbents and their lobbies[12]. French fixed term employment rose to around 14% of total employees by 1998 and has stayed at around that share thereafter. In Spain the growth in temporary contracts has been even more rapid in the 1990s, resulting in temporary employment accounting for between 31-33% of total employment in the period from 1998 to 2007. This process was important in driving the reduction in the Spanish unemployment rate from over 22% in 1994 to 8% in 2007. However, the subsequent recession has seen a very sharp upward shift in Spanish unemployment towards 20% by 2010, a significant part of which can be accounted for by

[11] A recent update of these measures can be found in Venn (2009).
[12] Saint-Paul (2000)

the non-renewal or otherwise of temporary contract workers. Spanish experience suggests that the introduction of temporary contracts led to increased volatility of employment by increasing both hiring and firing rates[13]. The increase in the hiring rate cut into unemployment and into long run unemployment in particular. However, lower firing costs have also facilitated large separations since 2007. Other consequences of fixed term contracts have been a lower incentive for employers to invest in on-the-job training, a higher wage premium for more educated workers on permanent contracts, as well as impeding spatial mobility due to uncertainty[14].

The impact of the current recession on a dual labour market suggests that how temporary contracts are implemented can also matter. A comparison of France and Spain since 2007 found that Spanish unemployment would have been raised by 2.5 percentage points less if Spain had had less stringent French employment protection legislation[15]. More generally, there has been questioning of the whole strategy of temporary contracts with emphasis placed on replacement by a single labour contract alongside severance pay conditioned on tenure.

Use of temporary contracts has been most pronounced in Western Europe. Despite the fact that the problem of employment protection for incumbents and the impact on job creation is a pressing issue for many developing countries, explicit use of temporary contracts has been very limited. What is familiar, however, is the widespread inability to address head-on the extent of employment protection and wage benefits

[13] More generally, see also Boeri and Garibaldi (2007)
[14] See Bentolila, Dolado and Jimenez (2008)
[15] Bentolila, Cahuc, Dolado and Le Barbanchon (2009) who also note that unemployment benefits have been fairly similar in both France and Spain, as have wage bargaining institutions.

offered to workers in the covered or formal sector. Even where this is recognised to be a barrier to employment growth, policy makers have mostly preferred to use other instruments, such as wage subsidies, to try and boost employment. In Tunisia, a highly regulated labour market and high labour supply has resulted in significant and growing unemployment, but policy has mainly been the use of wage subsidies and other active labour market policies, as well as trying to raise firm entry rates[16]. Both set of policies have been costly and have had very limited results. However, European experience with tow-tier labour markets is unlikely to be an appropriate model for developing countries that are trying to change the extent of employment protection. We return to some of these issues in Section 5 below.

3.3 Trade Unions

Trade unions have been important features of the institutional landscape in Europe. Their impact has primarily been through the structure of wage bargaining and the result wage levels. In this process, union membership, coverage and the locus of bargaining have been generally viewed as relevant.

In terms of membership, it is widely held that unions have declined – as has labour militancy – over the last forty years. Yet, the simplest time series measure of density – defined as the share of union members in total employees – actually shows a decline between 1960/64 and the end of the 1990s in eight Western European countries but an actual increase in eight other countries[17]. It also shows large variation in the extent of changes across these countries. However, Visser's (2006) revised series of density data

[16] World Bank (2008)
[17] Nickell (2002)

for the period 1970-2003 show not only very large variation in union rates across countries but also a clear secular decline in most countries over this period. By 2003 union density rates were lower than in 1970 in all but four European countries – namely, the Scandinavian countries and Belgium. In some instances, the decline has been very large – from nearly 22% in France to around 8%, from 45% in the UK to 30%, from 63% to around 35% in Austria. Similar falls in membership have occurred in other OECD economies, such as the USA, Canada, Australia and Japan, with particularly large falls in Australia and the USA[18]. Unionisation rates have fallen particularly strongly in the transition economies, such as Hungary, Poland and the Czech Republic, driven mainly by changes in the political system. For all these countries, changes since 2003 have been incompletely monitored but it seems plausible to assume that unionisation has continued to decline.

While density rates are indicative of the presence of unions, they are also potentially misleading, as the size of membership may be a poor measure of the actual effect of unionisation. Coverage – defined as the share of workers whose employment is affected by collective agreements negotiated between employers and unions - can be very different from density. Most striking is the case of France where the latter was around 8% in 2003 while coverage was 95%. Indeed, coverage data for most of Western Europe show rates of between 80-95%, except in Germany (63%) and the UK (35%). Decentralised bargaining in the UK accounts for this low coverage rates, as it also does for the USA, Canada and Japan. But elsewhere in Europe multi-employer bargaining and policies tend still to extend contractual outcomes to non-unionised firms. The available

[18] Unionisation rates vary a good deal across US states; for example, being around 13% in New Hampshire and Iowa as against around 6% in South Dakota and Louisiana

evidence also suggests very different incidences of unionisation across private and public sectors – with the public sector having generally far higher density rates – as well as differences across groups of workers, whether cut by age, sex or type of contract. In the UK 2007 data show that while 60% of public sector workers remain unionised, this has fallen to around 16% for private sector workers. Further, over 70% of workers in the public sector have their earnings governed by collective agreements as against 20% in the private sector. In short, much of the general decline in unionisation has, indeed, occurred in the private sector. Yet, factors such as coverage and sectoral incidence help explain why despite falling membership, unionisation has continued to influence unemployment through wage bargaining (see Section 4 below). In addition, collective bargaining can materially affect employment protection in ways that differ from legislation[19].

3.4 Labour taxation

Financing for labour market programmes varies widely both across the advanced market economies as well as in emerging and transition countries[20]. With respect to unemployment benefits, for instance, in the Netherlands insured persons' contributions to a general unemployment fund average 3.5% of covered earnings. Employers contribute around 5.8% of covered payroll to both the unemployment fund and a redundancy payment fund. These payments also cover sickness and maternity benefits. By contrast, in the UK unemployment benefits are financed out of employer and employee

[19] Venn (2009) documents collective bargaining about employment protection. The paper notes that in a number of countries, including Denmark, collective agreement provisions are significantly more generous than those in the legislation

[20] For detailed individual country descriptions, see the website for *'Social Security Programs Throughout the World'* – www.ssa.gov/policy/docs/progdesc/ssptw

contributions that also cover sickness and maternity benefits, work injury benefits, as well as a specific contribution to the National Health Service. There is no earmarking of unemployment financing. Similar differences in financing arrangements exist in transition and emerging markets. In Poland, coverage of employed workers for unemployment benefits is financed by employers' contributions of 2.45% of payroll, with workers not explicitly contributing for unemployment. Deficits are covered by the government budget. In the Czech Republic, both employers and employees contribute explicitly to unemployment insurance, while in Russia unemployment benefits are financed from federal and local government budgets rather than from payroll taxes. In Colombia, employers contribute 8.3% of annual salary with no contribution from employees. In Chile, individual severance accounts have been established with the insured contributing a base of 0.6% of monthly earnings and employers contributing between 2.4-3% of covered payroll depending on a worker's contract.

There is considerable debate over the impact of labour taxes – including the payroll taxes that commonly finance unemployment insurance - on unemployment. Taxes that treat income equally whatever its source (earnings or benefits) should not affect the cost of labour to firms and hence not affect unemployment. Theoretically, there are grounds for assuming that taxes that drive a difference between take home and cost of labour to the firm – the so-called tax wedge - may have a negative impact on employment. That would be true if taxes raised labour costs and affected firms' demand for labour. It could also be possible that different taxes had different effects. In the latter regard, evidence suggests that there is no significant differential impact of payroll, income or consumption taxes – the standard components of labour taxation – on labour

costs and hence on employment. However, when turning to the impact of total labour taxation on employment the evidence appears more ambiguous.

