Job Security and Labour Market Flexibility*

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This paper discusses the desirability of government-legislated job security. Job security may be beneficial to employed workers, but it can also impose a cost on unemployed workers by lowering labour market turnover and thereby increasing the average duration of unemployment spells. This externality can lead to self-reinforcing behaviour between workers at different firms: If most workers in the economy have job security then turnover will be low and the duration of unemployment following a layoff is likely to be high. As a result, other workers will also desire job security. Even in the absence of legislation, therefore, the externality may result in more job security being provided than is socially desirable.

I Introduction

Job security is naturally a major concern to workers and many labour contracts contain provisions that reflect this concern. Explicit seniority rules for layoffs and implicit commitments to retain workers during downturns through reductions in hours (‘worksharing’) are just two examples of the form that such contract provisions might take. In addition to job-security provisions that arise in private contracts as a result of negotiations between workers and firms, governments in most industrial countries have legislated various forms of job security. Examples of such provisions include mandatory dismissal notice, mandatory severance pay, and regulations on part-time work. In North America, two recent examples are of particular interest. In 1988, the United States passed the Worker Adjustment and Retraining Notification Act (WARN) which requires firms to provide 60 days advance notice of plant closures or layoffs that displace 50 or more workers. In 1991, the province of British Columbia passed the Job Protection Act, requiring firms to provide eight, 12 or 16 weeks advance notice for layoffs involving more than 50, 100, or 300

workers, respectively. The British Columbia legislation is not unusual by Canadian standards; most provinces have mandatory advance-notice provisions for both individual and group employment terminations (Kuhn, 1993).

The debate over the desirability of government-mandated job security is usually cast in terms of direct benefits versus indirect costs. Workers are presumed to receive direct benefits from greater job security, but it is generally agreed that the costs imposed on firms from legislated job security might be passed on to workers in the form of lower wages or lower employment (Abraham and Houseman, 1991; Houseman, 1990; Lazear, 1990). It is noteworthy that much of this debate appears to be based, at least implicitly, on the view that only the welfare of employed workers matters in determining the desirability of job-security legislation. But one possible indirect cost associated with the provision of job security is its negative effect on labour market flexibility and, more specifically, its negative effect on the job-finding rate for unemployed workers. Indeed, this argument has recently been made by the OECD:

One way governments influence the job matching process is through systems of regulations on hiring and separations. If these are too restrictive, employers may become overly cautious about taking on new staff, especially from the ranks of the unemployed ... The result will be lower levels of vacancies and labour turnover, and delays in structural adjustment ... systems of labour market regulation need to be reviewed to ensure they are not responsible for unnecessary rigidities (OECD, 1992:xii).

The existence of mandated job security is presumably motivated by the belief that there is some sort of market failure that results in too little job security being provided by private contracts. In this paper, we discuss the relationship between job security and labour market turnover and argue that there may be a different market failure which results in too much job security being provided. Our basic argument is that, by reducing labour market turnover, the provision of job security to one group of employed workers imposes costs on unemployed workers, even in the absence of any indirect effects on the level of wages or unemployment. One implication is that the provision of job security is likely to lower the job-finding rate for unemployed workers and thereby increase the average duration of unemployment spells.

To the best of our knowledge, this externality has not been considered in discussions of the desirability of job-security legislation. It is distinct from two other labour market externalities that have been considered in the context of the search behaviour of workers: 'congestion externalities' and 'rent-splitting externalities' (see, for example, Mortensen, 1986). Congestion externalities arise when one worker enters the labour market to search for a job and, as a result, reduces the probability that any other worker makes a successful match. Rent-splitting externalities can occur in settings where a firm-worker match generates a surplus that must somehow be divided between the firm and worker. In such a setting, when one agent decides to decline a potential match, a cost is imposed on the other agent. With both congestion and rent-splitting externalities, the decision on the part of one agent to begin (or continue) search imposes costs on other agents, with the implication that the private market results in too much search taking place. The externality discussed in this paper does not bear directly on the issue of whether the private market produces too much or too little search; rather, it concerns whether the private market contains too much or too little job security.

