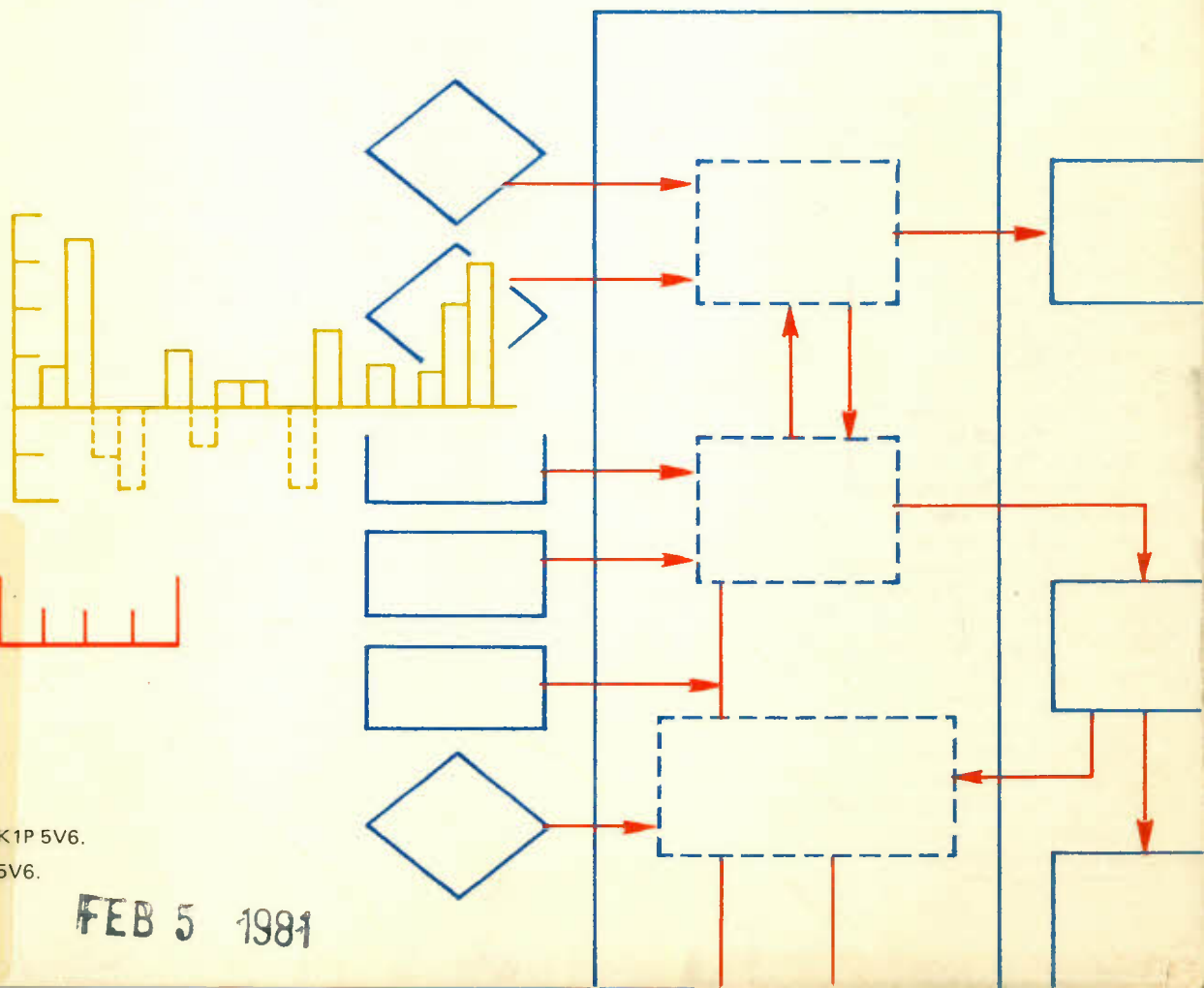


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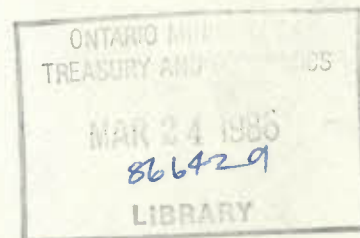


DISCUSSION PAPER NO. 185

An Assessment of the Impact of the
Federal Budget on the Canadian Economy

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assisted by P. Nevin

An analysis using
CANDIDE model 2.0



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AN ASSESSMENT OF THE IMPACT OF THE FEDERAL BUDGET ON THE CANADIAN ECONOMY

Summary

In the Seventeenth Annual Review, a Prebudget Base Case and a number of alternatives are presented. These projections, which were developed in August 1980, provide an assessment of many issues that were the focus of public discussion during the late summer and early fall. At that time, no information was available on the economic assumptions underlying the Federal Budget, as set forth on October 28 by the Minister of Finance, or the specific policies to be included in it.

The Federal Budget and its underlying economic assumptions are now known. The Budget includes a clear statement of energy policy as well as the government's assumptions about the economic environment for the period 1980-1985. As a result we have extended the analysis in the Seventeenth Annual Review and present the results in "An Assessment of the Impact of the Federal Budget on Canadian Economy."

The energy statement which accompanies the Federal Budget includes an explicit statement and data concerning domestic oil and gas pricing, energy taxation, expenditure incentives

Résumé

Le Dix-septième Exposé annuel présente un scénario de référence pré-budgétaire et un certain nombre d'autres simulations qui ont été mises au point en août 1980. Toutes ces projections ont trait à un certain nombre de questions qui faisaient l'objet de débats publics à la fin de l'été et au début de l'automne de cette année. A ce moment-là, nous ne savions encore rien des hypothèses économiques sur lesquelles reposeraient les prévisions budgétaires du gouvernement fédéral, présentées le 28 octobre par le ministre des Finances, ni des mesures particulières que le Budget devait renfermer.

Nous sommes maintenant fixés sur ces deux points. Le Budget comprend une déclaration précise sur la politique énergétique, de même que les hypothèses du gouvernement relativement à la conjoncture économique pour les années 1980 à 1985. Armés de ces renseignements, nous avons poursuivi l'analyse du Dix-septième Exposé et nous présentons dans le document dont le titre apparaît ci-haut un scénario des répercussions possibles du Budget fédéral au cours de cette période.

Le Budget s'accompagne d'un énoncé sur la politique énergétique qui comprend des données explicites sur les prix intérieurs du pétrole et du gaz naturel, sur les impôts frappant l'énergie, sur les dépenses visant à stimuler la prospection et la substitution

related to exploration, and conversion from oil, and other related items for the period 1980-1985. After 1985 there is less explicit data on taxation and expenditure programs, which makes analysis beyond 1985 less meaningful. For this reason we have not extended our analysis beyond 1985.

In developing the analysis of the Federal Budget, three major sets of differences are considered. To trace the impact that each of these important differences has on the Prebudget Base Case, we have developed three alternatives.

The first alternative substitutes the world pricing assumptions for crude petroleum used in the Federal Budget for our Prebudget Base Case assumptions. The Federal Budget assumes higher rates of growth for world crude petroleum prices than those in the Prebudget Base Case. This also implies certain changes to royalties, subsidies and the oil export tax, as this first alternative assumes no change in the domestic price of crude petroleum or natural gas from the Prebudget Base Case.

In the second alternative, we include not only the world pricing assumptions for crude petroleum implicit in the Federal Budget, but also the assumptions about domestic oil and natural

d'autres sources d'énergie au pétrole, et sur d'autres éléments connexes, pour les années 1980 à 1985. Au-delà de 1985, les données sur la fiscalité et les programmes de dépenses sont moins précises, ce qui affaiblit la portée de l'analyse après cette date. C'est pourquoi nos projections s'arrêtent à 1985.

Dans notre analyse du Budget, nous avons examiné trois catégories de différences entre notre scénario de référence pré-budgétaire et les projections à moyen terme du ministère des Finances. Afin de mesurer l'incidence de chacune de ces différences sur le scénario pré-budgétaire, nous avons effectué trois simulations.

Dans la première simulation, nous avons remplacé les hypothèses relatives au prix mondial du pétrole que renferme le scénario de référence par celles qui sont utilisées dans le Budget. La hausse projetée de ces prix est plus rapide dans le Budget que celle que contient notre scénario. Comme nous avons retenu ici les hypothèses du scénario de référence à l'égard des prix intérieurs, il en résulte des chiffres modifiés pour les redevances, les subventions et la taxe sur les exportations de pétrole.

Dans la deuxième simulation, nous avons tenu compte non seulement des hypothèses du Budget fédéral quant au prix mondial du pétrole brut, mais aussi de celles qui touchent aux prix intérieurs du pétrole et du gaz naturel, aux taxes sur les ressources énergétiques

gas pricing, energy and non-energy taxation, spending related to exploration incentives, and the off-oil conversion and substitution incentives. We include a group of assumptions associated with the anticipated path for the consumption of gasoline, home heating fuel, natural gas and the exports and imports of crude petroleum and natural gas volumes that are related to the conversion and substitution incentives. Also affected are royalties, subsidies and the oil export tax, which are different from the levels reported both in the Prebudget Base Case and in the first alternative. Not only are the world pricing assumptions set at Budget levels as in the first alternative, but different domestic pricing assumptions and paths for exports and imports are also used in this second alternative.

In a third alternative, we add to the second alternative revised assumptions related to the timing of certain large energy investment projects and the profile for investment spending in public utilities.

We compare the three CANDIDE Model 2.0 alternatives which assess the medium-term impact of the Federal Budget with the Department of Finance medium-term projections and with the Prebudget Base Case. Our point of

et aux taxes générales, aux dépenses visant à stimuler la prospection, et aux mesures visant à favoriser le remplacement du pétrole par d'autres sources d'énergie. Cette simulation renferme aussi un ensemble d'hypothèses relatives à l'évolution future de la consommation de pétrole, de mazout et de gaz naturel, ainsi que des exportations et des importations de pétrole et de gaz naturel qui sont liées aux mesures d'encouragement à la conversion et à la substitution. Ici encore, ces hypothèses influent sur les redevances, les subventions et la taxe sur les exportations de pétrole, qui diffèrent toutes des niveaux enregistrés tant dans notre scénario pré-budgétaire que dans la première simulation. Dans cette deuxième projection, en plus d'utiliser les hypothèses du Budget à l'égard du prix mondial du pétrole, nous modifions celles qui ont trait aux prix intérieurs et à l'évolution des exportations et des importations.

Dans la troisième simulation, nous avons ajouté à la deuxième des hypothèses révisées quant à l'échancier de certains grands projets d'investissement dans le secteur énergétique et à celui des dépenses consacrées aux services d'utilité publique.

Nous comparons ensuite ces trois simulations obtenues à l'aide du modèle CANDIDE 2.0, qui mesurent les répercussions à moyen terme du Budget fédéral, avec les projections à moyen terme du ministère des Finances et avec notre scénario de référence pré-budgétaire.

departure for this exercise is the Economic Council of Canada's Prebudget Base Case as described in Chapter 2 of the Seventeenth Annual Review. In order to assess the differences that exist between the Prebudget Base Case and the Department of Finance's medium-term projection, which includes not only an assessment of the economic outlook but also, implicitly, the impact of the Federal Budget, it is important to examine each alternative carefully.

