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## **Peering Under the Inflationary Veil: Synopsis**

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## 2 Synopsis

by Patrick Grady\*

*Veil after veil will lift – but there must be veil upon veil behind.*

Sir Edwin Arnold, *The Light of Asia*

The existence and importance for public and business policy of inflation-induced distortions in financial reporting and taxation was universally recognized by the speakers at the conference. There was much less agreement on the precise nature of the distortions themselves. Disagreement was rife over the appropriate modifications to financial reporting and taxation required to cope with the distortions. But the need for further experimentation in this complex area was widely perceived.

This synopsis summarizes the major issues debated at the conference. It is necessarily somewhat impressionistic and leaps from theme to theme, juxtaposing remarks made at different times in the conference on similar themes in order to sharpen our focus on areas of agreement and disagreement among the participants.

Because of the view, which found some currency at the conference, that, when it comes to inflation adjustment, financial reporting and taxation each have their own separate aspects, the synopsis deals with these topics one at a time, starting with financial reporting, in many ways the more fundamental of the two. But the two issues are obviously very closely and inextricably related.

### **Inflation-Induced Distortions in Financial Reporting**

#### ***The Nature of the Distortions***

Evidence on distortions in the aggregate was provided by Abraham Tarasofsky. As he noted, there are several adjustments to book operating income (the sum of profits and interest expense) that must be made in order to offset the distortions caused by inflation and thus obtain a better estimate of the real underlying profit situation. Two of these adjustments

reflect the difference between replacement cost depreciation and cost of goods sold and historical cost. These adjustments must be made because, unless a firm covers its replacement costs, it cannot maintain its fixed capital and inventories and remain in the same general line of business in the long run. A third adjustment is for the erosion in other working capital. It has a similar justification. These three adjustments yield real before-tax operating income, which, when taken as a proportion of capital employed, produces the before-tax real rate of return on capital employed. The after-tax equivalent is obtained by deducting actual income tax paid. A further and more controversial adjustment for gains on debt must also be made. The result, reflecting the fact that equity shareholders benefit from the reduced real value of outstanding debt, is called the real rate of return on net worth.

Tarasofsky's rate of return estimates for both the non-farm, non-financial sector and manufacturing show a large gap between nominal and real after-tax rates of return on capital employed that opens up with inflation. For the non-farm, non-financial sector, the gap goes from 2 to 3 per cent in the mid-1960s to 8 to 10 per cent in the late 1970s. The real rate of return remains fairly stable around 5 per cent, while the nominal rate climbs steeply.

Daniel Holland pointed out the same divergence between nominal and real rates of return in the United States, United Kingdom, and Sweden as in Canada. An interesting difference noted by Holland between the U.S. and Canada was that the disparity was as pronounced ten years after the war as in the recent decade.

A similar story concerning the gaps between nominal and real could be told for the rates of return on capital employed in manufacturing in Canada and the rates of return on net worth for both sectors. One difference is the greater degree of variability. It makes sense that a highly cyclical industry like manufacturing should exhibit wider fluctuations than the non-farm, non-financial sector as a whole. It is also reasonable that return on net worth should be more

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volatile than return on capital employed. Daniel Holland reported similar findings for the U.S.

Tarasofsky observed that the fact that real rates of return on net worth were generally higher than those on capital employed suggested that actual inflation was higher than anticipated and that shareholders have been earning gains at the expense of lenders. This was questioned by Michel Proulx who thought it might have more to do with the risk premium on the return to equity investment.

The impact of inflation on real rates of return was examined by Tarasofsky using econometric techniques. His conclusion was that inflation was not a significant factor as regards the real after-tax rates of return on capital employed in either sector and the real after-tax rate of return on net worth in the non-farm, non-financial sector. In manufacturing, inflation had a significant negative impact on the real rate of return on net worth.

Michel Proulx, in a somewhat different context, raised the question of the meaning of the inflation variable. While he acknowledged that a general inflation should only affect after-tax profitability through its impact in raising taxes, he suggested that inflation resulting from some sources could have a different impact depending on the nature of the inflation. For instance, inflation stemming from relative price changes such as increases in real energy prices can affect after-tax profitability. This was confirmed by some preliminary statistical work that he had done.

