

The Underground Economy in Ontario's Construction Industry

***Estimates of its Size and the Revenue
Losses to Government and the Workplace
Safety & Insurance Board (WSIB)***

***Final Report
November 1998***

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The Underground Economy in Ontario's Construction Industry: Estimates of Its Size and the Revenue Losses to Government and the WSIB

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Executive Summary

This study has two objectives: to estimate the size of the underground economy in Ontario's construction industry and to estimate the amount of the fiscal loss to governments and to the WSIB that results from underground practices in construction.

By its very nature, the underground economy in construction is difficult to measure. The amount of underground activity and the income derived from underground practices vary over the economic cycle and over the course of the construction season. Within Ontario, there are undoubtedly regional differences in the incidence of underground activity. Notwithstanding these measurement difficulties, it is nevertheless possible to develop reasonable estimates of the average amount of underground work in construction and the likely income generated by that work. It is also possible to estimate the revenue loss to governments and agencies, such as the Ontario Workplace Safety and Insurance Board, that is a consequence of underground practices in construction. While these estimates cannot claim precision, given the nature of the underground economy, they nevertheless provide a credible indicator of the size of the underground economy in construction and the revenue loss to governments.

A. The Amount of Underground Work

The study estimates that between 1995 and 1997, underground employment in the Ontario construction industry was in the range of **25% to 35% of total employment**. Our best estimate is 28%. Exhibit No. 1 sets out the estimated rate of underground employment in each sector and in the industry, as a whole. The estimated rates apply to the average employment between the years 1995 and 1997.

Exhibit No. 1
Estimates of Underground *Employment* in the Ontario Construction Industry,
Annual Averages, 1995-1997

| | Avg. Employment | Low Estimate | | High Estimate | | Best Estimate | |
|---|-----------------|--------------|------|---------------|------|---------------|------|
| | 1995-97 | Underground | Rate | Underground | Rate | Underground | Rate |
| <i>New Residential</i> | | | | | | | |
| New Housing | 75,150 | 11,273 | 15% | 15,030 | 20% | 12,525 | 17% |
| Renovations | 65,183 | 32,592 | 50% | 45,628 | 70% | 36,213 | 56% |
| Total New Residential | 140,333 | 43,864 | 31% | 60,658 | 43% | 48,738 | 35% |
| <i>Repair Residential</i> | 23,361 | 14,017 | 60% | 18,689 | 80% | 15,574 | 67% |
| <i>Total Residential Construction</i> | 163,694 | 57,881 | 35% | 79,347 | 48% | 64,312 | 39% |
| <i>New Non-Residential</i> | | | | | | | |
| Building | 50,273 | 7,541 | 15% | 10,055 | 20% | 8,379 | 17% |
| Engineering | 33,625 | 1,345 | 4% | 2,018 | 6% | 1,494 | 4% |
| Total New Non-Residential | 83,898 | 8,886 | 11% | 12,072 | 14% | 9,873 | 12% |
| <i>Repair Non-Residential</i> | 27,408 | 3,563 | 13% | 6,578 | 24% | 3,959 | 14% |
| <i>Total Non-Residential Construction</i> | 111,306 | 12,449 | 11% | 18,650 | 17% | 13,832 | 12% |
| <i>Total Construction</i> | 275,000 | 70,330 | 26% | 97,997 | 36% | 78,144 | 28% |

B. The Amount of Underground Income

The proportion of *income* that is underground is somewhat lower than the proportion of *employment* that is underground. This difference arises from the fact that most underground workers factor in their savings from tax evasion and charge a lower labour rate to a customer or contractor. On the basis of other research work, we have estimated that this discount is between 12.5% and 25%.

Exhibit No. 2 sets out our estimates of underground *income* on the same basis as the previous estimates for underground *employment*. For the industry, as a whole, we estimate that 20% to 30% of all income in construction is underground. Our best estimate is 22%.

Exhibit No. 2
Estimates of Underground *Income* in the Ontario Construction Industry, 1995-1997
Annual Averages, 1995-1997 (\$millions)

| | Avg. Annual Employment Income, 1995-97 | Low Estimate | | High Estimate | | Best Estimate | |
|---|--|--------------|------------|---------------|------------|---------------|------------|
| | | Underground | Rate | Underground | Rate | Underground | Rate |
| <i>New Residential</i> | | | | | | | |
| New Housing | 3,106 | 342 | 11% | 466 | 15% | 380 | 12% |
| Renovations | 3,012 | 1,205 | 40% | 1,807 | 60% | 1,339 | 44% |
| Total New Residential | 6,119 | 1,546 | 25% | 2,273 | 37% | 1,718 | 28% |
| <i>Repair Residential</i> | 1,079 | 518 | 48% | 734 | 68% | 575 | 53% |
| Total Residential Construction | 7,198 | 2,064 | 29% | 3,007 | 42% | 2,294 | 32% |
| <i>New Non-Residential</i> | | | | | | | |
| Building | 2,591 | 311 | 12% | 440 | 17% | 345 | 13% |
| Engineering | 1,993 | 60 | 3% | 100 | 5% | 66 | 3% |
| Total New Non-Residential | 4,584 | 371 | 8% | 540 | 12% | 412 | 9% |
| <i>Repair Non-Residential</i> | 1,187 | 119 | 10% | 237 | 20% | 132 | 11% |
| Total Non-Residential Construction | 5,771 | 489 | 8% | 778 | 13% | 544 | 10% |
| Total Construction | 12,696 | 2,554 | 20% | 3,784 | 30% | 2,838 | 22% |

C. The Amount of Revenue Loss

On average, the revenue loss to governments from the underground economy in the Ontario construction industry was \$1.1 billion to \$1.7 billion in each year from 1995 to 1997. These revenue losses lead to greater burdens on all Canadian taxpayers, regardless of whether they work in the construction industry. In the case of the WSIB, there is a direct relationship between the revenue losses attributable to the underground economy in construction and the higher contributions that legitimate contractors must pay.

Exhibit No. 3
Estimates of Government Revenue Losses from
Underground Practices in Construction
Ontario, 1995 - 1997, Annual Averages - \$Millions

| | Low Estimate | High Estimate |
|---|----------------|----------------|
| Goods and Services Tax (GST) | \$128 | \$192 |
| Retail Sales Tax (RST) | \$14 | \$28 |
| Employer Health Tax (EHT) | \$4 | \$8 |
| Personal Income Tax | \$840 | \$1,369 |
| Canada Pension Plan (CPP) | \$32 | \$43 |
| Employment Insurance (EI) | \$23 | \$39 |
| Workplace Safety and Insurance Board (WSIB) | \$31 | \$55 |
| Total Fiscal Loss | \$1,072 | \$1,734 |

D. The Factors Driving the Underground Economy

Comparing this study to work done by Statistics Canada suggests that since 1990, the underground economy has increased by 50% to 100%. The underground economy is now imbedded in Ontario's construction industry.

Three factors were the principal drivers of the increase in underground practices in construction. The first of these was the introduction of the GST on January 1, 1991. There is strong evidence for a ratcheting up of underground work following the introduction of the GST. The impact of the GST cannot be separated from the second factor, namely, the economic conditions in the construction industry at the time the GST was introduced. The sharp increase in unemployment from 1991 onwards, together with significantly more intense competitive conditions for contractors, cut across the entire construction industry.

These economic conditions, in turn, led to a dramatic increase in the number of construction workers who are self-employed. This was the third factor behind the growth of the underground economy. Without this increase in self-employment, underground activities in construction could not have reached their present proportions.

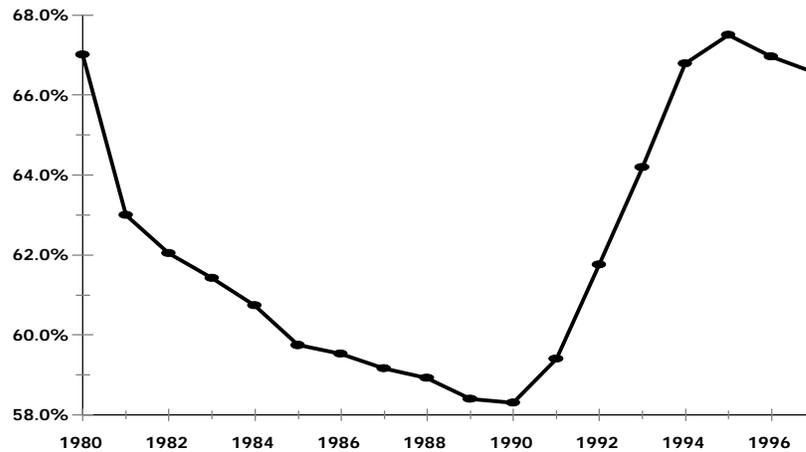
The GST:

The impact of the GST is most graphically illustrated by the sharp increase in the use of cash for transactions. Cash, of course, is the preferred currency of the underground economy. Prior to 1991, there was a steady decline in the use of cash. Credit cards diminished the amount of actual cash that was needed in relation to average monthly purchases. In 1991, however, that trend was reversed.

Exhibit No. 4

Average Monthly Currency (Seasonally Adjusted) held outside Chartered Banks as a Percent of Average Monthly Personal Expenditure, in Current Dollars, on Goods and Services¹

Statistics Canada, CANSIM Data Series B1604 and D15312



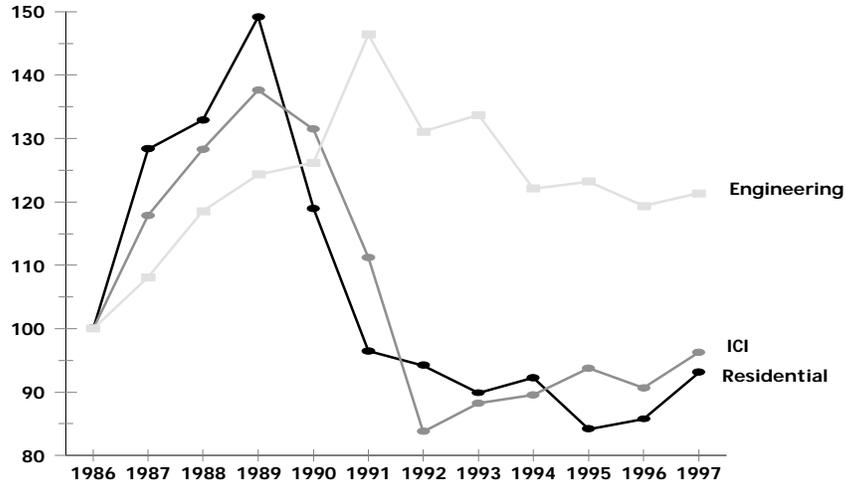
Acute Unemployment:

In the early 1990's there was a concurrent decline in investment in new construction in both the ICI and residential sectors. The effect of this recession was to drive down paid employment. As a result of the scarcity of legitimate work, especially after UI benefits were exhausted, many workers engaged in underground practices, especially in the renovation and repair sector. Renovation and repair employment did not experience a decline comparable to that in new construction.

¹ A similar analysis is found in Peter S. Spiro, "Evidence of a Post-GST Increase in the Underground Economy," *Canadian Tax Journal*, vol 41, no. 2 (1993).

Exhibit No. 5

New Construction Investment in Ontario by Sector, 1987-1996 (Index: 1987= 100)
Statistics Canada, CANSIM



Intense Competition:

The sharp decline of new construction investment in the ICI and residential sectors led to a situation where contractors were chasing fewer and substantially smaller jobs. Construction prices fell and competitive pressure became significantly more severe. Among small contractors, over 40% in many trades reported to Revenue Canada that they were operating at a loss. Many, of course, continued in business by concealing income that they would previously have reported.

Exhibit No. 6

Proportion of Residential and ICI Contractors with Revenues Under \$5 Million Operating at a Loss, Ontario 1994-1996 (Average)
Statistics Canada

| SIC | Industry Group | Percent Operating at a Loss (Average 1994-1996) |
|-----------|-------------------------------------|--|
| 4011 | Single Family Housing | 44.8% |
| 4012 | Apartment and Multiple Unit Housing | 43.2% |
| 4013 | Residential Renovation | 41.3% |
| 4021-4023 | ICI | 41.7% |

Commencing in 1991, construction industry bankruptcies ratcheted up sharply. In the first half of the 1990's, construction industry bankruptcies were some 40% higher than in the years immediately prior to the downturn in construction spending.

The sudden emergence of severe unemployment, in combination with the ratcheting up of competitive pressure, led to a sharp increase in both self-employment and underground work. The growth of self-employment was the essential underpinning of the increase in the underground economy. This is not to say that all self-employed workers in the construction industry are part of the underground economy. However, self-employment is a key enabling factor behind growth in the underground economy in construction.

Behind these factors was the increase in the overall tax and regulation burden on both contractors and workers. This burden was not unique to the construction industry and must be regarded as a factor that led to a general increase in unreported activity in many sectors of the economy.

E. Self-Employment

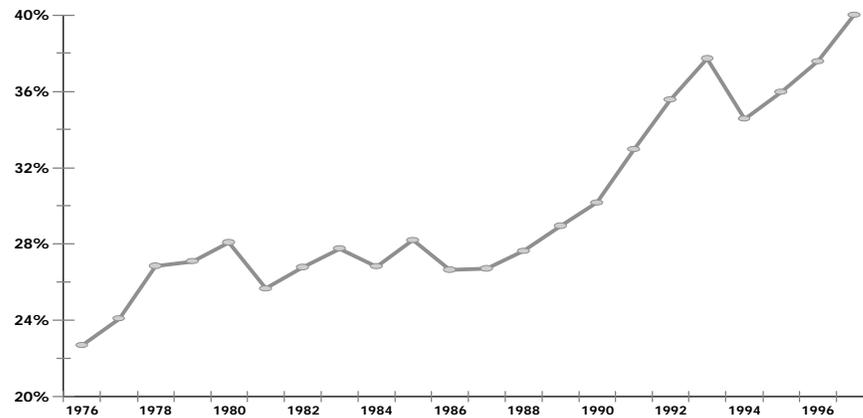
The scale of the change in Ontario's construction labour market is illustrated by comparing 1987 to 1997. Total employment was virtually the same in these years. In 1987 there were 293,700 workers employed in Ontario's construction industry. In 1997, total employment was 290,200. However, the similarity ends there. The number of persons who were wage-workers was significantly lower in 1997 than in 1987: 212,700 in 1987 compared to only 176,200 in 1997. At the same time, the number of self-employed workers *increased* from 77,500 in 1987 to 117,500 in 1997. *The self-employed share of total construction employment grew from 26.7% to 40.0%* This growth in self-employment arose from a complex set of factors. Many laid-off workers turned to self-employment to earn a living. Others may have been required by their former employers to change their status to nominal self-employment to evade taxes and other charges. Finally, the recession led many small contractors to lay-off their paid workers and resume employment as independent operators.

Exhibit No. 7 shows the trend in self-employment as a share of total construction employment in Ontario. Other data show that, on average, self-employed workers in construction worked more hours per week than wage-paid employees. In the construction industry, the majority of self-employed hours of work were undertaken by workers who were self-employed on a full-time basis. Although "moonlighting" was a factor in the growth of self-employment, the increase in moonlighting does not explain the growth in self-employment.

Exhibit No. 7

**Self-Employment as a Percentage of Total Construction Industry Employment, Ontario
1976 - 1997 (Annual Average)**

Statistics Canada - Labour Force Survey



F. Dependent Contractors

There are two types of hiring relationships: a *paid employment relationship* and a *contract-for-service*.

A *paid employment relationship* presumes an employer who exercises supervision and control over who does the work and how it is done. An employer typically provides materials and equipment and may supply tools. Regardless of whether an employee is remunerated on an hourly basis or a piece-rate basis, the employer is responsible for maintaining records of employment, paying EI, CPP and WSIB contributions, deducting income tax at source and issuing both a T-4 slip and a record of employment (RoE). The latter is used to access EI benefits.

In a *contract-for-service* arrangement, the person performing the work has substantial autonomy over determining how a job is done, when the work is done and, when necessary, who works as a helper or assistant. Workers on a contract-for-service usually supply the necessary materials either as part of the contract or on a cost-plus basis. There are no contributions to EI, CPP or WSIB paid by the customer or contractor nor is income tax deducted at source. Workers who operate on a contract-for-service basis are termed *independent operators*.

To avoid deducting taxes at source or paying EI, CPP and WSIB contributions, many contractors hire persons as employees but fraudulently *mask the relationship* as a contract-

for-service. The substantive issues of control and supervision are the same as in an employment relationship, but the remuneration is portrayed as a contract-for-service. Workers whose employment has these characteristics are termed *dependent contractors*. In law, they are regarded as employees, meaning that income tax should be deducted at source and contributions should be made by their employer for EI, CPP and WSIB. As well, these *de facto* employees should be covered by the *Employment Standards Act* in regard to overtime, holidays and vacation pay.

A significant portion of self-employed workers are dependent contractors. This has implications for both WSIB coverage and EI coverage. We estimate that dependent contractors and workers who are paid an hourly or piece rate account for 16.5% to 19.6% of all underground work in Ontario's construction industry.

G. Implications

The estimates that we have developed of underground employment and income in Ontario's construction industry show that conditions in the industry changed radically in the 1990's. These changes have significant implications for governments, contractors and employees, as well as for the owners of buildings and structures. The first implication, and the one examined in this report, is the revenue loss to governments resulting from underground practices in construction.

The growth of the underground economy also has many other negative implications for the construction industry. These include increased tax and contribution burdens on legitimate contractors and workers. This is especially clear in the case of the WSIB, where construction industry contributions have increased significantly. The growth of underground practices in construction also results in unfair competition for legitimate contractors and workers. As well, underground practices potentially weaken health and safety standards and programs, undermine labour standards and erode construction standards. Finally, underground practices reduce the contribution base for benefits plans and weaken apprenticeship training and skills development.

Q

November 1998

Overview

A. Objectives:

This study has two objectives. The first is to estimate the size of the underground economy in Ontario's construction industry. The second is to estimate the amount of tax revenue and WSIB contributions that are lost as a result of underground practices in construction.

By its very nature, the underground economy in construction is difficult to measure. The amount of underground activity and the income derived from underground practices vary over the economic cycle and over the course of the construction season. Within Ontario, there are undoubtedly regional differences in the incidence of underground activity. Notwithstanding these measurement difficulties, it is possible to develop reasonable estimates of the average amount of underground work in construction and the likely income generated by that work. It is also possible to estimate the revenue loss to governments and agencies, such as the Ontario Workplace Safety and Insurance Board, that is a consequence of underground practices in construction. While these estimates cannot claim precision, given the nature of the underground economy, they nevertheless provide a credible indicator of the size of the underground economy in construction and the revenue loss to governments.

This chapter sets out the study's key findings and summarizes the evidence of a significant increase in underground work in the 1990's. Chapter Two reviews previous analytical work. Chapter Three examines the factors that promoted the growth of the underground economy including, in particular, the growth of self-employment. While, by no means do all self-employed persons work underground, we believe that, in the construction industry, the growth of self-employment was inextricably bound up with the expansion of underground activities. Chapter Four develops detailed estimates of the amount underground economy work in the construction industry. Chapter Five considers the implications of these estimates for tax revenues and for the WSIB. Chapter Six presents the study's conclusions. The methodology used in developing the estimates presented in Chapters Four and Five is described in appendices to the main report. A case study prepared for the Ontario Construction Secretariat is also attached as an appendix.

B. Key Findings

There is compelling evidence that, throughout the 1990's, the underground economy increased significantly in Ontario's construction industry. In some segments of the industry, underground work is now the predominant form of employment. Working underground is now so widespread in the construction industry that it has become imbedded. Many workers are employed both legitimately and in the underground economy. Similarly, there are contractors who work both legitimately and underground.

The scale of underground work threatens employment standards, weakens construction standards, undermines legitimate contractors and jeopardizes apprenticeship and training. Governments lose substantial revenues as a result of underground work. By implication, the tax burden of those who work legitimately is higher than it need otherwise be.

The growth of the underground economy also has significant implications for the WSIB. In the first place, the WSIB does not receive contributions for work that is done underground. At the same time, many injuries suffered while working underground are undoubtedly reported to the WSIB as if they had occurred while working legitimately. This shifting of liabilities to the WSIB is facilitated by the fact that many individuals work both legitimately and underground, often for the same employer.

The growth of underground activities is the single most important policy issue confronting the construction industry.

Three factors were the principal drivers of the increase in the underground economy in construction. The first was the introduction of the GST on January 1, 1991. There is strong evidence for a ratcheting up of underground work following the introduction of the GST. The GST added significant new costs, especially to residential construction and to renovation work. Prior to the GST, the Manufacturers Sales Tax applied only to materials. The GST applies to the full value of the job. This is a significant and visible tax increase. More important, for some construction activities - such as renovation work - the GST can be avoided relatively easily by doing cash deals.

The impact of the GST cannot be separated from the second factor, namely, the economic conditions in the construction industry at the time the GST was introduced. The sharp increase in unemployment from 1991 onwards, together with significantly more intense competitive conditions for contractors, cut across the entire construction industry.

These economic conditions, in turn, led to a dramatic increase in the number of construction workers who are self-employed. This was the third factor behind the growth of the underground economy. Without this increase in self-employment, the underground activities in construction could not have reached their present proportions.

In addition to these factors, which we have identified as the principal drivers of the increase in underground activities, there were other contributing factors. In the first half of the 1990's, the total burden of income taxes and payroll taxes increased. The attraction of working underground increased. During this period, access to unemployment insurance benefits was also tightened. In 1989, the number persons in Ontario receiving regular UI benefits was 77% of the number of unemployed. By 1997, that proportion had declined to 29%. That is to say, 71% of the unemployed did not qualify for the now renamed EI benefits. Some of these unemployed workers undoubtedly moved into the underground economy.

The policies and enforcement systems of the WSIB, Revenue Canada and the Ontario Ministry of Finance (formerly the Ministry of Revenue) were overwhelmed by these developments. Indeed, the WSIB may have facilitated the shift to nominal self-employment when it introduced, in 1992, a more liberal "organizational test" to determine independent operator status and did not do systematic audits of applications for independent operator status.

We estimate that the amount of construction industry employment that is underground is in the range of 25% to 35%. Our best estimate is 28%. This proportion is substantially higher in residential construction, where we estimate the proportion of underground employment at 35% to 48%, with our best estimate being 39%. In the ICI sector, we believe that underground activity accounts for 15% to 20% of total employment, with our best estimate being 17%.

We estimate the revenue loss to governments and to the WSIB as follows:

Exhibit I-A
Estimates of Government Revenue Loss from
the Underground Economy in Construction
Ontario, 1995 - 1997, Annual Averages
\$Millions

| | Low Estimate | High Estimate |
|-------------------------------------|--------------|----------------|
| Goods and Services Tax (GST) | | |
| New Residential Construction | \$ 7 | \$ 14 |
| Repair and Renovation | \$121 | \$178 |
| | ----- | ----- |
| Total | \$128 | \$192 |
| Retail Sales Tax (RST) | \$14 | \$28 |
| Employer Health Tax (EHT) | \$4 | \$8 |
| Personal Income Tax | \$840 | \$1,369 |
| Canada Pension Plan (CPP) | \$32 | \$43 |

| | | |
|---|----------------|----------------|
| Employment Insurance (EI) | \$23 | \$39 |
| Workplace Safety and Insurance Board (WSIB) | \$31 | \$55 |
| Total Fiscal Loss | \$1,072 | \$1,734 |

C. Evidence of an Increase in Underground Work

1. Statistics Canada's Estimates

In a 1994 study, Statistics Canada formulated estimates of the construction expenditures that escape *measurement* in the national accounts statistics.² These estimates should not be confused with an estimate of the size of the underground economy. Expenditures that escape *measurement* are undoubtedly part of the underground economy. However, our work indicates that, in the construction industry, by far the greater portion of underground work is *measured* by Statistics Canada as part of its overall estimates of output, employment and income. That being said, it is nevertheless useful to review Statistics Canada's estimates of *unmeasured* construction expenditures. The Statistics Canada study focussed on 1992. This is also an important fact to keep in mind. As will be shown later in this chapter, 1992 was at the beginning of the run-up in underground work. The underground economy grew substantially after 1992.

For 1992, Statistics Canada's estimates of *unmeasured* construction expenditures, on a national basis, are as follows:

Exhibit I-B
Statistics Canada's Estimate of Unmeasured Expenditures
in Residential Construction
Canada, 1992

| Construction Sector | Percent of Expenditures that Escape Measurement (Upper Boundary) |
|-----------------------------------|--|
| Non-Residential Construction | 0.0% |
| New Residential Construction only | 9.0% |
| Residential Renovation only | 13.9% |

² Statistics Canada, *The Size of the Underground Economy in Canada*, by Gylliane Gervais, 1994 Catalogue No. 13-603E, No. 2

Elsewhere in the same study, Statistics Canada estimates that, in the overall economy, work that is *measured*, but done underground, is equal to about half of what escapes *measurement*. We believe that this is an understatement for construction. Nevertheless, using this 50% ratio as a first approximation, suggests that around 13.5% of total expenditures in new residential construction were done on an underground basis and around 21% in residential renovation. The Statistics Canada study provides no guidance for estimating the amount of underground work in the ICI sector.