Cross-section studies using OECD data have indicated that an increase in the tax wedge can raise real labour costs[21] and adversely affect employment and raise unemployment. A 10% increase in the tax wedge has been estimated to reduce the employment rate by between 0.3 - 2.7%, while the effect on the unemployment rate has been between 1 - 2%. Nickell et al (2003) use a fixed effect panel which similarly finds an increase of just over 1% in unemployment. An interesting regional study for Sweden looking at whether regional differences in payroll taxes translated into differences in employment has found no significant effect, although it is possible that lower tax rates may have had a positive impact through encouraging entry of new firms. A large reduction in the payroll tax rate did, however, have an unambiguous impact on wages as employers and workers appear to have treated the reduction as a windfall to be shared, mainly to the benefit of employers[22]. There is also evidence from Europe that tax incentives can materially affect individuals' at the margin of being employed, more than they may affect the amount of hours worked by those already in work. Further, major effects of the tax wedge are only likely to occur for low wage workers where additional contributions cannot be shifted to workers and hence lead to an increase in costs. To address these concerns, there has been increasing experimentation with in-work tax

[21] For example, Daveri and Tabellini (2000), Nickell et al (2002), Scarpetta (1996), Nickell and Layard (1999), Nicoletti and Scarpetta (2001)

[22] Bennmarker, Mellander and Ockert (2008)

credits, particularly in the UK where there is some evidence that they have helped induce some types of workers to take up employment[23].

Studies from non-OECD settings also paint a mixed picture. Gruber (1997) used Chilean data and found that a 1981 reduction of payroll taxes by 25% was almost fully shifted on to wages with no significant employment effects. A more recent exercise using Argentine data for the period from 1995 to 2001 found that changes were only partly shifted to wages and that there was no significant effect on employment. By contrast, using the case of a large increase in payroll taxes in Colombia after 1993, Kugler (2009) found that 20% of the increase was passed on to workers in the form of lower wages – a finding consistent with Heckman and Pages' (2004) wider study for Latin America which found a 33% shifting. In the Colombian instance, the impact of a 10% rise in payroll taxes was to lower formal employment – particularly of production workers - by up to 5%. On balance, the empirical evidence suggests that labour taxation can affect employment but not necessarily by large magnitudes.

Turning to the actual evolution of labour taxation, the data show that in Western Europe there has been a substantial increase in the tax wedge since the 1960s. Between 1960 and 1964 the average tax wedge in Western Europe was around 38% with a range of 19% (Spain) to 57% (Italy). By 1996-2000 it had risen to over 53% with a range of 33% (Ireland) to 77% (Sweden)[24]. Subsequently, there have been attempts to reduce labour taxation, so that in 2008 the average rate had fallen to around 42% for the same 15

[23] The extent to which this is the case depends very much on design. A review of the UK's Working Families Tax Credit indicated that employment of lone mothers did increase but that was not the case for low income couples where incentives actually deteriorated, see Brewer (2009)

[24] CEP/LSE database

European countries[25]. In the USA and Canada the total tax rate in 2008 was slightly below or the same as their 1960-64 rates at around 30-31% while in Japan the tax rate had climbed from 25% to 29.5% by 2008[26]. However, the general picture again remains one of considerable heterogeneity across countries. At present, a country like Ireland has a tax wedge below 23% while Belgium's is 56%.

While much of the increase in the wedge can be attributed to increases in personal income tax, social security contributions by employers and employees constitute the largest component for many countries. In Belgium and Germany, for example, employer and employee contributions to around 34% of labour costs or between 60-66% of the total tax wedge, while in France contributions comprise nearly 40% of labour costs, as against 10% for income tax. In Denmark, personal income tax is the largest component at over 30% with contributions accounting for only 11%. In the so-called Anglo-Saxon countries, contributions tend to be lower than the OECD average being in the range of 14%-18% for the UK, North America and Canada and falling to under 6% for Australia.

4. Some consequences of labour market institutions

The growth in OECD unemployment – as well as its persistence – in and after the 1970s has spawned considerable interest in understanding how the equilibrium rate of unemployment has been affected by institutions, shocks and other factors. The operative assumptions have been that the equilibrium level of unemployment will be affected by any variable that influences the ease with which unemployed individuals can be matched

[25] The countries are Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and UK.
[26] The 2008 numbers come from OECD (2008).

to available job vacancies, as well as by any variable that affects the way in which wage bargaining occurs. Variation in unemployment across countries after 1980 appears to be well explained by differences in labour market institutions[27]. A series of papers have also tried to explain the time series variation in employment[28]. Nickell et al (2005) used annual data for the OECD and include variables that could explain deviations of unemployment from its equilibrium level. Such variables include aggregate demand, productivity and wage shocks. In addition, they include time series measures of institutional variables, including, inter alia, for employment protection, employment taxes, replacement rates and benefits duration. They argue that over half of the upward shift in equilibrium unemployment over the period 1960-1995 can be explained by changes in institutions. In particular, they found that (in order of importance) the benefits system; labour taxes, unions and changes in laws for employment protection have been contributory factors.

Blanchard and Wolfers (2000) have also used five year averages with baseline variables and interactions to argue that it has not so much been institutions by themselves but the interaction of institutions and shocks that has been behind persistence of high unemployment in Western Europe. Thus, shocks – such as in the 1970s – may have lead to changes in institutions, such as increases in the generosity of benefits. These in turn may have contributed to the persistence of high unemployment leading to further institutional adaptation, albeit not necessarily a return to previous institutional arrangements. These adaptations, it has been argued, can develop their own dynamic;

[27] See Layard, Nickell and Jackman (1991). See also the papers in Snower and de la Dehesa (1997)

[28] Aside from those directly cited in the text, see also Belot and van Ours (2001), Baker et al (2005), Bertola et al (2005)

examples being the recourse to dual labour markets and contracts in parts of Continental Europe[29].

In short, despite the evidence that institutions play a role in explaining differences in unemployment and changes in unemployment, it is difficult, if not impossible, to isolate a particular configuration of institutions that tends to be consistent with better economic performance, particularly with respect to equilibrium unemployment. Consequently, Freeman (1998) has argued that there appears to be no unique institutional path to be followed. This agnostic conclusion contrasts with the apparently strong presumptions about the sort of labour market institutions and extent of labour market flexibility that would be optimal in, for example, the World Bank's 'Doing Business' indicators. Indeed, this form of labour market liberalism has been widely propagated as the model for emerging markets to follow. Certainly, this contrasts significantly with the existing situation in most emerging markets where employment protection and dual labour markets are widely present. What is very different, however, from the OECD setting is the absence – except in the former socialist or transition countries - of organised fall-backs for workers losing their jobs. The next section turns to describing the situation currently existing across a swathe of emerging markets.

5. Emerging markets and their labour markets

Most emerging markets have relied on policies of employment protection and severance as their main policy instruments. Indeed, employment protection has been a very pronounced in many developing feature with relatively small formal sector workforces

[29] As argued in Blanchard (2006), Blanchard and Landier (2002)

being sheltered by job protection and significant constraints on both hiring and firing. As such, workers in such formal sector firms – often in turn in the public sector - tend to be privileged not only in terms of earnings and working conditions, but also in terms of job security and tenure. The pervasive problem of youth unemployment – a major feature, for example, of the Arab countries – can be traced not only to supply side factors – high labour force growth rates – but also to the limit on job creation resulting from employment protection of relatively small numbers of incumbents[30].

Despite some serious caveats about the quality of measurement and coverage[31], the Doing Business employment indicators provide some evidence concerning the extent of employment protection. For example, in 2007 firing costs expressed in weeks of salary were, 186 in Egypt, 108 in Indonesia, 91 in China, 87 in Vietnam, 56 in India, 37 in Brazil and 24 in South Africa. To put this in context, most Western European countries, as well as USA, Canada, Japan, Australia and New Zealand had severance costs under 20 weeks, albeit with some major exceptions, such as Portugal (99), Germany and Greece (both 69). Using the same source's rigidity of employment index[32], the picture is more mixed with many advanced economies also having quite high levels of employment rigidity.

The OECD overall employment protection indicator for 2008 allows comparison of additional emerging markets with the core OECD group (see *Table 3*). The Western European (excluding the Accession countries) average is around 2.05 while Canada, UK

[30] For an overview of developments in the Middle East and North Africa, see Salehi-Isfahani (2010)
[31] Commander and Tinn (2009)
[32] This being an average of three sub-indices – difficulty of hiring and firing and rigidity of hours indices.

and USA range between 0.2-0.75. Japan and Australasia have scores intermediate between Europe and the Anglo-Saxon group. The group of emerging markets have significantly higher employment protection than the European average, with some exceptions such as South Africa and most of the transition economies. What is evident is that employment protection continues to be an important element of policy in many of the leading emerging markets. Where time series evidence is available, it suggests that reductions in employment protection have been more elusive in recent years in emerging markets than in the advanced market economies. This persistence has co-existed alongside dual labour markets in many of these economies so that relatively small shares of the labour force actually benefiting from the relatively high levels of employment protection. We return to this issue in Section 5 below.

