AIMS Commentary

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Payroll Taxes:
Killers of jobs, killers of wages

Morley Gunderson
CIBC Chair in Youth Employment – University of Toronto
Fellow of the Royal Society of Canada

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Introduction

Payroll taxes[1] are levied on employment earnings and are generally earmarked to provide insurance against earnings losses that otherwise would occur if, for example, the eligible worker became injured (workers' compensation), unemployed (employment insurance, EI), or retired (Canada/Quebec Pension Plan, CPP/QPP). In a number of jurisdictions, however, employer payroll health taxes and education taxes have been instituted that are not designed to cover earnings losses but to raise revenue for those purposes.

Payroll taxes are generally levied on the employer, although they also can be levied on employees or both employers and employees. Because they tend to be levied on employers, they have considerable political appeal, since they give the appearance that rich corporations are paying the tax. But appearances can be deceiving: payroll taxes are generally shifted to workers — often low-wage workers — who ultimately bear most of the tax burden. The tax is usually a percentage

[1] Discussions of the history, growth, and properties of payroll taxes in Canada are provided, for example, in Dahlby (1993); DiMatteo and Shannon (1995); Baran (1996); Lin, Picot, and Beach (1996); Abbott and Beach (1997); Kesselman (1997, 2001); and Lin (1999).

What's inside:

Payroll taxes are "killers of jobs" and "killers of wages":
- a 1% increase in payroll taxes reduces wages by 2.5%
- a 1% increase in payroll taxes reduces employment by 2% to 4.8%
- relatively stagnant real wages in recent years may reflect slower nominal wage growth as a way of paying for payroll tax increases.
- at its introduction in the 1920's and 30's payroll tax rate was 1%; it reached 12% by 1997 and has increased even more significantly since then.

The most important issue: ensure that the programs payroll taxes finance are designed, implemented and administered efficiently.
- Use employer experience-rating for workers compensation and EI payments
- Review caps on EI and other payroll taxes, which encourage employers to overwork current employees (who have met the cap) rather than hire additional people
- Re-examine EI's regionally-extended benefits: they slowly erode the ability of local economies to create viable jobs

of earnings, although there is usually a ceiling on the earnings on which the tax is paid. As well, there is often an earnings floor below which the tax is not paid, and some individuals might be exempt or not covered (since coverage usually is extended only to those who contribute to the fund).

Payroll taxes in Canada have increased steadily since first instituted many decades ago (see Di Matteo and Shannon 1995). In the 1920s and 1930s, they were slightly under 1 percent of payroll, since provincial workers' compensation was the only program in place at the time. In 1940, they increased to around two percent of payroll when the federal unemployment insurance was added, and in 1966 they jumped to 4 percent of payroll when the federal CPP was added along with the QPP. Over that period, the increase in payroll taxes was solely the result of the introduction of new programs — the rate within each program did not rise. In the early 1970s, however, program rates began to rise. Coupled with the introduction of health and postsecondary education taxes in some provinces, this led to an increase in the total payroll tax rate to more than 12 percent by 1997. The rate has continued to increase since then, reflecting the dramatic rise in CPP/QPP rates to about 10 percent of payroll.

The Expected Effects of Payroll Taxes

By increasing labour costs, payroll taxes should be expected to reduce employers' demand for labour, which, in turn, should reduce after-tax wages and employment. It is for this reason that payroll taxes are often regarded as "killers of jobs," although they can also be "killers of wages."

The extent to which payroll taxes reduce wages or employment depends upon the ultimate incidence of the tax, which differs from where it is first applied. That is, even if the tax is levied fully on employers, they can shift the burden of it to labour. The extent to which employers can do so depends upon a complex set of factors, including the extent to which employers and employees value the benefits of the programs financed by the tax, and what economists refer to as the "elasticity" of the supply of labour and of employers' demand for labour.[2] If employers and employees benefit by the amount they pay, then there is no adjustment — the payroll tax is simply a user charge (Summers 1989). This link between benefits and taxes, however, can be broken by various factors, as we shall see.

The burden of the payroll tax that labour bears in the form of lower wages is heavier if *the supply of labour is inelastic* (in which case, labour cannot reduce its supply to "escape" the tax) and/or if *the demand for labour is elastic* (in which case, employers are able to "escape" the tax by substituting away from the higher-priced labour). There are good theoretical reasons to believe that most of the tax is shifted to labour (especially youth and less-skilled labour) and that this will be increasingly the case given global competition, technological change, the international mobility of capital, increasing deregulation, the spread of nonstandard employment, and the stronger attachment of women to the labour market. The reason is that labour is generally considered to be an "immobile factor of production," not easily able to move to escape the tax (that is, the labour supply is fairly inelastic). In contrast, employers' demand for labour is fairly elastic because global competition makes it difficult to pass labour cost increases on to consumers in the form of product price increases. As well, new technologies and offshore outsourcing are providing many good available substitutes for labour.