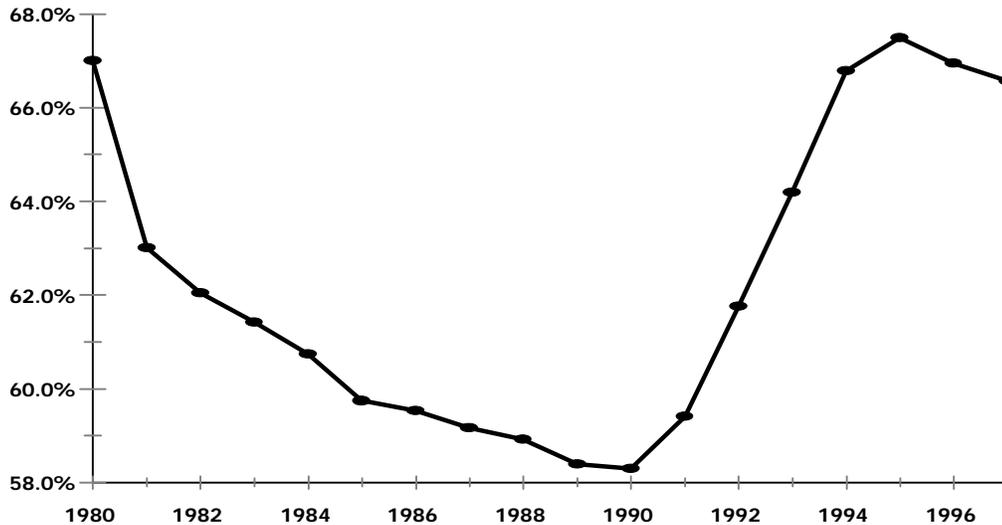
It should be noted that Statistics Canada regards its estimates of *unmeasured* expenditures as an upper boundary estimate. By inference, the estimate of the underground economy that we derived from their work would also be considered by Statistics Canada to be an upper boundary estimate. As will be evident from the discussion in this Chapter and the estimates subsequently developed in Chapter Four, we believe that underground activity in construction is much higher than implied by Statistics Canada's analysis. Part of the reason for this conclusion is that the base year for Statistics Canada's study was 1992. In our view, the evidence points to a significant growth in the underground economy since then.

2. The Use of Cash

The underground economy is strongly associated with the use of cash. The reason for using cash, except for small purchases, is to avoid creating a "paper trail." In general, one would expect the overall use of cash, in relation to total household purchases, to decline with the spread of credit cards and, and more recently, debit cards. Indeed, this decline did occur each and every year throughout the 1980's. In 1991, however, the trend away from cash went into reverse. The reversal continued until 1995. What accounts for the greater use of cash? The co-incidence with the introduction of the GST in January of 1991 is too strong not to be regarded as the chief cause of the shift to cash.

Exhibit I-C shows the amount of cash outside the banking system as a percentage of average monthly personal expenditures. The implication of Exhibit I-C is that, in 1990, the average cash balance was equal to roughly 58.3% of monthly personal expenditures on goods and services. By 1995, this proportion had increased to 67.5%. The increase is striking. It is *prima facie* evidence of a widespread increase in the use of cash and, by inference, strong evidence of a significant ratcheting up of the underground economy. Many of these underground transactions were undoubtedly in the retail and food service sectors. Others were probably related to the purchase of smuggled tobacco products. By all accounts, however, the construction industry was a significant contributor to the growth of the underground economy.

Exhibit I-C
Average Monthly Currency (Seasonally Adjusted) Held Outside Chartered Banks as a Percent of Average Monthly Personal Expenditure, in Current Dollars, on Goods and Services - Canada³
 Statistics Canada, CANSIM Data Series B1604 and D15312



3. Household Expenditure Patterns

Household expenditures may be divided between spending on durable goods and spending on non-durables. Spending on durable goods is more cyclical. However, expenditures on various types of durable goods generally tend to follow a common trajectory. That is to say, the factors that affect a household’s decision to purchase a new appliance are similar to the factors that affect its decision to purchase new furniture, a new car or some other “big ticket” item. It is reasonable to expect that expenditures by homeowners on renovations and repairs would largely follow the pattern of overall spending on durable goods.

Exhibit I-D compares spending on consumer durables as a whole with homeowner expenditures on renovations and repairs. The estimates of spending on consumer durables are drawn from the national accounts statistics. The estimates for spending by homeowners on renovations and repairs are taken from the Survey of Homeowner Renovation and Repair Expenditures. This distinction is important, because the estimates for renovation and repair spending are the expenditures that were *reported* by homeowners in the survey. It is highly likely, however, that an increase in underground activity would be accompanied

³ A similar analysis is found in Peter S. Spiro, “Evidence of a Post-GST Increase in the Underground Economy,” *Canadian Tax Journal*, vol 41, no. 2 (1993).

by an increased in *concealed* spending that would not be reported in the Survey of Homeowner Renovation and Repair. The data bear out this interpretation.

Exhibit I-D shows that homeowners' *reported* expenditures on renovations and repairs generally tracked overall spending on durables until 1992. After 1992, spending on durables increased, while *reported* spending by homeowners on renovations and repairs declined. From 1987 to 1993, for every \$1.00 spent on durables, approximately \$0.24 was spent on renovations and repairs. This ratio was remarkably constant over the period. By 1996, the *apparent* ratio fell to \$0.18. This divergence is consistent with the view that, after the introduction of the GST, there was a marked increase in *unreported*, underground work in residential renovation and repair, but that there was no comparable trend towards concealment in the retailing of durable goods.

Exhibit I-D
Expenditures on Durable Goods (National Accounts)
Compared to Reported Expenditure of Homeowners on Renovations
and Repairs (HRRE Survey)
(1987 = 100), Canada
Statistics Canada)

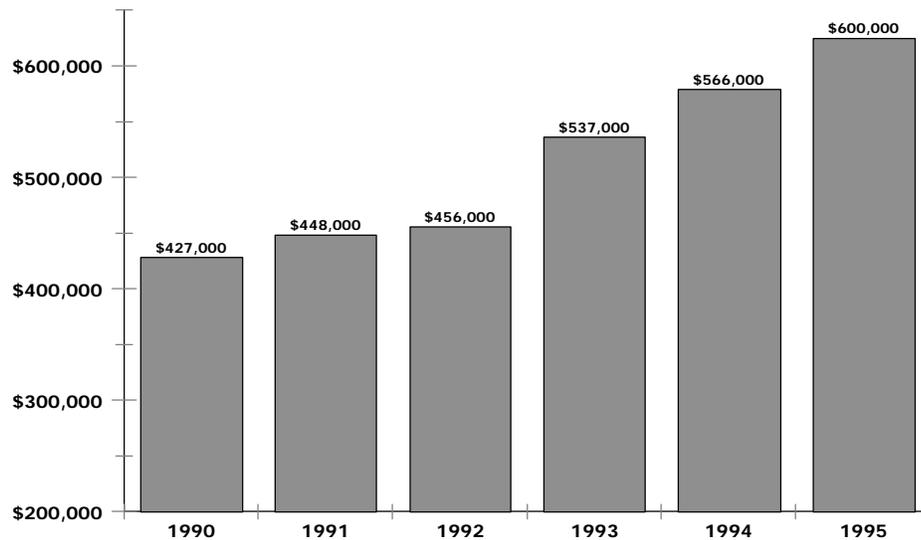


4. Materials Consumed in Residential Construction

In general, we should expect to find that, in residential construction, the ratio of final output to materials consumed would be comparatively stable, at least over short periods of time. The data, however, indicate an increase in this ratio.

Exhibit I-E tracks the consumption of lumber and building materials per million dollars of residential construction. The increase in the ratio after 1992 is striking.

Exhibit I-E
Sales of Lumber and Building Materials
per \$ Million of Expenditure on Residential Construction, Canada
Statistics Canada⁴



There are four possible explanations. First, there could have been a dramatic increase in do-it-yourself renovation and repair. This would increase materials consumed without increasing labour income. As a result, the ratio of materials to final output would increase. Given the recession, this may explain some of the increase in the ratio shown in Exhibit I-E. A second explanation would be that the prices of building materials increased while the price of labour remained the same. Were this to occur, the materials share of final output value would increase. However, materials prices should have *declined* by about 6-7% when the manufacturers sales tax was replaced with the GST. The data indicate that some prices fell, while others held up. On average, prices of materials did not change significantly. A third explanation for an increase in the materials ratio would be that labour costs fell. Given the recession, this is possible, but not by the 25-30% required to explain the change in the materials ratio. The final explanation is that there was an increase in underground work after 1992. This would have led to an increase in the proportion of labour income that was concealed. As a result, the *apparent* ratio of materials to total cost would have increased. Given the evidence of other indicators, this is the most likely explanation.

⁴ Based on National Accounts and custom data supplied by Statistics Canada. See also Statistics Canada, *The Size of the Underground Economy in Canada*, *op. cit.*, Table No. 1, p 12.

5. Concealed Income in Construction

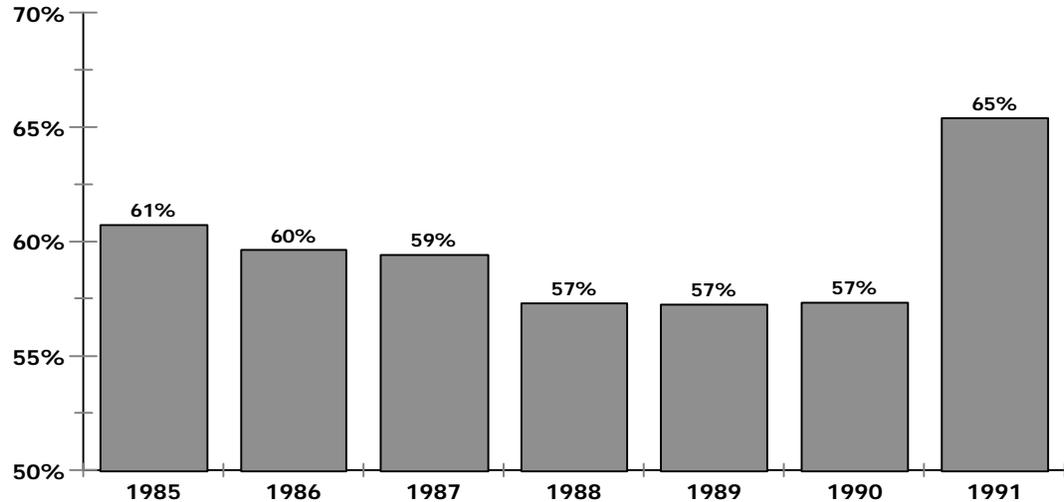
Opportunities to conceal income are a function of the employment relationship. Workers who are paid a wage (or a piece rate) have virtually no means of concealing their income, since it is reported by their employer and recorded on a T-4 slip. It is the self-employed who have the opportunity to conceal income if they have co-operation of an owner or a contractor. This is usually done by working for cash. The self-employed may either be incorporated or unincorporated. Unincorporated businesses are employed individuals (and partnerships) who operate a business without using a corporate structure to shelter their business activities. Many of these self-employed are legitimate independent operators, that is to say, they are not subject to supervision or close control. Others, however, are dependent contractors who work on a piece rate basis. They are treated by their *de facto* employers as sub-contractors rather than as employees. In this way their *de facto* employers avoid employer contributions for EI, CPP, WSIB as well as the requirement to deduct income tax at source.

Statistics Canada has compared the estimated net income of unincorporated businesses in construction, based on the system of national accounts, with the net income that was reported to Revenue Canada by unincorporated construction businesses. The analysis covers the period 1985 to 1991. What is striking about this analysis is that it reveals that the *majority* of work done by unincorporated business in the construction industry is underground. Statistics Canada estimated that, on average, over 60% of the net income of unincorporated construction businesses is concealed from Revenue Canada. Moreover, the proportion increased from 57.3% to 65.3% in 1991, *i.e.*, after the introduction of the GST. This is consistent with other data that point to a ratcheting up of underground work after 1991.

Exhibit I-F summarizes Statistics Canada's estimates of concealed income to 1991. Estimates after this year are not available. Other estimates for Saskatchewan and the Yukon point to roughly similar orders of magnitude.⁵

⁵ Luigi Zanasi, *The Underground Economy in Construction in Saskatchewan*, for United Brotherhood of Carpenters and Joiners, 1986 (June 1996) and *The Underground Economy in Construction in the Yukon*, Yukon Carpenters and Allied Workers (June 1996)

Exhibit I-F
Percent of Net Income of Unincorporated Construction Businesses
(i.e., Self-Employed) that is not reported to Revenue Canada, Canada
Statistics Canada⁶



6. Self-Employment in Construction

One of the defining trends in the Ontario construction industry in the 1990's has been the sharp increase in the number of self-employed workers and the even more dramatic increase in their share of total employment. Chapter Three will examine this trend in more detail.

The increase in self-employment can be attributed to three causes. The first was the increase in the number of construction workers who were being laid off and sought work on a self-employed basis to earn a living. This may be characterized as a “push” factor. The second, and related cause, was workers who were attracted to self-employment as a more attractive way to work. One of these attractions was the ability to conceal income. Increases in income taxes and other charges undoubtedly made it more attractive to conceal income. This may be termed a “pull” factor. Finally, depressed economic conditions forced many small contractors to lay off their workers. These small contractors then worked as independent operators. This also may be regarded as “push” factor.

In 1987, 26.7% of construction workers were self-employed. By 1997, that proportion had increased to 40.0%. Most of this increase occurred after 1990. Moreover, as will be discussed in Chapter Three, virtually all of the increase in self-employment took the form of self-employed workers who did not hire other workers. This is consistent with an

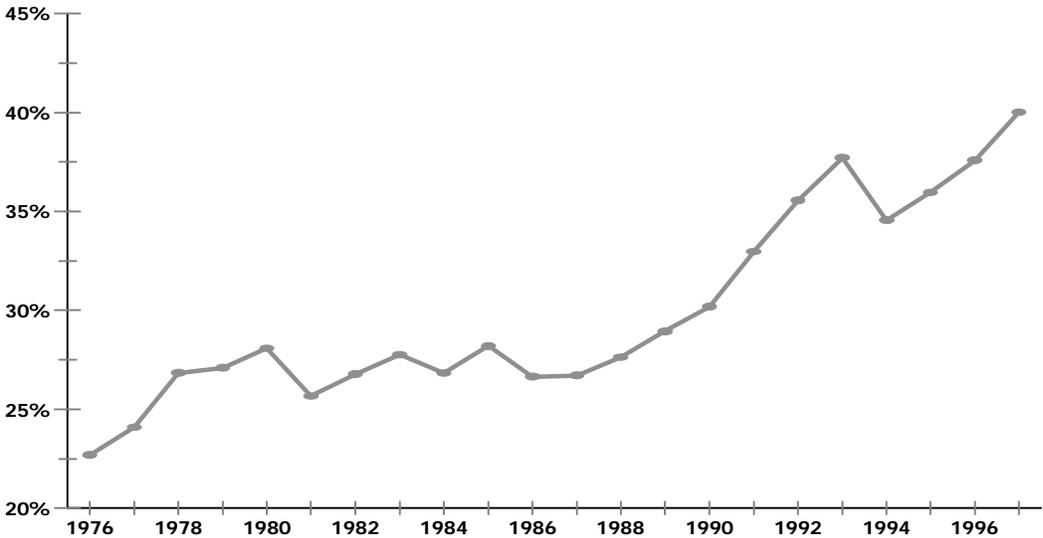
⁶ *op. cit.* p 13, based on Table No. 2

increase in the number of dependent contractors, *i.e.*, workers whose employment relationship was deliberately configured as a sub-contract arrangement but which had the substantive character (supervision, etc.) of a normal wage-based employment relationship. As noted above, the majority of the net income from unincorporated, self-employed workers in construction is concealed from Revenue Canada.

Exhibit I-G tracks the self-employed as a percentage of total employed workers in Ontario's construction industry. The data show that the trend to self-employment began in the late 1980's - a period of overall expansion for the construction industry. However, if self-employment were simply a benign effect of economic growth, one would have expected the share of self-employment to decline when the construction industry fell into recession in 1991. This did not happen. In fact, the trend to self-employment became even more pronounced. We believe that the drivers behind the increase in self-employment after 1991 were the GST and the need to take work on whatever terms it was available.

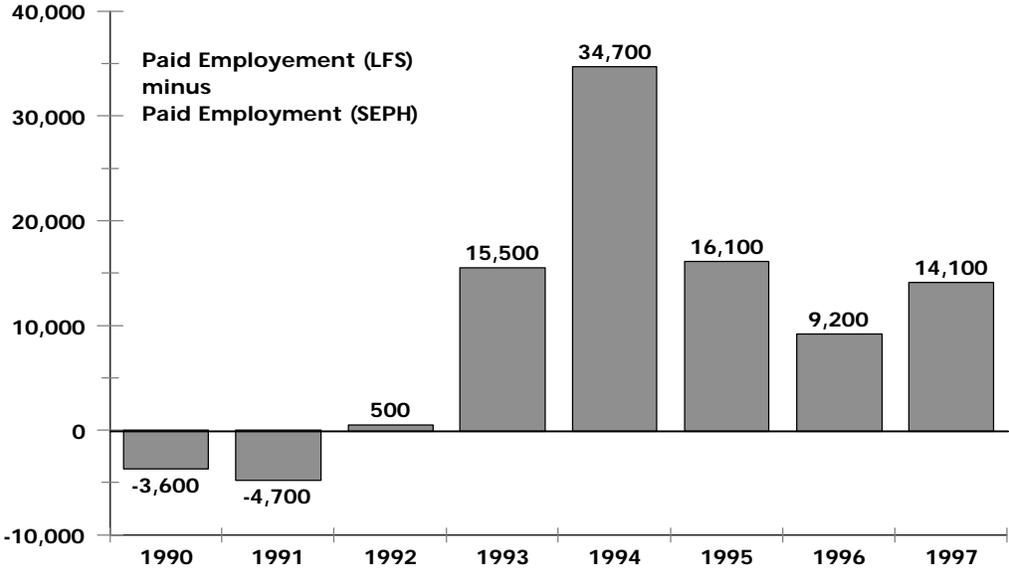
Self-employment lends itself to income concealment. The growth of self-employment was an essential underpinning of the underground economy. We believe that self-employment is a strong indicator of changes in the share of overall construction employment that is underground. On this basis, we conclude that in the 1990's, the underground economy increased significantly in Ontario's construction industry.

Exhibit I-G
Self-Employment as a Percentage of Total Construction Industry Employment, Ontario
1976 - 1997 (Annual Average)
Statistics Canada - Labour Force Survey



As discussed earlier, some of the self-employed are legitimate independent operators who are not closely supervised or controlled in their work. Others are dependent contractors whose employment relationship is configured as a contract-for-services to avoid making payroll contributions or deducting income tax. The view that dependent contractors have increased in number is confirmed by comparing paid employment estimates from the Labour Force Survey (LFS) with estimates from the Survey of Employment Payroll and Hours (SEPH). The LFS is based on doorstep interviews with individuals. SEPH is based on a survey of employers. In principle, the number of paid employees identified in the LFS should coincide with the number of employees reported in SEPH. Although it is to be expected that different survey instruments would generate somewhat incommensurate data, a trend in the gap between the two would require explanation. Exhibit I-H shows that after 1991, a significant gap emerged between the measure of paid employment in construction, according to the LFS and the measure of the number of employees on construction industry payrolls, according to SEPH. In essence, some 14,100 persons in 1997 identified themselves in the LFS as paid construction employees but were not identified as being on a payroll by SEPH. This suggests that many of these individuals were dependent contractors who thought of themselves as employees but did not appear on an employer's payroll.

Exhibit I-H
Gap in Paid Employment in Construction as Measured by the Labour Force Survey
and the Survey of Employment Payroll and Hours, Ontario 1985-1997
Statistics Canada



D. Adding Up the Evidence

All of the evidence points to a significant and growing underground economy in Ontario's construction industry

1. Work by Statistics Canada, which focuses chiefly on *unmeasured*, as opposed to underground activity, supports estimates in 1992 of underground activity in the range of 13.5% in residential construction and 21% in renovation.
2. The use of cash increased sharply after 1991. The ratio of cash balances to average monthly personal expenditures increased from 58.3% in 1990 to 67.5% by 1995 and remained high in subsequent years. This increase occurred notwithstanding the greater use of credit cards which reduce the need for cash.
3. After 1992, *reported* household expenditures on renovations and repairs declined. In contrast, there was an increase in expenditures on consumer durables. This is consistent with the view that in the 1990's an increased proportion of spending on renovations and repairs was done on a cash basis and that some of this was not reported in surveys.
4. The ratio of materials to measured expenditure on residential construction increased by 40% between 1990 and 1995. This increase cannot be explained by an increase in do-it-yourself construction or by changes in the relative price of labour and materials. The implication is that a significant proportion of the labour income associated with the use of these building materials was underground.
5. The concealed income of unincorporated business in construction rose from 57.3% in 1990 to 65.4% in 1991, the latest year for which data are available.
6. The number and the share of self-employed workers in the construction labour force increased significantly in the 1990's. In 1997, the proportion stood at 40% of employed workers in the industry. Self-employment, together with tax evading arrangements between the nominally self-employed and owners or contractors, are the critical enabling factors driving the growth of the underground economy.
7. Comparing the number of persons who identified themselves as paid employees in the construction industry, according to the Labour Force Survey, with the number of persons reported on construction industry payrolls, *per* the Survey of Employment Payroll and Hours shows that a significant gap emerged after 1990. This gap is consistent with an increase in the number of dependent contractors, *i.e.*, persons who are nominally self-employed, but who are *de facto* employees. This type of employment relationship is almost invariably associated with underground activity.

Adding all of this evidence together leads to three inescapable conclusions

- first: the underground economy in Ontario's construction industry increased significantly during the 1990's;
- second: the underground economy in the Ontario construction industry has reached unprecedented proportions and is now imbedded in the industry;
- third: there are significant revenue losses to governments and to the Workplace Safety and Insurance Board, as a result of underground construction practices.

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Review of Previous Analytical Work

The purpose of this chapter is to review previous analytical work and to consider its relevance to the objectives of this study.

A. Overview of Previous Studies

There are three broad approaches to measuring underground activity.

The *monetary approach* examines changes in the ratio of cash to chequable bank deposits. Underground transactions are assumed to be predominantly cash transactions. An increase in the ratio of cash to chequable bank deposits implies that a greater share of overall transactions are cash transactions and, therefore, potentially underground transactions. Indeed, except to avoid creating a “paper trail,” there are few other reasons for switching to settlement by cash rather than by cheque or credit card. By its very nature, the monetary approach does not lend itself to a sectoral analysis and therefore cannot estimate the extent of underground work in the construction industry.

The *national accounts approach* examines the economy from the perspective of measured incomes and measured expenditures. Every transaction is one party’s expenditure and another party’s income. An underground contractor may conceal his or her income. It is more difficult, however, for the purchaser of that work to conceal the expenditure, especially when the work involves materials as well as labour. Other data, such as the Labour Force Survey, the Homeowner Repair and Renovation Survey, the Survey of Consumer Finance, the Census and various physical measures of the consumption of materials, provide a basis for confirming or adjusting estimates of both income and expenditure.

A *micro-analytical approach* examines the scope for concealing income in particular types of work and estimates the extent of this concealment based on judgement, interviews or custom surveys, as well as anomalies in reported labour force activity rates.

Exhibit II-A summarizes the salient findings of previous analytical work. In general, the monetary approach yields results that are larger - sometimes significantly larger - than the national accounts approach. For the construction industry, only two estimates of concealed income have been developed. Statistics Canada estimated that, on a national basis, in 1991, 65.3% of the net income of unincorporated businesses in construction was not reported to

Revenue Canada. This estimate is broadly commensurate with Zanasi's 1992 estimates for Saskatchewan (47.5%) and the Yukon (47.2%).

