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Communiqué

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Work Sharing program should focus on alleviating hardship of partial, temporary layoffs, says C.D. Howe Institute study

Canada's Work Sharing program should focus on alleviating the hardship of partial, temporary layoffs, rather than structural or seasonal unemployment, says a *C.D. Howe Institute Commentary* released today.

The study, "The Work Sharing Program in Canada: A Feasible Alternative to Layoffs?", was written by David Gray, an economics professor at the University of Ottawa.

The program, which is run by Human Resources Development Canada, is designed to alleviate situations of cyclical and hence temporary joblessness, by offering help to employees who would otherwise be caught in a layoff of at least three months. The participating firm signs an agreement whereby it can reduce its work week and its pay commensurately, while Ottawa compensates workers at the same replacement rate it would pay if they were receiving conventional unemployment insurance. It appears that the program is used to a certain extent in instances of seasonal unemployment, and it even includes a little-used provision for difficulties that are explicitly structural.

Gray presents evidence to support and evaluate Work Sharing and other programs like it in various US states and western European countries. He concludes that the Canadian version has provided some macroeconomic stabilization of the labor market, probably improved labor relations in times of downsizing, and prevented the economic hardship and social costs of unemployment for a substantial number of workers (perhaps 43,000 plus their families during the 1989–90 period).

Gray argues, however, that the efficiency and focus of the Work Sharing program could be improved, and he suggests a package of reforms to make the program a genuinely and clearly countercyclical policy for helping those who are temporarily laid off:

- After the end of a Work Sharing Agreement, eliminate participants' immediate eligibility for conventional unemployment insurance benefits.
- Lengthen the maximum duration of an agreement to one year, but eliminate further extensions. This rule would both give administrators more time to determine if a

downturn is temporary or not and prevent extended use of the program in cases of structural unemployment.
- Limit each firm to using the program once during a business cycle. This rule would stop firms from using it in cases of seasonal unemployment.
- Suspend Work Sharing during the above-trend phase of a business cycle. If some adjustments were made to account for regional conditions, this change would be primarily symbolic.
- Do not couple Work Sharing with retraining programs.
- Eliminate the seldom-used structural unemployment provision.

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Communiqué

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Selon une étude de l'Institut C.D. Howe, le programme de Travail partagé devrait surtout soulager les difficultés associées aux mises à pied partielles et temporaires

Le programme de Travail partagé du gouvernement fédéral devrait surtout soulager les difficultés associées aux mises à pied partielles et temporaires, plutôt qu'au chômage structurel ou saisonnier, révèle un *Commentaire de l'Institut C.D. Howe* publié aujourd'hui.

Intitulée « The Work Sharing Program in Canada: A Feasible Alternative to Layoffs? » (« Le programme de Travail partagé au Canada : une alternative possible aux mises à pied ? »), l'étude est rédigée par M. David Gray, professeur d'économie à l'Université d'Ottawa.

Mis en œuvre par Développement des ressources humaines Canada, le programme s'efforce de remédier aux situations de chômage cyclique, et donc temporaire, en offrant de l'aide aux employés qui se retrouveraient autrement dans une situation de licenciement temporaire d'au moins trois mois. L'entreprise participante signe une entente, en vertu de laquelle elle peut réduire sa semaine de travail et la rémunération en conséquence, tandis qu'Ottawa compense les travailleurs au même taux de remplacement que s'ils recevaient des prestations ordinaires d'assurance-emploi. Il semble que le programme soit utile dans une certaine mesure dans certaines situations de chômage saisonnier et il comprend même une disposition dont on se prévaut rarement pour les difficultés d'origine expressément structurelle.

M. Gray avance des preuves qui appuient et qui évaluent des programmes comme celui du Travail partagé, qui existent dans divers États américains et pays d'Europe de l'Ouest. Il conclut que la version canadienne a permis une certaine stabilisation macroéconomique du marché du travail, qu'elle a probablement amélioré les relations de travail en période de rationalisation, et qu'elle a évité bien des difficultés économiques et les coûts sociaux du chômage chez bon nombre de travailleurs (probablement 43 000 d'entre eux, plus leurs familles, pendant la période de 1989-1990).

Toutefois, l'auteur soutient que l'on pourrait améliorer l'efficience et la portée du programme de Travail partagé et suggère un ensemble de réformes qui rendraient le programme véritablement et clairement anticyclique pour ceux et celles qui sont mis à pied temporairement :

- Une fois qu'une entente de Travail partagé touche à sa fin, il faut éliminer l'admissibilité immédiate des participants aux prestations ordinaires d'assurance-emploi.
- Il faut porter à un an la durée maximale d'une entente, mais éliminer toute prorogation. Cette règle accorderait aux administrateurs davantage de temps pour établir si le repli est temporaire ou non et éviterait une utilisation prolongée du programme dans les cas de chômage structurel.
- Toute entreprise ne doit pas avoir recours plus d'une fois au programme par cycle économique. Cette règle empêcherait ainsi les entreprises d'y avoir recours pour les cas de chômage saisonnier.
- Il faut interrompre le programme durant la phase où le cycle économique est en hausse. Lorsqu'il est nécessaire d'apporter certaines corrections en raison des conditions régionales, toute modification devrait être principalement symbolique.
- Il ne faut pas conjuguer le Travail partagé aux programmes de recyclage professionnel.
- Il convient d'éliminer la disposition portant sur le chômage structurel, qui est rarement utilisée.

* * * * *

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The Work Sharing Program in Canada

A Feasible Alternative to Layoffs?

David M. Gray

In this issue...

How to make Canada's Work Sharing program a more efficient way to alleviate the pain of partial, temporary layoffs.

The Study in Brief...

Work Sharing, a program run by Human Resources Development Canada, offers help to employees who would otherwise be caught in a layoff of at least three months. The firm signs an agreement whereby it can reduce its work week and its pay commensurately while the federal government compensates workers at the same replacement rate it would pay if they were receiving conventional unemployment insurance.

The program is designed to alleviate situations of cyclical and hence temporary joblessness (although there exists a little-used provision for difficulties that are explicitly structural), and it is not supposed to be used for seasonal unemployment. Work Sharing agreements can last a maximum of 26 weeks, with the possibility of a 12-week extension.

After presenting theoretical and practical evidence to support and evaluate this program and others like it in various US states and western European countries, the study concludes that the Canadian version has provided some macroeconomic stabilization of the labor market, probably improved labor relations in times of downsizing, and prevented the economic hardship and social costs of unemployment for a substantial number of workers (perhaps 43,000 plus their families during the 1989–90 period).

Several suggested reforms would make the program a genuinely and clearly countercyclical policy for alleviating the pain of partial, temporary layoffs.

- After the end of a Work Sharing Agreement, eliminate participants' immediate eligibility for conventional unemployment insurance benefits.
- Lengthen the maximum duration of an agreement to one year, but eliminate further extensions. This rule would both give administrators more time to determine if a downturn is temporary or not and prevent extended use of the program in cases of structural unemployment.
- Limit each firm to using the program once during a business cycle. This rule would stop firms from using it in cases of seasonal unemployment.
- Suspend Work Sharing during the above-trend phase of a business cycle. If some adjustments were made to account for regional conditions, this change would be primarily symbolic.
- Do not couple Work Sharing with retraining programs.
- Eliminate the seldom-used structural unemployment provision.

The Author of This Issue

David M. Gray is Associate Professor of Economics at the University of Ottawa. His research interests are primarily in the area of labor market policies, such as work sharing regimes, early retirement regimes, and unemployment insurance programs, in France as well as in Canada.

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Although the unemployment rate in Canada is currently at its lowest level since the 1970s, it is still high compared with that of the United States, and it will certainly rise considerably when the next recession strikes the Canadian economy. The persistence of high unemployment rates in some segments of the Canadian labor market encourages policymakers to search for new measures. One approach that drew some interest in the mid-1990s, particularly in Quebec, is *job sharing* policies, an array of government-sanctioned arrangements whose function is to reallocate the existing amount of labor input among those who are able and willing to work at the going wage. The notion of squeezing more jobs out of given economic activity levels appears to have broad appeal.

