

Economic Forecasting: Is There Any Hope?

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Eleven years ago, I gave a talk here at Carleton University on "Economic Forecasting: Humbling Experiences of the 1970s", in which forecasts made in 1972 for 1980 were compared to the actual outcomes. Observations were offered on the lessons learned, and a hopeful view was taken about the use of econometric tools in the 1980s.

I have been asked to revisit the same theme, but with the experience of ten more years. What were the blunders and successes in the 1980s? Are the tools being used today better than the "old" ones? What are the challenges for the 1990s?

As well I have been asked to discuss the major concerns evident in the current forecast for the next few years. Does the unemployment rate decline? Are government deficits and debts under control? What can be done to improve Canada's economic performance?

1 BACKGROUND

Recognition that "the future is unpredictable" [Drucker, p.123] is a useful starting point for someone tasked with producing forecasts. Whether we would go as far as Drucker's dictum that "... forecasting is not a respectable human activity..." [p.124] is debatable. But the essence of the argument is that the purpose of strategic planning is to examine the futurity of present decisions and to seize opportunities to change (or respond to) the forecast or outcome. Some base case(s) or reference view(s) of the future can be helpful to this process.

A useful technique for supporting the planning process and coping with the "unknown" is to develop alternative "scenarios" or alternative "conditional" forecasts based on specified sets of changes to key or core assumptions. Strategic plans can be examined under a number of scenarios to determine their viability. Approaches that maintain good performance under different scenarios could be labeled "robust"; those that are highly sensitive to the scenario suggest that additional work to make them more robust may be required or, at least, recognition of the sensitivity alerts decision-makers to the uncertainty associated with that policy or strategy.

Today, ten years later, there is a better understanding that the "future is not forecastable". However, the use of alternative scenarios has been slow to emerge. Some of our more sophisticated clients use them, but the practice is not widespread.

For purposes of this paper I have selected two forecasts, one made in December 1983 (ten years ago) and another one done in December 1988 (five years ago). These are the regular Reference forecasts supplied to our clients at that time. The forecasts for 1993 from each of these Reference Cases are compared to the actual outcomes for 1993. In some cases, the actual data for 1993 are not yet available, so that the comparison has been made to the preliminary estimates of the National Accounts, released on March 1, 1994, or from our December 1993 forecast for 1993.



The purpose of this comparison of five-year and ten-year forecasts to the actual outcome is not to impress you with our accuracy, or to confirm your worst suspicions of the inaccuracy of forecasters. (If you are in the latter camp, then it would be interesting to know what you do instead of forecasting!) Rather the purpose is to discuss some of the factors that have led to the differences, as an indication of what can occur in any "future". This will illustrate why the future portrayed by an economic forecast should not be taken as inevitable. Remember this "lesson" when we examine the outlook for the next five years.

2 POPULATION

The number of people (the population) in any economy is one of its important characteristics. In essence, "all" that is needed is a forecast of births, deaths, and net immigration (in-migration less out-migration or emigration) to produce a forecast for the population, given the number of people in the previous period.

The ten-year population forecast made in 1983 for 1993 was 26,927,000 (the first row and column in the table below). The five-year forecast, made in 1988 for 1993, was 27,386,000. The net immigration assumption is shown in the second row.

Population Forecasts for 1993
(thousands of people, mid-year)

| FORECAST MADE IN: | 1983 | 1988 | 1993(ACTUAL) |
|-------------------|--------|--------|-----------------|
| TOTAL POPULATION | 26,927 | 27,386 | 27,828 (28,666) |
| NET IMMIGRATION | 45 | 75 | 216 |

In 1983, we underestimated the population for 1993 by about 900 thousand, most of the discrepancy arising from substantially higher net immigration over the period (about 840 thousand) than assumed.

This more rapid immigration was a result of two factors:

- o With low immigration, population growth slowed appreciably. This forecast (and others like it) resulted in a review of policy in the late 1980s, with a decision to increase immigration substantially.
- o Economic performance was more vibrant through 1988 than in the Reference Forecast, suggesting a more open immigration policy as well. (In the 1983 forecast, immigration was increased from 1995 on as labour markets tightened.)