In Table 1 we report the results obtained from this analysis for selected economic indicators. Four of the projections in Table 1 are derived from CANDIDE Model 2.0, the remaining projection being that of the Department of Finance. The reasons for the differences between the Department of Finance projection and our Prebudget Base Case are now evident. The largest difference in the growth rate in real Gross National Expenditure in 1980 is associated with differences in assumptions related to energy investment and especially those associated with public utilities. The Federal Budget impact reduces the CANDIDE Model 2.0 growth rate in 1980 from

Le point de départ de cette comparaison est le scénario tel que décrit dans le chapitre 2 du Dix-septième Exposé. Afin de mieux mesurer les différences entre le scénario prébudgétaire et les projections du ministère des Finances -- lesquelles comportent non seulement une présentation des perspectives économiques mais aussi, implicitement, une évaluation de l'impact du budget fédéral --, il importe d'examiner soigneusement chacune des simulations.

Au tableau 1 figurent les résultats de notre analyse à l'égard de certains indicateurs économiques. Dans chaque cas, les quatre premières projections sont dérivées du modèle CANDIDE 2.0, tandis que la cinquième est celle du ministère des Finances. La lecture du tableau permet de voir clairement les raisons des écarts entre les projections du ministère des Finances et notre scénario de référence. L'écart le plus important à l'égard de la croissance de la dépense nationale brute réelle en 1980 provient des différences entre les hypothèses relatives aux investissements énergétiques, notamment dans le cas des services d'utilité publique. Le Budget a pour effet d'abaisser le taux de croissance indiqué par le modèle CANDIDE 2.0 de -0,4 à -0,6 % en 1980. Si l'on incorpore les projections du Budget relativement à l'investissement énergétique, ce chiffre descend à -1,1 % et se rapproche ainsi de la projection du ministère des Finances (-1,0 %).

Table/Tableau 1

Impact on Selected Economic Indicators - Summary/Effets sur divers indicateurs économiques - Résumé

	1980	1981	1982	1983	1984	1985	
Real GNE (per cent change)							DNB réelle (variation en pourcentage)
Prebudget Base Case ¹	-0.4	1.4	3.1	3.5	3.3	2.4	Scénario pré-budgétaire
Budget With No Alternative Energy Investment	-0.5	1.5	3.2	3.7	3.4	2.6	Scénario pré-budgétaire, avec prix mondiaux du budget
Budget With Alternative Energy Investment	-1.1	0.5	3.2	3.5	3.7	2.1	Budget, sans autres investissements énergétiques
Finance Medium Term Projection ²	-1.0	1.0	4.0	3.7	3.6	3.3	Budget, avec autres investissements énergétiques
							Projection à moyen terme des finances
Consumer Price Index (per cent change)							IPC (taux de variation)
Prebudget Base Case	9.8	10.6	9.9	9.0	9.0	8.7	Scénario pré-budgétaire
Budget With No Alternative Energy Investment	9.9	10.6	9.9	9.0	9.1	8.6	Scénario pré-budgétaire, avec prix mondiaux du budget
Budget With Alternative Energy Investment	10.1	11.1	10.0	9.1	9.5	9.1	Budget, sans autres investissements énergétiques
Finance Medium Term Projection	9.8	11.4	10.0	9.2	9.4	9.3	Budget, avec autres investissements énergétiques
	9.7	10.2	9.4	8.8	8.6	8.2	Projection à moyen terme des finances
Unemployment Rate (per cent level)							Taux de chômage (niveau en %)
Prebudget Base Case	7.9	8.0	7.5	7.0	6.7	6.5	Scénario pré-budgétaire
Budget With No Alternative Energy Investment	7.9	8.0	7.4	6.9	6.5	6.2	Scénario pré-budgétaire, avec prix mondiaux du budget
Budget With Alternative Energy Investment	8.0	8.2	7.8	7.4	7.1	6.9	Budget, sans autres investissements énergétiques
Finance Medium Term Projection	7.7	8.7	8.4	8.1	7.8	7.7	Budget, avec autres investissements énergétiques
							Projection à moyen terme des finances
Exchange Rate (\$ CDN/\$ US)							Taux de change (\$ can./\$ É.-U.)
Prebudget Base Case ¹	1.172	1.169	1.171	1.186	1.193	1.200	Scénario pré-budgétaire
Budget With No Alternative Energy Investment	1.172	1.167	1.170	1.187	1.195	1.204	Scénario pré-budgétaire, avec prix mondiaux du budget
Budget With Alternative Energy Investment	1.175	1.163	1.158	1.164	1.166	1.155	Budget, sans autres investissements énergétiques
Finance Medium Term Projection ²	1.173	1.159	1.154	1.161	1.167	1.157	Budget, avec autres investissements énergétiques
	1.163	1.143	1.136	1.136	1.136	1.136	Projection à moyen terme des finances
Current Account Balance (billions of current dollars)							Solde au compte courant (milliards de \$ courants)
Prebudget Base Case ¹	-5.2	-5.6	-5.8	-8.1	-9.6	-11.1	Scénario pré-budgétaire
Budget With No Alternative Energy Investment	-5.3	-5.1	-5.3	-8.1	-9.7	-12.0	Scénario pré-budgétaire, avec prix mondiaux du budget
Budget With Alternative Energy Investment	-6.4	-5.5	-4.3	-4.2	-4.3	-1.3	Budget, sans autres investissements énergétiques
Finance Medium Term Projection ²	-6.2	-5.5	-4.0	-4.9	-5.1	-5.0	Budget, avec autres investissements énergétiques
							Projection à moyen terme des finances
Federal Deficit (billions of current dollars)							Déficit fédéral (milliards de \$ courants)
Prebudget Base Case ¹	-10.8	-12.5	-12.8	-13.3	-11.4	-12.5	Scénario pré-budgétaire
Budget With No Alternative Energy Investment	-10.7	-12.5	-13.2	-14.4	-13.0	-15.6	Scénario pré-budgétaire, avec prix mondiaux du budget
Budget With Alternative Energy Investment	-11.0	-9.3	-7.0	-4.5	-0.5	1.9	Budget, sans autres investissements énergétiques
Finance Medium Term Projection ^{2,3}	-11.4	-10.2	-8.1	-5.7	-1.0	2.4	Budget, avec autres investissements énergétiques
	-11.9	-10.1	-8.5	-7.5	Projection à moyen terme des finances
Provincial Surplus (billions of current dollars)							Excédents provinciaux (milliards de \$ courants)
Prebudget Base Case ¹	2.7	4.5	6.1	7.3	8.7	10.0	Scénario pré-budgétaire
Budget With No Alternative Energy Investment	2.4	4.5	6.4	8.0	9.6	11.1	Scénario pré-budgétaire, avec prix mondiaux du budget
Budget With Alternative Energy Investment	1.9	2.6	3.3	3.9	5.1	6.6	Budget, sans autres investissements énergétiques
Finance Medium Term Projection ²	1.8	2.2	3.1	3.7	5.1	6.7	Budget, avec autres investissements énergétiques
	Projection à moyen terme des finances

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1 Taken from Canada - The Medium Term Performance and Issues, Background Document for the 17th Annual Review, Economic Council of Canada, November 1980./Canada - The Medium Term Performance and Issues, document du Dix-septième Exposé annuel, Conseil économique du Canada, novembre 1980.

2 Taken from The Medium-Term Prospects for the Canadian Economy, 1980-1985, Department of Finance, Canada, October 1980./Les perspectives à moyen terme de l'économie canadienne, 1980-1985, ministère des Finances, Canada, octobre 1980.

3 Fiscal years 1980-81 to 1983-84./Exercices financiers 1980-1981 à 1983-1984.

-0.4 per cent to -0.6 per cent. Using the Budget projections for energy investment further lowers the growth rate to -1.1 per cent. This is close to the Department of Finance projection of -1.0 per cent.

The differences in 1981 are also clear. The imposition of the Federal Budget assumptions without the alternative energy investment assumptions reduces the CANDIDE Model 2.0 growth rate from 1.4 per cent to 1.1 per cent. Adding the alternative energy investment assumptions of the Department of Finance further reduces the growth rate to .5 per cent. This compares with the Department of Finance projection of 1.0 per cent for real growth in 1981. For the remainder of the decade, the Department of Finance projection shows higher growth rates on average than either of the Budget assessment calculations derived from CANDIDE Model 2.0. Let us now turn to the rate of inflation.

Some important differences between the Department of Finance projection and the CANDIDE Model 2.0 projections are revealed in the rate of inflation. On average, during the period 1981-1985, the

Les différences pour l'année 1981 sont également évidentes. Si l'on applique les hypothèses du Budget sans incorporer d'autres options touchant aux investissements énergétiques, le taux de croissance de l'économie obtenu à l'aide du modèle CANDIDE 2.0 passe de 1,4 à 1,1 %. Si l'on incorpore les hypothèses du ministère des Finances touchant aux investissements énergétiques, le taux de croissance s'en trouve de nouveau réduit, cette fois à 0,5 %. Ce chiffre se compare à la projection de 1 % avancée par le ministère des Finances. Pour le reste de la décennie, les projections du ministère indiquent des taux plus élevés, en moyenne, que ceux que produit le modèle CANDIDE 2.0 à l'égard des répercussions du Budget. Voyons donc maintenant les résultats quant au taux d'inflation.

On constate, ici aussi, d'importantes différences entre les projections du ministère des Finances et celles du modèle CANDIDE 2.0. En moyenne, le taux d'inflation diffère d'environ 1,0 point de pourcentage par année de 1981 à 1985 entre les deux séries de projections. Pour 1981, les simulations du modèle CANDIDE 2.0 incorporant les dispositions budgétaires donnent un taux d'inflation supérieur à 11,0 %. Le chiffre projeté par le ministère des Finances est 10,2 %.

rate of inflation differs by approximately 1.0 percentage point per year. For 1981, Budget projections with CANDIDE Model 2.0 show a rate of inflation above 11.0 per cent. This compares with the Department of Finance projection of 10.2 per cent.

The general impact of the Federal Budget appears to be one which increases the rate of unemployment. The Prebudget Base Case suggests an unemployment rate of 8.0 per cent for 1981, but our Budget alternatives show the unemployment rate lying between 8.2 per cent and 8.6 per cent. This compares with Finance's projection of 8.7 per cent for 1981. However, our Budget projections using CANDIDE Model 2.0 show a more rapid decline in the unemployment rate than that of the Department of Finance. But, by 1985, CANDIDE Model 2.0 Budget projections show higher unemployment rates than in the Prebudget Base Case.

The impact on the current account balance and the exchange rate as we move from the Prebudget Base Case to the Budget impact assessment cases is interesting. By 1984 the differences between the Department of Finance projection and our Budget assessment cases are small, compared with those generated by the Prebudget Base Case.

L'effet général du Budget fédéral semble être de faire croître le taux de chômage. Notre scénario pré-budgétaire situe ce dernier à 8,0 % en 1981, mais nos nouvelles simulations post-budgétaires le font varier de 8,2 à 8,6 %, tandis qu'il atteint 8,7 % dans la projection du ministère des Finances. Si nos simulations post-budgétaires projettent une diminution plus rapide du taux de chômage que celle du ministère des Finances, ce taux n'en est pas moins supérieur, en 1985, à celui qu'avancait notre scénario pré-budgétaire pour cette année-là.

Le passage de notre scénario pré-budgétaire à nos nouvelles projections a, sur le solde courant et sur le taux de change, des répercussions qui nous paraissent intéressantes de noter. Ainsi, vers 1984, l'écart entre notre projection post-budgétaire et celle du ministère des Finances est faible, comparativement aux résultats de notre scénario pré-budgétaire. L'analyse du ministère des Finances donne un dollar légèrement mieux coté que dans nos projections post-budgétaires. Il faut rappeler que l'évolution du solde courant dans nos nouvelles projections est influencée par la tendance présumée des importations de pétrole brut. Du reste, nous avons posé à cet égard une hypothèse identique à celle qui sert aux projections du ministère des Finances.