Government interventions that aim to redistribute employment opportunities include a regulated reduction in the standard work week, government-subsidized early retirement programs to encourage older workers to withdraw permanently from the labor force,[1] and regulations to discourage the recourse to overtime. Wide-reaching job sharing measures and regulations have received great attention in continental Europe, particularly in France, where legislation requiring a reduction in the standard work week is being applied almost universally.[2] In 1998, the Italian government presented similar legislation. In Canada, a federal advisory group, chaired by Arthur Donner and reporting to the minister of human resources development, examined an array of job sharing policies. Its first recommendation was to endorse “a new public policy priority that emphasizes redistribution and reduction of working time” (Canada 1994a, 52). In contrast, Huberman and Lacroix (1996), in their Canada-focused treatise on this topic, tend to take a negative view of the feasibility and the desirability of job sharing policies.

The topic of this *Commentary* is a specific kind of job sharing program generically termed *subsidized short-time compensation* (STC). Designed to serve as an alternative to full layoffs that are accompanied by conventional unemployment insurance (UI) benefits,[3] it provides partial, prorated indemnities for workers who have suffered income loss stemming from a reduction in their hours of work.

Two characteristics distinguish STC programs from broadly based job sharing policies, which are sometimes called “alternative working arrangement” measures. First, participation in STC programs is voluntary for firms, and nonparticipants are not directly affected. Second, these programs are designed primarily (but not exclusively) to apply in situations of cyclical and hence temporary unemployment. They presuppose a downturn in the economy or at least in the employer’s industry. Unlike

1 Early retirement programs are quite developed in France, Italy, and Germany. Though enormously popular with the older workers of distressed firms, they have turned out to be costly for taxpayers. In Canada, the only analogues of which I am aware are the program at Algoma Steel in Sault Ste. Marie, Ontario, the assistance package for the workers in the Atlantic codfisheries (The Atlantic Groundfish Strategy — TAGS — which has now been phased out and replaced by a new regime), and a regime that is currently being created for the laid-off coal miners of Devco in Cape Breton, Nova Scotia. Typically, the provisions stipulate that workers over age 50 who are either laid off or leave their jobs voluntarily become eligible for long-term supplemental unemployment insurance payments funded by the federal government.

2 For a summary analysis, see “Schools Brief: One Lump or Two,” *The Economist*, November 25, 1995, pp. 67–68.

3 The Canadian program has, of course, been renamed employment insurance (EI). But to avoid confusion herein, I use UI for all unemployment insurance programs, whether the reference is generic or specific to a particular jurisdiction.

the hours-reduction initiatives that have been implemented in France, Germany, and Italy, the objective of STC programs is not to alter permanently the composition of labor input in favor of higher employment coupled with a shorter work week.

STC programs in Belgium, Germany, and France date back to the 1970s and are quite developed, but the Canadian program, called Work Sharing, was not created until 1981 (for a detailed description, see Box 1).[4] One of the three developmental uses of Canada's conventional UI program administered by Human Resources Development Canada (HRDC), it drew considerable public awareness in 1993–94 when Ottawa refused a request from Bell Canada to use it for thousands of workers in Quebec.

My basic thrust in this study is to determine whether the Work Sharing program contributes to economic well-being in a fashion that the conventional UI program does not. In the next two sections, I discuss, respectively, the advantages and the disadvantages of STC programs, based on a literature survey drawn primarily from the track records in Germany, Belgium, France, and the United States. An analysis and evaluation of the Canadian program follows. In the final section, I make policy recommendations for improving the outcomes associated with this program.

Work Sharing has an appropriate role in the Canadian labor market, but it should be targeted exclusively on cyclical unemployment.

My conclusion, in summary, is that Work Sharing has an appropriate role in the Canadian labor market. It can avoid full layoffs that would otherwise occur during recessions and can thus attenuate some of the losses in social welfare that stem from unemployment. It is a program that should, however, be targeted exclusively on cyclical unemployment; it should not be used to subsidize underemployment or delay unemployment arising from structural adjustments. (As I discuss later, it is sometimes difficult in practice to distinguish between those two sources of job loss.)

Work Sharing is, in effect, a second-best policy, as it serves to counteract inefficient and inequitable industrial relations practices that lead to excessive layoffs (some of which arise from collective bargaining conventions, such as union seniority provisions that force junior employees to incur an excessive burden of adjustment costs during recessions). I suggest a few reforms to avoid a pitfall associated with Canada's conventional UI regime — generous repeat access to benefits that are not experience rated — that has the effect of subsidizing unstable employment patterns. When the next recession occurs, the activity levels of Work Sharing can be expected to rise considerably. This increase will warrant close monitoring of the allocation of benefits and provide a good opportunity to re-evaluate the program.

Advantages of STC Programs

The STC principle gets a favorable review in most of the applied studies of which I am aware, including studies by labor economists (for example, Houseman and Abraham 1993; Mosley and Kruppe 1996; Vroman 1992) and more numerous works by industrial relations specialists (for example, Best 1988; MaCoy and Morand 1984). The basic approach of these authors is to compare the outcomes produced by STC regimes and those produced by the alternative they are designed to supplant: conventional layoffs coupled with conventional UI. Most judge the STC option superior.

4 Other countries that have some form of an STC program include Denmark, Italy, Japan, the Netherlands, New Zealand, Norway, Spain, Switzerland, and the United States. From this point forward, I refer to the Canadian program as Work Sharing and to the generic program as STC.

Box 1: *The Canadian Work Sharing Program*

The Canadian Work Sharing program, instituted in 1982 and run by HRDC, is straightforward. A firm applies for the program, stating its intention of laying off 20 percent or more of its employees for at least three months. If the application is accepted,[a] the firm signs an agreement. It can reduce its work week and cut workers' pay by a prorated percentage of their pre-tax labor income (it must maintain all fringe benefits). All the participating workers receive government compensation for their loss at the same rate applied in the conventional unemployment insurance program (currently, 55 percent of earnings up to a benefit ceiling, which is rarely reached by workers who are losing only part of their former earnings). The usual UI waiting period is waived for these Work Sharing benefits, and their receipt does not reduce future eligibility to receive conventional UI benefits.

An agreement can last a maximum of 26 weeks, but a 12-week extension is possible. A seldom-used provision permits longer periods (up to 50 weeks of benefits) to address permanent layoffs. Nevertheless, the program is primarily conceived to mitigate temporary layoffs related to cyclical unemployment. It is not to be used for seasonal unemployment.

Financing comes from regular UI contributions, although the program is funded from a special budgetary chapter. HRDC forecasts expenditures annually and typically receives authorization to spend the amount requested.[b]

a Any application ostensibly meeting the program's guidelines is accepted; the department applies little discretion as long as funds are available.

b The budget has thus been essentially open-ended in most years. In 1991, however, it was exhausted when participation far exceeded expectations. The department temporarily suspended access to the program while it applied to the Treasury Board for more funds, and no new agreements were approved during the interlude. Thus, benefits were effectively rationed on a first-come, first-served basis.

This overall conclusion is typically based on a plausible premise (demonstrated in Jacobson, LaLonde, and Sullivan [1993] and elsewhere) that shedding labor input by conventional layoffs can generate very high social costs, which can be attenuated by substituting partial layoffs for full layoffs. More specifically, the desirable effects that an STC program has on labor market outcomes can be categorized under three headings: reducing layoffs during recessions, improving the distribution of the social costs of unemployment, and improving firms' productivity.

Reducing Layoffs during Recessions

The primary objective of an STC program is to avoid layoffs or reduce their number, thus reducing the inflow of workers into unemployment.[5] This objective is premised on the condition that the negative shock to output is temporary and, therefore, most of the employment losses are temporary. Thus, the program is designed to function as a countercyclical policy intervention that lessens employment loss during a recession.

5 For example, the official description of the Canadian Work Sharing program provided by HRDC indicates a goal of "maintain[ing] local, regional, and industrial employment levels during periods of short term, adverse economic conditions" (Guest 1991).