Exhibit II-A

Estimates of Unmeasured and Concealed Income using Various Methods

| Authors | Target Year | Method | Estimate of Underground Economy as % of GDP (except where noted) |
|---|-----------------|--------------------------------|---|
| Rolf Mirus and Roger S. Smith, "Canada' Irregular Economy," <i>Canadian Public Policy</i> , vol 7, no. 3 (Summer, 1981). Cf., Table 1, p 451 | 1976 | Monetary | Three procedures: 1. 14% 2. 21.9% 3. 4.8 - 7.2% |
| Rolf Mirus, "The Invisible Economy," in George Lerner, ed., <i>Probing Leviathan</i> , (Vancouver, 1984) Cf., Table 5.4, p 122 | 1964 - 1980 | Monetary | 1976: 10.4% 1977: 10.0% 1978: 11.0% 1979: 12.7% 1980: 14.5% |
| Mireille Ethier, "The Underground Economy," in Francois Vaillancour, ed., <i>Income Distribution and Economic Security in Canada</i> , (Toronto, 1985) Cf., Table 2.11, p 101 | 1973 - 1981 | Monetary | 1976: 7.3% 1977: 8.4% 1978: 7.8% 1979: 7.7% 1980: 4.8% 1981: 5.9% |
| Seymour Berger, "The Unrecorded Economy," <i>Canadian Statistical Review</i> , Statistics Canada, 11-003E, April 1986 | 1981 | National Accounts | Unmeasured only: 2.8% |
| Bernard Fortin, Pierre Fréchette and Joëlle Noreau, "Dimension et caractéristiques des activités économiques non déclarées à l'impôt," Université Lval, Cahier 8702 (1987) | 1986 | Micro-analysis (Custom survey) | 1.4% |
| Rolf Mirus and Roger S. Smith, "Canada's Underground Economy," in Edgar L. Feige, ed., <i>The Underground Economies</i> , (New York, 1989), Cf., Table 12.5, p 279 | 1973 - 1982 | Monetary | Three procedures (1982) 1. 10.53% 2. 11.81% 3. 12.84% |
| Valdimir Karoleff, Rolf Mirus and Roger S. Smith, "Canada's Underground Economy Revisited," unpublished paper, 1993 | 1984, 1990 | Monetary | 1984: 19.3% 1990: 1. 21.6% 2. 14.6% |
| Gylliane Gervais, <i>The Size of the Underground Economy</i> , Statistics Canada, (1994) 13-603 | 1992 | National Accounts | 4.2% (excl. illegal) 5.2% (incl. Illegal) 65.3% of unincorporated, self-employed business income in construction was estimated to be concealed (1991) |
| Peter S. Spiro, "Evidence of a Post-GST Increase in the Underground Economy," <i>Canadian Tax Journal</i> , vol 41, no. 2 (1993), Appendix | 1992 | Monetary | 1.2% under-measurement of GDP |
| "The Shadow Economy," <i>The Economist</i> , September 19, 1987 p 26. Estimates for Canada | approx. 1978-80 | Monetary and Other | Summary of comparative work: 1. 11% (Monetary) 2. 9% (Other) |
| Peter S. Spiro, "Estimating the Underground Economy," <i>Canadian Tax Journal</i> , vol 42, no. 4 (1994). Cf. Table 2, p 1072 | 1970-1993 | Monetary | 1993: 8 - 11% |

| | | | |
|---|-------------|----------------------|--|
| BDO Dunwoody Ward Mallette (Ottawa), for Ontario Acoustical and Drywall District Council (1993) | 1992/93 | Micro-analysis | Estimates of labour costs and potential tax and WCB losses in five non-union construction projects using "independent operators" |
| Luigi Zanasi, <i>The Underground Economy in Construction in Saskatchewan</i> , for United Brotherhood of Carpenters and Joiners, 1986 (June 1996) | 1989 - 1992 | National Accounts | 47.5% of estimated total income in Saskatchewan construction industry concealed from Revenue Canada (1989-1992) |
| Luigi Zanasi, <i>The Underground Economy in Construction in the Yukon</i> , for Yukon Carpenters and Allied Workers (June 1996) | 1989 - 1992 | National Accounts | 47.2% of estimated total income in Yukon construction industry concealed from Revenue Canada (1989-1992) |
| Department of Finance, Nova Scotia, <i>The Underground Economy in Residential Construction</i> (1997) | 1987-1995 | National Accounts | 10.8% in residential construction |
| KPMG, <i>Strategic Analysis of Underground Employment in the Construction Industry</i> , (Ottawa), 1997 | | Qualitative Analysis | No estimates. Analysis of methods of concealment and broad "signals" of concealment |

B. Statistics Canada, *The Size of the Underground Economy in Canada, (1994)*⁷

Purpose:

Statistics Canada's 1994 study of the underground economy was primarily focussed on the extent to which income and expenditures may not be *measured* in the agency's national accounts data. As noted in Chapter One, this is different from estimating the extent to which work is done on an underground basis. While *unmeasured* work is likely underground work, the majority of underground work in the construction industry is *measured*, *i.e.*, it is included in Statistics Canada's estimates of income and expenditure related to construction. Indeed, it is discrepancies between Revenue Canada data and national accounts data which enabled Statistics Canada to estimate income concealment by the self-employed as part of that study. In reviewing the Statistics Canada study, it is important to keep in mind that, notwithstanding its title, the main purpose of the report was to estimate the *unmeasured* economy, not the underground economy.

Estimates of Unmeasured Income and Expenditure:

Based on 1992 data, for the economy as a whole, Statistics Canada concluded that the *upper* boundary on the *unmeasured* economy was 2.7%. In the construction industry, estimates were developed only for the residential sector. In new residential construction, the estimate of *unmeasured* output was 9.0%. For residential renovations, the estimate was 13.9%. Statistics Canada assumed that there was no *unmeasured* expenditure in non-residential construction. Again, it is to be stressed, these are estimates for 1992 of *unmeasured* expenditure, *not* estimates of underground income.

⁷ Statistics Canada, *The Size of the Underground Economy in Canada*, by Gylliane Gervais, 1994 Catalogue No. 13-603E, No. 2

Underground Income:

Statistics Canada's 1994 study did not attempt to estimate the rate of underground work in the construction industry. For the economy as a whole, Statistics Canada suggests a level equal to approximately 5.2% of GDP, using 1992 data. The components of this estimate are summarized in Exhibit II-B:

Exhibit II-B

Statistics Canada's Upper Estimate of the Underground Economy as a Whole, 1992:

| Source | Percent of GDP |
|---|----------------|
| Expenditures which escape measurement | 2.7% |
| Expenditures which are measured but not reported | 1.5% |
| Illegal activities that are neither measured nor reported | 1.0% |
| Total estimated Underground Economy | 5.2% |

Coincident Indicators:

As discussed in Chapter One, the Statistics Canada study also found corroborative evidence of *unmeasured* activity in other, coincident indicators:

- 1: the ratio of materials to total output increased in residential construction. Statistics Canada reported this ratio through to 1992. In Chapter One, we updated the estimate of this ratio to 1995. While other factors may account for a portion of the change in the ratio, the increase is consistent with growth in *unmeasured* labour income. Indeed, the data after 1992 point even more strongly in this direction.
- 2: a comparison of the net income of unincorporated business in construction, based on national accounts estimates, with the net income of unincorporated construction businesses reported to Revenue Canada showed a gap that averaged over 60% from 1985 to 1991.
- 3: the gap between paid employment, measured by the Labour Force Survey, and the number of paid employees measured in the Survey of Employment Payroll and Hours has tended to increase for the economy as a whole. As noted in Chapter One, this is particularly true for the construction industry. Statistics Canada believes that some of this gap may be attributable to underground employment which is partially measured by the Labour Force Survey, but not by the Survey of Employment Payroll and Hours.
- 4: Statistics Canada estimated that in 1990-1992, approximately 24% of the economy was exposed to underground activity. The construction industry accounted for one quarter of this overall exposure.

Partial Estimates:

As noted earlier, Statistics Canada estimated that *unmeasured* expenditures in new residential construction were 9.0% of the *measured* total. In renovation work, the *unmeasured* output was estimated at 13.9% of the *measured* total. Statistics Canada did not attempt to estimate a rate of underground work for the construction industry as a whole. Nor did the Statistics Canada analysis examine the difference between underground employment and underground income. As will be discussed later, this is a significant difference.

Statistics Canada's analysis took 1992 as its base year. This was only one year after the introduction of the GST. As discussed in Chapter One, we believe that there is strong evidence that underground activity increased throughout the 1990's and that an estimate based on 1992 data is likely to underestimate the magnitude of the problem in 1998.

C. Monetary Approach

Two key findings emerge from estimates of underground activity using a monetary approach:

- first: the overall rate of underground activity may be larger than estimated by Statistics Canada (which used a national accounts methodology). This, in turn, implies that the rate of underground activity in the construction industry may be higher than estimated by Statistics Canada. Certainly it is not lower.
- second: there was an increase in underground activity in response to the introduction of the GST, increased unemployment and increases in both income taxes and payroll taxes. In particular, the use of cash jumped sharply after the introduction of the GST in 1991.

Overview of Monetary Approach:

Gross domestic output can be thought of as the total value of all transactions in the economy. Some of these transactions are done in cash, others by cheque or credit card. If there are no changes in the propensity to use cash, then the amount of cash that is required in the economy in a month should be a fairly stable proportion of the total value of all transactions. Broadly, the evolution of the banking system and the use of credit cards has reduced the need to hold cash and therefore ought to have diminished the ratio of cash to total transactions. The amount of cash held outside the banking system is comparatively easy to measure. The Bank of Canada keeps an accurate tab on the amount of currency printed. Similarly, the banks keep an accurate count of the amount of currency they hold. The difference between the two is the amount of cash held by individuals and businesses. If the ratio of these cash balances to total expenditures increases, then one or both of the following must be true:

1. there has been a shift from settling accounts by cheque or credit card to settling them by cash, presumably for the purpose of eliminating a paper trail and facilitating the concealment of income by the recipient;
2. the total value of transactions, *i.e.*, GDP, has been underestimated. In other words, the real ratio of cash balances to total transactions did not change. Rather, an increasing proportion of total transactions escaped *measurement*. For this to be true, the income from the *unmeasured* transactions must also be unreported.

The first explanation puts the weight on concealment. The second explanation puts the explanatory weight on measurement errors in the national accounts system and implies, at the same time, that there is significant concealment. In general, we find the evidence for concealment compelling and the evidence for measurement errors less convincing. In either case, an increase in the ratio of cash to expenditures implies an increase in underground activity.

Estimates of Underground Economy:

Summarizing the monetary approach literature, Mirus and Smith observe that various estimates using the monetary approach “suggest significant growth and an order of magnitude of 12% to 15% of GDP for Canada’s underground economy.”⁸ This is roughly two to three times the estimate of 5.2% which Statistics Canada judges to be the upper boundary of the underground economy. Applied to the construction industry, these higher overall estimates would imply a rate of underground activity in the range of 30-40%.

The GST Effect:

The importance of the GST in changing the demand for cash balances is stressed by Peter Spiro in his analysis of the sharp increase in cash balances after 1990.⁹ For this study, we updated Spiro’s analysis. As noted in Chapter One, the analysis shows that the use of cash fell, as would be expected, in each and every year in the 1980’s. This reflected the spread of credit cards to settle transactions. In 1990, the average cash balance was 58.3% of average monthly personal expenditures. In 1991, following the introduction of the GST, the cash balance ratio rose and continued to increase until 1995. By 1995, the cash balance ratio was 67.5% of average monthly personal expenditures. In other words, after the introduction of the GST, there was a marked increase in the use of cash to settle transactions. (See Exhibit I-C on page 8).

⁸ Rolf Mirus and Roger S. Smith, “Canada’s Underground Economy: Measurement and Implications,” in Owen Lipper and Michael Walker, *The Underground Economy: Global Evidence of Its Size and Impact*, Fraser Institute (Vancouver, B.C., 1997) p. 8

⁹ Peter S. Spiro, “Evidence of a Post-GST Increase in the Underground Economy,” *Canadian Tax Journal*, vol 41, no. 2 (1993)

D. Micro-Analytic Studies

*KPMG: National Study*¹⁰

The KPMG Study was undertaken for the National Working Group on Underground Employment in the Construction Industry. The National Working Group was supported by the federal government. The study did not attempt to estimate the extent of underground activity. Rather its purpose was to identify characteristics of underground work and methods of concealment. The study was based principally on interviews with contractors, representatives of industry associations and unions and officials from governments and Workers Compensation Boards.

On the basis of its interview evidence, the KPMG study estimates that prices on underground work are 10-30% below prices quoted on legitimate work. Presumably the 30% would apply chiefly on labour-only contracts. This is consistent with information suggested by background informants for this study, which put the typical discount in underground residential work at 10-20% for a labour-and-materials job.

The KPMG study identifies a number of “signals” which have led industry observers and participants to conclude that underground work is significant in construction and has increased during the 1990's.

Exhibit II-C

Signals of Increased Amount of Underground Work

KPMG Study (pp 46-47)

| Signal | Explanation |
|---------------------------|---|
| Trends in Permits: | increase in do-it-yourself permits (assumed to be masking underground contract work in the residential sector). |
| Customers' Declarations: | customers have become more insistent about doing cash transactions |
| Absence of signage: | increase in number of projects taking place without signs posted. A legitimate contractor would usually post signage. |
| Sales to Public: | building suppliers report that sales to the public now exceed sales to contractors.* |
| Client Account Purchases: | building suppliers also report an increase in sales of materials charged to client account rather than contractor account. This implies an increase in labour-only contracts.* |
| Unmarked Trucks: | increase in the number of unmarked trucks. A legitimate contractor would usually put signage on vehicles. |
| Loss of Market: | in some regions, professional renovation contractors report that the demand for certain types of work has disappeared. The presumption is that the work is being done underground. |
| Applications for Work: | contractors report receiving significantly fewer applications for employment. This was interpreted to mean that workers had moved into underground self-employment and no longer sought legitimate employment to the same degree. |

¹⁰ KPMG, *Strategic Analysis of Underground Employment in the Construction Industry*, (Ottawa), 1997

Scarcities: notwithstanding that local Canada Employment Centres show individuals in certain trades as being unemployed, contractors have difficulty in finding skilled workers.

Bidding Practices: established firms bid within a narrow range, but newcomers bid at prices around 20% lower. The use of underground workers or sub-contractors was believed to be an important factor that sometimes enabled bids to be radically lower.

* Note that the increase in the sale of materials to the public and the increase in client account purchases is consistent with the increase in the ratio of materials to total output illustrated in Exhibit I-E on page 11. Expenditures on materials cannot be concealed, while expenditures on labour can be concealed.

The KPMG study confirms the general view that the underground economy is uncommon in the engineering sector, chiefly because sub-contracting is less common in engineering construction. This is not to say that there is no underground work in this sector, but that the proportion of underground work is smaller than in other types of construction.

In ICI construction, smaller projects and smaller jobs within large projects were judged to be significantly more vulnerable to encroachment by underground workers. As the report notes, “there was unanimous agreement that it was easier to practise ‘cash on the dash’ deals on smaller projects, especially if they were inside jobs and/or short duration. Fewer parties were involved, there was less need for a ‘paper trail,’ and relatively less likelihood of inspections or audits.” (p 81) The finding that underground work is increasingly a factor in the ICI sector represents an important change from the perspective in the Statistics Canada study. That study concluded that unmeasured work in the ICI sector was inconsequential and, therefore, did not pursue the broader issue of underground work in the ICI sector.

The KPMG study confirms the widespread perception that underground work is a significant factor in new residential construction, but especially in renovation work. The study also finds that in renovations, underground work is more common in projects under \$10,000 than in larger projects. In 1995, the Homeowner Repair and Renovation Survey found that, on a national basis, projects over \$10,000 accounted for 41.3% of total estimated expenditures on homeowners’ renovation and repairs. This distinction between larger and smaller projects will be used in estimating the extent of underground work.

The KPMG study also comments on the importance of competitive pressures in driving the growth of the underground economy. As the report comments, “it doesn’t take long for other, legitimate contractors to get the drift, and to deduce that if they want to save their business, they too have to ‘join the game.’” (p 58). The importance of increased competitive conditions will be discussed in Chapter Three of this report.

*Zanasi: Saskatchewan and Yukon Studies*¹¹

¹¹ Luigi Zanasi, *The Underground Economy in Construction in Saskatchewan*, for United Brotherhood of Carpenters and Joiners, 1986 (June 1996) and Luigi Zanasi, *The Underground Economy in Construction in the Yukon*, for Yukon Carpenters and Allied Workers (June 1996)

Studies done by Luigi Zanasi use national accounts data and Revenue Canada data to estimate the magnitude of concealed income in the construction industry for Saskatchewan and the Yukon. Exhibit II-D summarizes the findings for Saskatchewan. The results are broadly consistent with Statistics Canada's findings, though it should be kept in mind that the latter examined only self-employed construction workers (*i.e.*, unincorporated businesses in construction).

Exhibit II-D

Estimates of Concealed Income in Construction Industry (Saskatchewan, 1989-1992)
Zanasi, (constructed from various tables)

| | Construction Purchased | Estimated Labour Ratio | Expected Income | Declared Income | Concealed Income | Percent of Income Concealed |
|----------------|------------------------|------------------------|------------------|------------------|------------------|-----------------------------|
| 1989 | \$3,070,500 | 30.1% | \$923,884 | \$501,183 | \$422,701 | 45.8% |
| 1990 | \$3,669,868 | 26.7% | \$978,652 | \$503,904 | \$474,748 | 48.5% |
| 1991 | \$3,523,146 | 28.6% | \$1,006,506 | \$491,050 | \$515,456 | 51.2% |
| 1992 | \$3,060,379 | 27.7% | \$846,333 | \$470,757 | \$375,576 | 44.4% |
| | | | | | | |
| Average | \$3,330,973 | 28.2% | \$938,844 | \$491,724 | \$447,120 | 47.5% |

It should be noted that this analysis does not attempt to adjust the estimate of construction work to take account of *unmeasured* construction. Statistics Canada's study suggests that *unmeasured* work represents up to 9.0% of new residential construction and up to 13.9% of residential renovation. Nor does the study attempt to allocate underground work across sectors. As noted earlier, it is widely believed that the incidence of underground work differs significantly across sectors and by size of job. Combining wage income with self-employment income also diverts attention from the concentration of underground work in the self-employed segment of the labour force. Nevertheless, the study is helpful in establishing a benchmark and in confirming Statistics Canada's findings on concealed income in the construction industry.¹²

*BDO Dunwoody: Ottawa Study*¹³

BDO Dunwoody examined five Ottawa area acoustical and drywall projects in the ICI sector. The five projects were all awarded to non-union contractors. The successful bids, on average, were 1.93% below the lowest union bid. Based on a survey of unsuccessful bidders, the study estimated that the total employment in the five projects was 25,147

¹² Unfortunately, data on purchased construction (*i.e.*, construction work done on contract rather than own account) has not been published since 1992. Also, Revenue Canada stopped coding income tax returns (T-1's) by occupation in 1993. Consequently, it is not possible to apply Zanasi's methodology to more recent construction data.

¹³ BDO Dunwoody Ward Mallette, Study for Ontario Acoustical and Drywall District Council, October 31, 1993

hours. The study further estimated the difference in taxable employment income had the work been performed by workers paid a union wage versus independent operators paid a gross rate some 35% lower than the union wage rate. The taxable income, as opposed to the gross income, of the independent operators was assumed to be reduced by deductible business expenses. As well, the independent operators were assumed to have opted out of WCB coverage. The deductions employed were commonly used expense ratios for self-employed tradespersons. On this basis, the taxable employment income of the independent operators was estimated to be 32% lower than the income that would have been earned had a union wage been paid to regularly employed workers. Taxable income would have been reduced further, if some of the income had been concealed. As well, the tax payable on that income could have been reduced by artificially splitting the income among other family members to achieve a lower average tax rate.

The BDO Dunwoody study is helpful in drawing attention to the lower tax yield that would arise from income earned by independent operators, even if all income were declared.

*Ontario Construction Secretariat Survey*¹⁴

The Ontario Construction Secretariat undertook a mail survey of the members of two trades. The survey results indicated the following:

- 26% of one trade and 40% of another reported working underground,
- of those who worked underground, 60-70% did so as independent operators,
- the incidence of working underground increased directly with unemployment,
- over 70% of those who worked underground understood that they had not been covered by WCB while they were working underground,
- over one-fifth of the members of one trade and one-third of the members of another trade reported working for cash or straight cheque with no deductions at source,
- 60% of the work done underground by members of one trade and 66% by members of the other trade was in the residential sector. However, 25% of the cash work done by one trade and 37% by another trade was done in the ICI sector.

The Ontario Construction Secretariat survey is particularly important in confirming the widespread character of underground work, the prevalence of workers moving between legitimate work and underground work and the significant encroachment of underground work into the ICI sector.

¹⁴ Ontario Construction Secretariat, *Underground Work: Undermining the Construction Industry* (1995)

D. Summary

The review of previous analytical work leads to the following conclusions:

5. the overall underground economy, understood in the broad sense of concealed income, is probably substantially larger than the 5.2% suggested by Statistics Canada.
2. the underground economy has increased in the construction industry since Statistics Canada did its analysis based on 1992 data. Underground transactions may have increased in other sectors as well.
3. in the construction industry, underground work is widespread in the residential sector, especially in residential renovations. However, there is also significant qualitative and quantitative evidence that underground practices have been insinuated into the ICI sector and are now an important factor in small-scale ICI projects and in smaller jobs within larger ICI projects.
4. underground work is strongly associated with the abuse of self-employment and nominal independent operator status.
5. among construction workers, there is considerable movement between legitimate work and underground work.

R



Factors Fostering Underground Work

The purpose of this chapter is to review the factors which promoted the growth of the underground economy in construction and, in particular, to examine the increase in the share of self-employed workers in the construction work force. In the construction industry, self-employment is considered to be a critical enabling factor of increased underground activity.

The face of Ontario's construction industry has changed radically over the past decade. The severe downturn in construction during the early 1990's resulted in increased unemployment among construction workers and intense competition, with pressure for cost reduction, among contractors. The convergence of these factors, together with external influences, including the GST and higher taxes, led to the growth of self-employment. Self-employment and individuals who sub-contract for work are the foundation the underground economy.

A. Comparing the Construction Industry Labour Market: 1987 and 1997

If snapshots of Ontario's construction industry in 1987 and 1997 were laid side by side, they would show virtually identical levels of overall employment in the industry. A closer examination would reveal, however, that the construction labour market had changed fundamentally over the ten year period. The defining change was the dramatic increase in the percentage of construction workers who identified themselves as self-employed. In 1987, that proportion was 26.7%. By 1997, the self-employed represented 40.0% of the industry's workforce and accounted for 41.5% of hours worked.

Equally important, the amount of slack in the construction labour market also increased. As an indicator of slack we can use the combined total of the unemployment rate and the rate of part-time work. This increased from 13.3% in 1987 to 19.4% in 1997. It was not just the number of employed workers that fell. Among those who were employed, average annual hours of employment also fell. The Labour Force Survey shows a decline of 5.4% in average hours of employment over the ten year period. A more severe decline in average annual hours of employment is shown by the Dalcour Construction Model. The Dalcour Model estimates that average annual hours of employment of construction workers dropped by 14.5%.¹⁵

¹⁵ The Dalcour Model is a construction employment forecasting model whose development was supported by Human Resources Development Canada. The Dalcour Model estimates labour requirements by trade and by sector based on labour intensity rates derived from engineering studies and labour utilization rates (average annual hours per

All of these factors crystallize in one variable which shows how radically the construction labour market changed between 1987 and 1997. The proportion of employed workers in construction, who were paid employees and who normally worked on a full-time basis, fell from 67.4% to 49.9%.

Clearly, general business conditions were less favourable to the construction industry in 1997 than in 1987. It is doubtful, however, if a return to the conditions that prevailed in 1987 would undo the changes that have taken place in the construction labour market. In large measure, these changes have become imbedded. They both contribute to the growth of the underground economy and, in turn, are reinforced by the spread of underground activities.

Exhibit III-A
Construction Industry Labour Market Indicators, 1987 and 1997
Statistics Canada, Labour Force Survey and Dalcov Model

| | 1987 | 1997 |
|---|---------|---------|
| Total Employed in Construction Industry | 290,200 | 293,700 |
| Self-Employed as Percent of Construction Labour Force | 26.7% | 40.0% |
| Self-Employed Share of Construction Industry Hours Worked | 28.8% | 41.5% |
| Unemployed and Part-Time Workers as Percent of Construction Labour | 13.3% | 19.4% |
| Full-Time Employees as Percent of Total Employed in Construction Industry | 67.4% | 49.9% |
| Estimated Average Annual Hours among Employed Workers (Dalcov Model) | 1,344 | 1,148 |
| Estimated Weekly Hours in Construction Industry (Labour Force Survey) | 38.7 | 36.6 |

Just as important as the contrast between 1987 and 1997 was the trajectory followed by the industry. The ten years between 1987 and 1997 saw a run-up of employment followed by a severe downturn of employment in the ICI and residential sector. The depth and duration of this recession caused both an acute labour surplus and an intensification of competitive conditions.

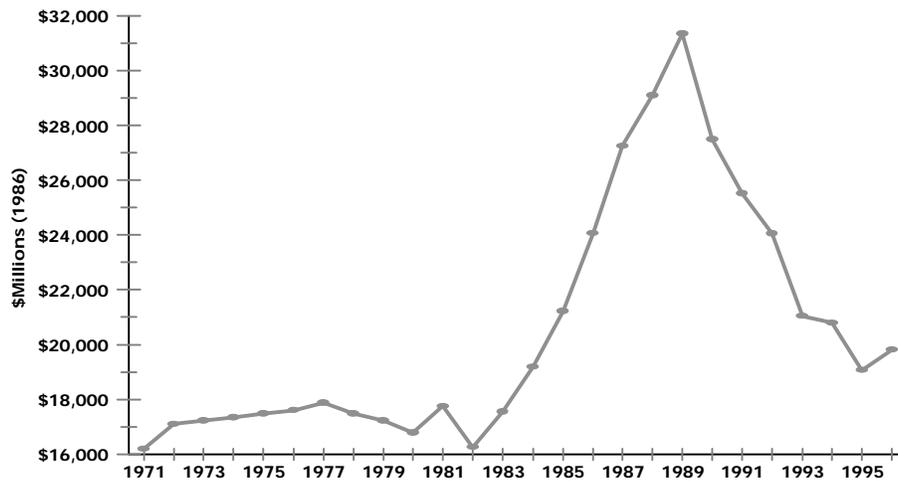
A. Severe Downturn in Residential and ICI Construction

While there always have been expansions and contractions in the construction sector, the run-up in construction in the 1980's and the subsequent downturn in the early 1990's was on a scale without recent precedent. Exhibit III-B shows that from the start of the expansion in 1982 to

year) derived from industry sources and reconciled to Statistics Canada employment data.

the peak in 1988, the volume of new construction approximately doubled. The sharpness of the increase was matched by the steep fall after 1989. From its peak in 1989 to its bottom in 1995, new construction investment fell 39.1%. As Exhibit III-C shows, however, this decline was mainly in the residential and ICI sectors. The decline in the engineering sector was dampened, to a considerable degree, by the federal government's counter-cyclical spending in the first half of the 1990's. In the ICI and residential sectors, however, new construction declined sharply.