Tarasofsky also displayed the relationship between the real after-tax rate of return and the after-tax cost of funds. He said that this data showed an adverse relationship between 1973 and 1978 with a more favourable relationship developing as the 1970s drew to a close. Tarasofsky interpreted this as possibly being another indication that the corporate sector as a whole had by now learned to live with a chronically high rate of inflation. This was contested by Michel Proulx.

More telling evidence on inflation-induced distortions in financial reporting at the industry and firm level was presented by Bert Waslander for a subsample of the *Financial Post* data base of 152 firms for which John Bossons had calculated inflation adjustments. Waslander found that the inflation-induced distortions in reported operating income display substantial variation among industry averages as well as among individual firms. The differences among industries are particularly large for the cost of sales adjustment, reflecting the varying importance of inventory holdings across industries. Waslander

attributed the variation of inflation-induced errors for individual firms around industry group averages to the depreciation adjustment, which is in turn related to the age of fixed assets and the share of fixed assets in total capital employed. Waslander also noted that "small" firms (though large enough to be in the *Financial Post* data base) tend to have larger inflation-induced errors than large firms and that inflation-induced errors were negatively related to the real return on capital employed. Waslander interpreted his analysis as confirming that "the incidence of inflation on real returns is uneven across industries and firms." He suspected that this "must have undesirable effects on resource allocation and points to an inequitable distribution of tax and inflation burdens."

Keith Brewer also presented some interesting evidence on inflation-induced distortions using data from Statistics Canada, *Industrial Corporations, Financial Statistics*. His analysis incorporated the same adjustments as Waslander's plus an additional adjustment for the reduction in the real value of net debt. Brewer noted that, for metal mines, the distortion was very volatile whereas, for manufacturing, it grew more steadily with inflation. He also pointed out that in 1980 profits of the mineral fuels sector are only slightly misrepresented since the depreciation and debt adjustment are offsetting, but in the manufacturing sector as a whole inflation-adjusted profits are only 72 per cent of reported profits. The principle reason for the difference between the manufacturing and resource sectors is the larger understatement of inventory costs resulting from the combination of first in, first out (FIFO) inventory valuation procedures and a longer average time spent in inventory. Brewer also made the observation that his data indicated that, even in the 1960s, a period of relative price stability, distortions were far from uniform across both industries and time.

Michael Alexander also provided striking concrete examples of the unevenness of distortions in financial reporting by showing inflation-adjusted and historical cost financial statements for three companies, taken from the public data base of the Financial Accounting Standards Board's (FASB) Financial Accounting Statement 33 (FAS 33).

Michael Mackenzie presented inflation-adjusted income for U.S. and U.K. banks, which diverged substantially from reported income. In many cases, inflation-adjusted income was but a fraction of reported income with the fraction varying significantly across banks. If anyone needed to be convinced of the significance of inflation-induced distortions before coming to the conference, enough persuasive evidence on this question was surely presented.

### ***The Impact of Inflation-Induced Distortions***

One of the main reasons for concern about inflation-induced distortions in financial reporting is their possible impact on the appropriate size and structure of public and private investment in Canada. If business and government do not have access to accurate and reliable information on real rates of return, and if tax burdens are shifted arbitrarily and haphazardly among industries and firms by inflation, how can businessmen make good investment decisions and how can government formulate appropriate overall policies affecting investment? This concern was voiced by David Slater at the outset of the conference. It was identified by Michel Proulx as requiring attention in future research. Several other participants also noted the issue in passing. Morley English observed that the question as to how responsive total output would be to improved income measurement and distribution of taxes was not discussed in any detail at the conference. Nevertheless, it remained an important underlying theme of the conference.

A related topic that was examined in some depth at the conference pertained to the ability of capital markets to function efficiently in the presence of inflation. This was inflation-induced distortions in stock market values.