The paper is organized as follows. In Section II we provide some simple indicators of the stringency of job-security legislation, the extent of job-security provision, and the average duration of unemployment spells for a number of industrialized economies. In Section III, we give a simple example which illustrates the link from job security
to the average duration of unemployment. This link is developed further in Section IV where we show how it can lead to an externality in any labour market characterised by involuntary unemployment. In Section V we discuss some of the implications of this externality for the effects of job-security legislation. Section VI addresses the generality of the argument; Section VII is a brief conclusion.

II Some International Evidence

Labour market flexibility is often used as a basis for making international comparisons of labour market performance. Canadian and US labour markets, which have relatively little mandated job security, are generally viewed as being very flexible; in contrast, most European labour markets, which have much more stringent job-security legislation, are viewed as being considerably less flexible. Such 'Eurosclerosis,' a now widespread term which arose in the past decade to describe this inflexibility, was cited by former US President Reagan in his opposition to the 1988 WARN Act.

Our main argument, developed in more detail in the next section, is that mandated job security is likely to impose a cost on workers by reducing the amount of turnover in the labour market. This reduction in turnover would be reflected in a lower hiring rate of unemployed workers, longer unemployment durations, and an increased incidence of long-term unemployment.

Table 1 shows selected labour market data from 12 industrialized countries, grouped by continent. There are two measures of the stringency of mandated job-security provisions. The first, in column (1), is a ranking of ten of the countries by Bertola (1990), based on the detailed qualitative discussion of job-security provisions contained in Emerson (1988). Among those countries ranked by Bertola, Italy has the most restrictive job-security provisions and the United States has the most lenient. Bertola's ranking is based on regulations governing part-time employment, requirements for severance pay, and notice requirements for individual and mass terminations. Column (2) gives a much narrower measure of job security, taken from Lazear

<table>
<thead>
<tr>
<th>Country</th>
<th>(1) Ranking of job security</th>
<th>(2) SEV</th>
<th>(3) β</th>
<th>(4) Long-term unemployment (% of total)</th>
<th>(5) Unemployment duration (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>1</td>
<td>0</td>
<td>.11</td>
<td>9.9</td>
<td>2.4</td>
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<td>na</td>
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<td>8.2</td>
<td>3.3</td>
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<td>22.5</td>
<td>6.1</td>
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<tr>
<td>Denmark</td>
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<td>na</td>
<td>.28</td>
<td>26.0</td>
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<tr>
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<td>na</td>
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<td>69.3</td>
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<td>55.1</td>
<td>13.2</td>
</tr>
<tr>
<td>Germany</td>
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<td>1</td>
<td>.53</td>
<td>55.5</td>
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<td>Sweden</td>
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<td>.55</td>
<td>6.9</td>
<td>3.5</td>
</tr>
<tr>
<td>Austria</td>
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<td>.42</td>
<td>15.2</td>
<td>na</td>
</tr>
<tr>
<td>France</td>
<td>8</td>
<td>12</td>
<td>.43</td>
<td>43.2</td>
<td>15.6</td>
</tr>
<tr>
<td>Belgium</td>
<td>9</td>
<td>2</td>
<td>.55</td>
<td>82.5</td>
<td>45.5</td>
</tr>
<tr>
<td>Italy</td>
<td>10</td>
<td>20</td>
<td>.28</td>
<td>66.3</td>
<td>33.3</td>
</tr>
</tbody>
</table>

SOURCES:
(3): Author's computations based on data from Burdett and Wright (1989).
SEV shows the number of months of severance pay received by a blue-collar worker with ten years of service upon termination ‘without cause’. In those countries for which there is both a Bertola ranking and SEV data, the ordering is broadly consistent.

