# A stable workplace? A mobile workforce? – What is best for increasing productivity?

## 4.1. Introduction

Globalization and the pace of technological change have fuelled the longrunning debate over labour market flexibility. Both, it is argued, increase competitive pressures and the speed with which enterprises need to react to change, thereby putting a premium on flexibility. The corollary of this argument is that, when labour markets are flexible, structural transformation can occur more rapidly, since both capital and labour can shift to newer, higher value-added sectors. The growth of the ICT service sector in the United States is offered as an example, as is the (labour-saving) use of ICT in process innovations or, indeed, in outsourcing. Flexibility, therefore, is said to favour inter-sectoral mobility, and, in turn, inter-sectoral mobility favours productivity and employment growth.

Curiously, however, this macro-view of structural transformation in relation to flexibility differs from the micro-view. As this chapter discusses, there is substantial evidence that stability of employment (tenure) is positively related to productivity gains. Many reasons exist for this positive relationship. Most prominently, tenure not only increases the gains of learning by doing, but is also an inducement for firms to invest in training (as they will be able to reap the rewards of their investment). The objective of the present chapter is to address the "flexibility versus stability" paradox of productivity growth.

Section 4.2 of this chapter looks at "structural transformation", or the mobility of labour and capital between sectors. Section 4.3 examines the opposite – the relative "fixity" or stability of capital and labour at the micro-level. Both are then set in relation to their implications for the future of labour market institutions and regulations, in Section 4.4. In particular, balancing flexibility and stability is addressed through the policy of protected mobility. The foregoing sections mainly consider industrialized countries. Section 4.5 poses the question of whether the conclusions for industrialized countries also apply to developing countries.

## 4.2. The mobility of labour and capital between sectors

Fifty years ago, in 1954, the Nobel laureate economist Sir Arthur Lewis wrote an article still considered an influential classic in the development economics literature. Lewis's central insight was that development occurs when labour and capital move from lower value-adding sectors, such as agriculture, into the more dynamic, higher value-adding manufacturing sector. When workers move from low productivity to high productivity sectors, overall productivity increases and so does economic growth. His view of the process is discussed in box 4.1.

#### Box 4.1. Arthur Lewis, a pioneer of development economics

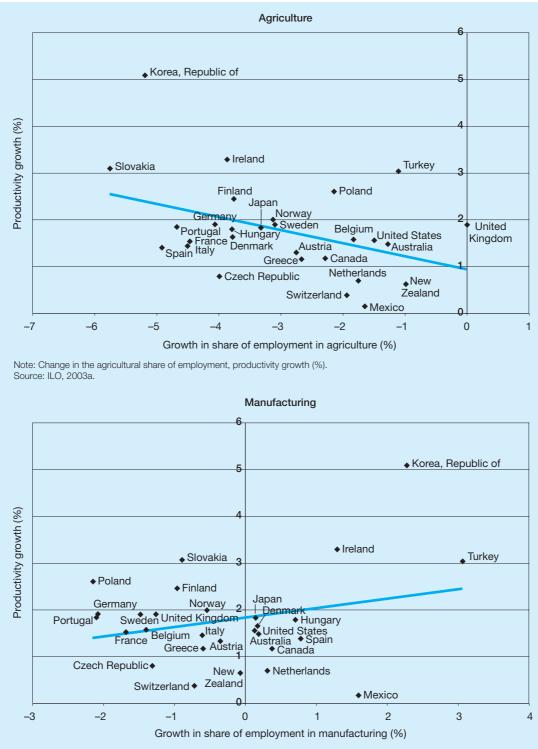
Arthur Lewis (1915-1991) was a leading figure in research on developing countries. His ground-breaking works<sup>1</sup> in the mid-1950s – *Economic development with unlimited supplies of labour* and *Theory of economic growth* – have been followed by a series of other important works. The experience he gained from his numerous assignments, as an economic adviser and as the administrator of a large development bank, gave him great insight into evolving political guidance for countries during the development process. Lewis tackled issues that were basic to the causes of poverty and to the unsatisfactory rate of economic growth in the developing world. His work, designed to describe and explain the intrinsic problems of underdevelopment, won great acclaim and gave rise to widespread scientific debate which has resulted in a series of variations and additions to Lewis's original premises.

The model of interest for this chapter is based on the dual nature of a developing economy. Lewis wrote: "One day in August, 1952, walking down the road in Bangkok, it came to me suddenly ... throw away the neoclassical assumption that the quantity of labour is fixed. An 'unlimited supply of labour' will keep wages down... The result is a dual (national or world) economy, where one part is a reservoir of cheap labour for the other. The unlimited supply of labour derives ultimately from population pressure, so it is a phase in the demographic cycle." He referred to an agricultural sector functioning on traditional lines, primarily based on self-support, which engages the labour of the greater part of the population. This sector is characterized by low productivity and value added. The other sector is modern, marketoriented, primarily engaged in industrial production and characterized by high productivity and value added. The driving force in the economy stems from the industrial sector, which expands with the support of unlimited supplies of cheap labour by migration from the agricultural sector. People migrate from agricultural areas because of lack of work and because they are forced to take any income opportunity given to them (the problem of hidden unemployment in the agricultural sector). The modern sector is able to pay slightly higher wages because of higher productivity. Profits in the modern sector create the growing savings which finance the capital formation for expansion.

<sup>1</sup> Lewis, 1954; 1955. Source: "Sir Arthur Lewis – Autobiography", http://www.nobel.se/economics/laureates/1979/lewisautobio.html

While Lewis's article is a discussion of development, the general message is that inter-sectoral mobility is important for productivity growth and, consequently, employment and output growth. This resides in turn on the mobility with which capital and labour move to the most dynamic growth sectors. Yet all economies have limits on such mobility. Product market regulations – for example, commercial taxes or zoning laws, the costs or bureaucratic hurdles to be overcome in starting a new business – can be such that they discourage entrepreneurship. Similarly, deficiencies in the education and skill formation systems can impede labour mobility.

Although admittedly suggestive rather than conclusive, figure 4.1 appears to make intuitive sense. It relates inter-sectoral mobility to productivity growth



# Figure 4.1. Change in employment by sector and annual productivity growth, selected industrialized countries (1980-2000)

Note: Change in the manufacturing share of employment, productivity growth (%). Source: ILO, 2003a. and, as predicted in the Lewis argument, the relationship is indeed positive. While innovation and productivity improvements within industries are important (to which the discussion will return) so, too, is "structural transformation" – the extent to which economies can exploit opportunities on the dynamic frontiers of industrial change by encouraging inter-sectoral mobility, particularly from declining to growing industries.

As noted above, product market regulation could slow the movement of workers across sectors through the barriers of entry it imposes on capital mobility, thereby restricting competition. The OECD has recently done extensive work on this subject<sup>1</sup> and there have been previous analyses as well.<sup>2</sup> In particular, the OECD has constructed a variety of indices gauging the stringency of product market regulation, one of which focuses particularly on barriers to entrepreneurship. In industrialized countries (or "post-industrial" in the sense that employment in manufacturing stands in relative or absolute decline), regulatory barriers in product markets could plausibly slow the growth of emergent industries, predominantly in the private, service sector. If so, there ought to be a relationship between the degree to which competition is sheltered through product market regulations, and the share or growth of private-sector service jobs.

Reference is frequently made to the "employment gap" between Europe and the United States as existing predominantly in the growth of these specific jobs. And, indeed, arguments explaining this gap rely little on product market regulation. Europeans, for example, consume many more services provided by the public sector - particularly health - which Americans, in contrast, purchase privately. At the very least, there is a difference between countries in the share of private-sector service employment and, as figure 4.2 suggests, product market regulation could be part of the reason. Of course, far more rigorous analysis would be required to make the case with greater certainty.

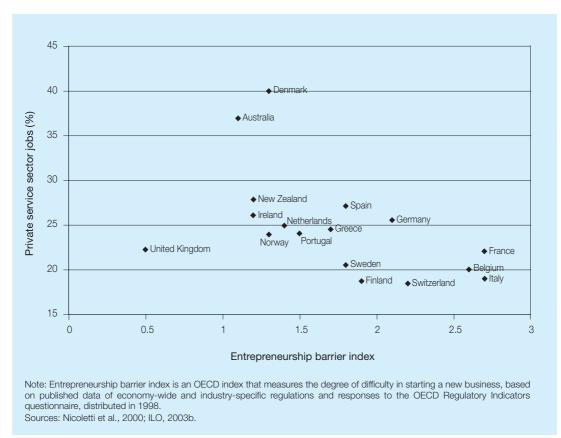
An earlier study<sup>3</sup> held European product market regulation to account for Europe's poor employment performance compared to that of the United States. The same study relegated labour market rigidities to a subsidiary role in explaining this difference: "... deregulation in the labour market will ... lead to a higher number of low-skill, low-wage jobs. Deregulation in the product market, however, will lead to job creation across the board."<sup>4</sup>

One conclusion to draw might therefore be that labour market "rigidities" turn out to be less significant as an explanation for differences in employment performance. Indeed, just how much weight to assign to labour market regulation and institutions has been a subject of debate for over two decades. While there is logic in elevating the constraints on the product market as an explanation for important differences in employment and output growth, exonerating labour market regulation completely would seem facile. The situation is more

<sup>&</sup>lt;sup>1</sup> OECD, 2002.

<sup>&</sup>lt;sup>2</sup> McKinsey Global Institute, 1994.

<sup>&</sup>lt;sup>3</sup> ibid



# Figure 4.2. Share of private-sector employment in services vs. the entrepreneurship barrier index, selected industrialized countries, late 1990s and early 2000s

complex, as there are important interdependencies in product and labour market regulation.

Research by the OECD<sup>5</sup> found a significant and positive relationship between the strictness of product and labour market regulation, with labour market regulation proxied by an index of the stringency of employment protection legislation (EPL). In one hypothetical interpretation of this relationship, limiting product market regulation could allow a country to have tougher laws on employment protection, since reducing competition in product markets could enhance the employment stability of those with work. Alternatively, the hypothesis could be argued with the reverse causality: the social choice of legislating greater employment protection could require that product market competition be circumscribed. Figure 4.3 reveals that the share of workers with long tenure (greater than ten years) is quite clearly related to the degree of stringency of product market regulation. Taken together, this implies a third relationship: the likelihood that the stringency of EPL is positively related to employment tenure. It is, and discussion will return to this point.

<sup>&</sup>lt;sup>5</sup> Nicoletti et al., 2000.