The Department of Finance assessment implies a slightly stronger dollar than our Budget assessment alternatives. We must remember that the path for the current account balance in our Budget assessment cases is influenced by the assumed path for imports of crude petroleum. In fact, we have used the same assumed path as that of the Department of Finance medium-term projections.

The impact that the Federal Budget will have on the federal deficit is also interesting. Although Finance's medium-term projection figures are for fiscal years, the improved position of the federal government as a result of the Federal Budget is substantiated in our Budget impact assessment cases.

This exercise must be interpreted with a great deal of caution. We ourselves have been careful to break the assessment into three important steps. However, there are still a number of critical assumptions which must not be forgotten. The most critical is the assumed path for crude petroleum imports and the implied substitution of natural gas for domestic fuel oil in residential and commercial use. This has an important bearing on the outcome for both the current account balance and the federal deficit.

Les effets que le Budget aura sur le déficit fédéral présentent également un certain intérêt. Les projections du ministère des Finances, qui portent sur les années financières, prévoient une amélioration du solde fédéral causée par le Budget, et ce résultat se trouve confirmé dans nos simulations.

Il faut toutefois interpréter tous ces résultats avec beaucoup de prudence et c'est pourquoi nous avons nous-mêmes pris soin de répartir l'analyse en trois étapes. Il reste en effet un certain nombre d'hypothèses critiques qu'il ne faut pas oublier. La plus importante a trait à l'évolution future des importations de pétrole brut et au remplacement du mazout canadien par le gaz naturel dans les secteurs résidentiel et commercial. Ce facteur a une grande incidence sur le solde courant de la balance des paiements et sur le déficit fédéral. Si d'autres ressources énergétiques ne viennent pas remplacer le pétrole d'origine

If this import and domestic substitution away from oil does not occur, import subsidy payments will not decline and the current account balance will not improve. This will imply less appreciation in the exchange rate, which in turn will imply upward pressure on the inflation rate. If the import compensation charge is increased to offset the need for higher subsidies, this will also lead to higher rates of inflation.

None of the outcomes for growth in real Gross National Expenditure in 1981 are encouraging. They range from 0.5 per cent to 1.1 per cent. The recovery in 1982 and 1983 is not spectacular. In the long run, the federal deficit declines, approaching near balance by 1983, with a combined federal-provincial surplus materializing in the period 1984-1985. Most of this surplus remains in the provincial sector. It appears that surpluses will continue to emerge in the provincial sector, stemming primarily from oil rents accruing to the three Western provinces.

If, by the end of the period, the federal deficit is reduced to near balance, what then might be the effect on the composition of savings? Table 2 contains the deviation of the Budget alternative from the Prebudget Base

canadienne et étrangère, les subventions à l'importation ne diminueront pas et le compte courant ne s'améliorera pas. Il en résultera une appréciation moindre du dollar canadien et, par suite, une reprise des pressions à la hausse sur le taux d'inflation. Si l'on augmente les frais des indemnités pétrolières pour financer les subventions supplémentaires qui seront nécessaires, cette hausse aura aussi pour effet de faire grimper le taux d'inflation.

Les calculs n'ont pas produit de résultats encourageants pour ce qui est de la croissance de la dépense nationale brute réelle en 1981, puisque les chiffres oscillent de 0,5 à 1,1 %. Pour 1982 et 1983, la reprise ne paraît pas devoir être spectaculaire. À plus long terme, le déficit fédéral diminue, pour se rapprocher de l'équilibre en 1983, et le solde combiné du fédéral et des provinces affiche un excédent en 1984-1985. Cet excédent reste d'ailleurs plus important à l'échelon provincial grâce, surtout, aux rentes pétrolières accumulées par les trois provinces de l'Ouest.

Si le déficit fédéral est effectivement abaissé à près de zéro à la fin de la période de projection, quelle influence ce facteur aura-t-il sur la composition de l'épargne? Le tableau 2 présente l'écart qui sépare nos projections post-budgétaires de notre scénario pré-budgétaire à cet

Table/Tableau 2

Deviation of Budget (With No Alternative Energy Investment) from Prebudget Base Case for the Composition of Savings¹/Écart entre les projections du Budget (sans options en matière d'investissements énergétiques) et celles du scénario de référence pré-budgétaire, à l'égard de la composition de l'épargne¹

Percentage points/En points de pourcentage

	1981	1982	1983	1984	1985	
Personal Sector	-0.3	-0.1	-0.0	-0.2	-0.3	Épargne personnelle
Government Sector	1.7	3.4	5.2	6.0	8.4	Épargne publique
Federal	4.1	6.5	8.5	9.1	10.9	Gouvernement fédéral
Provincial	-2.4	-3.1	-3.2	-3.0	-2.4	Gouvernements provinciaux
Municipal	-0.0	-0.0	-0.0	0.0	0.0	Administrations municipales
Hospital	0.0	0.0	-0.0	-0.0	-0.0	Hôpitaux
Canada Pension	0.0	-0.0	-0.0	-0.1	-0.1	Régime de pensions du Canada
Quebec Pension	0.0	-0.0	-0.0	-0.0	-0.0	Régime de rentes du Québec
Business Sector	-1.4	-1.6	-1.3	-1.4	-0.7	Épargne des entreprises
Foreign Sector	-0.1	-1.7	-3.8	-4.4	-7.3	Épargne extérieure

1 CANDIDE Model 2.0, November 1980. Total of the shifts in the four sectors should add to zero, plus or minus rounding differences./Modèle CANDIDE 2.0, novembre 1980. Le total des changements dans les quatre secteurs devrait donner zéro, avec des différences positives ou négatives plus ou moins grandes à cause des chiffres arrondis.

Case for the composition of savings for the period 1981-1985. Initially, the federal proportion increases at the expense of the provinces and the business sector. By the 1984-1985 period, the foreign sector is also making a substantial contribution. Thus, one of the hidden impacts of the Federal Budget is its compositional effect on savings. It will have a tendency to reduce the percentage of savings accruing to provincial governments, the corporate sector, and the personal sector, and at the same time to decrease the proportion of dis-savings or increase the proportion of savings accruing to the federal sector.

The reader might wish to review Chapters 2 and 3 of the Council's Seventeenth Annual Review. In Chapter 3 we discuss two alternative approaches which the federal government might consider to reduce its deficit. One of these approaches deals with a number of initiatives that among other things include: 1) a blended pricing scheme; 2) a natural gas export tax; and 3) increased corporate taxation. We called this the oil-based deficit reduction alternative.

In Chapter 3 we indicate that the oil-based deficit reduction alternative should only be considered in joint consultation with the

égard. Dans les premières années, la part fédérale augmente aux dépens de celles des provinces et du secteur des entreprises. Vers 1984-1985, le secteur extérieur apporte lui aussi une contribution importante. C'est donc dire que, parmi les effets latents du Budget fédéral, il faut compter son incidence sur la composition de l'épargne. Les mesures qu'il renferme auront tendance à réduire la proportion de l'épargne aux mains des gouvernements provinciaux, des entreprises et des personnes et, en même temps, à diminuer la proportion de la désépargne ou encore à accroître la part de l'épargne fédérale.

Nous invitons le lecteur à se reporter aux chapitres 2 et 3 du Dix-septième Exposé du Conseil. Le chapitre 3 présente deux formules que le gouvernement fédéral pourrait mettre en oeuvre pour réduire son déficit. L'une d'elles comprend un certain nombre d'initiatives dont, notamment, un régime de prix mixtes, une taxe à l'exportation du gaz naturel et une augmentation de l'impôt sur les revenus des sociétés. Il s'agit donc d'une stratégie qui vise à abaisser le déficit au moyen des redevances tirées du pétrole.

Dans le chapitre 3, nous signalons que cette option ne devrait être considérée que dans le cadre d'une action concertée avec les provinces, en particulier celles qui produisent du pétrole. Nous

provinces, especially the oil producing provinces. However, in this alternative we did not include a different path for crude petroleum and natural gas consumption, nor for import substitution or for the incentives away from crude petroleum. As a result, the alternative in Chapter 3 of the Review is devoid of the balance-of-payments and exchange rate effects observed in the Federal Budget impact assessment alternatives. However, the compositional shifts in savings from the corporate sector, from the provincial sector and from the personal sector were observed and highlighted.

In Chapter 3 we also presented an alternative which did not assume joint action between the provinces and the federal government to reduce the federal deficit, but instead assumed unilateral action by the federal government. In particular, this second alternative excluded the blended pricing scheme as an option, but included our Prebudget Base Case assumption on oil pricing. It also included much higher direct taxation by the federal government on all Canadians. In Chapter 3 we indicated that the alternative which assumes joint action between the provinces and the federal government in reducing the federal deficit was more attractive from the point of view of its

n'y avons cependant pas incorporé d'hypothèses différentes à l'égard de la consommation de pétrole brut et de gaz naturel, de la réduction des importations de pétrole brut et des mesures visant à encourager le remplacement du pétrole par d'autres formes d'énergie. C'est pourquoi le scénario présenté au chapitre 3 ne rend pas compte de l'évolution de la balance des paiements et du taux de change, contrairement à nos simulations post-budgétaires. Nous y avons cependant souligné l'importance relative moindre de l'épargne des provinces, des personnes et des sociétés.

Dans ce même chapitre de l'Exposé, nous avons aussi présenté un scénario ne prévoyant aucune concertation entre les provinces et le gouvernement fédéral en vue de réduire le déficit de ce dernier, mais plutôt une action unilatérale de la part d'Ottawa. Cette deuxième simulation exclut notamment l'option du prix mixte, mais elle renferme l'hypothèse relative au prix du pétrole servant à notre scénario de référence pré-budgétaire. Elle prévoit également que tous les Canadiens devront payer des impôts fédéraux directs beaucoup plus élevés. Nous faisons en outre valoir que le scénario reposant sur une action conjointe des provinces et du gouvernement fédéral a des effets plus positifs, du point de vue de la production et des emplois, que celui de l'action unilatérale.

effect on output and jobs than the unilateral action case.

The federal Budget does more than what was suggested in the oil-based deficit reduction alternative reported in Chapter 3 of the Seventeenth Annual Review. It introduces elaborate incentives supported by spending in the area of capital assistance and subsidies for substitution away from oil, import substitution, and increased use of natural gas in commercial, industrial, and residential use, along with exploration and Canadian ownership incentives. If we had to point to those places where the Federal Budget, either in impact or in assumptions, is optimistic, we would have to include the ones concerning the domestic substitution of natural gas for crude petroleum and the associated import substitution away from crude petroleum which the Budget projections imply. Although incentives for substitution have been offered not only by way of higher prices (market induced substitution) but also by way of subsidies and capital assistance (non-market induced substitution), these assumptions may not, in fact, be the actual outcome. Furthermore the compositional shift in savings that we observe in our calculations and that we observed in the oil-based deficit reduction alternative reported in

Le Budget fédéral va plus loin que notre scénario de la réduction du déficit au moyen des redevances pétrolières. Il présente en effet des mesures d'incitation très élaborées, appuyées par des dépenses d'immobilisations et des subventions pour la substitution du pétrole canadien par d'autres sources d'énergie, le remplacement partiel du pétrole importé et le recours accru au gaz naturel dans les secteurs commercial, industriel et résidentiel, ainsi que des mesures visant à encourager les travaux de prospection et à favoriser un accroissement du contrôle canadien sur les ressources énergétiques. S'il nous fallait indiquer sur quels points le Budget se montre optimiste, soit à l'égard de ses répercussions éventuelles ou de ses hypothèses, il faudrait mentionner les programmes visant la substitution du gaz naturel au pétrole brut et la réduction des importations de pétrole. Mais, bien qu'on ait visé à stimuler cette substitution par le truchement de prix plus élevés (substitution suscitée par le marché) et par des subventions et une aide financière directes (substitution non suscitée par le marché), il demeure possible que ces hypothèses ne se concrétisent pas. En outre, l'évolution de la composition de l'épargne qui se dégage de nos calculs et que nous notons dans le scénario de la réduction du déficit au moyen des redevances pétrolières, dont il est question dans le chapitre 3 de l'Exposé, fait présentement l'objet de débats publics. Il faudra surveiller attentivement l'incidence que ce transfert d'épargne pourrait avoir sur l'investissement.