The most salient advantage of a short-time compensation program is that it serves to partially counteract a perverse impact of the conventional UI system.

On this criterion, the effect is the opposite of the impact of conventional UI programs, which, according to long-standing, convincing evidence, engender an incidence of layoffs higher than what would otherwise be the case.[6] Firms and their employees tend to mutually adapt their wage levels and layoff practices to produce a pattern of temporary full layoffs during which workers are eligible for conventional UI benefits. Thus, perhaps the most salient advantage of an STC program is that it serves to partially counteract a perverse impact of the conventional UI system.

The efficacy of STC programs in saving jobs is a difficult issue to research, however, because the analyst has to quantify counterfactual layoffs that, by definition, are not observed. In their informative survey of the track record of STC programs in several countries, Mosley and Kruppe (1996) emphasize the lack of appropriate data for evaluating these programs' effects on aggregate employment. Most of the estimates that have been produced pertain to *specific* jobs within *specific* firms that were explicitly targeted by the regime. For example, the official evaluation of the Canadian program (Canada 1993)[7] — considered to be one of the most authoritative studies that has been carried out — conjectures that it prevented layoffs over the beginning phases of the 1990–92 recession. A total of 177,800 workers participated in the program during fiscal years 1989/90 and 1990/91, and the authors estimate this figure to be the equivalent of 43,200 full layoffs avoided.[8] As I explain later, however, an estimate that included the financing aspects of STC programs, as well as other interactions and feedback effects within the labor market, would diminish the *net* increase in employment (or decrease in unemployment). I know of no rigorous research that treats the question of whether or not STC programs serve to increase *aggregate* employment during a recession. Unless the scope of such a program is quite large relative to the labor market, as is sometimes the case in Belgium, analysts would be hard put to produce reliable empirical estimates of its effects on employment.

Redistributing the Social Costs of Unemployment

In addition to macroeconomic stabilization, the literature on STC programs typically stresses the social protection they afford workers by reducing the number of layoffs and the commensurate income losses. According to the EIC study of Work Sharing (Canada 1993), workers who participated in the agreement were much better off financially than

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6 The seminal article raising this issue is Feldstein (1976). For a more recent and succinct survey of the US literature, see Hamermesh (1990). Many of the studies on the impact of Canada's UI system on the country's labor market are mentioned in Green et al. (1994), which is part of the C.D. Howe Institute's The Social Policy Challenge series. Many of the same points are treated in more recent pieces by Nakamura (1995); Nakamura, Cragg, and Sayers (1994); and Nakamura and Diewert (1997).

7 This update of a previous study (Canada 1984) was commissioned in late 1991 by the Insurance Programs Directorate, Program Evaluation Branch, Strategic Policy and Planning, Employment and Immigration Canada (EIC), which is now called Human Resources Development Canada. The authors of the study are Frank Graves and Timothy Dugas of EKOS Consultants. In the text, I sometimes refer to this work as the EIC study, but I consistently cite it as Canada (1993).

8 The typical participant lost between one and two days of work a week, or approximately 25 percent of the standard work week. Using a number of assumptions, the authors estimate that, had the firms involved carried out conventional layoffs, they would have laid off approximately one in four of the participants. The analysts thus take the number of participants and divide by four to calculate the number of jobs preserved (178,800 / 4 = 43,200).

their counterparts in the comparison group, who were laid off and claimed conventional UI benefits. The latter group lost 47 percent of their income; the former only 19 percent.

The basic theme of this literature — that a redistribution of the burden of unemployment increases the well-being of society — rests on two reasonable premises. First, this burden is often distributed in what many view to be an unfair fashion. Microeconomic theory indicates that if a firm is laying off workers, the predicted and the most desirable outcome is that it select those who contribute the least to production relative to their wage level. The economy and hence society in general benefit from a reallocation of labor and capital resources from distressed firms to growing ones. In North America, however, contract rules often require unionized employers (and sometimes nonunionized ones as well) to select for layoff the least senior workers, who are not necessarily the least productive. Thus, the burden of adjustment is typically borne by a subset of the labor force, a situation that proponents of STC regimes view as socially undesirable.

The burden of adjustment is typically borne by a subset of the labor force, a situation that proponents of STC regimes view as socially undesirable.

The implicit, strong critique of the institution of layoff by inverse seniority raises an important and interesting question. Why do employers and employees agree to inefficient collective agreements or conventions that lead to the layoff of low-seniority, productive workers and the retention of high-seniority, less-productive workers? There are arguments in favor of the last-hired / first-fired convention, such as its ease of administration and its potential effect of encouraging workers to invest in firm-specific human capital. Lindbeck (1994) concludes, however, that these gains are a mixed blessing for distributional equity. He concurs with the view that seniority provisions tend to exacerbate the vulnerable position of "outsiders" — disproportionately younger workers who are marginalized by the labor market.[9] This inequitable selection mechanism does not come into play if an STC program can reduce the number of total layoffs.

The second premise is that certain laid-off workers experience very high adjustment costs, which can negatively affect society as a whole. The burgeoning literature on the itineraries of dislocated workers indicates a wide variety of outcomes, which are usually measured in terms of income loss and jobless duration. Certain workers find new jobs quite quickly, while others experience long-term unemployment (typically defined as a jobless spell that lasts for more than a year).

On the basis of analysis drawn from the Canadian Survey of Displaced Workers, Gray and Grenier (1995) find that, although about 37 percent of workers displaced between 1981 and 1984 (a period covering a major recession) found new jobs within 14 weeks, 23 percent of them experienced jobless spells that lasted more than a year.[10] More recent evidence from the Labour Force Survey (Statistics Canada, cat. 71-220XPB, table 32) indicates that the average jobless spell at the end of 1998 had lasted 24.1 weeks, but that 22 percent of all spells had lasted longer than six months, and almost 10 percent more than a year.

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9 Using Canadian data from 1988, Picot and Pyper (1993) show that younger workers (ages 16 to 24) are 1.6 times as likely to be laid off as workers from other age categories. A factor underlying this finding is the high incidence of layoff among workers with fewer than two years of seniority with their present employer.

10 All other factors held constant, the research indicates that women, older workers, and workers with lower educational attainment experience longer durations of joblessness than other workers.

Evidence drawn from several US sources (for example, Jacobson, LaLonde, and Sullivan 1993; Swaim and Podgursky 1991; Farber 1997) reveals a similar pattern for the distribution of jobless durations and earnings losses, with significant clusters of workers gaining employment either very quickly or very slowly. The problem of long-term unemployment is much worse in western Europe. In 1999, the average proportion of unemployed workers who had been jobless for more than a year was 40.3 percent for France, 51.7 percent for Germany, 61.4 percent for Italy, and 29.8 percent for the United Kingdom (OECD 2000, table G).

The argument is that the case for government intervention to prevent layoffs is particularly strong in the case of the long-term unemployed. While a significant portion of brief joblessness can be viewed as frictional unemployment, which is necessary for productive job search and appropriate matching of employers and employees, few economists would argue that long-term unemployment serves any useful economic purpose. Furthermore, there are concerns (surveyed by Bean 1994 in the European context and Ruhm 1991 in the US context) that, after workers have been jobless for a certain period of time, the probability of re-employment is low. This phenomenon is sometimes labeled "scarring," in reference to a permanent depreciation of workers' productive abilities that renders employers reluctant to hire them. As this group of hard-core unemployed becomes disconnected from the labor market, social problems are exacerbated.

According to Houseman and Abraham (1993), the high costs associated with this scarring can be avoided to the extent that a program can permanently prevent the layoff of workers susceptible to long-term unemployment. If so, STC programs can improve the outcome generated by conventional layoffs coupled with the main UI program.

I am not aware, however, of any study that examines the degree to which STC programs have prevented displacement among workers particularly vulnerable to long-term unemployment. Furthermore, the claim that STC programs benefit such workers, many of whom are older, is somewhat inconsistent with the argument (described above) that these programs benefit younger workers disproportionately by counteracting the adverse impact of the layoffs by the inverse seniority convention.

