# THE UNDERGROUND ECONOMY: MEASUREMENT AND CONSEQUENCES

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### TABLE OF CONTENTS

	Page
INTRODUCTION	1
WHAT IS THE UNDERGROUND ECONOMY?	2
CAUSES OF THE UNDERGROUND ECONOMY	4
A. Economic Rationale	4
B. Political Science Rationale	5
C. Empirical Research on Causes	8
THE SIZE OF THE UNDERGROUND ECONOMY	9
IMPACT OF THE GST ON THE UNDERGROUND ECONOMY	10
THE CANADA REVENUE AGENCY AND THE UNDERGROUND ECONOMY INITIATIVE	11
OTHER POSSIBLE MEASURES TO IMPROVE COMPLIANCE	13
A. Reduce Taxes	13
B. Hide the GST	14
C. Strengthen Compliance Measures	14
D. Simplify Administration	14
E. Change the Tax Mix	14
CONCLUSION	15



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#### **INTRODUCTION**

Most people have had some contact with the underground economy, either because they sought it out or because it was offered to them. In the latter case, perhaps it was a car mechanic or carpenter who offered a "cash only" price. In the former instance, maybe it was simply the temptation to omit reporting some extra income at tax time.

Estimates of the size of the underground economy vary widely, partly because underground economic activity is, by its nature, difficult to observe, and partly because of divergent opinions on the definition of the underground economy. In the early to mid-1990s, Statistics Canada, using a narrow definition of the underground economy, estimated its value at anywhere from 1.4% to 5.2% of Gross Domestic Product (GDP). Others, such as University of Ottawa professor Gilles Paquet, employed a much broader definition of the underground economy and estimated its value at anywhere from 33% of GDP all the way to 100% of GDP.

While interest in and concern about the underground economy peaked in the early to mid-1990s, and especially after the introduction of the Goods and Services Tax (GST) in 1991, recent research suggests the underground economy has not disappeared and is likely still substantial in size. In 2002, for example, economists David Giles and Lindsay Tedds claimed their research showed that the underground economy had grown steadily from about 3.5% of GDP in 1976 to 15.7% of GDP in 1995. (4) Assuming the underground economy is still 15.7% of GDP, its value in 2003 would be about \$191 billion. (5)

<sup>(1)</sup> The underground economy is also known as the "black market," the "hidden economy," the "shadow economy" and the "subterranean economy."

<sup>(2)</sup> G. Gervais, *The Size of the Underground Economy in Canada*, Statistics Canada, Catalogue 13-603, No. 2, February 1994, p. 60; and Philip Smith, "Assessing the Size of the Underground Economy: The Statistics Canada Perspective," *Canadian Economic Observer*, May 1994, p. 3.31.

<sup>(3)</sup> Gilles Paquet, "The Underground Economy," University of Ottawa Working Paper 88-33, 1988, p. 4.

<sup>(4)</sup> David E. A. Giles and Lindsay M. Tedds, *Taxes and the Canadian Underground Economy*, Canadian Tax Paper No. 106, Canadian Tax Foundation, Toronto, 2002.

<sup>(5)</sup> For the underground economy to measure the same 15.7% in 2003 as it did in 1995 implies that the underground economy grew in lockstep with the legitimate, official economy.

Policy-makers are, of course, interested in knowing more than just the size of the underground economy. They also want to know how much it costs governments in terms of lost tax revenue, especially if they want to avoid budgetary deficits while contemplating new spending or tax-cut initiatives. Using a fairly broad definition of the underground economy, Giles and Tedds estimated that it cost the federal government almost \$44 billion in forgone tax revenue in 1995, an amount that represented about 33% of the federal government's total tax revenue in that year. Using a narrower definition, the Auditor General of Canada stated in a 1999 report that the underground economy was costing federal and provincial governments \$12 billion in lost tax revenue each year. In terms of the 2002-2003 fiscal year, this would amount to about 6.7% of the federal government's total tax revenue.

To explore these issues in more detail, this paper begins by reviewing some of the definitions of the "underground economy," because differing definitions account for much of the large discrepancy in the estimates mentioned above. The paper next considers the rationale – economic and otherwise – for engaging in the underground economy. It then takes a closer look at some of the estimates of the size of the underground economy, followed by an analysis of the impact of the GST. In the last two sections, the paper considers some of the federal government's efforts to shrink the underground economy, as well as other possible policy actions to limit its size and scope.