A higher immigration assumption (net immigration of 100,000 in 1988 tapering off to 75,000 in 1993) was used in the forecast produced in 1988 for 1993. This reduced the size of the error in forecasting population to

about 440,000. The decision to reduce net immigration from 1988 forward was based on a forecast of worsening labour market conditions. However, the later policy decision was to set immigration independent of labour market conditions, with a stress on family reunification and refugees.

With the results of the 1991 Census, Statistics Canada decided to incorporate an adjustment for a Census "undercount" into the population estimates. This resulted in an increase in population, not only in 1991 but in all previous years. (We are awaiting the incorporation of this adjustment into other Statistics Canada series before including it in the model.) This serves as a useful reminder that the various economic variables that we forecast are also subject to revision from improved statistical measurement or changes in methodology.

3 WORLD OIL PRICES

In the 1970s the world witnessed substantial OPEC price shocks, with major increases in 1974 and 1979-80. The ten-year forecast made in 1983 was for the OPEC oil price to be about \$49 a barrel in 1993, essentially a continuing real increase of 1-2% per year plus US inflation. This view was later modified, with alternative scenarios in 1985 focusing on a collapse of OPEC prices prior to its decline in 1986. The view in 1988 for 1993 was for only modest increases in OPEC prices, fairly close to the actual course of events.

World Oil Price Forecasts for 1993
(current US \$ per barrel, Persian Gulf)

| FORECAST MADE IN: | 1983 | 1988 | 1993(ACTUAL) |
|-------------------|---------|---------|----------------------|
| World Oil Price | \$49.04 | \$18.26 | \$17.00 (\$19.82WTI) |

The additional number in the table is the price now used in the model, the crude oil price of West Texas Intermediate (WTI) at Chicago. This reminds us that institutional settings can change, and that the reference price for determining Canadian prices of a commodity can shift.

4 US GROWTH

The progress of our largest trading partner is quite important to the Canadian outlook. The impact on international trade is obvious. At the same time, investment decisions in Canada are conditioned by the performance of the US economy, given substantial foreign ownership in many sectors.

US GNP Growth
(average annual rate of growth)

| FORECAST MADE IN: | 1983 (1993/1983) | 1988 (1993/1988) |
|-------------------|------------------|------------------|
| Forecast | 2.9% | 2.6% |
| Actual | 2.7% | 1.5% |

For the ten-year period, starting in 1983, economic growth was forecasted to be 2.9% in contrast to the actual performance of 2.7%. However, in the five-year forecast made in 1988, the outlook was too robust by 1.1%, a reflection of the underestimation of the monetary and fiscal restraint chosen by US policymakers. These forecasts were based on those of US forecasters, although we accept the responsibility for the assumptions.

5 INFLATION

Inflation has been a major focus of the 1980s. The ten-year forecast was for inflation (using the CPI) to average 4.4%, only slightly higher than the actual 4.0%. (The lower oil price is part of the explanation here.) The five-year forecast was for a modest 3.2%, compared to the actual of 3.7%. Although a GST was discussed in the 1988 outlook, it was not incorporated. (We provided clients with a number of different GST scenarios in the years 1988-1990.) This accounts for most of the difference between the actual and forecast values in the latter period.

Inflation: CPI Change
(average annual rate of growth)

| FORECAST MADE IN: | 1983 (1993/1983) | 1988 (1993/1988) |
|-------------------|------------------|------------------|
| Forecast | 4.4% | 3.2% |
| Actual | 4.0% | 3.7% |

Recent inflation rates of less than 2% were not part of either forecast. It is interesting to note, however, that inflation forecasts without the severe monetary restraint and major recession of recent years, differed little from the average rates through 1993. Perhaps the "benefits" are still to come.

6 INTEREST RATES

Interest rates in 1993 were lower than forecast ten and five years earlier. This is understandable for the short-term rate, since inflation was much lower in 1993 than in the earlier forecasts. If the rate of inflation (GDP deflator of 0.8%) in 1993 is netted off of the estimates, then the real short-term interest rates are much closer.