The case that STC programs can benefit marginal workers with low seniority is quite strong. Less persuasive is the argument that such programs can be accurately targeted to a broad range of workers who would have limited re-employment opportunities if they were displaced.

In my view, the case that STC programs can benefit marginal workers with low seniority is quite strong. I find less persuasive the argument that such programs can be accurately targeted to a broad range of workers who would have limited re-employment opportunities if they were displaced.

Improving Workplace Productivity

Analysts suggest that STC programs can improve firm productivity in three ways: by circumventing the seniority rules that restrict the flexibility of an employer who faces slack demand, by improving labor force morale, and by helping firms retain trained employees during a cyclical decline.

Circumventing Seniority Rules

Lindbeck argues that the last-in / first-out convention is outdated and likely to generate inefficiencies. Much job-security regulation, he claims, is based on the notion that many workers are interchangeable, but, given current production technology, jobs are becoming more specialized and heterogeneous. Contracting firms must be able to retain key employees, who are often "young, newly trained, hardworking and enthusiastic employees" (1994, 73). In certain circumstances, STC can contribute to this objective.

Little empirical evidence exists to supplement the anecdotal evidence on this point. An exception, however, is a recent case study concerning the major work sharing scheme at Bell Canada in Quebec mentioned earlier, an arrangement that was a totally private initiative not subsidized by the Work Sharing program.[11] Lanoie, Raymond, and Shearer (1996) report significant declines in productivity (estimated at 3 to 8 percent) for certain occupations, such as phone installers, following Bells' implementation of a reduced work week in 1994. They attribute the loss in productivity in part to declining efficiency of coordination, which they link to the adoption of the work sharing arrangement (it was discontinued the following year). They conclude that "the demonstrated decrease in productivity signals an important consideration for other firms and governments considering implementing such a program" (p. 11).

One must be cautious, however, in applying these findings, which pertain to a specific situation, to other firms and industries. Furthermore, the authors hesitate to attribute the entire decline in productivity to the work sharing arrangement. One can probably conclude that certain production technologies, such as those requiring a lot of supervisory personnel, have staffing requirements that do not lend themselves well to substitution of more employees working for fewer hours per week. On the other hand, one can imagine other settings, such as hospitals and retailers, which already employ a lot of part-time labor, in which the substitution is efficient. In my view, in cases where an STC program imposes higher production costs on firms, adjustments on the part of employees must be made to compensate employers. Yet it seems unlikely that further reductions in labor costs could be achieved by reducing wages or benefits, since workers are already sacrificing some of their earnings through working fewer hours. This dilemma poses a significant obstacle to implementation.

In cases where an STC program imposes higher production costs on firms, adjustments on the part of employees must be made to compensate employers.

Boosting Morale

As mentioned in several chapters of Best (1988) and MaCoy and Morand (1984), a very positive impact on labor relations and the morale of the labor force can emerge from the use of STC programs. The authors of the EIC program evaluation concur:

> Moreover, the work-sharing group displays a much higher level of morale, better attitudes to work and management, superior quality of life, better social relations, and improved psychological and physical well being. (Canada 1993, iii.)

Variables such as the morale of the labor force are difficult to measure, so evaluating these hypotheses is problematic. Nevertheless, they certainly seem plausible.

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11 Bell Canada had initially targeted 5,000 of its workers for layoff in a permanent restructuring of the firm. Then, in a much-publicized application, the firm requested that the Work Sharing regime contribute $30 million to top up the pay of thousands of workers, who would accept a shortened work week and the commensurate reduction in pay (see McKenna 1993; Huberman and Lanoie 2000). Because the plan was explicitly intended to ease the pain of permanent downsizing, HRDC denied the request. Bell finally implemented its own one-year work sharing arrangement with its employees.

Subsidizing Labor Hoarding

The provision of STC benefits can subsidize labor hoarding (Reid 1982; 1985; Schiff 1986). This practice occurs when firms, faced with a cyclical decline in the demand for their product, retain redundant skilled workers in order to avoid the costs of recruiting and training replacements after the layoff period.

Clearly, many individual firms can benefit in this fashion (because a portion of the cost of retaining the redundant workers is borne by the UI fund). The question that remains unanswered in most studies is why there are gains from preserving employment relationships that the employer (or the employee) would otherwise have chosen to sever. The economic case for a subsidy in this context applies only in instances of skilled labor hired under long-term contract.[12]

The limited evidence on STC programs' ability to promote skill retention is not supportive of the hypothesis of skill retention. Using data from the program in France, I find that participating firms do not tend to have particularly high levels of employer-specific training (Gray 1994). Indeed, sectors whose labor forces have relatively high levels of general training and formal education tend to have comparatively low rates of participation in the program, which suggests it is not working to preserve employment relationships characterized by relatively high training and / or education requirements (either those that are specific to the employer or those that are generally applicable).

A study of the Canadian program speaks indirectly to this issue. Siedule, Guest, and Wong (1996) find that the participating firms tend to have employees with somewhat higher skill levels than the nonparticipating firms in their comparison group. In contrast to my work cited above (Gray 1994), this study deals only with levels of education and general skills. The authors draw no conclusions from their finding, however, and to link it with productivity gains stemming from a Work Sharing arrangement seems tenuous.

The productivity improvements generated by STC programs versus the outcome generated by permanent layoffs coupled with conventional UI stem in large part from the raising of labor force morale.

In my view, the case that STC programs improve social welfare through this particular channel is not persuasive. Although the evidence is very preliminary, the results thus far indicate that the productivity improvements generated by these program versus the outcome generated by permanent layoffs coupled with conventional UI stem in large part from the raising of labor force morale.

Disadvantages of STC Programs

Given the positive reviews cited above, why have STC programs not elicited in North America the popularity they have in continental Europe? Mosley and Kruppe (1996) note the particularly low rate of program take-up in the United States compared with

12 This situation is frequent for skilled labor, according to the worker-turnover literature of labor economics (see, for example, Parsons 1972). Long-term contracts specify the terms for salary, the provision of training, skills acquired, and services rendered. These contracts function to foster investments on the part of both employers and employees in the employment relationship and are thus sometimes called "bonding" mechanisms. If a volatile macroeconomic climate causes many unforeseen layoffs to occur, however, the resulting uncertainty will discourage future long-term bonding and investment in training. Although one can see the desirability of reducing the degree of uncertainty in the economic environment in which these employment relationships are drafted, it is more difficult to establish that STC programs are an effective instrument for reaching this goal.

that in Canada, despite the numerous similarities between the two countries' labor markets. A majority of policymakers, employers, and employees appear to see a number of drawbacks and thus favor the status quo, for which the predominant mode of downward labor force adjustment is conventional layoffs. I divide these drawbacks into two types: global effects on the aggregate labor market, and effects at the level of the particular work unit.

Macroeconomic Effects

Some observers view job sharing programs as defeatist measures that distract attention from the true policy challenge of drafting job creation measures to fight unemployment.

Some observers view job sharing programs as defeatist measures that distract attention from the true policy challenge of drafting job creation measures to fight unemployment. Indeed, former C.D. Howe Institute President Thomas Kierans (1994) explicitly criticizes job sharing policies in a passage headed "Work Sharing? Not!" In effect, he views such policies as an additional, costly set of regulations on how employers hire and employ labor, which might also engender a hike in payroll taxes. The Canadian Chamber of Commerce and the Canadian Federation of Independent Business have expressed similar concerns (see Gibb-Clark 1994; Beauchesne 1994).

