Canadian Labour Market Developments in International Context: Flexibility, Regulation and Demand

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Le marché du travail canadien n'a pas eu un bon rendement dans les années 90 lorsque nous le comparons à d'autres pays industrialisés, en particulier avec les États-Unis. Cela a précipité de nombreux appels visant à rendre le marché du travail canadien plus "flexible". Par contre, selon les évidences, le marché du travail canadien n'est pas du tout "inflexible" lorsque compris comme étant capable de changer et de s'adapter aux changements. Les partisans de la flexibilité dans le marché du travail supportent des politiques de déréglementation du marché du travail. Bien que le marché du travail au Canada soit plus réglementé que celui aux États-Unis, il est relativement déréglementé selon des standards internationaux. Par contre, il n'y a pas de corrélation entre l'intensité de la réglementation dans le marché du travail et la performance des emplois dans les pays de l'OCDE dans les années 90; les conditions de la demande prédisent mieux la performance des emplois que ne le font les structures comparatives des réglementations.

Canada's labour market performed badly in the 1990s, compared both to the set of industrialized countries and to its main comparator, the United States. This has prompted numerous calls for measures that would make Canada's labour market more "flexible." Much evidence suggests, however, that Canada's labour market is not at all "inflexible," in the common sense of being able to change and to adapt to change. Advocates of labour market flexibility are often actually calling for policies of labour market *deregulation*. While Canada's labour market is more regulated than that of the US, by international standards it is relatively deregulated. There is no correlation, however, between the intensity of labour market regulation and the employment performance of OECD countries during the 1990s; aggregate demand conditions are a more powerful predictor of employment performance than are comparative regulatory structures.

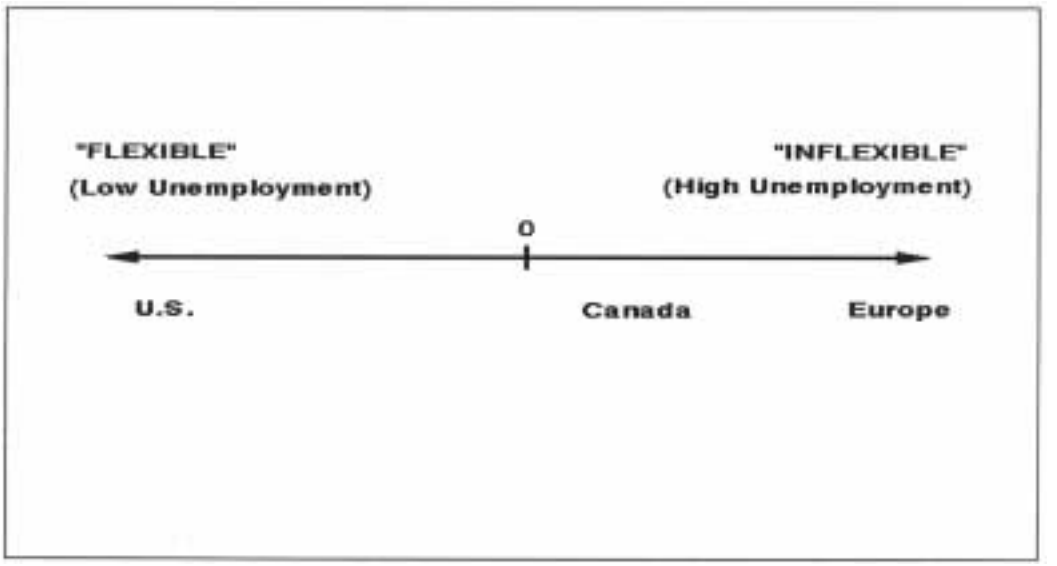
INTRODUCTION

The paradigm of "labour market flexibility" has exerted a decisive influence on labour market policy-making in the developed industrial economies in recent years. This paradigm rests on the central notion that competitive labour market forces will generally attain the most efficient match between labour supply and labour demand, and hence a lower rate of long-run structural or "equilibrium" unemployment. Government interventions aimed at enforcing particular labour market outcomes (such as

minimum wages, unemployment insurance programs, collective bargaining structures, and other employee protections) tend to disrupt these competitive market forces, limit the "options" of labour market participants, and produce a less flexible, adaptive, and efficient labour market, marked in particular by higher rates of unemployment in the long run. The *OECD Jobs Study* (OECD 1994) provided the classic statement of this flexibility paradigm, and following its release, member governments were entreated to adopt pro-competitive policy reforms. Coincident with the rise of the flexibility paradigm was a widespread de-emphasis on the role of aggregate demand conditions in explaining unemployment and other negative labour market outcomes, and a corresponding downgrading of the importance of macroeconomic policy as a means of reducing long-run unemployment.

As a result of the intellectual and policy dominance of the labour market flexibility view, most recent international comparisons of labour market structures and performance have tended to be conducted through a "flexibility lens." The typical depiction of Canada's labour market in an international context is to arrange countries on a one-dimensional scale of labour market flexibility (much like that shown in Figure 1). The United States is considered to have a highly "flexible" labour market (and hence more efficient outcomes, including a lower rate of unemployment). Continental Europe is considered to have an "inflexible" labour market (and hence less efficient outcomes, including higher unemployment). Canada is typically placed somewhere between these two extremes — although generally in a position considered "too close" to the European end. The emergence of an unemployment gap between Canada and the US in the last two decades is often ascribed to Canada's labour market inflexibility. Various flexibility-enhancing policy measures, often on the US model, are proposed to make Canada's labour market more efficient, thus reducing long-run unemployment.[1]

FIGURE 1
Flexibility in an International Context: A Standard View



This paper will raise several questions of that standard view, in the context of an empirical survey of labour market outcomes in the 1990s in Organization for Economic Cooperation and Development (OECD) countries. The first part suggests various different potential working definitions of the term "flexibility," and considers the differing patterns of observable behaviour which might correspond to these respective conceptions. The second section of the paper will then review key labour outcomes in the past decade, comparing Canada to both the US experience and a wider sample of developed countries. This review confirms that by many measures (although not all) Canada's labour market performance in the 1990s was poor. The third section explores in more detail the extent to which Canada's labour market is indeed relatively "inflexible" in contrast to that of its southern neighbour. In a simple, pragmatic understanding of the word, Canada's labour market does not at all seem "inflexible." When flexibility is interpreted in the concrete sense of being "able to change and to respond to change," Canada's labour market is highly flexible, by many measures more so than that of the United States.

The fourth section of the paper then argues that "flexibility" and "inflexibility" are not actually the appropriate terms with which to describe the unidimensional continuum considered in Figure 1. What is more accurately being portrayed is a one-dimensional scale ranging from a "deregulated" labour market at one end (in which employment and distributional decisions are largely unconstrained by policy interventions, and are instead subject to primary market determination) to a "regulated" labour market at the other end (in which explicit policy measures are taken to enforce employment and/or distributional outcomes more compatible with social preferences). A numerical index of labour market regulation for 17 OECD countries is constructed on the basis of seven different measures of labour market intervention. This index confirms the initial (but incorrectly named) perception that Canada's labour market is more regulated than that of the US. In an international context, however, Canada's labour market is still relatively *deregulated*. Several European countries are located at the other extreme of this scale.

There is no consistent correlation, however, between degrees of labour market regulation and key measures of employment performance during the 1990s. Another economic factor which might be held to influence employment performance is the relative vibrancy of aggregate demand conditions. The fifth section of the paper thus reviews a range of indicators of the vibrancy of aggregate demand conditions for the same OECD countries. This review verifies that Canada experienced unusually weak demand conditions during the last decade, while the US enjoyed relatively strong conditions (in large part because of a significantly more expansionary macroeconomic policy regime). Indeed, the demand-side differences between Canada and the US are more pronounced than differences in the degree of labour market regulation. The strength of aggregate demand is positively and significantly correlated with employment performance in OECD countries during the 1990s. These results suggest a need for a two-dimensional model of labour market structures and performance, one example of which is presented in the final section of the paper.

Defining "Flexibility"

In a common-sense understanding, "flexibility" would seem to refer to the ability to change and respond to change. Indeed, the 1994 *OECD Jobs Study* utilized a working definition something like this in introducing its agenda of policy reforms. The central goal of labour market policy, the OECD argued, should be "to improve the ability of economies and societies both to cope with, and benefit from, change, by enhancing the ability to adjust and adapt, and increasing the capacity to innovate and be creative" (OECD 1994, p. 43). The choice of terms is deliberately inoffensive: who could be opposed to "flexibility," in this common-sense understanding of the term?

Various failures to change and respond to change can be imagined, and hence an "inflexible" labour market could be seen to demonstrate various dysfunctional outcomes. Traditional competitive labour market analysis focuses on price and quantity adjustments in response to supply and demand changes. The problem of labour market inflexibility might then be conceived in simple "price" and "quantity" forms, as suggested by Kuhn (1997). Price inflexibility would be demonstrated by a failure of equilibrium wages to adjust to supply or demand changes.[2] Quantity inflexibility might refer to various regulatory or institutional measures inhibiting quick adjustments in the level of employment (through compulsory layoff notice requirements, for example). Other, more complex forms of inflexibility are also possible. Inflexibility in the employment relationship might imply that the terms and forms of employment are unduly static, prohibiting needed flexibility and fluidity in variables such as the hours of work or the formal relationship between worker and employer (perhaps through prohibitions against flexible forms of employment such as contingent or contractual arrangements). A lack of mobility between economic sectors, or a lack of geographic mobility between regions, or even mobility by workers in and out of the labour force in response to changing market conditions, might be indicative of other forms of labour market inflexibility.

Some dimensions of inflexibility might be complementary with others, while some might be substitutes. In a simplistic supply-and-demand partial equilibrium, for example, an inflexibility in prices might be subsequently reflected in a perverse flexibility in employment levels — with labour demand unduly rising or falling in response to the imposition of some non-market-clearing wage level. In this instance, changes in employment levels are an indication of an inability to change on the part of wages, while flexibility in wages should theoretically allow for more "inflexibility" (i.e., stability) in employment levels.

In the parlance of labour and macroeconomists, however, "flexibility" has come to mean something quite different from the ability to change and respond to change. Within a competitive, neoclassical model of the functioning of labour markets, the term is largely synonymous with a labour market that is relatively more subjected to market pressures in the determination of employment and earnings, and relatively free from institutional or structural barriers that might interfere with competitive responses to various shocks or stimuli. There is an imperfect correlation, therefore, between the notion of flexibility advanced by advocates of more pro-competitive labour market structures, and the common-sense meaning of the term that might be commonly held by non-specialist members of the public. The latter refers to a general ability to change; the former reflects a particular type of response to change in which some outcomes may not actually change at all. The resulting confusion probably plays a role in the policy debates that inevitably accompany the pro-competitive policy reforms advocated by the OECD and others. In these debates, advocates of more competitive, deregulated labour markets are seen to be promoting the general goal of "flexibility," while opponents are correspondingly portrayed to be somehow in favour of "inflexibility."