What are the consequences of employment protection policies? There is relatively little evidence of the impact on measures of performance. Besley and Burgess (2004) have used state level Indian data and find that a wider body of labour regulations adversely affects firm level performance. Botero et al (2004) use a larger cross country dataset to estimate the impact of an index of labour regulations including restrictions on firings and find that regulation raises unemployment, lowers labour force participation and raises the size of the informal or unofficial economy. There is also, of course, a large body of country level evidence from a wide swathe of developing countries over a protracted period of time suggesting that the existence of a covered or protected sector has been associated with larger informal sectors, job queuing and wait unemployment[33].

[33] This sort of setting is, of course, central to Harris-Todaro models as well as later models of segmented labour markets. Note, however, that enforcement of labour regulation may make *de jure* and *de facto* regulation diverge substantially. Gimpelson

A relatively small number of emerging markets have already established the beginnings of a system of unemployment benefits. For example, in Turkey and Korea compulsory unemployment insurance has been put in place. Workers have specified contribution and employment requirements for eligibility with benefits payable for between 7-10 months. The replacement rate in both countries is 50% of the earnings base; gross earnings in the case of Korea, net in the case of Turkey. Social security contributions amount to around 16% of labour costs in Korea and 29% in Turkey. In China, unemployment benefits are available for a relatively small share of the urban labour force. Benefits are set by local governments at levels lower than the local minimum wage and are payable for periods that depend on pre-existing employment experience. The installation of unemployment benefits has been particularly widespread in the former socialist or transition countries (which are addressed in more detail below).

Across regions and countries, the beneficiaries of unemployment benefits remain a relatively small share of the total unemployed[34]. One estimate suggests that in Latin America around 20% of the unemployed receive some form of unemployment compensation with this proportion falling to 2/3% in North Africa, the Middle East and Sub-Saharan Africa. Not only is coverage very limited but – where available – low replacement rates dominate[35]. In some countries, such as Brazil and China – as in the USA – there is in addition significant regional variation as the provinces play a major part in determining statutory provisions for benefits.

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and Kapelushnikov (2009) provide evidence from Russia of large variation in enforcement across regions or *oblasts*.

[34] Of course, there remain issues with the measurement of the unemployed in the first place.

[35] See Vroman and Brusentsev (2009)

6. Transition economies

The transition countries are particularly interesting as for historical reasons they have had particularly developed welfare programmes with explicit unemployment insurance and fallbacks for job losers. Although most of these countries – particularly in Central Europe – have income levels at the higher end of the emerging market distribution[36], they nevertheless provide interesting experimental terrain for considering what the impact of labor market institutions might be in other emerging markets.

To date, there has been a relatively small literature that has looked at the design and impact of labour market institutions in these countries. Boeri and Terrell (2002) argued that relatively generous non-employment benefits in Central and Eastern Europe established a wage floor that forced the least productive firms to shed workers and hence implement restructuring. By contrast, in the CIS benefits were less generous, wages more flexible and this – through much of the 1990s – was associated with labour hoarding and downward wage flexibility but also less restructuring. Consequently, unemployment emerged earlier and at higher incidences in Central and Eastern Europe than in countries further east.

Empirical evidence on the direct effect of institutions on unemployment is mixed. Boeri and Burda (1996) found a small but significant effect of expenditure on active labour market programmes, job creation, and programme intake on outflows from unemployment into employment in the Czech Republic. Ham, Svejnar and Terrell (1998, 1999) also found that the institutional system had only a moderate effect on the duration

[36] For example, by 2006 in PPP terms Hungary's per capita income was roughly double that of Brazil and 3.5 times that of China. However, a country like Ukraine had an income level below that of Brazil and 30% higher than that of China while Russia was roughly comparable to Mexico.

of unemployment for both women and men in the Czech and Slovak Republics. In addition they found some evidence of country variation - there was a greater responsiveness to the unemployment compensation system in the Czech Republic. For Poland, Puhani (2000) did not find any significant effect on unemployment duration using information on changes in the duration of unemployment benefits in Poland. Similarly, Micklewright and Nagy (1996) found little effect of changes to the benefit system on duration in Hungary. However, they also found that over time an increasing proportion of the unemployed searching for jobs actually received no financial support from the state while an increasing proportion of those in receipt of benefits did not search.

In terms of trends, the data suggest several evolutions in institutions over time. First, the generosity of unemployment benefits has tended to fall, often quite significantly. Second, for employment protection, it appears that there has been a decline in most transition countries. However, there is a considerable country level heterogeneity. As *Table 3* shows, many transition countries have employment protection scores comparable to Western Europe, and lower than Brazil, China or India[37]. However, while the employment protection indicator for Russia is relatively low – equivalent to that of Finland or the Netherlands - *de jure* and *de facto* employment protection varies substantially in Russia. Data on layoffs, as well as the widespread use of wage arrears and involuntary hours adjustment, suggest that labour hoarding is pervasive (not only in Russia but also in Ukraine and other CIS countries), even if *de jure* employment protection has decreased. Third, regarding funding, the Central European transition

[37] See Venn (2009)

countries tend to have a total tax wedge of around 40% of which by far the greater part is composed of social security contributions. The total labour tax rate is thus quite similar to Western Europe. In the CIS it seems that the total tax wedge has fallen.

Unemployment in the transition countries has been driven since 1990/92 by a series of powerful restructuring and reallocation processes. *Table 4* gives the unemployment rate for the major countries at four year intervals. It can be seen that in most countries, unemployment rose sharply near the start of transition and in a number of cases persisted at high levels – such as in Poland - before declining sharply after 2004. In the CIS – as given by Russia and Ukraine – unemployment rose less sharply. In short, these economies have all experienced large increases in unemployment but with some notable variation across countries and regions.

In exploring whether employment and unemployment rates can be related to institutional variables, Lehmann and Muravyev (2010) run a set of cross country regressions relating in the spirit of Nickell et al., (2005). They find that employment protection in particular exerts a significant negative effect on the employment rate and a positive effect on unemployment that is, however, insignificant, except when having youth unemployment on the left hand side. Most of the other explanatory variables lack significance and/or are perversely signed. The finding that employment protection acts adversely against employment is consistent with findings for both the OECD and from other emerging markets.

6.1 Unemployment and unemployment benefits in transition economies

Commander and Heitmueller (2008) look more systematically at whether unemployment benefits have any impact on employment and unemployment. They show that for both initial and long run unemployment, replacement rates in Central Europe and Russia tended to fall between the mid 1990s and 2005. At that time, initial replacement rates then ranged between 0.4-0.6. More recent – 2008 - indicators reported in *Table 5* suggest that the replacement rate for two family types averaged around 55% and were not that different from the comparator advanced market economies also included in the table for both initial and long term unemployment.

However, there are some important caveats. Not all the unemployed have actually been eligible for unemployment benefits. Indeed, the share of those eligible has often declined to low levels. For example, in Hungary and Poland eligibility rates of around 0.6 in the early/mid-1990s had fallen to around 0.2 by 1996/98. In the Czech Republic eligibility has remained at around 0.2/0.3 from the mid-1990s to now[38]. This can partly be explained by changes in benefit rules but more by the falling share of short term unemployed. Further, the impact of an unemployment benefit system depends on the enforcement of the benefit rules. Evidence that is available, however, relates only to the strictness of the rules rather than the strictness of actual enforcement. Hungary has had relatively strict rules throughout while Russia has been less strict. Finally, it should be noted that there have been changes other than in generosity to benefits systems since the

[38] Vroman and Brusentsev (2009) report recipiency rates for 2004/2005 for 10 Central and Eastern European countries. With the exception of Romania, rates were in the range of 9-36%. In the CIS they were generally yet lower, with Russia and Ukraine (at the upper end of the scale) having recipiency rates of 24/25%.

early 1990s. For example, in 1997 the Poles started differentiating over the duration of benefits by making it conditional on the level of unemployment in a given region.

To explore any possible relationship between unemployment rates and unemployment benefits, the aim would be to see whether institutions can explain time evolutions and whether institutions can explain specific country evolutions beyond common time evolutions and differences in levels. However, given the small number of observations on time, it is necessary to limit the analysis to some correlations between unemployment and the NRRs. *Charts 3* and *4* now plot the aggregate unemployment rate of each country against the short and long term NRRs, respectively. *Chart 5* also plots the relationship between unemployment and unemployment benefits using both short and long term NRRs for both short and long run unemployment. There is no clear, linear relationship between these indicators and unemployment levels across countries. There is a slight positive but non-linear correlation between long-term net replacement rates and both the overall unemployment rate and the proportion of long-term unemployed. The link for the initial net replacement rates and unemployment is more complex but also non-linear. There was also no clear linear relationships when controlling for country fixed effects. In short, unemployment benefits do not appear satisfactorily to explain unemployment.