Some of the criticisms emanating from employer groups are directed, however, to sweeping job sharing proposals, such as the global shortening of the work week that is currently being implemented in France.[13] These groups are speaking in the spirit of the research of some well-known labor economists, who have a well-founded skepticism about the ability of broadly based job sharing policy interventions to increase employment. Layard (1986) and Layard, Nickell, and Jackman (1991) indicate that countries that have reduced average work hours the most, often through regulating a shortened work week, tend to be those where unemployment has *grown* the most. Job sharing policies are premised on what Layard labels the "lump of output fallacy" (sometimes called the "lump of labor fallacy"), according to which the level of gross domestic product (GDP) and hence total labor input are fixed, and new job creation or destruction is precluded. Most economists refute the position that some fixed or diminishing level of total hours must be worked in order to produce the lump. The majority view is that new jobs can be created by fostering aggregate growth (increasing the size of the lump), rather than solely by increasing the number of jobs given a level of economic activity (increasing the job density of the lump).[14]

This point is echoed by Hamermesh (1993), who argues that, although job sharing policy measures would likely tilt the composition of labor input toward shorter working time and more employees, they would also have the adverse effect of

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13 As noted above, the standard work week in France has been reduced by legislation from 39 hours to 35 hours. There is to be no loss in weekly compensation, but the government assumes part of the resulting increase in unit labor costs by awarding transitional subsidies. In the first stage of implementation in 1999, the legislation applied only to larger firms. In subsequent stages, it will apply to all but the smallest firms (those with fewer than ten employees). As a further incentive for employers to adopt this change, the law now permits a much greater degree of flexibility in the utilization of working time than was previously the case. The most prominent example is a provision called annualization, which allows employers to vary the length of the work week over the course of the calendar year without having to pay premiums, provided that the annual average of hours worked per week does not exceed 35.

14 As a case in point, approximately 1.8 million net jobs have been created in Canada since the trough of the last recession in 1992.

increasing the costs of production, which would, in turn, reduce total output, thus contracting the lump. The end result would be a decrease in the aggregate demand for labor, which would partially or fully offset the initial stimulative effect on the employment level.

A related argument against job sharing programs is raised by a number of labor economists, most notably Layard, Nickell, and Jackman (1991), whose overarching, macro-oriented treatise on unemployment leans toward the institutional settings of European labor markets. Their analysis is couched in a framework that models the global labor market, incorporating both the demand side and the supply side and including feedback effects from employment and unemployment variables to the wage-determination process and to the level of aggregate production. The essence of their approach is that job sharing programs artificially reduce the labor supply, causing the equilibrium real wage to be unrealistically high in the face of unemployment, a situation that dampens induced employment growth. The predicted net effect of job sharing, provided it is implemented on a large scale, is a reduction in aggregate output with no net increase in employment. This result is somewhat ironic given that the fundamental *raison d'être* of programs of this type is to increase net employment in the event of stagnant or falling aggregate output.[15]

Writing from a Canadian perspective, Lacroix (1996) rehashes the economic arguments raised above and claims that global job sharing initiatives are likely to have a deleterious impact on the labor market. Hunt (1997) offers a lucid and informative analysis of the experiences in France and Germany. The most recent analysis of job sharing programs is by renowned labor economist Richard Freeman (1998); basing his argument on a thorough survey of the existing literature and heuristic analysis, he essentially echoes the view, expressed above, that most government-sponsored initiatives to spread work have limited efficacy.

Despite this near consensus against the efficacy of job sharing policies, especially strict regulations on working time, these critiques may not apply to the Canadian Work Sharing program. Because it is an STC program that is used primarily during recessions, it has a much narrower scope than broadly based, permanent job sharing policy measures, such as the recent French regulation. The global impact of the Canadian STC program is likely to be small and may be positive, provided that it is used primarily as a short-term measure in instances of cyclical unemployment. Under these conditions, it is not likely to have the effect of raising wages or per unit labor costs very much.

Provided Canada's Work Sharing program is used primarily as a short-term measure in instances of cyclical unemployment, it is not likely to raise wages or per unit labor costs very much.

Microeconomic Effects

An STC regime can have micro effects on individual firms and work units — effects that are both distortionary and important, even considering its narrow scope of application.

One potential disadvantage of STC arrangements is that senior workers who are covered by collective agreements have little financial interest in participating. Although

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15 A slightly more elaborate explanation of this effect is contained in "Schools Brief: One Lump or Two," *The Economist*, November 25, 1995, pp. 67–68. Citing the treatise by Layard, Nickell, and Jackman (1991), the article explains how these macroeconomic behavioral channels relate to the nonaccelerating inflation rate of unemployment (NAIRU).

an STC program may have an overall positive impact on the morale of the labor forces of distressed firms, the workers' preferences for that option may not be unanimous. In situations in which layoffs are carried out by inverse seniority and the bargaining unit is composed primarily of relatively senior workers, the union may prefer conventional layoffs (Best 1988; MaCoy and Morand 1984). In case studies of work sharing arrangements in Quebec, where the level of interest in long-term job sharing policy initiatives tends to be higher than elsewhere in Canada, Huberman and Lanoie (2000) highlight the importance of obtaining a consensus among the participating workers. More generally, effective STC arrangements must take into account considerations of the labor supply as well as the potential effects on labor demand.

A second disadvantage, highlighted by Reid (1982; 1985) in his early analysis of the Canadian program and cited by many other observers, is that an STC program can lead to an increase in the level of quasi-fixed labor costs, such as health insurance and life insurance benefits. This component of labor costs increases when a new worker is hired, but not when he or she works an extra hour. If an STC agreement is implemented, workers who would have been laid off are retained, and the firm continues to incur the quasi-fixed costs associated with them, which it would not have had to pay had this group of workers been laid off. The implication is that the quasi-fixed labor cost per hour increases as the length of the work week falls, raising the overall cost of implementing the STC option relative to the conventional layoff option.

The third and most common critique of STC programs concerns what I call the palliative effect. The concern is that certain work units may treat STC benefits as a subsidy to maintain existing employment levels in situations in which the slack demand is permanent. Instead of functioning as a short-term income replacement mechanism in relatively infrequent situations of cyclically slack demand, STC benefits may be used to subsidize the status quo, preventing adjustment when labor resources should be reallocated to other regions or sectors.

Indeed, there is ample evidence that some French, German, and Italian firms are participating in their national programs when the nature of the unemployment is *structural*. Germany, for example, has provisions, explicitly specified as a way to address structural unemployment, that give its steel industry access to STC benefits for as long as three and a half years. This provision is explicitly specified as a way to address structural unemployment. The program is also used to address the draconian restructuring that is occurring in the former East Germany, where the use is the most extreme. In 1993, approximately a quarter of the eastern German labor force was receiving STC payments on a long-term basis. Since many recipients were not working any hours at all, the arrangement was a work sharing program in name only; it had actually been transformed into a long-term income maintenance program (Seifert 1993). My conversations with a researcher who has studied work sharing in the United States indicate that a minority of participating firms use the STC benefits in this fashion. Mosley and Kruppe (1996) share the view that long-term STC benefits can have undesirable harmful effects on labor allocation by forestalling worker adjustment; they indicate that this distortionary effect has been very prevalent in Italy.

The appropriate policy response is to refrain from intervening to prevent layoffs but to provide affected workers with conventional UI benefits.

The appropriate policy response here is to refrain from intervening to prevent layoffs but to provide affected workers with conventional UI benefits (and perhaps other types of adjustment assistance for particularly vulnerable workers).

Canada's Work Sharing Program

Having outlined the positions of the proponents and the opponents of STC programs at a generic level, I now turn to an evaluative analysis of the Canadian Work Sharing program. Following the approach of Corak's (1994b) analysis of the main Canadian UI program, I organize my evaluation according to four aspects. The first, which is key in any type of UI program, is the nature of the unemployment addressed — that is, whether it is cyclical or structural. The second is the behavioral incentives and disincentives, which are common to any insurance scheme, public or private. In the context of the Work Sharing program, behavioral distortions are closely tied to whether the workers are threatened with structural or cyclical unemployment, so I treat these first two aspects together

Third, I analyze the redistributive impact of the program, a particularly relevant aspect for any social insurance scheme. Like Canada's old age security regime, the public UI system is only loosely based on evaluated risk and thus functions as a redistributive taxation mechanism that compensates needy individuals for broader risks.