#### WHAT IS THE UNDERGROUND ECONOMY?

Economists David Giles and Lindsay Tedds classify underground economic activities as shown in Table 1 below. (8)

<sup>(6)</sup> Giles and Tedds (2002), p. 236. The authors define underground economic activity as legal transactions involving tax evasion, plus illegal transactions. These definitions are discussed in detail below.

<sup>(7)</sup> Report of the Auditor General of Canada, 1999, Chapter 2, p. 2–5, available on-line at: <a href="http://www.oag-bvg.gc.ca/domino/reports.nsf/html/99menu\_e.html">http://www.oag-bvg.gc.ca/domino/reports.nsf/html/99menu\_e.html</a>. The Auditor General defines the underground economy as legal transactions involving tax evasion. This definition does *not* include illegal economic activity.

<sup>(8)</sup> Giles and Tedds (2002), p. 3.

**Table 1: Classifying and Defining the Underground Economy** 

	Market Activities	Non-market Activities
Underground activities based	(1) Failure to report income from wages, self-employment, benefits, profits, capital	(2) Failure to report barter activities involving legal goods and services.
on legal activities	gains and dividends; evasion of border taxes via e-commerce.	
Illegal activities	(3) Sale of stolen goods, drugs, smuggled gems, tobacco, alcohol, and exotic animals and plants; fees for human smuggling; the manufacture of drugs; prostitution; gambling; fraud related to business activities, benefits and insurance; software and audio-visual piracy, "zapping" cash registers to erase transactions, and "curbsiding," i.e. the illegal sale of motor vehicles.	(4) Barter of stolen goods, drugs, or smuggled tobacco or alcohol; theft of goods for own use; production of drugs for own use; extortion; software and audio-visual piracy for own use or barter.

Source: Giles and Tedds (2002), p. 88, Table 5.1.

From this table, and for the purposes of this brief review, two definitions of the underground economy can be developed. The first definition corresponds to squares (1) and (2) of Table 1. It defines the underground economy as otherwise legal transactions that become illegal because the transactions are not reported to the relevant tax authorities. The second major definition holds that the underground economy comprises legal *plus* illegal transactions (see squares (3) and (4)) not reported to the responsible level of government. Under this definition, the underground economy includes all four types of activities listed in Table 1.

A third, much broader definition of the underground economy, not illustrated by Table 1, extends the second definition to include *all* non-market activity, including unpaid housework and volunteer work. This is the definition apparently employed by Paquet in estimating that the underground economy was equivalent to at least 33% of the GDP and as much as 100%. Using a similar definition, Statistics Canada pegged the underground economy at 47% of GDP. This definition of the underground economy, however, is rarely used in the literature and falls outside of the common understanding of underground activity as somehow

<sup>(9)</sup> Using the same table, Giles and Tedds discuss five different definitions of the underground economy. For most of their research, however, they refer only to the two discussed here.

<sup>(10)</sup> This is known as tax evasion, i.e., the illegal avoidance of taxes. Tax experts normally distinguish between tax evasion and tax avoidance, which is the legal shuffling of transactions or business activity to lower or eliminate tax payments. Tax collectors are mostly preoccupied with limiting tax evasion as opposed to tax avoidance.

<sup>(11)</sup> Smith (1994), p. 3.29.

"outside of the law." (12) It will therefore not be considered further. The bulk of the analysis will instead focus on the Giles and Lindsay distinction between underground activity linked to tax evasion and underground activity linked to the illicit nature of the transaction.

#### CAUSES OF THE UNDERGROUND ECONOMY<sup>(13)</sup>

For many law-abiding citizens, the thought of engaging in the underground economy rarely occurs until an opportunity to do so presents itself – a workman who, for example, offers a "cash-only" price with a wink and a nudge. In some sense then, the question of "opportunity" is key to understanding the underground economy. To get to the heart of the matter, however, it is important to investigate what motivates a seller or a service provider to offer the cash-only price, and what motivates the buyer – the law-abiding citizen – to accept the offer.