Even if labour bears most of the burden of a payroll

[2] The *elasticity of the supply* of labour indicates how responsive the labour supply is to changes in the wage rate. If the labour supply is inelastic, it is relatively fixed and individuals are not very responsive to wage changes. This could be the case, for example, if the income effect and substitution effect of a wage increase roughly offset each other. The income effect reflects that fact that a wage change increases income or wealth, which reduces the labour supply since individuals can afford not to work. The substitution effect reflects the fact that a wage increase will increase the (opportunity) cost or income forgone from not working, which should lead to a substitution towards more work.

The *elasticity of the demand* for labour indicates how responsive employers are to changing labour demand in response to a wage change. The demand for labour is elastic if labour costs are a substantial component of total cost; if labour cost increases cannot easily be passed on to consumers in the form of product price increases; if there are many good substitutes for labour, and if the substitutes are readily available.

tax in the form of lower wages in the long run, the short-run adjustment can involve considerable reductions in employment and increases in unemployment until wages adjust downward. The adjustment can be exacerbated by rigid wages and the possibility that short-run unemployment can foster more permanent long-run unemployment.

Evidence of the Effects of Payroll Taxes

The empirical evidence bears out the theoretical expectations. Because the labour supply is inelastic and the labour demand of firms is elastic, much of the burden of the payroll tax — evidence suggests approximately 80 percent — is ultimately shifted to labour in the form of lower wages even if it initially is "paid for" by employers.[3] This is especially true for lower-wage workers, who are less skilled and are not sufficiently mobile to "escape" the tax. Thus, the appeal of taxing rich corporations through a payroll tax is based largely on a false image.

It takes some time for employers to shift the tax burden to labour. In the interval, the payroll tax does indeed increase employers' labour costs, and even in the long run not all of the tax is passed on to labour. To the extent that the payroll tax is an additional labour cost to employers, it can lead to substantial reductions in employment and output and to increases in unemployment in the short run — effects that might last for perhaps five years until the longer-run adjustments to wages occur (Baran 1996, 39; Dungan 1998, 2000).

There might also be a longer-run, more permanent effect to the extent that not all of the costs of the payroll tax ultimately are shifted to labour. According to Canadian data, a one-percentage-point increase in payroll taxes reduces wages by about 2.5 percent and employment by about 2 percent (Abbott and Beach 1997, 225, 226) with DiMatteo and Shannon (1995) finding it reduces employment between 3 percent and 4.8 percent. The latter study concludes: "These results suggest that the employment effects of payroll taxes are non-trivial…The fact that since the 1960s the persistent upward trend in unemployment has been accompanied by rising payroll tax rates is probably not an entirely coincidental relationship" (19). One could also add that the relatively stagnant real wages over that period might also not be a coincidence, but might reflect slower nominal wage growth as a way of paying for payroll tax increases.

Policy Implications

Both economic theory and the empirical evidence suggest that payroll taxes are "killers of jobs" (likely in the short run) or, more subtly, "killers of wages" (likely in the longer run). Pick your poison.

There is, however, an important caveat. Payroll taxes are generally used to finance specific programs that yield benefits to employees and/or employers. Workers' compensation, for example, provides insurance benefits and vocational rehabilitation to injured workers. It also protects employers from legal liability and lawsuits over workplace injuries, since workers give up their right to sue as the quid pro quo for receiving workers' compensation. It also saves both parties the cost of potentially expensive litigation through the courts. Employment insurance replaces a portion of worker's lost earnings while unemployed. It also saves employers the cost of providing such insurance or the higher compensating wage they would have to pay workers to accept the risk of uninsured unemployment. Public pension plans provide retirement income to employees. They also save employers the cost of having to provide more of such insurance through private pensions, and they save employees the cost of paying for such a fringe benefit by accepting a lower compensating wage in return for the benefit.

In that vein, the potential negative effects of payroll taxes must also be considered in light of the benefits of the programs they finance. As a system, payroll taxes are often considered to have desirable properties. To the extent that they are like user charges earmarked for particular expenditures, they minimize distortions, since they are akin to group purchases of a service. Since they are administered through an existing payroll system, they involve minimal administrative and compliance costs. Since they are earmarked for particular expenditures, they provide a degree of entitlement to the program benefits. And since the costs are more explicit and tied to the program, program growth might be limited

[3] See Dahlby (1993); Abbott and Beach (1997); Kesselman (1997, 2001); and Lin (1999).

if people notice the costs and do not think of the program as "free" simply because it is provided by government.

Nevertheless, the link between payroll taxes and their supposed benefits is easily broken. Inefficiencies in the way payroll taxes are administered or abuses in the system could make the benefits seem small. In the case of recent health care and education payroll taxes, the benefits might not even be connected with employment at all. As well, the benefits might be perceived as going to a different generation of workers, as in such pay-as-you-go schemes as the CPP/QPP and workers' compensation (Gunderson and Hyatt 1998, 2000).