Fourth, I briefly consider cost effectiveness, an issue also addressed in the program evaluation (Canada 1993), which is the source for some of the figures and estimates presented in this section.[16]

Unemployment and Behavioral Disincentives

The distinction between relatively temporary, cyclical unemployment and long-term, structural unemployment is a crucial one for Canadian Work Sharing. Despite the program's inclusion of a provision that can be applied in instances of structural unemployment, it is rarely *explicitly* used for this purpose. In 1991, only about 25 to 50 out of a total of approximately 11,000 participating firms used this mode of the program.

Moreover, for agreements under the provision designed for cyclical unemployment, the standard maximum duration of an agreement is 26 weeks, but the actual completed length of agreements between 1989 and 1991 was only 18 weeks. Only 20 percent of firms used the maximum duration of 26 weeks, although 29 percent (including firms that originally applied for fewer than six months of benefits) applied for an extension to their agreement (Canada 1993).[17]

The most worrying incentive effect of Work Sharing is the potential for firms that have experienced a permanent reduction in demand to use the program to palliate permanent layoffs.

Potential Misuse of the Program

The most worrying incentive effect of Work Sharing is the potential for firms that have experienced a permanent reduction in demand to use the program to palliate permanent layoffs. Certainly, evidence abounds that provisions of Canada's regular UI system are being used to subsidize the maintenance of existing employment levels and

16 The year the EIC study was commissioned (1991) was a year of record participation in the program: about 11,000 applications were approved, 196,458 workers drew benefits, and $160 million was spent. The study's stated objectives were to evaluate the program's past effectiveness in preventing layoffs and thus to assess its future prospects, as well as to examine its cost effectiveness, particularly in comparison to the alternative of conventional layoffs coupled with orthodox UI benefits.

17 Of these extension requests, 87 percent were approved.

patterns, even though the program was originally designed to address cyclical unemployment.[18] Another notable and recent analogue is the series of special aid packages for fishery workers. Most economists predict that recipients of this type of governmental assistance will tend to be less disposed than they otherwise would be to retrain, relocate, and search intensively for a new job.

Thus, several government programs directed at distressed firms, including Work Sharing, risk being transformed into long-term income maintenance programs. There is widespread agreement that more direct adjustment strategies are appropriate when the market signals that a permanent downsizing is imminent. STC programs should thus not serve as an impediment to resource reallocation.

The EIC evaluative study of Work Sharing contains a number of qualitative indications that this transformation phenomenon could be present. According to the judgment of the authors, most social blueprints have a “stay the course” flavor (Canada 1993, 288) in that they give slight mention of major changes in work patterns or retraining initiatives.[19] The impetus for an application for a Work Sharing program is typically a crisis involving the threat of major layoffs, so the imperative of the work unit is often to avoid (or at least delay) as much of the trauma and the painful adjustment costs as possible.

If Work Sharing tends to be viewed as a social protection instrument, the short shrift in both deed and word that firms and workers give to retraining is not surprising. As I argue in the conclusion, retraining initiatives should be decoupled from STC arrangements, because the objectives and the target populations of the two types of programs are distinct.

Retraining initiatives should be decoupled from STC arrangements, because the objectives and the target populations of the two types of programs are distinct.

Evidence

To turn from anecdotal to more quantitative evidence of the use of Work Sharing to alleviate structural unemployment, the EIC study (Canada 1993) reports a fairly high incidence of repeat use by units involved in STC. Between 1982 and 1991, 5 percent of the participating firms used the program at least three times and 10 percent at least twice.

The study also reveals a fairly high incidence of layoffs occurring after a Work Sharing agreement terminated. In 29 percent of the cases, layoffs the program was supposed to avoid were merely postponed; the employees were laid off in the six months following program participation. Of these separations, 75 percent were permanent. Approximately 29 percent of the Work Sharing participants received regular UI payments shortly after the agreement terminated.

A somewhat alarming finding of the EIC study is that firms that obtained an extension of their initial Work Sharing agreement were particularly likely to lay off workers after the expiration of the second agreement.

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18 Given the regional extended benefits provision coupled with the variable entry requirements provision, individuals can — and do, on a recurrent, yearly basis — work for a relatively short time and collect benefits for a much longer period. (See the in-depth discussions of employment-related government policy and its impact in the Atlantic provinces in May and Hollett 1995; and McMahon 2000.)

19 More specifically, a survey questionnaire sent to employers had a question about the reasons why they participated in the program. Among the menu of responses, the entry “flexibility to respond to new technologies” ranked low, whereas “avoiding layoffs” was cited the most frequently.

Despite this pessimistic sign, however, several considerations suggest that it would be an exaggeration to characterize the Work Sharing program as prone to widespread misuse by beleaguered, subsidy-hungry firms (and their employees) attempting to avoid restructuring.

First, as some proponents of the program note, an employer may quite unintentionally overestimate future demand.[20] A permanent downturn may initially appear to be temporary, and distinguishing cyclical unemployment and structural unemployment can be problematic before the fact. Several sources provide evidence that the expectations of workers and firms are often biased toward the upside. Corak (1994a) and Katz and Meyer (1990), using Canadian and US data respectively, demonstrate that, at the point of separation, workers not given a specific recall date often expect to be back eventually; a significant number of them, however, do not ultimately return to their former employer. And employers' expectations about the permanence of the layoffs may well be influenced by macroeconomic forecasts for the Canadian economy, which systematically overestimated economic performance during the 1991–93 recession. Thus, a portion of the misuse of Work Sharing may be unintentional on the part of the applicants.

Second, because of the inherent difficulty just mentioned, the provisions of the program prohibit a firm from using it for more than 12 months under any circumstances.

Third, if usage of the program in instances of structural unemployment were significant, one would expect to see a pattern characterized by inertia effects (an increase in participation in the current time period resonates in several subsequent time periods). Instead, Gray (1996) and Canada (1993) discern a countercyclical pattern: after participation levels rise initially, they tend to revert to a normal level. Using aggregated data on Work Sharing outlays within a time series framework, these works show that participation increases markedly in times of negative economic growth (with a two-quarter lag) but likewise decreases with positive economic growth. The participation rates are very low during times of moderate to strong economic growth. In 1997, 1998, and 1999, for instance, the number of participants was less than a tenth of the level reached during the height of the recession in 1991 (see Table 1).

Although the firm-level data suggest some misuse of the Work Sharing program as a palliative to permanent downsizing, the evidence does not appear to translate into pervasive, widespread misuse.

Overall, although the firm-level data suggest some misuse of the Work Sharing program as a palliative to permanent downsizing, the evidence does not appear to translate into pervasive, widespread misuse.

Seasonal Usage

Both the evaluative EIC study (Canada 1993) and Gray (1996) do, however, find evidence of seasonal usage patterns, although the program guidelines supposedly preclude such use. Given the Work Sharing program's relatively short track record,[21] it is difficult to accurately disentangle business cycle effects from the seasonal effects. As a rough estimate, however, usage appears to decline about 80 percent during the

20 See, for example, the employer-rebuttal section of the EIC report (Canada 1993).

21 The program has experienced only one full business cycle, and during the mid-1980s as well as the mid- to late 1990s, usage levels were so low that one cannot glean much information on participation patterns.

Table 1: *Usage Levels of the Canadian Work Sharing Program, 1983–99*

	Participants per Month	% of 1991 Peak Usage
	(number)	*(percent)*
1983	21,900	59.7
1984	10,620	28.9
1985	7,500	20.4
1986	5,990	16.3
1987	4,260	11.6
1988	4,630	12.6
1989	5,960	16.3
1990	17,240	47.0
1991	36,640	100.0
1992	23,400	63.8
1993	11,430	31.2
1994	4,914	13.4
1995	3,331	9.0
1996	3,891	10.6
1997	1,664	4.5
1998	2,523	6.9
1999	2,941	8.0

Note: The program was instituted in 1982, but for part of that year it had only the status of a pilot program. For that reason, the figures for 1982 are not comparable with those for subsequent years and are not presented here. Also, each participation figure here is the annual average of the number of workers drawing Work Sharing benefits at the end of each month in the year indicated. Since a typical participant draws benefits for 12 to 16 weeks, many of the same individuals are counted in the figures for several consecutive months. These stock data are thus not comparable with the flow data on the number of incoming participants during fiscal years 1989/90 and 1990/91 that are reported elsewhere in the text.