As stated in the introduction, there are various forms that job security can take. One form is ‘hours adjustment’ or ‘work-sharing’: rather than laying off a small group of workers, a firm reduces the number of weekly hours for each member of a larger group. Although this still leaves workers exposed to some income risk, it does provide some insurance against layoffs, and thus is potentially an important form of job security. A measure of the relative adjustment of hours and employment in different countries is then a reasonable proxy for an international comparison of existing levels of de facto job security. Column (3) shows such a measure, taken from Burdett and Wright (1989). Using aggregate data on the number of employees (E) and the average hours worked per employee (H), Burdett and Wright measure the variances of the annual percentage changes in these two variables for a number of countries during the 1970s. A simple measure of the relative importance of hours adjustment is

\[
\beta = \frac{\text{variance}(\%\Delta H)}{\text{variance}(\%\Delta H) + \text{variance}(\%\Delta E)}
\]

which lies between zero and one. A country with a high value of \( \beta \) uses a relatively large amount of ‘hours adjustment’ compared to ‘employment adjustment’ and thus is said to have a high degree of de facto job security. In contrast, a country with \( \beta \) equal to zero indicates that hours (per worker) are never adjusted and so all adjustments in total labour input occur through layoffs and hiring; there is little or no de facto job security in this case. The lowest values of \( \beta \) in Table 1 are for the United States and Canada; the highest values are for The Netherlands and the UK.

Columns (4) and (5) show data about long-term unemployment. Column (4) contains a measure of the incidence of long-term unemployment. The measure is for 1989 prime-age males (25–54 years old) and represents the fraction of the total stock of unemployed workers who have been unemployed for 12 months or longer. Column (5) shows an estimate of the average duration of unemployment in 1987–88 based on the estimated monthly outflows from unemployment expressed as a percentage of the stock of unemployed workers. We take the standard approach of viewing the inverse of this ‘exit rate’ as our estimate of average unemployment duration. Note that Italy and Belgium, which have the most stringent job-security provisions according to Bertola’s rankings, have among the highest incidence of long-term unemployment and average unemployment duration. In contrast, the United States and Canada, with the least stringent job security, have among the lowest. But job security, at least as represented by the existing legislation, is clearly not the entire story. Sweden, which lies roughly in the middle in terms of its mandated job-security ranking, has the lowest incidence of long-term unemployment. The Netherlands, on the other hand, ranking only third in job security, has a very high incidence of long-term unemployment.

The information in Table 1 suggests the existence of a relationship between mandated job security and broad measures of labour market performance, particularly if one focuses on Italy and Belgium at one extreme and the United States and Canada at the other. It also illustrates why North American labour markets are typically regarded as being much more flexible than European labour markets. We do not wish to suggest that this evidence necessarily implies a causal link from job-security legislation to labour market performance. Rather, it opens the possibility of such a link and motivates investigation of possible explanations of the data. The discussion in this paper concerns one such potential explanation.
III A Simple Example

In this section, we present a very simple example to illustrate the link between the provision of job security and the average duration of unemployment. This example is not intended as a realistic description; rather it abstracts from many important aspects of actual labour markets in order to illustrate the basic relationship as clearly as possible. The discussion in the next section incorporates several of these aspects.

Imagine an economy in which all employed workers receive the same wage, but only a fraction of the total stock of workers are employed. As a result of inherent changes in the economy, firms constantly experience fluctuations in consumers' demand for their products, and hence in their own demand for labour. At any time, therefore, some firms face a downturn and want to lay off some of their workers, while others face an upturn and want to hire more. Imagine that the upturns and downturns of individual firms exactly balance so that the total number of employed workers in the economy is constant.

Now imagine that it is feasible for the government to mandate perfect job security; that is, it can require that firms not lay off workers under any circumstances. Suppose further that there are no indirect costs to this job security in the form of either lower wages or higher unemployment. Clearly, this policy makes currently employed workers better off as the possibility of their ever being laid off is removed at no cost in lower wages. But if no jobs are ever lost in downturns, and the unemployment rate is not affected by job security, then it must also be true that no new jobs are ever created, except through the normal turnover caused by worker retirement or death; the job-finding rate for unemployed workers is thus much lower. Since job-finding rates and unemployment durations are inversely related, complete job security generates a higher average duration of unemployment than would be the case with no job security. In this artificial economy, then, job security does benefit currently employed workers, but only by imposing a cost on the unemployed. The cost is not an increase in the number of unemployed workers, for this has been held constant, but rather the reduction in the job-finding rate for the existing stock of unemployed workers.