Exhibit III-B
Construction Investment in Ontario, 1971 - 1996 (\$1986)
Statistics Canada, CANSIM

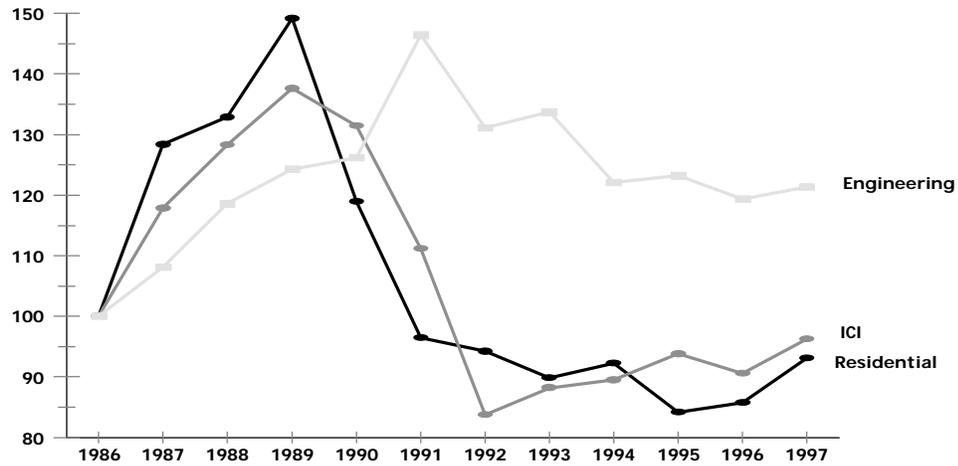


The concurrent down-spiral of new construction in the residential and ICI sectors produced high levels of unemployment, especially in those trades with only limited scope for working in the engineered sector. On the contractor side, the contraction of new construction in the residential and ICI sectors intensified competitive conditions as contractors chased substantially less work.

Exhibit III-C

Construction Investment in Ontario by Sector, 1986-1997 (Index: 1986= 100)

Statistics Canada and Dalcour Construction Model



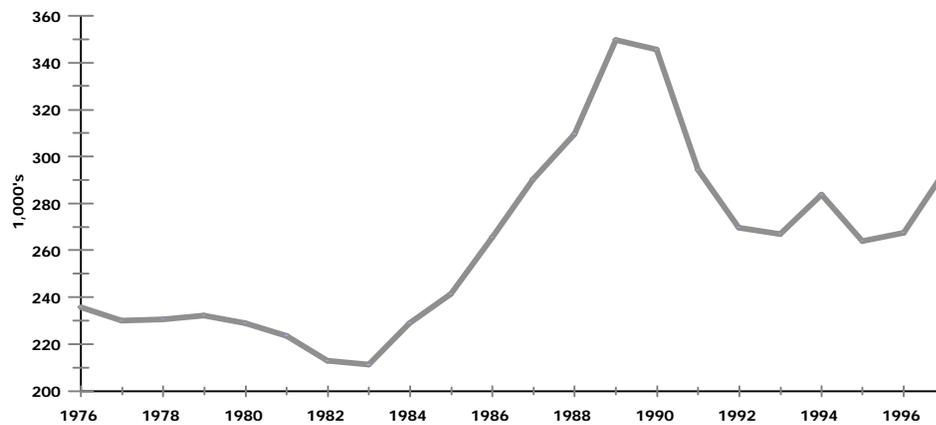
B. Sharp Decline of Employment in New Construction

Between its peak in 1989 and its initial trough in 1993, the sharp drop in new construction in the residential and ICI sectors caused overall employment in the construction industry to fall from 349,700 to 267,000. This was a decline of 23.6%. As Exhibit III-D illustrates, the severity of the decline was substantially greater, as well as more sudden, than in the previous business cycle.

Exhibit III-D

Total Construction Industry Employment in Ontario (Paid and Self-Employed), 1976 - 1997

Statistics Canada, Labour Force Survey



Using ratios derived from Statistics Canada's input/output analysis for Ontario, we have estimated the level of construction industry employment by sector and by type of construction activity from 1990 to 1997.¹⁶ The earliest estimates developed were for 1990, based on input/out ratios computed by Statistics Canada for that year. These estimates are summarized in Exhibit III-E.

Exhibit III-E

Estimates of Construction Industry Employment in Ontario Sector and Type of Construction, 1990-1997 (1,000's)

derived from Statistics Canada, Input-Output Analysis and reconciled to Labour Force Survey Totals

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Residential: | | | | | | | | |
| New | 103.0 | 77.7 | 78.3 | 71.1 | 78.4 | 64.5 | 70.9 | 90.0 |
| Renovations | 69.8 | 60.4 | 55.3 | 66.5 | 69.2 | 64.1 | 62.3 | 69.1 |
| Repair | 21.4 | 19.1 | 18.6 | 21.7 | 22.6 | 23.5 | 22.6 | 24.1 |
| Total | 194.2 | 157.3 | 152.3 | 159.4 | 170.2 | 152.1 | 155.8 | 183.2 |
| Non-Residential: | | | | | | | | |
| ICI: New and Renovations | 81.5 | 64.0 | 46.0 | 41.7 | 51.2 | 49.0 | 51.8 | 50.0 |
| Engineering: New / Renovations | 37.0 | 39.3 | 38.1 | 32.8 | 31.4 | 35.0 | 33.2 | 32.7 |
| Repair (both sectors) | 32.9 | 33.7 | 33.3 | 33.1 | 31.1 | 27.8 | 26.7 | 27.8 |
| Total | 151.5 | 137.0 | 117.4 | 107.6 | 113.7 | 111.8 | 111.6 | 110.5 |
| Total Construction Industry: | 345.7 | 294.3 | 269.7 | 267.0 | 283.9 | 263.9 | 267.4 | 293.7 |

It is useful to compare 1990 to 1997 and to examine the course of employment between these years.

- in the residential sector, employment in new construction fell from peak to trough by approximately 38,500 persons or approximately 37%. In renovations and repair, however, employment generally held up. From 1990 to 1992, we estimate that employment fell by about half this rate (19%), but recovered quickly thereafter. Indeed, in 1997, we estimate that there were marginally more workers employed in residential renovation and repair than in 1990, notwithstanding the overall decline in residential construction employment. In the residential sector, there was a push from new construction into renovation and repair work.
- in the non-residential sector, we cannot separate new construction from renovation

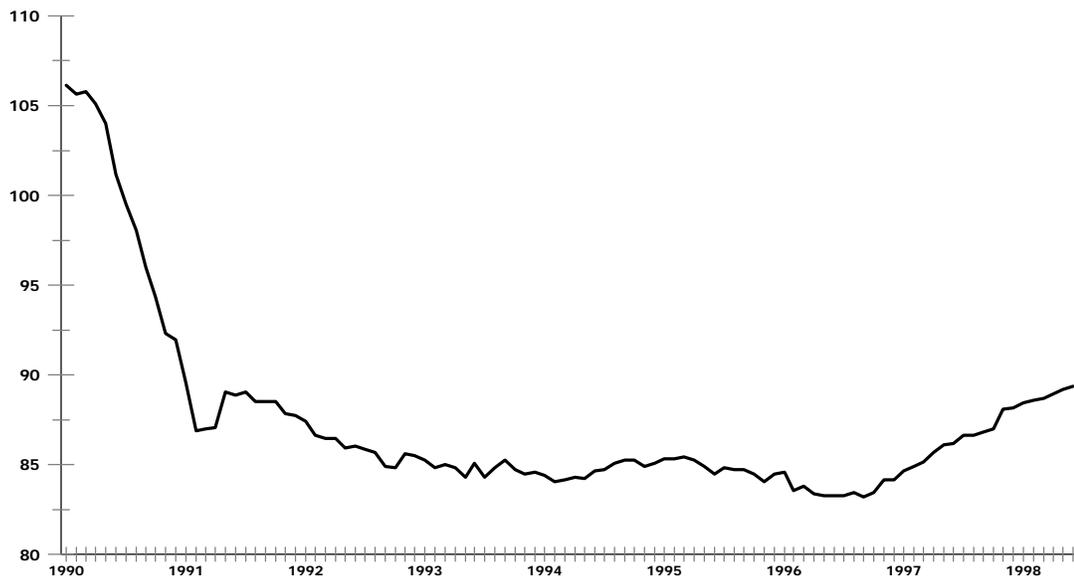
¹⁶ See Appendix A for a detailed description of the methodology behind these estimates.

work. In the ICI sector, from peak to trough, employment fell by almost half, but by only 20% in engineering construction. The shift in the composition of ICI work from new construction to repair affected the size of projects. Smaller projects lend themselves to underground activity.

D. Cost-Cutting Pressure

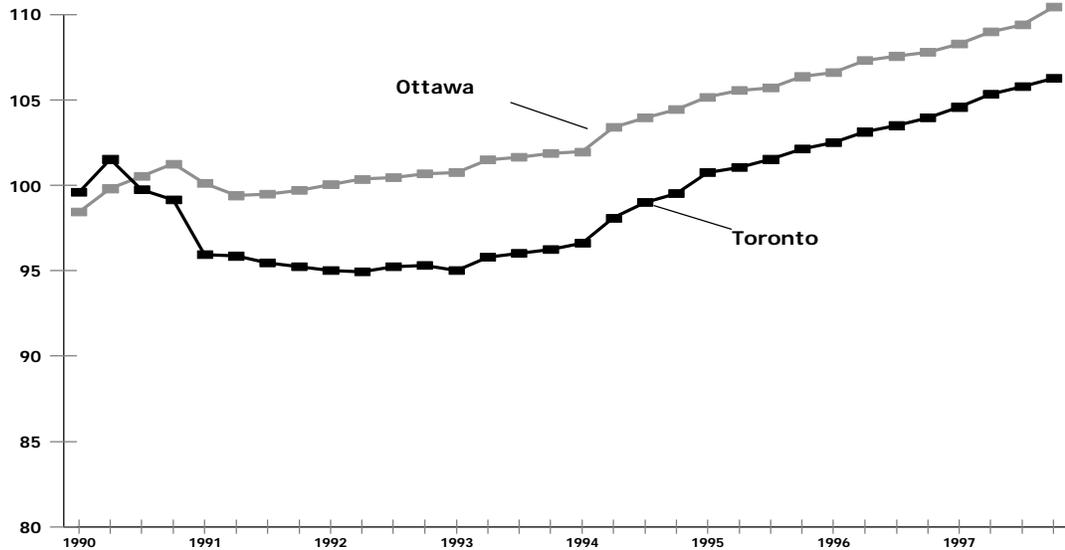
The sharp decline of new construction led to a situation in which contractors were chasing significantly fewer and smaller jobs. From 1990 onwards, cost-cutting pressure was particularly acute in what remained of new construction in the low-rise residential sector. Exhibit III-F shows that the *New House Price Index (house only)* in Ontario fell by approximately 20% from its peak in the late 1980's and remained at this level until recovery began in 1997. Even now, prices are still much lower than during the late 1980's.

Exhibit III-F
New House Price Index (Ontario) - House Only, 1990= 100
Statistics Canada



In the ICI sector, cost-cutting pressure was less acute. As Exhibit III-G shows, the decline in ICI prices in the Toronto market was approximately 10%. Prices have now recovered. In the Ottawa market, the decline from 1990 was less severe.

Exhibit III-G
ICI Construction Prices, Ottawa and Toronto (1990= 100)
Statistics Canada



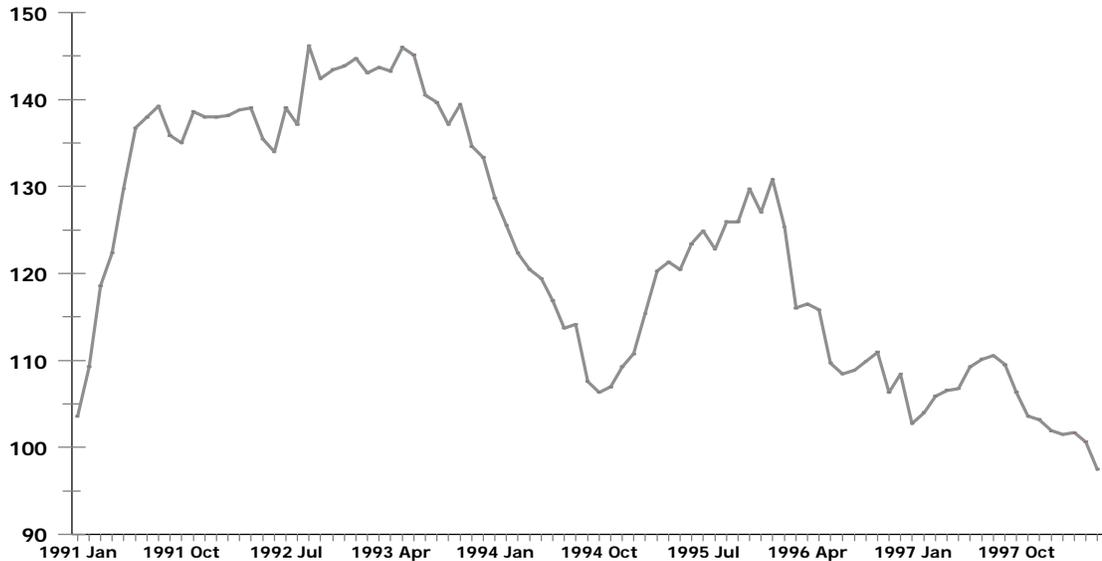
The intensification of competitive pressure on contractors is apparent in the steep rise in construction industry bankruptcies and in the proportion of contractors with operating losses.

Consistent with this trend, Exhibit III-H shows that more than 40% of small contractors reported to Revenue Canada a loss from 1994 to 1996. Many small contractors, of course, remained in business by concealing income from Revenue Canada that they might previously have reported. Exhibit III-I shows that, in the first half of the 1990's, Ontario construction industry bankruptcies increased by 40-45%, compared with 1990.

Exhibit III-H
Proportion of Residential and ICI Contractors with Revenues Under \$5 Million Operating at a Loss, Ontario 1994-1996 (Average)
Statistics Canada

| SIC | Industry Group | Percent Operating at a Loss (Average 1994-1996) |
|-----------|-------------------------------------|--|
| 4011 | Single Family Housing | 44.8% |
| 4012 | Apartment and Multiple Unit Housing | 43.2% |
| 4013 | Residential Renovation | 41.3% |
| 4021-4023 | ICI | 41.7% |

Exhibit III-I
Bankruptcies - Construction Industry (Ontario)
12-Month Moving Average / 1990= 100
Statistics Canada



E. Sharp Increase in Self-Employment¹⁷

In 1987 and 1997, total employment in Ontario's construction industry was virtually the same - 293,700 in 1987 compared to 290,200 in 1997. However, the number of construction workers

¹⁷ For general discussions of the trend to self-employment, see the following:

I. D. MacRedie, "Self-Employment in Canada: An Overview," *The Labour Force* (February, 1985) published by former Dept of Employment and Immigration Canada

Statistics Canada, *Enterprising Canadians: The Self Employed in Canada*, Gary L. Cohen (1988) (71-536)

OECD, *Employment Outlook*, (Paris, 1992), Chapter Four

Robert L. Aronson, *Self-Employment: A Labor Market Perspective*, ILR Press (School of Industrial and Labor Relations, Cornell University), Ithaca, New York (1991)

Francine Blau, "A Time-Series Analysis of Self-Employment in the United States," *Journal of Political Economy*, 95, (June, 1987)

Economic Council of Canada, *Employment in the Service Economy*, Canada Communications Group (1991)

John E. Bregger, "Measuring Self-employment in the United States," *Monthly Labor Review*, U.S. Department of Labour (January/February 1996) pp 3-9

Statistics Canada, *Labour Force Update: The Self-employed*, Autumn, 1997 71-005XPB

who were working for wages was significantly lower in 1997 than in 1987: 212,700 in 1987 compared to only 176,200 ten years later. At the same time, the number of self-employed workers *increased* from 77,500 in 1987 to 117,500 in 1997. The self-employed share of total construction employment grew from 26.7% to 40.0%

Exhibit III-J shows the trend in self-employment as a share of total construction employment in Ontario.

Exhibit III-J
Self-Employed as a Percentage of Total Construction Industry Employment, Ontario
1980 - 1997 (Annual Average)
Statistics Canada - Labour Force Survey

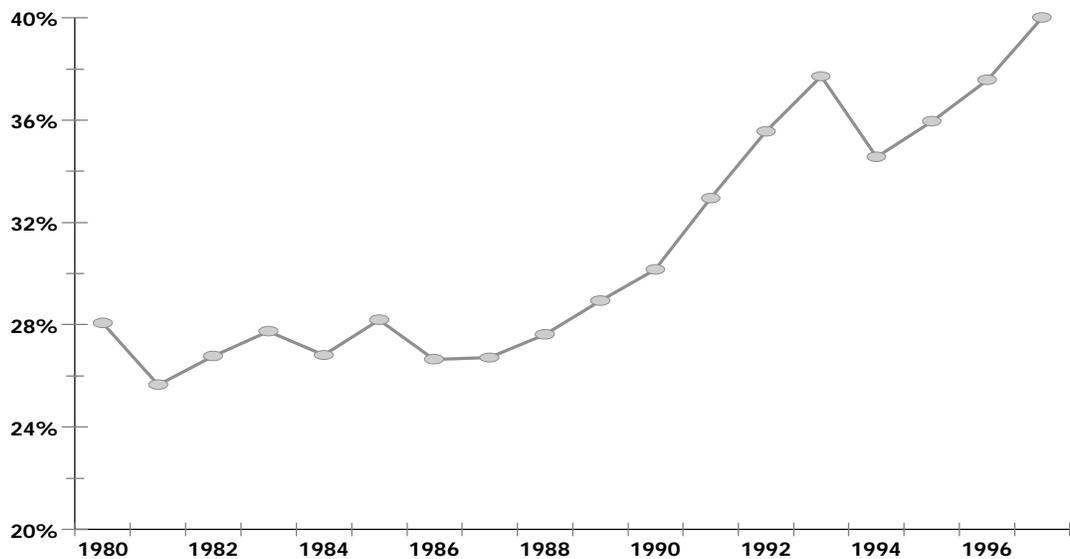


Exhibit III-K tracks actual levels of employment among the self-employed and workers paid as employees. Of particular significance is that, prior to 1991, the number of self-employed workers in construction increased or declined in tandem with the increase or decline of workers who were paid employees. In 1991, this relationship broke down. The number of wage-paid workers continued the sharp decline that had begun in 1989 and 1990, but the number of self-employed workers was comparatively stable. From 1995 to 1997, employment growth was higher among the self-employed than among the wage-paid.

Exhibit III-K
Self-Employment and Wage-Paid Employment in Ontario Construction,
1976 - 1997 (Annual Average)
Statistics Canada - Labour Force Survey



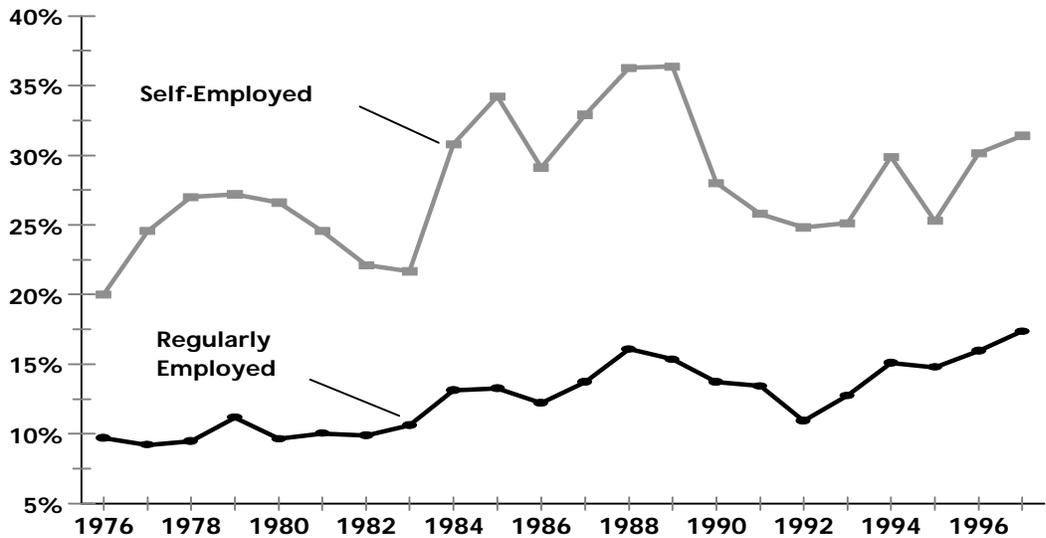
Exhibit III-L shows that, on average, self-employed construction workers work moderately more hours per week than wage-paid workers. In construction, self-employed workers were on the job an average of 41.5 hours, while wage-paid employees worked an average of 38.6 hours. The margin between the two types of workers widened during periods of buoyant construction activity and narrowed when activity was depressed. In 1997, the margin was 1.4 hours. The higher number of hours worked by self-employed construction workers has two implications:

- first, the self-employed are *not* predominantly “moonlighters,” that is, workers who have regular employment as their principal source of income, but work on a self-employed basis in the evenings and on weekends;
- second, the self-employed account for a somewhat larger share of total work than they do of total employment.

Exhibit III-L
Average Weekly Hours: Self-Employed and Regularly Employed,
1976 - 1997 (Annual Average), Ontario
Statistics Canada - Labour Force Survey



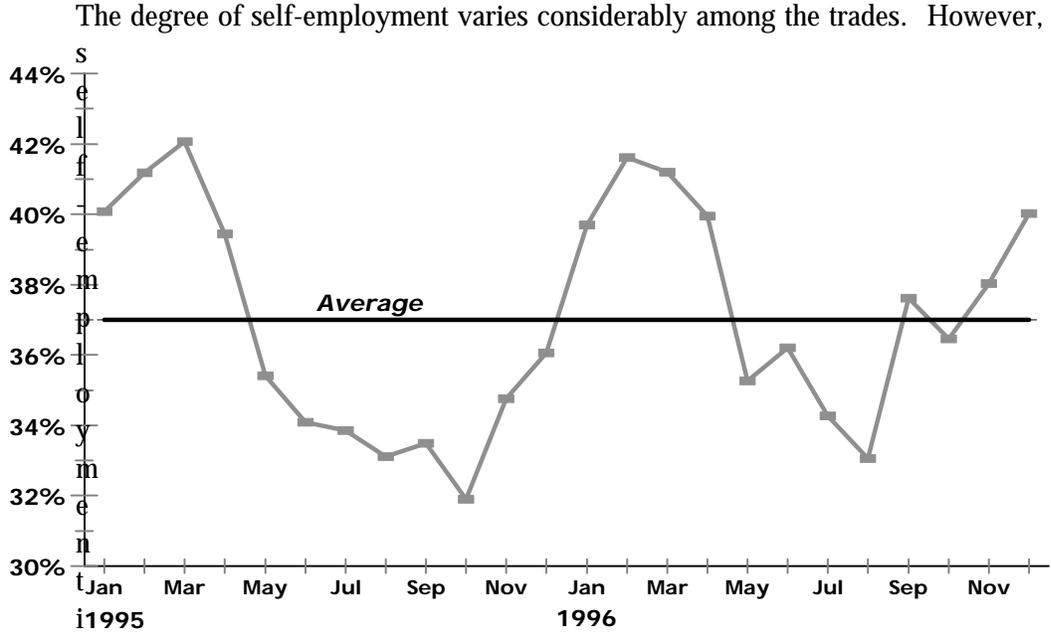
Exhibit III-M
Percent Working 50 or More Hours per Week on Average in Ontario Construction
1976 - 1997 (Annual Average)
Statistics Canada - Labour Force Survey



It is noteworthy that, among the self-employed, a larger percentage of workers typically work more than 50 hours per week. Exhibit III-M shows this comparison. While fluctuating significantly, there has been a tendency for the proportion of the self-employed working more than 50 hours per week to increase. (A similar tendency is evident among the regularly employed, although the proportion working more than 50 hours is smaller). In 1997, approximately one third of self-employed workers accounted for 50% of all hours worked by self-employed workers in construction.

The propensity to work in self-employment varies considerably by the time of year. Not surprisingly, there is markedly more self-employment during the winter. Exhibit III-N illustrates this pattern. This simply confirms the general view that a significant fraction of the self-employed are persons who work in regular employment during the building season, but seek out self-employment during the winter months, largely as a result of lay-offs.

Exhibit III-N
Self-Employed as a Percent of Total Employed by Month in Ontario Construction
1995 and 1996, Actual Unadjusted
Statistics Canada - Labour Force Survey



s widespread in all segments of construction except engineering construction (i.e., highways and heavy construction). Exhibit III-O presents data from a special tabulation of the Labour Force Survey.

Exhibit III-O

Self-Employed as a Percent of Employed in Ontario Construction, 1996

Statistics Canada - 1997 Labour Force Survey (Special Tabulation)

(Cells under 1,500 persons suppressed)

| SIC Code | SIC Descriptor | % of All Construction Employment | % of All Self-Employed in Construction | % of Trade who are Self-Employed |
|----------|--|----------------------------------|--|----------------------------------|
| SIC 401 | Residential Building and Development | 18.7% | 24.5% | 50.7% |
| SIC 427 | Interior and Finishing | 14.0% | 20.4% | 56.4% |
| SIC 421 | Site Work | 9.5% | 10.5% | 43.1% |
| SIC 426 | Electrical | 10.5% | 9.5% | 34.9% |
| SIC 429 | Other Trade Work | 10.3% | 8.7% | 32.8% |
| SIC 424 | Plumbing, Heat, A/C and Mechanical | 12.6% | 8.7% | 36.6% |
| SIC 423 | Exterior Close-in | 8.1% | 7.8% | 37.2% |
| SIC 422 | Structural and Related | 5.3% | 6.0% | 44.1% |
| SIC 412 | Highway and Heavy Construction (1996) | 5.6% | 1.4% | 9.8% |
| SIC 425 | Mechanical Specialty (1995) | 1.9% | 1.4% | 28.6% |
| SIC 411 | Industrial Construction (other than | 1.5% | suppressed* | suppressed* |
| SIC 402 | Non-Residential Building and Development | 2.1% | suppressed* | suppressed* |

* suppressed due to very low numbers

Self-employed workers may be either incorporated or unincorporated. Incorporated self-employed workers may have more difficulty in concealing income. On the other hand incorporation may also reflect a stronger commitment to remaining self-employed.