Source: Statistics Canada, cat. 73-001, various issues.

summer (compared with fall and winter). This is the same seasonal pattern that characterizes the use of regular UI benefits in that program's "high entitlement regions," where entry requirements are reduced and benefit periods extended. Some cyclical effects may be confounded with seasonal effects, so the statistical findings may not be entirely attributable to pure seasonal usage, but they are a source of concern.

One can probably conclude that certain firms have participated in the program once in instances of seasonal unemployment, but not on a recurring, annual basis. Nevertheless, seasonal downturns should be relatively easy to predict and identify, and the implication is that administrative control procedures should be examined and tightened.

Conclusion

In summary, the aggregate usage patterns suggest that the Work Sharing program is functioning in a manner consistent with its primary objective of preventing layoffs in instances of cyclical unemployment, thereby stabilizing employment over the business cycle. STC program activity levels are appropriately very low during recovery periods.

The difficulty in distinguishing between cyclical and structural unemployment before the fact is an important implementation problem, however, since the program is based on the presumption that this distinction is apparent in most cases. If one accepts the estimate of a misuse rate of 29 percent provided by the evaluative study (Canada 1993), improvement in program delivery is desirable. Seasonal patterns of usage are another implementation problem. In the concluding section of this *Commentary*, I suggest some practical policy reforms to ensure that the program is less prone to these misuses.

Redistributive Issues

The final aspect of the Work Sharing program is its role as an income-redistribution mechanism.

Many of the payments under Canada's conventional UI program are not made on the logic of actuarially based insurance. If they were, contributions would have at least a rough positive relationship with the expected indemnity for loss. In fact, the program levies a uniform payroll tax on all workers and employers across the country independent of the probability of claim. Thus, the present system, particularly the regionally extended benefits provision, has become a more or less permanent means of transferring income from workers in occupations, industries, and regions subject to relatively low unemployment to workers in occupations, industries, and regions subject to relatively high unemployment. The degree and the pattern of payments and subsidies across industries is neatly documented by Corak and Pyper (1995). Many research studies (for example, Lemieux and MacLeod 2000; Green and Riddell 1997) and HRDC's 1994 social policy green papers on UI reform (Canada 1994b; 1994c; 1994d) criticize these permanent subsidies to those working in industries that are seasonal or that have unstable employment patterns.

Use of the UI system as a permanent income maintenance program in depressed regions is not a viable policy option and has done great harm to the reputation of the entire Canadian UI program.

In my view, this use of the UI system to alleviate the handicaps the unemployed face in depressed regions is not a viable policy option and has done great harm to the reputation of the entire Canadian UI program. This fault would constitute a major pitfall for the Work Sharing program if it were to permanently subsidize unstable employment patterns at the expense of healthy ones.

The redistributive impact of the Work Sharing program has a different structure, however. For any particular work unit, the time frame for benefits is limited. Sectors that are undergoing secular decline, rather than a temporary, recession-induced decline in demand, are generally denied access to these benefits (an example is the aforementioned application from Bell Canada in 1993). In the policy recommendations that follow, I suggest a few reforms that could help to ensure that Work Sharing benefits do not systematically subsidize inherently unstable employment patterns or sectors in secular decline.

Cost Effectiveness

The EIC report (Canada 1993) addresses the question of the implications of the Work Sharing program for the UI account. Although the analysts claim that the social and economic benefits of the program outweigh the associated costs, they admit that on the narrow, strictly pecuniary basis of the UI account, Work Sharing is 33 percent more expensive than conventional UI. The implication is that, during years of high usage, the program does place upward pressure on payroll taxes.

The authors of the EIC report attribute this cost discrepancy to three factors. First, the two-week UI waiting period is waived for those participating in Work Sharing. Second, 30 percent of laid-off workers do not collect conventional UI benefits (presumably because they have found alternative jobs); in contrast, all participants of a Work Sharing agreement receive indemnities. Third, as already noted, a fairly high number of individuals who participate in a Work Sharing agreement go on permanent layoff with conventional UI coverage, thus incurring expenditures for both programs.

One of the policy recommendations I make in the conclusion should contribute to improving the relative cost effectiveness of the Work Sharing program.

Policy Recommendations

The key benefits of the Canadian Work Sharing program stem from its reducing the number of layoffs during recessions and allocating the burden of unemployment more equitably.

The key benefits of the Canadian Work Sharing program stem from its reducing the number of layoffs during recessions and allocating the burden of unemployment more equitably. It has served as a macroeconomic stabilizer of the labor market. It appears to have saved jobs on a small scale, and it probably prevented the economic hardship and social costs of unemployment for perhaps 43,000 workers and their families during the 1989–90 period. To the extent that the jobs saved were held by workers who would have been vulnerable to long-term unemployment, the program has reduced the social costs associated with this phenomenon.

Notice, however, that the estimates of jobs saved by Work Sharing do not capture the effects of the taxation required to finance the payments or the program's effects on labor supply behavior posited by Layard, Nickell, and Jackman (1991), both factors that tend to dampen employment growth.

Given the interdependence and feedback effects among all the markets in the Canadian economy, I concur with Lacroix's (1996) proposition that one cannot assess whether Work Sharing's net impact has been to save jobs. It does seem plausible that the program can improve labor relations in times of downsizing. But it is unlikely that Work Sharing can preserve, to any great extent, employment relationships that embody specific skills.

Proposed Reforms

The reforms that I propose for Work Sharing have a common theme: they are designed to make the program less vulnerable to the criticism that, like certain provisions of the conventional UI program, it generates inequities and costly inefficiencies in the labor market. The best way to maintain the integrity of the Work Sharing program and to avoid budget overruns is to strongly discourage its use as a palliative in the face of permanent layoffs. It is also important to avoid using the benefits to maintain part-year employment patterns on a permanent basis.[22]

Eliminate participants' eligibility for conventional UI benefits following termination of a Work Sharing agreement.

22 These imperatives seem particularly relevant in light of the reforms to conventional UI implemented in 1997. The new employment insurance program laid out in Bill C-12 introduced the principle of penalizing repeat users via an intensity rule that somewhat discourages repeat drawing of conventional UI benefits. As a response to the reduction in the generosity of conventional UI benefits to repeat users, certain firms and workers may be tempted to turn to Work Sharing benefits to support unstable or seasonal employment patterns.

This restriction, which is the common practice in the United States (where individual states design STC programs), would prevent individual workers from repeatedly drawing benefits from the UI account and render the eligibility conditions of the Work Sharing program consistent with the limitations that Green (1994) recommends for the main UI program. Since an STC regime is typically presented as an attractive *alternative* to total layoffs and conventional UI, the case for it would be strengthened by preventing individuals from drawing benefits from both programs after one separation. The restriction would also prevent any incremental fiscal or resource costs beyond those that would have been generated had the workers been permanently laid off from the start.

The case for an STC program would be strengthened by preventing individuals from drawing benefits from both STC and UI programs after one separation.

Lengthen the maximum duration from six months to one year, but eliminate the provisions for further extensions.

The goal here is to ensure that the program cannot be used indefinitely in instances of structural unemployment, but also to allow more time to assess whether the downturn is temporary or long term. Determining whether slack demand is temporary may take longer than six months. Lengthening the maximum duration for a Work Sharing agreement to perhaps one year may thus be warranted. If no recovery is in sight after this period has elapsed, the downsizing should be considered permanent, and alternative adjustment strategies implemented. If this regulation were strictly applied, the criticism that the Work Sharing program is subject to political interference and preferential treatment would not be credible. Doing away with applications for renewal would also reduce administrative costs.

Prevent the repeat use of the Work Sharing program by any one firm over a business cycle.