The cost that job security imposes on unemployed workers will occur whenever the lower rate of layoff leads to a lower rate of hiring from the unemployment pool. One can think of a number of reasons why this might occur. For example, as suggested by the OECD quote in the introduction, firms would naturally be reluctant to hire additional workers during an upturn if the mandated job-security prevents layoffs in any possible future downturn.

This positive relationship between the layoff and hiring rates was guaranteed in the simple example by the assumption of constant unemployment. But in actual economies the level of unemployment is not constant and therefore it is not automatically true that a reduction in layoffs generates a reduction in the hiring rate. To clarify this point, note that the hiring rate is defined as $h = H/U$ where $H$ is the total flow of new hires per unit time and $U$ is the total stock of unemployed workers. As long as total unemployment falls proportionately less than layoffs (and hires), however, then the provision of job security must lead to a reduction in the hiring rate. We discuss in Section VI reasons for expecting a negative correlation between job security and the hiring rate of unemployed workers. It is this negative correlation that leads to the labour market externalities we describe in the next section.

IV Labour Market Externalities

The example in the previous section suggests that job security may not be desirable for the economy as a whole. We are then led to examine how much job security will actually be provided in private employment contracts. We consider two general cases:
When all firms find it costless to provide job security, and when at least some firms find it costly to do so.

1 When Job Security is Costless to Firms

The employment package of wage and job security received by workers is a contract between a firm and the employees at that firm, and so can be expected to reflect the preferences of those parties rather than of society in general. Obviously, for any given wage, any currently employed worker has a clear preference for contracts that provide as much job security as possible. This preference does not depend on the worker being risk averse; rather, it simply reflects the natural desire to protect a situation that is privileged in the sense of its being preferable to unemployment. If employers are indifferent to the level of job security provided, as they would be if it were costless to provide such security, then it is in the interests of both parties to provide the job security desired by workers.

This illustrates one possible labour market externality. If the provision of job security is costless to firms, they will naturally provide it to those of their workers who desire it. But since this provision of job security imposes costs on individuals who are not involved in the setting of individual employment contracts (unemployed workers), employers will be induced to offer too much job security relative to what is optimal from the point of view of society as a whole.

It is surely too restrictive to think only about situations where firms are indifferent about providing job security to their workers. Layoffs obviously do occur in the real world, and it is therefore clearly not the case that all workers have complete job security. But as long as it is true that workers always prefer more job security to less, ceteris paribus, and that they (or their representatives) are able to articulate this preference when negotiating contracts, then the existence of some employment contracts with less than complete job security must mean that at least some employers find it costly to provide such security. We discuss in Section VI some reasons why job security may be costly. Whatever the reason for such costs, however, their existence leads us to consider the effect job security has on wages.²

2 When Job Security is Costly to Some Firms

Consider two potential contracts between a worker and a firm, one specifying more job security than the other. We refer to these as the ‘secure’ and ‘risky’ contracts in order to distinguish them, but they represent only two contracts along a continuum of different levels of contractually provided job security. If both contracts offer the same wage, it is clear that the worker will prefer the secure contract. But the wage/security combination embodied in a contract presents a trade-off to the worker; the worker prefers higher wages to lower, and prefers more job security to less. It follows, therefore, that if the risky contract offers a wage sufficiently above that in the secure contract, then the worker will prefer the risky contract. We call such a difference the wage premium. Let \( \Delta w_w \) represent the wage premium for which the worker is indifferent between the two contracts; in other words, \( \Delta w_w \) is the minimum wage premium that the worker is prepared to accept in a risky contract.

Now consider the firm. If the firm’s technology is such that secure contracts are more costly to provide than risky ones (for a given wage), then there is also a threshold wage premium, \( \Delta w_f \), at which the firm is indifferent between the two types of contract. That is, \( \Delta w_f \) is the maximum wage premium that the firm is prepared to offer in a risky contract.