There are two main theories as to why people engage in the underground economy. The first is put forward by economists; the second, by political scientists. These two theoretical approaches are augmented by empirical analysis, which is discussed in the third part of this section.

#### A. Economic Rationale

For some economists, criminal activity – including underground economic activity involving illegal transactions or tax evasion on legal transactions – can best be explained as a rational decision that takes into account the economic benefits of illegal activity as well as the economic costs of being caught (fines, jail time, a criminal record and lost income). (14)

<sup>(12)</sup> Note also that by measuring all non-market activity, this definition could also suggest that the underground economy has shrunk since the early part of the century, when much of what today would be considered "market activity" was conducted in the home. These activities would include, for example, the caring and nurturing of children and elderly patients within the family (versus using daycare or nursing homes), the preparation of foods by the homemaker (versus using take-out or "readymade" meals), and the greater degree of manual labour (versus using vacuum cleaners, electric washers and dryers, and so on).

<sup>(13)</sup> The discussion in this section borrows heavily from earlier research by Library of Parliament analyst Terrence Thomas.

<sup>(14)</sup> This approach to analyzing criminal behaviour was pioneered by University of Chicago economist and Nobel prize winner Gary Becker. See in particular Becker's "Crime and Punishment: An Economic Approach," *Journal of Political Economy*, Vol. 76, March/April 1968, pp. 169-217.

In other words, these economists believe that criminals are as rational as anyone else, behaving no differently than, for example, a business executive contemplating the costs and benefits of an investment. Accordingly to this view, criminal activity will increase if the value of the investment/criminal activity goes up, or the probability of being caught goes down, or the penalties for getting caught decrease. These economists would predict, for example, that an increase in cigarette or liquor taxes would, all other things being equal, (15) lead to an increase in smuggling activity. They would also argue that the introduction of the GST, even though it was designed to be "revenue neutral" and merely replace the old manufacturers' sales tax (MST), might nevertheless have led to increased underground economic activity, because the probability of being caught for GST tax evasion – at least in the early years – was probably quite low as tax administrators were still learning about the tax, its consequences and typical tax evasion schemes. (16)

Finally, a related economic point is that where underground activities tend to have high returns and economies of scale, one might expect organized crime to become involved. To illustrate, proponents of this economic theory would point to the growth of organized cigarette smuggling in the early 1990s, and its subsequent demise after sharp reductions in federal and provincial tobacco taxes as well as new and improved enforcement measures in the mid-1990s.

#### **B.** Political Science Rationale

Perceptions of fairness – above and beyond the economic emphasis on the rationality of tax evasion and underground activity – are also thought to play an important role in determining a person's willingness to engage in the underground economy. In developed economies such as Canada's, fairness in the tax system is usually said to rest on two criteria:

- Horizontal Equity: This is the idea that individuals in the same economic circumstances (roughly, with the same income and set of deductions) should pay the same tax;
- Vertical Equity: This is the idea that those with higher incomes should pay a greater proportion of their income in tax than those with lower incomes (the tax system should be progressive).

<sup>(15)</sup> Among other things, this prediction rests on an assumption that the increased taxes are not offset or accompanied by increased detection activity, fines, jail terms or other penalties.

<sup>(16)</sup> They might also argue that evasion might have increased because the GST was a very visible tax, one that applied at the point of sale rather than at the manufacturing stage.

If there is widespread tax evasion, those who do not engage in tax evasion end up paying more than those in the same economic circumstances who do. Moreover, governments may increase tax rates to compensate for the revenue lost due to tax evasion, possibly worsening the original tax evasion problem. The horizontal equity principle is violated to the extent that people in similar circumstances face different tax rates and tax burdens because of the willingness or ability of some to take part in the underground economy. This situation could lead previously law-abiding citizens to become tax evaders. (18)

The second criterion of fairness (the vertical equity principle) may be violated if a regressive tax is introduced, or if those with higher incomes have a greater propensity to evade taxes. If citizens are concerned about vertical equity, particularly with respect to the GST, increased tax evasion should be most heavily concentrated among those with relatively low incomes. Like most hypotheses about tax evasion, it is difficult to obtain the data to test this hypothesis. At first glance, the GST, like any other sales tax, is regressive. The GST tax credit, (19) however, dampens somewhat the GST's regressive features, at least for those with low incomes. (20)