However, cross-country variations in unemployment and labour market institutions are only one way of analysing whether the latter do indeed play a role in explaining the evolution of unemployment. Using Labour Force Survey (LFS) data providing information on an individual level for three countries - Poland, Hungary and the Czech Republic – it is possible to analyse whether the benefit system has had an

impact on labour market flows out of unemployment into employment and inactivity over time. The advantage of this approach is that it is possible to control more fully for individual circumstances, such as unemployment duration, age and education. To do this, in addition to the usual control variables, the NRRs were merged into the LFS data. In particular, the matching took into account the number of children, marital status and length of unemployment spell. While this necessarily simplifies - net replacement rates after all are based on average wages and not on actual wages - it introduces further variation into the data beyond the usual binary information. This way it is possible to link changes in average levels of benefits over time with individual information.

Multinomial logistic regressions were then estimated for the three countries. These were done both on a pooled and annual basis with the aim of tracing changes in the impact of institutions on flows over time[39]. For flows from unemployment to employment in all three countries, the sign on the net replacement rate varied but was very rarely significant. When controlling for individual attributes, as well as region and time, there was no evidence that NRRs had any notable impact on flows into employment from unemployment. For registrations, there was no robust, common effect across countries. Estimates were also sensitive to whether pooled or time series data were being used. For Hungary, where there were more measures of benefits, recipients of disability benefits in particular had a lower chance of moving back into employment from unemployment. Being on disability benefits in Hungary reduced a person's re-employment probability by around 6 percentage points. Finally, when using a dummy variable for receipt of unemployment benefit (UI) or social assistance (UA) for the three

[39] Full results are reported in Commander and Heitmueller (2008)

countries, there was no clear effect or difference with almost all coefficients being insignificant.

Interestingly, the picture looks rather different for flows from unemployment to inactivity. Net replacement rates and being in receipt of unemployment benefits, as well as being registered as unemployed, clearly reduce the likelihood of individuals becoming inactive in the pooled model in both the Czech Republic and Poland. Second, pension, disability and child benefits significantly increase the chances of becoming inactive in Hungary. By contrast, the NRR variable – whether entered individually or jointly – is, as in the other two countries, mostly negatively signed and significant. When dummy variables for the receipt of benefits or social assistance are included both enter negatively.

In short, a careful look at a number of transition countries which have adopted systems of unemployment insurance provides little evidence that benefits can explain differences in aggregate unemployment rates across countries. Matching NRRs to micro-data, it appears that benefits can affect outflow rates from unemployment, albeit mainly with respect to flows from unemployment to inactivity. The evidence suggests that these effects have stayed constant, but small, over time despite the fact that benefit generosity has declined. Given the change in aggregate unemployment rates and an increased share of long-term unemployed with limited benefits entitlements, this suggests that the overall link between institutions and unemployment rates has been weak. The next section now turns to the design issues connected with the possible introduction of policies for reducing employed-based risk.

7. Design issues for emerging markets

Previous sections have suggested that emerging markets face increased risk from continuing integration in to the world economy. This risk appears to be associated with a greater appetite among their citizens for government to provide measures of risk abatement in the labour market. Yet, even if these preferences are to be met, there is no clear template in design that emerging markets can easily. Section 3 has shown, for example, that there are wide differences in the design of unemployment insurance systems in the OECD as well as very different degrees of employment protection. Further, the mix of employment protection and unemployment benefits provision varies significantly across countries.

The available evidence also indicates that the dominant form of public intervention in the labour market in emerging markets remains employment protection with, in particular, use of the public sector as a vehicle for employment creation and job preservation. In part because of these preferences, the size of the formal sector has itself often remained relatively small. Employment protection has also tended to run alongside high costs for separation, hence high severance charges. These can impose severe rigidities on firms and result in both the levels of employment and the composition of employment being skewed in ways that are adverse from the standpoint of productivity. Further, while the direct beneficiaries of intervention have generally been a fairly small share of the labour force, the consequences of the type of intervention have been encompassing and have helped structure the organisation of the wider labour market. In this sense, policies aimed at lowering employment based income and consumption risk require sharp departures from past practice. Blanchard (2004) summarises the challenge

as moving away from high severance payments and employment protection more generally to a system of publicly provided unemployment insurance and lower severance costs. Others have argued that unemployment insurance in the OECD manner is either too costly fiscally and/or in terms of incentives and that a greater emphasis on self-insurance would instead be desirable[40]. However, in most instances to date, such changes have proven to be wishful thinking, not least because of the entrenched power of incumbents and vested interests.

When considering what experience with policies – mainly in the OECD - of employment-based risk mitigation suggest for future design, several aspects stand out. There is a vast body of evidence that shows that social protection is costly. Including unemployment benefits, social protection expenditure accounts for over 25% of GDP in Western Europe. A body of research has also found that unemployment benefits can affect not only the rate of unemployment but also that for non-participation. In particular, there is compelling evidence that the presence of benefits affects the duration of unemployment, not least as indicated by the jump in job matching that occurs when eligibility for receipt of benefits expires[41]. The presence of unemployment benefits can affect workers' incentives to search for work and the scale of these effects can be very significant. In emerging markets, the question of institutional capacity is also critical. Most emerging markets lack robust, transparent and effective institutions. This is likely to be a major constraint in a domain where integrity, monitoring and oversight – not least to limit moral hazard among recipients of transfers – is essential. In China, for example, the main challenge facing recently introduced labour laws remains enforcement and

[40] For example, Vodopivec (2009)
[41] See, inter alia, the review in Atkinson and Micklewright (1991)

implementation and this is a characteristic feature of most emerging markets[42]. Further, the size of the informal economies in most emerging markets is generally very significant – in India, for example, the relative share of the formal sector in industrial employment is under 10% [43]- and this raises further questions regarding coverage and feasibility. Moreover, the presence of large informal sectors often implies that unemployment is harder to isolate as a discrete state, as the response to job loss is for workers commonly to shift into lower paid informal activity[44]. Finally, given that the formal sector in most emerging markets is in effect the privileged sector in terms of compensation, contractual terms and working conditions, workers losing jobs in the formal sector tend not to be those with most income risk or exposure to poverty[45]. In short, when considering appropriate design in the emerging market context, there is no unique set of design principles and practices that can readily be forced into a template.

7.1 Merging savings and insurance?

For some time, mainly with a view to mitigating the moral hazards involved in traditional systems of unemployment insurance, economists have proposed merging elements of saving or self insurance with a funded insurance component. For the USA, for example, Feldstein and others (1998) relied on simulations to argue that UISAs, or unemployment insurance savings accounts, could significantly lower the cost to taxpayers of providing unemployment benefits. Others have argued that savings for unemployment and

[42] See OECD (2010), p171-2
[43] OECD (2007), p121
[44] However, this response is of course endogenous in the sense that absent any organised system of fall-backs, workers will have to seek other work or rely on family members.
[45] A point made by Vodopivec (2009).

retirement need to be merged to be effective in making workers internalise the costs of unemployment benefits as well as allowing for better diffusion of risk.

In recent years, these proposals have been advanced as a possible solution for some emerging markets and, indeed, there is now some experience – notably in South America – of just such applications. It has been argued that their main benefit is to limit the disincentives for seeking work for those in receipt of transfers. Some element of self insurance could be expected to improve incentives for unemployed workers to search for work. Indeed, a recent study of a UISA programme in Chile has found, for example, that recipients relying primarily on UISAs behave differently than those relying on transfers with respect to the timing of their exit from unemployment and that this difference is consistent with improved work incentives[46].

UISAs have been described in detail elsewhere[47]. The main features that should be noted are that employers and in some cases workers deposit a specific share of a worker's earnings in an individual savings account. In Latin America – where these accounts have been most widely used – the deductions that are made have ranged between 3% to over 9%. In case of job loss, workers can draw on these accounts. The main difference in the design of UISAs concerns the extent to which redistribution or borrowing is allowed. Savings accounts that allow borrowing imply that workers are not necessarily constrained by the volume of their savings once experiencing a bout of unemployment. In most instances, withdrawals are not simply bounded by the amount in an account, so that borrowing or recourse to an additional fund can be made for a limited period and/or amount.