Given the pattern of threshold wage premia discussed above, a given firm and group of workers will choose a risky contract if and only if \( \Delta w_f \) exceeds \( \Delta w_w \); that is, if the maximum amount that the workers require to accept such a contract. Thus, in the ab-

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sence of any formal job-security legislation, the pattern of risky and secure contracts will be determined by the relative sizes of $\Delta w_w$ and $\Delta w_f$. At firms where $\Delta w_f$ exceeds $\Delta w_w$, a risky contract will be chosen; at firms where $\Delta w_f$ is less than $\Delta w_w$, a secure contract will be chosen.

The effect of job-security legislation, if it is to be binding, is to impose costs on any employers offering risky contracts, and thus to reduce the maximum wage premium that firms are prepared to offer in a risky contract. This clearly increases the number of worker-firm matches for which the privately optimal contract is the one containing job security. In those cases where legislation induces a change of contract, the agents end up in a contract that they would otherwise have rejected and so the legislation makes those agents worse off. This is the notion of an indirect cost of job security invoked by many opponents of job-security legislation: currently employed workers have a preference for security, but, to the extent that job-security legislation induces some firms to switch from risky to secure contracts, the direct benefit to workers at those firms is outweighed by the cost of reduced wages.

It is worth emphasizing that this cost of mandated job security, resulting from the proscription of some mutually beneficial contracts, is quite separate from the externality discussed in Section I, where we explicitly assumed that job security had no effect on wages.

3 More than One Labour Market Equilibrium

The final aspect of job security that we consider arises when the externality discussed in Section I is combined with the effects of legislation on contracted wages. The idea behind the externality is that job security reduces labour market turnover and so increases the average duration of unemployment spells. The longer the average duration of unemployment after a layoff, the greater is the cost to being laid off, and hence the greater is the wage premium that a worker requires in order to accept a risky contract. Job security, then, not only imposes a cost on unemployed workers, but also imposes a cost on those workers who currently have jobs but who face the possibility of layoff in the future.

The interaction of the job-security externality with the effect of job security on wages generates a 'strategic complementarity': that is, a situation where the actions of agents are self-reinforcing (e.g., Cooper and John, 1988). In this case, the strategic complementarity is that the value of a secure contract to any particular worker increases with the number of other workers who choose to accept a secure contract. The reason is that as more workers use secure contracts, labour market turnover falls and thus unemployment durations rise, making secure contracts more valuable to any particular worker.

One important implication of such a strategic complementarity is that the labour market may have more than one equilibrium, with different amounts of job security being provided in each. In one equilibrium, job security is rare in the economy and so the labour market is characterized by high turnover, short average durations of unemployment, and hence a relatively small cost to being laid off. In this case, the wage premium that workers require in order to accept a risky contract is small, thus making risky contracts a more likely outcome. In another equilibrium, there is widespread provision of job security and so the labour market has low turnover and high average unemployment durations. The resulting high costs associated with being being laid off generate a large required wage premium for workers and hence a greater incentive for firms and workers to negotiate secure contracts.

V Implications for Job-Security Legislation

The strategic complementarity identified in the previous section has a number of im-
lications for the effects of mandatory job security.

The first of these is that policies encouraging the provision of job security operate with a multiplier effect. Secure contracts will be chosen by all worker-firm matches for which $\Delta w_f$ exceeds $\Delta w$. By decreasing $\Delta w$, job security policies increase the number of matches for which it is privately optimal for the contract to provide security. In doing so, however, labour market turnover is reduced; this makes secure contracts more attractive to workers and thus increases $\Delta w$. As $\Delta w$ rises, there is a further increase in the number of matches for which job security will be provided. In this way, job security policies that impose relatively small direct costs on firms could potentially have a large effect on the amount of job security actually provided.

A second implication of our analysis is that observed differences in the amount of job security in different countries need not be due purely to cultural differences or differences in legislation; any observed differences may simply reflect that the countries have settled into different labour market equilibria. For example, the data in Section II show that countries in Europe typically have more job security and higher average unemployment durations than those in North America. It is possible that the higher level of job security provided in Europe is the result of the higher cost to workers there of being laid off given the higher duration of unemployment, and that the higher unemployment duration is itself the result of the higher level of job security.