This paper will survey empirical evidence regarding the ability of Canada's labour market to change and to adapt to change, along several of the potential axes identified above. Some of these dimensions of change will be seen as desirable by advocates of OECD-style policy reforms, while others will be seen as perverse consequences of improper labour market functioning in other dimensions. What seems indisputable, however, is that Canada's labour market in the 1990s was a site of incredible, rapid, and often painful change during the 1990s — and hence whatever may be wrong with Canada's labour market, it does not suffer from a lack of movement.

Comparative Labour Market Performance in the 1990s

Table 1 provides a summary of different labour market indicators for 20 different OECD countries,

TABLE 1
Key Labour Market Outcomes: Selected OECD Countries, 1990-1998

	Employment Rate		*Unemployment Rate*		*Participation Rate*		*Avg. Ann. Growth*	*Avg. Ann. Growth*
	1998	*Chg. 1990-98*	*1998*	*Chg. 1990-98*	*1998*	*Chg. 1990-98*	*Emplymt. 1990-98*	*Real Wage 1990-98*[1]
					(percent)			
Canada	70.1	-1.5	8.4	0.3	76.5	-1.4	1.2	1.1
OECD	66.0	0.2	6.9	1.0	70.9	1.0	0.9	0.9
US	74.2	2.0	4.5	-1.1	77.7	1.2	1.5	0.7
Japan	74.9	2.4	4.1	2.0	78.1	4.0	0.6	0.1
Germany	64.3	-1.5	9.4	4.6	71.0	1.9	0.1	0.4
France	59.6	-0.9	11.7	2.7	67.5	1.0	-0.1	1.1
Italy	50.9	-2.7	12.3	3.2	58.0	-0.9	-0.5	0.1
UK	70.7	-0.3	6.3	-0.8	75.5	-1.0	0.1	1.4
Australia	68.7	-0.4	8.0	1.1	74.7	0.4	1.2	1.2
Austria	63.1	-1.1	6.5	1.8	67.5	0.1	0.4	0.9
Belgium	58.2	0.4	9.5	2.8	64.3	2.4	0.2	1.1
Denmark	76.6	-0.1	5.1	-2.6	80.7	-2.4	0.4	1.5
Finland	64.7	-10.0	11.4	8.2	73.0	-4.1	-1.7	1.4
Ireland	61.9	8.3	7.8	-5.6	67.1	5.2	3.9	1.4
Netherlands	61.8	7.2	4.0	-2.2	64.4	6.2	2.2	0.2
NZ	60.3	1.5	7.5	-0.3	65.2	1.4	2.2	-0.1
Norway	75.3	3.4	7.5	-0.3	81.4	3.4	1.4	1.8
Portugal	64.7	-3.6	5.1	0.5	68.2	-3.4	-0.2	2.9
Spain	51.2	0.1	18.8	2.6	63.0	2.1	0.4	1.2
Sweden	68.9	-12.4	8.3	6.6	75.1	-7.6	-1.7	1.5
Switzerland	79.8	-2.0	3.9	3.4	83.0	0.8	0.1	0.7

Note: [1]Compensation per employee, business sector only, deflated by growth in consumer prices.
Source: Author's calculations from *OECD Economic Outlook*.

including Canada, for the period between 1990 and 1998 (the most recent year for which comparable data were available). Most popular and media coverage of labour market issues tends to focus on one of two measures: either the absolute rate of job creation, or changes in the unemployment rate. Both of these measures, however, can be misleading for purposes of international comparisons. The unemployment rate is contingent on the definition of which non-employed individuals are considered to be in the labour market and hence unemployed, and which are considered to be outside the labour force.[3] The relative importance of a given rate of job creation, meanwhile, is entirely contingent on the rate of growth of the general population of the jurisdiction in question. Since the employment rate abstracts from the problems associated with definitions of the labour force and differentials in rates of population growth, it is utilized throughout this paper as the key measure of labour market performance.

Utilizing standardized OECD data, some 70 percent of Canada's working-age population were employed in 1998, representing a decline of 1.5 percentage points from 1990.[4] Canada's employment rate is higher than the OECD average, but the decline in Canada's employment rate in the 1990s was in contrast to a slight increase in the average employment rate for the OECD as a whole (of 0.2 points). Canada thus places in the lowest quarter of OECD countries ranked according to the change in the employment rate during the 1990s. The United States enjoyed a healthy increase in the employment rate during the same period (of 2.0 points); other countries that experienced even larger increases in employment rates include Japan, Ireland, the Netherlands, and Norway.

Other labour market indices confirm that Canada has experienced a difficult decade in terms of labour market outcomes. Canada's unemployment rate was 1.5 points higher than the OECD average in 1998, although the increase in the unemployment rate from 1990 to 1998 (of 0.3 points) was smaller than the one-point increase in the average OECD unemployment rate. Another indication of the depressed labour market conditions in Canada has been the drop in labour force participation, which declined by 1.4 points between 1990 and 1998 (compared to a one-point increase in labour force participation for the OECD as a whole).[5]

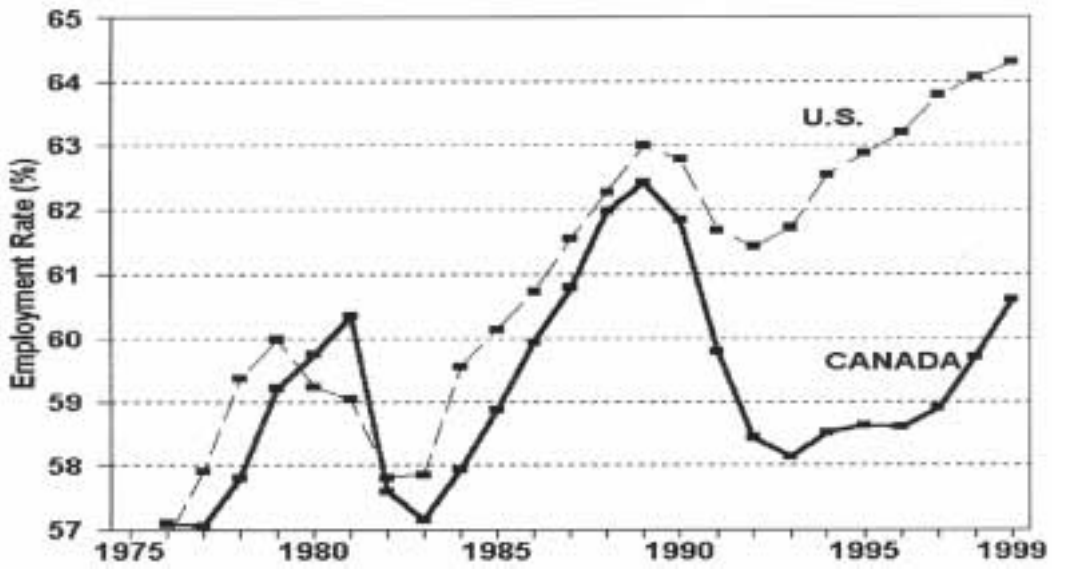
The rate of absolute job creation in Canada between 1990 and 1998 exceeded the rate in the OECD as a whole. But since Canada's population is growing roughly 50 percent faster than for the OECD as a whole, Canada needs to generate a faster rate of job creation just to keep up with other countries in terms of employment and unemployment rates. Finally, it is interesting to note that real wages in Canada grew slightly faster during this period than elsewhere in the OECD, despite the relatively depressed labour market conditions that were experienced.[6] This is a form of "flexibility" of which advocates of the flexibility paradigm do not generally approve.

Many policy discussions in Canada rely heavily on comparisons between Canada and the United States. Given the close proximity of the US, the importance of foreign trade and investment flows between the two countries, and the general importance of the US in the global economy, this focus on bilateral comparisons is probably inevitable — although subsequent policy conclusions should certainly be tested against a wider sample. In the context of policy debates over labour market flexibility, these comparisons to the US take on a particular importance, since the US is conventionally held to possess a prototypically flexible labour market. The relative deterioration of Canadian labour market performance vis-à-vis that of the US would thus seem to provide *prima facie* support for the notion that more "flexible" labour market policies should be adopted in Canada.

There is no doubt that Canada's labour market performed more poorly than that of the US through most of the 1990s. The oft-discussed "unemployment gap" between the two countries first emerged during the early 1980s, and widened to almost five percentage points in the early 1990s.[7] Many commentators have suggested that this gap is largely due to structural differences in the labour markets of the two economies, and have argued that Canada could reduce its unemployment rate by adopting US-style labour market regulations and institutions.[8]

As indicated in Figure 2, however, it was not until the 1990s that the unemployment rate gap was reflected in a corresponding *employment* rate gap. Canada's employment rate rose in step with that of the US through the 1970s and 1980s, long after most of the supposedly "flexibility-inhibiting" policy changes (such as the infamous 1971 Unemployment Insurance reforms) had been implemented. While some of these reforms may have affected variables such as labour force participation (hence impacting on the unemployment rate), they did not seem to have undermined Canada's relative employment performance. It was only in the 1990s that employment as a proportion of the working-age population

FIGURE 2
Employment Rates: Canada and United States, 1976-1998

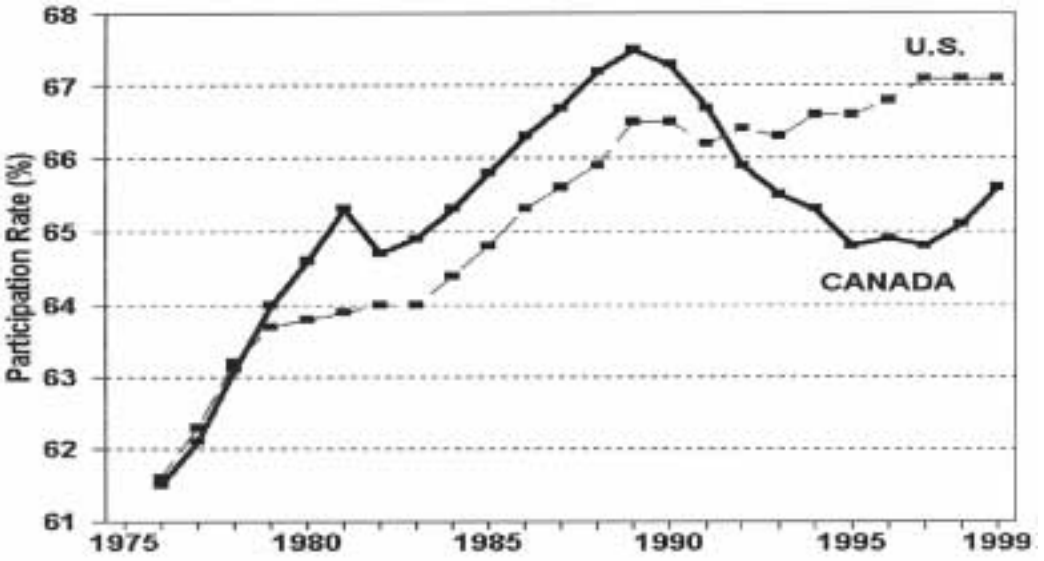


fell below that of the US, by a total of four percentage points by 1993 and with only a partial recovery since then. Several studies have since identified the decline in Canada's employment rate as the most important source of the relative decline in Canadian living standards, compared to those of the US, during the 1990s.[9]

Canada's employment rate deteriorated relative to the US by a far greater degree in the 1990s than is suggested by the data on unemployment rates in the two countries. This implies that labour force participation in Canada must have declined in Canada, relative to that of the US (see Figure 3). The Canadian participation rate fell by 2.5 points between 1989 and 1995, and has only recently begun to recover. In contrast, the US participation rate continued to increase through the 1990s, following only a modest setback in 1991. In the 1980s Canada's participation rate averaged about one point higher than that of the US, but since 1992 it has been significantly lower (at present by about 1.5 percentage points). The Canadian participation rate also seems to display a generally higher degree of volatility than in the US; this will be explored further below.