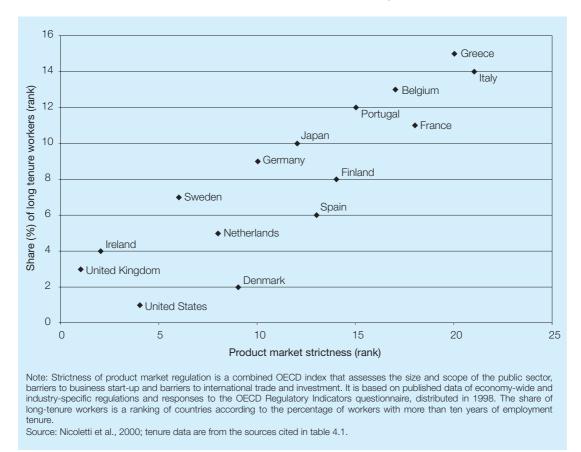
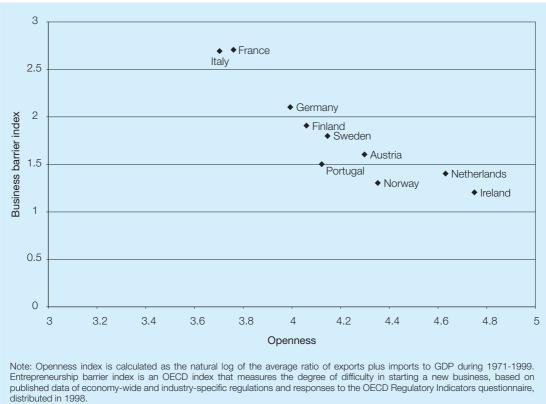


Figure 4.3. Strictness of product market regulation vs. share of workers with long tenure, selected industrialized countries, late 1990s and early 2000s

National governments regulate product and labour markets differently. Increasing globalization, however, generally implies more pressure on both markets to respond to change arising from external competition. In the European Union, for example, with the accession of ten new Member States, greater competitive pressure is anticipated. As figure 4.4 suggests, the degree to which competition can be curtailed through product market regulation bears some relation to the degree of economic openness (measured here as the log of the share of imports and exports in GDP). A plausible hypothesis is that regulatory regimes that seek to shelter product and labour markets from the full gales of competitive pressures are able to do so with less openness to the external economy.

Yet the winds of change are such that product markets will likely yield to greater openness, and, indeed, regulatory reform of product markets in Europe is advancing.<sup>6</sup> In view of the close relationship between product and labour market regulation, the question is whether labour markets, and the institutions and regulations that support them, will also need to yield to greater openness. The

<sup>6</sup> Blanchard, 2004.



# Figure 4.4. Degree of openness vs. barriers to entrepreneurship, selected European countries, 1970-2000

Sources: Dar and Amirkhalkhali, 2003; Nicoletti et al., 2000.

answer is likely to be in the affirmative, but with an important difference: whereas openness and a tendency to product market deregulation are apparent, openness and labour market deregulation are decidedly not.

In fact, if spending on labour market policies can be taken as a proxy for labour market intervention, then the more open an economy is, *the more such intervention occurs*, as is clearly apparent in figure 4.5.

Money spent is nonetheless a crude indicator of policies and programmes. What should the nature of such intervention be? To answer this question requires an understanding of the economics – not of capital and labour mobility – but of employment stability, to which discussion now turns.

## 4.3. Employment stability and productivity

First, the term "tenure" is defined, with some descriptive observations on differences in tenure between countries. The reasons for such differences are presented, with a focus on two labour market institutions in particular. Thereafter, the relation between employment tenure and productivity is reviewed, and also the theoretical and empirical literature on whether or not tenure is good for productivity growth.

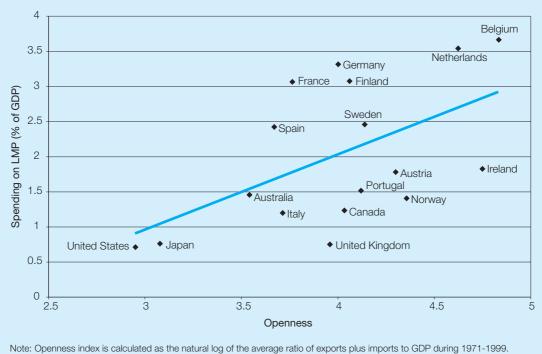


Figure 4.5. Spending on labour market policies increases with openness, selected industrialized countries, 1970-2000

Note: Openness index is calculated as the natural log of the average ratio of exports plus imports to GDP during 1971-1999. Sources: OECD, 2004; Dar and Amirkhalkhali, 2003.

Employment tenure is simply the amount of time that a worker has spent working for the same employer, even if the worker's job within the firm has changed. In short, "employment" tenure and "job" tenure are not synonyms. In fact, short job tenure in the context of long employment tenure with the same firm possibility reflects "functional" flexibility, or the extent to which firms adjust internally to changes in labour demand, rather than through the external labour market. As table 4.1 shows, average aggregate employment tenure varies – often quite substantially – across countries. In general, European and Japanese workers have longer tenure than those in the United States, and the latter have longer tenure than workers in Latin America.<sup>7</sup>

#### What explains differences in employment tenure?

A variety of factors accounts for differences in the length of employment tenure. An initial observation is that – whatever these factors are – the differences themselves appear to change negligibly over time. Thus, the rather stark difference in employment tenure between the United States and the European Union remains the same today as 15 years ago. On the one hand, this is a reflection of

<sup>&</sup>lt;sup>7</sup> A salaried or dependent worker is an employee, thus the data include persons who are employed by large, small and micro-enterprises as well as workers employed as domestic servants. Self-employed workers are not considered dependent and are excluded from the data.

	Average tenure (years)	Workers with < 1 year tenure (%)	Workers with > 10 years tenure (%)
Greece	13.6	9.8	52.1
Japan	12.2	8.3	43.2
Italy	12.2	10.8	49.3
France	11.2	15.3	44.2
EU-14*	10.6	14.8	41.5
Germany	10.6	14.3	41.7
Denmark	8.3	20.9	31.5
United Kingdom	8.2	19.1	32.1
Argentina	6.7	27.5	21.2
United States	6.6	24.5	26.2
Peru	6.3	29.0	20.1
Chile	5.5	34.5	18.8
Brazil	5.3	37.2	16.4
Honduras	3.9	51.4	10.1

Table 4.1.	Average tenure and tenure distribution, selected OE0		
	and Latin American countries, various years		

\*Excludes Austria.

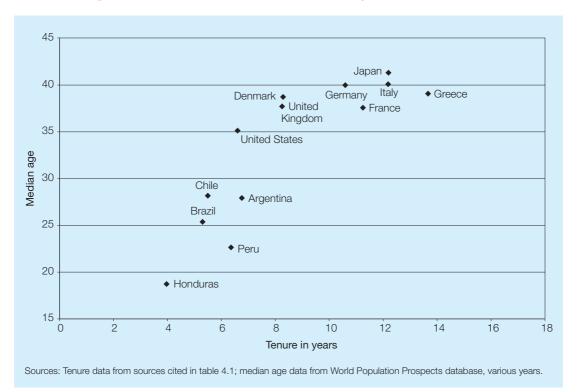
Sources: Data for Europe from 2002 based on Eurostat; US data from 1998 based on national sources; Latin American data from IADB (2004) based on household surveys of the late 1990s and 2000s.

just how deeply rooted – and durable – are the different characteristics of national labour markets. On the other hand, this durability itself considerably qualifies the popular assumption that employment security has eroded everywhere.<sup>8</sup>

Beyond this observation is the clear presence of cultural, economic, institutional, and purely demographic factors that explain differences in tenure. For example, demographic factors matter in a rather straightforward manner, as figure 4.6 illustrates. The younger a country's population, the lower its average tenure will be, for the simple reason that a greater share of the working-age population will have lived less long (a distinguishing feature between developing and industrialized countries). Younger people also change jobs more frequently than older people. The latter, with time, will have perhaps found the job match that suits both them and their employer, have family responsibilities which increase the fixed costs of mobility, have invested more in firm-specific skills, or have attained a level of income and benefits difficult to replace in the external job market.

Differences in GDP growth can also influence tenure. A country with sustained, higher levels of GDP growth is likely to be one in which employment is increasing as well. New entrants to the employed workforce reduce the average aggregate tenure of the workforce as a whole. Good economic times can also

<sup>&</sup>lt;sup>8</sup> Auer and Cazes, 2003. See Neumark (2000) for an in-depth analysis of changes in job stability and security in the United States in the 1990s.



#### Figure 4.6. Average tenure vs. median age, selected European and Latin American countries, Japan and the United States, late 1990s and early 2000s

encourage greater voluntary transitions between jobs. Economic growth's influence on tenure applies at more disaggregated levels as well: a growth sector is likely to have lower average tenure than a mature one. Another economic factor to which discussion returns below is that of differing economic structures. An economy with a relatively higher share of small firms is likely to have lower average tenure duration than one whose share of large firms is greater, since small firms are characterized by a higher rate of market entrances and exits than large firms. While it hardly proves the point, this may be one reason why a small-firm economy such as Denmark, for example, also has tenure duration substantially lower than the EU average. A speculative point is that a small-firm economy may *require* a higher degree of micro-flexibility than one in which large firms predominate.<sup>9</sup>

### Institutional and regulatory factors

Labour market "institutions", whether formal or informal, are an expression of underlying social and economic relations and cultural preferences in a society. Broadly understood, institutions can be of many sorts. Formal institutions

<sup>&</sup>lt;sup>9</sup> Several other economic factors (some of which were described by Alfred Marshall in the nineteenth century) plausibly affect tenure. For example, if labour costs are a small share of total costs, tenure is often longer.

include the regulations that govern hiring and dismissal (i.e. employment protection legislation), collective bargaining negotiations that concern job retention and dismissal, or set the wage/employment trade-off, as well as social protection policies such as unemployment insurance, which can influence mobility and hiring decisions.

Numerous informal institutions also affect tenure. Certain customs may be embedded in a society to encourage job retention on the part of both employers and workers. Such preferences can be codified: Malaysia's social partners, for example, have agreed to a code of conduct whereby a first response to a business downturn ought to be through an across-the-board cut in earnings affecting both managers and workers. The point is that any restrictions on numerical flexibility (whether formal, as through EPL, or simply through custom) create the incentive that alternatives to adjustment through dismissals be found. Society's expectations also matter. For example, beliefs regarding childcare and work may influence a worker's decision to remain in the labour market or not.

### Two institutions in relation to employment tenure

Among the myriad factors that affect employment tenure, two labour market institutions – employment protection legislation and collective bargaining – are key influences.