A final implication concerns the direction of the causal link between mandated job security and unemployment duration. In Table 1, the simple correlation between Bertola’s ranking of job security and the measure of average unemployment duration is 0.70. One interpretation of this fact is that mandated job-security provisions reduce labour market turnover and are the direct cause of high unemployment durations. Another quite different interpretation is that the mandated job security rep-

resents a policy response to the high costs of layoff in a particular labour market. In other words, the strategic complementarity may not only lead to self-reinforcing behaviour between workers at different firms, but also between workers and policymakers.

VI Generality of the Argument

Our basic argument about the negative externality associated with the provision of job security, and the implication of this externality for the possibility of multiple labour market equilibria, depends only on three things being true about labour markets:

1/ that workers prefer employment to unemployment;

2/ that some firms find it costly to provide job security; and

3/ that lower layoff rates (resulting from job security) imply lower hiring rates of unemployed workers.

None of these features are at odds with casual observation. Indeed, in our view at least, the first two features are obvious characteristics of actual labour markets and only the third is reasonably debatable. In this section we discuss some reasons why each of the above features might be true, and present some suggestive evidence in support of the third. In Hogan and Ragan (1994; 1995) we consider the theoretical basis for these features more formally.

I Workers’ Preference for Employment

Workers must prefer being employed to being unemployed in order for the provision of job security to contain a negative externality. Without this preference, workers would experience no cost from being laid off and hence there would be no cost to unemployed workers of lower hiring rates and longer unemployment spells. Early models of labour markets found it difficult to provide an explanation of how unemployment could persist without wages falling to the point where either unemployment was eliminated or workers were indifferent be-
tween employment and unemployment. There are now, however, a wide range of models that generate unemployment in equilibrium and, at the same time, have workers who strictly prefer employment to unemployment. These include, among others, efficiency wage models (e.g., Akerlof and Yellen, 1986) and search and matching models (e.g., Diamond, 1982; Pissarides, 1990).

2 Costs to Providing Security

Our argument about the strategic complementarity does not require all firms to strictly prefer risky over secure contracts (for a given wage). It is easy to imagine situations where it may be costly for a firm not to provide job security. For instance, a firm facing a decline in demand may wish to retain workers who have acquired firm-specific human capital so that it can avoid the costs involved in training new workers in a subsequent upturn. All that is required in our framework, however, is that at least some firms prefer risky contracts to secure ones at a given wage.

One issue in determining the amount of security to be specified in a labour contract is how the inherent risk associated with operating in an uncertain world can best be shared between the firm and worker. This risk-sharing decision will depend in part on the extent to which the respective parties have access to alternative forms of insurance. Large firms, for instance, may be able to self-insure if their relatively easy access to capital markets allows them to maintain a payroll during a downturn without threat of bankruptcy. Also, their shareholders can further insure by diversifying their portfolios. These arguments do not apply so strongly to small owner-operated firms; such firms are likely to be less able to provide security in their labour contracts. It is presumably because of such considerations that the 1988 WARN Act in the United States explicitly exempted firms with fewer than 50 employees.

Even if firms are risk neutral, their costs may be structured in such a way that they have a strict preference for risky contracts. For example, it may be less costly to employ 100 workers for a full five-day week than 125 workers each employed for a four-day week. This might reflect certain costs, such as health insurance premia, which depend on the number of employees rather than on the total number of hours worked. Evidence that supports this idea in the Canadian context is discussed in Meltz, Reid and Swartz (1981).

Finally, if a firm has a preference for risky contracts for any reason, this preference will be intensified if there exists publicly funded unemployment insurance that is imperfectly ‘experience rated’ (i.e., for which the premium charged to firms is not closely related to the frequency with which it lays off workers). In such cases the firm can reduce the size of its work force at little or no cost to itself while at the same time having its workers’ incomes partly insured. The existence of unemployment insurance therefore provides an incentive for firms to bear less of the risk and thus to offer less job security to their workers. This notion is supported by studies of Feldstein (1978) and Topel (1983) which examine the different degrees of experience rating across different US states and find a greater use of layoffs when there is less experience rating. A similar implication of unemployment insurance is described by Burdett and Wright (1989). They note that most Western European countries permit short-time compensation in their UI schemes (i.e., partial payment of UI when a worker is not laid off but has his or her hours reduced) whereas the US and Canada do not. They suggest that the greater use of hours adjustment in Western Europe (reported in column (3) of Table 1) may be partly a result of this institutional difference.