Franco Modigliani persuasively put forward his controversial view that stock prices have failed to keep pace with inflation in the U.S. because participants in the stock market have not used the correct rational valuation procedures because of confusion over the significance of inflation. This view is regarded as heresy by those that believe financial markets function efficiently. Modigliani argued that, instead of capitalizing using real rates of return, they have incorrectly used nominal rates that incorporated an inflation premium similar in magnitude to that exhibited by nominal interest rates. A further reason why inflation might have adversely affected stock market values was also adduced by Modigliani. It was that participants may have failed to correct earnings properly for the gain on the inflation-induced depreciation of monetary liabilities. In short, participants do not realize that interest expenses are overstated. According to Modigliani, these valuation errors would produce a rather dramatic result. Stock prices would be trading at about half the level consistent with rational valuation procedures.

John Grant examined Modigliani's hypothesis using Canadian data. The first fact Grant stressed was that, in contrast to the experience in the U.S., Canadian equities have, except for a few periods in the 1970s, generally kept ahead of inflation. In addition, a model built by Grant and Arif Sayeed at Wood Gundy

satisfactorily explains the movements in the Toronto Stock Exchange Composite Index by assuming that investors discount their expectation of future real dividends at a real rate. Thus, there is no need to postulate irrational behaviour in Canada as Modigliani does in the U.S. to explain stock market behaviour.

Franco Modigliani found Grant's paper to be an important piece of evidence to add to the other international material he was collecting. However, he was unconvinced by Grant's analysis. In particular, picking up on an earlier point made by David Slater, he wondered to what extent Grant's results depended on the predominance of resource-based industries in the TSE index with their fundamentally different determinants of performance. Modigliani also questioned the degree to which Grant's real discount rate moved like a nominal interest rate. He suggested, following up on a comment by Bossons, that it makes no sense to rely on leverage as an explanatory variable for a real rate. Grant responded that he had excluded the oil and gas industry from his model and it had not deteriorated substantially. Grant defended the leverage variable on the grounds that the real discount rate would be affected by the risk of bankruptcy, which is related to nominal leverage. In any event, given the disagreement between Modigliani and Grant, the rationality of the Canadian stock market has not been proven to everyone's satisfaction.

### ***New Reporting Rules***

The Canadian Institute of Chartered Accountants (CICA) issued an exposure draft in December 1979 proposing a system of current cost accounting. A revised version reflecting representations will be forthcoming in the near future. Pending its release, James Goodfellow outlined the CICA's earlier proposals. Current cost income on two bases is to be disclosed: current cost income of the enterprise, and the current cost income attributable to shareholders. Current cost income is historical cost income adjusted for depreciation, cost of sales, net productive monetary items, and other impacts of specific price changes on productive assets. Current cost income attributable to shareholders incorporates, among other things, a financing adjustment to reflect the impact on net borrowings. The change in the current cost of inventories and property, plant, and equipment would also be disclosed. These disclosures would only be required of large enterprises with publicly traded securities and with inventories, property, plant, and equipment totaling more than \$50 million or with assets more than \$350 million.

Broadly, the proposed disclosure package was similar to that under FASB 16 in the U.K., but it

differed in many significant respects from that in the U.S. under FAS 33.

While James Goodfellow never said as much, it could be inferred from his vigorous defence of the exposure draft against all categories of critics that its revised version will likely retain the essence of the earlier recommendations. He did stress, however, the need for flexibility for specialized industries so that management can provide the most meaningful information. The presence of some of these critics at the conference made for some lively sessions and helped to highlight the key issues.

John Boersema argued that General Price Level Accounting (GPLA), now referred to as constant dollar accounting, using a single index such as the gross national expenditure (GNE) deflator, is the best way to produce financial statements that are not distorted by inflation, yet meet the same objectives as historical cost statements. He objected to the exposure draft's rejection of financial capital in favour of a concept of maintaining operating capacity. Boersema illustrated the impact of GPLA on the financial position of Shell Canada Limited. On a GPLA basis, Shell's 1980 net earnings were \$246 million or 30 per cent less than the \$355 million earnings on a traditional accounting basis. This would cut the rate of return on capital roughly in half.

Gary Corlett also favoured taking this kind of broad brush view of the impact of inflation on the ability of a company to stay healthy, which he recalled was the type of approach recommended by the Ontario Committee on Inflation Accounting. He contended that the constant dollar approach can produce 90 per cent of the benefits of the current cost approach for 10 per cent of the work.