Interest Rate Forecasts for 1993
(percentage)

| FORECAST MADE IN: | 1983 | 1988 | 1993(ACTUAL) |
|---------------------------|------|-------|--------------|
| Three-month Treasury Bill | 6.89 | 8.48 | 4.84 |
| T-Bill in real terms | 3.42 | 5.22 | 4.04 |
| Industrial Bond Rate | 8.31 | 10.30 | 8.85 |

The long-term interest rate for 1993 was bracketed by the two forecasts, although it is likely that the implicit expected inflation was higher in the forecast values than today. This suggests that the forecasts underestimated the real long-term interest rate in 1993.

7 FISCAL POSITION OF GOVERNMENTS

Forecasting government revenues and expenditures has its own special challenges. Some components are particularly cyclically-sensitive (UI benefits, income tax collections) and all components are subject to reallocation with budgets.

Even if one is successful in being fairly close with the aggregate revenues and expenditures, the balance may be quite volatile, particularly if errors on revenues and expenditures are negatively correlated, as they seem to be.

This comparison uses the National Accounts data for calendar years. No attempt has been made to translate these estimates into the Public Accounts fiscal year values, nor to reconcile the accounting rule changes, timing changes, and other "fiddles" that we have recently witnessed.

There are some changes that could be made to account for Budget changes. It was decided in the Federal Budget of 1992 to drop the Family Allowance and to replace it with a refundable child tax credit in 1993. Therefore, expenditures dropped by \$2.8 billion and personal income tax revenues declined by \$3.3 billion, including the effect of losing the clawback on family allowances. However, no alterations were made in the comparison below.

Fiscal Revenues, Expenditures, and Balances for 1993
(billions of current dollars)

| FORECAST MADE IN: | 1983 | 1988 | 1993(ACTUAL) |
|-------------------------|-------|-------|--------------|
| ALL GOVERNMENTS: | | | |
| Revenue | 322.7 | 306.5 | 304.0 |
| Expenditure | 337.0 | 342.0 | 362.7 |
| Balance | -1.9 | -24.0 | -48.1 |
| FEDERAL: | | | |
| Revenue | 147.0 | 140.3 | 135.5 |
| Expenditure | 165.0 | 170.0 | 167.5 |
| Balance | -15.9 | -27.5 | -30.2 |

Revenues for all governments were less in 1993 than forecasted in 1983. A major source of the discrepancy was lower oil and gas royalties, flowing from the lower world oil price. The 1988 forecast for 1993 was much closer.

Total government expenditures were much higher than forecast, particularly as a result of higher interest payments and higher social assistance payments by provinces. These both flowed from the federal policy choices to reduce inflation through restrictive monetary and fiscal policies.

Federal expenditure forecasts were fairly close, although federal revenues were lower in 1993 than indicated by either the ten-year or five-year forecasts.

The sensitive nature of forecasts of government balances was particularly evident at the all-government level. Federal off-loading onto the provinces helped them maintain their expenditures under control.

8 REAL ECONOMIC GROWTH

The ten-year and five-year forecasts for real GDP (at factor cost) were over-estimated by 0.5% per year and 1.9% per year, respectively. In the 1983-1993 period, consumer expenditure and investment were over-estimated, exports were under-estimated but imports also actually grew much more rapidly, offsetting the strength of exports. In the last five-year period, the consumer and business investment were much weaker than forecast, while imports were much stronger. This is consistent with the view that the exchange rate was over-valued from 1988 through 1993.

Real GDP Growth (average annual rate of growth)

| FORECAST MADE IN: | 1983 (1993/1983) | 1988 (1993/1988) |
|-------------------|------------------|------------------|
| Forecast | 3.2% | 2.8% |
| Actual | 2.7% | 0.9% |

The Free Trade Agreement was not included in the 1983 Reference Case, since it was not even under consideration at the time. It was in the 1988 Reference Case, although primarily through tariff reductions and assumed productivity increases. A number of studies of the FTA were provided to clients during the period in which it was under discussion.