In short, taxes perceived as horizontally or vertically unfair may not be paid or respected. A high degree of tax compliance depends on a vibrant civil society, a healthy "social contract" between the governed and those who govern, a well thought-out and relatively simple

<sup>(17)</sup> This idea of "diminishing returns" from taxation originated with economist Arthur Laffer and became embodied in what became known as the "Laffer curve." It was based on the premise that as taxes rise, work effort decreases so that at some point, an increase in tax rates actually leads to reduced tax revenue because of an induced increase in leisure consumption. The "Laffer curve" theory is not often cited now, because it is apparently very dependent on the broader social context, as evidenced by the sharp divergence in tax rates between countries such as the United States and, for example, some of the northern European countries, where tax rates often exceed 50%.

<sup>(18)</sup> Note that the increased evasion is also potentially consistent with Becker's model. In this case, previously law-abiding citizens were law-abiding because they overestimated the probability of getting caught; widespread tax evasion by others in their economic circumstances prompts these law-abiding citizens to re-evaluate the probability of getting caught, which increases the net return to crime and leads them to begin evading taxes.

<sup>(19)</sup> The GST tax credit is granted on the basis of the taxpayer's income and is not related to his or her particular expenditures. Given this situation, low-income taxpayers have an even greater incentive to evade the GST, because not only do they avoid paying the tax, they also continue to receive the GST tax credit.

<sup>(20)</sup> It should be noted that, even if the tax is regressive, the claim that people cheat on the GST because of its regressive nature may be a simple rationalization of illegal activity.

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7

tax structure and, finally, an appropriate system of monitoring and penalties for those caught cheating. Spiro, for example, points to Switzerland's successful introduction of a value-added tax through a series of referenda that helped build a social consensus.

Psychological studies of taxpayer behaviour have found that evasion increases when people can convince themselves that a tax is unfair. For their own self-esteem, most people like to think of themselves as honest. Indeed, society could not function at all were this not the case ... However, once people see themselves as being cheated by government, they feel justified in "cheating back." (21)

This theoretical perspective, then, would predict that the GST would cause an increased incidence of tax evasion to the extent it was seen as unfair. The evidence seems to suggest that this was in fact the case, with some claiming the GST played an important role in bringing down the Progressive Conservative government of Kim Campbell. It is also important to note that the GST was introduced just as the economy was entering a period of decline, interest rates were rising, deficits were growing, unemployment rates were high and rising, the real estate market was collapsing, cigarette smuggling was rampant, and cross-border shopping was a serious concern. For many economists, these cyclical economic factors would be expected to increase the economic benefit of tax evasion and underground activity more generally relative to the cost of being caught, especially in tobacco smuggling and cross-border shopping, where penalties were relatively minor and the chances of being caught were slight. In short, purely rational economic decisions may have overlapped and aggravated a sense that the GST, and the tax system more generally, were increasingly unfair.

<sup>(21)</sup> Peter Spiro, "Taxes, Deficits, and the Underground Economy," in Owen Lippert and Michael Walker, *The Underground Economy: Global Evidence of its Size and Impact*, The Fraser Institute, Vancouver, 1997, p. 50.

<sup>(22)</sup> Spiro (*op. cit.*, p. 47), for example, writes that "... the GST overnight became the most unpopular tax imposed by a Canadian government in peacetime. *Globe and Mail* columnist Peter Cook commented that 'the single most unpopular act of the late, unlamented Mulroney government was its introduction of the goods and services tax.' This was not just hindsight: during 1990, newspapers were full of headlines such as 'Arguing the Case for a GST revolt,' 'Two-thirds of Canadians still oppose tax,' 'GST last straw,' 'Individuals Crushed by Tax While Companies Get off Lightly,' and 'A Shopping List for GST Haters."

#### C. Empirical Research on Causes

Empirical research has identified two major factors that are believed to affect the size of the underground economy: (23)

- changes in measured economic growth rate i.e., GDP growth rates. An increase in Canada's GDP growth rate will, all other things being equal, likely cause an increase in the size of the underground economy;
- changes in tax rates. An increase in taxes will, all other things being equal, likely cause an increase in the size of the underground economy. (24) Changes in personal income taxes are thought to have the greatest effect on underground activity, more so than changes in indirect taxes (25) and corporate taxes.