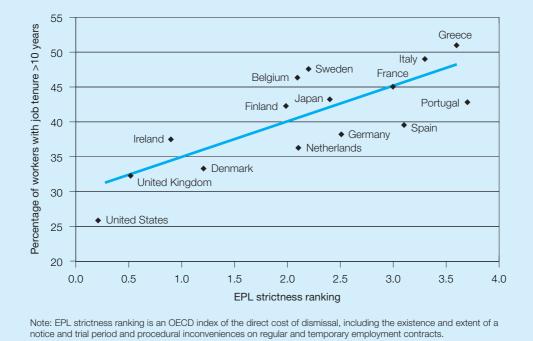
### Employment protection legislation (EPL) and job stability

Employment protection legislation has played a prominent role in the debate over labour market flexibility and employment creation. The arguments are well-rehearsed and need no recalling here.<sup>10</sup> Of note in the present discussion is the relationship between EPL and extended tenure in OECD countries, evident in figure 4.7, which shows the share of long-tenured workers (defined as greater than ten years) relative to an index of the stringency of EPL. The two are clearly related: the more stringent EPL is, the greater the share of workers with long tenure.

#### Unionization, social dialogue and employment stability

The stability or flexibility of an employment relationship is also influenced by the level of unionization that exists in a country, as well as the characteristics and aims of social dialogue. The nature of this relationship, in turn, has important effects on productivity. At an aggregate level, union presence does seem to be related to longer average tenure, as figure 4.8 illustrates. A comparison of Europe, Japan, Latin America and the United States shows a positive relationship between average employment tenure for salaried workers and the percentage of salaried workers covered by collective bargaining agreements. As with the relationship to employment protection legislation, the continental European countries – with collective bargaining coverage rates ranging from 55 to 95 per cent – have much higher tenure than either Latin America or the United States,

<sup>&</sup>lt;sup>10</sup> OECD, 1994; ILO, 1995; IMF, 2003.



# Figure 4.7. Strictness of employment protection legislation vs. percentage of workers with long tenure, selected industrialized countries, 1998

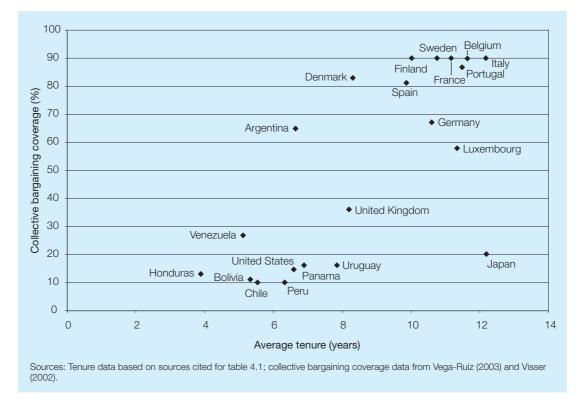
Sources: EPL ranking from OECD *Employment Outlook*, 2002; tenure data for 1998; for European countries from Eurostat database, for Japan and United States from national surveys, various years. where collective bargaining coverage is low (mainly under 20 per cent). Japan is

an outlier, with a 20 per cent collective bargaining coverage is low (mainly under 20 per cent). Japan is average tenure – perhaps a good example of how other less formal labour market institutions, in this case the *nen-ko* security-based earnings and promotion system, can play an important role in promoting employment stability.

Because these data cover all salaried workers, the direct effect of unions on employment tenure is not readily apparent. Further breakdown of the analysis in order to compare unionized versus non-unionized workers in the United States reveals sharp differences: 48 per cent of unionized workers have long tenure (employment tenure greater than ten years) compared with only 22 per cent of non-unionized workers.<sup>11</sup> The average tenure for unionized workers in the United States approaches the European average. Explicit employment security provisions in collective bargaining agreements no doubt explain some of this difference, but are not the only factor. In many countries, unionized workers tend on average to be older than those who are non-unionized; and organized workplaces are often in more established firms, where average tenure may be longer. It also matters whether the data relate to the public sector, where unionization rates (and tenure) are often higher than in the private sector.

<sup>&</sup>lt;sup>11</sup> Data prepared by the American Federation of Labor-Congress of Industrial Organizations, based on the 1998 US Current Population Survey (see http://www.aflcio.org).

#### Figure 4.8. Collective bargaining coverage and average tenure in selected European and Latin American countries, Japan and the United States, late 1990s and early 2000s



While it cannot be asserted that unionized workplaces are always more productive than equivalent non-union ones, there remains substantial evidence of the beneficial effects of unions on productivity growth. Recent evidence for the United States, for example, concludes that "the unionized firms that … adopted … workplace innovations had higher productivity than even the non-unionized firms with those innovations. This finding may be due in part to the job security unions provided that enabled the workers to speak freely about potential improvements in the production process without fear of losing their jobs."<sup>12</sup> The organization of work as a powerful source of productivity growth is a subject to which discussion will return. The more general effects of unions on productivityenhancing employment stability are described in box 4.2.

### Unions and training

A major conduit for improving productivity is through training, and here unions play a salient role. Dialogue with workers' representatives regarding training can reduce information asymmetries by identifying those areas where workers' skills are weakest. Furthermore, when their representative participates in the development of a training programme, workers are more likely to accept the

<sup>&</sup>lt;sup>12</sup> Black and Lynch, 2004, p. 3.

#### Box 4.2. How do unions promote employment stability?

Unionization and social dialogue can promote employment stability both at the micro- or firm-level as well as the macroeconomic level. At the firm-level, unions promote stability in three ways.

- Higher wages associated with unionism deter workers from switching jobs on the supply side and, on the demand side, wage pressure could force employers to seek productivity improvements to offset it.
- Institutional mechanisms available through unions give workers a "voice," allowing them to channel the grievances of the "median" worker for resolution, rather than opt for "exiting" the job.
- Many collective bargaining agreements include provisions that limit lay-offs, again inducing cost-adjustment solutions through other channels.

As is commonly discussed in the literature on the economic effect of unions, union workers earn on average more than their equivalent non-union counterparts as a result of their bargaining power with employers. This is known as the union-wage differential, and depending on the country, the industry, the bargaining power of workers, and the socio-economic characteristics of the workforce, the differential can amount to 15 per cent above the wages of similar non-unionized workers. Because a worker in a unionized firm risks losing this differential upon quitting, there is greater incentive for workers to stay with their employers, thus increasing tenure. The lower quit rate, in turn, implies greater overall employment stability among union members.

As there is an association between trade unionism and a significant reduction in quit rates, it is clear that trade unions do more than just raise the wages of their members. They also provide an institutionalized form of communication that gives workers the ability to voice dissatisfaction – the "voice mechanism". Such a mechanism allows workplace problems to be solved, rather than having workers simply "exit" the firm. Worker and employer representatives can establish grievance procedures and other forums for worker-manager dialogue that facilitate worker participation, thereby encouraging greater stability in the employment relationship.

Both higher wages and improved communication encourage union members to stay on the job, but another compelling reason for the relatively higher employment stability among unionized workers are union efforts to ensure employment security. Unions can promote employment stability by negotiating collective bargaining agreements that include provisions against worker dismissal, in exchange for other concessions. Indeed, "job security has emerged as the primary trade-off under flexibility bargaining".<sup>1</sup> A review of bilateral and trilateral flexibility negotiations in 22 countries found that unions traded employment security in exchange for concessions on wages, contingent work, cuts in working time, and employee ownership programmes.

At the macroeconomic level, unions also promote stability through social dialogue with government and employers' representatives. In these instances, agreements are made on national wage policies. For example, the setting of the minimum wage or the development of wage policies which ensure wage increases match productivity growth, can help to establish macroeconomic conditions that facilitate job growth. In times of economic change or uncertainty, social dialogue can be instrumental in making job retention and job creation a priority for governments and social partners. Having an effective mechanism in place for social dialogue at the national level can prove a competitive advantage for countries, particularly during economic restructuring or downturn. Singapore's relatively rapid adjustment to the Asian financial crisis with minimal job loss is a case in point. Rather than lay-offs or wage cuts, the solution of choice was to relieve employers of a share of their non-wage labour costs. Enterprises thereby received some relief in their labour costs, yet the retention of jobs and earnings propped up aggregate demand in the economy.

In Europe in the 1990s, many countries engaged in national social dialogue to develop policies for increasing competitiveness without compromising on social protection. The issues were wide-ranging and included monetary policy, taxation, wage increases, social welfare reforms, and the enhancement of workplace collective rights. In Ireland, Denmark and the Netherlands, the government and social partners agreed on social pacts aimed at solving the countries' economic problems through a concerted approach based on wage moderation and a boost in economic competitiveness. The policies resulted in strong employment creation. Similarly, national social dialogue in Barbados in the 1990s focused on surmounting economic crises while minimizing lay-offs and social hardship. The social partners and government agreed to focus on competitiveness and productivity, to accept wage freezes until corresponding productivity gains were achieved, and to retain jobs.

<sup>1</sup> Ozaki, 1999, p.127. Sources: Freeman, 1980; Ozaki, 1999; Auer, 2000; Campbell, 2001; Ishikawa, 2003.

programme, potentially improving its effectiveness. Employers' organizations can also be instrumental in encouraging training, as they can persuade individual firms to provide general training for an industry's workers. Without this joint commitment of firms within a given industry to provide training, the industry may develop an incentive problem: firms would be hesitant to train a worker out of fear that she or he may leave the firm or be poached by a competitor.<sup>13</sup>

The relationship between unions, training and employment stability runs both ways. By ensuring that workers' skills are deepened and kept up to date through training, unions have an instrument to attain employment security for their workers. At the same time, firms are more willing to invest in training their workers if they have some assurance that they will stay. This assurance has been instrumental to the success of high-performance work systems, as box 4.3 explains. Since union members are characterized as having lower turnover, union-covered firms may train a greater proportion of their workers, as firms are more likely to receive the returns from this investment.

Research findings support this theory. A recent study of the relationship between union coverage and training, based on a sample of male workers from household surveys in the United Kingdom between 1991 and 1996, reports a training incidence among union-covered men that was ten percentage points higher than non-union-covered men.<sup>14</sup> The authors then estimate an econometric

<sup>13</sup> Soskice, 1990.

#### Box 4.3. Tenure, productivity, and the new organization of work

The emergence of "high-performance work systems" has renewed attention on the use of tenure as a policy to induce workers to improve their performance. High-performance work systems (HPWS) involve a reorganization of work, away from the Taylorist model of direct supervision of employee tasks, to autonomous teams focused on problem-solving or quality improvement. The purpose of HPWS is to increase the participation of workers in decision-making. Workers make assessments about job tasks and methods of work and then communicate their insights with other workers, managers and experts. Active participation of workers in problem-solving committees is believed to raise productivity and numerous studies indicate that high-performance work systems increase productivity.