As well, neither forecast reflected the policy choices made in the 1989-92 period to purposefully "flush out" inflation, through restrictive monetary and fiscal policy. Again, the implications of this strategy were explored at length through special studies. Unfortunately, they were "too true" in pointing to the loss of growth and employment as a consequence.

There is no solution to the problem of unanticipated policy changes. What can be done is to explore them at length at the time of their discussion, rather than waiting for the results. Unfortunately, the "non-destructive" testing of policies through model simulation is too uncommon.

9 PRODUCTIVITY GROWTH

Output per person was lower than either of the forecasts, by 0.4% per year for the ten-year forecast, and 0.8% per year for the five-year period. The differences result from a combination of cyclical weakness, lower capital-labour ratios from reduced investment, and mix changes. It resulted in slow growth in real wages.

Labour Productivity Growth (average annual rate of growth)

| FORECAST MADE IN: | 1983 (1993/1983) | 1988 (1993/1988) |
|-------------------|------------------|------------------|
| Forecast | 1.6% | 1.5% |
| Actual | 1.2% | 0.7% |

Over the 1983-93 period, productivity growth was weaker than forecast in agriculture, fishing, construction, utilities, and community, business, and personal services. Manufacturing productivity at an average rate of 2.5% was the same as forecast. Mining, forestry, and communications were under-estimated.

In the more recent period, 1988-93, actual manufacturing productivity was much weaker, perhaps suggesting that the upward adjustments from the FTA were more than offset by cyclical weakness. Most other sectors exhibited patterns similar to those evident in the ten-year forecast.

10 REAL DISPOSABLE INCOME

Real disposable income forecasts were higher than actual performance. This is not surprising, given the weaker growth and lower productivity. As well, the depreciation in 1992 and 1993 essentially transferred real income to businesses from the personal sector, and recent interest rate declines have reduced consumer incomes.

Real Disposable Income Forecasts (average annual rate of growth)

| FORECAST MADE IN: | 1983 (1993/1983) | 1988 (1993/1988) |
|-------------------|------------------|------------------|
| Forecast | 3.2% | 2.1% |
| Actual | 2.3% | 1.1% |

11 LABOUR MARKETS

The ten-year labour market forecasts were remarkably close. However, some of it is the result of offsetting errors, with the higher actual population being offset by somewhat lower participation rates as a result of the recession. The more robust employment forecast in the five-year case was dashed by the recession, along with the unemployment rate forecast.

Labour Market Forecasts for 1993
(thousands of people)

| FORECAST MADE IN: | 1983 | 1988 | 1993(ACTUAL) |
|--------------------|--------|--------|--------------|
| Participation Rate | 67.0% | 67.4% | 65.2% |
| Labour Force | 14,016 | 14,338 | 13,945 |
| Employment | 12,461 | 13,141 | 12,384 |
| Unemployment | 1,556 | 1,197 | 1,561 |
| Unemployment Rate | 11.1% | 8.4% | 11.2% |

If nothing else, this forecast comparison should be a warning that shorter-term forecasts (e.g., five-year) are not necessarily closer than longer-term forecasts (e.g., ten-year).

12 MAJOR CHANGES TO THE MODEL AND PROCEDURES

When these forecasts were compiled, I was reminded of the number of changes in the underlying databases that we had to absorb in the last ten years. The 1983 forecasts were in 1971 dollars, the 1988 forecasts in both 1971 and 1981 dollars, and the end point in 1986 dollars. With each new base year came methodological changes in the National Accounts. Each time the database changes the entire model must be re-estimated, tables modified, and the model's simulation properties evaluated. This also has meant a substantial investment in people and computer time (about \$500,000 per revision).

Procedures for maintaining the databases are continually being improved, tables added, graphic packages developed, etc. These developments have kept the costs under control as the model size has increased.

The Informetrica Model (TIM) has also evolved over the last ten years. Increased disaggregation of employment, wages, supplementary labour costs, returns on capital, international trade flows, and productivity have all been done, as the historical data became available. This has driven the model size up substantially (now about 8,000 equations) but improved the price linkages and productivity estimates, while providing much more detail

to our clients. Other changes include the incorporation of a single-year population model, more focus on government debts and interest payments, new rules for UI contribution rates, the incorporation of varying technologies over time, and a detailed block of equations for estimating personal income taxes.