The decline in the Canadian employment rate in the 1990s occurred even as Canada was adopting labour market policy measures which are generally considered to be "pro-competitive" (the most important being a major reduction in the generosity of the unemployment insurance system). Again this does not seem to support the notion that the differences in labour market outcomes between the two countries result primarily from structural or regulatory differences. Canada's employment performance kept pace with that of the US through the 1970s and 1980s, even as its labour market regulations diverged in a more interventionist direction. Canada's relative employment performance then deteriorated just as important "flexibility-enhancing" reforms were being implemented.

FIGURE 3
Labour Force Participation Rates: Canada and United States, 1976-1997



On the other hand, it is clearly true that Canadian macroeconomic policies diverged significantly from those of the US during the 1990s. During the early 1990s, Canada's central bank unilaterally pursued a more anti-inflationary monetary policy than was followed by US authorities. From 1990 through 1995, real short-term interest rates averaged over 5 percent in Canada, compared to barely 1 percent in the US. Later, Canadian governments adopted a uniquely severe stance of fiscal restraint, reducing government program spending by eight percentage points of GDP between 1993 and 1999, versus a corresponding decline of three points of GDP in the US. Total taxes also increased slightly faster as a share of GDP in Canada than in the US.

The negative consequences of these policies for aggregate demand conditions (at least in the short run) are clearly relevant to the slower growth of output and employment that was experienced in Canada during this period. One would think, *a priori*, that these demand-side differences would be important in explaining Canada's relatively poor employment outcomes. Surprisingly, however, much of the policy discussion in Canada continues to focus on the need for structural and institutional reforms in Canada's labour market, making it more "flexible."

DIMENSIONS OF CHANGE

In fact, by a range of different indicators, Canada's labour market has proven itself to be extremely flexible, in the pragmatic sense proposed in the first section of this paper — in many aspects even more flexible than that of the US. The notion that Canadians have been protected or insulated from change by virtue of various regulations and protections, and that this insulation has itself become a source of labour market weakness, is not supported by a variety of data sources which attest to the incredible

pace of change in Canada's labour market, and the incredible lengths to which Canadians have gone in the interests of supporting themselves through tumultuous times.

For example, one indicator of "ability to change" might be the degree to which an economy can shift its labour resources from one industry to another, in response to changing demand and technological conditions. Table 2 summarizes data regarding the volatility of sectoral employment in Canada and the US, from 1983 through 1997, for 35 industrial sectors at the two-digit level. The volatility of sectoral employment might be measured with respect to absolute numbers of workers, or with respect to the sectoral allocation of the total workforce. Hence comparative data on both indicators are provided in Table 2. It turns out that the Canadian economy is at least as "flexible" as that of the US in shifting employment between different sectors. Table 2 presents normalized standard deviations of both the absolute levels of sector employment, and the shares of sector employment in overall employment. In both cases, sectoral employment volatility is higher in Canada than in the US, in a majority of the 35 sectors considered, during the total period from 1983

TABLE 2
The Volatility of Sectoral Employment: Canada and United States, 1983-1997, 35 industries at two-digit level

	Total Period	*1983-1989*	*1990-1997*
Sectoral Employment Levels			
Arithmetic mean, normalized standard deviation of employment[1]			
Canada	10.40%	7.25%	6.73%
US	8.23%	5.73%	4.70%
Weighted average, normalized standard deviation of employment[1]			
Canada	8.26%	6.85%	4.89%
US	9.31%	6.20%	5.19%
Industries in which volatility was greater in Canada (out of 35)	25	25	26
Sectoral Employment Shares			
Arithmetic mean, normalized standard deviation of employment shares[1]			
Canada	9.95%	5.27%	5.74%
US	9.53%	5.60%	4.94%
Weighted average, normalized standard deviation of employment shares[1]			
Canada	6.11%	3.21%	4.26%
US	6.26%	3.38%	3.43%
Industries in which volatility was greater in Canada (out of 35)	19	14	19

Note: [1]Normalized standard deviation equals standard deviation as percentage of the sample mean (to eliminate units).
Source: Author's calculations from Statistics Canada, *Employment, Earnings and Hours,* and US Department of Labor, *Employment and Earnings.*

through 1997. On an unweighted basis, the average volatility demonstrated in the 35 sectors is higher in Canada. On a weighted basis, average sectoral volatility is slightly lower in Canada (reflecting the fact that it is larger industries in the US, such as business services and communications, that have shown the greatest overall volatility). And if anything, sectoral employment levels and shares have become more volatile in Canada relative to the US in the 1990s; by most measures, the volatility of sectoral employment increased in the 1990s in Canada, but decreased in the US.

Another feature of "flexibility" in the labour market might be the ease and speed with which employment decisions respond to changes in the broader economic environment. For example, it is often argued (in the "quantity" version of the flexibility hypothesis) that overly-generous employment security provisions inhibit the degree to which employers can respond to downturns in their product markets by reducing employment; hence employers are reluctant to hire new workers even when they are needed, for fear that they will be prevented from downsizing excess workers during slower periods in the future. As a consequence, employment levels will be relatively insensitive to fluctuations in demand (either upward or downward). One method of measuring the importance of this type of inflexibility would be to econometrically evaluate the relationship between changes in demand conditions and changes in employment. Table 3 reports results from regressions of employment on GDP for the period from 1976 through 1998, for Canada and the US, conducted in both levels and first difference terms.[10] Variables are measured in natural log terms to ensure commensurability of coefficients between the two countries. In both types of regressions, the

TABLE 3
Regressions of Employment on GDP: Canada and United States, 1976-1998

	Levels Regressions	*First-Difference Regressions*
Canada		
Constant	0.860	-0.0013
	(3.726)	(-0.412)
Coefficient on GDP	0.639	0.721
	(37.010)	(7.630)
Adj. R^2	0.984	0.732
United States		
Constant	6.192	0.0016
	(61.020)	(0.645)
Coefficient on GDP	0.628	0.583
	(53.411)	(8.224)
Adj. R^2	0.992	0.760

Note: All regressions conducted using natural logs of the variables; t-statistics in parentheses; annual data.

Source: Author's calculations from Statistics Canada, *Canadian Economic Observer,* and US Council of Economic Advisors, *Economic Report of the President.*

coefficient on GDP was higher for Canada than for the US; in the first-difference regression, the coefficient was substantially higher for Canada than for the US. This suggests that employment is more sensitive to demand conditions in Canada than is the case in the US, and hence that employers are better able to adjust their hiring (and firing) decisions quickly in the wake of changing product market circumstances.

A similar indication of flexibility in the labour market might be the extent to which individual workers alter their fundamental decision to participate in the labour market on the basis of changing employment and macroeconometric circumstances. In other words, how elastic is labour supply to the general state of labour markets? It has been argued that overly generous social insurance programs will perversely encourage "too much" labour force participation, by encouraging individuals to maintain job searches in a particular region (or at least to *report* that they are maintaining job searches) when no realistic work opportunities are available. In this case, labour force participation would be relatively insensitive to the general state of employment outcomes. Table 4 reports the results of regressions of labour force participation rates in Canada and the US on the corresponding employment rate in each country, once again utilizing data from 1976 through 1998, and conducted in both levels and first-difference terms. A time trend is also included in the levels regression to reflect the long-run social and demographic influences on labour force participation (such as the increased formal work activity of women). Once again, the coefficients on the employment rate are substantially higher in both regressions for Canada than for the US.

TABLE 4
Regressions of Participation on Employment: Canada and United States, 1976-1998

	Levels Regressions[1]	*First-Difference Regressions*
Canada		
Constant	-125.438	0.118
	(-2.350)	(1.687)
Coefficient on Employment Rate	0.677	0.387
	(5.594)	(5.676)
Adj. R^2	0.689	0.598
United States		
Constant	-230.403	0.159
	(-4.655)	(3.406)
Coefficient on Employment Rate	0.309	0.279
	(3.523)	(4.739)
Adj. R^2	0.947	0.505

Notes: T-statistics in parentheses; annual data.
[1]Levels regressions include a time trend.

Source: Author's calculations from Statistics Canada, *Canadian Economic Observer,* and US Council of Economic Advisors, *Economic Report of the President.*

An alternative way of phrasing the same hypothesis would be to argue that the participation decisions of workers should respond to the *negative* prospects of unemployment, as well as or instead of to the *positive* lure of high employment rates. In this case, the participation rate (or changes in it) should be regressed on the unemployment rate (or changes in it). These regressions are reported in Table 5. This time the results are mixed: the coefficient on unemployment is higher for the US in the levels regression, but higher for Canada in the first-difference regression. Since the decline in the participation rate in Canada has probably weakened the extent to which the official unemployment rate accurately reflects the degree of labour market excess capacity (since the proportion of non-employed adults who qualify as officially unemployed has fallen), it may be that the employment rate serves as the better indicator of labour market conditions for the purposes of participation decisions. At any rate, no case can be made on the basis of these findings that participation decisions in Canada are any *less* sensitive to broader economic conditions than is the case in the United States, and there is considerable evidence to suggest that they are *more* sensitive.[11]

Another dimension to labour market flexibility might be the extent to which employees are able to devise and implement alternative work arrangements to reflect non-standard circumstances in product markets, or other factors which might inhibit the creation of traditional full-time permanent positions. The OECD placed considerable emphasis on these dimensions of flexibility in its 1994 *Jobs Study*, advocating greater flexibility in working hours and support for self-employment and other forms of

TABLE 5
Regressions of Participation on Unemployment: Canada and United States, 1976-1998

	Levels Regressions[1]	*First-Difference Regressions*
Canada		
Constant	-146.765 (-1.798)	0.163 (1.775)
Coefficient on Employment Rate	-0.631 (-3.388)	-0.850 (-10.238)
Adj. R^2	0.352	0.832
United States		
Constant	-339.608 (-10.669)	0.214 (4.214)
Coefficient on Employment Rate	-0.724 (-8.892)	-0.786 (-13.655)
Adj. R^2	0.960	0.898

Notes: T-statistics in parentheses; annual data.
[1]Levels regressions include a time trend.