In contrast, James Goodfellow thought that there are problems with constant dollar accounting. He could not see how statements expressed in units of general purchasing power could be more useful than those expressed in terms of money. He maintained that it was not very relevant to use a general price index, such as the consumer price index, to adjust specific non-monetary items, such as steel mills, in financial statements. In saying this, he was careful to point out that he did not mean to suggest that information based on general price changes does not provide a useful standard of comparison for specific price changes.

Michael Alexander also supported the current cost approach. He was encouraged by the growing support in the U.S. for the FASB's action to implement current cost accounting with Statement 33. According to Alexander, a large majority of accounting firms

now favour the current cost approach over the use of a general index because of its greater usefulness.

The CICA exposure draft called for full supplementary disclosure. Michael Alexander regarded the introduction of change through supplementary disclosure to the basic financial statements as a "practical approach because it does not replace the existing system on which we have to rely — yet it enables analysis and use of additional information." Michael Fogg believed that, in choosing between full and partial supplementary disclosure, the U.S. partial approach was more useful than the U.K. full approach upon which the CICA exposure draft was patterned. Seymour Wigle went even further in volunteering his opinion that, if the CICA had favoured the U.S. approach at an earlier date, we might already have had something in place.

However, Michael Alexander only viewed supplementary reporting as a temporary solution. He said that, since it is difficult to ignore the impact of material price changes in the basic financial statements and still provide a meaningful and useful result, in the long run price changes would have to be recognized in the basic financial accounting model.

The net debt adjustment, which is made to allow for the extent to which profits are understated for the decline in the real value of outstanding net debt in calculating current cost income attributable to shareholders is probably the most controversial of the inflation adjustments. This is probably because it does not represent a cash inflow and because it runs counter to the conservative approach leaning towards the understatement of profits preferred by the accounting profession. Government officials, as noted by Michael Alexander, have tended to favour a debt adjustment. Such an adjustment does have the advantage from their point of view of protecting the corporate tax base. Many economists have also advocated a debt adjustment. With respect to the point that there is no associated cash inflow, Franco Modigliani argued that there would be if the firm maintained the same leverage policy.

Some of the participants made some interesting observations that have bearing on the debt adjustment issue. Michael Alexander gave everyone pause for reflection when he pointed out that, after adjusting for the impact of inflation on long-term debt, it would be General Motors with its healthy debt-equity ratio and not Chrysler that would now be in trouble. Paul Clough expressed concern about any method of inflation adjustment that gives lots of "credit" for "lots of debt." He quoted with approval a Swiss banker who said this was not a "recipe for survival." Bill Detlefsen was also concerned about creating gains from borrowing or working capital deficiency

situations. Along more anecdotal lines, Michael Fogg reported that his wife, upon being informed of their family's gain on debt, went out and spent it. On the pro side of the debt adjustment issue, James Goodfellow argued that the failure of accountants to provide information on the benefits of holding debt in inflationary times was misleading. It presents the bad news only without the good news.

The presentations focusing on the problems of accounting for inflation in particular industries or sectors gave a valuable and different perspective on the overall issue. The sectors represented were the extractive industries – oil and gas, in particular – integrated aluminum production, regulated industries, financial institutions, and – last but not least – small business. Most had some criticisms of the CICA exposure draft.

John Boersema found fault with the CICA exposure draft for being irrelevant and impracticable for the oil and gas resource sector. For oil and gas reserves, which are unique, finite, depleting resources that will not be replaced in kind, the concept of "service potential" is impossible to measure and of questionable utility.

John Schoonover also found the "service potential" concept to be unworkable for large multinationals such as Alcan for which the replacement of a fixed asset may involve a different type of asset in perhaps another country where conditions and performance might be quite different. He wondered if the development of replacement intentions for fixed assets to determine "service potential" can be considered an effective use of management's time for a "what if" exercise. Boersema thought it might be more profitable to use the resources searching for oil and gas.

The accounting problems of the oil and gas industry are compounded by disagreements over the appropriate methodology for preparing historical cost financial statements. Large companies tend to expense dry holes, while small companies capitalize them. This is the distinction between the "successful efforts" and "full cost" approach to accounting for exploration and development expenditures. There is also the issue of reserve recognition accounting, which Keith Brewer considered a promising way of valuing reserves.