Other frequently cited factors that are believed to increase the size of the underground economy include:

- an increase in the number and extent of government regulations, which increase the cost of working in the official economy relative to the underground economy;
- an increase in the unemployment rate, which increases the incentives to work in the black market for two reasons: first, some of those who lose their official economy jobs may be able to find work in the underground economy while collecting employment insurance (EI) for their lost employment at the same time. Second, those unable to find work in the official economy and ineligible for EI may feel they have no choice but to engage in the underground economy in order to provide for their basic food and shelter needs; (26)
- an increase in self-employment, where it is generally easier to evade taxes and where empirical research suggests a disproportionate amount of tax evasion takes place.

<sup>(23)</sup> Giles and Tedds (2002), p. 237.

<sup>(24)</sup> Giles and Tedds also find that increases in the underground economy tend to cause increases in tax rates. Growth in the underground economy, for example, could be expected to lead to higher tax rates as governments attempt to maintain their overall revenue collection.

<sup>(25)</sup> Indirect taxes include retail sales taxes such as the GST and excise taxes on gasoline, jewellery, tobacco and other products.

<sup>(26)</sup> Giles and Tedds (2002), p. 10. The authors suggest, however, that the role of unemployment is probably ambiguous to the extent that unreported activity takes place alongside reported activity. Under that scenario, a fall in the unemployment rate (i.e., more reported activity) would lead to growth in the underground economy.

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These empirical findings – like most empirical findings – are sensitive to the period in which the analysis is conducted. Introducing a new tax during a period of strong economic growth might have little impact on the underground economy. Introducing the same tax in the middle of a recession might lead to a different outcome. Similarly, increasing taxes in a high-tax jurisdiction might lead to more underground economic activity than the same tax increase would in a low-tax jurisdiction.

#### THE SIZE OF THE UNDERGROUND ECONOMY

It is difficult to be certain of the size of the underground economy. As the authors of a recent book on the topic pointed out, "...it is probably best to admit at the outset that there is no simple or definitive answer to the question, 'What is the size of Canada's underground economy." (27)

There are two major reasons for the wide variance in estimates discussed in the introduction. The first is that those who hide their income or engage in illegal activities are generally not anxious to share that information. Researchers consequently employ a variety of *ad hoc* and often widely divergent methodological and statistical approaches to estimate the size of the underground economy. The second reason is that, as noted above, different researchers use different definitions of the term "underground economy." Underground economy estimates by Statistics Canada, the Auditor General, and others normally consider only tax evasion activity related to legal transactions. Other estimates, however, including those by Giles and Tedds and by Mirus and Smith (cited below), broaden the definition to include illegal economic activity such as the sale of illicit drugs.

Notwithstanding these two difficulties, there appears to be some consensus on the size of the underground economy, depending on which of the two major definitions is employed. Table 2 sets out these two major groups of estimates. Using a relatively narrow definition of the underground economy as tax evasion relating to otherwise legal transactions, researchers have pegged the underground economy at anywhere from 1.4% to 5.4% of GDP. Broadening the definition of the underground economy yields estimates ranging from 8% to 16% of GDP.

<sup>(27)</sup> *Ibid.*, p. xviii.

<sup>(28)</sup> This classification of estimates of the size of the underground economy into two broad categories, while useful for exposition purposes, does some injustice to the actual analytical work underlying the estimates. For example, Statistics Canada's upper-bound 5.4% estimate includes a measure of illegal transactions as amounting to no more than 1% of GDP. Giles and Tedds (*op. cit.*, pp. 89-92) argue that this dramatically understates the true extent of illegal, unrecorded economic activity in Canada.

**Table 2: The Size of the Underground Economy as a Percentage of GDP: Two Estimates and Two Definitions** (29)

	Tax Evasion on Legal Transactions	Tax Evasion on Legal Transactions plus Illegal Transactions
Estimated size of the underground economy	1.4-5.2% (\$17.1 – \$65.8 billion)	8-16% (\$97.5 – \$195 billion)
Estimated loss of federal tax revenue	\$12 billion <sup>*</sup>	\$44 billion**
Sources	Auditor General of Canada, Department of Finance, Statistics Canada. (30)	Giles and Tedds, Mirus and Smith, Schneider and Enste, Spiro. (31)

<sup>\*</sup> Report of the Auditor General of Canada, 1999, Ch. 2, p. 2–5.