Chapter 3 of the Review is currently under public discussion. The impact that this shift in savings will have on investment is an area to watch carefully.

If the off oil substitution and import substitution does not occur as assumed in the Federal Budget and reduced investment spending results from the shift of savings (away from producers to the federal sector), we may find a situation where domestic supply is reduced and domestic demand is unchanged, thereby resulting in further dependence on imported crude petroleum.

We need only remember that in the mid-1970s the oil import subsidy programme was introduced under the assumption that the OPEC price shock of late 1973 was a once-in-lifetime event. From this point of view, the programme appeared to be the best way to absorb the impact of the shock on Canadian incomes over the medium run as domestic crude petroleum prices adjusted upwards. As it turned out, this was not the case. We must be careful that we do not make the same mistake with respect to domestic substitution, import substitution, and the impact that the Budget could have on the composition of savings and thus, on the level of investment.

Si la substitution du pétrole par d'autres sources d'énergie et la réduction des importations ne se produisent pas, et si le transfert de l'épargne des producteurs vers le secteur fédéral se traduit par une baisse des investissements, nous pourrions connaître une situation dans laquelle l'offre intérieure serait réduite et la demande intérieure inchangée, ce qui contribuerait à accroître davantage notre dépendance envers les importations de pétrole.

Est-il besoin de rappeler qu'au milieu des années 70, le programme de subventions aux importations de pétrole avait été mis en place parce qu'on croyait que l'explosion des prix de l'OPEP à la fin de 1973 ne se reproduirait jamais plus ? Dans une telle perspective, ce programme semblait le meilleur moyen d'absorber à moyen terme les répercussions de ce choc sur les revenus des Canadiens, à mesure que les prix du pétrole canadien s'accroîtraient aussi. Malheureusement, les choses se sont passées autrement. Il ne faudrait donc pas faire la même erreur en ce qui concerne la substitution du pétrole canadien, la réduction du pétrole importé et les effets que pourrait exercer le Budget sur la composition de l'épargne, et donc sur le niveau de l'investissement.

Preface

This paper contains an analysis of the October 28, 1980 Federal Budget. Results are reported that are obtained using CANDIDE Model 2.0. It would assist the reader to be familiar with the contents of the following:

- The Budget, Department of Finance Canada, October 28, 1980
- Budget Papers, Department of Finance Canada, October 28, 1980
- The Medium-Term Prospects for the Canadian Economy, 1980-1985, Department of Finance Canada, October, 1980
- The National Energy Program, 1980, Energy Mines and Resources Canada
- Seventeenth Annual Review: A Climate of Uncertainty, Economic Council of Canada, December, 1980
- Canada, The Medium Term Performance and Issues, Background Document to the Seventeenth Annual Review, Economic Council of Canada, December, 1980.

Introduction

In the background document to the Seventeenth Annual Review,¹ a Prebudget Base Case and 26 alternatives are presented. This research formed the basis of Chapters 2 and 3 of the Economic Council's Seventeenth Annual Review: A Climate of Uncertainty.² These alternatives deal with: (1) the impact of the external environment; (2) an assessment of Canadian economic potential; (3) the impact of selected domestic energy investment projects; (4) risks on the side of inflation; (5) the domestic oil pricing issue; (6) the impact of savings incentives and de-indexation of personal income taxes; (7) the impact of business investment incentives; and (8) an examination of certain policy initiatives that might reduce the federal deficit.

The Prebudget Base Case and alternatives were developed in August 1980. The range of alternatives considered provides an assessment of many items which were the focus of public discussion during the late summer and early fall. At that time, no information was available on the economic assumptions underlying the Federal Budget as set forth on October 28 by the Minister of Finance or on the specific policies to be included in it.

The Federal Budget is now known. Included in it are a clear statement of energy policy and the assumptions underlying the economic environment for the period 1980-85. In this

document we extend the analysis of the Seventeenth Annual Review to include an analysis of the impact of the Federal Budget during that period. This document is a factual examination of the impact of the Federal Budget as interpreted by CANDIDE Model 2.0.

The energy statement which accompanies the Federal Budget includes explicit data concerning domestic oil and gas pricing, energy taxation, expenditure incentives related to exploration, expenditure incentives related to conversion from oil, and other related items for the period 1980-85. After 1985 there is less explicit data on taxation and expenditure programs, which makes analysis beyond that point less meaningful. For this reason we have not extended our analysis beyond 1985.

In developing the analysis of the Federal Budget, three major sets of differences are considered. First, the assumption for the path of the world price of crude petroleum from 1980 to 1985 differs in the Federal Budget from that underlying the Prebudget Base Case. Second, the path for domestic oil and natural gas prices, the associated taxes on energy, and the recycling of these tax revenues for purposes of exploration, conversion, and substitution are different from the Prebudget Base Case. Third, the timing and magnitude of certain large energy projects and the path for investment by public utilities differ from the Prebudget Base Case assumptions.

To trace the impact that each of these important differences has on the Prebudget Base Case, we have developed three alternatives. The first substitutes the world pricing assumptions for crude petroleum used in the Federal Budget for our Prebudget Base Case assumptions. The Federal Budget assumes higher rates of growth for world crude petroleum prices than those in the Prebudget Base Case. This also implies certain changes to royalties, subsidies, and the oil export tax, as this first alternative assumes no change in the domestic price of crude petroleum or natural gas from the Prebudget Base Case.

In the second alternative, we include not only the Budget's world pricing assumptions for crude petroleum but also its assumptions about domestic oil and natural gas pricing, energy and non-energy taxation, and spending related to exploration incentives, as well as the off-oil conversion and substitution incentives. We include a group of assumptions associated with the anticipated path for the consumption of gasoline, home heating fuel, natural gas, and the exports and imports of crude petroleum and natural gas volumes that are related to the conversion and substitution incentives. Also affected are royalties, subsidies, and the oil export tax, which are different from the levels reported both in the Prebudget Base Case and in the first alternative.

In a third alternative, we add to the second alternative revised assumptions related to the timing of certain large energy investment projects and the profile for investment spending in public utilities.

We divide this document as follows. Section 1 gives a brief outline of the Prebudget Base Case assumptions and analysis of the major impacts. Section 2 compares the Budget assumptions for the world price of crude petroleum with our Prebudget Base Case assumptions, including the implied changes in subsidy payments and royalties. Section 3 discusses the impact of these assumption changes on the Prebudget Base Case. In discussing the impacts we concentrate on a selected group of indicators. These include the rate of growth for GNE, the rate of growth for the CPI, the unemployment rate, the trade balance, the exchange rate, the federal government deficit, and the provincial government surplus. Section 4 gives a detailed account of assumption changes related to the wellhead and city gate prices for natural gas and crude petroleum, along with an explicit summary of all taxation and expenditure adjustments required in the Prebudget Base Case to implement the Federal Budget. Section 5 discusses the impact of these changes on the first alternative reported in Section 3. This gives the impact of the Federal Budget per se. Section 6 indicates explicitly the differences in assumptions associated with energy investment, both in timing and magnitude,

including differences in public utilities investment. In Section 7 we discuss in detail the impact that these changes have on the second alternative reported in Section 5. Section 8 summarizes our findings and compares our results with those outlined by the Department of Finance in the medium-term prospects document included among the Budget Papers.³

SECTION 1

THE PREBUDGET BASE CASE EXTERNAL ENVIRONMENT, ENERGY, AND DOMESTIC POLICY ASSUMPTIONS

Before dealing with the impact of the Federal Budget in detail, we review the assumptions underlying the Prebudget Base Case projection that will be used for purposes of comparison when the Federal Budget alternatives are developed and discussed in later sections. These assumptions can be divided into three broad classes: those directly associated with the external environment (the United States and other OECD countries); those closely related to domestic energy pricing and energy investment; and those related to domestic fiscal and monetary policy.

Table 1 includes the major indicators that summarize the anticipated performance of the U.S. and other OECD economies for the period 1980-85. Most apparent is the weak performance we anticipate for the OECD, and in particular for the United States, in 1980. This poor performance continues in 1981, with only a weak recovery. In the United States, we anticipate the unemployment rate will rise to 8.4 per cent and then follow a path close to 7 per cent as we move to the mid point of the decade. Inflation rates will be close to 14 per cent in 1980 and average above 8.5 per cent for the remainder of the period. U.S. interest rates are anticipated to follow a downward trend from current levels, averaging close to 9.0 per cent by the middle of the decade.

Table 1
External Environment Assumptions - Prebudget Base Case Projection¹

	1980	1981	1982	1983	1984	1985
OECD						
Industrial Production (Per Cent Change)	-1.7	1.2	5.1	5.0	4.4	3.6
United States ²						
Real GNE (Per Cent Change)	-1.3	0.5	3.6	2.7	3.0	2.0
Industrial Production (Per Cent Change)	-4.0	0.7	5.9	5.2	4.4	3.2
CPI (Per Cent Change)	14.0	11.2	10.1	8.2	8.3	9.2
Unemployment (Per Cent Level)	7.5	8.4	7.9	7.4	7.1	7.1
Short-Term Interest Rate (Per Cent Level)	11.3	10.4	8.9	8.7	8.6	9.0
Overseas Countries ³						
Industrial Production (Per Cent Change)	2.1	2.1	3.4	4.6	4.4	4.4
Crude Petroleum ³						
International Price - \$ CDN (Per Cent Change)	63.5	11.1	9.7	10.6	9.4	9.2

1 CANDIDE Model 2.0, August 1980.
 2 Latest available projections of Wharton Econometric Forecasting Associates, Philadelphia, Pa., as of August, 1980.
 3 Economic Council of Canada Estimates, August, 1980.

This performance is extremely poor for both the United States and other OECD countries. The recovery period (1981-82) for the United States is nothing like that experienced after the downturn of 1974-75. Whereas real growth in the United States during 1976 approached 7.0 per cent, we do not see this occurring during the period 1981-84. Worse still, the weak sectors in the U.S. economy are those that are very important for Canadian exports: automobiles, farm machinery, steel, and lumber.

After a substantial adjustment in 1980, the international price of crude petroleum in the Prebudget Base Case tracks a rate of increase that is near 10.0 per cent per annum during 1981-85. Thus, the annual rate of increase in international oil prices is expected to be 1.0 to 1.5 percentage points higher than that of Canadian domestic prices.

In our Prebudget Base Case projection, after incorporating the most recent adjustments to the domestic oil price as of August 1980, we made the assumption that the domestic price of crude petroleum would not be governed by pre-July 1980 agreements between the federal government, the producing provinces, and the producers. We assumed that the domestic price of crude petroleum would advance at the rate of \$4.00 per barrel per year from 1981 onward, but that the existing revenue splits as of August 1980 between the producing provinces, the producers, and the federal government would be maintained. We also assumed maintenance of the federal oil import subsidy programme.