During the 1980's, the proportion of self-employed construction workers who were unincorporated fluctuated around a stable proportion - roughly 40-45%. Exhibit III-P shows that after the introduction of the GST, the increase in self-employed workers was mainly among unincorporated workers.

Self-employed workers may work either independently or they may employ other workers. Exhibit III-Q shows that there was a sharp increase after 1991 in the proportion of self-employed workers who did not employ helpers. Indeed, *virtually all of the increase in self-employment was among self-employed workers who did not employ paid helpers.* This was a break in trend. Prior to 1991, most self-employed construction workers employed helpers. By 1997, two-thirds did not. This is consistent with qualitative evidence that there was an increase in contractors' use of former employees as dependent contractors, likely with the intent of evading income and payroll taxes.

Exhibit III-P
Percent of Self-Employed Construction Workers who are Unincorporated
1982 - 1997 (Annual Average)
Statistics Canada - Labour Force Survey

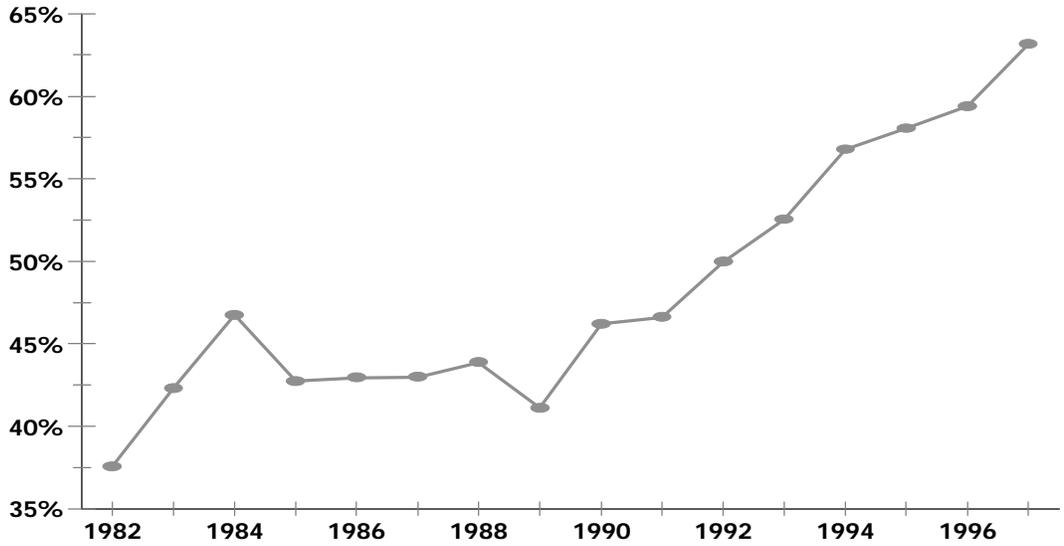


Exhibit III-Q
Number Self-Employed who Employ Paid Help or Do Not Employ Paid Help
1982 - 1997 (Annual Average)
Statistics Canada - Labour Force Survey



According to data from the 1996 Census, self-employed workers received approximately 28% of the labour income in the construction industry. In 1996, the self-employed accounted for 37.5% of total hours. This implies that, on average, self-employed workers received an hourly income that was roughly 75% of that received by the average paid worker. Concealing income from Revenue Canada would narrow the take-home margin considerably. Indeed, a self-employed worker who concealed 30-40% of his or her earnings would have a take-home income greater than that of a legitimate worker. Given these incentives, it is not surprising that the proportion of self-employed workers increased so dramatically and that this increase was concurrent with the growth of the underground economy.¹⁸

F. Independent Operators and Dependent Contractors

As noted elsewhere in this report, an *independent operator* is a person who is genuinely self-employed, *i.e.*, independent operators are not subject to the control and supervision of an employer. Independent operators are engaged on the basis of a contract-for-services. It is common in the underground economy for an employment relationship to be masked as a contract-for-services to avoid the obligation to report the income on a T-4 slip and to deduct income taxes and payroll taxes from source. Persons whose employment is masked as a contract-for-services, but who are subject to the control and supervision associated with an employment relationship, are termed *dependent contractors*.

The distinction between independent operators and dependent contractors is relevant for WSIB coverage. In Ontario, employees in construction- including dependent contractors - must be covered by the WSIB. Independent operators have an option. In principle, independent operators must establish their status for each job, by completing an independent operator application. The application applies a test, based on a series of questions, to determine whether the individual is an independent operator or a dependent contractor. This is known as the “organization test” because it focuses on the way that work and reporting relationships are organized. The current organization test was put in place, with effect from January 1, 1992. At the time, it was expected that the organization test would render it easier for individuals to be recognized as independent operators and to opt out of WSIB coverage.

In practice, there is negligible compliance with the WSIB’s requirements that self-employed individuals apply for independent operator status. A special sampling of WSIB

¹⁸ It should also be noted that contractors and entrepreneurs with receipts of less than \$30,000 annually are exempt from the requirement to charge GST. This may have encouraged an increase in moonlighting on a self-employment basis. As well, the exemption from the obligation to collect GST and report receipts may have encouraged concealment of income for purposes of evading income tax.

administrative records, undertaken by the WSIB for this study, found that there were approximately 1,652 candidate accounts involving an independent operator status application in the construction industry. Even allowing for a sampling error and for some independent operator applications being captured by different filing procedures, the number of apparent independent operator applications constitutes a small fraction of the number of self-employed construction workers, as measured by the *Labour Force Survey*. To recapitulate, Exhibit III-R presents the Labour Force Survey estimates of self-employed construction workers:

Exhibit III-R
Self-Employed Construction Workers in Ontario, 1995-1997
Labour Force Survey

| | Total Self-Employed (plus family workers) | Unincorporated Self-Employed | Incorporated Self-Employed | Self-Employed who Hired No Paid Helpers (Incorporated and Unincorporated) |
|------|---|------------------------------|----------------------------|---|
| 1995 | 94,900 | 61,300 | 32,000 | 55,100 |
| 1996 | 100,500 | 64,500 | 35,100 | 59,700 |
| 1996 | 117,500 | 73,100 | 41,800 | 74,200 |

Even if one regards only those self-employed workers who do not hire paid helpers as being the type of worker whose status should be verified, the WSIB is tracking fewer than 5% of the total. For all practical purposes, the WSIB's system of monitoring self-employment and independent operator status is highly ineffective.

WSIB premiums are a significant cost in the construction industry. Depending on the sector, 1998 rates range from 4.39% to 18.5% of covered payroll. We estimated the weighted average to be 8.0%, using 1997 estimated person-years of employment. Escaping payment of these contributions is clearly attractive and makes independent operators more competitive. Given these incentives, it should be expected that the employers of dependent contractors would wish to maintain the fiction that their employees are independent operators. Significant evasion should be expected. It is likely that the 1992 organization test, among other factors, facilitated this evasion.

G. Summary

Several conclusions emerge from this review of the factors behind the growth of the underground economy in construction:

1. in the early 1990's, the construction labour market was transformed by the combination of severe unemployment with significantly more intense competitive conditions among

contractors. The principal effect of this was pressure to reduce costs, even if this meant illegally evading taxes and WSIB premiums. This, in turn, contributed to the growth of the underground economy. In the construction industry, the growth of self-employment was both a symptom of the increase in the underground economy and a factor which enabled that increase to take place;

1. in 1997, self-employed workers accounted for 40% of total employment in Ontario construction and 41.5% of total working time. The growth of self-employment was the result of a complex interplay of “push” factors and “pull” factors. It was a trend that was not limited to the construction industry;
2. total construction employment was virtually equal in 1987 and 1997. Over those ten years, the number of wage-paid workers *fell* by 36,500 while the number of self-employed workers *increased* by 40,000;
3. after 1991, by far the largest proportion of the growth in self-employment was attributable to an increase in the number of workers who did not employ helpers. This is consistent with the evidence from the KPMG study that many contractors hired former employees as dependent contractors;
4. self-employed workers earn an hourly income that is roughly 70% of the average hourly income of paid workers. If 30-40% of self-employed income is concealed, take-home earnings would exceed that of a paid worker. If 50-60% of income is concealed - as suggested by both the Statistics Canada and Zanasi studies - the take-home earnings of the self-employed would significantly exceed the take-home earnings of paid workers. With incentives as powerful as this, it is not surprising that self-employment and the underground economy have become imbedded in Ontario’s construction industry;
5. the WSIB’s system of tracking independent operator status covers fewer than 5% of workers who would claim that status and arguably fewer than 1% if the strict meaning of the *Act* were applied;
6. self-employment is the foundation of the underground economy. While many self-employed workers are legitimate, the regulation of self-employment is the single most important policy challenge facing the construction industry.

R

IV

Estimating the Underground Economy in Ontario's Construction Industry

The purpose of this chapter is to present estimates of the amount of underground employment and underground income in Ontario's construction industry. Chapter Five will present estimates of the revenue losses to government and to the WSIB related to this underground income. The estimates of underground activity are broken out by sector and focus on the years 1995 to 1997. The chapter concentrates on the analytical conclusions and their implications. Appendix A discusses in more detail the methodology behind the estimates of overall construction industry activity.

A. Key Findings:

We estimate that between 25% and 35% of all employment in Ontario's construction industry, for the period 1995-1997, was done on an underground basis. The income from underground employment tends to be lower than in legitimate employment, at least on a gross income basis. This is because underground workers factor in their tax savings from concealing income and charge a lower labour rate to customers or contractors. We estimate that between 20% and 30% of income in Ontario's construction industry was concealed from Revenue Canada.

On a "best estimate" basis, we would put underground employment at 28% of total industry employment and underground income at 22% of total industry income. While we have developed our detailed estimates only for the years 1995-1997, we estimate that in 1990, *i.e.*, prior to both the GST and the collapse of new construction in the ICI and residential sectors, the rate of underground employment was around 15-17% and the rate of underground income around 13%-15%. In other words, in the 1990's, the size of the underground economy in construction increased by 50-100%.

We further estimate that 50-60% of construction workers participate, in one way or another, in the underground economy, either as self-employed undergrounders or as moonlighters. On a "best estimate" basis, we gauge participation in the underground economy at 52%-55%. Participation rates on this scale mean that underground activity is widespread and deeply imbedded in both the construction industry and the construction labour market.

B. Terminology:

Underground income is income that is not reported to Revenue Canada, to the Ontario government or, where required, to the WSIB. *Underground work* is the employment that generates underground income.

Terminology related to Employment:

Underground work may be remunerated on a *paid employment* basis or a *contract-for-services* basis. When a worker is hired on a paid employment basis, he or she receives an hourly wage or a piece rate and is supervised by his or her employer. The customer may be the owner of the building or structure or another contractor who is further up the contracting chain.

When work is remunerated on a *contract-for-services* basis, the worker receives a fixed price for the job. The worker is responsible to the customer for satisfactory completion. Again, the customer may be the owner or another contractor who is further up the contracting chain. Workers who are hired on a contract-for-services basis are, by definition, *self-employed*.

When a worker is hired on a paid employment basis, the contractor is obliged to maintain payroll records, deduct income tax, EI and CPP contributions at source, make EI, CPP, EHT and WSIB contributions and pay overtime, statutory holidays and vacation pay. Upon termination, the employee receives a Record of Employment statement which is used to apply for EI benefits. These obligations on the part of an employer apply to both wage-paid work and piece-rate paid work.

When work is done on a contract-for-services basis, the contractor or customer pays the gross amount directly to the worker and is obliged to maintain records only to the extent that the payment is subsequently deducted as an expense.

It is common practice in the underground economy for an employer to treat a worker as an employee, in regard to supervision and control, but engage that worker on a contract basis. In this way, the employer evades responsibility to keep records, administer deductions, pay additional contributions and pay premiums for overtime, statutory holidays and vacation. For the worker, the apparent advantage of this arrangement is that remuneration is paid on a gross basis, *i.e.*, without deductions for income tax, CPP and EI. Workers employed on such a basis are termed *dependent contractors*. Legally, such arrangements are contraventions of both the *Income Tax Act* and the *Employment Standards Act*. Also, dependent contractors are supposed to be subject to WSIB coverage with attendant payment of premiums by their employer.

A self-employed worker who is truly independent in terms of control, supervision and other relevant factors is termed an *independent operator*. Independent operators, by definition, are self-employed. They have the choice of whether to be covered by WSIB.

Terminology related to Types of Underground Employment:

Underground workers may be *fully underground*, in the sense that they do no legitimate work and work in the underground economy on a full-time and permanent basis. However, most self-employed workers who participate in the underground economy do a portion of their work on a legitimate basis. They may do some jobs legitimately and some on an underground basis, or they may receive partial payment for a job as legitimate income and the balance as cash. We term such workers *regular undergrounders*, since this is such a common practice among many of the self-employed. This arrangement is especially common in large renovation jobs. Many homeowners are reluctant to forego the ability to hold a contractor responsible for his or her work. To enforce responsibility, there must be a paper trail, even if the written contract stipulates a price that is less than the actual total price of the job to the owner.

Underground workers may also be *irregular undergrounders*, that is to say they only work underground when there is no legitimate work to be had. This reflects both seasonal factors and overall conditions in the labour market. Irregular undergrounders may find employment on this basis sufficiently attractive that they become regular undergrounders. Some irregular undergrounders may have a further motivation to conceal income, namely to protect their fraudulent receipt of EI, WSIB, disability or welfare benefits.

Moonlighters are persons who have regular paid employment, but who work part-time on an underground basis.

Terminology related to Income:

When work is done on a contract basis by self-employed workers, regardless of whether the work is underground or legitimate, the worker doing that work may be *incorporated* or *unincorporated*. The profit of an unincorporated worker is the amount that is left after legitimate operating expenses are deducted from gross income. Legitimate operating expenses include purchased materials, tools, depreciation on equipment, interest on loans, travelling expenses and other normal business operating expenses. For statistical purposes, the profit is termed the *net income of unincorporated businesses*.

For incorporated businesses, profit is the residual after deducting from gross income all business operating expenses including wages and salaries. Many small businesses are incorporated even though they technically employ no workers. The owner of the business and his or her family members may be shown as shareholders and/or as employees (up to a certain income level), as this is a way of distributing income from the business at the lowest tax rate. For large companies, some shareholders may be persons who have no operating role in the company. In the Statistics Canada data used to generate our estimates of income and expenditure, all profit is included in a general category termed "*other surplus*." It is not possible to isolate the proportion of profit that is paid out as dividends to persons with no operating role in a company. We have not removed this amount in our estimates of total construction industry income. The result is to inflate the estimates of construction industry income by perhaps as much as 2-3%. This should be kept in mind when considering the high

estimates that are offered.

Underground work is typically remunerated on a *cash basis* or by cheque payable to cash. The preference for cash arises from bank policy. Most banks will not cash a cheque above a certain amount (usually around \$200). Rather they put the transaction through as a simultaneous deposit to account and withdrawal. In this way, a paper trail is created if Revenue Canada audits an individual's bank records. It will be recalled from Chapter One that the use of cash increased significantly after the introduction of the GST. It is possible, however, for a contractor to pay a sub-contractor by legitimate cheque and for that sub-contractor not to reveal the income to Revenue Canada. In doing so, the sub-contractor who conceals the income risks discovery by an audit of the contractor's records.

C. Précis of Methodology

To develop estimates of the size of the underground economy in construction, we first developed estimates of the expenditures and income in each sector of the construction industry. We then applied certain assumptions to these overall estimates to generate estimates of underground employment and underground income. Appendix A discusses in detail the procedures used to develop estimates of overall expenditures and income in each construction sector. In this section, we briefly summarize that procedure and show how we tied our estimates of the underground economy to these broader estimates of overall construction expenditures and income.

Using Statistics Canada's national accounts data on construction expenditures and input-output analysis, we estimated the labour and materials content of construction in Ontario by sector. The construction expenditure estimates were then increased to take account of unmeasured construction, using Statistics Canada's 1994 study of the underground economy as a basis for these adjustments. This analysis was projected forward to 1995-1997. Where appropriate (e.g., for estimating employment) price deflators were used to reduce nominal values to real volumes. The estimates of labour content were then adjusted to take out the portion of construction work done by persons who are not part of the construction industry, *i.e.*, work by the owners of buildings or structures or their direct employees. (This is termed "own-account" work by Statistics Canada.) The construction employment estimates were then calibrated to be consistent with estimates from the *Labour Force Survey*.

Estimates of the amount of underground work were then developed on a sector by sector basis, such that the total tied in with estimates founded on (1) the proportion of self-employed in the construction labour force, (2) the proportion of self-employed income that is concealed, (3) an estimate of the ratio of underground labour charges to legitimate labour charges, and (4) an estimate of the incidence of moonlighting among regularly paid construction workers. Chapters One to Three provide background for the assumptions behind those estimates.

We present estimates for 1995, 1996 and 1997. We have also averaged these three years and used this average as our base in estimating rates of underground activity. We prefer a three-year average because this procedure tends to even out distortions that may enter into data for any particular year.

D. Background to the Estimates

High estimates and low estimates are presented, along with a set of “best estimates.” The key assumptions that determine the high and low estimates are enumerated. This is not to say that we endorse the high or low estimates. Rather, we regard the high and low estimates, and their associated assumptions, as setting the boundaries on reasonable estimation. Our own “best estimates” are somewhat closer to the low estimates.

In considering how to assess the boundaries implied by the high and low estimates, the following factors should be kept in mind:

- A. The low estimates approximate, but still exceed, the level of underground work that would be consistent with the upper boundary in Statistics Canada’s 1994 study (which was based on 1992 data). That study, it should be recalled, assumed that there was no exposure to unmeasured construction activity outside the residential sector. Since underground activity was estimated as a ratio of unmeasured activity, the study implicitly assumed no underground activity outside the residential sector.
- B. The Labour Force Survey, to which we have reconciled our sectoral distribution of estimated employment in the construction industry, may understate total employment in that industry. It is quite likely that some individuals who are working underground - especially those receiving EI, WSIB or disability benefits - do not truthfully reveal that they are working. The KPMG study found evidence that, in some regions and at some times of the year, there are unexplained shortages for trades in which Canada Employment Centres show registered unemployed workers. It is reasonable to assume that the under-estimated employment that is not picked up by the Labour Force Survey is largely underground employment. This would raise our estimates.
- C. The Labour Force Survey probably underestimates moonlighting in construction. For the past three years, the average reported incidence of multiple job-holding in construction was 9.5%. Industry informants generally believe that the proportion of workers who work for a secondary employer (or directly for a customer) is higher. Weekend work for a second employer or a direct customer is especially common in construction.
- D. The behaviour of cash balances - described in Chapter One and Chapter Three - is consistent with a much higher level of underground activity than in the pre-1991 period.
- E. The increase in self-employment in the construction industry is consistent with increased underground activity. In 1992, the base year of the Statistics Canada study, the rate of self-employment in construction was 35.6%. In 1997, as noted, it was 40.0% of a larger

employment base.

- F. Our estimates for labour income include the operating surplus of incorporated entities. Much of this, we believe, is the operating surplus of small business in the construction industry and is flowed through to the owners of those businesses who are actively engaged in managing the business. Some fraction of this gross operating surplus, however, is profit accruing to shareholders who have no operating role in the construction industry. We cannot isolate this amount. However, it represents a slight overstatement of total labour income for the construction industry.

The estimates of underground work are presented by sector. However, these estimates have been calibrated to be consistent with estimates which are reasonable for the construction industry as a whole, using the Labour Force Survey. The industry-wide estimates are based on three central findings from the previous analysis:

- first: from 1995 to 1997, on average, 38% of construction industry workers were self-employed. In 1997, this proportion was 40%;
- second: Statistics Canada estimated that, for the period 1985 to 1991, approximately 60% of the income of unincorporated business in construction was concealed. In 1991, this proportion was 65%. Later data are not available;
- third: we know from Census data that self-employed workers earn less than wage-paid workers. We also know from studies of the industry that underground workers factor in their savings from tax evasion and charge lower labour rates than legitimate workers. This discount from legitimate work appears to be in the range of 10 - 20%.

Taken together, these findings imply that underground income attributable to the self-employed is approximately 18% to 22% of total industry income. Amounts over this must be attributed to moonlighters and to workers in receipt of EI, WSIB or disability benefits who are working underground to maintain their eligibility for these benefits.

In the case of irregular undergrounders, there are both cyclical and seasonal factors affecting the volume of underground work. Workers with regular employment who moonlight are limited in the amount of time they can devote to their underground work. In the discussion which follows, we indicate how we have framed our overall estimates so that they can be anchored in clear assumptions about the rate of income concealment by the self-employed and the rate of moonlighting by workers who also have wage-paid jobs.

E. Estimates of Underground Employment

Exhibit IV-A presents our estimates of total employment by sector for the Ontario construction industry in the 1995-1997 period. These estimates are based on Statistics Canada's national accounts estimates of construction expenditures, adjusted to include "unmeasured" construction and to exclude "own account" construction. Details behind the formulation of these estimates are presented in Appendix A.

Exhibit IV-B presents estimates of *underground* employment in the Ontario construction industry during the 1995-1997 period. These are derived from the estimates of construction industry employment by sector (Exhibit IV-A) and our assumptions regarding the share of underground construction employment by sector.

Exhibit IV-A

Estimates of Employment in the Ontario Construction Industry

(Adjusted to include "Unmeasured Construction" and Exclude "Own Account" Construction)

Reconciled with Labour Force Survey employment estimates

| | 1995 | 1996 | 1997 | Total | Average | Percen |
|---|---------|---------|---------|---------|---------|--------|
| <i>New Residential</i> | | | | | | |
| New Housing | 64,551 | 70,855 | 90,045 | 225,451 | 75,150 | 27.3% |
| Renovations | 64,070 | 62,339 | 69,141 | 195,549 | 65,183 | 23.7% |
| Total New Residential | 128,621 | 133,194 | 159,185 | 421,000 | 140,333 | 51.0% |
| <i>Repair Residential</i> | 23,458 | 22,573 | 24,051 | 70,082 | 23,361 | 8.5% |
| <i>Total Residential Construction</i> | 152,078 | 155,767 | 183,236 | 491,082 | 163,694 | 59.5% |
| <i>New Non-Residential</i> | | | | | | |
| Building | 48,996 | 51,790 | 50,035 | 150,820 | 50,273 | 18.3% |
| Engineering | 35,046 | 33,161 | 32,666 | 100,874 | 33,625 | 12.2% |
| Total New Non-Residential | 84,042 | 84,951 | 82,701 | 251,694 | 83,898 | 30.5% |
| <i>Repair Non-Residential</i> | 27,780 | 26,681 | 27,763 | 82,224 | 27,408 | 10.0% |
| <i>Total Non-Residential Construction</i> | 111,822 | 111,633 | 110,464 | 333,918 | 111,306 | 40.5% |
| <i>Total Construction</i> | 263,900 | 267,400 | 293,700 | 825,000 | 275,000 | 100.0% |

Exhibit IV-B

Estimates of *Underground* Employment in Ontario Construction, 1995-1997

| | Avg. Employment | Low Estimate | | High Estimate | | Best Estimate | |
|---|-----------------|--------------|------|---------------|------|---------------|------|
| | 1995-97 | Underground | Rate | Underground | Rate | Underground | Rate |
| <i>New Residential</i> | | | | | | | |
| New Housing | 75,150 | 11,273 | 15% | 15,030 | 20% | 12,525 | 17% |
| Renovations | 65,183 | 32,592 | 50% | 45,628 | 70% | 36,213 | 56% |
| Total New Residential | 140,333 | 43,864 | 31% | 60,658 | 43% | 48,738 | 35% |
| <i>Repair Residential</i> | 23,361 | 14,017 | 60% | 18,689 | 80% | 15,574 | 67% |
| <i>Total Residential Construction</i> | 163,694 | 57,881 | 35% | 79,347 | 48% | 64,312 | 39% |
| <i>New Non-Residential</i> | | | | | | | |
| Building | 50,273 | 7,541 | 15% | 10,055 | 20% | 8,379 | 17% |
| Engineering | 33,625 | 1,345 | 4% | 2,018 | 6% | 1,494 | 4% |
| Total New Non-Residential | 83,898 | 8,886 | 11% | 12,072 | 14% | 9,873 | 12% |
| <i>Repair Non-Residential</i> | 27,408 | 3,563 | 13% | 6,578 | 24% | 3,959 | 14% |
| <i>Total Non-Residential Construction</i> | 111,306 | 12,449 | 11% | 18,650 | 17% | 13,832 | 12% |
| <i>Total Construction</i> | 275,000 | 70,330 | 26% | 97,997 | 36% | 78,144 | 28% |

Exhibits IV-C summarizes the assumed levels of underground activity in residential repair and renovation, based on the size of the job. The overall size distribution of renovation and repair jobs is drawn from Statistics Canada's Survey of Homeowner Renovation and Repair.