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[46] Van Ours et al (2010)

[47] See Robalino et at (2009) for a good overview, also Vodopivec (2006)

A widely cited example is that of Chile. There, in a system introduced since 2002, employees and employers have contribution rates of 0.6 and 1.6% respectively. An unemployment episode can lead to a worker withdrawing from the savings account to a maximum of five monthly payments with a replacement rate of between 30-50%. If savings are not adequate to cover this eventuality, the worker can draw on a Solidarity Fund up to this same limit, but, in this instance, only if job loss was involuntary. Further, access to Solidarity Fund resources has been restricted to workers with open ended, rather than fixed term, contracts, although this has now been partly relaxed. The Solidarity Fund is in turn financed by employer contributions of 0.8% of all wages of their employees with an additional government annual lump sum contribution. The total contribution rate, excluding the government element, consequently amounts to 3%.

The Chilean and other examples are cases in which private contributions are supplemented by public insurance. In the case of a Solidarity Fund, the public insurance component has, however, an explicit redistributive aspect, although actual implementation of the system is in the hands of a private firm selected competitively. Some schemes – as in the case of the system being discussed for adoption in Jordan – involve borrowing with a key issue being to do with the balance at retirement. In many emerging markets, average life expectancy remains far closer to retirement age than in the OECD and this could reasonably be expected to influence behaviour by accelerating the incentive to borrow towards the end of their working lives. To limit possible abuse, those with outstanding borrowings are mostly expected to repay any excess borrowing but there are obvious concerns about the credibility of this provision. In some instances, scope for forgiveness or partial subsidisation can be introduced.

7.2 Limits to self insurance

While UISAs can be motivated on both macroeconomic – boosting savings rates – and incentive grounds, some fairly fundamental problems of design remain in the context of most emerging markets. Most generally, such schemes involve high levels of institutional capacity and integrity, as well as a financial system capable of managing and investing the array of individual accounts. But there is also the objection that workers – or particular groups of workers – may be unable to generate sufficient savings to draw down over an unemployment spell. This is likely to be particularly true for young workers who commonly face particularly high hazards of unemployment, let alone for low wage earners in the informal sector. Unlike pensions which get drawn down at a defined time in life, episodes of unemployment tend to be far less predictable and hence timing becomes a potentially complicating issue. Moreover, in economies where wage levels are relatively low, workers may be unwilling to save for events that are hard to predict and to which they may attach very widely differing probabilities and, hence, priorities. Indeed, the savings shortfall criticism may hold in aggregate in many emerging markets, as savings ability over extended periods of time may also be inadequate. That need not, in principle, imply that the cost of any supplementary public funding would have to be greater than under an alternative regime, but it does signal that UISAs in emerging markets are likely to carry a non-trivial, fiscal cost.

Most generally, in terms of design it appears that systems that involve a mix of self and public insurance might be able to address effectively some of the financing and equity issues, if not those of institutional capacity. Robalino et al (2009) rightly point out that conventional UI systems are not necessarily progressive and argue that UISAs can be

designed so as to redistribute to poorer workers, such as through limiting benefits and/or ensuring a minimum level of benefits. However, aside from any difficulty in implementing this, moving to any system where redistribution (using public funds) can occur will raise many of the same problems as a publicly funded insurance system, such as with respect to incentives for job search. Such schemes also do not address the issue of layoffs and the challenge of trying to make firms internalise the cost of the public resources used to complement any self-insurance element[48].

A further – and familiar - criticism of UISAs is that they unsuitable for countries with large informal sectors. Given that the bulk of the workforce in many emerging markets is actually in the informal sector, moving to any form of self insurance with or without a public element would require a sea-change in behaviour among both employers and employees and could be expected to run into serious enforcement-cum-incentive problems given the institutional, taxation and other status of informal sector firms and individuals. Although, in principle, adopting an explicit redistributive objective through use of public resources could allow extension of coverage to informal workers, it is not clear whether (a) such an extension of coverage would match to demand, (b) would be administratively and institutionally feasible and finally, (c) would be free from the usual design problems facing more conventional programmes. Robalino et al (2009) argue that it would require a relatively small redistributive component that was well targeted for incentive and fiscal costs to be contained. But given the scale of the informal or uncovered sector as well as institutional and information constraints, this argument may be heroic.

[48] Blanchard (2004)

7.3 Facilitating reform

Before moving to actual design principles, it should also be emphasised there are likely to be some important political economy considerations. Earlier sections have given details on the pervasive nature – and corrosive consequences – of the employment protection that exists in most emerging markets. However, aside from lowering employment risk for insiders but also reducing job creation and prolonging unemployment durations for others, employment protection policies have built up substantial groups of interested parties with an aversion to reform. As such, a major barrier to reform concerns the bargaining power of those already protected – incumbents. In addition, many of those protected are employed in public sector firms, government or in large private companies. Such firms are often those that are highly unionised and where the voice for protection remains powerful[49]. This makes their workers often potentially formidable opponents. Set against that is, however, the far larger constituency of workers outside the protection sector, including those queuing to secure jobs in the protected sector. Indeed, the median voter looks far closer to someone in the unorganised part of the economy in most emerging markets. However, they tend to form no coherent constituency – not least for being formed of disparate parts – and hence tend to lack effective bargaining power. In addition, many governments draw their political support from the protected sector and in effect pursue their support through providing superior benefits and other employment based privileges.

[49] Union presence and bargaining coverage has also affected the extent and persistence of employment protection in OECD countries. Low union density need not imply low bargaining power but may depend on the structure of bargaining and coverage. The example often cited is that of France where union membership has been low and declining.

A common way around these problems has been to try and use severance payments. While design has varied, most generally such payments have had a lump sum component and when appropriately discounted have been pitched lower than the NPV of remaining in protected employment. In some instances, there have been experiments - similar to those tried in Western Europe - using different types of contracts for new hires that also involve grandfathering incumbents. However, while severance can have a place in compensating for job loss – particularly for those who have been in a job for a protracted period of time - severance is inherently unsuitable as a more permanent way of dealing with employment and income risk.

The relevant question is what sort of compensation mechanism can assist in promoting restructuring and a reduction in employment protection in formal sector firms? To the extent that severance can deal only with a proportion – and possibly a small proportion – of possible job losers, the introduction of more general employment loss compensation might be able to advance a more general reform of the labour market. By providing some form of fallbacks for those with an enhanced employment risk, the objective would be to enable a wider pursuit of reforms that involve a diminution in employment protection. To that end, the aim would be to substitute over time unemployment insurance for employment protection. Indeed, this *quid pro quo* is essential if grafting on some element of unemployment insurance to existing systems of (excessive) employment protection is to be avoided. Firms would in principle gain from the increase in discretion regarding hiring and firing decisions. At the same time, reductions in payroll tax rates for employers could be made to reflect a rebalancing of risk sharing and to increase the attraction of the policy shift.

7.4 Elements in design

The above discussion has highlighted several features and constraints. For a start, classical systems of unemployment insurance are demanding institutionally and generally are plagued by major incentive problems. They are also costly. Financing through payroll taxes – rates of which are commonly quite high - also imposes costs, notably with regard to job creation and in some instances can affect the type of jobs that are created. Attempts to address incentive issues through self insurance have made some headway but have serious drawbacks. Not only are there questions of coverage, adequacy and implementation but the more realistic variants of self insurance that involve elements of redistribution face many of the same incentive issues of more conventional approaches. Further, if coverage is to be extended to the informal sector not only is this likely to require a change in attitudes and modus operandi but also will likely involve major fiscal costs. Even so, despite these shortcomings, there is clearly scope for meshing together elements of public and self insurance to address employment-based income risk in emerging markets: the question is how?

When designing any system of employment risk compensation, three players are relevant. The first comprises the workers whose employment risk is the primary subject of the policy. The second comprises the firms who employ those workers and whose performance and preferences will tend to determine the level and variation of employment over time. The third comprises government whose ability to fund and monitor unemployment insurance is, for a variety of reasons, superior to the other players.

In the case of firms, Blanchard (2004) points out that the presence of unemployment insurance will distort the separation decision. High benefits will affect the productivity level at which firms are indifferent between employing workers and laying them off. This distortion can in principle be addressed – in the case of risk neutral firms – by firms being charged for unemployment benefits paid to workers they lay off, thereby making them internalise the costs of their decisions. But if the firm is risk averse and faces financial constraints then this sort of recovery of costs is unlikely to be feasible[50]. In an emerging market context, particularly where reductions in employment protection could be expected to induce restructuring, contributions by firms on an *ex post* basis are unlikely to work. One possibility would be to use both a mix of fixed contributions – i.e., a payroll tax – and *ex post* adjustment with the share financed by payroll taxation relative to that of the lay off tax being varied over time and context. The underlying principle at work is that firms who lay off workers should pay some, if not all, of the costs of the benefits paid to workers who have lost their jobs.