This conclusion is borne out in a study of the manufacturing sector.<sup>1</sup> The authors found that workers assigned most importance to job security, measured in the study as the existence of an explicit employment security agreement or trust in management to do its best to avoid lay-offs in the case of a decline in company sales. In the steel industry, for example, employee security's influence on "uptime" (the amount of time a factory is running) was nearly double that of incentive pay. Given that line delays are extremely costly in steel production, assuring security proved beneficial for output. In the garment industry, the authors also found similar productivity benefits among low-skilled workers, who traditionally receive little investment from firms. Employment security, it would seem, is relevant not only in white-collar or knowledge-intensive industries.<sup>2</sup>

Guaranteeing job security is imperative in HPWS in order to induce workers to discuss their ideas about productivity improvements. In the absence of security, workers will fear that they may innovate themselves out of a job: "Since high-performance companies consider workers as one of their key investments, they view layoffs as an option of last resort, offering instead an explicit commitment to employment security. Some firms adopt no-layoff policies; others send employees for training during 'slow' periods or redeploy workers to other jobs within the company. Still others turn to employee ownership as a way to avoid job losses. High-performance companies also respond to business downturns with various employment arrangements, including part-time, contract, temporary full-time, and work-sharing. When companies support employment security policies, workers reciprocate with greater flexibility and commitment."<sup>3</sup>

<sup>1</sup> Applebaum et al., 2000.

<sup>2</sup> Indeed, the European Commission (2002) found that low-skilled workers who receive on-the-job training have a risk of unemployment comparable to that of high-skilled workers, similarly benefiting from jobs with training.
 <sup>3</sup> US Dept. of Labor, 1994, p.11.

Sources: OECD, 1999; Applebaum et al., 2000

model that accounts for differences in workers' traits, including motivation and ability. They find that among similar workers, union-covered workers have a five percentage-point greater chance of receiving training. In the sample, this amounted to four extra days of training for union versus non-union workers.<sup>15</sup>

<sup>&</sup>lt;sup>14</sup> Booth et al., 2003.

<sup>&</sup>lt;sup>15</sup> ibid. The extra training also resulted in a 7 per cent wage increase for union workers.

The foregoing discussion thus offers support for the positive relationship between employment tenure and employment protection legislation and the institution of collective bargaining. Such stability in the workplace is likely to be favourably perceived by the employees who benefit from it. The question remains, however: Are the benefits of stability at odds with economic performance, as reflected in trends in productivity growth? Discussion now turns to this issue.

### The productivity benefits of stability: The evidence

Economic studies of the benefits of tenure on wages consistently show that an increase in tenure will increase a worker's real wages. Typically, it is estimated that (controlling for other characteristics such as the worker's education, gender, occupation and industry) an additional year on the job increases a worker's wage by about two per cent.<sup>16</sup> But do the economic benefits that workers receive from tenure translate into benefits for a firm or an economy? In other words, does a firm, or an economy, increase its rate of productivity as tenure increases?

Many economists have propounded on what firms gain in having a more tenured workforce. The most common explanation invokes the theory of "firm-specific human capital", in which tenure is a mechanism that allows firms to invest in workers over time, since it minimizes the risk of the employee leaving. Firms invest in on-the-job training that is firm-specific and that results in an increase in worker productivity. Because the training is firm-specific, its value in the external labour market is less, thus reducing the risk of costly labour turn-over. Yet the worker does not immediately receive all of the wage gains from the increased productivity. By delaying some of the returns to increased productivity. firms structure the incentives as another means to discourage workers from leaving. Workers are then less inclined to leave, as they would forsake these earnings.<sup>17</sup>

Those workers who receive firm-specific training have skills that are not available on the external market. Moreover, firms are limited in their supply of available, trained and experienced workers, since only past entrants to the firm have received this training. The external workforce does not have this internal training and cannot therefore substitute for the firm's more experienced workers.<sup>18</sup> As one economist noted, "experienced workers are produced by passing young workers through the seniority system" of an internal labour market.<sup>19</sup> Based on the firm-specific capital model, tenure induces firms to train their workers, while the structure of compensation induces commitment by workers. The result is an increase in the worker's productivity and the firm's output.

Research on industrialized countries supports theoretical work on the beneficial relationship between tenure and productivity. An early and important

<sup>&</sup>lt;sup>16</sup> Farber, 1998.

<sup>&</sup>lt;sup>17</sup> Lazear, 1979.

<sup>&</sup>lt;sup>18</sup> Lichtenberg, 1981.

<sup>&</sup>lt;sup>19</sup> See Oswald, cited in Blakemore and Hoffman, 1989.

empirical study of the tenure-productivity relationship in the United States found that for every 1.0 per cent increase in the median year of job tenure in the manufacturing sector, labour productivity increased by 0.39 per cent.<sup>20</sup> This could be attributed to the on-the-job training that workers with longer tenure receive and would offer support to the argument that seniority rules are consistent with increased productivity.<sup>21</sup> Box 4.4 shows similar results for a study of the private sector in France, supporting the hypothesis that employment stability and productivity growth go hand-in-hand.

The ILO has also recently explored the link between tenure and productivity using productivity and tenure data measured at the sectoral level for 13 European countries for the years 1992 to 2002.<sup>22</sup> Based on 822 observations, and controlling for differences in countries and sectors, the study measures labour productivity against average tenure by sector.<sup>23</sup> The results prove a positive and significant association between tenure and labour productivity, with a 1.0 per cent increase in the average rate of tenure increasing productivity by 0.16 per cent.

Focusing only on average tenure can mask patterns in the labour market, such as countries that have a stable core of long-term workers and many less stable workers. Because of this, an important policy concern is whether greater segmentation in class of tenure affects productivity. The ILO study estimates how different groups of tenured workers affect productivity: short-tenure workers (workers with less than one year with the same employer), long-tenure workers (more than ten years of tenure) and very long tenure workers (more than 20 years). The results in figure 4.9 show that increasing the share of workers with short, long and very long tenure will have a negative effect on productivity. In particular, a 1.0 per cent increase in the share of long-tenure workers will cause productivity to fall by 0.02 per cent; a 1.0 per cent increase in the share of very long tenure workers has a greater negative effect on productivity is also negative and significant, with a 1.0 per cent increase in the amount of workers with less than one year of tenure causing productivity to decline by 0.04 per cent.

The negative effect of an abundance of workers on short-term contracts confirms the findings of other studies. In France, the study cited in box 4.4 found that a doubling in the number of short-term workers will cause productivity to

<sup>&</sup>lt;sup>20</sup> Blakemore and Hoffman (1989) merged output data from the US manufacturing sector between 1963 and 1981 with aggregate tenure data from the Current Population Survey, yielding 63 observations. They argue that in the short run only firm-specific skills (training) will affect labour productivity, because the other variables affecting it are long-run – ability and general training (education). Thus, their model is designed to measure short-run productivity as a function of the share of workers with different levels of tenure, since workers with longer or shorter tenure have received different amounts of firm-specific skills training.

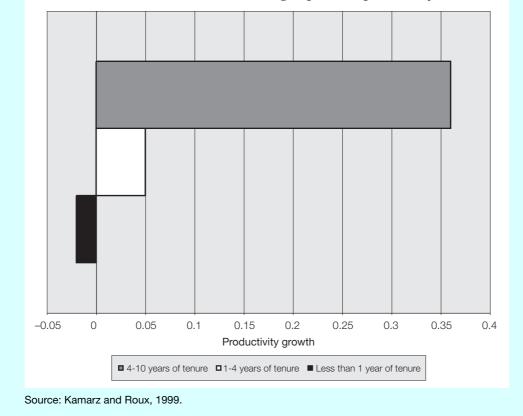
<sup>&</sup>lt;sup>21</sup> An alternative hypothesis is that seniority rules are the only impersonal and transparent (i.e. "fair") criterion for promotion.

<sup>&</sup>lt;sup>22</sup> See Auer, Berg and Coulibaly, 2004, for methodology used.

<sup>&</sup>lt;sup>23</sup> As the model controls for sector, the average capital-intensity of a given sector in relation to other sectors is controlled. It is important to control for the capital-intensity of production, since it can have an influence on tenure to the extent that, if labour costs are a small share of total costs, firms might be less inclined to adjust labour demand through dismissals. As in Blakemore and Hoffman (1989), it is assumed that in the short run only firm-specific skills affect labour productivity.

#### Box 4.4. Employment stability and productivity in the private sector in France

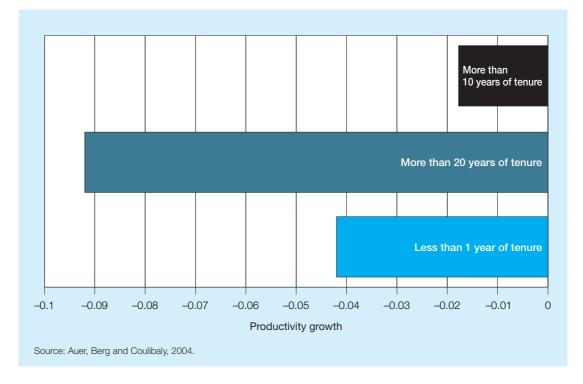
A study of the French private sector also supports the hypothesis that stability in employment is good for productivity. To estimate the effects of tenure on firm productivity, the authors grouped workers according to how long they remained in the job ("stayers"). The four groups of stayers are less than one year, 1-4 years, 4-10 years and more than 10 years (with more than 10 years used as a control). The study found that employing workers with 4-10 years of tenure has the most beneficial effect on productivity: a 1.0 per cent increase in the share of this group increases firm productivity by 0.36 per cent, as the graph accompanying this box shows. On the other hand, a 1.0 per cent increase in the proportion of workers with less than one year of tenure has a negative effect on productivity, lowering productivity by 0.02 per cent. The productivity effect of increasing the 1-4 year tenure group by 1.0 per cent is a positive although modest 0.05 per cent. Thus, in relation to workers with more than 10 years of tenure, the greatest gains in productivity would come from an increase in the proportion of workers with more than 10 years. The study also concludes that a low turnover rate is associated with higher labour productivity.



Effect of 1% increase in share of tenure group on firm productivity

fall, a result not found for the other tenure groups. A study of the manufacturing sector in the United States also found that short-tenured workers were less productive. Workers with 0-6 months of tenure in the durable goods industries were only 24 per cent as productive as workers with over two years of tenure; workers

# Figure 4.9. Effect on productivity of a 1.0 per cent increase in the share of workers in three tenure groups, 13 European countries, 1992-2002



with 7-24 months of experience were only 65 per cent as productive. In the nondurables industry, workers with 0-6 months of tenure were only 5 per cent as productive as those with two years of tenure, while workers with 7-24 months of experience were 54 per cent as productive.<sup>24</sup> Overall, the evidence points to a positive and beneficial effect of tenure on labour productivity with intermediate levels of tenure exhibiting the greatest returns to productivity, with decreasing and eventually negative returns for extended tenure, and a negative productivity effect from workers with short tenure.