The implementation of the GST involved major changes to the model to handle the zero-rated and exempt goods and services. The FTA required the introduction of tariff rates by country. The one area in which the model became less complex was in the area of energy pricing, with the demise of the NEP in 1985. (We still have the old code in storage if needed!)

Another innovation has been the development of the Regional-Industrial Model (RIM), which complements TIM by providing provincial forecasts consistent with the national outlook, linked through the provincial allocation of industrial output. The process of examining the provincial outlook has also helped in improving the national outlook and model.

Advances in computing have also allowed the growth in model size (from 2,000 equations to over 8,000), with little deterioration in solution time (currently about one minute per year).

13 WHAT IS THE OUTLOOK TO 2000?

One way of reading the title "Economic Forecasting - Is There Any Hope?" focused on the procedures, the accuracy, the capacity to anticipate changes, and other improvements.

Another view would look for an answer to the question, "Is there any hope in the future?". It is to this issue that we now turn.

Key assumptions include: no OPEC price shocks; continued, but modest expansion of the US and world economies; real interest rates lower than in the 1980s but higher than in the 1960s and 1970s; and policy stances as elaborated in recent federal and provincial budgets.

Real growth over 1994-98 averages 3.4 per cent per year, and is slightly more vigorous in each of the first two years (3.6%). The major limitation to a more robust pace is traceable to our assumption that current policy, which is targeted on slowing the growth of current spending by households and governments, is continued into the late 1990s. We expect per household real disposable income in 1998 will be indistinguishable from that of 1980.

Recent depreciations, accelerated productivity increases, and past and future slow growth of unit labour costs yield strong, pro-growth foreign trade results in the next five years. However, decelerating growth in the United States, only modest recovery in the rest of the G-7, supply-side limitations to rapid expansion of exports in many primary sectors, and accelerated import growth from a generalized rebound in Canadian investment after 1994 weaken the positive influence of foreign trade on growth in 1995-96. Autos are a continuing source of trade strength, and the deficit:

in tourism and other travel accounts is reduced moderately.

The "bad news" is little reduction in the unemployment rate over the next five years. The "good news" is that the secular increases of the unemployment rate since the mid-1970s are halted. The pace of growth, and annual changes, to the labour force should be notably higher than in the mid-1980s because of immigration and other population fundamentals. Secular influences affecting participation rates of women and older men, and a cyclically-related return of workers "discouraged" by the recent recession result in a more rapid growth of the labour force than recently experienced. We have adopted a conservative view about the return of discouraged workers, so that there is some risk that unemployment rates will be higher than we have projected.

Government deficits decline over the next five years. As measured by comparison to total output, progress varies across jurisdictions, however. We project the federal government can meet its target of a public accounts deficit that is 3 per cent, or less, of GDP after three years, and, by 1998, it is half that registered at the end of the last recovery (1989). Relative to GDP, the magnitude of provincial, local and hospital system deficits combined is cut to one-third that of 1993, by 1998. However, where their fiscal operations were roughly in balance at the end of the 1980s, we expect their deficits will be equivalent to one per cent of GDP in 1998. For the public sector as a whole, we expect the ratio of the deficit-to-GDP will be about the same in 1998 as it was in 1989.

Sectoral and aggregate unit cost developments are conducive to low inflation. Inflation remains at, or below, the 1994-98 targets agreed to by the new Minister of Finance and Governor of the Bank of Canada in December, 1993.

Nominal long-term interest rates decline moderately over the five years, but real rates continue much above growth to limit advances that governments and other debtors can expect to make during the period. Prospects for US and other G-7 inflation and interest rates are also consistent with this view.

Fiscally-inspired restraint in government spending is altering the social system. The implications of recently introduced restraint in the Unemployment Insurance System are for less support to the unemployed.

We are reporting vacancy rates in housing that have not been seen since World War II. Additions to the stock of housing in 1991-93 lagged the change in the number of households by about 175,000. Even if there are 177,000 starts in 1994, the recent gap will widen, and the perception that the country has a true housing "crisis" could easily emerge by mid-decade.