Relying on a larger component of self insurance involves, in effect, workers putting aside savings to be drawn down in the event of unemployment. This can be funded in a variety of ways, through a payroll tax contribution, most likely of a compulsory nature, or through voluntary contribution. Relying, however, on a larger component of self insurance could also be non-neutral vis-à-vis job creation as it would depend on the level of deductions from firms. For workers, the level of savings could potentially have an impact on labour supply. And – as pointed out earlier – if there is an additional element

[50] Blanchard (2004) makes the point, however, that most lay-offs – at least in the OECD - do not occur when firms are distressed, suggesting that financial constraints may be less binding. But this may not hold for emerging markets, particularly in the context of a reduction in employment protection and associated restructuring.

of public insurance, then many of the same incentive or moral hazard issues will be present.

7.5 Sequence

Consider an archetypical emerging market, likely to be a middle income country with an existing system of social security contributions and old age benefits (normally organised around a single state run pillar), alongside a large uncovered informal sector. In these contexts, when introducing unemployment benefits, at the outset it would be necessary to limit coverage to workers in the organised or formal sectors with, however, the establishment of a parallel scheme (of which more below) aimed at extending, in a staggered manner, coverage towards informal sector workers. Over time, the two might be expected to converge.

With respect to financing, any viable system is likely to have mixed sources of funding, as in the Chilean example. There clearly needs to be a public insurance component, not least because of the ability of the state to diversify unemployment risk[51]. In the Chilean example, this comprises the Solidarity Fund which is part covered by public contributions. There is also scope for an explicit introduction of self insurance. Given that coverage would start only with the existing formal sector – which in many of these countries is relatively small – the creation of individual employment accounts could be feasible. Each worker would have an individual employment account held with the Employment Agency (but possibly implemented through a private sector operator or bank). Payments into that account would come from up to three sources. Employers

[51] See the wider discussion of this issue in Blanchard and Tirole (2004)

would make regular (monthly) contributions set as a share of the worker's gross wage. Workers would similarly be required to set aside explicitly a (lower) share of earnings that would be paid directly into the account. Subject to some eligibility criteria (see below), workers would be able to draw on accumulated contributions up to a specified maximum duration. In the event that combined firm and worker contributions were insufficient to cover benefits, a supplemental contribution would be made by government. Over time, an additional component – a balancing item – could be introduced for individual employers so that at the end of each time period (e.g., every six months) in the case when the cost of layoffs (as measured by the sum of unemployment claims) exceeded contributions, firms would have to make supplemental payments - an *ex post* adjustment. This would evidently help to reduce any need for public resources. At retirement age, any positive balance in the account would be transferred to the worker. To avoid large drawdown close to retirement, a declining age-related scale of permitted borrowing on any individual's account would have to be introduced.

The format suggested above would in effect switch payroll taxation to a specific employment account with a defined set of contingent benefits. The administrative requirements would not be trivial for this type of set up but neither would they be that exacting, particularly given that most of these countries already run contributory old age programmes. Indeed, proposals to launch individual social accounts have been floated in the context of some OECD countries[52], while a country like Egypt has already started introducing individual 'smart' cards that will contain, *inter alia*, citizens' access rights to

[52] For example, in Laroque (2008)

services and transfers. Technological changes certainly make implementation more feasible.

Turning to the design of the unemployment programme, two organising principles would be needed; simplicity in execution and minimisation of work disincentives. It would be appropriate to think of a flat rate - but experience-related - payment contingent on involuntary separation. Given the likely inability of any agency in these emerging markets to monitor effectively whether workers take jobs and leave unemployment, the receipt of benefits would have to be more tightly bounded, both in terms of generosity and duration.

In terms of generosity, a small set of simple skills or earnings brackets (say, high, medium, low) would be pre-determined with possible claimants being grouped into one or other bracket, adjusted by years in a job (tenure), at time of application. Replacement rates would have to set at the lower end of the spectrum, particularly for higher *ex ante* earnings brackets. For the lowest earnings bracket, the effective replacement rate should be set higher. Average feasible replacement rates would have to be determined for each setting and subject to extensive prior scenario testing but might be expected not to exceed 0.25.

Eligibility criteria should be determined conditioned on the length of time in a job and work histories. At the outset, a minimum period of one or two years in work could be considered, possibly combined with a minimum level of contributions in a worker's account. A limit on the number of times a claim could be made in a given period would need to be defined (e.g., one unemployment spell every three years).

Duration should again be simple with a clear maximum period for receipt. Given that any such programme would be mainly about compensating for transitory income loss, it would be sensible to limit to between 3-6 months. This will not address long term unemployment but that should not be seen as its task.

In the event of involuntary job loss, payments of unemployment benefits would be organised equivalently to earnings with weekly frequencies rather than as lump sum payments. Payments would need to be organised around an institution with a national branch network – such as Post Offices – but it is possible that other technologies, such as mobile phones, could also be used to make payments (drawing on experience in some developing countries with money transfers).

7.6 Bringing in the informal sector

Given that informal sector work is often highly variable in hours, effort and earnings and is difficult to monitor, isolating a unique labour market state - unemployment – is unlikely to prove feasible. Conditioning a benefit on such a state would therefore be equivalently infeasible. As such an important objective of policy should be to help induce informal firms – particularly the larger ones – to shift into the formal sector. Exerting influence at this margin may motivate more specific interventions but, in general, protecting workers against employment and income volatility in the informal sector is not best served by a system of unemployment insurance.

As regards drawing firms into the formal economy, much, of course, depends on reducing barriers that range from tax levels and predictability to other regulatory costs and, hence, to improving the benefits to being in the formal sector. However, by raising

the value of being formal – at least to workers – in providing some share of benefits available to formal sector workers, some further incentive for forms to cross-over could be introduced. For the firm, it depends on whether they attach value to having access to some unemployment insurance for their workers or merely view it as an additional cost, given the effectively de-regulated labour market in which they operate as informal sector firms. In making this choice more attractive to firms, some temporary and selective financial incentives could be applied. With respect to unemployment contributions, this might, for example, take the form of a contributions holiday or partial relief for firms, alongside public supplements to worker contributions for a transitional period of up to several years. In principle, such public spending could be recouped over time through the additional fiscal revenues that formalisation could be expected to deliver.

While the sort of incentives described above might affect choices at the margin between staying informal or moving into the formal economy, the reality is likely to be that many small informal firms will be unreceptive. Indeed, providing income support – particularly to the most disadvantaged income groups - might be better achieved through discrete transfer programmes not necessarily tightly linked to employment status. Even so, there are obvious benefits to helping individual workers build, where feasible, some level of precautionary savings. This suggests that the route of augmented and flexible self insurance might be appropriate. Individuals could be encouraged to set up individual employment accounts using a wide branch-based network, such as the Post Office. To encourage participation, a matching or multiplicative contribution from public resources could be offered with initially that contribution being a multiple of worker or even group contributions. To avoid firms simply free-riding, the public top-up could, over time, be

made conditional on the employer also contributing. Such a scheme would also have to have very clearly defined savings caps, given the likelihood of relatively low returns to savings. The scheme would not permit borrowing. As regards access to accumulated savings, workers could draw down savings in non-lump sum form to cover self-declared income shortfalls but only once a minimum threshold of savings had been attained and for a limited duration. Workers would also be permitted to withdraw accumulated savings on reaching a specified age. Part of the reason for designing it this way would be to mimic the unemployment benefits framework in the formal sector with a view to raising demand for firms to shift into the formal economy.

8. Conclusion

Fluctuations in employment and income for workers are a feature of all economies. The extent to which such fluctuations are addressed through insurance and other mechanisms varies very widely across countries. These differences are not strictly explained by income levels alone. Most obviously, the USA operates a very different system of unemployment insurance than that present in Europe. What is common, however, is that as countries become richer, both income levels and the structure of risk associated with those income levels tend to interact in ways that have historically, as well as contemporaneously, resulted in greater levels of social protection and, in particular, a larger role for public insurance and action.