### At what point is tenure no longer productive? Is there an "optimal tenure"?

The negative effect of increasing the share of workers with more than ten years of tenure and those with more than 20 years begs a second question. Is there a point at which the returns from tenure begin to diminish? The ILO study finds that aggregate tenure has a positive effect on productivity, at least until 13.6 years, for the sample and time period analysed. After 13.6 years, the benefits of increased average tenure on sectoral productivity begin to decrease, as figure 4.10 shows. Nonetheless, although the productivity benefits are decreasing, the

<sup>24</sup> Lichtenberg, 1981.

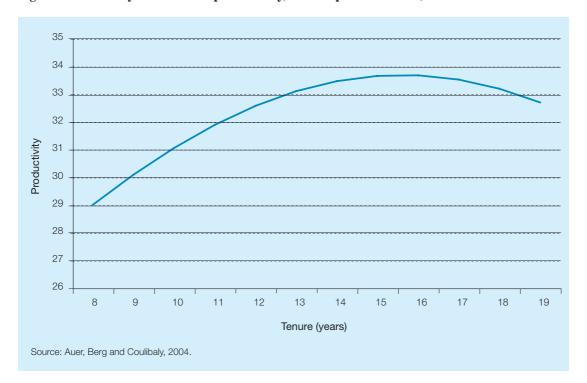


Figure 4.10. Life cycle of tenure–productivity, 13 European countries, 1992-2002

firm still benefits from retaining these workers past 13.6 years, as long as the total wages paid to workers are less than their output.

It is important to note that the finding above refers to aggregate, average tenure. Per occupation, sector or country, these estimates would vary. More importantly, at the individual level, it should not be predicated as the appropriate length of time to retain a worker. In other words, while an "optimal tenure" may exist, at what point it arrives for a particular worker is not known. The most that can be concluded from the empirical exercises reviewed here is that, in general, short tenure (less than one year) and long tenure (more than ten years, but particularly above 15 and 20 years) can have negative productivity affects. Medium tenure, between one and ten years, but particularly between five and ten years, would seem optimal for productivity growth.

There are other grounds, in any case, on which optimal tenure ought not to imply that workers who exceed that level should leave the firm. Not only would this contravene a worker's right to be protected against age discrimination, it would likely also be a prescription for age-related structural unemployment. In addition, it would place further strains on social security systems which are already under pressure. Finally, it would be a curb on growth expansion, as many developed economies face increasing labour shortages. This is precisely why European Union policy on older workers runs in just the opposite direction, by attempting to reduce the use of early retirement programmes and to increase the employmentto-population ratios of women and older workers. The macroeconomic costs of not doing so are likely to greatly outweigh the microeconomic productivity effects of workers with tenure over the optimal level. There is a solution to the latter, and it is inherent in the concept of lifelong learning.

## 4.4. The policy of "protected mobility"

This chapter has so far emphasized two issues in particular: the benefits of intersectoral mobility for increasing aggregate productivity and the benefits of employment stability in pursuit of the same ends. Clearly, it is a question of balance – a balance to be struck according to diverse national circumstances. That being said, economic openness implies a growing need for flexibility at the micro-level. Yet much of this flexibility can be generated internally in the firm, via "functional" flexibility. Nonetheless, the more difficult it is to adjust internally, the more likely firms will resort to "numerical" flexibility. Economies differ, however, in the extent to which the risks of external mobility are borne by the individual or by society. When risks are more likely to be borne by the individual, the perception of employment insecurity is greatest and can arguably spill over negatively into aggregate demand.

This leads to a further point. The reform of product markets would seem inevitably to carry a component of deregulation. It is not obvious that the reform of labour markets needs to come through the channel of deregulation. Rather, an optimal route to labour market regulatory reform and greater flexibility may require that flexibility be traded against greater security – with more investment in labour market policies, the more open an economy becomes. "Flexicurity" is the composite word that describes these dual needs. It is a policy concept considerably more evolved than the earlier monolithic debates over flexibility through deregulation alone.

The interdependent economy of the future will require labour market institutions that promote micro-flexibility in all its senses, including to facilitate and to protect the mobility of people in an ongoing context of restructuring – or structural transformation. What is needed, in short, are approaches to a concept of "protected mobility", by recognizing the value of stable, but adaptable internal labour markets as well as simultaneously acknowledging that external mobility will occur and that better governance of transitions is preferable to the absence of such governance. This conclusion derives from what might be called the macroeconomics of security.

### Micro-flexibility and macro-stability: The macroeconomics of security

The stability of employment conveys macroeconomic benefits, as a strong incidence of stability bolsters confidence and ensures the continuity of aggregate demand. In other words, the perception of employment security influences consumption behaviour. Workers who feel insecure about the future of their job may hold back consumption, as evidenced, for example, in the United States, where a recent study found that households will respond to an increase in the probability of future job losses by reducing their food consumption in the year prior to a job loss by 5 per cent.<sup>25</sup> Similarly, during the economic recession that affected Switzerland in the 1990s, increased job insecurity negatively affected consumer spending, which then compounded the negative effects of the economic downturn.<sup>26</sup> The study's author estimates that, as a result of the fall in consumption, GDP growth rates were further reduced by half.

Of course, a host of factors condition whether employees feel secure in their employment prospects. Two are especially relevant in the present discussion – the micro-level perception of security, and the perception of security in the event of job loss. The former rests on the likelihood of a long-term employment relationship. After all, the best source of economic security is a job, and the longer an employee is in a job, the more secure the employee generally feels. It is also the case that the probability of job loss falls substantially as tenure increases.<sup>27</sup> Employment protection at the micro-level clearly has a role to play but, as will be seen, it does not fully account for perceptions of security. The second has to do with a sense of "security of transition" in the labour market in the event of job loss. A measure of such security is whether the transition is from worse to better jobs, or the "trap" of transition from one low-quality job to the next (or no job at all).

Data for perceptions of transition into the external labour market exist for the European Union, and the perception that one low-quality job will lead to another is positively related to a sense of insecurity. The European Commission defines transition rates as those from *low-quality jobs* ("dead-end" or low-paid jobs/low-productivity jobs) to high-quality jobs (good jobs and jobs of reasonable quality). Jobs are grouped in these four categories depending on pay, productivity, job security, training opportunities and career prospects. Thus, workers who believe that they will replace their current dead-end job with another deadend job will report relatively high perceptions of job insecurity. This is one explanation of the relatively high insecurity ranking in Spain. Another important dimension to job security, however, is the social protection provided by governments in case of job loss. Insecurity can be mitigated with labour market policies, as several European countries have done. Social protection is therefore important in increasing security and creating a productivity-enhancing environment. Having greater opportunity to transition from low-quality jobs to high-quality jobs lessens insecurity, as figure 4.11 shows.

Noteworthy here is the empirical point that, while longer tenure reduces the risk of job loss, countries with the longest records of employment tenure (and the most stringent protection of the same) are not necessarily those with the lowest perception of employment insecurity. Perceptions of security, it would seem, depend more on what will happen in the event of job loss. Here, again, a crude

<sup>&</sup>lt;sup>25</sup> Stephens, 2001.

<sup>&</sup>lt;sup>26</sup> Wolter, 1998.

<sup>&</sup>lt;sup>27</sup> The fall in probability of job loss will depend on the country-specific labour market. Valetta (2000) finds that five additional years of tenure reduces the dismissal probability by nearly one-half for the average male worker in the US Panel Study on Income Dynamics conducted between 1976 and 1992; Farber (1998) summarizes similar findings for the United States.

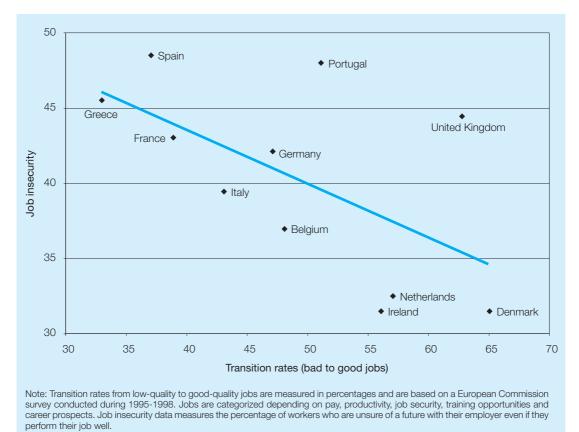
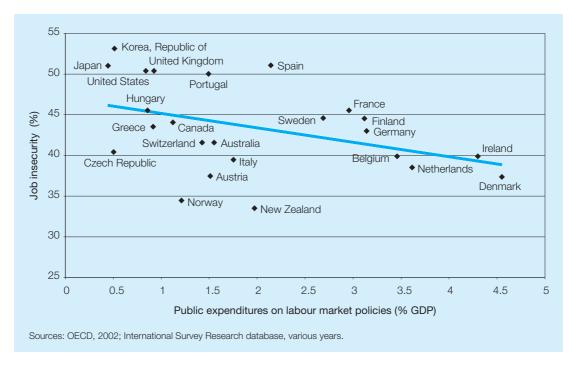


Figure 4.11. Quality of job prospects and insecurity, selected European countries, 1995-2000 (percentage)

proxy shows a convincing relation between the perception of employment insecurity and the amount of money governments spend on labour market policies. In figure 4.12, it is apparent that perceptions of employment security bear some relation to insurance against the risk of job loss.

Sources: European Commission, 2002. Data for 2000 based on the International Survey Research database, various years.

In short, perceptions of employment security do not necessarily depend upon the micro-level. Instead, they appear to depend upon the extent to which the risk of external mobility can be alleviated. And that risk has both a quantitative and a qualitative dimension. For example, in the United States – despite the increase in long-term unemployment over the past several years – the risks of external mobility appear to be less in terms of job-to-job mobility than in the quality of the transition. A recent study noted: "Job creation, to the extent that it is happening, is taking place in lower-wage industries. In 48 of 50 American states, jobs in higher-paying industries have given way to jobs in lower-paying industries since the recession ended in November 2001. Nationwide, industries that are gaining jobs relative to industries that are losing jobs pay 21 per cent less



# Figure 4.12. Job insecurity and spending on labour market policies, selected OECD countries, 2000

annually."<sup>28</sup> Employment security in the United States appears to have a more qualitative than quantitative dimension.