Exhibit IV-C

Underground Rate in Residential Renovation and Repair, 1995-1997

| | Percent of Total Work | Underground Rate (Low Estimates) | Underground Rate (High Estimates) |
|-------------------------------------|-----------------------|----------------------------------|-----------------------------------|
| Residential Renovation Work: | | | |
| Jobs under \$5,000 | 26% | 65% | 80% |
| Jobs between \$5,000 and \$20,000 | 44% | 50% | 70% |
| Jobs over \$20,000 | 30% | 35% | 60% |
| Total Renovation | 100% | 50% | 70% |
| Residential Repair Work: | | | |
| Jobs under \$5,000 | 78% | 65% | 85% |
| Jobs over \$5,000 | 22% | 50% | 60% |
| Total Repair | 100% | 60% | 80% |
| Total Renovation and Repair | 100% | 56% | 73% |

The KPMG Study, discussed in Chapter Two, noted the industry's view that the proportion of underground work is inverse to the size of the project. On larger projects, homeowners want a paper trail on which they can rely to hold a contractor accountable for unsatisfactory work. Moreover, the larger the job, the more difficult it is for the contractor to conceal all of the income, in light of the purchases of materials that his or her books may show. It is difficult to avoid depositing some funds to a bank account. Doing so creates a paper trail which tax auditors can pursue.

F. Estimates of Underground Income

Exhibit IV-D translates the employment estimates into estimates of income. The estimates in Exhibit IV-D are based on Statistics Canada's input-output analysis which provides a measure of the labour content of construction expenditures.

Exhibit IV-E derives estimates of *underground* income from these estimates of overall labour income using certain behavioural assumptions.

Exhibit IV-D
Estimates of Total Employment Income in the Ontario Construction Industry,
1995-1997 (\$Millions)

| | Annual Estimates | | | 1995-1997 | | |
|---|------------------|---------------|---------------|---------------|---------------|--------------|
| | 1995 | 1996 | 1997 | Total | Average | Percent |
| <i>New Residential</i> | | | | | | |
| New Housing | 2,590 | 2,939 | 3,790 | 9,319 | 3,106 | 24.0 |
| Renovations | 2,747 | 2,974 | 3,316 | 9,037 | 3,012 | 23.2 |
| Total New Residential | 5,337 | 5,914 | 7,106 | 18,356 | 6,119 | 47.2 |
| <i>Repair Residential</i> | 1,006 | 1,077 | 1,153 | 3,236 | 1,079 | 8.3 |
| Total Residential Construction | 6,343 | 6,991 | 8,259 | 21,593 | 7,198 | 55.5 |
| <i>New Non-Residential</i> | | | | | | |
| Building | 2,375 | 2,739 | 2,658 | 7,772 | 2,591 | 20.0 |
| Engineering | 2,001 | 2,016 | 1,962 | 5,979 | 1,993 | 15.4 |
| Total New Non-Residential | 4,376 | 4,755 | 4,620 | 13,751 | 4,584 | 35.3 |
| <i>Repair Non-Residential</i> | 1,145 | 1,187 | 1,231 | 3,562 | 1,187 | 9.2 |
| Total Non-Residential Construction | 5,521 | 5,942 | 5,851 | 17,313 | 5,771 | 44.5 |
| Total Construction | 11,863 | 12,933 | 14,110 | 38,906 | 12,969 | 100.0 |

Exhibit IV-E
Estimates of Underground Income in the Ontario Construction Industry,
1995-1997 (\$Millions)

| | Avg. Annual Employment Income, 1995-97 | Low Estimate | | High Estimate | | Best Estimate | |
|---|--|--------------|------------|---------------|------------|---------------|------------|
| | | Underground | Rate | Underground | Rate | Underground | Rate |
| <i>New Residential</i> | | | | | | | |
| New Housing | 3,106 | 342 | 11% | 466 | 15% | 380 | 12% |
| Renovations | 3,012 | 1,205 | 40% | 1,807 | 60% | 1,339 | 44% |
| Total New Residential | 6,119 | 1,546 | 25% | 2,273 | 37% | 1,718 | 28% |
| <i>Repair Residential</i> | 1,079 | 518 | 48% | 734 | 68% | 575 | 53% |
| Total Residential Construction | 7,198 | 2,064 | 29% | 3,007 | 42% | 2,294 | 32% |
| <i>New Non-Residential</i> | | | | | | | |
| Building | 2,591 | 311 | 12% | 440 | 17% | 345 | 13% |
| Engineering | 1,993 | 60 | 3% | 100 | 5% | 66 | 3% |
| Total New Non-Residential | 4,584 | 371 | 8% | 540 | 12% | 412 | 9% |
| <i>Repair Non-Residential</i> | 1,187 | 119 | 10% | 237 | 20% | 132 | 11% |
| Total Non-Residential Construction | 5,771 | 489 | 8% | 778 | 13% | 544 | 10% |
| Total Construction | 12,696 | 2,554 | 20% | 3,784 | 30% | 2,838 | 22% |

Underground income is the amount of income earned in construction work that is not reported to Revenue Canada for purposes of paying GST or income tax. Nor is underground income declared for purposes of paying WSIB, EI or CPP contributions. Underground income also evades payment of GST. In Exhibit IV-E, we have estimated the amount of underground income by sector, after taking account of both *unmeasured* construction expenditure (*i.e.*, the amount of construction work that Statistics Canada estimates is not included in the published national accounts data) and *own account* construction (*i.e.*, construction work done by the owners of buildings or structures or their direct employees). The estimates have been framed in terms of high, low and best estimates, using the average construction income for 1995-1997 as the base.

Exhibit IV-F summarizes the behavioural estimates that are behind the estimates of the rate underground income. Behavioural assumptions are required to generate overall estimates of underground activity and underground income. The key behavioural estimates pertain to: (1) the percent of work by self-employed construction workers that is underground, (2) the proportion of regularly employed construction workers who moonlight, and (3) the discount offered by underground workers to owners or contractors. The basis for these assumptions is the analytical work presented in Chapters One to Three.

Underground Work and the Self-Employed:

Statistics Canada's estimated that, in 1991, concealment by unincorporated businesses in construction was 65% of net income, *i.e.*, income after deducting legitimate expenses.

Underground Work and Legitimately Employed Construction Workers:

A survey conducted in 1995 by the Ontario Construction Secretariat found that 26% of one trade and 40% of another trade reported working underground on a moonlight basis.

Discount for Underground Work:

Persons consulted for this study, who are well informed on construction industry practices, estimated that discounts for underground work range from 10-20% off total price. Since materials cannot be discounted, this represents a discount on labour charges of approximately 20-40%.

Exhibit IV-F summarizes the behavioural assumptions used to generate overall estimates of underground income.

**Exhibit IV-F
Behavioural Assumptions**

| | Low Estimates | High Estimates |
|--|------------------|-------------------|
| Percent of Work by Self-Employed that is Underground | 60% | 70% |
| Proportion of Paid Employees who Moonlight | 25% | 50% |
| Rate of Moonlighting | 1 day/week | 1½ day/week |
| Moonlighting as a Percent of Paid Employment | 4% | 12% |
| Percent of Moonlight Income that is concealed | 100% | 100% |
| Discount to Owners/Contractors for Underground Work | 12.5% | 25% |
| Shares of Total Underground Income: | | |
| Self-Employed: | 88% | 80% |
| Moonlighters: | 12% | 20% |

G. Conclusions

This chapter has presented detailed estimates of both total and underground employment and income, on a sector by sector basis, in Ontario's construction industry. The base period is 1995 to 1997. To our knowledge, these are the only estimates developed at this level of detail and with this degree of rigour in tying estimates to previous analytical work, to Statistics Canada's analysis of input and output in the construction industry and to the Labour Force Survey. The key findings of the chapter are summarized in Exhibit IV-G.

The estimates of underground employment and underground income presented in this chapter confirm the construction industry's view that the underground economy is a serious problem. On the scale suggested by the estimates in this chapter, it is likely that the underground economy has become imbedded in the construction industry. Underground practices are distorting the competitive environment, undermining labour standards, eroding health and safety standards and weakening investment in apprenticeship and skills upgrading. As well, the underground economy is imposing significant additional costs on legitimate contractors and workers who must pay higher taxes and WSIB contributions to subsidize the undergrounders.

Exhibit IV-G**Estimated Rate of Underground Employment and Income, 1995-1997**

| | Low Estimate | High Estimate | Best Estimate |
|-------------------------------------|--------------|---------------|---------------|
| New Housing: | | | |
| Underground Work | 15% | 20% | 17% |
| Underground Income | 11% | 15% | 12% |
| Residential Renovation: | | | |
| Underground Work | 50% | 70% | 56% |
| Underground Income | 40% | 60% | 44% |
| ICI: | | | |
| Underground Work | 15% | 20% | 17% |
| Underground Income | 12% | 17% | 13% |
| Total Construction Industry: | | | |
| Underground Work | 25% | 35% | 28% |
| Underground Income | 20% | 30% | 22% |

□

V

Estimating Revenue Losses from the Underground Economy in Construction

The purpose of this chapter is to derive estimates of the revenues lost to governments and to the WSIB as a result of underground employment in Ontario's construction industry. The revenue instruments examined are:

- Federal Goods and Services Tax (GST)
- Ontario Retail Sales Tax (RST)
- Employer Health Tax
- Personal Income Tax
- EI and CPP Contributions
- WSIB Premiums

Where methodology is more complex, it is described in Appendix B.

Appendix C is two case studies prepared by the Ontario Construction Secretariat.

A. Federal Goods and Services Tax (GST)

Non-Residential Construction:

In our view, there can be no significant GST loss in non-residential construction. This is not to say there is no underground work in the non-residential sector. We have already suggested estimates of that work. Rather, the nature of the GST, as a tax instrument, largely insulates it from the effect of underground work in non-residential construction.

To understand this conclusion, we must consider the contracting chain. The owner is charged GST by the general contractor. The owner, therefore, pays GST to the general contractor.

The general contractor is charged GST by each of the sub-contractors. The general contractor, therefore, pays GST to the sub-contractors and remits to Revenue Canada the difference between the GST that was received from the owner and the GST that was paid to the sub-Contractors.

The sub-contractors receive GST from the general contractor. The sub-contractors are assumed to have a mix of (1) workers who are legitimate sub-contractors, (2) workers who are legitimate employees and (3) underground workers. The sub-contractor is charged GST by the legitimate sub-contractors. Employees and underground workers do not charge GST. The sub-contractor therefore remits to Revenue Canada the difference between the GST received from the general contractor and the GST paid to the legitimate sub-contractors.

The legitimate sub-contractors may have some business expenses on which they paid GST. The legitimate sub-contractors then remit to Revenue Canada the difference between the GST received from the sub-contractor and the GST they paid on these business expenses.

From the perspective of the GST system, underground workers are the same as employees: they create value on which GST is charged but the payments to them do not generate a deduction against GST charged. There is no leakage of GST in the contracting chain.

Residential Construction - New Housing:

GST is charged on new housing. No GST is charged on existing housing. For new rental housing, the full GST rate of 7% applies. For most new ownership housing, a rebate of GST is available. This rebate reduces the effective GST rate to 4.5%. The 4.5% GST rate applies to all new ownership housing priced at less than \$350,000. Above \$350,000, the rebate is progressively reduced so that ownership housing priced above \$450,000 is subject to the full 7% GST.

It is assumed that GST is paid on all multiple-unit projects. In this respect, multiple-unit projects are comparable to non-residential construction projects. Similarly, GST is charged and paid on single family and semi-detached houses sold by large builder/developers. There is no leakage of GST from the contracting chain.

The principal - and significant - source of GST leakage is in the construction of single and semi-detached units by *owner-builders*. An owner-builder pays GST only on legitimately purchased inputs. Therefore, an owner-builder has a strong incentive to purchase inputs underground. In the main this is labour, although some materials might be supplied by an underground contractor with credits claimed on the account of a legitimate purchaser. Land is assumed to be roughly one-quarter of total costs. Land is subject to GST; paying the GST on land cannot be avoided.

If an owner-builder subsequently sells a housing unit, GST is not charged to the purchaser. This has led to the emergence of bogus owner-builders who do not occupy the housing unit but build for the purpose of selling. Clearly these bogus owner builders have a strong incentive to purchase inputs underground, since the saving on GST goes straight to their profit on the final transaction.

As detailed in Appendix A, we estimate that owner-builder construction of new housing,

where at least some of the work is done underground, represents 3% to 5% of total new housing expenditures. Since many legitimate owner-builders also engage in underground arrangements with sub-contractors, the share of total new housing expenditures accounted for by owner-builders who engaged in underground practices is estimated at 4-7%. It is further estimated that 40-60% of these expenditures would escape GST payment as a result of underground practices. The GST which would have been payable on these expenditures would be 4.5%.

Exhibit V-A
Estimate of GST Leakage in New Residential Construction

| | Average Annual GST Leakage 1995 to 1997 |
|---------------|--|
| Low Estimate | approx. \$7 million |
| High Estimate | approx. \$14 million |
| Best Estimate | approx. \$10 million |

Residential Repair and Renovation:

In Chapter Four we set out estimates of underground income in the renovation and repair sector based on different rates of underground work by size of project. For these estimates, we are assuming that GST is paid on materials, either by the end-user or by a legitimate purchaser of renovation services whose account showed excessive consumption of materials. The GST leakage, therefore, is on the hidden income. These estimates assume that the labour charges would not be grossed up if the income were not hidden. If labour charges were grossed up, the income on which GST applied would be roughly 10-20% higher.

Exhibit V-B
Estimate of GST Leakage in Repair and Renovation

| | Average Annual Hidden Income 1995 to 1997 (Ex. IV-E) | Average Annual GST Leakage 1995 to 1997 7% |
|---|---|---|
| Low Estimate (Underground Share: 42%) | \$1,723 | \$121 million |
| High Estimate (Underground Share: 62%) | \$2,541 | \$178 million |
| Best Estimate ((Underground Share: 50%) | \$1,914 | \$134 million |

B: Ontario Retail Sales Tax (RST)

Contractors from outside Ontario who bring materials into Ontario receive a rebate from their home province on sales tax paid on those materials. In principle, those builders are required to post bond in Ontario and to pay the equivalent sales tax that would have been levied on the materials in Ontario. In practice, many contractors do not post bond and therefore enjoy a competitive advantage on materials. This problem is largely confined to border markets. The problem potentially applies in both residential and non-residential construction. In practice, the industry generally believes that the problem is more common in non-residential construction.

It is estimated that roughly 15% of non-residential contract construction work is in areas sufficiently near the borders with other provinces to attract shipments of materials from those provinces. The materials share of non-residential building and total non-residential repair is roughly 35%. For engineering, materials are roughly 31%. The RST payable on these materials would be 8%.

There is no firm basis for estimating the share of work done by out-of-province contractors. For our purposes, we assume that the share of work done by out-of-province contractors is between 10% and 20% of their potential near-border market of 15%.

In the non-residential sector, the potential RST loss would be \$14-\$28 million.

Exhibit V-C

Estimate of Potential RST Leakage to Out-of-Province Contractors

\$Millions

(based on Total Estimated Expenditures - Appendix A: Table A-10)

| | Average Total Exp. 1995-1997 | 15% Border Share | Materials Ratio | Materials Amount | 8% RST | 10% Share | 20% Share |
|-------------|------------------------------|------------------|-----------------|------------------|--------|-----------|-----------|
| Building | \$18,595 | \$2,798 | 35% | \$976 | \$78 | \$8 | \$16 |
| Engineering | \$16,121 | \$2,418 | 31% | \$750 | \$60 | \$6 | \$12 |
| Total | \$34,716 | \$5,207 | | \$1,726 | \$ 138 | \$14 | \$28 |

C. Employer Health Tax

In Chapter Four we estimated average annual underground income for 1995 to 1997 as follows:

| | |
|----------------|-----------------|
| Low Estimate: | \$2,554 million |
| High Estimate: | \$3,784 million |
| Best Estimate: | \$2,838 million |

Employer Health Tax is approximately 1% of payroll.

Not all of the underground income should be incorporated into the tax base for the Employer Health Tax. In the first place, since 1997, employers with payrolls under \$200,000 are exempt from the EHT. Second, self-employed individuals are exempt. In light of the post-1997 exemption of employers with payrolls under \$200,000, we feel that these should be eliminated from our estimate of fiscal loss.

We have estimated that self-employed persons account for 60% to 75% of underground income. We have no firm basis for estimating the proportion of underground wage income that would be covered by the \$200,000 exemption if the income were reported. To allow for this factor, we will assume that 15% to 20% of underground income would properly be in the EHT tax base. On this basis the lost revenue would be:

Exhibit V-D

Estimate of EHT Loss to Ontario

(based on Total Estimated Underground Income - Table IV-E)

| | Estimated EHT Lost to Underground Economy in Construction |
|---|---|
| Low Estimate (Low Estimate of Underground Income / 15% incorporated into payroll base) | approx. \$4 million |
| High Estimate (High Estimate of Underground Income / 20% incorporated into payroll base) | approx. \$8 million |

D. Personal Income Tax

Evasion of personal income tax represents the most significant revenue loss to governments from underground activity in the construction industry. The estimation of lost income tax

is complex. Our methodology has been set out in Appendix B. We distinguish among three types of underground workers:

- *Moonlighters* are persons with regular employment who work underground during evenings and weekends.
- *Irregular undergrounders* are persons who work underground during the off-season while they may be collecting EI benefits or welfare.
- In the case of the *self-employed*, the central issue is concealment.

Exhibit V-E summarizes the estimates for personal income tax losses.

Exhibit V-E

Estimates of Income Tax Lost to All Types of Underground Work:

| | Low Estimate | High Estimate |
|--------------------------|----------------------|------------------------|
| Moonlighters | \$124 million | \$295 million |
| Irregular Undergrounders | \$124 million | \$295 million |
| Self-Employed: | \$592 million | \$779 million |
| Total: | \$840 million | \$1,369 million |

E. Canada Pension Plan Contributions

The persons that we have identified as moonlighters or irregular undergrounders have declared incomes that are higher or virtually equal to the Yearly Maximum Pensionable Earnings. Therefore, the losses in CPP contributions are insignificant for these individuals. In the case of the self-employed, we estimate that they would be liable for combined employer-employee contributions equal to 3% on roughly half of the additional income they would be required to report.

| | | |
|--|----------------------|----------------------|
| | Low | High |
| Lost CPP Contributions of Self Employed | approx. \$32 million | approx. \$43 million |

F. Independent Operator vs Dependent Contractors

EI and WSIB pose distinct estimation problems because not all underground income would be covered by EI or WSIB. EI applies only to persons who are employees. It does not apply to self-employed workers. WSIB is mandatory for employees and optional for self-employed workers.

Employees:

Employees are persons who are subject to the control and supervision of an employer. Some underground workers are paid an hourly wage and treated as employees. Others are paid a piece rate, but still subject to the same degree of supervision and control as employees. Others are paid on a sub-contract basis. Some of these persons are genuinely self-employed. Others, however, are *de facto* employees whose relationship has been fraudulently masked as a contract-for-services to avoid making deductions at source. These are termed dependent contractors.

Independent Operators:

Independent operators are genuinely self-employed persons who are not subject to the control and supervision of an employer.

We need to estimate the proportion of underground work that is either unreported wage work or dependent contractor work. There is no basis for making a firm estimate. On the basis of industry opinion as described by the various studies discussed in Chapter Two, we suggest the following estimates:

Moonlighters:

Moonlighters are persons who work on weekends and evenings. We believe that they are likely to do the lion's share of their underground work as independent operators on a cash basis. We estimated that only 15% of underground work done by moonlighters is dependent contractor or wage work which should be subject to EI and WSIB contributions.

Irregular Undergrounders:

Irregular undergrounders are more likely to be working as wage earners or dependent contractors in the underground economy. This comes from their intermittent involvement in the underground economy. We estimate that 50% of work done by irregular undergrounders is dependent contractor or wage work.

Self-employed:

We know from the Labour Force Survey that two thirds of the self-employed are either incorporated or employ helpers. We believe that incorporation and employing helpers is strong evidence of independent operator status. The remaining one-third of the self-employed are both unincorporated and do not employ helpers. We assume that one third of these work as dependent contractors. Overall, this implies that 11% of the self-employed work as dependent contractors (i.e one third of one third).

Combining these estimates with our estimates of underground employment suggests the following rate of dependent contractor and wage employment in the underground economy. These estimates suggest an overall rate of wage employment or dependent contractor employment in the underground economy of 16.5% to 19.6%

Exhibit V-F
Estimates of Wage Work and Dependent Contract Work
in the Underground Economy in Ontario Construction

| | Share of Underground Employment (Low Estimate) | Share of Underground Employment (High Estimate) | Rate of Wage or Dependent Contractor Work | Weighted Share (Low Estimate) | Weighted Share (High Estimate) |
|---------------|--|---|---|-------------------------------|--------------------------------|
| Moonlighters | 12.5% | 20.0% | 15% | 1.9% | 3.0% |
| Irregulars | 12.5% | 20.0% | 50% | 6.3% | 10.0% |
| Self-Employed | 75.0% | 60.0% | 11% | 8.3% | 6.6% |
| Total | 100.0% | 100.0% | | 16.5% | 19.6% |

G. Employment Insurance Contributions

During the period 1995 to 1997, the average combined EI contribution rate was 7.1%. On the basis of the estimates suggested above, from 15.7% to 19.0% of underground work should be covered by EI. However, it should be kept in mind that moonlighters and some irregular undergrounders have legitimate earnings that are close to the EI ceiling. To the extent that underground earnings are above the EI ceiling, there would be no contributions applicable.

Moonlighters and irregular undergrounders account for about one half of work that should be covered by EI. We assume conservatively that only about half of their underground income would be below the EI ceiling. We assume that approximately three-quarters of the underground income of self-employed workers would be below the EI ceiling.

If these assumptions and estimates are combined, the EI loss would apply to approximately 12.5% to 14.5% of underground income. The EI contribution on this income would be 7.1%.

Exhibit V-G
Estimates of EI Contributions Due on
Wage Work and Dependent Contract Income

| | Low Estimate | High Estimate |
|--|----------------------|----------------------|
| Proportion of Underground Income on which EI Contributions are Due | 12.5% | 14.5% |
| Estimated Contributions 7.1% | approx. \$23 million | approx. \$39 million |

H. WSIB Contributions

The estimates that were used for wage employment and dependent contractor employment in the underground economy can also be applied to WSIB contributions. The maximum insurable earnings are sufficiently high that we may assume that all such income would be liable to WSIB premiums.

WSIB premiums depend on the trade classification of the work. We have no basis on which to distribute underground workers among the 13 rate groups that apply in the construction industry. The weighted average of these rates for 1997 (using the WSIB's estimated person-years of employment for each rate group) is \$7.43 per \$100 of payroll. On this basis, we estimate lost WSIB premium income as follows:

Exhibit V-H
Estimates of WSIB Contributions Due on
Wage Work and Dependent Contract Income

| | Low Estimate | High Estimate |
|--|-----------------------|----------------------|
| Proportion of Underground Income on which WSIB Contributions are Due | 16.5% | 19.6% |
| Estimated Contributions 7.43% | approx. \$ 31 million | approx. \$55 million |

Again, it should be noted, that if forcing income to be declared caused labour rates to rise, the premium income would be increased accordingly.

These estimates assume the dependent contractor and wage employment rates that we suggested earlier. If dependent contractors and wage employees were more common in the underground economy, then the premium loss to the WSIB would be greater.

I. Summary of Fiscal Losses

Exhibit V-J summarizes the estimated fiscal losses from the underground economy in Ontario's construction industry.

Exhibit V-I
Estimates of Fiscal Losses from Underground Economy in Construction
Ontario, 1995 - 1997, Annual Averages
\$Millions

| | Low Estimate | High Estimate |
|--|----------------|----------------|
| Goods and Services Tax (GST) | | |
| New Residential Construction | \$ 7 | \$ 14 |
| Repair and Renovation | \$121 | \$178 |
| | ----- | ----- |
| Total GST | \$128 | \$192 |
| Retail Sales Tax (RST) | \$14 | \$28 |
| Employer Health Tax (EHT) | \$4 | \$8 |
| Personal Income Tax | \$840 | \$1,369 |
| Canada Pension Plan (CPP) | \$32 | \$43 |
| Employment Insurance (EI) | \$23 | \$39 |
| Workers Safety and Insurance Board (WSIB) | \$31 | \$55 |
| Total Fiscal Loss | \$1,072 | \$1,734 |

The assumptions behind these estimates necessarily make them approximations only. Informed observers may feel more comfortable with different assumptions in some cases, though we believe that the range we have suggested for our estimates should accommodate most concerns.

The central message of these estimates is that the fiscal loss is enormous.

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VI

Summary and Conclusions

This chapter will review the principal conclusions of the study, place them in the context of other work that has been done on the underground economy and consider the implications of the study's key findings.

A. The Stark Facts about the Underground Economy

- 1: Over the period 1995 to 1997, in the Ontario construction industry, underground employment accounted for 25% to 35% of all employment. Our best estimate is 28%.
- 2: For the same period, underground income represented 20% to 30% of all income generated by the construction industry. Our best estimate is 22%.
- 3: Self-employment has increased significantly in the construction industry and has been a symptom, an enabler and a driver behind the growth of underground economy work. According to the Labour Force Survey, self-employment in Ontario's construction industry in 1997 was 40%.
- 4: The fiscal loss to governments and the WSIB is enormous. The total fiscal loss is composed of losses on GST, Retail Sales Tax, Employer Health Tax, Personal Income Tax, CPP and EI contributions and WSIB premiums. We estimate the total fiscal loss at \$1.1 billion to \$1.7 billion.
- 5: We estimate that 17.5% to 19.6% of underground work is either wage employment or dependent contractor employment. This has implications for EI coverage, WSIB coverage and also for Employment Standards enforcement.
- 6: One way or another, we estimate that 50-60% of workers in the construction industry participate in the underground economy. Our best estimate is in the 52% to 55% range.
- 7: Underground work is found in all sectors of the construction industry. Although more heavily concentrated in the residential sector, contractors who employ underground labour or underground sub-contractors are now a significant competitive factor in some segments

of the ICI sector.