This paper has been concerned with understanding what the impact of this greater level of social protection – particularly in the domains of employment protection and unemployment insurance – has been on the rich adopters. It has considered the evidence

regarding the impact of labour market institutions on equilibrium unemployment and hence what sorts of lessons might be derived from cumulative experience in these countries. Using evidence particularly from Europe, it has been shown that the design of interventions can have major, long lasting and frequently adverse consequences. Yet, in the midst of large country heterogeneity, certain design principles can be identified that are of relevance to the growing number of emerging markets whose growth and changes in citizen aspirations mean that that they must begin to address issues of employment volatility. Interestingly, using information from a number of so-called transition economies where, for historical reasons, social protection has been more advanced, no clear impact of unemployment insurance on unemployment and employment can be found. There may, however, be some evidence that employment protection exerts a negative effect on the employment rate.

In this light, the final part of the paper has tried to develop some principles that can help guide labour market interventions and institutions for addressing unemployment in emerging markets in ways that avoid many of the pitfalls experienced in the advanced market economies and are also feasible from both a financing and institutional perspective. Given large informal sectors and often weak institutions, it is suggested that a mix of public insurance and self insurance should be used. Explicit employment programmes and funding should be established. A public insurance element will be necessary – relying only on employer and employee contributions has some major drawbacks. This sort of programme can also help economies and policy make the transition away from regimes of high employment protection and incumbent rent seeking. For informal sector workers, conditioning transfers on unemployment is not feasible, but

nevertheless measures can be taken that can encourage some informal firms to cross into the formal sector, while also promoting the growth of precautionary savings among informal sector workers. Finally, the next stage of the work will need to involve detailed country-specific design and simulations aimed at testing the impact of such innovations on worker incentives and behaviour, as well as pinning down the detailed fiscal and financial implications. Institutional capacity and requirement will also need to be examined closely.

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Table 1: Opinions regarding state support for the unemployed: evidence for selected emerging markets from the World Values Survey, 2005/6

Country	Democracy is good	Democracy is bad	n	% good
Argentina	6.1	6.3	919	0.95
Brazil	7.8	7.9	1446	0.9
Chile	7.7	6.5	895	0.93
China	8.3	7.3	1233	0.94
Egypt	6.7	6.5	3028	0.98
India	8.4	7.4	1527	0.73
Indonesia	4.4	5.4	1894	0.97
Jordan	7.5	6.1	1423	0.76
Morocco	8.1	7.7	1047	0.96
Peru	6.3	6.3	1392	0.89
South Africa	8	6.7	2840	0.9
South Korea	7.1	7.2	1199	0.77
Thailand	6.6	6.4	1528	0.93
Uruguay	7.2	5.9	931	0.91
Comparators				
France	6.6	6.3	974	0.9
USA	5.7	5.9	1194	0.86
No of respondents	26130	2654	28784	0.91

Source: World Values Survey, 2005/2006 round
Notes: Question 151: I am going to describe various types of political systems and ask what you think about each as a way of governing this country. For each one, would you say it is a very good, fairly good, fairly bad or very bad of governing this country.
Question 155: Many things may be desirable, but not all of them are essential characteristics of democracy. Please tell me how essential you think 'state support for the unemployed ' is as a characteristic of democracy. Use this scale where 1 means "not at all an essential characteristic of democracy" and 10 means it definitely is "an essential characteristic of democracy".

Table 2: OECD average unemployment rates, 1960-2007, 2008 and 2009

Country	60/69	70-79	80-89	90-99	00-07	2008	2009
Australia	1.8	3.7	7.6	8.8	5.7	4.2	5.6
Austria	1.9	1.6	3.3	3.8	3.5	3.9	5.0
Belgium	2.2	4.4	11.4	11.3	7.4	7.0	7.9
Canada5.0	6.6	9.4	9.6	6.9	6.1	8.3	
Denmark	1.5	4.1	8.1	7.7	4.8	3.3	6.0
Finland	1.9	3.6	4.9	11.9	8.6	6.4	8.2
France	1.5	3.5	8.3	10.2	8.6	7.9	9.4
Germany	0.8	2.4	6.1	7.8	9.3	7.3	7.5
Greece	5.3	2.3	6.6	9.6	9.7	7.7	n.a
Ireland	5.3	7.2	14.1	12.7	4.3	6.0	11.8
Italy	5.2	6.4	10.2	11.3	8.4	6.8	7.8
Japan	1.3	1.7	2.5	3.0	4.7	4.0	5.1
Netherlands	0.8	3.7	9.9	6.1	3.4	2.8	3.5
New Zealand	0.2	0.5	4.6	7.9	4.5	4.2	6.1
Norway	1.0	1.6	2.8	4.9	3.8	2.5	n.a
Portugal	2.5	4.7	7.4	5.6	6.2	7.8	9.6
Spain	1.5	4.3	17.9	19.8	10.6	11.4	18.1
Sweden	1.7	2.1	2.8	7.5	6.2	6.2	8.3
Switzerland	0.01	0.2	0.6	3.0	3.5	3.5	4.4
UK	1.6	3.6	9.8	8.1	5.1	5.6	n.a
USA	4.8	6.2	7.3	5.7	5.0	5.8	9.3

Source: OECD

Table 3: OECD Overall Employment Protection indicators for 2008

Western Europe		**Emerging Markets**	
Austria	1.93	Brazil	2.75
Belgium	2.18	Chile	2.65
Denmark	1.5	China	2.65
Finland	1.96	India	2.77
France	3.05	Indonesia	3.68
Germany	2.12	Korea	1.9
Greece	2.73	Mexico	3.13
Ireland	1.11	South Africa	1.25
Italy	1.89	Turkey	3.72
Netherlands	1.95		
Norway	2.69		
Portugal	3.15		
Spain	2.98	**Transition Countries**	
Sweden	1.87	Czech Republic	1.96
Switzerland	1.14	Hungary	1.65
UK	0.75	Poland	1.9
		Russia	1.92
North America		Estonia	2.1
USA	0.21	Slovakia	1.44
Canada	0.75	Slovenia	2.51
Australasia and Japan			
Japan	1.43		
Australia	1.15		
New Zealand	1.4		

Source: OECD (2008)

Table 4: Unemployment rates in selected transition economies, 1992-2008

Country	1992	1996	2000	2004	2008
Albania	26	12	16.8	14.4	12.7
Bulgaria	15.3	13.5	16.3	12	5.6
Czech Republic	2.6	3.9	8.8	8.3	4.4
Estonia	3.7	9.9	13.6	9.7	5.5
Hungary	9.8	9.9	6.4	6.1	7.8
Latvia	2.3	20.6	14.4	10.4	7.5
Lithuania	3.5	16.4	16.4	11.4	5.8
Poland	13.6	12.3	16.1	19	7.1
Romania	8.2	6.7	7.1	8	5.8
Russia	5.2	9.7	9.8	7.8	6.4
Slovakia	11.4	11.3	18.6	18.1	9.5
Ukraine	0.4	7.6	11.6	8.6	6.4

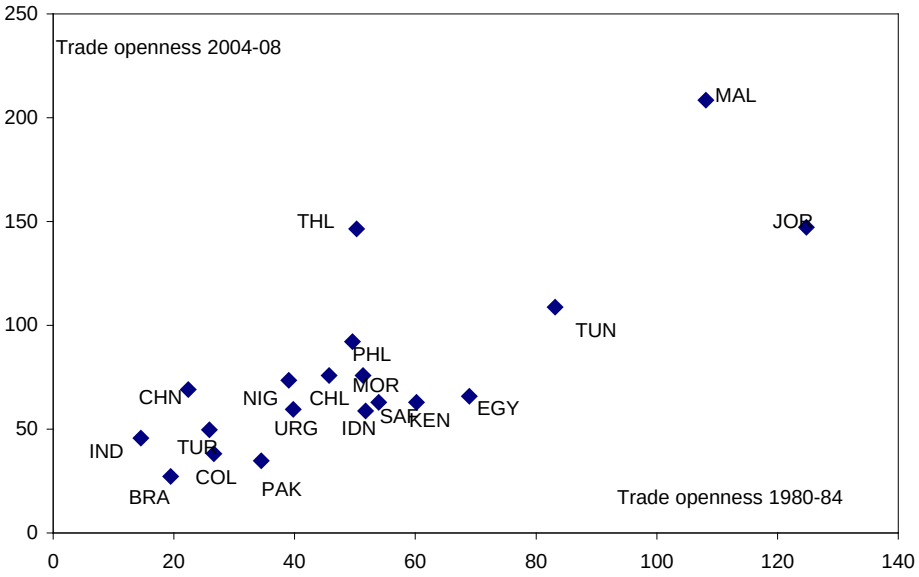
Source: Lehmann and Muravyev (2010) who use ILO, IMF and Transmonee data. Note that 1992 rates are mostly for registered unemployment, while other years are ILO rates.