John Boersema argued that with unresolved accounting problems such as these the solution appears to be supplementary disclosure. This would include information on reserves and would obviate the need for current cost disclosures. Overall company-wide information on the impact of inflation

could be provided through GPLA or constant dollar accounting.

Bill Detlefsen expressed his agreement with John Boersema. He also offered his opinion that efforts to develop an accounting approach for inflation have so far failed in the extreme case of the extractive industries. He wondered if inflation adjustment can be successful in general even if it is not applicable in extreme situations.

Paul Clough characterized the problems of regulated industries as being the same as all businesses, with regulatory problems added as a layer on top. One of these problems is that the regulatory process is based on historical costs. Clough was encouraged that Canadian Pacific Limited's proposal for handling the inflated cost of assets, "The Current Value Cost of Capital," has been put on the Canadian Transport Commission's agenda. On the other hand, Clough was not very satisfied with the meaningfulness and comprehensibility of the replacement cost information that his own firm and others were supplying the Securities and Exchange Commission in the U.S. He judged that it might be worth some additional delay in Canada to ensure that inflation accounting standards produce meaningful and understandable figures.

For financial institutions, Michael Mackenzie noted that they were specifically excluded from the recommended coverage of the CICA exposure draft. A Task Force of the Canadian Bankers' Association reported in early 1981 on the exposure draft. It noted that the most significant effect of inflation on banks was the gradual erosion of capital. While it came out against rigidly applying current cost accounting to banks, it proposed the publication of supplementary information along the lines of that required in the U.S. Mackenzie personally thought that the publication of inflation-adjusted information might help to call attention to some problems for financial institutions created by inflation. These would include the facts that real growth is substantially less than nominal, capital is eroded by deposit growth, and income is overstated if allowance is not made for current cost depreciation and rentals.

Small business was not covered by the CICA's exposure draft on account of its protests over an earlier exposure draft, according to Irving Rosen. He asserted that the small businessman does not understand current cost accounting information and has no use for it, since it just makes unnecessary work. Rosen noted that there is a limit on the resources that the average small businessman can spend on accounting advice as well as on the capacity of the profession to meet the demands. Current cost accounting could be, as Rosen sees it, "the straw that might break the camel's back."

Many obstacles to the acceptance of inflation accounting were cited at the conference. Michael Alexander said that business is concerned about the way capital markets might react to lower inflation-adjusted profits. Also a larger number of professionals have a vested interest in the present historical cost system. Also, according to Irving Rosen, the small businessman is afraid that current cost accounting would make it more difficult to obtain bank loans, since it would cast a less favourable light on the firm's financial health. Ironically, banks for their part, according to Michael Mackenzie, do not want to publish inflation-adjusted information, because it would make it more difficult to raise money. Perhaps, if this is indeed the case, banks might show a little more sympathy for the hard-pressed small businessman than Rosen might expect.

Many of the participants stressed that usefulness should be a prime criterion for any inflation-adjusted accounting data. Michael Alexander considered it too early to tell how useful the FASB's FAS 33 data was for decision makers. Michael Fogg knew of little evidence that the data was being used outside of the firms except by investment analysts. Michael Mackenzie noted that there was no evidence of use of the inflation-adjusted information for financial institutions in the U.S. and U.K. On the other hand, both Michael Alexander and Michael Fogg were encouraged by the interest shown at a recent conference on how to use inflation-adjusted information for management purposes sponsored by the Financial Executives Institute. Michael Alexander quoted one executive as saying to his staff, "If I am going to be accountable to shareholders on an inflation-adjusted basis, then I am going to hold you as managers accountable in the same way." By the same token, Seymour Wigle contrasted the willingness of management in the U.K. to develop sophisticated internal data to gain competitive advantage with their unenthusiastic approach to developing data in the Statement of Standard Accounting Practice 16 (SSAP 16).

One possible use of inflation-adjusted financial information is to justify earnings to the public. John Boersema was skeptical of this, however. He showed how for his company, Shell Canada Limited, profits could be stated in 1980 at \$335 million on a historical cost basis, versus \$65 million on a CICA exposure draft basis. He wondered if, given the suspicion with which oil company profits are presently viewed, the public would accept such revised numbers. On the other hand, Michael Mackenzie thought that the publication of restated earnings might assist financial institutions in explaining their earnings.