- 8: All of the evidence points to a significant increase in the underground economy in the 1990's. We estimate that underground work increased by 50% to 100% since the beginning of the decade.

B. The Factors behind the Underground Economy

Three factors chiefly account for the growth of the underground economy in the 1990's.

The first factor was the introduction of the GST on January 1, 1991. As shown in this study, and in work by Spiro, there was a sharp increase in the use of cash following the introduction of the GST.

The second factor was the sharp decline of investment in new construction in the ICI and residential sectors in the early 1990's. The concurrent decline of these two sectors created acute unemployment and significantly intensified competitive conditions among contractors. Bankruptcies increased sharply. The proportion of small construction companies with operating losses exceeded 40%. In these conditions, desperate contractors were compelled to chase significantly fewer available jobs. Cost-cutting took hold across the industry. The combination of significantly more intense competitive conditions and acute unemployment were the raw ingredients of the underground economy. These pressures led to the third factor.

The third factor was a sharp increase in self-employment in the construction industry. The relationship of self-employment to the underground economy is complex. Many self-employed workers are legitimate. However, for underground workers, self-employment facilitates income concealment and masking an employment relationship as a contract-for-services. Self-employment reached 40% of total employment by 1997 and accounted for a somewhat larger proportion of estimated working time. Virtually all of the growth in self-employment in the 1990's was among self-employed workers who did not employ helpers. Statistics Canada's analysis and work by Zanasi point to an extremely high rate of income concealment among the self employed. Statistics Canada estimated concealment at 65% among unincorporated construction businesses in 1991.

The underground economy has now become imbedded, in large measure, in the construction industry. A return to more buoyant economic conditions in the residential and ICI sectors will not lead to a significant reversal of the trend to self-employment nor to an unwinding of the underground economy.

C. Collateral Evidence of the Underground Economy

While this study is the only detailed attempt to estimate the *amount* of underground employment and income by sector, other studies point in the same direction.

- 1: Work by Statistics Canada, which examined *unmeasured* expenditures in the economy, supports estimates of the underground economy in residential construction in the range of 20-30%. This analysis used 1992 as its base year. Other collateral evidence points to continuing increases in underground work after 1992.
- 2: The use of cash increased sharply following the introduction of the GST on January 1, 1991. The ratio of cash balances to average monthly personal expenditures was 58.3% in 1990. In 1995 the ratio stood at 67.5%. This shift to cash occurred, notwithstanding the increased use of credit cards and debit cards.
- 3: After 1992, *reported* household expenditures on renovations and repairs declined while expenditures on consumer durables increased. This apparent inconsistency supports the view that, in the 1990's, an increased proportion of spending on renovations and repairs was done on a cash basis and was not reported in surveys.
- 4: The ratio of materials to measured expenditure on residential construction increased by 31.5% between 1992 and 1995. Do-it-yourself construction and changes in the relative price of labour and materials cannot account for this jump in materials use. The implication is that a significant proportion of the labour income associated with the use of these building materials was underground.
- 5: Statistics Canada found that the concealed income of unincorporated business in construction increased from 57.3% in 1990 to 65.4% in 1991. Data are not available for subsequent years.
- 6: The number and the share of self-employed workers in the construction labour force increased sharply in the 1990's, reaching 40% of employed in 1997. Self-employment is a critical enabling factor in the spread of the underground economy.

D. The Broader Implications of this Study

The estimates that we have developed of underground employment and income in Ontario's construction industry show that conditions in the industry changed radically in the 1990's. These changes have significant implications for governments, contractors and employees, as well as for the owners of buildings and structures. The first implication, and the one examined in this report, is the revenue loss to governments resulting from underground practices in construction.

The growth of the underground economy also has many other negative implications for the construction industry. These include increased tax and contribution burdens on legitimate contractors and workers. This is especially clear in the case of the WSIB, where construction industry contributions have increased significantly. The growth of underground practices in construction also results in unfair competition for legitimate contractors and workers. As well, underground practices potentially weaken health and safety standards, undermine labour standards and programs and erode construction standards. Finally, underground practices reduce the contribution base for benefits plans and weaken apprenticeship training and skills development.

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November 1998

Appendices

**Appendix A: Estimating Expenditures, Employment and
Income in Ontario's Construction Industry**

Appendix B: Estimating Revenue Losses

Appendix C: Case Studies

Appendix A

Estimating Expenditures, Employment and Income in Ontario's Construction Industry

Purpose

This appendix reviews the methodology and presents the detailed tabulations used to prepare the estimates of construction industry expenditures, employment and income in Ontario. These provide the base data required for the estimates of underground employment and income set out in Chapter IV.

Definitions and Terminology

The estimates are disaggregated by sector and by type of construction (new, renovation or repair).

Construction sectors:

Construction activity is typically disaggregated into two broad sectors (residential and non-residential):

Residential construction comprises work on residential buildings (including houses and multiple unit buildings).

Non-residential construction comprises construction projects which do not involve residential buildings. There are two broad types of non-residential construction: buildings and engineering work.

Non-residential building consists of work on buildings. This is commonly referred to as ICI (industrial, commercial and institutional) construction.

Engineering construction consists of work on projects which do not involve buildings. Often called *heavy* construction, the engineering sector includes work on a diverse range of activities such as roads, bridges, airstrips, railways, dams, and irrigation projects.

Type of Construction:

Within each construction sector, there are two broad types of construction activities:

New construction comprises work on a new structure or building. Statistics Canada's definition of new construction includes both the construction of new structures and other work which is commonly regarded as *renovations*. For residential construction, renovations include additions and major alterations or improvements to a dwelling and conversions of existing buildings to create additional residential units. The distinction between new housing and residential renovation work is important for the analysis in this report. For non-residential construction, statistics are not available to distinguish between new work and renovation work.

Repair construction consists of work on an existing building or structure which does not add expected life to the building or structure and which reasonably would have been expected as necessary when the building or structure was erected.

Construction Industry and Own-Account Construction:

Construction work is undertaken in a variety of ways: owners may either utilize contractors to undertake the work or they may utilize their own work force:

Contractors are engaged to undertake construction work on behalf of the owner. They may be either general contractors or specialists in a particular trade.

General contractors are responsible for completion of an entire construction job. In completing this work, general contractors typically engage a range of specialist workers.

Special trade contractors are engaged to undertake a specific part of a construction project. Typical specialist trades include electricians, plumbers, roofers, concrete formers, painters, etc.

Own-account construction work consists of construction activities undertaken by owners, utilizing their own work force. This includes do-it-yourself (DIY) homeowners who undertake repairs or renovations to their homes as well as organizations in industries other than construction which have construction work forces to undertake construction work on their facilities.

The *construction industry* includes only workers or businesses involved in contract construction work. Own-account work is *not* considered to be work undertaken by the construction industry. This distinction is important because data on construction expenditures refers to the amalgam of work done by the construction industry and work done on own-account.

Within the construction industry, workers are distinguished by whether they are paid workers, or self-employed.

Data Sources

The estimates presented in this report are based mainly on data compiled by Statistics Canada.

National Accounts data include estimates of expenditures by sector and type of construction in Ontario. Estimates of construction expenditures were available from Statistics Canada up to 1997 for each sector and type of construction – except for 1997 expenditures on repair construction (which were estimated by the consultants).

Input-Output data indicate the inputs (e.g. materials, services, labour, etc.) required for a given volume of expenditures in particular types of construction. This information can be used to estimate the income and employment generated in the construction industry from the volumes of expenditures in different sectors and types of construction provided in the National Accounts data. The latest input-output data available for Ontario relate to the year 1990, though more recent (1993) input-output data are available for Canada.

Labour Force Survey data provide information on the number of workers employed in construction over time, including details on the number of paid versus self-employed workers. The Labour Force Survey data are aggregated to *the construction industry as a whole*; they are not available for sectors or types of construction. These data nonetheless provide essential measures of the overall employment in the industry, as well as the types of workers employed (i.e., paid and self-employed).

Census data provide information on income and a check on the Labour Force Survey.

Price indexes are available to measure changes in the prices of various types of construction. Price indices are essential to this type of analysis because they allow the conversion of the *current dollar* estimates of construction expenditures into *real (constant dollar)* estimates of expenditures. Since price changes affect the volume of construction which can be purchased with a given expenditure, it is important to be able to convert (*deflate*, in statistical terminology) expenditure estimates to a constant dollar series for some parts of this analysis, in particular, estimates of employment by sector and type of construction.

These are the main data sources for this analysis. However, information from a variety of other sources were also utilized in preparing the estimates presented here. For example, data from Canada Mortgage and Housing Corporation (CMHC) and the Ontario New Home Warranty Program were utilized to assist in the analysis of owner-built new housing. Data from Statistics Canada's *Homeowner Repair and Renovation Survey* were used to disaggregate the estimates of overall expenditures on repairs and renovations into estimates of expenditures by size of job.

Description of Method

This section describes the methodology used to prepare estimates of expenditures, employment and income by sector and type of construction.

There were a number of steps involved in formulating these estimates. For each step, this appendix provides a brief written description of the methodology, plus a tabulation which presents the results. The tabulations are provided at the end of the appendix.

In each of the tabulations, the estimates are disaggregated into the following sectors and types of construction:

Residential:

New Residential – disaggregated into:

New housing

Renovations (called alterations and improvement by Statistics Canada)

Residential Repair

Non-Residential:

New Non-Residential – disaggregated into:

Building

Engineering

Non-Residential Repair

Review of Tables

Table A-1:

Statistics Canada's Estimates of Construction Expenditures by Sector and Type of Construction

Statistics Canada prepares estimates of construction expenditures by sector and type of construction. Except for repair spending in 1997 (which were not available and were estimated independently by the consultants), these Statistics Canada expenditure estimates form the base for all of the subsequent estimates of construction expenditures, employment and income in Ontario.

Table A-2:

Total Construction Expenditures by Sector and Type of Construction – Including *Unmeasured* Construction Expenditures

Not all construction activity is measured by Statistics Canada. *The Size of the Underground Economy in Canada* (Catalogue 13-603E), prepared by Statistics Canada in 1994 presents

estimates of the volume of construction activity in Canada in 1992 which may not be measured in the Statistics Canada estimates of expenditures.

According to the Statistics Canada analysis, the “unmeasured” construction is concentrated in the residential sector. There is not considered to be any unmeasured construction activity in non-residential construction. The volume of “unmeasured” spending is believed to be especially high in cottages, conversions and alterations and improvements but is present in all parts of residential construction. Note that “unmeasured” construction is not equivalent to “underground” construction. Underground construction may be measured or unmeasured though it is reasonable to presume that virtually all unmeasured construction is part of underground construction.

For new residential construction, Statistics Canada estimated that the maximum *unmeasured* share in 1992 was 9% of the published expenditure estimates. For renovations (called alterations and improvements by Statistics Canada), the maximum *unmeasured* share was estimated at 13.9% of the published estimates. For repairs, Statistics Canada did not provide estimates of the *unmeasured* share – for the purposes here, it is assumed to be 20% for residential repairs.

Table A-2 presents the revised estimates of total construction expenditures – including the revisions to the base Statistics Canada expenditure estimates (Table A-1) to accommodate *unmeasured* construction. As discussed in the report, the Statistics Canada estimates of the likely maximum amount of *unmeasured* construction activity are considered to be at the low end of the likely range of *unmeasured* activity. This conclusion reflects the increase in the amount of underground activity since 1992, the year on which Statistics Canada based its estimates.

Table A-3:
Total Construction Expenditures by Sector and Type of Construction
(Constant Dollars)

In estimating the employment impacts of construction spending (presented later in this appendix), it is necessary to “deflate” the current dollar estimates (in Table A-2) to constant dollars. For this procedure, constant dollar estimates from Statistics Canada were utilized, where appropriate. For repairs and residential renovations, indexes were formulated by the consultants since no reliable price indexes were available from Statistics Canada.

Statistics Canada’s price deflator for new residential construction shows a significant decline in prices for new housing from 1990 to 1991, and relatively stable prices for the subsequent period to 1997. For residential repairs and renovations, it was considered that prices would have declined in the early 1990s (though not as significantly as for new construction) and risen somewhat starting the mid-1990s, due to the economic recovery.

Consequently, a deflator was constructed by the consultants which reflected roughly half of the price declines of new residential construction over the 1990-1991 period, relatively stable prices to 1994 and a subsequent modest increase in prices in 1995-1997.

For non-residential repairs, an index was constructed which reflected the average of the deflators for new non-residential building and engineering.

The estimates of construction employment contained in subsequent tabulations in this appendix are based on expenditure converted to 1990 constant dollars (in Table A-3). This was necessary to correspond with the base year data available for Ontario from the Statistics Canada Input-Output model.

**Tables A-4 – A-5:
Interim Estimates of Employment and Income Impacts of Construction Expenditures
by Sector and Type of Construction**

Special Statistics Canada input-output tabulations provided the basis for estimates of the number of jobs and amount of income generated by various types of construction. The latest available input-output impact information for Ontario related to the year 1990. Input-output data for Canada for both 1990 and 1993 allowed a recalibration and expansion of the impact information for Ontario.

The input-output analysis facilitated the preparation of tabulations which projected the volume of income (wages and salaries, net income of unincorporated businesses, and corporate profits) and employment generated by sector and type of construction as a result of the estimated current and constant dollar expenditures (Tables A-2 and A-3, respectively).

The methodology applied here is capable of providing detail on the breakdown of income into paid income (wages and salaries) versus self-employed income and other surplus (mainly corporate profits). However, the input-output impact information is based on the early 1990s, and there have been very significant changes in the structure of the construction workforce over the subsequent period (see discussion on self-employment and independent contractor status in construction in Chapter III). Therefore, only aggregate estimates of employment and income in construction are provided here.

Two tabulations have been generated in this series:

Table A-4:
Interim Estimate - Income (Wages, Salaries, Net Income of Unincorporated Business and Other Surplus) Generated to Construction Workers by Sector and Type of Construction
(Includes both Construction Industry and Own-Account)

Table A-5:
Interim Estimate - Construction Employment Generated by Sector and Type of Construction (Includes both Construction Industry and Own-Account)

These are called “interim estimates” because they will be adjusted in subsequent tabulations in this appendix to provide the base information required for the analysis of underground activity.

Table A-6:
Interim Estimate - Construction Industry Employment by Sector and Type of Construction (Excludes Own-Account Employment in Construction)

Table A-5 provides estimates of the construction employment generated by sector and type of construction – derived through application of the employment multipliers formulated through the input-output analysis. These include both construction industry employment and own-account construction employment. To derive estimates of employment in the *construction industry* alone, estimates of own-account employment were derived.

There is no solid information on the own-account share of construction. For this analysis, own-account construction undertaken by homeowners (DIY work) is irrelevant since the input-output model does not include DIY labour in its employment impact multiplier. For non-residential construction, however, the input-output results do include own-account work. Estimates of the shares of non-residential own-account work are notoriously difficult to estimate. Through discussions with various knowledgeable experts and through further analysis, it was determined that own-account work comprised roughly 20% of new non-residential construction in the early 1990s, and that buildings and engineering each accounted for roughly half of the total own-account employment. For the estimates here, it was assumed that the rate of “contracting out” had increased to the point where own-account work comprised 15% of new non-residential construction during the 1995-1997 period. The same 50/50 share of employment between building and engineering was also assumed. For non-residential repair, a slightly higher own-account share (25%) was assumed.

These estimates of own-account workers were removed from the construction employment estimates presented in Table A-5 to yield the interim estimates of construction industry employment presented in Table A-6.

**Table A-7:
Final Estimate - Construction Industry Employment by Sector and Type of
Construction**

The Statistics Canada Labour Force Survey produces estimates of employment in the construction industry as a whole – but not by sector or type of construction. For the 1995-1997 period, the average annual construction employment in Ontario, according to the Labour Force Survey, was 275,000.

These estimates of construction industry employment from the Labour Force Survey are within 8% of the average of 296,000 generated in Table A-6. The estimates in Table A-6 were, of course, generated through the process described in previous sections of this appendix – by applying input-output multipliers to the estimated construction expenditures by sector and type of construction, and then removing own-account work. There are a number of possible reasons for the difference in the two estimates – not least, the potential for underground workers to declare themselves “unemployed” or “not in the labour force” in the Labour Force Survey. However, for the purposes here, it is assumed that all workers (including those engaged in underground work) respond truthfully to the Labour Force Survey.

Table A-7 is the final stage in the process of estimating construction industry employment by sector and type of construction. It was derived by calibrating the interim estimates for employment by sector and type of construction (Table A-6), to the total estimated construction employment from the Labour Force Survey.

**Table A-8:
Final Estimate - Income (Wages, Salaries and Net Income of Unincorporated Business)
Generated to Construction Industry Workers by Sector and Type of Construction**

Table A-4 presented estimates of the total income (wages and salaries, net income of unincorporated business and other surplus) generated to construction workers. These were based on the input-output income estimates applied to the estimated spending on construction (Table A-2).

To derive estimates of the income accruing only to *construction industry* workers, the estimated income from workers on own-account construction jobs was deleted from the estimates presented in Table A-4. The adjustment was similar to that used in removing own-account workers in the estimates of construction industry *employment* (Table A-6). As in Table A-6, the adjustment affected only non-residential construction since the labour for own-account (DIY) homeowners is not included in the input-output analysis. The estimated income for own-account non-residential construction workers was assumed to be equal to

the average income of non-residential workers in each sector and deducted from the total income estimates in Table A-4 to yield the estimated income for construction industry workers only – in Table A-8.

**Table A-9:
Average Income of Construction Industry Workers by Sector and Type of
Construction**

Table A-9 presents estimates of the average income of construction industry workers. It is based on the estimates of total income generated to construction industry workers, presented in Table A-8 and the interim estimate of total employment presented in Table A-6.

The total income estimates (Table A-8) include wages, salaries, net income of unincorporated businesses and other surplus. They were derived by applying the results of the input-output analysis to estimated construction expenditures. These data are a measure of total income of construction industry workers. As noted in the main body of this report, these estimates likely include a small amount (e.g., dividends from incorporated companies) which do not accrue to construction industry workers.

The total employment estimates (Table A-6) are also derived from the input-output analysis. They deliberately are not based on the employment estimates calibrated to the Labour Force Survey (Table A-7) in order to use constant base data and since it is presumed that the Labour Force Survey results may understate actual employment in the construction industry. It is presumed that some underground workers do not accurately report their employment status.

The estimates of average income by sector and type of construction are used to provide a base for the estimation of income tax and other revenue losses as a result of underground employment.

**Table A-10:
Final Estimate - Expenditures for Contract Construction Work by Sector and
Type of Construction**

Table A-2 presented estimates of total construction expenditures by sector and type of construction (including “unmeasured” construction work). These expenditures include two items which are not for contract construction: expenditures on materials for homeowner DIY work and expenditures for own-account non-residential construction work. These are removed in Table A-9.

The expenditures on materials by DIY homeowners were estimated through information

from the Statistics Canada Homeowner Repair and Renovation Survey and other sources: for renovations, it was assumed that 29% of total expenditures were for materials only; for homeowner repairs, the materials only estimate (from the Homeowner Repair and Renovation Survey) was 33% of total spending; however, this is only for homeowners – landlords would have lower materials only expenditures. For the purposes here, the 29% materials only share for renovations was assumed to apply to residential repairs as well. In addition, a small adjustment (3%) was taken from new construction to account for the materials purchases of owner-builders. The estimates of the value of own-account non-residential work utilized the same estimated own-account share as were used in the estimates of own-account employment and income (Tables A-6 and A-8).

Table A-1: Statistics Canada Estimates of Construction Expenditures by Sector and Type of Construction*
Ontario 1995-1997 (Million Current Dollars)

| | Annual Estimates | | | 1995-1997 | | |
|--|------------------|---------------|---------------|---------------|---------------|--------------|
| | 1995 | 1996 | 1997 | Total | Average | Percent |
| <i>New Residential</i> | | | | | | |
| New Housing | 6,089 | 6,911 | 8,911 | 21,911 | 7,304 | 23.1 |
| Renovations | 5,033 | 5,450 | 6,075 | 16,557 | 5,519 | 17.5 |
| Total New Residential | 11,122 | 12,360 | 14,986 | 38,469 | 12,823 | 40.6 |
| <i>Repair Residential*</i> | 1,749 | 1,873 | 2,006 | 5,628 | 1,876 | 5.9 |
| <i>Total Residential Construction</i> | 12,871 | 14,233 | 16,992 | 44,097 | 14,699 | 46.5 |
| <i>New Non-Residential</i> | | | | | | |
| Building | 6,612 | 7,582 | 7,366 | 21,560 | 7,187 | 22.7 |
| Engineering | 6,373 | 6,496 | 6,307 | 19,176 | 6,392 | 20.2 |
| Total New Non-Residential | 12,984 | 14,079 | 13,674 | 40,736 | 13,579 | 43.0 |
| <i>Repair Non-Residential*</i> | 3,193 | 3,311 | 3,433 | 9,937 | 3,312 | 10.5 |
| <i>Total Non-Residential Construction</i> | 16,177 | 17,390 | 17,107 | 50,673 | 16,891 | 53.5 |
| Total Construction | 29,048 | 31,623 | 34,099 | 94,770 | 31,590 | 100.0 |

* 1997 Repair estimates were not available from Statistics Canada and were estimated independently.

Table A-2: Total Construction Expenditures by Sector and Type of Construction - Including "Unmeasured" Ontario 1995-1997 (Million Current Dollars)

| | Annual Estimates | | | 1995-1997 | | |
|---|------------------|---------------|---------------|----------------|---------------|--------------|
| | 1995 | 1996 | 1997 | Total | Average | Percent |
| <i>New Residential</i> | | | | | | |
| New Housing | 6,637 | 7,533 | 9,713 | 23,883 | 7,961 | 23.8 |
| Renovations | 5,732 | 6,207 | 6,919 | 18,859 | 6,286 | 18.8 |
| Total New Residential | 12,370 | 13,740 | 16,633 | 42,742 | 14,247 | 42.7 |
| <i>Repair Residential</i> | 2,099 | 2,248 | 2,407 | 6,753 | 2,251 | 6.7 |
| Total Residential Construction | 14,469 | 15,987 | 19,040 | 49,496 | 16,499 | 49.4 |
| <i>New Non-Residential</i> | | | | | | |
| Building | 6,612 | 7,582 | 7,366 | 21,560 | 7,187 | 21.5 |
| Engineering | 6,373 | 6,496 | 6,307 | 19,176 | 6,392 | 19.1 |
| Total New Non-Residential | 12,984 | 14,079 | 13,674 | 40,736 | 13,579 | 40.7 |
| <i>Repair Non-Residential</i> | 3,193 | 3,311 | 3,433 | 9,937 | 3,312 | 9.9 |
| Total Non-Residential Construction | 16,177 | 17,390 | 17,107 | 50,673 | 16,891 | 50.6 |
| Total Construction | 30,646 | 33,377 | 36,146 | 100,169 | 33,390 | 100.0 |

Table A-3: Total Construction Expenditures by Sector and Type of Construction (Constant Dollars) Ontario 1995-1997 (Million 1990 Constant Dollars)

| | Annual Estimates | | | 1995-1997 | | |
|---|------------------|---------------|---------------|----------------|---------------|--------------|
| | 1995 | 1996 | 1997 | Total | Average | Percent |
| <i>New Residential</i> | | | | | | |
| New Housing | 7,389 | 8,672 | 10,864 | 26,926 | 8,975 | 26.4 |
| Renovations | 5,849 | 6,085 | 6,653 | 18,588 | 6,196 | 18.2 |
| Total New Residential | 13,239 | 14,758 | 17,518 | 45,514 | 15,171 | 44.5 |
| <i>Repair Residential</i> | 2,142 | 2,204 | 2,314 | 6,660 | 2,220 | 6.5 |
| Total Residential Construction | 15,381 | 16,961 | 19,832 | 52,174 | 17,391 | 51.1 |
| <i>New Non-Residential</i> | | | | | | |
| Building | 6,472 | 7,272 | 6,933 | 20,677 | 6,892 | 20.2 |
| Engineering | 6,476 | 6,630 | 6,424 | 19,531 | 6,510 | 19.1 |
| Total New Non-Residential | 12,948 | 13,903 | 13,357 | 40,208 | 13,403 | 39.3 |
| <i>Repair Non-Residential</i> | 3,183 | 3,268 | 3,352 | 9,803 | 3,268 | 9.6 |
| Total Non-Residential Construction | 16,131 | 17,171 | 16,709 | 50,011 | 16,670 | 48.9 |
| Total Construction | 31,511 | 34,132 | 36,541 | 102,185 | 34,062 | 100.0 |