Table 2

Prebudget Large-Scale Energy Investment Project Phasing¹

<u>Project</u>	<u>Phase In</u>	<u>Peak Period</u>	<u>Phase Out</u>
Syncrude Extended	1980	1981-82	1988
Alsands	1981	1984-85	1987
Q + M Pipeline	1981	1982	1984
Alaska Highway Gas Pipeline	1981	1983-84	1987
Cold Lake	1982	1986-87	1990
East Coast Gas Pipeline	1988	1990	1992

1 Economic Council of Canada Estimates

Table 3

Prebudget Domestic Policy Assumptions, August 1980¹

Oil Pricing	\$4 per barrel per year (.85 natural gas price parity) with existing revenue splits between producing provinces, producers and federal government maintained. Federal oil import subsidy programme maintained. Syncrude levy held at \$1.75 ceiling.
Tax Policy	All policies presently in place are unchanged.
Spending Policy	Government restraint with 1.5 per cent per year real growth in goods and services. All indexed transfers maintained. Established programme financing renegotiated in 1981-82 along existing lines. Equalization payments and tax point agreements maintained.
Monetary Policy	Canadian interest rates follow U.S. rates as decade unfolds. Money supply growth targets in the 5 to 9 per cent range (average 8 per cent).

1 Economic Council of Canada Estimates

Table 2 summarizes the major oil sands and energy pipeline investment projects now underway, or anticipated during the period 1980-90, the effects of which are built into the Pre-budget Base Case. Table 3 summarizes the domestic policy assumptions underlying the Prebudget Base Case projection.

This is only a broad outline of a very detailed set of assumptions that has been incorporated into the Prebudget Base Case calculation. A more detailed discussion is found in the background document to the Seventeenth Annual Review.

SUMMARY OF THE PREBUDGET BASE CASE PROJECTION

The Prebudget Base Case projection points to the many problems that we currently face in an unchanged domestic policy environment with a lacklustre world outlook situation. In summary, the major areas of concern which emerge from a close examination of Table 4 are as follows:

- Real growth in 1980 is extremely weak with an unspectacular recovery period in 1981-1983. There are only 2 years during the period where growth is near potential.
- We anticipate that inflation in 1980 will be close to the double-digit range, with high rates continuing through 1981. We expect the long-term trend to track in the range of 8.0 to 9.0 per cent.
- Unemployment rates remain above 7 per cent until 1982. They then drift towards 6.5 per cent.
- Continued decline in the rate of growth of real wages through 1982, and only a modest recovery thereafter.
- Nominal wage growth in the 8.0 to 10.0 per cent range in 1981-83, with a long-run trend close to 10 per cent.
- Decline in the personal saving rate from the current high level of above 10 per cent, in part due to the erosion of personal saving incentives caused by inflation.
- An increased percentage of output devoted to investment dominated by many large energy projects that are assumed to begin construction in the early part of the decade.
- Continued federal deficits and provincial surpluses.
- Continued current account deficits.
- Poor performance in the rate of growth of output per manhour, in part due to the cyclical adjustment currently underway in the economies of our trading partners.

Table 4

Selected Indicators - Prebudget Base Case Projection¹
(percentage increase)

	1980	1981	1982	1983	1984	1985
Gross National Product (\$1971)	-0.4	1.4	3.1	3.5	3.3	2.4
Consumer Price Index	9.8	10.6	9.9	9.0	9.0	8.7
Unemployment Rate (level)	7.9	8.0	7.5	7.0	6.7	6.5
Labour Force	2.4	2.1	1.9	1.9	1.9	1.5
Employment	2.0	2.0	2.4	2.4	2.4	1.7
Productivity	-2.3	-0.7	0.9	1.3	1.1	1.0
Real Wage Rate	-2.2	-2.4	-0.1	0.7	0.5	1.2
Nominal Wage Rate	7.4	8.0	9.8	9.8	9.6	9.9
Saving Rate (level)	10.1	9.5	9.2	9.1	8.8	8.6
Participation Rate (level)	62.4	62.7	63.1	63.5	64.0	64.3
Real Investment (% of GNE)	22.6	23.0	23.2	23.8	24.6	24.8
Federal Deficit (% of GNE)	-3.8	-4.0	-3.6	-3.3	-2.5	-2.5
Provincial Surplus (% of GNE)	1.0	1.4	1.7	1.8	1.9	2.0
Balance of Payments						
Current Account Balance (% of GNE)	-1.8	-1.8	-1.6	-2.0	-2.1	-2.2
Energy Balance (% of GNE)	1.2	1.5	1.5	0.9	0.8	0.4
Non-energy Balance (% of GNE)	-3.1	-3.3	-3.1	-3.0	-2.9	-2.6

¹ CANDIDE Model 2.0, August 1980

SECTION 2

PREBUDGET BASE CASE WITH BUDGET WORLD PRICE - ASSUMPTIONS

We first set out the assumptions in the Budget Papers for the international price of crude petroleum, the related changes in the prices of natural gas and fuel products, and compare these with the Prebudget Base Case assumptions. The Federal Budget assumes a higher rate of growth for the international price of crude petroleum than that used in the Prebudget Base Case.

The Finance Department document, The Medium-Term Prospects for the Canadian Economy, 1980-1985, which outlines Canadian medium-term prospects underlying the Budget projections, assumes that international crude oil prices will increase further in early 1981 as the result of continued unrest and hostilities in the Middle East. Thereafter, this price is assumed to rise by 2 per cent per year in real terms. This is higher than the 1.0 to 1.5 per cent increase assumed in the Prebudget Base Case.

The implications of these assumptions for the path of international crude petroleum prices are computed for the three export deflators associated with crude petroleum, natural gas, and fuel products, and the two import deflators associated with crude petroleum and fuel products in CANDIDE Model 2.0. The percentage change from the Prebudget Base Case in these deflators is recorded in Table 5.

Table 5

Prebudget Base Case With Budget World Price Assumptions¹

	1980	1981	1982	1983	1984	1985
Export Deflator - Crude Petroleum (\$US)						
Prebudget Base Case (1971 = 1.00)	10.836	12.017	13.170	14.553	15.906	17.354
Prebudget Base Case With Budget World Price - Per Cent Deviation	0.87	6.32	11.37	16.81	20.12	21.99
Export Deflator - Natural Gas (\$US)						
Prebudget Base Case (1971 = 1.00)	14.395	15.964	17.497	19.334	21.132	23.055
Prebudget Base Case With Budget World Price - Per Cent Deviation	-1.25	14.69	20.13	26.01	29.58	31.60
Export Deflator - Fuel Products (\$US)						
Prebudget Base Case (1971 = 1.00)	7.290	8.201	8.898	9.655	10.475	11.366
Prebudget Base Case With Budget World Price - Per Cent Deviation	0.0	1.33	3.20	4.15	5.11	5.60
Import Deflator - Crude Petroleum (\$US)						
Prebudget Base Case (1971 = 1.00)	13.615	15.126	16.593	18.352	20.077	21.924
Prebudget Base Case With Budget World Price - Per Cent Deviation	0.80	6.33	11.47	17.01	20.33	22.31
Import Deflator - Fuel Products (\$US)						
Prebudget Base Case (1971 = 1.00)	6.244	7.805	8.547	9.316	10.154	11.068
Prebudget Base Case With Budget World Price - Per Cent Deviation	0.0	0.0	2.28	3.69	4.17	4.17
Oil Import Subsidies						
Prebudget Base Case (millions of current dollars)	2847.0	3376.0	3744.0	4686.0	4790.0	6592.0
Prebudget Base Case With Budget World Price - \$ Deviation	-27.0	382.0	1181.0	2372.0	3092.0	4632.0
Oil Export Tax						
Prebudget Base Case (millions of current dollars)	875.0	695.0	610.0	587.0	500.0	456.0
Prebudget Base Case With Budget World Price - \$ Deviation	13.0	88.0	154.0	236.0	257.0	270.0
Provincial Royalties						
Prebudget Base Case (millions of current dollars)	7314.0	9819.0	11651.0	13110.0	14485.0	15578.0
Prebudget Base Case With Budget World Price - \$ Deviation	-419.0	-114.0	57.0	308.0	498.0	609.0

¹ CANDIDE Model 2.0, November 1980.

As a result of the faster rate of growth of international crude petroleum prices, there is an increase in oil import subsidy payments to finance subsidies on imported oil and to finance subsidies paid to the oil sands producers, assuring them a guaranteed price for their product.

This higher international crude petroleum price also implies a change in oil export tax revenues which, by the end of the period, have increased by 270 million dollars. Although the domestic pricing assumptions in this first alternative are the same as in the Prebudget Base Case, there is a small change in provincial royalties resulting from higher revenues from natural gas exports. These assumption changes are also part of this alternative.

SECTION 3

THE IMPACT ON THE PREBUDGET BASE CASE OF THE BUDGET
INTERNATIONAL PRICE

Table 6 describes the impact of this higher international oil price on selected economic indicators. The most interesting impact is the increase from the Prebudget Base Case in the growth rate of real GNE of between 0.1 and 0.2 percentage points during the 1980-85 period. This is partly due to the terms-of-trade effect. For instance, in 1983 the terms of trade -- the ratio of export prices of goods and services to import prices of goods and services -- rise from 1.072 in the Prebudget Base Case to 1.0823 in this alternative. For 1985, this ratio changes from 1.074 to 1.081, indicating real income gains to Canadians.

The components of the functional distribution of income that are most affected are profits, dividends and investment-type income. By the end of the period, corporate profits have risen by \$5.9 billion, while real personal disposable income (components of which are dividends and investment-type income) has risen by \$1.0 billion.

Because of the increase in profits in this alternative, the ratio of corporate profits to net national income has increased from 16.3 to 17.5 per cent by 1985, and the share of the wage bill in net national income has dropped from 70.1 to 69.3 per cent. However, the wage bill itself is some \$2.0 billion higher by the end of the period, reflecting a marginal increase in real wages. There are only marginal changes in the consumer price index.

Table 6

The Impact on the Prebudget Base Case of the Budget World Pricing Assumptions^{1,2}

	1980	1981	1982	1983	1984	1985
Real GNE (per cent change)						
Prebudget Base Case	-0.4	1.4	3.1	3.5	3.3	2.4
Prebudget Base Case With Budget World Price	-0.5	1.5	3.2	3.7	3.4	2.6
Consumer Price Index (per cent change)						
Prebudget Base Case	9.8	10.6	9.9	9.0	9.0	8.7
Prebudget Base Case With Budget World Price	9.9	10.6	9.9	9.0	9.1	8.6
Unemployment Rate (per cent level)						
Prebudget Base Case	7.9	8.0	7.5	7.0	6.7	6.5
Prebudget Base Case With Budget World Price	7.9	8.0	7.4	6.9	6.5	6.2
Exchange Rate (\$ CDN/ \$ US)						
Prebudget Base Case	1.172	1.169	1.171	1.186	1.193	1.200
Prebudget Base Case With Budget World Price	1.172	1.167	1.170	1.187	1.195	1.204
Current Account Balance (billions of current dollars)						
Prebudget Base Case	-5.2	-5.6	-5.8	-8.1	-9.6	-11.1
Prebudget Base Case With Budget World Price	-5.3	-5.1	-5.3	-8.1	-9.7	-12.0
Federal Deficit (billions of current dollars)						
Prebudget Base Case	-10.8	-12.5	-12.8	-13.3	-11.4	-12.5
Prebudget Base Case With Budget World Price	-10.7	-12.5	-13.2	-14.4	-13.0	-15.6
Provincial Surplus (billions of current dollars)						
Prebudget Base Case	2.7	4.5	6.1	7.3	8.7	10.0
Prebudget Base Case With Budget World Price	2.4	4.5	6.4	8.0	9.6	11.1

¹ All Fiscal spending, taxation and domestic energy pricing assumptions are those of the Prebudget Base Case.

² CANDIDE Model 2.0, November 1980.