Source: Author's calculations from Statistics Canada, *Canadian Economic Observer,* and US Council of Economic Advisors, *Economic Report of the President.*

entrepreneurship. How does Canada fare in terms of this type of flexibility in work arrangements?

One measure of the degree of flexibility in working hours would be the proportion of individuals working part-time. Part-time employment in Canada has grown substantially as a share of total employment over the last two decades (see Table 6). Close to one in five Canadian workers is now employed on a part-time basis, and a considerable portion of those (about one-third in 1998) would prefer to be working full-time. Since 1991 part-time employment has been more common in Canada than in the US, where the incidence of part-time employment has declined through most of the 1990s (perhaps because of the tighter labour market circumstances there). The decline in the part-time employment share in Canada since 1997 (from 19.1 percent in 1997 to 18.5 percent two years later) reinforces the suggestion that Canada's very slack labour markets were an important factor behind the earlier growth of part-time employment.

A similar degree of "flexibility" in Canada's labour market is also visible in comparative data on self-employment in the two economies. Self-employment in Canada has increased dramatically in the 1990s (Table 6). Self-employment accounted for over three-quarters of all net new jobs created in Canada between 1990 and 1997, and hence the incidence of self-employment (as a share of all employment) grew from an average of about 14 percent during the 1980s to some 18 percent by the end of the decade.[12] In contrast, self-employment is much less common in the US economy, and self-employment has declined slightly in the US during the 1990s.[13] Once again, it hardly seems that a lack of entrepreneurial creativity has held back Canada's labour market during the 1990s: Canadians have amply demonstrated their willingness and their ability to create work for themselves, even when paying jobs are hard to find. The relatively low earnings that are typical of the self-employed also attest to a high degree of wage flexibility on the part of these new entrepreneurs.[14]

TABLE 6
Indicators of Flexibility in Employment Relationships: Canada and United States, 1980 through 1999 (percent)

	1980	*1990*	*1999*	*Change 1990-99*
Part-Time Employment Share				
Canada	14.4	17.0	18.5	+1.5
United States	17.5	17.3	16.6	-0.7
Self-Employment Share				
Canada	13.2	14.3	16.9	+2.6
United States	7.0	7.3	6.6	-0.7
Voluntary Quit Rate[1]				
Canada	1.22	1.29	0.89	-0.40
United States	0.83	0.83	0.56	-0.27

Note: [1]Voluntary unemployed quits as proportion of labour force.

Source: Author's calculations from Statistics Canada, *Labour Force Historical Review* (Catalogue 71-004, CD-ROM), and US Department of Labor, Bureau of Labor Statistics Website.

There is one sense in which both the Canadian and the American labour markets have demonstrated a declining degree of flexibility during the 1990s. Presumably, a flexible labour market is one in which *employees* also possess the ability to makes changes in their work activity, including the effective ability to leave jobs that are considered unappealing or inappropriate. The best measure of this type of flexibility would be a general quit rate: that is, the proportion of workers in any given year who voluntarily leave their jobs. These data are unavailable on a consistent time-series basis for the two countries. A less appealing substitute measure for which data are available is the number of unemployed persons at any given point who voluntarily left their last job. This measure captures the degree to which workers who are not happy with their present work circumstances are effectively able to leave their job, even if it means enduring a spell of unemployment.

As indicated in the bottom panel of Table 6, the number of unemployed quits as a proportion of the total labour force has declined significantly in both Canada and the US. This likely reflects a generally heightened sense of economic insecurity on the part of workers in both countries, as well as (in Canada's case, anyway) the tightening of eligibility requirements for unemployment insurance (according to which individuals who quit their jobs were penalized beginning in 1990, and disqualified from benefits altogether beginning in 1993).[15] Despite the more stringent regulations regarding unemployment insurance eligibility, the incidence of unemployed job-quitters remains significantly higher in Canada than in the US (which may suggest that Canadian workers enjoy a greater "exit option" than American workers, even if that exit implies a spell of unemployment). In both countries, however, it seems that the effective ability of workers to voluntarily leave an initial job (especially if that departure implies a period of unemployment) has declined. This suggests a certain one-sidedness to the "flexibility" of modern labour markets: employers enjoy an enhanced ability to hire labour on flexible terms and conditions, but the effective ability of employees to exit from undesired jobs seems to have declined.

A high degree of geographic labour mobility is another oft-discussed characteristic of a flexible labour market. Discussions of this issue often point the blame at overly generous social insurance programs, which protect workers against the economic costs of unemployment and hence reduce their incentive to move elsewhere in search of better opportunities.[16] As Table 7 indicates, however, it turns out that the residents of hard-hit regions of Canada have actually been more likely to move elsewhere in Canada, than the residents of the poorest parts of the US. Table 7 summarizes the net inward or outward migration from those Canadian provinces or US states that demonstrate extreme outcomes (whether positive or negative) according to a range of different economic criteria: unemployment rates, personal incomes, or GDP per capita.[17]

By any of the preceding criteria, Newfoundland ranks as the least opportune province on labour market grounds: it has the highest unemployment, the lowest personal income, and the lowest GDP per capita of any Canadian province. Newfoundland experienced a net outward migration between 1990 and 1997 equal to 6.4 percent of its initial 1990 population. In contrast, the worst-ranked US states by these same criteria (West Virginia for the unemployment rate and GDP per capita, Mississippi for personal incomes) experienced seemingly perverse net *inward* migrations during the same period. High-ranked jurisdictions in both countries also demonstrated perverse migration responses; for example, high-ranked Ontario and Connecticut both experienced net outward migration.[18] The inward migration experienced into Alberta between 1990 and 1997 was greater than the inward migration to any top-ranked US state.

Migration patterns clearly cannot be explained on the basis of simple economic differentials (such as unemployment or income levels) between regions. Some US states experienced larger net migration

TABLE 7
Geographic Labour Mobility in Canada and the United States: Net Domestic Migration, 1990-1997

	Canada			*United States*		
	Province	*Diff. from Cda. Avg. 1990*	*Net Migration 1990-97*	*State*	*Diff. from US Avg. 1990*	*Net Migration 1990-97*
			%			*%*
Unemployment						
Worst	Nfld.	+8.9 pts	-6.4	W. Virg.	+2.8 pts	+0.6
Best	Ont.	-1.8 pts	-0.4	Nebraska	-3.4 pts	+0.3
Personal Income[1]						
Worst	Nfld.	25%	-6.4	Missis.	-33%	+2.2
Best	Ont.	+10%	-0.4	N.H.	+36%	+1.2
GDP per Capita						
Worst	Nfld.	-37%	-6.4	W. Virg.	-31%	+0.6
Best	Alta.	+16%	+2.1	Conn.	+32%	-5.8
Largest Flows						
Outward	Nfld.	-	-6.4	N.Y.	-	-8.4
Inward	BC	-	+5.9	Nevada	-	+29.0

Note: [1]Average household income for US.

Source: Author's calculations from Statistics Canada, *Annual Demographic Statistics, Provincial Economic Accounts*, and *Canadian Economic Observer*, and the *US Statistical Abstract*.

flows than any Canadian province. For example, high-income New York State lost more of its population to outward migration between 1990 and 1997 than did impoverished Newfoundland; this mostly reflects the move of affluent families to out-of-state suburban areas. Meanwhile, fast-growing Nevada experienced a larger inflow of population than did Canada's fastest-growing province, British Columbia. These results are tinged by the fact that the average US state represents a smaller segment of the overall national population than does the average Canadian province, and hence migration rates are not strictly comparable between the two countries (as discussed in note 17); on average, US states experienced an absolute inward or outward migration equal to 4.7 percent of its starting population during the 1990-97 period, versus 2.6 percent for the average Canadian province. Nevertheless, at a minimum it seems safe to conclude that Canadians in general (and Newfoundlanders in particular) have demonstrated themselves at least as able and willing to relocate in response to economic circumstances (positive or negative) as Americans.

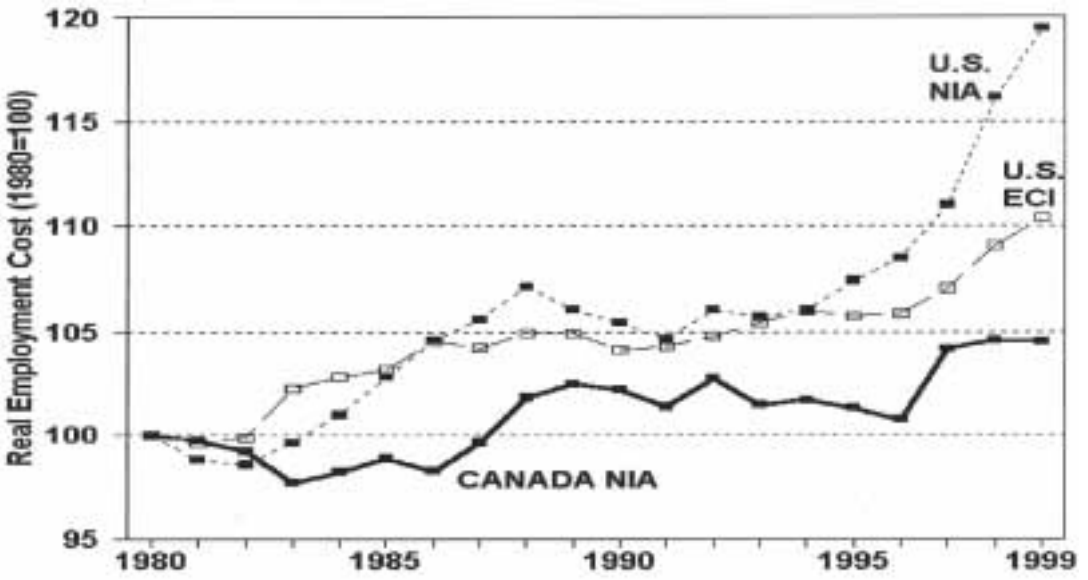
One final potential dimension of labour market flexibility in Canada and the US is illustrated in Figure 4, which portrays the evolution of real weekly earnings (deflated by changes in consumer prices) in the two countries since 1983. Real earnings declined in both countries during the 1980s, and have increased in both countries in the 1990s. The degree of volatility during both periods was higher in