Michael Alexander made the critical point that, to be useful, inflation-accounting data must be capable

of being viewed from both a micro and macro perspective. It would thus help to bridge the gap between the microeconomic decisions made by business and the government's macroeconomic management. This would mean that the data must be aggregatable. The FASB's Statement 33 data bank meets this bill.

Michael Alexander and James Goodfellow both made strong pleas to the accounting profession for leadership in establishing new accounting standards adequately reflecting the impact of inflation. In addition, there was something of a consensus among participants in favour of an experimental approach. Michael Alexander characterized the U.S. approach as represented currently by FAS 33 as a kind of "experimental patchwork."

## **Inflation-Induced Distortions in Taxation**

### ***The Distortions***

Inflation-induced distortions in reported income carry over directly into the corporate tax base. Corporate tax revenue is thus increased by the extent to which replacement cost depreciation and cost of sales exceeds historical cost and is decreased by the overstatement of interest expenses. *A priori*, the net effect on corporate tax revenue cannot be predicted, but Abe Tarasofsky presented data taken from a Department of Finance study showing that the real effective tax rate (adjusted for inflation) was higher than the nominal rate on average over the 1976-78 period by about 11.5 percentage points for the non-farm, non-financial sector and by 15 percentage points for manufacturing. Inflation-induced distortions in reported income could also be expected to shift the tax burden among industries and firms creating an uneven pattern of taxation that was related to the industries' and firms' holdings of fixed assets and inventories and their outstanding debt. This was demonstrated by Bert Waslander. Another tax-related distortion noted by John Bossons was the favourable tax treatment of owner-occupied housing relative to other assets such as equities. These tax distortions would no doubt lead to a misallocation of resources.

While there was no difference of opinion among the participants of the conference concerning the tendency of inflation *per se* to raise corporate tax revenues and the resulting distortions in the tax structure, there was substantial disagreement over whether or not the effective corporate tax rate has actually increased as a result of inflation. There are two questions at issue here. The first is the extent to which the discretionary tax cuts introduced by the

government in recent years, such as the two-year write-off and lower tax rate for manufacturing, investment tax credits, and the 3 per cent inventory valuation adjustment, offset the impact of inflation. The second is more philosophical. It relates to the degree to which the tax cuts can be considered a general policy response to inflation.

On the first issue, Abe Tarasofsky asserted on the basis of Department of Finance data that there has been a distinct upward shift in average tax rates in both the non-farm, non-financial sector and the manufacturing sector. Bert Waslander contended using the *Financial Post*-Bossons data base referred to above that average effective tax rates on profits have risen consistently over the period for the 152 firms in his sample to the point where in 1976-78 they were approximately equal to the statutory tax rate. Waslander cautioned that these results could be exaggerating the increase in the effective tax rate somewhat because of low real rates of return in the sample studied.

Waslander also examined the 58 manufacturing firms in his sample separately. For them, he concluded that the tax reductions enacted in the 1970s to lower the effective tax rate in manufacturing relative to other firms did not offset the effect of inflation-induced tax increases. Thus, the effective tax rate for manufacturing rose significantly to the point where it was higher than for corporations in general. This resulted from the larger relative inflation adjustments for manufacturing relating to higher-than-average depreciation rates and inventories and to a relatively low utilization of long-term debt.

Michel Proulx disagreed strongly with both Tarasofsky's and Waslander's conclusions. He said, with respect to Tarasofsky's conclusions, that there were two caveats attached to the analysis of effective tax rates in the Department of Finance study that had to be borne in mind. One was a break in the effective tax rate series in 1977 as a result of a change in the sample of corporations covered by *Industrial Corporations, Financial Statistics*, the data source, which would render intertemporal comparisons less meaningful. The second was a rise in losses, due to the calculation of the average tax rates on the basis of aggregate profits net of losses, which could lead to an illusory increase in the tax burden.