All elements of the "Red Book" Plan as introduced by the new federal government have been incorporated. We expect pro-growth effects from the Plan in 1994 and 1995. Key to this, however, is the assumption that the Infrastructure Initiative will be fully incremental. If there is no incrementality to the Initiative, our projected growth for 1994 would be reduced by 0.4 per cent, and in 1995, by 0.2 per cent.

The legacy of an enlarged debt owed foreigners and continuing high real interest rates worldwide limit the extent to which annual borrowing from foreigners can be reduced from their current, high proportions. Nevertheless, we are expecting progress, and by 1998, the current account deficit as a proportion of GDP is returned to historical norms. Until then, borrowing from foreigners will remain an unusually large proportion of total savings available to support investment.

Declining personal savings rates in 1994-96 are another important contributor to consumption and overall economic growth. But the real disposable income of consumers grows only slowly over the next five years.

Reflecting the basic strategy that determines demand, goods-producing sectors lead the growth of 1994-98. Limiting growth of household incomes, however, is an important constraint on the growth of enterprises providing retail trade, food, accommodation and other recreational services. As these are the core of "small business", the strategy of limiting growth of household incomes threatens another government plank: employment growth generated by small business.

At the end of 1998, governments and households should be especially vulnerable to any worldwide recession, in particular one induced by rising foreign interest rates. Per household real income will have stagnated for almost two decades, and increases in social spending will have been limited. Although government and foreign balances improve over the next five years, the all-government debt-to-GDP ratio stabilizes in 1998 at 30 percentage points above that of 1989.

13.1 Not In The Forecast

The most recent Federal Budget (February 22, 1994) has not been fully incorporated. The additional restraint added on the personal income tax side, the further reduction in UI benefits, and the additional restraint on federal wage rates and spending on goods and services will further dampen the outlook.

The continuation of down-loading onto the provinces by restrictions on CAP and EPF are likely to trigger additional restraint in forthcoming provincial budgets. Alberta, of course, has already moved to dramatic cuts in the next three years in provincial spending.

Significant changes to Workers' Compensation Board contributions may be required, raising payroll taxes and unit labour costs in the coming years.

At this point, the outlook remains only cautiously optimistic. These next five years will be better than the last five, but still way below the full potential of the Canadian economy.

14 HOW TO IMPROVE THE PROSPECTS?

Several months ago, a group of economists (Pierre Fortin, Brian MacLean, Lars Osberg, and myself) addressed this issue in a series of articles for the *Ottawa Citizen*. In particular, the final article was titled, *Canada's Economic Hope*, with advice for the next government. Well, the new government is in place and the advice still stands. (This section is based on this article.)

Canada is facing the twin problems of high unemployment and rising government debt. What should we do?

Our expert advice is to adopt a combination of policies to promote short-run growth accompanied by changes in how wages and prices are set and other longer-run institutional reform.

The short-run growth stimulus has to come from an expansionary monetary policy. Only lower real interest rates and a lower value of the Canadian dollar can provide enough stimulus for economic growth.

Economic growth is our only hope of solving the twin problems of unemployment and high government deficits. Growth will reduce unemployment and the personal hardships associated with it. It will expand government revenue, and will reduce social program spending. Interest payments as a percentage of federal expenditures will shrink rapidly as lower interest rates are paid on a slowly growing stock of debt.

The current fiscal policy - spending restraint - will not solve the twin problems of the deficit and high unemployment. Only lower interest payments, lower social transfers, and the higher tax revenues which come from faster growth are going to really control the deficit.

As people go back to work and UI and social assistance payments fall, we believe that the total expenditures of government can and should decrease substantially.

We also advocate a less restrictive fiscal policy in combination with lower real short-term interest rates. Government should shift its focus from spending cuts and concentrate on spending smarter. Additional expenditures can and should focus on measures which will contribute to our growth potential - e.g., improved public infrastructure and better training and educational opportunities for the less-privileged.

What targets should we set? We believe that the government should strive to reduce the unemployment rate to 7 per cent within 3 or 4 years, and should adopt a goal of 2 per cent annual productivity growth. This will require real economic growth each year of 5 per cent or more.