#### IMPACT OF THE GST ON THE UNDERGROUND ECONOMY

The GST was introduced in 1991, in the midst of a recession and at a time when the country was beset by cross-border shopping, high and rising unemployment, a trend towards more self-employment, the widespread *perception* and media discussion of a growing underground economy, (32) tobacco smuggling, general tax fatigue and growing budget deficits. Shortly after the GST was introduced, researchers and policy analysts noticed a sharp rise in the use of bills and coins throughout Canada. This rise in the use of cash was widely interpreted as a sign that Canadians, angered by the introduction of the GST, were increasingly taking part in the

<sup>\*\*</sup> Giles and Tedds (2002), p. 236. Note that this figure is for 1995 only.

<sup>(29)</sup> Most of the estimates cited in this table were developed in the early to mid-1990s.

<sup>(30)</sup> Report of the Auditor General of Canada, 1999, p. 2–8; Department of Finance (Don Drummond, Mireille Ethier, Maxime Fougère, Brian Girard and Jeremy Rudin), "The Underground Economy: Moving the Myth Closer to Reality," *Canadian Business Economics*, Summer 1994, p. 5; Smith (1994); Gervais (1994).

<sup>(31)</sup> Giles and Tedds (2002), p. 236; Rolk Mirus and Roger S. Smith, "Canada's Underground Economy: Measurement and Implications," in Lippert and Walker (1997), p. 8; Friedrich Schneider and Dominik H. Enste, "Shadow Economies: Size, Causes, and Consequences," *Journal of Economic Literature*, 2000, p. 78; and Spiro, as cited by Giles and Tedds (2002), p. 81.

<sup>(32)</sup> The 9 August 1993 issue of *Maclean's* magazine, for example, contained the article "Cheaters: Tax Evasion Costs \$30 Billion – Enough to Cover the Deficit."

underground economy, where cash is the preferred means of exchange. (33) Media interest in the issue also increased appreciably. Between 1982 and 1992, there had never been more than 10 articles a year on the underground economy in major Canadian publications. In 1992, the number of articles on the subject jumped to almost 140.

Based on an analysis of the ratio of cash balances to consumer expenditures, Peter Spiro estimated in 1993 that the GST increased the size of the underground economy by as much as 0.8% of GDP between 1991 and 1992. Spiro's approach has been criticized, however, by Statistics Canada, the Department of Finance and other researchers for employing what some consider questionable assumptions.<sup>(35)</sup>

Nevertheless, subsequent research – employing different statistical techniques – seems to support Spiro's contention that, at least initially, the GST contributed to growth in the underground economy. In their 2002 book, Giles and Tedds "find strong evidence that if in 1991 the federal government had not introduced the goods and services tax (GST) but had instead effected a revenue-neutral increase in the effective personal income tax rate, then the underground economy would have been smaller in subsequent years than we estimate it to have actually been." Giles and Tedds do not, however, provide an estimate of the impact of the GST on the underground economy.

### THE CANADA REVENUE AGENCY AND THE UNDERGROUND ECONOMY INITIATIVE

Some attempts have been made to rein in the underground economy. In 1993, Revenue Canada (now known as the Canada Revenue Agency (CRA)) created what it called its "underground economy initiative" or UEI. The UEI consisted of, among other things, adding 200 workers to its "non-filers and non-registrants" program and another 1,000 staff to audit small

<sup>(33)</sup> Unlike credit cards or other non-cash forms of money, cash leaves very little trace or record of the underlying transaction and is therefore the ideal medium of exchange – after pure barter – for underground economic activity.

<sup>(34)</sup> Roderick Hill, "The Underground Economy in Canada: Boom or Bust?" *Canadian Tax Journal*, Vol. 50, No. 5, 2002, p. 1642.

<sup>(35)</sup> The principal weakness of this approach is that it assumes that an increase in the use of cash is tied to an increase in the size of the underground economy, when in fact consumers may be using more cash for other reasons such as reduced inflation (i.e., less opportunity cost to holding money), new technology (i.e., increased use of automatic teller machines), and a recession (i.e., a shift away from large, credit-based purchases towards more cash transactions).