The major impacts of the increase in the international price of crude petroleum and related energy forms are on the federal deficit and the current account balance. By 1985 the federal deficit has risen from \$12.5 to \$15.6 billion. This first alternative contains the Prebudget Base Case domestic oil pricing assumption of an annual increase of \$4 per barrel and a continuation of the federal oil import subsidy programme. Higher oil import subsidy payments, resulting from a wider gap between domestic and international prices, cause a deterioration in the federal position that is not outweighed by the revenue gains from the additional activity effects arising from the terms-of-trade gains. There is only a marginal increase in the provincial surplus that results from additional royalty payments on natural gas exports, plus the activity effect from the terms-of-trade gains.

The current account balance exhibits a mixed response. In the early part of the period there is slight improvement, but by 1985 it deteriorates from a deficit of \$11.1 billion to a deficit of \$12.0 billion. This results from increased payments for crude petroleum imports which offset the increased gains from exports of other energy sources. The exchange rate deteriorates marginally - by four tenths of a cent by 1985.

Due to the deterioration of the federal deficit, the stock of federal debt increases by the end of the period, resulting in an increase in debt servicing that further weakens the federal deficit position. On the other hand, after an initial increase in the stock of debt, the provincial position improves, implying a slight reduction in provincial debt-servicing charges.

SECTION 4

BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT - ASSUMPTIONS

We now set out the assumption changes required in the Prebudget Base Case to implement the Federal Budget. We divide our discussion into five parts: 1) domestic energy pricing policy; 2) foreign and domestic energy demand assumptions; 3) new federal energy-related expenditures associated with conversion and substitution; 4) new federal energy-related revenues; and 5) non-energy related changes in federal revenues and expenditures.

In the Budget Papers, Canadian domestic pricing policy for crude petroleum and natural gas is discussed in relation to specific estimates of future international oil prices. It is for this reason that we developed a first alternative incorporating Budget estimates for the international price of crude petroleum into the Prebudget Base Case. In our analysis of the Federal Budget, we use this alternative as our starting point.

In Table 5 we recorded the export and import deflators associated with crude petroleum and natural gas for the Prebudget Base Case with Budget World Price assumptions. In the current alternative, we use the same assumptions. Thus we show in Table 7 no deviation in the world pricing assumptions for this alternative, when compared to the alternative discussed in the previous section.

Table 7

Budget With No Alternative Energy Investment: Energy Foreign Trade Price and Demand Assumptions¹

	1980	1981	1982	1983	1984	1985
Export Deflator - Crude Petroleum (\$US)						
Prebudget Base Case With Budget World Price (1971 = 1.00)	10.929	12.776	14.667	16.999	19.107	21.171
Budget With No Alternative Energy Investment - % Deviation	0.0	0.0	0.0	0.0	0.0	0.0
Export Deflator - Natural Gas (\$US)						
Prebudget Base Case With Budget World Price (1971 = 1.00)	14.216	18.310	21.020	24.362	27.383	30.340
Budget With No Alternative Energy Investment - % Deviation	0.0	0.0	0.0	0.0	0.0	0.0
Export Deflator - Fuel Products (\$US)						
Prebudget Base Case With Budget World Price (1971 = 1.00)	7.290	8.311	9.183	10.056	11.011	12.002
Budget With No Alternative Energy Investment - % Deviation	0.0	0.0	0.0	0.0	0.0	0.0
Import Deflator - Crude Petroleum (\$US)						
Prebudget Base Case With Budget World Price (1971 = 1.00)	13.723	16.083	18.496	21.473	24.157	26.815
Budget With No Alternative Energy Investment - % Deviation	0.0	0.0	0.0	0.0	0.0	0.0
Import Deflator - Fuel Products (\$US)						
Prebudget Base Case With Budget World Price (1971 = 1.00)	6.244	7.805	8.742	9.660	10.577	11.529
Budget With No Alternative Energy Investment - % Deviation	0.0	0.0	0.0	0.0	0.0	0.0
Imports of Crude Petroleum						
Prebudget Base Case With Budget World Price (millions of 1971 dollars)	449.1	462.0	521.7	612.8	639.5	686.5
Budget With No Alternative Energy Investment - \$ Deviation	-11.9	-57.0	-104.3	-197.5	-233.9	-356.5
Exports of Crude Petroleum						
Prebudget Base Case With Budget World Price (millions of 1971 dollars)	248.0	221.7	210.0	204.2	189.6	180.9
Budget With No Alternative Energy Investment - \$ Deviation	-46.7	-12.5	-6.0	-14.2	-12.4	-3.7
Exports of Natural Gas						
Prebudget Base Case With Budget World Price (millions of 1971 dollars)	275.0	345.1	401.0	397.4	397.6	374.5
Budget With No Alternative Energy Investment - \$ Deviation	-56.3	-96.1	-87.7	-62.2	-57.5	-34.5

¹ CANDIDE Model 2.0, November 1980.

The National Energy Program⁴ contains the following wellhead schedules for 1) conventional oil; 2) oil sands production; and 3) tertiary recovery of oil. The wellhead price of conventional oil will increase by \$1 per barrel every six months until the end of 1983, and by an average of \$4 in 1984 and \$4.50 in 1985. Oil sands production is guaranteed a reference price of \$38.00 a barrel at the wellhead, effective January 1, 1981. This reference price will increase annually thereafter by the rate of increase in the consumer price index or the international price, whichever is lower. In this alternative, the oil sands reference price does not reach the international price by 1985. It rises to \$54.13 by that year, while the international price, expressed in Canadian dollars CIF at Montreal, reaches \$69.59. For tertiary recovery oil -- that is, oil of 15 degrees API gravity -- a per barrel price of \$30.00 at the wellhead is set in January 1981. This price increases to \$42.70 by January 1985.

The National Energy Program includes a blended price system that averages both domestic and foreign costs, to arrive at an end-use price for the consumer. The blended price system is accompanied by an extension of the existing system of refinery levies. This system will ensure that the end-use price of petroleum products to consumers will lie above the wellhead price but below the international price. The Budget Papers indicate

that although wellhead increases will remain at \$2 per barrel per year until the end of 1983, the petroleum compensation charge paid by all domestic refiners and passed on to consumers will be set at \$2.50 per barrel per year during the period January 1, 1981 through the end of December 1983. This means that the price to consumers will rise by \$4.50 per year over that period. The blended price then increases by \$5.93 in 1984 and \$5.50 in 1985. These increases reflect the higher wellhead increases mentioned previously as well as the petroleum compensation charge.

The new petroleum compensation charge to be levied on all domestic production is intended to cover the cost of the import compensation program and the present Syncrude levy. It is further stated in the Budget Papers that the blended price will never exceed 85 per cent of the international price or the average price of oil in the United States, whichever is lower.

Table 8 contains the changes required in the Prebudget Base Case with Budget World Price assumptions to implement the new domestic crude petroleum pricing policy. The end-use consumption deflators for other fuel products and for gasoline, oil, and grease are substantially above our Base Case projections. This reflects the combined effects of both wellhead increases and the new petroleum compensation charge. The deflator for gasoline, oil, and grease in Table 8 has also been adjusted to reflect

Table 8

Budget With No Alternative Energy Investment: Domestic Energy Price and Demand Assumptions¹

	1980	1981	1982	1983	1984	1985
Consumption Deflator - Natural Gas						
Prebudget Base Case With Budget World Price (1971 = 1.00)	2.876	3.340	3.979	4.686	5.392	6.098
Budget With No Alternative Energy Investment - % Deviation	0.85	0.17	-2.46	-5.59	-7.06	-6.32
Consumption Deflator - Other Fuel Products						
Prebudget Base Case With Budget World Price (1971 = 1.00)	3.637	4.468	5.259	6.031	6.790	7.550
Budget With No Alternative Energy Investment - % Deviation	4.81	13.04	12.93	13.19	17.58	20.12
Consumption Deflator - Gasoline, Oil & Grease						
Prebudget Base Case With Budget World Price (1971 = 1.00)	2.294	2.642	3.028	3.417	3.798	4.179
Budget With No Alternative Energy Investment - % Deviation	1.88	7.16	9.42	10.23	12.86	15.44
Value Added Deflator - Crude Petroleum & Natural Gas Mining						
Prebudget Base Case With Budget World Price (1971 = 1.00)	5.443	6.755	8.068	9.381	10.694	12.008
Budget With No Alternative Energy Investment - % Deviation	-6.59	-20.60	-26.97	-30.12	-27.98	-23.14
Consumption - Natural Gas						
Prebudget Base Case With Budget World Price (millions of 1971 dollars)	366.9	373.8	394.1	416.2	433.3	454.3
Budget With No Alternative Energy Investment - \$ Deviation	8.5	12.8	23.5	36.7	51.1	65.8
Consumption - Other Fuel Products						
Prebudget Base Case With Budget World Price (millions of 1971 dollars)	622.1	613.2	626.8	642.8	650.0	661.4
Budget With No Alternative Energy Investment - \$ Deviation	-53.5	-104.6	-149.6	-193.2	-232.3	-272.0
Consumption - Gasoline, Oil & Grease						
Prebudget Base Case With Budget World Price (millions of 1971 dollars)	2277.3	2236.3	2191.7	2166.1	2158.6	2175.5
Budget With No Alternative Energy Investment - \$ Deviation	15.5	-16.9	62.0	131.0	150.8	154.9

¹ CANDIDE Model 2.0, November 1980.

changes introduced in early 1980, which provide for a 9 per cent ad valorem tax on gasoline that replaces the previous specific tax. The sector deflator for crude petroleum and natural gas mining is also recorded in Table 8. It shows the impact of reduced wellhead increases in the early period, compared with our Prebudget Base Case domestic pricing assumptions. In the Prebudget Base Case, we assumed wellhead increases of \$4 per barrel per year; in the Budget Papers wellhead increases above \$4 per barrel do not occur until the period 1984-85. Prior to this time, they are \$2 per barrel per year.

One can clearly see the impact of the wellhead pricing policy and the import compensation charge by examining the key deflators in Table 8. The wellhead pricing policy holds the value-added deflator for crude petroleum and natural gas mining below the Base Case figures. The combined effect of wellhead increases and refinery tax charges holds the end-use deflators for petroleum products above the Base Case figures.

In the past, natural gas producers have been granted wellhead price increases arising from increased natural gas prices at Toronto of 15 cents per thousand cubic feet (MCF) for every \$1 increase in the wellhead price of crude petroleum. In the Budget Papers, it is stated that this policy will continue, except in 1981, at which time there will be a pause in order to make room for a new federal tax on domestic and export natural gas sales. Thereafter consumer prices for natural gas will reflect a combination of taxes and wellhead price increases, the former designed to produce revenue for the federal government and the

latter designed to provide revenues for the producers and the producing provinces.

Natural gas prices to the consumer will rise less quickly than oil prices, in order to encourage a shift away from oil to natural gas. In 1980, when compared to the price of crude petroleum (including the Syncrude levy), natural gas was priced at 80 per cent parity. Under the National Energy Program, this relationship will decline to 67 per cent by 1983.

Effective November 1, 1980, a tax of 30 cents per MCF of natural gas will be levied against both the exporter and the consumer. This tax will further increase by 15 cents per MCF on July 1, 1981 and by a further 15 cents on January 1, 1982, and again on January 1, 1983. A similar tax will be levied on liquified petroleum gases.

This new gas tax is intended to be levied in such a way that exporters do not suffer a reduction in the price they currently obtain for exports or domestic sales. It is stated that, in setting the export price of natural gas in the future, prices will be adjusted to take this tax into account. In this alternative, it is assumed that the export price of natural gas is at 82.6 per cent of parity with the international oil price in 1980, increases to 91 per cent in 1981, and that it will then remain at this parity level until 1985.