To gauge the quantitative significance of this latter effect, Proulx used the *Financial Post*-Bossons data base. He noted that this data base had been substantially revised from that used by Waslander. His conclusion was that average real effective tax rates based upon companies with positive net income would have increased slightly for the non-financial corporate sector as a whole from 1966-69 to

1974-79, would have increased substantially in resource based industries, and would not show any upward trend in the non-resource industries as a whole or in the manufacturing sector. This latter result contrasted with the conclusions drawn by Tarasofsky and Waslander. It was also confirmed, according to Proulx, by some further analysis using the annual corporate financial and taxation statistics data. In addition, Keith Brewer supported Proulx's contention that the effective tax rate in manufacturing did not increase.

Concerning the philosophical question of whether the discretionary tax cuts can be considered a policy response to inflation, there was substantial disagreement. James Tyrrell argued that they could not, since they were introduced for quite different reasons, such as to compensate for the tax incentive for domestic international sales corporations (DISCs) in the U.S. or to stimulate needed investment in certain sectors, rather than to offset the effect of inflation. Paul Clough also adopted this position claiming that the use of capital cost allowances and investment tax credits is misunderstood by politicians and the public who confuse them with some form of adjustment for the inflated cost of replacing assets.

On the other side of the question was, notably, Morley English from the Department of Finance, who argued that, while the measures were not adopted exclusively because of inflation, they were adopted in an inflationary environment to respond to the problems posed by that environment. Indeed, some measures, such as the 3 per cent inventory valuation adjustment, were specifically intended to compensate for inflation. For others, the connection is less obvious, but perhaps no less real. Seymour Wigle also differed from James Tyrrell in viewing fast write-offs as having an element of response to inflation.

Whether or not tax cuts were introduced and actually succeeded to offset the impact of inflation on aggregate effective tax rates, the fact still remains that inflation has distorted effective tax rates among industries and firms from those intended by policy makers. This brings us to proposals to reform the corporate tax system and reduce these distortions, thereby improving resource allocation.

### **Proposals for Reform**

The first issue under this rubric is, Should the proposals for reform involve net corporate tax reductions or just a redistribution of tax burdens? Those such as James Tyrrell, who believe there has been a significant increase in tax burden because of inflation, favour large net tax cuts. Others, such as Morley English, argue that any proposals should be "revenue neutral" (meaning unchanged corporate

tax revenues). This would require that any tax cuts to compensate for inflation should be financed by corporate tax increases elsewhere, producing losers as well as gainers. By the same token, Seymour Wigle noted that as a realist he could not overlook the need of the government for revenues, and Keith Brewer thought that it would be more realistic to expect a shift in the intercorporate distribution of the total business tax burden than to lower taxation all around.

Many proposals to reform the corporate tax system were discussed at the conference. Since the government has indicated that it is awaiting "a comprehensive inflation accounting system," perhaps a solution would be to base the corporate tax on inflation-adjusted income as measured under such a system when it eventually surfaces and is accepted.

Interestingly enough, none of the participants explicitly advanced this particular proposal. Instead, James Tyrrell argued that the forthcoming recommendations of the accounting profession concerning standards will be by way of broad guidelines for supplementary reporting, which would not qualify as "a comprehensive inflation accounting system." Furthermore, he indicated that this was not the answer to the problem in any event, since tax laws must be written in clear and unequivocal language, and since any correction for inflation should err on the side of simplicity in order to meet the equity test.

Morley English agreed that there would be important factors that could lead to divergence between an inflation accounting tax system and a financial reporting system. He noted that there were already significant differences between tax and book depreciation and that such differences would probably continue. In particular, he could not see how the Department of National Revenue could practicably audit taxes based on price indexes prepared by plant engineers.

John Boersema also stressed that the separation of tax accounting and financial reporting should be recognized and that an accounting solution should not be pushed in the hope that it might result in a tax break. Seymour Wigle noted the example of the U.K. where inflation-adjusted accounting standards did not result in tax recognition, the government's prior encouragement notwithstanding. He warned that the same thing could happen in Canada.

Another issue that would arise in the context of a tax system based on "a comprehensive inflation accounting system" is the appropriateness of levying taxes on any adjustment to correct profits for the overstatement of interest expenses. Since the recipients of the interest income are already being taxed

on the full amount, this approach would involve an element of double taxation. This illustrates the importance of addressing the question of inflation-induced distortions in the measurement of real income in the broader context of the overall taxation of investment income in the hands of individuals as well as businesses.