Part of the fiscal dividend from this extra growth needs to be reinvested, to remove the constraints of inadequate infrastructure. However, there is also the need to reduce the deficits which have been generated in high unemployment years, as our unemployment is reduced. This combination of reduced deficits, while spending more on infrastructure to facilitate economic growth, will stabilize and eventually reduce the

debt-to-GDP ratio.

Canadians will not get the full benefits from lower interest rates and domestic spending, however, unless the exchange rate is lowered. Otherwise, increased spending will flow disproportionately to spending on imported goods and services.

We believe that the Bank of Canada should aim for an exchange rate of about 70 US cents per Canadian dollar, which would bring our manufacturing unit labour costs relative to the US to their 35-year average. This lower value of the Canadian dollar would not only boost our output and employment, but help to reduce our current account deficit.

Dollar depreciation will be unpopular with the foreign investors holding Canadian bonds, but they have been well rewarded in recent years. Indeed, the high interest rate attaching to Canadian bonds in the recent past already embodies a premium stemming from a widely-held expectation of future depreciation - once the feared event has actually happened, no further interest premium against subsequent depreciation will be needed.

Short-term stimulus from easier monetary policy and some fiscal easing alone will not achieve the best performance possible from the economy. To get the maximum number of good jobs with the least possible inflation is going to require more from government than simply pulling on the macroeconomic levers. The government has to get more involved in directing the economy.

We believe that a new government should start right away with building the framework for an effective incomes policy. An explicit incomes policy would not be something totally new and different - merely a change from the Bank of Canada's implicit incomes policy as set out in its inflation targets. The Bank of Canada, already has an incomes policy. When those targets have been violated, the Bank has used the big club of raising the unemployment rate to double-digit levels to enforce compliance. Mass unemployment is, however, an extremely wasteful way of controlling inflation.

One possible incomes policy would feature wage and price guidelines aimed at keeping our inflation rate in line with that of the US. Any indexation of wages could use a revised Consumer Price Index (CPI) net of those shocks for which no one can provide compensation, that is, omitting the effects of indirect taxes, exchange rate changes, and international commodity price shocks. An important aspect of an incomes policy will be the development of an institution that can bring together the various groups in society to establish the guidelines.

Shrewd monetary and fiscal policies can return our economy to full capacity operation. With an appropriate incomes policy, we should be able to maintain the economy at its full potential. After the economy returns to full capacity, further improvements in living standards will depend upon raising the rate of productivity growth.

Setting a 2 per cent productivity growth target would serve to focus our efforts and our energy. Realization of the target should allow average real wages to increase by about 40 per cent over the next 17 years, as compared to almost no increase over the past 17 years. To realize our productivity growth target, we will need to: (1) raise private sector investment, (2) improve our training performance, particularly company training and training for those who do not attend university, (3) realize a higher investment-to-consumption ratio in our public spending, and (4) become more adept at creating and diffusing new technologies.

The policy package we offer promises economic performance so much better than that forecast under present macroeconomic policies that it may sound almost like a dream - imagine 7 per cent unemployment rates or less, rapid declining government debt-to-GDP ratios, modest expansion of some programs, and 2 per cent annual growth in productivity and real wages.

Other mature economies enjoy such performance today and we have enjoyed it in the not so distant past - it is well within the realm of possibility. The great attraction of a bold policy package featuring realistic objectives is that it has the potential to provide the inspiration, and invoke the cooperation from all groups in society, necessary to pull it off.

15 SUMMARY

Don't believe that forecasts are inevitable. Rather they show the implications of the policy and other assumptions made to produce a forecast. That is why the term "conditional forecast" should be taken as implied at all times.

The real challenge for policymakers is to start with such a forecast and strive to improve on it through better policy. That's what it is all about!

At present, there is a large "gap" between our current and expected performance, and what is achievable with the resources available in Canada. We are not fully employing our people, we are under-utilizing our capital, and not fully exploiting the available technologies.

"Hope" can become reality only if the efforts of governments and the private sector are directed to improving economic performance. As citizens you should demand no less!

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