Labour market policies increase perceptions of job security, and this helps to boost economic performance. As the OECD explains, "more generous unemployment insurance benefits and higher union density do cause workers to report greater satisfaction with job security, perhaps because their families' incomes are better protected, should they lose their jobs".<sup>29</sup> Denmark provides an interesting case in this analysis, since it combines low tenure (8.3 years on average in 2001) with high levels of social protection and low levels of insecurity. Danish expenditures on labour market policies are the highest in the European Union, at about 5 per cent of GDP. Benefit replacement rates in the Danish system average 60 to 70 per cent of the lost wage, although low-income recipients receive roughly 90 per cent of their past income. Labour market indicators show that the labour market functions well, with a high rate of labour force participation (65.6 per cent) in 2002 and a low unemployment rate (4.3 per cent), and a very low long-term unemployment rate (0.8 per cent). The level of perception of insecurity in Denmark is in sharp contrast with the United Kingdom, which has a similar average tenure (8.2 years), yet reported insecurity of 50.5 per cent in 2000 compared with Denmark's 37.5 per cent.

<sup>&</sup>lt;sup>28</sup> Economic Policy Institute, 2004.

<sup>&</sup>lt;sup>29</sup> OECD, 2002, p. 268.

### Activation of labour market policies

What conclusions may be drawn here? First, spending on labour market policies is the hallmark of open economies in a globalizing world, in which labour market adjustments are becoming more profound and more frequent. Here, the role of "traditional" labour market policies of the passive type consists of providing income in the event of job loss through unemployment insurance. The macro-economic benefits are clear. An effective unemployment insurance system will operate as a stabilizing mechanism for the economy while providing for the needs of laid-off workers. In the United States, it is estimated that the unemployment insurance programme mitigated the loss in real GDP by approximately 15 per cent during the five recessions that occurred between 1969 and the early 1990s. The programme exhibited a substantial and significant counter-cyclical effect on changes in real GDP over the three decades, resulting in an average annual peak saving of 131,000 jobs.<sup>30</sup>

A household-level analysis of the effect of unemployment insurance on consumption found that in the absence of unemployment insurance, becoming unemployed would be associated with a fall in consumption of 22 per cent, compared with the 6.8 per cent drop for unemployment insurance recipients in the United States.<sup>31</sup> Moreover, if the replacement rate of income under the unemployment insurance programme were above 84 per cent – compared with the current rate of approximately 50 per cent – unemployment insurance would fully smooth consumption across the unemployment spell. In comparison with other stimulus measures, such as income tax cuts, one study shows that the United States unemployment insurance system is at least eight times as effective as the tax system as a whole in offsetting the impact of a recession.<sup>32</sup>

The trend now, however, is toward the "activation" of labour market policies – combining income replacement (with its proven consumption-smoothing advantages) with a greater emphasis on and commitment to labour market reinsertion. In 1998, the European Union adopted employment guidelines that emphasized an "activation strategy". This requires unemployment beneficiaries to participate in job training and educational programmes after 12 months of receiving benefits, or six months if the worker is under the age of 25. In the case of Denmark, the passive component of unemployment benefits was reduced for adults from four years in 1994 to two years in 1998 and to one year in 2000.<sup>33</sup> Activation strategies, while more costly, have the benefit of improving workers' skills and also reducing the disincentive effects typically associated with unemployment insurance.

<sup>&</sup>lt;sup>30</sup> Workers covered in the unemployment insurance system in the United States pay a tax of approximately 0.5 per cent of earnings and receive in benefits approximately half of their income, according to their level of earnings and in which state they reside. Despite its economic benefits, the system has become less effective over time as only full-time, long-term workers are eligible – but their share in employment has fallen (Chimerine et al., 1999).

<sup>&</sup>lt;sup>31</sup> Gruber, 1997.

<sup>&</sup>lt;sup>32</sup> Orszag, 2001.

<sup>&</sup>lt;sup>33</sup> Madsen, 2003.

The present analysis yields the following conclusions.

- Both stability and mobility contribute to productivity growth, although arguably with different employment consequences.
- With increasingly open economies, it is likely that there will be further product market deregulation and greater competitive pressures. This in turn is likely to put pressure on the close relation between curbs on competition and regulated employment protection at the micro-level.
- Perceptions of employment security matter at the macroeconomic level for the stability of aggregate demand, which fuels productivity and employment growth. Yet, such perceptions appear to be unrelated to the degree of employment protection at the micro-level.
- Instead, they appear to be related to workers' perceptions of security in the event of labour market transitions of moving from job to job.
- Passive measures through unemployment insurance to insure against the risk of job loss make individual and macroeconomic sense. But, if used alone, passive measures carry with them the risk of moral hazard or disincentive effects and they do not guarantee labour market reinsertion, or reinsertion on the most favourable terms.
- Insuring people against employment loss is a necessity and one of increasing importance in view of the pressures for micro-flexibility. An active policy for public assistance in such insertion would serve the dual purpose of insulating against micro-flexibility and ensuring favourable terms for mobility. "Globalization-ready" institutions of this nature are arguably those represented in the high social protection/low employment protection countries listed in the lower-left quadrant of table 4.2. These five countries use labour market policies to cushion workers in their transition between jobs and, in so doing, promote the inter-sectoral mobility of workers.

# Table 4.2. Employment or employability protection? A typology of OECD countries, late 1990s and early 2000s

	High social protection	Low social protection		
HighTenure: 2nd longestemploymentLMP spending: 2nd greatestprotectionJob security laws: 2nd strictestJob security perception: 2nd h		Tenure: <i>longest</i> LMP spending: 2 <sup>nd</sup> least Job security laws: <i>strictest</i> Job security perception: <i>lowest</i>		
Countries	France, Germany, Sweden	Japan, Portugal, Greece, Italy, Spain		
Low employment protection	Tenure: 2 <sup>nd</sup> shortest LMP spending: greatest Job security laws: 2 <sup>nd</sup> most lenient Job security perception: highest	Tenure: <i>shortest</i> LMP spending: <i>least</i> Job security laws: <i>most lenient</i> Job security perception: 2 <sup>nd</sup> lowest		
Countries	Denmark, Belgium, Netherlands, Finland, Ireland	United States, United Kingdom		

Note: Own compilation and assessment based on the data sources below.

Sources: Job tenure data for Europe from Eurostat and for the United States and Japan from national surveys, various years; LMP spending data and strictness of job security laws from OECD, various years; job security perception from International Survey Research database, various years.

The future may well be one in which "protected mobility", backed by public financing, proves to be the most socially and economically efficient path to productivity, competitiveness and decent work.

## 4.5. Employment tenure in developing countries

The foregoing discussion has focused on industrialized countries. Can the conclusions drawn above also apply to the economic landscapes and labour markets of developing countries? Several stark differences emerge – among them, the relative size of the informal economy and, therefore, the limited reach of formal regulations and institutions. This chapter now reviews the main differences and what these imply for policy.

As noted in table 4.1, one important difference between developed and developing countries is the substantially lower average tenure in the latter. In addition, countries with a high share of long-tenure workers are also those with a low share of workers with less than one year of tenure – and vice versa. Figure 4.13 shows this relationship for several Latin American and European countries, Japan and the United States.

Again, demographic differences no doubt play an important role in explaining tenure differences. But demographics cannot fully account for these differences. For example, table 4.3 compares average tenure by age group of male workers in the private sector in Colombia and the United States in the late 1980s.

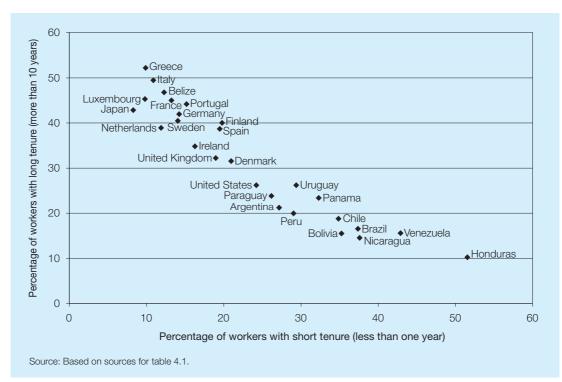


Figure 4.13. Distribution of short vs. long tenure in selected European and Latin American countries, Japan and the United States, late 1990s and early 2000s

Table 4.3.	Comparison of average years of tenure, male private-sector worke			
	Colombia and the United States, selected years			

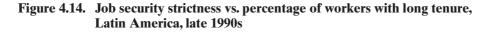
Age group	Colombia 1988	United States 1987	
15-20	0.44	0.44	
21-30	1.50	2.09	
31-50	3.25	4.67	
41-50	5.56	9.10	
51-59	8.50	13.95	
Source: Schaffner, 2001.			

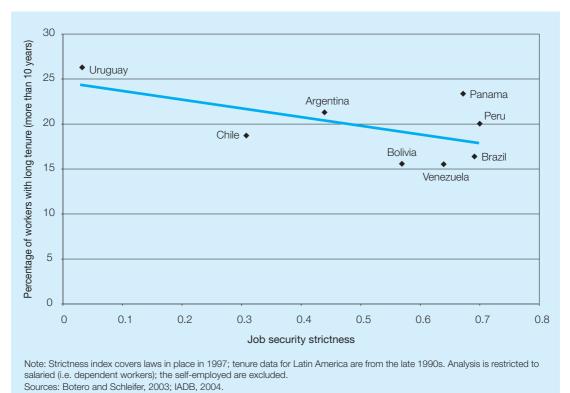
Tenure averages are the same in both countries for the 15-20 year old cohort but these averages already begin to diverge at the onset of the early twenties. By the time a private-sector American male worker is in his forties, he has 3.5 more years of tenure than a similarly aged Colombian private-sector male worker; in his fifties, the difference has increased to 5.5 years. Moreover, the study presenting these data finds that a male American worker with the same schooling as a male Colombian worker, performing the same occupation in the same sector in a similarly sized firm, has an 11 per cent greater probability of continued tenure than his Colombian counterpart. For workers with less than one year on the job, the differences in probability of continued tenure are even greater: these workers are over one and a half times more likely to remain in their job in the United States than in Colombia.<sup>34</sup>

In industrialized countries, the close, positive correlation between the stringency of job security and employment tenure was observed. A similar index of job security strictness is available for 12 Latin American countries. Curiously, and although employment protection legislation has often been blamed for impeding job allocation and job creation in Latin America, the positive relationship between job security strictness and tenure characteristic of OECD countries does not prevail in Latin America. As figure 4.14 suggests, the relationship is, if anything, the inverse.