FIGURE 4
Real Wage Trends: Canada and United States, 1983-1998 (1983 = 100)

the US: earnings there fell faster in the 1980s, and increased faster in the 1990s (especially in the period since 1997, when the US unemployment rate fell below 5 percent). On first glance, this might imply a greater degree of market responsiveness on the part of wages in the US. It is misleading, however, to look only at cash earnings as a measure of labour market compensation; non-wage labour costs (including payroll taxes and benefits such as employer-provided health insurance) are an important and volatile component of overall labour costs.[19]

Therefore, Figure 5 illustrates the trend since 1983 in the *total* employment cost index (labelled ECI, for private sector employers only) in the US, after inflation. Total employment costs, in real terms, have increased slowly and steadily in the US over the past two decades, showing little sensitivity to labour market conditions (although the apparent acceleration of employment costs since 1998 may reflect the increasingly tight conditions in the US labour market). Unfortunately, an equivalent index of total employment costs is not available for Canada. A rough equivalent can be constructed by calculating a measure of total labour income (from national income accounts data, including the cost of non-wage benefits but not counting payroll taxes) per employed worker, deflated to constant dollar terms. As indicated in Figure 5, this measure (labelled NIA) rose in Canada in the late 1980s, but has remained largely stagnant during the 1990s. For consistency, Figure 5 also illustrates the same NIA-derived measure for the US; it increases more rapidly than the US employment cost index.[20] If anything, these results may imply a higher degree of market responsiveness on the part of total labour compensation in Canada: employment costs grew when Canadian labour markets were tight in the late 1980s, but did not increase during the higher unemployment period of the 1990s.

FIGURE 5
Employment Cost Trends: Canada and United States, 1980-1999 (1980 = 100)



To test the sensitivity of labour incomes to labour market conditions, a series of regressions were performed on the NIA-derived measures of real labour income for Canada and the US. These regressions also include a measure of average real labour productivity,[21] to capture the extent to which higher incomes are reflecting productivity growth (as is implied in the standard competitive model). Regressions were performed on both the levels of real labour compensation, and their rates of annual change (both measured in natural log terms); the results, which are somewhat inconclusive, are summarized in Table 8. In both sets of regressions, all coefficients take their expected signs and are generally significant (with the exception of the coefficient on unemployment in the first-difference regressions, which is only significant at the 10 percent level for Canada and not at all for the US). In level terms, Canadian labour incomes are more sensitive to productivity growth than in the US, but the coefficient on the unemployment rate is smaller. In first-difference terms, the results are reversed: the coefficient on productivity is higher in the US, while the coefficient on unemployment is higher in Canada. Both regressions fit the US data better than for Canada, perhaps indicating a greater influence of structural or institutional factors on labour incomes in Canada. The average standard deviation of the annual proportional change in this measure of real labour income is somewhat higher in the US than in Canada (1.69 versus 1.38 over the 1976-98 period), which may also indicate a higher level of flexibility in US labour incomes. But no general case can be made on the basis of this evidence that US labour incomes are consistently more sensitive to "market fundamentals" (productivity and excess supply) than are Canadian incomes.

TABLE 8
Regressions of Labour Income on Productivity and Unemployment: Canada and United States, 1976-1998

	Levels Regressions	*First-Difference Regressions*
Canada		
Constant	2.959	0.0730
Coefficient on Productivity	0.149 (2.675)	0.813 (3.062)
Coefficient on Unemployment	-0.0715 (3.110)	-0.0363 (1.889)
Adj. R^2	0.405	0.335
United States		
Constant	2.583	0.0114
Coefficient on Productivity	0.129 (2.105)	1.120 (3.939)
Coefficient on Unemployment	-0.1200 (4.124)	-0.0120 (0.806)
Adj. R^2	0.746	0.494

Note: All data stated in natural log terms; t-statistics in parentheses; annual data.

Source: Author's calculations from Statistics Canada, *Canadian Economic Observer,* and US Council of Economic Advisors, *Economic Report of the President.*

FLEXIBILITY, DEREGULATION AND DISCIPLINE

The preceding data suggest quite strongly that Canada's labour market is not generally inflexible. Indeed, the degree of volatility in employment patterns, labour force participation, work arrangements, geographic mobility, and employment costs consistently matches or exceeds the corresponding patterns in the US. Wages may be slightly less flexible, but are market-sensitive nonetheless. Far from being an insulated oasis of calm in a world of turmoil, Canada's labour market has reflected a rapid pace of change, indeed. Canadian workers have responded to the difficult circumstances they face with new forms of flexibility: working in different industries, under different forms of employment contract, and in different parts of the country. All too often in the 1990s, Canadians have simply withdrawn from the world of work altogether. If "flexibility" is indeed interpreted as an ability to change and to adapt to change, it is hard to argue that Canada's labour market is inflexible, or that our poor performance relative to the US in the 1990s is attributable to a shortage of flexibility.

Nevertheless, there is surely something to the one-dimensional labour market taxonomy that was illustrated in Figure 1 — a taxonomy that places the US on one end, continental Europe on the other, and Canada somewhere in between. This continuum may indeed illustrate some real pattern of structural variability in labour markets. It is just that this

pattern has been misnamed with the deliberately inoffensive and seemingly neutral term "flexibility." What are the real differences that distinguish Canada's labour market from that of the US, on one side, and from those of Europe on the other? The US labour market does indeed stand out from those of other industrial economies, but not necessarily in terms of its ability to "adapt to change." Rather, there may be other aspects to the functioning of the US labour market that stand out as unique.

Consider the words of Alan Greenspan, Chairman of the US Federal Reserve Board, who described the labour-market features that contributed to the success of the US economy in the late 1990s as follows:

> Increases in hourly compensation ... have continued to fall far short of what they would have been had historical relationships between compensation gains and the degree of labor market tightness held.... As I see it, heightened job insecurity explains a significant part of the restraint on compensation and the consequent muted price inflation.... The continued reluctance of workers to leave their jobs to seek other employment as the labor market has tightened provides further evidence of such concern, as does the tendency toward longer labor union contracts.... The low level of work stoppages of recent years also attests to concern about job security.... The continued decline in the share of the private workforce in labor unions has likely made wages more responsive to market forces.... Owing in part to the subdued behavior of wages, profits and rates of return on capital have risen to high levels (Greenspan 1997).

Some of the features highlighted by Greenspan reflect precisely a *lack* of flexibility in the labour market: a lack of response of compensation to tight labour markets, a reluctance of workers to leave their jobs, and the prevalence of long-term contracts which lock in employment arrangements for six or more years at a time. And so Greenspan's portrayal of the unique features of the US model suggests that something other than flexibility is the key ingredient at work — or at least that "flexibility" is being interpreted once again from an unbalanced, pro-employer perspective. It is, rather, a high degree of labour market *discipline* that seems to be the operative force. US workers remain insecure despite a relatively low unemployment rate, and hence compensation gains — until 1998, anyway — are muted. A consequent redistribution of income from labour to capital is part of the equation. In this environment, the monetary authority is willing to allow the unemployment rate to fall below previously acceptable levels, without fear of shrinking profit margins and accelerating inflation. Greenspan's story is more about *fear* than it is about flexibility, and hence this famous quotation has come to be known as Greenspan's "fear factor" testimony, in which he concisely described the importance of labour market discipline for his conduct of monetary policy.

Strictly speaking, the term "flexibility" need not necessarily imply any of these seemingly punitive features: a fear of economic deprivation, even in the context of a strong labour market, which leads workers to moderate their wage demands and limit their labour mobility. In applied practice, however, most proposals for flexibility-enhancing policy reforms have tended to promote something like this model of a more disciplined labour market: less social insurance and income supports available to fewer workers, less ability for unions and wage regulations to influence incomes, and a reduced degree of upward wage pressure corresponding to any given level of unemployment. With more reliance on private market forces as the dominant determinants of employment and compensation, this is also a highly *deregulated* form of labour market. In other words, the paradigm of labour market flexibility in practice can more appropriately be considered a model of labour market deregulation, in various forms.[22] Deregulation represents a shift away from attempts to deliberately regulate employment and compensation outcomes through policy interventions by governments or other non-market institutions and

agencies. Since these interventions were typically motivated by a desire to increase wages, reduce poverty, and enhance the economic security of workers, this interventionist approach might also be labelled as a "solidaristic" labour market strategy.

With the focus placed more appropriately on the varying intensity of labour market regulation, rather than on the revealed degree of flexibility (purely defined), a quantitative comparison of labour market structures and institutions in different OECD economies can be conducted as follows. Consider the following seven measures, each of which captures a dimension of efforts by governments or by non-governmental institutions (such as trade unions) to deliberately regulate particular labour market outcomes (such as wages and income security). Unless noted, all variables are measured as of 1995, for a sample of 17 OECD countries.[23]

- Unemployment insurance coverage (as percent of unemployed).
- Trade union membership (as percent of employed).
- Public labour market program spending (as percent of GDP).
- Employee and employer payroll taxes (as percent of average wages).
- An index of legislated protections against employee dismissal (measured as of the late 1990s, and constructed and reported in OECD 1999).
- Incidence of poverty (percent of population below OECD cut-off).[24]
- Total government program spending (as percent of GDP).

A labour market can be considered relatively deregulated, according to this approach, if unemployment insurance eligibility rules are relatively tight, if unions and collective bargaining are relatively less important in wage determination, if interventionist labour market programs are relatively modest, if payroll taxes are low, if protections against dismissal are weak, if anti-poverty income supports are minimal, and if government program spending (which can be thought of as providing a form of "socialized" consumption which supplements the consumption possibilities generated through private incomes, but which is not contingent on an individual's employment status) is low. In this type of labour market, therefore, the terms and conditions of employment will be determined primarily through private contracts between employers and individual workers, and hence the incomes and economic prospects of workers will depend primarily on what they are able to earn in that private, competitive labour market (with relatively less supplementation from various forms of income supports or social consumption).

There are some ways in which a deregulated labour market might be "flexible" in the true sense of the word: for example, with less intrusive legislation governing issues such as employment security and notice of layoff, downsizing employers can clearly shed excess labour more quickly. But there are also aspects of a deregulated labour market which clearly *inhibit* flexibility in the common-sense understanding of the word. For example, in a system in which important health and pension benefits are provided largely or solely through private contracts between employers and employees, these programs are likely to be imperfectly portable (if at all), and this can constitute a significant barrier to workers' mobility between employers. As in the vision of Alan Greenspan, therefore, deregulation and flexibility are not at all synonymous.