The second proposal, which was put forward by Gary Corlett, would be to abolish the corporate income tax altogether. There could be no denying that this would succeed in eliminating the inflation-induced distortions in tax burdens among corporations. However, to avoid introducing distortions between the non-taxed corporate and the taxed non-corporate sector, the proposal would have to become considerably more complicated along the lines of the Carter Commission recommendation, whereby the corporate and personal income tax system would be integrated by attributing corporate source income to shareholders and taxing it at their marginal rate, with a credit for corporate taxes paid. Otherwise individuals could avoid taxes by retaining their income in corporations. Moreover, to eliminate inflation-induced distortions, it would have to be inflation-adjusted income that would be attributed. Thus, the initial simplicity of Corlett's proposal vanishes on closer inspection.

The rest of the proposals would qualify as *ad hoc* measures. The third proposal advanced by John Bossons is to index capital consumption allowances on the equity-financed portion of new investment. Limiting the indexation to the equity portion is in recognition of untaxed real gains on outstanding debt. This proposal is attractive from the government's point of view, since it minimizes its revenue loss by not granting tax relief on the existing capital stock. It thus provides a large investment stimulus at a minimal cost, as evidenced by Bossons' simulations of the effect of the proposal with the FOCUS econometric model of the Institute of Policy Analysis.

John Boersema also favoured indexing capital consumption allowances to some general index. But he did not specifically limit the indexing to new investment and to the equity financed portion, and he called for a similar indexing of inventory values to improve the inventory valuation adjustment.

The fourth proposal, put forward by James Tyrrell on behalf of The Canadian Manufacturers' Association, was for indexing of equity. It protects the purchasing power of the owner's equity from taxation by allowing a deduction from taxable income equal to the product of equity and the rate of change in the GNE deflator. If the cost is too great for the government to bear at the present time, it could be phased

in. The advantage of this proposal is its simplicity. Tyrrell acknowledged that it does not get at the root of the problem of distortions in tax burden caused by interindustry and interfirm variation in capital intensity and life, inventory holdings, working capital, and debt.

The final proposal mentioned by Michael Fogg and Irving Rosen was for the allowance of last in, first out (LIFO) for inventory valuation for tax purposes instead of first in, first out (FIFO). This would follow the current practice in the U.S. and would mostly eliminate the taxation of illusory inventory profits as long as inventory stocks were growing. If stocks were liquidated earlier, lower prices would be used for valuation, and illusory inventory profits would reappear. It would presumably replace the existing 3 per cent inventory valuation deduction, which Tyrrell and Rosen consider to be inadequate. Incidentally, it is not so clear that this is indeed the case to the extent that the inventories are financed by debt. Robin Boadway, Neil Bruce, and Jack Mintz of Queen's University have demonstrated in a paper presented at the 1981 Canadian Economic Association meetings that, even with FIFO, the 3 per cent inventory allowance is probably more than adequate as a result of the full deductibility of nominal interest charges to finance the inventory holdings. Some of those, such as Irving Rosen, who favour the adoption of LIFO to handle the problem of the taxation of illusory inventory profits due to inflation also support some form of

accelerated or indexed capital consumption allowances.

In developing proposals for reforming the corporate tax to take inflation into account, Michael Fogg identified an additional problem faced by a small open economy such as Canada, which is of less concern in the U.S. and U.K. It is the need for international harmonization. In a similar vein, Morley English warned that, with so many foreign subsidiaries in Canada, tax reductions to eliminate distortions could possibly have the unintended result of raising foreign taxes, thus transferring tax revenue to foreign fiscs. He also pointed out that a markedly different tax base in Canada from those abroad would pose both problems and opportunities for creative tax accounting.

## Conclusions

These are the main issues addressed at the conference as I see them. Many of them are far from resolved. At the conference, we succeeded in lifting veil after inflationary veil only to discover yet more veils underneath. Nevertheless, as the number of veils diminished, it was possible to gain a better appreciation of the underlying economic structure. For a similar appreciation, the reader is encouraged to turn to the abstracts of the papers presented at the conference, contained in these proceedings. In perusing them, he will no doubt develop his own interpretations of the issues.