Table A-4: Interim Estimate - Income (Wages, Salaries, Net Income of Unincorporated Business and Other Surplus) Generated to Construction Workers by Sector and Type of Construction Ontario 1995-1997 (Million Current Dollars)

| | Annual Estimates | | | 1995-1997 | | |
|--|------------------|---------------|---------------|---------------|---------------|--------------|
| | 1995 | 1996 | 1997 | Total | Average | Percent |
| <i>New Residential</i> | | | | | | |
| New Housing | 2,590 | 2,939 | 3,790 | 9,319 | 3,106 | 21.9 |
| Renovations | 2,747 | 2,974 | 3,316 | 9,037 | 3,012 | 21.2 |
| Total New Residential | 5,337 | 5,914 | 7,106 | 18,356 | 6,119 | 43.1 |
| <i>Repair Residential</i> | 1,006 | 1,077 | 1,153 | 3,236 | 1,079 | 7.6 |
| <i>Total Residential Construction</i> | 6,343 | 6,991 | 8,259 | 21,593 | 7,198 | 50.7 |
| <i>New Non-Residential</i> | | | | | | |
| Building | 2,734 | 3,135 | 3,046 | 8,915 | 2,972 | 20.9 |
| Engineering | 2,425 | 2,472 | 2,400 | 7,297 | 2,432 | 17.1 |
| Total New Non-Residential | 5,159 | 5,607 | 5,446 | 16,212 | 5,404 | 38.1 |
| <i>Repair Non-Residential</i> | 1,526 | 1,583 | 1,641 | 4,750 | 1,583 | 11.2 |
| <i>Total Non-Residential Construction</i> | 6,685 | 7,190 | 7,087 | 20,962 | 6,987 | 49.3 |
| Total Construction | 13,028 | 14,180 | 15,346 | 42,554 | 14,185 | 100.0 |

Table A-5: Interim Estimate - Construction Employment Generated by Sector and Type of Construction Ontario 1995-1997 (Persons)

| | Annual Estimates | | | 1995-1997 | | |
|--|------------------|----------------|----------------|----------------|----------------|--------------|
| | 1995 | 1996 | 1997 | Total | Average | Percent |
| <i>New Residential</i> | | | | | | |
| New Housing | 66,652 | 78,226 | 97,997 | 242,875 | 80,958 | 25.2 |
| Renovations | 66,156 | 68,823 | 75,247 | 210,226 | 70,075 | 21.8 |
| Total New Residential | 132,808 | 147,049 | 173,243 | 453,100 | 151,033 | 47.0 |
| <i>Repair Residential</i> | 24,221 | 24,921 | 26,175 | 75,318 | 25,106 | 7.8 |
| <i>Total Residential Construction</i> | 157,030 | 171,970 | 199,418 | 528,418 | 176,139 | 54.8 |
| <i>New Non-Residential</i> | | | | | | |
| Building | 58,248 | 65,452 | 62,395 | 186,095 | 62,032 | 19.3 |
| Engineering | 43,844 | 44,886 | 43,493 | 132,223 | 44,074 | 13.7 |
| Total New Non-Residential | 102,092 | 110,338 | 105,887 | 318,317 | 106,106 | 33.0 |
| <i>Repair Non-Residential</i> | 38,245 | 39,276 | 40,286 | 117,807 | 39,269 | 12.2 |
| <i>Total Non-Residential Construction</i> | 140,337 | 149,614 | 146,173 | 436,125 | 145,375 | 45.2 |
| Total Construction | 297,367 | 321,584 | 345,592 | 964,542 | 321,514 | 100.0 |

**Table A-6: Interim Estimate - Construction Industry Employment by Sector and Type of Construction (Excluding Own Account Workers)
Ontario 1995-1997 (Persons)**

| | Annual Estimates | | | 1995-1997 | | |
|---|------------------|----------------|----------------|----------------|----------------|--------------|
| | 1995 | 1996 | 1997 | Total | Average | Percent |
| <i>New Residential</i> | | | | | | |
| New Housing | 66,652 | 78,226 | 97,997 | 242,875 | 80,958 | 27.4 |
| Renovations | 66,156 | 68,823 | 75,247 | 210,226 | 70,075 | 23.7 |
| Total New Residential | 132,808 | 147,049 | 173,243 | 453,100 | 151,033 | 51.1 |
| <i>Repair Residential</i> | 24,221 | 24,921 | 26,175 | 75,318 | 25,106 | 8.5 |
| Total Residential Construction | 157,030 | 171,970 | 199,418 | 528,418 | 176,139 | 59.6 |
| <i>New Non-Residential</i> | | | | | | |
| Building | 50,591 | 57,177 | 54,453 | 162,221 | 54,074 | 18.3 |
| Engineering | 36,187 | 36,611 | 35,551 | 108,349 | 36,116 | 12.2 |
| Total New Non-Residential | 86,778 | 93,788 | 90,004 | 270,570 | 90,190 | 30.5 |
| <i>Repair Non-Residential</i> | 28,684 | 29,457 | 30,215 | 88,356 | 29,452 | 10.0 |
| Total Non-Residential Construction | 115,462 | 123,244 | 120,219 | 358,925 | 119,642 | 40.4 |
| Total Construction | 272,492 | 295,214 | 319,637 | 887,343 | 295,781 | 100.0 |

**Table A-7: Final Estimate - Construction Industry Employment by Sector and Type of Construction (Adjusted to Labour Force Survey Estimates)
Ontario 1995-1997 (Persons)**

| | Annual Estimates | | | 1995-1997 | | |
|---|------------------|----------------|----------------|----------------|----------------|---------------|
| | 1995 | 1996 | 1997 | Total | Average | Percent |
| <i>New Residential</i> | | | | | | |
| New Housing | 64,551 | 70,855 | 90,045 | 225,451 | 75,150 | 27.3% |
| Renovations | 64,070 | 62,339 | 69,141 | 195,549 | 65,183 | 23.7% |
| Total New Residential | 128,621 | 133,194 | 159,185 | 421,000 | 140,333 | 51.0% |
| <i>Repair Residential</i> | 23,458 | 22,573 | 24,051 | 70,082 | 23,361 | 8.5% |
| Total Residential Construction | 152,078 | 155,767 | 183,236 | 491,082 | 163,694 | 59.5% |
| <i>New Non-Residential</i> | | | | | | |
| Building | 48,996 | 51,790 | 50,035 | 150,820 | 50,273 | 18.3% |
| Engineering | 35,046 | 33,161 | 32,666 | 100,874 | 33,625 | 12.2% |
| Total New Non-Residential | 84,042 | 84,951 | 82,701 | 251,694 | 83,898 | 30.5% |
| <i>Repair Non-Residential</i> | 27,780 | 26,681 | 27,763 | 82,224 | 27,408 | 10.0% |
| Total Non-Residential Construction | 111,822 | 111,633 | 110,464 | 333,918 | 111,306 | 40.5% |
| Total Construction | 263,900 | 267,400 | 293,700 | 825,000 | 275,000 | 100.0% |

Table A-8: Final Estimate - Income (Wages, Salaries and Net Income of Unincorporated Business) Generated to Construction Industry Workers by Sector and Type of Construction (Excluding Own-Account Workers) Ontario 1995-1997 (Million Current Dollars)

| | Annual Estimates | | | 1995-1997 | | |
|--|------------------|---------------|---------------|---------------|---------------|--------------|
| | 1995 | 1996 | 1997 | Total | Average | Percent |
| <i>New Residential</i> | | | | | | |
| New Housing | 2,590 | 2,939 | 3,790 | 9,319 | 3,106 | 24.0 |
| Renovations | 2,747 | 2,974 | 3,316 | 9,037 | 3,012 | 23.2 |
| Total New Residential | 5,337 | 5,914 | 7,106 | 18,356 | 6,119 | 47.2 |
| <i>Repair Residential</i> | 1,006 | 1,077 | 1,153 | 3,236 | 1,079 | 8.3 |
| <i>Total Residential Construction</i> | 6,343 | 6,991 | 8,259 | 21,593 | 7,198 | 55.5 |
| <i>New Non-Residential</i> | | | | | | |
| Building | 2,375 | 2,739 | 2,658 | 7,772 | 2,591 | 20.0 |
| Engineering | 2,001 | 2,016 | 1,962 | 5,979 | 1,993 | 15.4 |
| Total New Non-Residential | 4,376 | 4,755 | 4,620 | 13,751 | 4,584 | 35.3 |
| <i>Repair Non-Residential</i> | 1,145 | 1,187 | 1,231 | 3,562 | 1,187 | 9.2 |
| <i>Total Non-Residential Construction</i> | 5,521 | 5,942 | 5,851 | 17,313 | 5,771 | 44.5 |
| Total Construction | 11,863 | 12,933 | 14,110 | 38,906 | 12,969 | 100.0 |

Table A-9: Average Income of Construction Industry Workers by Sector and Type of Construction Ontario 1995-1997 (Thousand Current Dollars)

| | Annual Estimates | | | 1995-1997 |
|--|------------------|-------------|-------------|-------------|
| | 1995 | 1996 | 1997 | Average |
| <i>New Residential</i> | | | | |
| New Housing | 38.9 | 37.6 | 38.7 | 38.4 |
| Renovations | 41.5 | 43.2 | 44.1 | 43.0 |
| Total New Residential | 40.2 | 40.2 | 41.0 | 40.5 |
| <i>Repair Residential</i> | 41.5 | 43.2 | 44.1 | 43.0 |
| <i>Total Residential Construction</i> | 40.4 | 40.7 | 41.4 | 40.9 |
| <i>New Non-Residential</i> | | | | |
| Building | 46.9 | 47.9 | 48.8 | 47.9 |
| Engineering | 55.3 | 55.1 | 55.2 | 55.2 |
| Total New Non-Residential | 50.4 | 50.7 | 51.3 | 50.8 |
| <i>Repair Non-Residential</i> | 39.9 | 40.3 | 40.7 | 40.3 |
| <i>Total Non-Residential Construction</i> | 47.8 | 48.2 | 48.7 | 48.2 |
| Total Construction | 43.5 | 43.8 | 44.1 | 43.8 |

Appendix B:

Estimating Revenue Losses

GST - New Residential Construction

The GST rate on new housing is 4.5%. The GST rate on existing housing is zero.

As noted in the main text, there is no significant GST leakage in apartment construction. Nor is there any significant GST leakage in large scale developments undertaken by professional homebuilders. In both cases, the developer pays GST on the full cost of constructing the house or apartment, including the cost of land. The developer charges GST to the end customer at the 4.5% rate and remits this GST to Revenue Canada, subtracting the GST that was paid to sub-contractors.

The principal source of GST leakage in residential construction is owner-builders. Owner-builders have a preferential position in the GST system. An owner builder pays 4.5% GST on purchased inputs. If the owner-builder occupies the house on a permanent basis, he or she clearly has an incentive to purchase as many inputs underground as possible. If the owner-builder occupies and then sells the house, no GST is charged to the customer because the unit is considered existing housing. Again the owner-builder has an incentive to have as much sub-contract work as possible done underground.

Given these incentives, it is not surprising that there are bogus owner-builders who build houses for sale.

For single units and semi-detached units, dwellings sold by builders must be registered with the Ontario New Home Warranty Program. In the 1995-1997 period, there were 92,500 single/semi housing starts in Ontario. There were 82,270 registrations with ONHWP. Therefore, roughly 11% of the new singles and semis built in Ontario were not registered with ONHWP. This represents about 8% of all new dwellings built (including apartments).

Assuming that 40-60% of the non-ONHWP houses are built by bogus owner-builders, roughly 3%-5% of spending on new housing would be accounted for by this type of construction. Since legitimate owner-builders (who actually occupy the homes they build) also have a strong incentive to do "cash deals" with specialist trades on which GST would

not be charged, it is likely that the share of total new residential construction expenditures accounted for by owner builders who engage in underground practices would be roughly 4-7%. GST would be paid on all materials, plus land, plus legitimately contracted services. Therefore, the land can be excluded from this analysis.

Since GST would be payable on most materials (though some GST credits could be utilized by contractors on other jobs), it seems likely that the share of these construction expenditures which would escape GST as a result of underground practices would be in the 40-60% range.

**Table B-1:
Estimated GST Loss on New Housing**

| | <u>Low</u> | <u>High</u> |
|--|---------------------|---------------------|
| Average 1995-97 Residential Construction Expenditures | \$7,722 million | \$7,722 million |
| "Owner-Builders" Engaging in Underground Practices | <u>5%</u> | <u>7%</u> |
| Construction Expenditures | \$386 million | \$541 million |
| Average Share Not Subject to GST Due to Underground Work | 40-60% | 40-60% |
| Expenditures Not Subject to GST Due to Underground Work | \$154-\$232 million | \$216-\$325 million |
| GST Lost (4.5%) | \$7 - 10 million | \$10 - 14 million |

Personal Income Tax

The most significant revenue loss associated with the underground economy is the loss of personal income tax that ought to be paid on the concealed portion of income. In principle, all of this income should be subject to personal income tax.

There are two issues involved in estimating the amount of personal income tax revenue that is lost to governments. The first is determining the appropriate amount of taxable income.

This is *more* than simply the estimated amount of underground income. If personal income tax were paid on underground income, the discount offered for underground work would evaporate. In other words, labour charges would rise. We estimate that labour charges for this work would increase by approximately half the discount that is currently offered for doing work underground. The addition to taxable income from regularizing income would be the amount of underground income *plus* the amount by which that income would increase as a result of higher labour charges. The second issue in estimating personal income tax losses is estimating the tax rate that would apply to the increment of taxable income.

Increase in Labour Charges:

In Chapter Four we estimated that the discount offered for underground work was between 12.5% and 25%. If underground income were reported, we assume that labour charges on that work would increase by 12.5%.

**Increase in Underground Income Attributable
to Reduction in Discount when Income is Regularized**

| | Underground Income (\$ Millions) (Refer to Table IV-D) | Adjusted Underground Income 12.5% Increment (\$ Millions) |
|---------------|--|---|
| Low Estimate | \$2,554 | \$2,873 |
| High Estimate | \$3,784 | \$4,257 |
| Best Estimate | \$2,838 | \$3,193 |

Tax Rate:

The marginal tax rate is the tax rate that is applied to an increase in income. In a progressive tax system, the marginal rate is higher than the average rate. To determine the marginal tax rate applicable to an increase of income, we first need to know what an individual's declared taxable income was.

From the input-output analysis we have developed estimates of total income for construction workers. These are presented in Table A-9 of Appendix A. Our basic estimate is \$43,800. This is the average income of construction industry workers in the period 1995 to 1997.

Underground workers are divided into three groups.

- *Moonlighters* are persons who work underground in the evenings and on weekends. Most of the total income earned by moonlighters is legitimate income earned through their regular employment. Underground income is strictly secondary.

- *Irregular Undergrounders* are persons who work underground part of the year while they are in receipt of EI, welfare or WSIB benefits. In their case, there is the added fiscal cost of benefits that are improperly paid to them in addition to the underground income which they conceal from Revenue Canada. We have not included this benefit cost in our estimates of underground income. As with moonlighters, we assume that most of the income earned by irregular undergrounders is legitimate income earned through their normal employment. Underground income is secondary.
- *Self-Employed* persons in the construction industry are assumed, on the basis of Statistics Canada work, to be major concealers of income from Revenue Canada and to be substantially committed to working underground.

The distribution of underground income varies between the low estimate and the high estimate. In essence, we believe that for the high estimate of underground income to apply, there must be a higher rate of moonlighting and irregular underground work.

We estimate that the distribution of underground income is as follows:

Estimated Distribution of Underground Income

| | Moonlighters | Irregulars | Self-Employed | Total |
|--|--------------|------------|---------------|---------|
| Low Estimate | | | | |
| Share of Underground Income | 12.5% | 12.5% | 75.0% | 100.0% |
| Underground Income (\$millions) | \$319 | \$319 | \$1,916 | \$2,554 |
| Adjusted by Reduction of Discount (\$millions) | \$359 | \$359 | \$2,155 | \$2,873 |
| High Estimate | | | | |
| Share of Underground Income | 20.0% | 20.0% | 60.0% | 100.0% |
| Underground Income (\$ millions) | \$757 | \$757 | \$2,270 | \$3,784 |
| Adjusted by Reduction of Discount (\$millions) | \$851 | \$851 | \$2,554 | \$4,257 |

The amount of income tax lost owing to underground practices requires assumptions about the marginal tax rate of each type of underground worker. These are discussed below.

Moonlighters:

In Chapter Four, we offered low and high estimates of moonlighting. The rate of moonlighting assumed was respectively 1 day per week and 1.5 days per week. In percentage terms this is a rate of underground *work* of 16.7% and 23.1%. We will assume that the discount rate is 25%. This means that underground work at these rates translates into underground *income* of 12.5% and 20.2% of total income.

As noted, our input-output estimates indicated an average income of \$43,800 for construction industry workers. This would break out into:

| | Low | High |
|--------------------|----------|----------|
| Legitimate Income | \$38,325 | \$34,952 |
| Underground Income | \$ 5,475 | \$ 8,848 |
| Total Income | \$43,800 | \$43,800 |

We can now gross up the underground income by assuming that the labour charges would have increased by 12.5% if the work had been done legitimately. This is half of the estimated deep discount for underground work.

| | Low | High |
|-------------------|----------|----------|
| Legitimate Income | \$38,325 | \$34,952 |
| Grossed Up Income | \$ 6,843 | \$11,060 |
| Total Income | \$45,168 | \$46,012 |

An individual with declared income of \$38,325 would fall into the middle tax bracket. For the period 1995 to 1997, the average marginal tax rate would have been 40.8%. This includes the federal income tax, the federal surtax and the provincial share.

In broad terms, we estimate that the personal income tax lost to moonlighters would be their marginal tax rate applied to their share of underground income:

Estimated Income Tax Lost to Moonlighters

| | Low Estimate | High Estimate |
|--------------------------------------|---------------|---------------|
| Share of Adjusted Underground Income | \$359 million | \$851 million |
| Income Tax at 40.8% | \$146 million | \$347 million |

Irregular Undergrounders:

Our estimates of irregular underground work are broadly similar to our estimates of moonlighting. Our low estimate is 9 weeks per year (17% of working time); our high estimate is 12 weeks per year (23% of working time). This corresponds roughly to two or three months of off-season work underground. We will assume that same discount rate of 25% applies. This means that underground work at these rates translates into underground income of 13% and 17% of total income respectively

We use the same average total income of \$43,800. This would break out into:

| | Low | High |
|--------------------|----------|----------|
| Legitimate Income | \$38,106 | \$36,354 |
| Underground Income | \$ 5,694 | \$ 7,446 |
| Total Income | \$43,800 | \$43,800 |

We can now gross up the underground income by assuming that the labour charges would have increased by 12.5% if the work had been done legitimately.

| | Low | High |
|-------------------|----------|----------|
| Legitimate Income | \$38,106 | \$36,354 |
| Grossed Up Income | \$ 6,406 | \$ 8,377 |
| Total Income | \$44,512 | \$44,731 |

As in the analysis of the moonlighters, these individuals would fall into the middle tax bracket. The average marginal tax rate would have been 40.8%.

We estimate that the personal income tax lost to moonlighters would be their marginal tax rate applied to their share of underground income:

Estimated Income Tax Lost to Irregular Undergrundersss

| | Low Estimate | High Estimate |
|--------------------------------------|---------------|---------------|
| Share of Adjusted Underground Income | \$359 million | \$851 million |
| Income Tax at 40.8% | \$146 million | \$347 million |

Self-Employed:

The self-employed conceal a much greater portion of their income. On the basis of their declared income, they are in the lowest tax bracket. Grossing up and reporting underground income would result in some of this income being taxed at the lower rate and some of it being taxed at a higher rate. We therefore need to estimate a blended marginal rate to determine the tax loss.

Our low estimate of self-employed concealment is 60%. Our high estimate is 70%. We estimate that the break-out of self-employed income is as follows, using the same \$43,800 average income:

| | Low | High |
|--------------------|----------|----------|
| Concealment Rate | (60%) | (70%) |
| Legitimate Income | \$17,520 | \$13,140 |
| Underground Income | \$26,280 | \$30,660 |
| Total Income | \$43,800 | \$43,800 |

We can now gross up the underground income by assuming that the labour charges would have increased by 12.5% if the work had been done legitimately.

| | Low | High |
|-------------------|----------|----------|
| Legitimate Income | \$17,520 | \$13,140 |
| Grossed Up Income | \$29,565 | \$34,492 |
| Total Income | \$47,085 | \$47,632 |

The marginal income tax rate that would apply is a blend of the lowest rate and the middle rate. For this study, we estimate that half the regularized income would be taxed at the lower rate and half at the middle rate. The blended marginal rate would be 32.3%

On this basis, the personal income tax loss, as a result of concealment by the self-employed, can be estimated as follows:

Estimated Income Tax Lost to Concealment by Self-Employed

| | Low Estimate | High Estimate |
|--------------------------------------|------------------|-----------------|
| Share of Adjusted Underground Income | \$ 2,155 million | \$2,839 million |
| Blended Marginal Tax Rate: | 32.3% | 32.3% |
| Income Tax | \$696 million | \$917 million |

Bringing these estimates together yields the following interim estimates of lost income tax:

**Interim Estimates of Income Tax
Lost to All Types of Underground Work**

| | Low Estimate | High Estimate |
|--------------------------|-----------------------|------------------------|
| Moonlighters | \$ 146 million | \$347 million |
| Irregular Undergrounders | \$146 million | \$347 million |
| Self-Employed: | \$696 million | \$917 million |
| Total: | \$ 988 million | \$1,611 million |

These interim estimates need to be adjusted to take account of the following:

1. at higher effective tax rates, some individuals will offer less labour. This would reduce the estimates;
2. the discounts on underground work may average less than 25%. This would raise the estimates;
- C. underground workers may not succeed in raising their labour charges by 12.5% as estimated. This would reduce the estimates;
- D. self-employed workers may be able to apply more business expenses against their income than they were previously reporting. This would reduce the estimates;
- E. being biased towards residential and renovation work, legitimate labour charges may be somewhat lower than the average for the construction industry as a whole. This would reduce the estimates.
- F. Our estimate of the blended marginal rate for the self-employed could be too high.

For all of these reasons, we believe that the interim estimate should be adjusted downwards. We believe that a 15% reduction would be reasonable. This yields the following final estimates of income tax losses:

**Final Estimates of Income Tax
Lost to All Types of Underground Work**

| | Low Estimate | High Estimate |
|--------------------------|----------------------|------------------------|
| Moonlighters | \$124 million | \$295 million |
| Irregular Undergrounders | \$124 million | \$295 million |
| Self-Employed: | \$592 million | \$779 million |
| Total: | \$840 million | \$1,369 million |

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Appendix C

Case Studies

Case Study No 1:

Abuse of Government Construction Projects

Larry Lineham, OCS Director and Business Manager of IBEW Local 1687, tells an astonishing, true story about one electrical contractor who has relentlessly abused Ontario's ICI construction system. Four awards against him by the Ontario Labour Relations Board, an ongoing investigation by Revenue Canada and a trail of unpaid wages and litigation did not prevent him from winning a hospital job this year in northern Ontario.

This contractor, organized by the IBEW, has a history of evading taxes, underground economy activity and poor quality work. He appeared as a non-union contractor, under a second name, working on an airport job in the north. A Board decision forced him to finish the job with IBEW members. Again he reappeared, under another name, as a non-union contractor on a school job and again the Board forced him to respect his agreements. Under a third name this contractor again hired non-union workers on a community college job. In addition to a third board ruling, this time his poor workmanship was a major issue and employees revealed that he had not been issuing proper T-4s. Wages were unpaid and litigation and investigations included the general contractor. Claims are still outstanding and taxes are likely unpaid.

Everyone loses in this situation. Work is continuing on both the school and college because of delays and poor workmanship related to the contractor's performance. There is no long-term advantage to taking the lowest bid.

Apparently this outrageous history did not prevent the same contractor, under yet another name, from starting work on a new hospital project. Complaints have been filed with Revenue Canada as well as the WSIB. These investigations are, naturally, confidential with the outcomes unknown. Whatever the results, the implications of this story are truly shocking. Major government construction projects, with a total value of over \$150 million and associated electrical work of over \$10 million, may have been awarded to this contractor working in the underground economy. It seems very likely that millions of dollars have been lost to Revenue Canada, Ontario Finance and the WSIB. This is the work of a brazen, repeat offender who simply reappeared over and over again with a different name.

This example is also an important indication that underground economy activity is not limited to residential renovation construction -- it is also a factor on institutional jobs. Evidence like this and other accounts of work in the underground economy raise the prospect that more ICI work is slipping into the underground economy.

The OCS has established a dialogue with the ministries that are affected by these practices and it is clear that extensive procurement procedures are in place to prevent this sort of abuse. Hopefully there are only a few offenders such as the one described here, and effective enforcement will soon prevent a repetition of the situations noted here.

Case Study No. 2: Out of Province Contractors

Ontario contractors are frustrated by stories of out-of-province constructors who appear to be abusing Ontario's ICI building system. Evidence suggests that taxes are being avoided and work is being transferred because of illegal procedures. Ontario requires that out-of-province contractors post a bond equal to 4% of the value of construction to cover retail sales tax on building materials and the new WSIB legislation includes similar withholding provisions for payroll assessments. In spite of these requirements, work is being awarded to Manitoba bidders under questionable circumstances.

A case in point is recent contracts for school construction in northwestern Ontario. A western Ontario school board arranged for a building to be designed in Winnipeg, tendered in a Manitoba bid depository and, eventually awarded to a Manitoba firm. The winning bid was below the local bids -- a difference that raises questions about the costs and taxes included in the winning bid calculations. A second case involves bids for a mine residence in the north. Two Ontario firms found that their bids were undercut by as much as 35% by competing contractors from Manitoba. Differences of this size are not easily explained by the usual competitive factors.

There are many other examples where non-Ontario bidders appear to be avoiding this province's taxes and WSIB assessments. One celebrated case is Le Group Axor from Montreal who have underbid many Ontario firms on high profile government and private sector projects and subsequently been charged for tax and WSIB-related offenses.

Ontario Finance has new enforcement officers and the WSIB has a new found commitment to pursue out-of-province contractors who are abusing the Ontario system. The Ontario Construction Secretariat is working on ways to facilitate this process.

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