3 The Negative Relationship between Job Security and Hiring Rates

As noted in Section III, the relationship between job security and hiring rates depends on the effect that job security has on the level of unemployment. Opponents of man-
Table 2
Labour Market Turnover

<table>
<thead>
<tr>
<th>Country</th>
<th>a = H/E</th>
<th>s = S/E</th>
<th>t = \frac{a + s}{2}</th>
<th>u</th>
<th>h = H/U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada (1981)</td>
<td>2.3†</td>
<td>2.2</td>
<td>2.2</td>
<td>10.5‡</td>
<td>19.0</td>
</tr>
<tr>
<td>France (1981)</td>
<td>1.3</td>
<td>1.4</td>
<td>1.4</td>
<td>10.2</td>
<td>12.1</td>
</tr>
<tr>
<td>Germany (1982)</td>
<td>2.1</td>
<td>2.1</td>
<td>2.1</td>
<td>9.3</td>
<td>20.3</td>
</tr>
<tr>
<td>Italy (1981)</td>
<td>0.8</td>
<td>1.3</td>
<td>1.0</td>
<td>10.1</td>
<td>8.9</td>
</tr>
<tr>
<td>Japan (1983)</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>2.6</td>
<td>62.6</td>
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<tr>
<td>UK (1984)</td>
<td>1.6</td>
<td>1.8</td>
<td>1.7</td>
<td>11.1</td>
<td>13.3</td>
</tr>
<tr>
<td>USA (1981)</td>
<td>3.3</td>
<td>3.4</td>
<td>3.3</td>
<td>7.2</td>
<td>43.0</td>
</tr>
</tbody>
</table>

† The rates a, s, t, and h are expressed in percent per month.
‡ u is the 1985 OECD Standardized Unemployment rate.
SOURCE: Canadian figures for a and s are taken from unpublished data from Statistics Canada; remaining figures for a and s are taken from Tachibanaki (1987); u is from OECD (1987) h is based on the authors’ calculations.

Datory job security often argue that such legislation will lead to higher unemployment by creating a more rigid labour market (e.g., Lazer, 1990). In this case, the reduction in labour market turnover resulting from an increase in the amount of job security would unambiguously reduce the hiring rate. In search and matching models such as Blanchard and Diamond (1989) and Pissarides (1986; 1990), on the other hand, widespread provision of job security can lead to a reduction in unemployment. In these models, both unemployment and vacancies are needed to match workers and firms. If job security leads to fewer layoffs, thus requiring fewer new matches, the equilibrium level of unemployment may be lower. But lower unemployment is not guaranteed in these models; in general, the overall effect on unemployment is ambiguous because it depends on how firms are assumed to create vacancies.

For the analysis of this paper to apply, however, it is not necessary that job security and unemployment are positively correlated; it is only necessary that job security reduces the hiring rate of unemployed workers. Of course, if job security increases the amount of unemployment, then the hiring rate will fall and our basic argument is valid. If, on the other hand, job security reduces unemployment, then the validity of our argument requires only that the reduction in unemployment be proportionately less than the reduction in hires. This is ultimately an empirical question.

Lazer (1990) provides some evidence on the relationship between job security and the amount of unemployment. He examines job-security provisions and unemployment rates across 20 countries and 30 years, and suggests that countries with more stringent job-security provisions also have higher unemployment rates. He estimates that if the United States were to increase its mandatory severance pay requirements from zero to three months, its unemployment rate would increase by over 5 per cent.

Table 2 provides some direct evidence about the relationship between job separation and hiring rates. It shows job-accession rates and job-separation rates for seven countries. The job-accession rate is defined as the monthly flow of hires expressed as a percentage of the stock of employment, \( a = \frac{H}{E} \). The job-separation rate is the monthly flow of separations (quits and layoffs) expressed as a percentage of the stock of employment, \( s = \frac{S}{E} \). As must be the case unless the country is to have enormous changes in the stock of employment over time, the accession and separation rates are very highly correlated. The hiring rate, \( h \), can be constructed from the accession rate using the relationship,

\[
h = \frac{H}{U} = a \cdot \frac{1 - u}{u} \]

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where \( u \) is the unemployment rate \( (u = U/(U + E)) \).