A numerical index of labour market regulation can be constructed as follows. Consistent data on each of these seven dimensions of the degree of labour market regulation are gathered for each of the 17 OECD countries. Each data series is oriented so that a higher score reflects a higher degree of

regulation. Each variable is normalized such that the unweighted mean score for the sample equals zero (and hence a positive score implies a relatively intense form of regulation, and a negative score a relatively passive one). Each variable is further normalized such that the standard deviation of each series is a constant.[25] Finally, an index of labour market regulation is calculated by averaging each country's scores over the seven indices considered.

Country-by-country scores in the seven component variables and on the overall constructed index of regulation are provided in Table 9.[26] The positioning of selected countries according to this index is illustrated in Figure 6. This index of regulation does indeed roughly correspond to the commonly-expressed scale of "flexibility" which was portrayed simplistically in Figure 1. The US places far at one extreme of the scale, with what is by far the most deregulated (or "disciplined") labour market in the OECD. Several European countries (particularly the Scandinavian countries) rank at the other extreme, with tightly regulated (or "solidaristic") labour markets. The continental

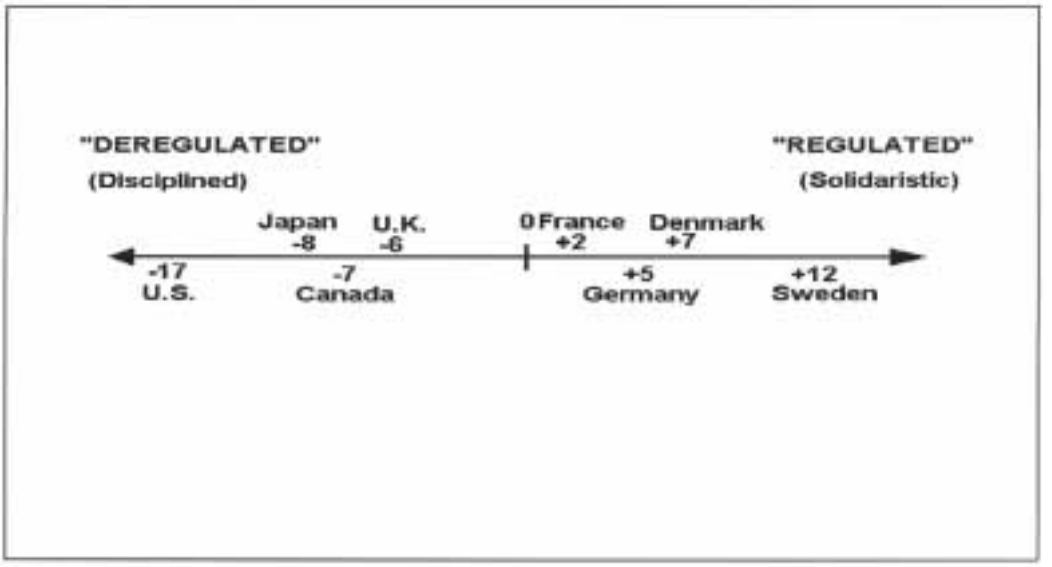
TABLE 9
Indices of Labour Market Regulation: Selected OECD Countries, 1995

	UI Coverage (% Unempl'd)	*TU Penetration (% employed)*	*Labour Market Programs (% GDP)*	*Payroll Taxes (% Average Wages)*	*Dismissal Protection (OECD Index)*[1]	*Poverty (% Pop'n below Minimum)*	*Gov't Program Spending (% GDP)*	*Index of Labour Market Regulation*
Canada	67	37	1.9	11	0.9	11.7	40.9	-6.9
OECD[2]	89	40	2.9	23	1.9	9.3	37.5	-
US	36	14	0.5	14	0.2	19.1	30.8	-16.6
Japan	39	24	0.5	14	2.7	11.8	35.0	-7.7
Germany	87	29	3.8	34	2.8	5.9	46.6	2.2
France	76	9	3.1	42	2.3	7.5	50.8	4.5
Italy	na[1]	44	2.0	39	2.8	6.5	41.8	3.7
UK	94	33	1.8	17	0.8	13.5	41.4	-6.2
Australia	101	35	2.1	2	1.0	12.9	33.9	-7.9
Belgium	138	52	4.2	36	1.5	5.5	45.1	6.4
Denmark	100	80	6.6	10	1.6	7.5	55.8	6.7
Finland	108	79	5.5	26	2.1	6.2	56.8	9.5
Ireland	149	49	4.3	16	1.6	11.1	33.8	0.4
Netherlands	125	26	4.8	37	3.1	6.7	46.4	7.4
NZ	127	24	1.9	0	1.7	9.2	37.2	-4.5
Norway	94	58	2.1	18	2.4	6.6	48.3	2.6
Spain	40	19	2.8	29	2.6	10.4	40.2	-2.9
Sweden	109	91	4.5	29	2.8	6.7	62.9	11.8

Notes: [1]Index calculated for "late 1990s."
[2]Unweighted averages.
[3]Data unavailable; regulation index calculated on basis of five components for Italy.

Source: Author's calculations from *OECD Economic Outlook*; OECD *Tax and Benefit Position of Workers*, OECD *Country Survey: Ireland* and United Nations Development Program, *Human Development Report*.

FIGURE 6
Regulation in an International Context: Selected Scores (7-component Index)

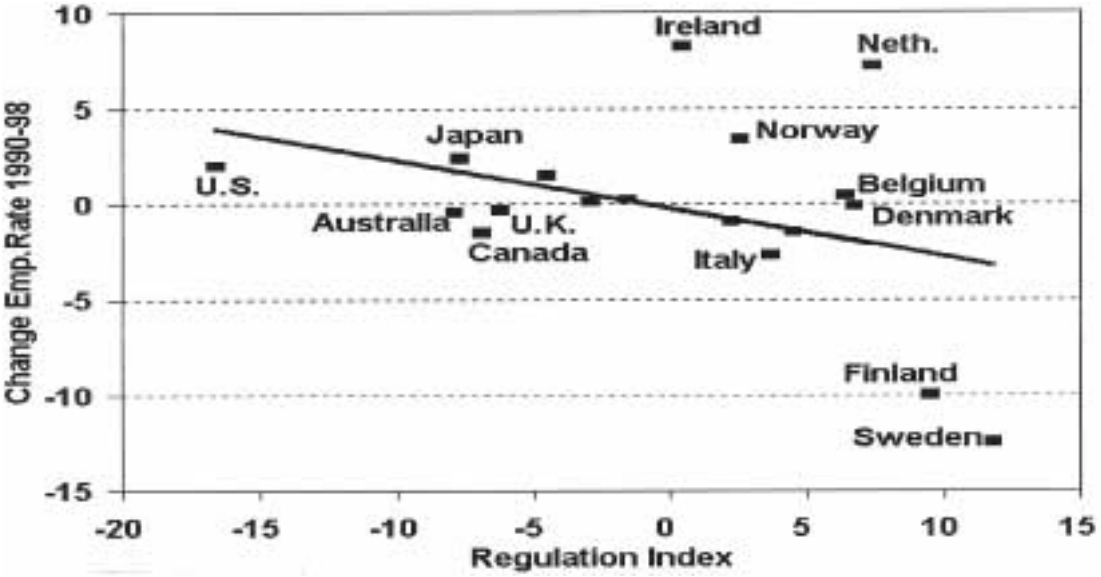


European countries demonstrate more moderate degrees of regulation. Canada scores somewhere between the US and Europe; although by international standards, Canada's labour market is no doubt relatively *deregulated*. In other words, while Canada's labour market is more regulated than that of the US (characterized by more generous social programs, stronger unions, and less poverty),[27] by the standards of the industrialized world as a whole Canada's labour market is still relatively free-wheeling.

REGULATION, DEMAND AND EMPLOYMENT

The regulation index constructed in Table 9 and depicted in Figure 6 better accords with the international classification which implicitly underlies most presentations of the labour market flexibility paradigm — a policy perspective that could perhaps be more accurately termed the "labour market deregulation paradigm." While this taxonomy seems to summarize international differences in the intensity of interventionist labour market regulations, it does not shed much light on international differences in labour market performance during the 1990s. There is no significant correlation between individual country scores on the regulation index, and the change in their respective employment rates during the 1990s. As illustrated in Figure 7, some countries with deregulated labour markets enjoyed relatively strong employment outcomes in the 1990s (including the US and Japan), but so did several countries with relatively regulated labour markets (including Ireland, the Netherlands, and Norway). Similarly, some countries with deregulated labour markets experienced declining employment rates in the 1990s (including Canada, Australia, and the UK), as did other countries with regulated labour markets (such as Italy and Germany). A regression of the change in employment rate on the index of labour market regulation for the 17 OECD countries considered produces a negative but statistically

FIGURE 7
Labour Market Regulation and Employment: Selected OECD Countries, 1990s



insignificant coefficient; if two outlier countries, Sweden and Finland, are excluded,[28] a regression of employment rate changes on labour market regulation produces a *positive* (but near-zero) coefficient.

The one-dimensional model of comparative labour market performance that informs the argument for deregulation needs to be supplemented, therefore, with additional information. In the Canadian context, it was suggested earlier that the uniquely difficult aggregate demand circumstances which were experienced during most of the 1990s might have been important in explaining the emergence of an "employment gap" between Canada and the US — a gap that did not reveal itself until the 1990s (long after the interventionist labour market reforms of the 1970s). Perhaps the consideration of aggregate demand circumstances in various OECD countries would help to provide a better explanation of international differences in employment performance.