Table 5: Net replacement rates for transition economies for initial (*I*) and long term (*LT*) unemployment in 2008 (for single individuals and one earner married couples with 2 children at 100% of average wage)

Country	Single/no children		One earner couple+2 children	
	I	*LT*	*I*	*LT*
Bulgaria	50	16	55	43
Czech Republic	53	30	61	57
Estonia	54	18	57	35
Hungary	59	23	70	59
Latvia	83	23	75	28
Lithuania	61	16	63	59
Poland	45	24	46	44
Romania	42	8	44	24
Slovakia	65	19	61	39
Slovenia	64	33	86	78
Comparators				
France	66	34	71	54
Germany	60	36	72	63
Netherlands	73	61	75	83
Sweden	50	44	60	65
UK	38	38	69	69
USA	55	6	51	38

Source: OECD (2008)

Chart 1. Selected Emerging Economies: change in trade openness from 1980-84 to 2004-2008



Source: World Bank's World Development Indicators and authors' estimates

Chart. Selected OECD countries: OECD Employment protection index and net replacement rate for single person at 100% of average wage

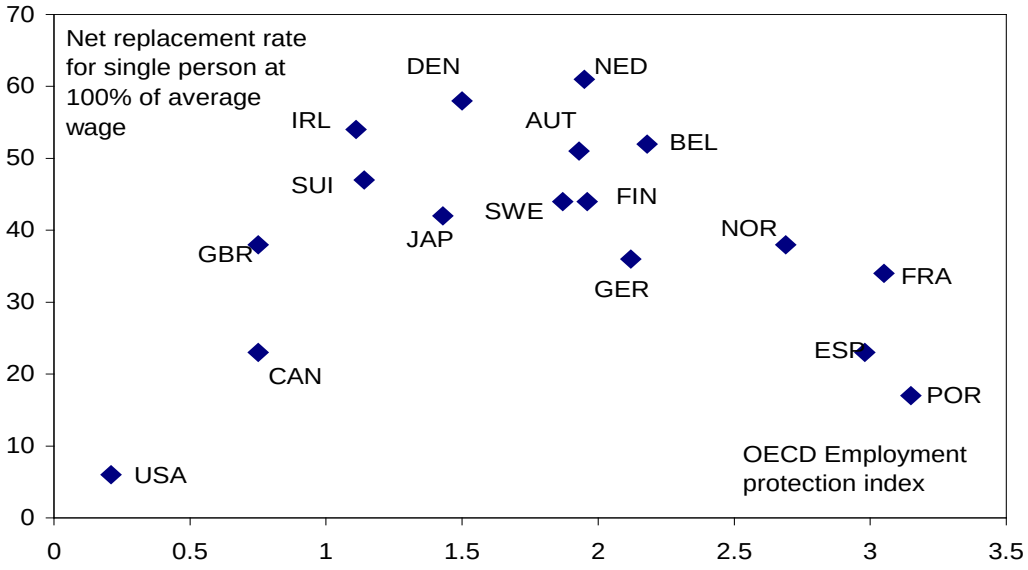


Chart 3: Net replacement rates long term (averages, max and min)

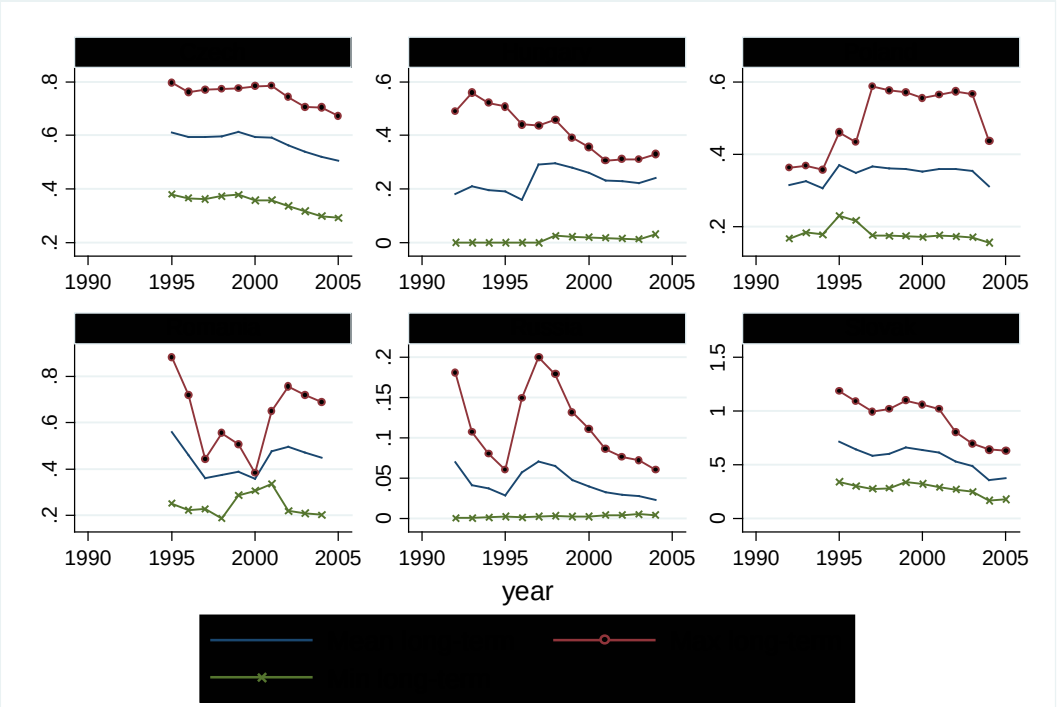


Chart 4: Net replacement rates initial phase (averages, max and min)

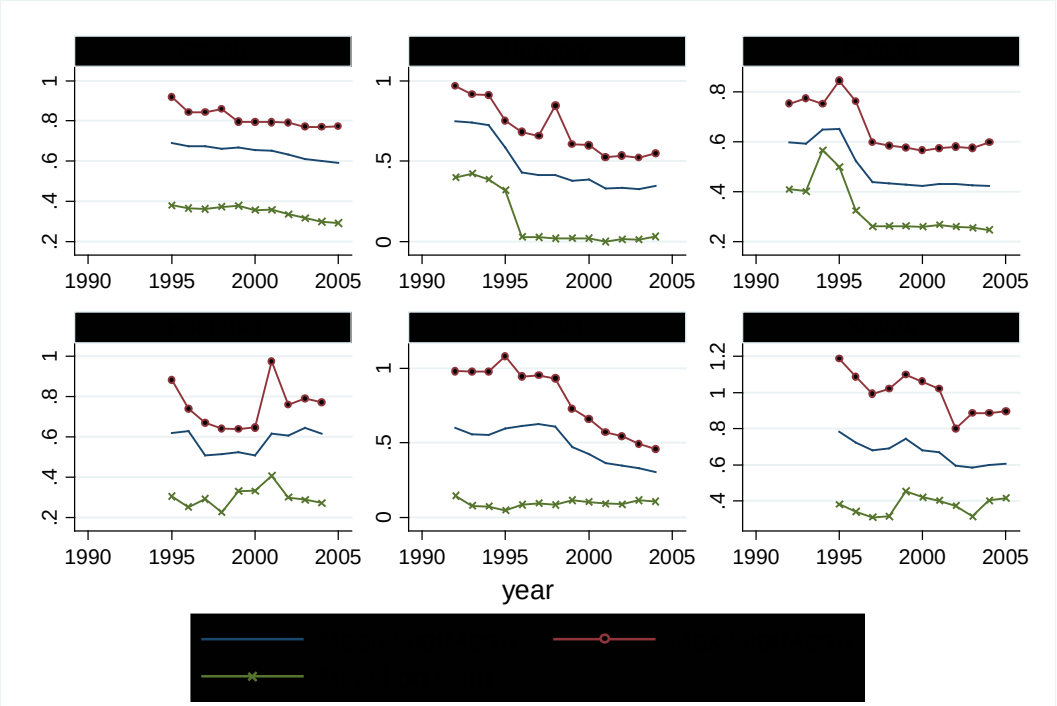


Chart 5: Correlations of unemployment and unemployment benefits