In Table 8 we see the impact of these changes on the domestic price of natural gas. The consumption deflator for natural gas increases at a less rapid rate than that of the Prebudget Base Case with Budget World Price. This reduction in the rate of growth of the natural gas consumption deflator is the result of the combined effect of smaller wellhead increases in crude petroleum prices, to which the price of natural gas is tied, and a declining parity between the domestic prices of natural gas and crude petroleum. This second factor arises from the effect on the latter price of the imposition of the petroleum compensation charge.

The Budget Papers include implied patterns for the domestic consumption of natural gas, crude petroleum products, and the imports and exports of crude petroleum and natural gas. We modify this alternative to include these Budget Paper assumptions. In Tables 7 and 8 are recorded the domestic consumption of natural gas and crude petroleum products, and the imports of crude petroleum. We emphasize that these patterns have been exogenously imposed upon CANDIDE Model 2.0 and are not model results. They imply a considerable reduction in the use of fuel oils for residential and commercial use, a considerable increase in the use of natural gas in these same areas, and a considerable reduction in imports of crude petroleum. In a sense this makes our Budget impact calculations less realistic, because we have not used the implied price elasticities within CANDIDE

Model 2.0 to measure the fuel substitution or import substitution in response to relative price changes. For this reason, one must be careful in interpreting our Budget impact assessment.

So far, we have traced the impact of the federal Budget proposals on the domestic and foreign prices for crude petroleum and natural gas, based on the movements of international prices implied in the Budget Papers. We have also set out the Budget paths for the domestic consumption of crude petroleum products and the imports and exports of crude petroleum and natural gas products.

Let us now consider the expenditure program. Table 9 classifies the new energy-related expenditures and the Western development program by National Accounts categories for fiscal years during the 1980/81 to 1983/84 period. The expenditure program as presented on page 90 of the National Energy Program document includes industry initiatives, incentives for oil substitution, incentives for future initiatives, special Atlantic Province incentives, conservation through the CHIP program, research and development, the gas bank, the Saskatchewan upgrader and other activities, including the Western initiatives.

These programs (Table 9) are allocated to National Accounts categories: (1) goods and services purchases; (2) capital assistance; (3) subsidies; and (4) transfers to other levels of government. Loans and advances are not a National Accounts category, but they are a financial requirement. These expenditures are converted to a calendar year basis and recorded

Table 9

Allocation of the New Energy Expenditures and the Western Initiatives in the National Energy Program; Budgetary to National Accounts Basis, Fiscal Years 1980/81 to 1983/84¹
(millions of current dollars)

	Goods & Services	Capital Assistance	Subsidies	Transfers to Other Govt.	Loans & Advances	Total
<u>Energy</u>						
Industry Incentives			2852			2852
Oil Substitution	50	1767				1817
Reserves - Future Initiatives	63	580	580	8		1231
Special Atlantic Programs	4	240		40	200	484
Conservation - CHIP Program	181	330				511
Research and Development	51	238				289
Gas Bank					469	469
SASK Upgrader					344	344
Other	44				200	244
<u>Western Initiatives</u>		1000	1000			2000
TOTAL	393	4155	4432	48	1213	10241

1 Estimates provided by the Department of Finance, November 1980.

2 Totals of National Energy Program expenditures differ from those reported in the table on page 90 of the document, The National Energy Program, 1980, Energy, Mines and Resources Canada. Figures in the document are on a calendar year basis, and various items concerned with conservation have been reallocated.

3 Totals for the various National Accounts categories have been allocated to relevant items on Table 10 (capital assistance, Items I and J; subsidies, Items G and H; transfers to other governments, Item L; and loans and advances, Item K). Sum of the 1981 to 1983 adjustments plus 25% of 1984 adjustments in Table 10 are represented by the totals of the categories in this table. Estimates for the remainder of 1984 and for 1985 in Table 10 have been made by the Economic Council of Canada.

in Table 10, according to the specific model variable that is influenced by the Budget. The following caveat should be kept in mind, however: energy-related goods and services spending (that is, the \$393 million item in Table 9) is assumed to be financed by cuts in other programs therefore goods and services spending does not differ from our Prebudget Base Case assumptions for reasons of new energy initiatives. It is clear from an examination of Table 10 that most of the new spending initiatives influence capital assistance items and non-oil, non-agricultural subsidies. These categories differ from the Prebudget Base Case assumptions by considerable amounts.

Oil import subsidy payments (Table 10, Item G) in the Budget alternative are lower than those reported in the Prebudget Base Case with Budget World Price. This is so for several reasons: 1) as we move to the end of the period, the gap between the domestic price and the international price narrows due to the rapid increase in the domestic price, resulting from both wellhead increases and the petroleum compensation charge; 2) the gap between the domestic price and the reference price paid to oil sands producers is smaller; and 3) the volume of crude petroleum imports (the Budget Papers assumption incorporated in this alternative) is reduced by considerable amounts from our first alternative.

Table 10
Budget With No Alternative Energy Investment: Energy-Related Budget Assumptions¹

	1980	1981	1982	1983	1984	1985
Federal - Revenue						
A Indirect Tax Revenue - Gasoline Excise Tax						
Prebudget Base Case With Budget World Price (millions of current dollars)	464.4	506.6	552.2	598.6	645.9	694.4
Budget With No Alternative Energy Investment - \$ Deviation	0.0	4213.3	6571.1	8689.9	8522.7	8183.2
B Indirect Tax Revenue - Oil Export Tax						
Prebudget Base Case With Budget World Price (millions of current dollars)	888.0	783.0	764.0	823.0	757.0	726.0
Budget With No Alternative Energy Investment - \$ Deviation	-134.2	163.2	411.0	497.0	593.0	718.0
C Effective Tax Rate - Crude Petroleum & Natural Gas Mining						
Prebudget Base Case With Budget World Price (rate)	0.426	0.426	0.426	0.426	0.426	0.426
Budget With No Alternative Energy Investment - \$ Deviation	0.0	0.08	0.08	0.08	0.08	0.08
D Direct Tax Revenue - Corporations						
Prebudget Base Case With Budget World Price (millions of current dollars)	0.0	0.0	0.0	0.0	0.0	0.0
Budget With No Alternative Energy Investment - \$ Deviation	0.0	1216.0	2010.0	2380.0	2760.0	3065.0
E Personal Income Tax - Total Income Assessed						
Prebudget Base Case With Budget World Price (millions of current dollars)	0.0	0.0	0.0	0.0	0.0	0.0
Budget With No Alternative Energy Investment - \$ Deviation	0.0	144.0	205.0	263.0	287.0	312.0
F Direct Tax Revenue - Personal						
Prebudget Base Case With Budget World Price (millions of current dollars)	0.0	0.0	0.0	0.0	0.0	0.0
Budget With No Alternative Energy Investment - \$ Deviation	0.0	-15.0	-15.0	-140.0	-150.0	-160.0
Federal - Expenditures						
G Subsidies - Oil Import Compensation						
Prebudget Base Case With Budget World Price (millions of current dollars)	2820.0	3758.0	4925.0	7058.0	7882.0	11224.0
Budget With No Alternative Energy Investment - \$ Deviation	27.0	80.9	-412.5	-1820.0	-3070.0	-6452.0
H Subsidies - Non Oil, Non Agricultural						
Prebudget Base Case With Budget World Price (millions of current dollars)	1236.9	1323.5	1416.1	1515.3	1621.3	1734.8
Budget With No Alternative Energy Investment - \$ Deviation	0.0	805.5	1382.9	1774.7	1934.7	2109.2
I Capital Assistance						
Prebudget Base Case With Budget World Price (millions of current dollars)	599.4	647.4	699.1	755.1	815.5	880.7
Budget With No Alternative Energy Investment - \$ Deviation	0.0	870.6	1238.9	1640.9	1788.5	1950.3
J Capital Assistance - Persons						
Prebudget Base Case With Budget World Price (millions of current dollars)	358.6	402.2	441.1	478.8	515.6	552.6
Budget With No Alternative Energy Investment - \$ Deviation	-0.1	143.8	204.9	263.2	287.4	312.4
K Change in Other Loans						
Prebudget Base Case With Budget World Price (millions of current dollars)	1500.0	1500.0	1500.0	1500.0	1500.0	1500.0
Budget With No Alternative Energy Investment - \$ Deviation	0.0	497.0	416.0	381.0	350.0	350.0
Provincial						
L Federal Transfers to Provinces						
Prebudget Base Case With Budget World Price (millions of current dollars)	1225.1	1310.9	1402.7	1500.9	1605.9	1718.3
Budget With No Alternative Energy Investment - \$ Deviation	0.0	15.1	15.3	14.1	14.1	13.7
M Indirect Tax Revenue - Other						
Prebudget Base Case With Budget World Price (millions of current dollars)	412.8	412.8	412.8	412.8	412.8	412.8
Budget With No Alternative Energy Investment - \$ Deviation	0.0	355.2	410.2	420.2	420.2	420.2
N Royalty Income						
Prebudget Base Case With Budget World Price (millions of current dollars)	6895.0	9705.0	11708.0	13418.0	14983.0	16187.0
Budget With No Alternative Energy Investment - \$ Deviation	-551.0	-2216.0	-3045.0	-3654.0	-3784.0	-3360.0

¹ CANDIDE Model 2.0, November 1980.

Let us now consider the impact on federal revenues of the energy-related Budget assumptions. In Table 10 we see large increases in indirect tax revenues associated with crude petroleum usage and corporate taxation (Items A and D). Item A includes revenues associated with the natural gas and gas liquids tax, the petroleum compensation charge (mentioned in the section on oil pricing), and the change associated with the ad valorem tax on gasoline. Item D includes petroleum and gas revenues associated with the 8 per cent tax on the operating income of producers and the changes to depletion allowances, etc. Item B reflects the net effect of the extension of the oil export tax and the sharing of a portion of the revenues with provincial governments. The impact on provincial governments shows up as Item M. Other small changes resulting from the conversion and off-oil substitution incentives appear as adjustments to personal income tax and assessed income (Items E and F of Table 10).

In Table 11 we record the Federal Budget impacts that are not related to energy. These include adjustments to the manufacturers' sales tax, alcohol and tobacco taxes, the unemployment insurance contribution rate, and expenditures on current goods and services for defence. Compared to the Prebudget Base Case, little change is required in the contribution rate associated with unemployment insurance, as we had anticipated, in our Base Case, movements in this rate to balance the fund. The Budget indexation of excise taxes associated with alcohol and tobacco implies that movements in these excise and duty rates are tied to the consumer price index. Changes to the manufacturers'

Table 11

Budget With No Alternative Energy Investment: Federal Non Energy Budget Assumptions¹

	1980	1981	1982	1983	1984	1985
UIB Employer/Employee Contribution Rate						
Prebudget Base Case With Budget World Price (rate)	-0.004	0.0	0.0	0.0	0.0	0.0
Budget With No Alternative Energy Investment - Deviation	0.0	0.00002	0.0	0.0	0.0	0.0
Indirect Tax Revenue - Manufacturers' Sales Tax						
Prebudget Base Case With Budget World Price (millions of current dollars)	266.4	266.4	266.4	266.4	266.4	266.4
Budget With No Alternative Energy Investment - \$ Deviation	0.0	44.6	53.6	62.6	72.6	80.6
Excise Tax Rate - Standard Weight Cigarettes						
Prebudget Base Case With Budget World Price (rate per thousand)	6.0	6.0	6.0	6.0	6.0	6.0
Budget With No Alternative Energy Investment - Deviation	0.0	0.6	1.3	1.9	2.7	3.4
Excise Duty Rate - Standard Weight Cigarettes						
Prebudget Base Case With Budget World Price (rate per thousand)	6.1	6.1	6.1	6.1	6.1	6.1
Budget With No Alternative Energy Investment - Deviation	0.0	0.6	1.3	2.0	2.7	3.5
Excise Duty Rate - Beer & Alcohol Combined						
Prebudget Base Case With Budget World Price (rate per gallon)	11.6	11.6	11.6	11.6	11.6	11.6
Budget With No Alternative Energy Investment - Deviation	0.0	1.2	2.5	3.8	5.2	6.7
Indirect Tax Revenue - Alcohol & Tobacco						
Prebudget Base Case With Budget World Price (millions of current dollars)	-9.0	-9.0	-9.0	-9.0	-9.0	-9.0
Budget With No Alternative Energy Investment - \$ Deviation	0.0	-10.0	-10.0	-10.0	-10.0	-10.0
Expenditure - Current Goods & Services, Defence						
Prebudget Base Case With Budget World Price (millions of current dollars)	1190.2	1213.8	1238.0	1262.7	1287.9	1313.8
Budget With No Alternative Energy Investment - \$ Deviation	-0.2	11.9	24.5	37.6	51.5	65.7

¹ CANDIDE Model 2.0, November 1980.

sales tax legislation require that a small increase be made to this revenue item (Item B, Table 11).