As employment protection legislation is stricter in Latin America than in the OECD countries, its relationship to tenure is not obvious. How then can this anomaly be explained? Perhaps by the fact that most new job creation in Latin America occurs in the informal economy and is untouched by the constraints of labour law, which might well be reflected in the data. It is also the case, of course, that a correlation between job security strictness and tenure needs to rely on compliance with labour law – and compliance is frequently imperfect in developing countries, even in the formal economy. Another possibility is that, however stringent laws are, they may apply only to a specific size-threshold of enterprise. The argument (similarly made in box 4.5 regarding South Asian labour laws) is that a size-threshold criterion provides an incentive for firms to remain artificially small. It is at least true that firm size is smaller in most developing

<sup>&</sup>lt;sup>34</sup> Schaffner, 2001.





countries. A fourth possibility is that the stringency of employment protection applies beyond a certain tenure threshold, thus giving the incentive for a high degree of employment turnover before that threshold is reached.<sup>35</sup>

Of course, a fifth explanation could simply be that labour law is not the impediment to labour mobility that some would claim. Looking at job turnover data, the Inter-American Development Bank finds gross job flows are as high in "rigid" Latin America as they are in "flexible" New Zealand and the United States.

#### Macroeconomic volatility

Beyond labour law, developing countries are often characterized by other differences with industrialized countries which could explain shorter tenure duration. For example, macroeconomic volatility is greater in developing countries and leads to greater firm death and job loss, lowering average tenure in an economy. As figure 4.15 shows, real annual GDP growth rates in Latin America and the Caribbean region fluctuated wildly during the 1990s, with a regional high of 8.6 per cent growth in 1992 and three years of negative growth in 1990, 1999 and

<sup>&</sup>lt;sup>35</sup> Edwards, 1993; Bronstein, 1998.

#### Box 4.5. Towards "protected mobility" in a developing country context: Nepal

Labour law in developing countries often places significant constraints on the ability of employers to dismiss workers for economic reasons. The origins of such stringency are many, but two are particularly significant: in the absence of a social security system offering unemployment insurance, the role of social protection fell to the enterprise; and, as in industrialized countries, stringent employment protection went hand-in-hand with product markets highly sheltered from competition.

The possible consequences of high employment protection are also many. It can be an inducement for capital-intensive production strategies at the expense of much needed employment creation. It can bias economic structure in the direction of small firms, as there is typically an employment threshold at which the law becomes enforceable. Or it can simply lead to widespread non-compliance and thus no employment protection.

In a world of more open economies, laws of all sorts will need to adjust. In the Kingdom of Nepal, the path of adjustment appears increasingly to be based on social dialogue and consensus. The country's employer organization, the Federation of Nepalese Chambers of Commerce and Industry (FNCCI), along with the three trade union federations, General Federation of Nepalese Trade Unions (GEFONT), Nepal Trade Union Congress (NTUC) and the Democratic Confederation of Nepalese Trade Unions (DECONT), reached an agreement in 2004 in which they pledged to "work together and are committed on the following points in order to develop industrial peace and to build cooperative relations between labour and management." Two points are of particular relevance:

- "all employers and business people are committed to maintain minimum labour standards by applying the policy of employment in conditions of decent work"
- "it is necessary to make reforms in the labour laws. Realizing this, taking the seven-point agenda of labour law reform, the process of existing labour law reform is underway".

The seven-point agenda for reform includes: labour flexibility; "exit" or dismissal policy; social security; gender; the informal economy; collective bargaining; and labour administration. If successful, negotiations between the parties will lead to a form of "protected mobility" embedding a quid pro quo in which dismissals on economic grounds become less cumbersome in return for greater social protection through the establishment of a social security system. This is just the path that the parties are following, and it is the same that their counterparts in Sri Lanka followed in 2003.

While the quid pro quo of greater social protection in return for greater micro-flexibility appears logical, it nonetheless poses several challenges. The first of these is inadequate labour demand. Simply put, the chances of finding alternative employment when one loses one's job in an industrialized country are far greater than in developing countries. This, in turn, implies that the income support given to a laidoff worker would have to be of substantial duration, whereas developing countries are not likely to have the fiscal depth to support a substantial degree of social protection. This is no doubt one reason why labour law reform has not proceeded at a rapid pace.

Source: Joint Press Statement by FNCCI and Trade Union Federations, Kathmandu, April 2004.

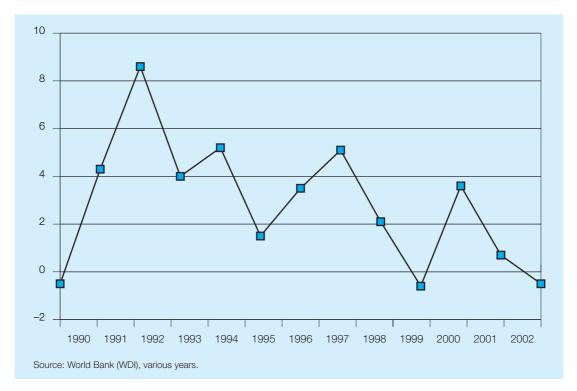


Figure 4.15. Real annual GDP growth, Latin America and the Caribbean region, 1990-2002

2002. Overall, average growth for the 12-year period was 2.8 per cent with a standard deviation of 2.6 per cent. For the same period, the average growth rate in the United States was also 2.8 per cent, but with a standard deviation of 1.5 per cent – considerably lower than that of Latin America and the Caribbean region. In the European Union, overall growth was lower, averaging 1.9 per cent, but the standard deviation was a low 1.1 per cent.

Macroeconomic volatility has been shown to negatively affect tenure as it reduces the survival probability of job creation, meaning a greater overall tendency for shorter job tenure.<sup>36</sup> Macroeconomic volatility also discourages massproduction techniques because they require a long-term commitment to fixed capital investments.<sup>37</sup> Such investments also require long-term commitment in human capital: an environment of volatility makes it less likely for firms to establish long-term employment relationships.

#### Differences in economic structure

In addition to macroeconomic volatility, the instability of employment relationships in Latin America reflects two other important characteristics evident in the

<sup>&</sup>lt;sup>36</sup> Davis et al., 1996, based on an analysis of births/deaths in manufacturing firms in the United States between 1973 and 1988.

<sup>&</sup>lt;sup>37</sup> Tybout, 2000.

region: the greater percentage of small-sized firms, and the bias toward production activities that can be undertaken with less-tenured workers. There is a concentration of manufacturing activities in less sophisticated products, the consequence of domestic consumption being skewed towards basic goods such as food and beverage, apparel, footwear, furniture and metal products. This has resulted in a bias toward simple manufactured goods that can be efficiently produced in small firms using cottage technologies.<sup>38</sup> Thus, it is possible that the production technologies used in making the same good are different in developing and industrialized countries. While firm exit and turnover are high in cottage production, new firms can enter these sectors more quickly and are able to depend on newer workers to produce these products.

As shown below, one main reason for lower average tenure among salaried workers is the abundance of small firms in developing countries. (See Chapter 5 of the Report for a discussion of small firms and productivity growth.) Small firms exit the market more quickly than larger firms and, with more Latin American workers employed in smaller firms, there is lower average tenure.<sup>39</sup> Table 4.4 illustrates the large variation in employment shares between manufacturing firms, especially in micro-enterprises, in Mexico and in the United States. For example, 13.8 per cent of Mexican workers were employed in the early 1990s compared with just 1.3 per cent of American workers. Table 4.5 gives job rotation rates among manufacturing firms in Argentina during the difficult economic period from 1995 to 2000. In micro-enterprises, defined as employing establishments with fewer than five workers, the job rotation rate was 49.6 per cent – meaning that every year, one-half of micro-enterprise workers changed or lost their jobs. This rotation rate is double the average for the industrial sector, which was nevertheless high for the same period. It also shows that a greater share of workers in small firms contributes to reducing tenure.

#### The consequences of employment instability

The argument has been made that a substantial degree of employment stability is good for productivity growth. And lower job stability may be one factor that

	Firm size by number of employees					
	1-4	5-9	10-19	20-49	50-99	> 99
United States (1992)	1.3	2.6	4.6	10.4	11.6	69.4
Mexico (1993)	13.8	4.5	5.0	8.6	9.0	59.1

 Table 4.4.
 Comparison of distribution of employment across manufacturing plants, according to firm size, Mexico and the United States, early 1990s (percentage)

<sup>&</sup>lt;sup>38</sup> Tybout, 2000.

<sup>&</sup>lt;sup>39</sup> In Japan, for example, employment tenure clearly increases with firm size. Firms with 1-99 employees have an average tenure of 9.6 years; in those with 100-999 employees, average tenure is 11.1 years; but in firms with over 1,000 employees, average tenure is 14.8 years (Auer and Cazes, 2003).

Table 4.5.	Job rotation in manufacturing, according to firm size, <sup>1</sup> Argentina, 1995-2000
	(percentage)

Size	Rotation
Micro-enterprises	49.6
Small firms	32.6
Medium firms	24.9
Large firms	16.5
Total	24.5

<sup>1</sup> With the exception of micro-enterprises (defined by the authors as less than 5 workers), firm sizes are categorized according to sales (considered by the authors as more appropriately addressing their concerns on differences in the technology-intensity of production). Small firms are defined as those with five or more workers and sales in Argentine pesos of less than ARS 3 million a year (around US\$900,000 at 2004 exchange rates); medium firms with sales between ARS 3-18 million (US\$900,000 to US\$5.5 million); and large firms with sales above ARS 18 million (US\$5.5 million) a year (Castillo et al., 2002).

Source: Castillo et al., 2002.

explains why labour productivity is lower in developing countries than developed countries, even after controlling for physical and human capital.<sup>40</sup> Lower job stability could also result in a comparative disadvantage in endeavouring to develop a production base that relies on the larger, more modern firms, in which longer-term employment relationships are important.<sup>41</sup> Without employment stability, it is more difficult and costly for firms to provide training, as higher turnover may prevent them from reaping the productivity benefits. An empirical analysis of the incidence and outcome of enterprise training among manufacturing firms in Colombia, Indonesia, Malaysia, Mexico and Taiwan (China) found that a sizeable proportion of firms did not provide any training to their workers. Firms in the Latin American region that were more likely to provide training were typically large, employed an educated and skilled workforce and invested in R&D and technology licences (and, for the Asian countries, exported to foreign markets). The study found a significant impact of training on the productivity of skilled workers, but not of unskilled workers.<sup>42</sup>

In industrialized countries, pressure may be mounting for a greater degree of flexibility at the micro-level as globalization heightens product market competition. In many developing countries, the situation is arguably the inverse: excessive flexibility may be a constraint on the development of stable work relations that benefit productivity growth.

## 4.6. Concluding remarks

Employment stability makes sense on both the demand and the supply side of the labour market, as it mitigates concerns over job security for the worker and is an inducement to invest in training for both worker and employer. Higher

<sup>&</sup>lt;sup>40</sup> Hall and Jones, 1999.

<sup>&</sup>lt;sup>41</sup> Schaffner, 2001.