Note that for reasons of data availability the year varies across countries in Table 2. This has the potential of distorting our measure of the hiring rate because there is likely to be cyclical behaviour in both job ac-

cessions and job separations. To get around this problem, we generate a turnover rate, \( t \), which is the simple average of the accession and separation rates in Table 2, and use this turnover rate as a rough proxy for the cyclically adjusted separation rate. The hiring rate in Table 2 is then derived using this turnover rate, rather than the accession rate. The unemployment rate used to construct the hiring rate is the OECD standardised unemployment rate for 1985 in each country.

Figure 1 plots the hiring rate against the turnover rate for the seven countries in Table 2. The simple correlation between the two rates is 0.43 but this jumps to 0.97 if Japan is omitted from the sample. Given the widespread belief that the ‘discouraged worker’ phenomenon is more prevalent in Japan than other countries (see Tachibanaki, 1987, and references therein), leading to a downward bias in measured unemployment and hence an upward bias in the estimated hiring rate, the comparison between North America and Europe may indeed be the most relevant.

In that case, despite the small sample, Figure 1 presents quite compelling evidence to support the hypothesis that labour markets in which there is a high job-separa-
tion rate are also ones in which the un-
employed can expect to be quickly reas-
b sorbed into the work force. To the extent that mandated job security reduces the job-
separation rate – by increasing the cost to firms of instigating such separations – one can then expect such job-security provi-
sions to impose a direct cost on the unem-
ployed.

VII Conclusions

Our analysis gives the result that govern-
ment-mandated job security is unambigu-
ously welfare reducing. This strong conclusion follows from the theoretical framework we use. We noted in the intro-
duction that an implicit belief motivating job-security legislation must be that there is some sort of market failure that leads workers and firms to negotiate private em-
ployment contracts that contain less job security than what is socially optimal. We do not reject the idea that such a market failure might exist; our focus is simply on a different aspect of job security. Our central point is to illustrate two additional external costs that can result from the provision of job security. The first is that job security imposes costs on unemployed workers by lowering labour market turnover and thereby increasing the average duration of unemployment. The second is that this in-
crease in unemployment duration operates through a multiplier effect to increase the cost to employed workers of being laid off, leading them to demand job security at a cost in wages.

An excessive policy conclusion from the above analysis is that governments should not only not mandate job security but should actively seek to eliminate it. It is not the aim of this paper to draw that conclu-
sion; obviously, there are many other aspects of real-world labour markets that also have to be considered in any determin-
ation of appropriate labour market policy. Furthermore, the simple descriptive statisti-
cs we have presented are clearly only sug-

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gestive and not conclusive of any particular view of the relationship between job security legislation and labour market performance. We would argue, however, that the possibility of external costs associated with the provision of job security needs at least to be considered by any policy-maker intending to introduce or strengthen job-security legislation.

Notes

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1 Lazear sets SEV equal to 0 for Canada because there is no nationwide legislation governing severance pay. But there are some jurisdictions that require severance pay. For industries in the federal jurisdiction (e.g., airlines, trucking, etc.), a worker is entitled to two days of pay per year employed, so that SEV in Table 1 would be one (month). Ontario is the only province which has legislated mandatory severance pay, but it applies only to employers with payrolls in excess of $2.5 million. For workers who have been employed at the firm for five years, the entitlement is five days of pay per year of employment. See Labour Canada (1991).

2 The term 'wage' here is a catch-all term which includes all aspects of the workers' compensation package, both monetary and non-monetary, other than the probability of layoff.

3 Burdett and Wright examine data from the 1970s. In the early 1980s Canada introduced a system of short-time compensation in its UI system. See Reid (1982; 1986) for details.

References


OECD (1987) Main Economic Indicators.


—— (1990) Equilibrium Unemployment Theory