A variety of indicators of aggregate demand conditions are reported in Table 10 for the same set of OECD countries. The table lists two indicators of monetary conditions (average real interest rates for short-term and long-run instruments), two indicators of fiscal policy (the change in all-government program spending as a share of GDP between 1990 and 1998, and the change in total government revenues as a share of GDP),[29] and two general indicators of macroeconomic performance (the average gap between actual and potential output, and the average annual growth in real per capita GDP). Table 10 indicates the uniquely negative aggregate demand conditions experienced by Canada in the 1990s. On both of the two overall performance indicators, Canada ranks second-worst among the OECD countries included in the table: Canada's average output gap during this period was exceeded only by Finland's, and Canada's rate of real per capita GDP growth was faster only than Switzerland's. And according to each of the policy

TABLE 10
Aggregate Demand Indicators: Selected OECD Countries, 1990-1998

	Avg. Real Short-run Int. Rate (%)	*Avg. Real Long-run Int. Rate (%)*	*Change Gov. Pgm. Spending (%GDP)*	*Change Gov. Tax Revenue (%GDP)*	*Average Output Gap[1] (% GDP)*	*Growth Real Per Cap. GDP (% per yr.)*
Canada	4.2	6.7	-3.8	1.4	-2.0	0.5
OECD	4.2	5.3	-0.2	1.3	-0.4	1.9
US	1.8	4.2	-2.8	1.6	-0.2	2.2
Japan	1.7	3.2	5.2	-3.4	0.1	1.1
Germany	3.3	4.7	2.4	3.8	0.0	na
France	4.8	5.9	2.3	1.9	-1.2	0.6
Italy	5.4	6.9	-3.2	3.8	-1.2	1.3
UK	4.3	5.0	-2.2	0.0	-0.2	1.6
Australia	4.9	7.0	-0.3	0.9	-0.5	2.3
Austria	3.6	5.0	0.7	1.3	0.1	1.5
Belgium	4.1	5.8	-0.1	1.9	-0.9	1.6
Denmark	5.3	6.5	0.8	1.4	-1.5	2.3
Finland	5.5	7.6	0.6	0.1	-3.8	1.1
Ireland	5.9	6.2	-3.0	-1.8	0.1	5.5
Netherlands	3.5	5.0	-6.0	-0.9	0.4	2.0
NZ	6.2	6.6	-5.3	-2.9	-1.4	0.7
Norway	5.0	6.0	-5.0	-2.0	-1.3	3.1
Portugal	4.9	na	7.6	5.8	0.2	3.0
Spain	5.3	6.3	-1.3	1.5	0.4	2.0
Sweden	4.7	5.9	-2.7	-2.0	-1.7	0.6
Switzerland	2.1	2.6	na	na	-1.3	-0.1

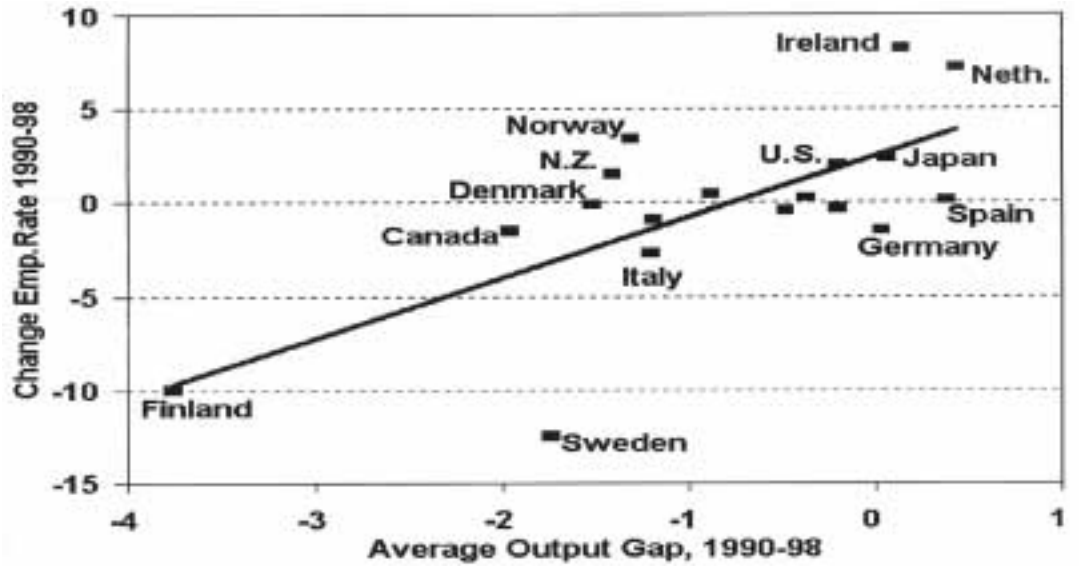
Note: [1]Difference between actual output and potential as share of potential output.
Source: Author's calculations from *OECD Economic Outlook*, OECD *National Income Accounts.*

indicators contained in Table 10, Canada's macroeconomic policy stance was more contractionary than that experienced in the OECD as a whole. In particular, the decline in government program spending was the fourth largest among the 20 countries included in the table.

The continental European economies also experienced a period of sustained contractionary macroeconomic conditions during the 1990s. The transition to a common currency regime obviously impacted on the macroeconomic environment faced by many of these countries, requiring tighter monetary and fiscal policy than would otherwise have been expected. As expected, the US enjoyed relatively strong aggregate demand conditions during the 1990s. In particular, next to Japan, the US experienced by far the most expansionary monetary policy regime in the whole OECD.

It turns out that the state of aggregate demand conditions can explain far more of the international

FIGURE 8
Aggregate Demand Conditions and Employment: Selected OECD Countries, 1990s



differences in employment performance during the 1990s, than can cross-country differences in regulatory structures and institutions. As indicated in Figure 8, there is a relatively strong positive relationship between the state of aggregate demand (symbolized here by the average output gap during the 1990-98 period) and the change in a country's employment rate. A regression of the change in the employment rate on the average output gap for the same 17 countries considered earlier produces a significant positive coefficient — one that is not dependent on the inclusion of the two outlying countries (Sweden and Finland). The output gap alone explains almost 50 percent of the variation in employment rate performance, while differences in labour market regulation explain less than 15 percent (and without producing a significant coefficient on the regulation index). Aggregate demand obviously does not tell the whole story of an economy's employment performance — for example, the Netherlands and Germany experienced roughly equivalent macroeconomic conditions during the 1990s, but the Netherlands generated a large increase in the employment rate while Germany experienced a decline — but it tells a lot. In particular, aggregate demand conditions seem considerably and consistently more important as an explanation of comparative labour market outcomes across countries in the 1990s than do cross-national differences in labour market institutions.

THINKING IN TWO DIMENSIONS

Canada experienced relatively negative labour market outcomes in the 1990s, even though it demonstrates a relatively deregulated labour market. Canada's macroeconomic circumstances during that decade, however, were uniquely poor. In terms of Canada-US comparisons, aggregate demand conditions were far more different across the two countries in the 1990s than were regulatory structures.

In an international context, Canada is relatively similar to the US in labour market regulation (both countries have relatively deregulated labour markets), but was strongly dissimilar in terms of macroeconomic conditions through most of the decade (US conditions were expansionary, while Canada's were contractionary). At a bare minimum, then, this would suggest that an analysis of aggregate demand conditions should be incorporated into the core of international labour market comparisons, which in recent years have focused rather unidimensionally on comparative regulatory structures.

One possible conceptual model for considering these two sources of difference in international labour market performance is presented in Table 11.[30] Countries can experience strong or weak aggregate demand conditions, in the context of a regulated or deregulated labour market. This generates a range of potential outcomes, as evidenced in the variety of labour market experiences that were visible across the OECD economies in the 1990s. Demand conditions are linked fairly predictably to employment outcomes. The intensity of labour market regulation, however, does not seem to be a reliable predictor of employment performance; the impact of varying degrees of labour market regulation may be visible instead in variables such as income distribution or the incidence of poverty. A relatively deregulated labour market will tend to be marked by greater degrees of inequality and poverty in income distribution; this can occur within the context of relatively strong labour markets (such as the US enjoyed through most of the decade) or relatively weak ones (such as those experienced in Canada). More aggressively regulated labour markets will experience less extreme patterns of income distribution; once again, this can occur against a backdrop of weaker or stronger labour markets, with, say, Norway and Sweden providing polar cases of this range of possibilities in the 1990s.

There were not many countries that qualified for inclusion in the lower-right quadrant of Table 11 (where strong demand conditions are combined with an interventionist regulatory stance) during the 1990s, but there are some: Norway, the Netherlands, and to a lesser extent Ireland, Denmark, and Austria. At any rate, the possibility of combining intense labour market regulation with strong demand conditions in order to produce the appealing combination of employment opportunity and social equality clearly cannot be ruled out of hand entirely. Given that many of the countries with relatively regulated labour markets experienced sluggish macroeconomic conditions through much of the decade

TABLE 11
Thinking in Two Dimensions: Regulation, Demand and Labour Market Outcomes

Intensity of Regulation ≥ Intensity of Demand ∨	Weaker Regulation	Stronger Regulation
Weaker Demand	Poor employment growth, poor distributional outcomes (Canada?)	Poor employment growth, better distributional outcomes (Sweden?)
Stronger Demand	Strong employment growth, poor distributional outcomes (US?)	Strong employment growth, better distributional outcomes (Norway?)

largely because of an historic one-time event — the transition to a common European currency — this "best of both worlds" combination may prove to be more feasible in coming years. In many ways, meanwhile, Canada experienced the "worst of both worlds" during the 1990s: weak macroeconomic conditions combined with a movement away from interventionist labour and social policies. This combination produced both falling employment and rising inequality.

One central difficulty with the model sketched out in Table 11 is that the two axes of the grid are clearly not mutually independent. The nature of labour market regulation will have implications for macroeconomic functioning, through a range of different causal mechanisms. The direction of these effects is complex and indeterminate, however. There are ways in which labour market deregulation might strengthen aggregate demand conditions and hence generate employment, and there are channels through which it might weaken demand-side conditions. The net outcome is unclear. The case is commonly and implicitly made that since one large country with a deregulated labour market (namely, the US) enjoyed relatively strong demand conditions during the better part of one decade, there must be a positive and monotonic relationship between labour market deregulation and employment growth. A review of the broader international experience, however, reveals that this conclusion is clearly premature.

Some of the competing channels of causation that link the intensity of labour market regulation to the intensity of aggregate demand conditions are summarized in Table 12.[31] One key outcome of labour market deregulation is likely to be the reduction of wage pressures (holding other factors, such as the level of unemployment or productivity growth, constant). Lower wages may stimulate more private investment spending and export demand (thanks to enhanced profitability and cost competitiveness, respectively); but they will tend to reduce domestic

TABLE 12
Deregulation and Demand: Interdependence and Indeterminacy

Deregulation Initiative	*Likely Effect*	*Impact on Demand and Employment*
Restrict union activity Reduce minimum wages Erode pay equity provisions	Reduce wages	Increase private investment Increase export demand Decrease private consumption
Reduce income support and unemployment insurance	Reduce incomes for non-employed	Decrease private consumption
	Increase "incentive" to work; Reduce wages	Increase private investment Decrease private consumption
	Reduce labour force participation	Reduce unemployment rate Decrease private consumption
	Lower payroll taxes	Increase private consumption Decrease public consumption Substitute labour for capital
Generally restrain wage pressures	"Permits" more monetary easing	Increase demand of all forms

consumption spending by workers. Scaling back the generosity of income-support programs will have a variety of effects. Consumption spending by those who relied on such programs will decline. Many marginal workers may leave the labour force altogether; while this is "useful" in reducing the official unemployment rate, it probably contributes further to the decline in personal incomes and hence consumption. To the extent that generous income support programs exert a positive influence on wage levels, their scaling back will reduce wage pressures (with the same indeterminate demand effects noted above). If savings from the reduction of income-security programs are passed on in the form of tax reductions (such as lower premiums for unemployment insurance), then the personal spending of employed workers might increase, while other public programs (which may have been funded in part from payroll taxes, as is the case in Canada) may be further cut back. Lower payroll taxes may encourage the substitution of labour for capital by private employers, thus creating some new jobs (although possibly with negative implications for productivity).