<sup>&</sup>lt;sup>42</sup> Ton and Batra, 1995.

productivity is the result. In developing countries, low employment stability and an underinvestment in training appear to go hand in hand.

Nevertheless, it is equally true that excessive barriers to the mobility of capital and labour can constrain productivity growth by impeding the expansion of new, higher value-added sectors. Clearly, the challenge is to find the right balance between enabling the mobility that greater flexibility allows and also ensuring some security. Such a balance is mediated by labour law and labour market institutions in individual economies. It is clear that in a global world of fastpaced economic and technological change and rising economic interdependence, laws and institutions designed for a more sheltered competitive environment are under pressure to adjust.

No single blueprint for change can suit all countries. The appropriate adjustment of laws and institutions is a purely domestic matter. Three conclusions may nonetheless be drawn. First, since national laws and institutions need to strike the right balance between the interests of both the supply and the demand side of the labour market, the shape that such laws and institutions take are most appropriately and effectively addressed by the representatives of supply and demand sides – workers' and employers' organizations. And this is as true for Nepal as it is for the Netherlands. Second, countries are coming to grips with more rapid labour market changes by shifting the balance to active rather than passive labour market policies. Why? Because active policies, when well designed, make the labour market function better than it would in the absence of institutional support and intervention.

This leads to the final point: the simple argument of labour market deregulation as a solution to economic and employment growth has been superseded by a more nuanced view of the role that laws and institutions play in labour market governance. Empirically, this is evident in two observations, the first (and the fundamental theme of this chapter) is that employment stability pays economic dividends and that laws and institutions have a role to play in supporting that stability. The second is that the economies most open to globalization are also those in which spending on labour market policies as a share of GDP is the greatest.

#### References

- Applebaum, E.; Bailey, T.; Berg, P.; Kallenberg, A. (eds.). 2000. *Manufacturing advantage: Why high-performance work systems pay off* (Ithaca, Cornell University Press).
- Auer, P. 2000. Employment revival in Europe: Labour market successes in Austria, Denmark, Ireland and the Netherlands (Geneva, ILO).
- Auer, P.; Cazes, S. (eds.). 2003. Employment stability in an age of flexibility (Geneva, ILO).
- Auer, P.; Berg, J.; Coulibaly, I. 2004. Is a more stable workforce good for the economy? Insights into the tenure-productivity-employment relationship (Geneva, ILO, Employment Strategy Working Paper No 15).
- Black S.E.; Lynch, L.M. 2004. Cited in *Economics Letter*, Federal Reserve Bank of San Francisco (http://www.hrbsf.org/publications/economics/letter/2004/el2004-10.html).

- Blanchard, O. 2004. *The economic future of Europe* (Cambridge, MA, National Bureau of Economic Research, Working Paper No. 103109), Feb.
- Blakemore, A.; Hoffman, D. 1989. "Seniority rules and productivity: An empirical test", *Economica*, Vol. 56, pp. 359-371.
- Booth, A.; Francesconi, M.; Zoega, G. 2003. "Unions, work-related training and wages", *Industrial and Labor Relations Review*, Vol. 57, No. 1, pp. 68-91 (Ithaca, NY, Cornell University School of Industrial and Labor Relations).
- Botero, J.; Schleif, A. 2003. *The regulation of labor* (Cambridge, MA, National Bureau of Economic Research, Working Paper No. 9756), June.
- Bronstein, A. 1998. Pasado y presente de la legislación laboral en América Latina (San José, ILO).
- Campbell, D. 2001. "Social dialogue and labour market adjustment in East Asia after the crisis", in G. Betcherman and R. Islam (eds.): *East Asian labor markets and the economic crisis: Impacts, responses and lessons* (Washington, DC, International Bank for Reconstruction and Development).
- Castillo, V.; Cesa, V.; Fillippo, S.; Rojo-Brievela, S.; Schlesser, D.; Yoguel, G. 2002. Dinámica del empleo y rotación de empresas: la experiencia en el sector industrial de Argentina desde mediados de los años noventa (Buenos Aires, CEPAL, Serie Estudios y Perpectivas 9).
- Chimerine, L.; Black, T.; Coffey, L. 1999. Unemployment insurance as an automatic stabilizer: Evidence of effectiveness over three decades (Washington, DC, US Department of Labor, Occasional Paper 99-8).
- Dar, A.; Amirkhalkhali, S. 2003. "On the impact of trade openness on growth: Further evidence from OECD countries", *Applied Economics*, (Coventry, Routledge Press), Vol. 35, No. 16, pp. 1761-1766.
- Davis, S., Haltiwanger, J.; Schuh, S. 1996. *Job creation and destruction* (Cambridge, MA, MIT Press).
- Edwards, A.C. 1993. *Labour market legislation in Latin America and the Caribbean*, (Washington, DC, World Bank LAC Technical Department Regional Studies Program Report 31).
- Economic Policy Institute. 2004. "Jobs shift from higher-paying to lower-paying industries", *Economic Snapshots*, 21 Jan.

(http://www.epinet.org/content.cfm/webfeatures\_snapshots\_archive\_01212004).

- European Commission. 2002. *Employment in Europe* (Brussels, EC Directorate-General for Employment and Social Affairs).
- Farber, H. 1998. *Mobility and stability: The dynamics of change in labor markets* (Princeton, NJ, Princeton University, Industrial Relations Section, Working Paper No. 400).
- Freeman, R. 1980. "The exit-voice tradeoff in the labor market: Unionism, job tenure, quits and separations", *Quarterly Journal of Economics* (Cambridge, MA, MIT Press), Vol. 44, No. 4, pp. 643-673.
- Gruber, J. 1997. "The consumption smoothing benefits of unemployment insurance", *American Economic Review* (Nashville, TN, American Economics Association), Vol. 87, No. 1, pp. 192-205.
- Hall, R.; Jones, C. 1999. "Why do some countries produce so much more output per worker than others?", *Quarterly Journal of Economics*, (Cambridge, MA, MIT Press), Vol. 114, No. 1, pp. 83-116.
- Inter-American Development Bank (IADB). 2004. Good Jobs Wanted (Washington, DC).
- International Monetary Fund (IMF). 2003. World Economic Outlook (Washington, DC).
- International Labour Organization (ILO). 1995. World Employment 1995: An ILO Report (Geneva).
- -. 2003a. Key Indicators of the Labour Market, 3rd edition (Geneva).
- -. 2003b. Yearbook of Labour Statistics, 62nd edition (Geneva).

- Ishikawa, J. 2003. Key features of national social dialogue: A social dialogue resource book (Geneva, ILO).
- Kaldor, N. 1966. *Causes of the slow rate of economic growth of the United Kingdom* (Cambridge, Cambridge University Press, an Inaugural Lecture).
- Kramarz, F.; Roux, S. 1999. Within-firm seniority structure and firm performance, (London, Centre for Economic Performance, Discussion Paper 420).
- Lazear, E. 1979. "Why is there mandatory retirement?", *Journal of Political Economy* (Chicago, IL, University of Chicago), Vol. 87, No. 6, pp. 1261-1284.
- Lewis, W.A. 1954. "Economic development with unlimited supplies of labour," *The Manchester School* (Manchester, Victoria University of Manchester), Vol. 22, No. 2, pp. 139-191.
- -. 1955. Theory of economic growth (London, Allen and Unwin).
- Lichtenberg, F. 1981. *Training, tenure and productivity*, (Cambridge, MA, National Bureau of Economic Research, Working Paper No. 671).
- Madsen, P. 2003. "Flexicurity through labour market policies and institutions in Denmark", in P. Auer and S. Cazes (eds.): *Employment stability in an age of flexibility* (Geneva, ILO).
- McKinsey Global Institute. 1994. Employment performance (Washington, DC, McKinsey & Company).
- Neumark, D. (ed.). 2000. On the job: Is long-term employment a thing of the past? (New York, Russell Sage Foundation).
- Nicoletti, G.; Scarpetta, S.; Boyland, O. 2000. *Summary indicators of product market regulation with an extension to employment production legislation*, (Paris, OECD Economics Department Working Papers, No. 226).
- Organisation for Economic Co-operation and Development (OECD). 1994. *The OECD Jobs Study* (Paris).
- -. 1999. Employment Outlook (Paris).
- -. 2002. Employment Outlook (Paris).
- -. 2004. Employment Outlook (Paris).
- Orszag, P. 2001. *Unemployment insurance as economic stimulus* (Washington, DC, Center on Budget and Policy Priorities, Policy Brief).
- Ozaki, M. (ed.). 1999. Negotiating flexibility: The role of the social partners and the state (Geneva, ILO), p. 127.
- Schaffner, J.A. 2001. "Job stability in developing and developed countries: Evidence from Colombia and the United States", *Economic Development and Cultural Change* (Chicago, IL, University of Chicago Press), Vol. 49, No. 3, pp. 511-536.
- Soskice, D. 1990. "Wage determination: The changing role of institutions in advanced industrialized countries", *Oxford Review of Economic Policy*, (Oxford, Oxford University Press) Vol. 6, No. 4, pp. 36-61.
- Stephens, Jr., M. 2001. "The long-run consumption effects of earning shocks", *The Review of Economics and Statistics* (Cambridge, MA, MIT Press), Vol. 83, No. 1, pp. 28-36.
- Ton, H.; Batra, G. 1995. Enterprise training in developing countries: Overview of incidence, determinants and productivity outcomes, (Washington, DC, World Bank, Private Sector Development Department, Occasional Paper No. 9).
- Tybout, J. 2000. "Manufacturing firms in developing countries: How well do they do and why?", *Journal of Economic Literature* (Nashville, TN, American Economics Association), Vol. 38, March, pp. 11-44.
- US Department of Labor. 1994. Road to high-performance workplaces: A guide to better jobs and better business results (Washington, DC, Office of the American Workplace).
- Valetta, R. 2000. "Declining job security", in D. Neumark (ed.): On the job: Is long-term employment a thing of the past? (New York, Russell Sage Foundation).

- Vega-Ruiz, M.L. 2003. Libertad de asociación, libertad sindical y el reconocimiento efectivo del derecho de negociación colectiva en América Latina (Geneva, ILO, background paper for IFP/DECLARATION).
- Visser, J. 2002. Union, unionization and collective bargaining trends around the world (Geneva, ILO, background paper for IFP/DECLARATION), Sep.
- Wolter, S. 1998. "The cost of job-insecurity: Results from Switzerland", International Journal of Manpower (Bradford, MCB University Press), Vol. 19, No. 6, pp. 396-409.
- World Bank. 2002. *World development indicators online* (Washington, DC) (http://derdata.worldbank.org/dataonline/) [accessed Spring 2004].