In order to offset the lengthening of the program’s payment period, firms should be prevented from repeat use over the course of a business cycle. If a recovery is not on the horizon after this period has elapsed, permanent restructuring should proceed. This reform, like the previous one, would reduce the administrative costs of the program by reducing the number of applications to scrutinize. It should also attenuate the seasonal usage patterns that have been discerned.

Limit operation of Work Sharing to the below-trend phase of a business cycle; suspend it during the above-trend phase.

In times of fairly low unemployment, the social protection rationale applies to a lesser extent because most laid-off workers can find alternative work relatively quickly. This recommendation would, of course, pose certain implementation difficulties. First, the threshold that separates the two phases is often difficult to determine, given the imperfect science of forecasting macroeconomic performance and the lags inherent in monitoring its indicators. Second, sometimes some provincial economies are in a recovery phase while others are still mired in recession. These difficulties are not insurmountable, however. For example, to counter the first, the program's outlays could be suspended only after a year of economic growth has occurred. For the second, some adjustment in timing could be permitted to account for regional macroeconomic conditions. Moreover, in practical terms, these complications would not pose an obstacle because this regulation would not be applicable in many instances (program use during the boom years of the late 1980s and the late 1990s was extremely low). Thus, the change would be primarily symbolic, but it would reinforce the appearance of the program as a genuinely countercyclical policy instrument.

Do not couple Work Sharing with retraining programs.

This recommendation is motivated by several mentions of the link (or the lack of one) between the two in the EIC evaluative report (Canada 1993), in Mosley and Kruppe (1996), and in Seifert's (1993) discussion of the STC program in eastern Germany.[23] Yet if Work Sharing is being used as intended, the expectation is that most of the workers will return to the work unit. Since the objective is to *avoid* restructuring and maintain the work unit intact in periods of temporary slack demand, it is not clear why subsidized retraining is necessary or warranted. Thus, the low propensity of participating units to obtain new training should not be alarming or surprising; most participants are supposed to be recalled. Government intervention in the realm of job retraining should focus on workers who have separated permanently from their employer and aim to make them more employable in the external job market. As this target population and objective are quite distinct from those of Work Sharing, there should be no risk of the two programs' working at cross-purposes.[24]

The low propensity of participating units to obtain new training should not be alarming or surprising; most participants are supposed to be recalled.

Eliminate the structural unemployment provision.

As mentioned, the Work Sharing program includes a seldom-used provision — a second track — that allows for the payment of benefits in instances when the nature of unemployment is explicitly structural. The well-known Houseman and Abraham (1993) piece recommends that STC programs maintain such a provision, but I recommend dispensing with it.

The German, Italian, and French STC programs have similar provisions for certain cases of structural unemployment, an approach the German government labels the "parachute function." The goal is to attenuate the workers' adjustment costs by lengthening the time over which the reduction in labor input takes place.

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23 In Canada, only 4 percent of units participating in Work Sharing engaged in a training (or retraining) scheme, compared with 10 percent of units in the EIC's control group of firms that carried out conventional layoffs (Canada 1993). The evidence from eastern Germany also indicates that training activity rarely occurs. Seifert estimates at 14 to 17 percent the participation rate in retraining programs for the workers receiving STC benefits; among the many actually working no hours at all, only a third were participating in training schemes: "The reasons for [the low disposition to retrain] are complex.... A third of the companies surveyed mentioned a lack of interest from employees as a reason for not having run any training schemes" (1993, 6).

24 Moreover, for another set of reasons, the federal government withdrew from human resource training initiatives of any kind in 1997.

In this context, no one can claim that productivity-enhancing effects of the STC approach apply. The rationale advanced by the French and German governments for their coal, shipbuilding, and automotive industries is that STC programs provide an extra measure of social protection to the most vulnerable workers *threatened* with displacement. The justification for delaying structural adjustment is that those workers with more attractive outside opportunities have an incentive to leave the industry, allowing more of the reduction to take place through attrition, rather than involuntary separations. According to this argument, the social costs of long-term unemployment may outweigh the fiscal cost of this long-term provision of STC benefits.

Although this cost-benefit principle may seem conceptually appealing, the question of magnitudes is difficult to address. Policymakers have good reason to be wary of subsidies whose implicit (and sometimes explicit) function is to preserve the production and employment patterns of certain sectors. Indeed, examples of such interventions, such as the European Union's Common Agricultural Program and the European Coal and Steel Community's industrial policies, indicate that they create an array of perverse incentives and political interference that causes very high fiscal and resource costs. On the basis of the experience in Italy and Germany, Mosley and Kruppe are quite critical of the "structural use" of STC programs. In the conclusion to their survey, they state:

Policymakers have good reason to be wary of subsidies whose implicit (and sometimes explicit) function is to preserve the production and employment patterns of certain sectors.

> Although a return to full time employment cannot always be foreseen with certainty, it should at least be envisaged as a clear goal if short-time work is to be used. If the only goal of short-time work is to delay dismissals...its use is problematic. In that case it merely slows the adjustment process in enterprises and sends false signals to individual workers. (1996, 619.)

An example from Canada is the Hyundai plant in Bromont, Quebec. Its workers received Work Sharing benefits for several years to subsidize part-time work while the plant operated at very low capacity. It closed permanently in 1995, and Hyundai sought a buyer. To continue the German parachute analogy, the parachutist (affected worker) has a tendency not to hit the ground gradually (adjust to structural change) but rather to defy the law of gravity indefinitely (long-term inflexibility).

Another disadvantage of this approach is that workers who are displaced by plant *closures* have no opportunity to benefit. Since the cause of displacement (plant closure versus plant streamlining) is beyond the control of the individual workers, it seems inequitable that only those whose separation is caused by a partial shutdown can benefit from this special kind of program.

In summary, it seems to me that the relatively small number of workers who are likely candidates for this provision of Work Sharing benefits — those displaced through downsizing who would likely fare poorly in the external job market — may not warrant the development of the program track within the STC framework designed for structural unemployment. It appears a convoluted way to assist this needy group of workers. Two panels of Work Sharing observers concur:

> The panellists also stated that Work Sharing could potentially be misused as a subsidy to keep inefficient industries alive, nor did they believe that the program should be used in permanent lay-off situations since the use of Work Sharing in both of these situations may interfere with more appropriate adjustment strategies. (Canada 1993, 65.)

Prospects

The most serious challenge facing the Work Sharing program is its use in instances of structural unemployment. Its long-term effectiveness would be enhanced if the incidence of this misuse could be somewhat reduced.

Participation in Work Sharing seems likely to remain quite limited, except during recessions. The most serious challenge facing the program is its use in instances of structural unemployment. Its long-term effectiveness would be enhanced if the incidence of this misuse could be somewhat reduced. After the next heavy wave of program activity, the work sharing regime should be subjected to a performance evaluation in the spirit of the study carried out after the recession of 1990–92 (Canada 1993).

The institutional framework and the UI system within which Canadian firms adjust their labor input seems heavily biased toward conventional layoffs coupled with conventional UI. Given this labor market environment, an STC program can function as a worthwhile second-best measure, but the logical progression of policy analysis suggests that Canada turn its attention to a first-best set of policy measures.

There appears to be a broadening consensus that conventional layoffs are inefficiently high. What sorts of policy reforms could be introduced to reduce their incidence? My perspective is similar to that of Hamermesh, who argues, in the US context, for conventional UI reform (that is, implementing experience rating of premiums and other financing reforms) and a restructuring of labor costs (by reducing the component of quasi-fixed costs and raising the variable component). As he says:

> A wider application of STC would probably reduce layoff unemployment and spread work among more people during slack times....If no other characteristics of the UI system...can be altered, STC is a potentially effective tool if the only concern is work sharing....There are other means within the UI system of accomplishing the same goal with less adverse impact on the labor market and lower administrative costs. (1990, 9.)

Perhaps the greatest virtue of STC programs is that they draw attention to the shortcomings of the existing constellation of collective bargaining conventions and UI regulations in which labor markets currently operate.

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