The problem of system abuses highlights the importance of "smart regulation" to ensure that the programs are efficiently designed, implemented, and administered so that program benefits are delivered in a cost-effective fashion. This could entail, for example, greater use of the well-established insurance principle of experience rating. This could be more extensively applied at the firm level in workers' compensation, so that employers with poor accident records would have an incentive to improve their workplace health and safety (Gunderson and Hyatt 2002, 21). Experience rating could also be applied to unemployment insurance. In the United States, where premiums of individual firms are already based on their past unemployment insurance (UI) claims, Anderson and Meyer (2000, 103) find that

> a country contemplating a move to experience rating might expect UI claims rates to fall between 10 and 33 percent, and the seasonality of this rate to fall 16-40 percent. These results clearly suggest that experience rating reduces UI claims and stabilizes employment. Both of these changes mean lower unemployment and, thus, likely higher social welfare. (2000, 103)

Scrutiny could also apply to regionally extended benefits, whereby unemployed persons in high unemployment regions can qualify sooner and receive benefits longer. Lee and Coulombe conclude, for example:

> The key to reduce regional disparities in living standards in Canada is to reduce regional disparities in unemployment rates. … We suggest the best way to do this is to facilitate adjustments in the labour market by eliminating regional distortions such as regionally extended unemployment benefits and the perverse subsidy to seasonal unemployment that comes out of the UI system. (1995, 7)

Such regionally extended benefits also run the risk of fostering a dependence on EI that can slowly erode the ability of local economies to create viable jobs sustained by market forces.

The cap or limit on EI payments (and other payroll taxes) also merits re-examining. That cap — unintentionally, as is so often the case with regulation — creates an incentive for employers to have their current employees work long hours (since they are likely at the cap and no further payroll taxes need be paid for them), rather than hire new workers and pay their higher payroll taxes until they reach the cap (Reid 1986). This can lead to long hours and "overworking" of incumbent workers who already tend to suffer from the "time crunch" associated with balancing work and family. It can also foster the unemployment of more marginalized groups that are facing difficulties being hired because the payroll tax would apply to them.

Clawbacks and other incentive features of the public pension system should also be given another look, including the clawbacks in the Old Age Security system and the Guaranteed Income Supplements, the requirement that individuals "substantially cease working" to receive their public pension benefits early; the penalties imposed on those who delay receiving their benefits until age 70 and beyond; and the requirement that individuals must begin to draw down on their RRSPs after age 71.

The most important issue with respect to payroll taxes is to ensure that the programs they finance are designed, implemented, and administered efficiently. If that is the case, then the payroll tax is largely a tax on labour, earmarked to provide work-related insurance — against the risk of injury, unemployment, and income loss on retirement — that both employers and employees value. These are simply group purchases, largely paid for by labour in the form of lower wages in return for the

benefits of the programs. Until those wages adjust, however, payroll taxes imply higher labour costs for employers and hence become "killers of jobs." When wages do adjust downward, payroll taxes become "killers of wages" unless the programs they finance achieve their goals efficiently. There is room for much improvement in such programs in Canada, and payroll taxes merit closer policy interest.

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Market mechanisms should be considered innocent until proven guilty — perhaps more so in labour markets than in other markets. All too often, however, the response to a negative labour market outcome is to try to "fix" the problem by imposing a law or regulation on the *symptom*: if wages are low, legislate a minimum; if older workers are required by company policy to retire, ban mandatory retirement; if striking workers are replaced by other workers, ban strike replacements. Although labour laws and regulations can be politically expedient in the short run by giving the appearance that action is being taken, in the long run they can be a recipe for disaster by shifting the focus to the symptom and away from the underlying *cause.* Worse, they can have unintended consequences, perhaps even harming the very people they were intended to help or protecting already-advantaged and well-organized interest groups.

Labour markets have characteristics that make them not only distinct from other markets, but also a target for regulation and institutional protection. There are grounds for this, but there are also dangers. Many of the differences between labour markets and other markets are ones of degree, not quantum differences in kind. Moreover, the regulations and institutions that are designed to mitigate market mechanisms also have their imperfections. Thus, when a negative labour market outcome presents itself, governments should take a certain sequence of decision-making steps (see Gunderson 2002):

- Determine if artificial barriers are inhibiting labour market forces themselves from dealing with the negative outcome; if that is the case, determine if the barriers are the unintended by-products of other government policies or regulations that can be altered to remove them.
- Determine if *well-defined* market failures are inhibiting market forces themselves from dealing with the negative outcome.
- Even if there are such failures, consider which is better: an imperfect market-based solution or an imperfect government-regulated solution, and bearing in mind that public intervention might well displace private activity in the area.
- If there is a role for public policy, determine how best to implement it, recognizing that public *financing* need not mean public *provision,* and that governments will face many of the same problems as market participants if markets fail.

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Morley Gunderson holds the CIBC Chair in Youth Employment at the University of Toronto and is a Fellow of the Royal Society of Canada. He is a Professor at the University of Toronto's Centre for Industrial Relations and Human Resources, Department of Economics, and School of Public Policy and Governance, and a Research Associate of the Institute for Policy Analysis, the Centre for International Studies, and the Institute for Human Development, Life Course and Aging.

Atlantic Institute for Market Studies

2000 Barrington St., Ste. 1302 Cogswell Tower,
Halifax NS B3J 3K1
phone: (902) 429-1143 fax: (902) 425-1393
E-Mail: aims@aims.ca
www.aims.ca