Perhaps the most powerful link between labour market regulation and aggregate demand conditions is one that operates through a policy response, rather than through an automatic market mechanism. If the central bank conducts monetary policy so as to deliberately restrain the growth of wages and other employment costs (on the assumption that these costs are the core driving force behind inflation), then monetary policy may shift to a more accommodating stance in the wake of labour market deregulation. The remarks of Alan Greenspan quoted above suggest that this has clearly occurred in the US. To the extent that easy monetary policy was important to the US expansion of the 1990s (and this extent seems considerable), and to the extent that monetary easing was "permitted" by the fact that deregulated US labour markets showed little signs of upward wage pressure (at least until 1998) even at very low unemployment rates, then labour market deregulation has clearly had powerful stimulative effects on demand and employment in the US. This link between monetary policy and labour market structures in the US probably sheds more light on the apparent success of the US economy this decade, than does the common claim that the US labour market is more "flexible" and hence somehow more "efficient." US monetary authorities were willing to maintain an easy policy stance as long as American workers were sufficiently disciplined and wage growth was constrained, even as labour markets tightened. This is a rather different story, indeed, from the implicit assumption that a labour market free of government interference is one that attains a "better match" between supply and demand.[32]

Conclusion

The main themes of this paper can be restated as follows. Canada's labour market performed badly in the 1990s, compared both to the set of industrialized countries and to its main comparator, the United States. This has prompted numerous calls for structural reforms to labour markets, in hopes of making Canada's labour market more "flexible" and reducing long-run unemployment. Much evidence suggests, however, that Canada's labour market is not "inflexible" in the common sense of being able to change and to adapt to change. Indeed, according to many indicators Canada's labour market has demonstrated a pace and extent of change that matches or exceeds that experienced in the US. Where Canada differs from the US in the sense implied by advocates of structural labour market reforms is not in its degree of "flexibility," so much as in its degree of *regulation*. Canada's labour market is indeed more regulated than that of the US, although by international standards Canada's labour market is relatively deregulated. There is no correlation, however, between the intensity of labour market regulation and the employment performance of different countries during the 1990s; aggregate demand conditions are a more powerful predictor of employment performance than are comparative regulatory structures. Finally, the paper proposes a two-dimensional

framework for comparing labour market performance across countries, in which both regulatory and macroeconomic factors are taken into consideration.

NOTES

The author thanks Tim Sargent, Andrew Sharpe, two anonymous referees, and members of the Working Group on Labour Market Regulation and Deregulation for helpful comments.

[1]See OECD (1996) for specific policy applications of this view in the Canadian context.

[2]Interestingly, and not coincidentally, advocates of pro-flexibility labour market reforms are typically more concerned with the failure of wages to fall during times of excess supply, than with the failure of wages to *rise* when demand conditions are stronger. For example, Brodsky (1994) defines one characteristic of flexibility as the ability to avoid wage increases that are greater than productivity increases; he does not seem concerned with the possibility that wage increases might lag behind productivity increases. This rather one-sided view of flexibility is not uncommon in statements of the flexibility paradigm.

[3]In the Canada-US case, these definitional differences added an estimated 0.8 percentage points to the apparent gap in unemployment rates between the two countries in 1997, hence explaining almost one-fifth of the difference in official (unadjusted) rates; see Sunter (1998) for details.

[4]Since the OECD utilizes a narrower concept of working-age population than Statistics Canada, its estimates of the participation rate and the employment rate are both significantly higher than are reported by Statistics Canada (according to whom Canada's employment rate was 60.6 percent in 1999). The OECD data are based on standardized definitions applied across member countries, and hence they (not the Statistics Canada data) are utilized in Table 1.

[5]This significant drop in labour force participation in Canada is key to reconciling the fact that Canada's unemployment rate increased by *less* than the OECD average during the 1990s, with the fact that Canada's employment rate declined by much *more* than the OECD average.

[6]The measure of real wages reported in Table 1 is the growth of compensation per employee in the business sector only, deflated by the growth of consumer prices. To the extent that wage restraint in public sector industries played an important role in restraining overall wage growth in Canada during the 1990s, this measure will overstate Canada's wage performance.

[7]An especially comprehensive collection of research on this subject is provided in Riddell and Sharpe (1998).

[8]For representative presentations of this argument see *The Globe and Mail* (1997) and Cooper (1999).

[9]See, for example, Tal (1999).

[10]The levels regressions compare the natural log of employment to the natural log of GDP; the first difference regressions compare changes in the two variables.

[11]The relative sensitivity of Canadian labour force participation is consistent with the findings of Elmeskov and Pichelman (1993).

[12]Like part-time employment, self-employment has also declined in relative terms in Canada since 1997 as the ability of workers to find regular paid work in Canada's labour market has substantially improved.

[13]Definitional issues once again complicate the comparison between Canada and the US as illustrated in Figure 6. Canadian statistics use a somewhat broader definition of self-employment (which includes incorporated working owners) than is the case in the US, and this accounts for approximately one-third of the difference between the apparent self-employment rates in the two countries. See Manser and Picot (1998).

[14]Almost 90 percent of the growth in self-employment in Canada during the 1990s consisted of self-employed individuals working on their own account (that is, with no employees). The average income of own-account self-employed in 1995 (*excluding* those with negative earnings) was just $22,900, roughly two-thirds the average earnings of paid employees. See Statistics Canada (1997, pp. 10 and 25).

[15]In neither country can the decline in the proportion of unemployed job quitters be attributed to a decline in the duration of unemployment; if the average duration of unemployment was reduced, then a given incidence of voluntary job-quitting would produce a lower average incidence of unemployed quits (simply because each individual who quit their job would not have to wait as long

before starting another one). In the US, the duration of unemployment was no lower in 1999 than in 1976, yet the incidence of unemployed quits fell by almost half during the same time; in Canada, the duration of unemployment increased through most of the period covered.

[16]See Coulombe (1997) for a recent version of this argument.

[17]The data summarized in Table 7 are not bilateral flows from the "worst" to the "best" jurisdiction in each instance; they indicate, rather, the total net outward flow (to all domestic destinations) from the "worst" jurisdiction, and the total net inward flow (again from all domestic sources) to the "best." It should be noted that by virtue of the fact that Canada is divided into only ten provincial jurisdictions, while the US is divided into 50 states, a given degree of *regional* mobility will show up as less *interprovincial* migration in Canada than will be the case with interstate migration in the US, simply because a given relocation has a greater probability of crossing a jurisdictional boundary in the US. For this reason, the data in Table 7 may understate the true relative geographic mobility of Canadians.

[18]Table 7 reports data on net interprovincial and interstate migration only. Including international immigration, Ontario experienced a net inward migration during the period.

[19]Depending on design, payroll taxes in particular can demonstrate a perverse cyclical pattern; for example, Canada's unemployment insurance premiums rose steeply during the early 1990s to help fund the escalating recession-induced costs of the program.

[20]This may be due to the larger-than-average income gains enjoyed by US managers and other professionals whose salaries are not considered in the calculation of the ECI.

[21]The measure chosen is real GDP per employed worker; since the labour income measure is also stated in per-employee terms, this approach abstracts from the need to estimate hours worked. According to this measure, real productivity has grown faster in the US than in Canada during the time period covered, although this is largely due to a growing gap between the two countries in average hours of work.

[22]Some more careful presentations of the flexibility paradigm have tried to adopt more "neutral" characterizations of the term. See Brodsky (1994) on the evolution of competing definitions of labour market "flexibility." Standing (1997) denies that the flexibility paradigm reflects an agenda for deregulation, arguing instead that powerful mechanisms of "market regulation" serve to control labour market outcomes even after the retrenchment of activist public policy; this paper, however, adopts the view that greater reliance on private market forces is indeed equivalent to a process of deregulation, conventionally defined.

[23]For three of the OECD countries listed in Table 1, data on these regulatory indices were unavailable: Austria, Portugal, and Switzerland. The labour market regulation index is constructed for 1995 which is approximately the mid-point of the period covered by the employment data portrayed in Table 1; we assume that the impact of these labour market institutions on labour market functioning is felt in a gradual, long-term manner.

[24]It could be argued that the incidence of poverty is more an "outcome" variable than it is an exogenous "policy" variable; a preferable approach might be to include some measure of the generosity of income supplement and security programs. These data are not available on a consistent OECD-wide basis, however. At any rate, a high incidence of poverty certainly attests to the absence of effective income-security programs, and hence to a weaker degree of labour market regulation. The reverse conclusion cannot necessarily be maintained — that is, that the absence of poverty reflects a high degree of regulation — although this is likely to be the case in practice. The author is indebted to Tim Sargent for pointing out this distinction.

[25]This second normalization (adjusting each series so that its standard deviation equals ten) is necessary to ensure that each variable carries equal weight in the calculation of the final index of regulation; otherwise, variables that demonstrated a greater degree of variability about the mean would be effectively weighted more heavily.

[26]Buchele and Christiansen (1999) utilize a very different methodology, relying on factor analysis techniques, to construct a similar index of labour market structures in OECD countries; it is interesting to note that the relative

rankings produced by the two approaches are roughly similar, suggesting a certain robustness.

[27]For all of these reasons, the Canadian labour market may consequently demonstrate less wage flexibility than in the US, which presumably was a large part of the motivation for these wage-regulating initiatives.

[28]Finland and Sweden both experienced severe exchange rate and interest rate shocks early in the period covered by this analysis, as a result of the breakdown of the European exchange rate mechanism; it seems imprudent to attach too much broader significance to the poor employment performance that followed these shocks, since that performance is at least somewhat unrelated to the highly regulated labour market structures of these two economies.

[29]Changes in taxes and program spending are reported separately because of the possibility that a given change in each may have differing aggregate demand effects. Government debt-service payments are not reported because of what are generally considered to be their weak demand-side effects.

[30]Palley (1998) suggests a similar approach.

[31]Any initial impacts of deregulation on employment, positive or negative, are likely to be amplified through subsequent macroeconomic repercussions. In other words, a policy initiative that initially increases (decreases) employment will produce further increases (decreases) in demand and hence employment as a result of the subsequent changes in consumer spending and other variables resulting from the initial effect.

[32]Note also that the whole chain of causation takes as given a certain starting view on the part of monetary authorities: namely, that growing wages in a tight labour market inevitably cause inflation, which must be prevented through monetary intervention to reintroduce desired slack into labour markets. If central bankers possessed a different view regarding the causes and consequences of inflation, and if other mechanisms (such as forms of centralized wage bargaining) were in place to regulate the behaviour of employment costs in a low-unemployment environment, then the positive relationship between deregulation and stimulative monetary policy would be broken.

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