<sup>(36)</sup> Giles and Tedds (2002), p. 238.

businesses, where, according to the Auditor General of Canada, "most of the underground activity exists." In particular, the CRA targeted four sectors of the economy: the hospitality sector; automobile repairs and sales of used vehicles by curbsiders; the jewellery trade; and the construction/renovation industry.

In the hospitality sector, the UEI focused on the restaurant trade, especially with respect to unreported waiter/waitress tips and tampering with cash registers by means of electronic "zappers" that erase transaction records. In the automotive repair and car sales sector, the UEI targeted unreported garage repairs and the sale of cars by unlicensed businesses (curbsiders). In the jewellery trade, the UEI targeted potential jewel smuggling operations and craftspeople who sell directly to consumers.

The prime location for underground activity, however, is in the construction and home renovation sectors, where work can be done and services exchanged with little or no visible trace. In addition to increased audits, the CRA also joined with groups such as the Canadian Home Builders Association (CHBA) to inform consumers about the risks of having work done "under the table," without a written contract.

The CRA claimed that as a result of the UEI, voluntary disclosures of previously underreported taxable income quadrupled and the submission of tax returns by previous non-filers increased, helping the agency to generate an additional \$2.5 billion in tax revenue during 1993-1998. In a 1999 review of the UEI program, however, the Auditor General of Canada stated that the \$2.5-billion figure represented the effects of the UEI *plus* regular, ongoing compliance efforts, and that the actual impact of the UEI was probably closer to \$500 million in additional tax revenue between 1993 and 1998.<sup>(38)</sup>

In recent years, the UEI appears to have been expanded to include more efforts at publicizing the consequences – both pecuniary and moral – of underground economic activity. These include the aforementioned "Get it in Writing!" campaign with the CHBA and renewed focus on community visits, where CRA officials discuss compliance issues with local businesses. In its 2002-2003 annual report to Parliament, the CRA estimated that its enforcement activities – including but not limited to the UEI – had generated a net \$7 billion during the 2002-2003 fiscal year.

<sup>(37)</sup> Report of the Auditor General of Canada, April 1999, p. 2–5.

<sup>(38)</sup> *Ibid.*, p. 2–16.

#### OTHER POSSIBLE MEASURES TO IMPROVE COMPLIANCE

Improving compliance – i.e., containing or shrinking the underground economy – is no simple matter. Once people have become engaged in the underground economy, they acquire skills and knowledge that help them avoid future detection. They may also build "underground economy" social networks. Both these outcomes increase the cost of exiting the underground economy, just as similar activities increase the cost of exiting the official, aboveground economy. That said, people can and do change, and there are several things the federal government could do to improve compliance, including:

- reduce taxes such as the GST and/or broaden the tax base;
- "hide" the GST;
- strengthen compliance measures;
- simplify the administration of the tax system; and
- change the tax mix.

#### A. Reduce Taxes

Perhaps the easiest way to improve compliance is to reduce taxes. This option could be especially effective if citizens have adapted to the existing level and view the tax cut as an incentive to work in the official, above-board economy. Lowering the GST from 7% to 5%, for example, might bring more economic activity into the official economy because it would lower the cost of compliance. Moreover, as recent economic psychology findings suggest, people react strongly to familiar reference points – dropping the GST to 5% would seem almost like a bonus to some, at least in the short term. (39)

For such a tax reduction to be revenue-neutral (i.e., maintain the current level of government revenue), however, the government would likely have to broaden the tax base or increase taxes elsewhere. In terms of the GST, this might mean extending the tax to include items such as groceries, which are currently "zero-rated," i.e., the GST is set at 0%. Such a move could, however, encourage underground activity in the previously zero-rated areas.

<sup>(39)</sup> The most often cited example of this is a person's reaction to temperature: a temperature of 25° Celsius might seem "uncomfortably hot" to a northerner, but "pleasant" to a person from Florida.

#### B. Hide the GST

In the years leading up to the introduction of the GST, there was much discussion about whether the tax should be "visible" or be included in the price. Some have suggested that compliance might have been improved if the CRA had required only GST-inclusive pricing, thus "hiding" the impact of the GST. While the current generation of consumers might perceive such a move as "devious" or manipulative, it could with time fade from public consciousness and ultimately lead to improved compliance.

#### **C.** Strengthen Compliance Measures

Among other things, the CRA's 1993 Underground Economy Initiative aimed at improving compliance through increased audits, more detailed research into key non-compliance sectors, legislative changes, stiffer penalties for tax evasion, publicity campaigns and greater cooperation with provincial taxing agencies. The Auditor General's review of the program has generally been favourable, although the CRA has been faulted for not being as diligent as it might be in fulfilling some of its promises, particularly its efforts at publicizing the consequences of tax evasion. Recent joint efforts, however, such as the partnership with the CHBA, appear to be moving in the right direction.

#### **D.** Simplify Administration

The CRA also appears to have made some progress in terms of simplifying the tax system. In terms of the GST, these include measures to refine the simplified input tax credit and the "quick method" for calculating GST owing.

#### E. Change the Tax Mix

While the discussion on compliance issues has tended to focus on the GST and its effect on the underground economy, it is important to remember that a substantial portion of the underground economy is driven by a desire to avoid income taxes. This is the reason that a workman may offer a "cash-only" price for a good or a service. The buyer's opportunity to avoid paying the GST is thus, in some measure, dependent on the seller's desire to avoid paying income taxes.

Indeed, Giles and Tedds find empirical evidence that shifting the tax structure to *income* taxes and away from indirect and corporate taxes is, notwithstanding the problems with the GST in the early 1990s, more likely to lead to an increase in the underground economy. Their review of the empirical evidence for Canada suggests that "the underground economy is about 2.5 times more responsive to changes in the effective personal tax rate than it is to changes in the effective indirect tax rate. It is about 10 times more responsive to changes in the effective personal tax rate than it is to changes in the effective corporate tax rate." This, in turn, suggests that changing the tax mix more towards indirect taxes such as the GST and more corporate taxes, and away from personal income taxes, could play an important role in constraining or even shrinking the underground economy, especially if combined with tax cuts.

#### **CONCLUSION**

In the early to mid-1990s, there was considerable policy and academic interest in the underground economy and tax evasion. At the time, the underground economy was widely perceived as growing, fuelled in part by the introduction of the GST and exacerbated by a weak economy, growing federal deficits, high unemployment rates, considerable cross-border shopping due to the strong Canadian dollar, and last but not least, high rates of cigarette smuggling. The most realistic estimates suggested the underground economy accounted for anywhere from 4.5% of Canada's GDP to 16%, depending on the definition. Estimates of the resulting tax loss vary just as widely, ranging from 6.7% to 33% of total tax revenue. There are two important caveats to these tax-loss estimates. First, no one believes these lost tax revenues are fully recoverable: at some point, the cost of collecting an extra dollar in tax revenue exceeds the benefit. Second, all estimates of the underground economy are extremely sensitive to small changes in the assumptions, changes in the period under analysis, and changes in what, for want of a better word, may be called the "social compact."

During the years since the introduction of the GST, many of the factors that contributed to concerns about overall tax fairness or that might have increased the incentives for tax evasion appear to have changed: people have, for the most part, come to grudgingly accept and better understand the GST and particularly the advantages of registering for the GST in order

<sup>(40)</sup> Giles and Tedds (2002), p. 203.

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16

to collect the GST input tax credit.<sup>(41)</sup> Moreover, income tax rates are now considerably lower than they were, especially after the tax cuts announced by the federal government in 2002. The economy is strong, unemployment is down and budgets are in surplus. Cross-border shopping is no longer a major concern. Tobacco taxes are somewhat lower, but with much better enforcement.

All these subtle and not-so-subtle changes have conspired to push the issue of the underground economy to the background, suggesting that in some important ways, compliance has been improved not so much by deliberate action targeted at improving compliance (with the exception of cigarette smuggling) but as a virtuous consequence of other policies pursued for their own reasons.

<sup>(41)</sup> Some small businesses whose annual sales fall below \$30,000 are not required to register for or collect the GST. In opting not to register, these businesses are, however, unable to claim a GST input tax credit.