In Table 10 provincial royalties (Item N) are reduced from Prebudget levels during the period 1981 through 1985. This is due to the lower wellhead pricing assumptions for both crude petroleum and natural gas, relative to our Prebudget Base Case alternative.

A clear understanding of the direct effects of the Budget measures will make the interpretation of both direct and indirect effects more meaningful. Before proceeding to the analysis of their impact on our Prebudget Base Case with Budget World Price, it is instructive to group the additional direct revenue and expenditure effects at both the federal and the provincial levels, in order to assess the direct impact of these changes on the fiscal position of both the federal and provincial governments. In a later section we will assess both direct and indirect affects.

Table 12 brings together from Table 10 and 11 all the additional federal revenues implied in the Budget Papers. In Table 12 it is clear that a substantial portion of the additional revenues accruing to the federal government results from higher corporate taxation of petroleum and gas revenues and from higher indirect taxation associated with crude petroleum and natural gas.

Table 12

Additional Federal Revenues (millions of current dollars)¹

	1980	1981	1982	1983	1984	1985
Personal Income						
MURB, Exploration Expenses ²	-	-15	-15	-140	-150	-160
Capital Assistance ³	-	(144)	(205)	(263)	(287)	(312)
Corporation Tax						
Petroleum and Gas Revenues ⁴	-	1058	1661	1910	2196	2415
Depletion, Resource, Small Business ⁴	-	158	349	470	564	650
Indirect Tax						
Natural Gas and Gas Liquids Tax ⁵	-	1219	1986	2715	2880	3070
Petroleum Compensation Charge ⁵	-	2893	4425	5764	5368	4772
Change to Base Gas Tax ⁵	-	102	161	210	275	342
Extension of Oil Export Tax ⁶	-134	163	411	497	593	718
Indexation of Tobacco, Alcohol duties and Sherry Tax Reduction ⁷	-	124	263	408	573	754
Adjustment to MANUF Sales Tax ⁸	-	45	54	63	73	81
Unemployment Insurance ⁹		9	4	45	107	183
Total Addition to Federal Revenue ¹⁰	-134	5756	9299	11942	12479	12825

1 Estimates by the Economic Council of Canada, November 1980.

2 Adjustment to Direct Tax Revenues, Personal, Item F on Table 10.

3 Adjustment to Taxable Income, Item E on Table 10.

4 The total of these two items is the adjustment to taxes collected, Item D, Table 10. A further adjustment to the effective tax rate for the crude petroleum and natural gas mining industry, Item C, Table 10, affects the rental cost of capital for the industry.

5 Exogenous adjustment made to Gasoline Excise Tax, Item A, Table 10 for the total of these three items.

6 Exogenous adjustment made to Oil Export Tax, Item B, Table 10.

7 Duty and excise tax rates for cigarettes (Items C and D, Table 11) and beer and alcohol (Item E, Table 11) are indexed by the CPI. Figures above are both direct and indirect effects associated with alcohol, tobacco and fortified wine tax measures and include the adjustment to alcohol and tobacco indirect tax revenue (Item F, Table 11).

8 Adjustment to manufacturers' sales tax revenue, Item B, Table 11.

9 Effect of adjustment to UIB contribution rate, Item A, Table 11, plus indirect effects.

10 Sum of above items net of capital assistance. Total underestimates direct federal revenue effect by the taxable portion of this item.

Table 13

Additional Annual Expenditures (millions of current dollars)¹

	1980	1981	1982	1983	1984	1985
Goods and Services	-1	13	35	63	104	148
Capital Assistance	-	871	1239	1641	1789	1950
To Persons	-	144	205	263	287	312
Subsidies						
Oil Import Compensation	27	81	-413	-1820	-3070	-6452
Energy Program	-	806	1383	1775	1935	2109
Transfers - Other Governments	-	15	15	14	14	14
Loans and Advances	-	(497)	(418)	(381)	(350)	(350)
Total	26	1930	2464	1936	1059	-1919

1 Estimates by the Economic Council of Canada, November 1980, based on data provided by the Department of Finance.

2 Current expenditures on goods and services associated with the National Energy Program for the 1981-85 period totalling \$393 (millions of current dollars) are assumed to come from other programs, therefore no change was made to goods and services to account for these expenditures (Table 9). Item above reflects the three per cent real expenditure increase in defense expenditures (Item G, Table 11 expressed in current dollars).

3 Exogenous adjustments to Capital Assistance and Capital Assistance, Persons, Items I and J, Table 10.

4 Exogenous adjustment to Oil Import Subsidies, Item G, Table 10.

5 Exogenous adjustment to Nonagricultural, Nonoil Subsidies, Item H, Table 10.

6 Adjustment to Federal Transfers to Provinces, Item L, Table 10.

7 Exogenous adjustment to Change in Other Loans, Item K, Table 10.

8 Sum is on a National Accounts basis therefore does not include loans and advances.

Table 13 shows the additional federal expenditures directly associated with the Federal Budget. Of interest are the large decline in oil import compensation subsidies and the large increases in capital assistance and subsidies associated with exploration, substitution, and conversion.

In Table 14 we show the difference between direct federal revenues and expenditures. We note that the Federal Budget will directly reduce the federal deficit by \$3.8 billion in 1981 and by \$15 billion in 1985. Table 15 shows the direct impact on provincial revenues. Of interest is the reduction in provincial royalties, which is only marginally offset by the rebate on the oil export tax.

We emphasize that these estimates of the direct effects do not include the impact that reduced federal deficits will have on borrowing requirements and thus on debt servicing charges. Nor do they include the indirect effects originating in induced activity levels (changes in tax bases) resulting from the impact of the Federal Budget on the economy. We can isolate these effects only by imposing the Federal Budget assumptions on CANDIDE Model 2.0 and deriving a solution to the model under this new set of assumptions. This we have done. We report the results in the next section.

Table 14

Difference Between the Change to Additions to Federal Revenues and Expenditures -
National Accounts Basis (millions of current dollars)

	1980	1981	1982	1983	1984	1985
Revenue	-134	5756	9299	11942	12479	12825
Expenditure	26	1930	2464	1936	1059	-1919
Difference	-108	3826	6835	10006	11420	14744

1 Total addition to revenue taken from Table 12.

2 Total additional expenditures taken from Table 13.

Table 15

Direct Changes to Provincial Revenue (millions of current dollars)

	1980	1981	1982	1983	1984	1985
Provincial Royalties ¹	-551	-2216	-3045	-3654	-3784	-3360
Rebate - Export Tax ²	-	355	410	420	420	420
Transfers From Federal Government ³	-	15	15	14	14	14
Total	-551	-1846	-2620	-3220	-3350	-2926

1 Exogeneous adjustment to Provincial Royalty Income, Item N, Table 10.

2 Adjustment to other Provincial Indirect Tax Revenue, Item M, Table 10.

3 Adjustment to Federal Transfers to Provinces, Item L, Table 10.

SECTION 5

THE IMPACT OF THE FEDERAL BUDGET ON THE PREBUDGET BASE CASE WITH BUDGET WORLD PRICE

Before proceeding to a discussion of the results, we indicate the various forces set in motion by the Budget. The major revenue changes in the Budget are those related to indirect taxation via the blended price policy, to corporate taxation, and to the taxation of natural gas and gas liquids.

The increase in indirect taxation will exert upward pressure on prices, and this by itself will reduce real incomes and output. However, weighing against these upward pressures on prices will be several factors: 1) the exchange rate is anticipated to appreciate as a result of the improvement in the balance of payments caused by the assumed reduction in oil imports; 2) the rapid reduction in the federal deficit should allow for reduced interest rates and, at the same time, for a lower rate of growth of the money supply; and 3) the loss in output due to a reduction in real incomes will have a mitigating effect on wages and prices, as higher unemployment rates result in less pressure within labour markets. Thus, there are many forces working in opposite directions; for this reason, it is impossible to predict, a priori, the eventual impact on the rate of inflation.

Furthermore, we cannot determine, a priori, whether the output effect will be positive or negative. Because of reduced provincial revenues, we expect a decline in government spending; however, because of the assumed reduction in oil imports,

less will be spent on imports as well. Aggregate consumption will decline if prices rise while nominal income remains constant, but an increase in income is expected from additional capital assistance to persons. As stated previously, we cannot say anything, a priori, about the direction of price movements. As for aggregate investment, it will depend upon the rate of output growth and the behaviour of profits. The increase in corporate taxes will reduce retained earnings, but the subsidy and capital assistance programs will cushion these effects. Thus, the direction of movement in aggregate output, relative to the first alternative, is impossible to determine, a priori. We use CANDIDE Model 2.0 to assess the impact of these conflicting pressures.

Table 16 provides an overview of the impact of the Federal Budget on selected economic indicators. The outcome of the opposing forces mentioned previously is revealed to be lower real growth and higher inflation. However, there is also an improved federal deficit, an improved trade deficit, a stronger dollar, higher unemployment rates, and reduced provincial surpluses.

Table 17 decomposes the major components of Gross National Expenditure (consumption, government expenditures, investment, exports, and imports). Here we present the deviation of the Budget alternative from the Prebudget Base Case with Budget World Price. Examination of this table reveals the main impacts of the Budget. The assumed reduction in oil imports, a key part of the

Table 16

Impact of the Federal Budget on the Prebudget Base Case with Budget World Price^{1,2}

	1980	1981	1982	1983	1984	1985
Real GNE (per cent change)						
Prebudget Base Case With Budget World Price	-0.5	1.5	3.2	3.7	3.4	2.6
Budget With No Alternative Energy Investment	-0.6	1.1	3.0	3.4	3.0	2.1
Consumer Price Index (per cent change)						
Prebudget Base Case With Budget World Price	9.9	10.6	9.9	9.0	9.1	8.6
Budget With No Alternative Energy Investment	10.1	11.1	10.0	9.1	9.5	9.1
Unemployment Rate (per cent level)						
Prebudget Base Case With Budget World Price	7.9	8.0	7.4	6.9	6.4	6.2
Budget With No Alternative Energy Investment	8.0	8.2	7.8	7.4	7.1	6.9
Exchange Rate (\$ CDN/ \$ US)						
Prebudget Base Case With Budget World Price	1.172	1.167	1.170	1.187	1.195	1.204
Budget With No Alternative Energy Investment	1.175	1.163	1.158	1.164	1.166	1.155
Current Account Balance (billions of current dollars)						
Prebudget Base Case With Budget World Price	-5.3	-5.1	-5.3	-8.1	-9.7	-12.0
Budget With No Alternative Energy Investment	-6.4	-5.5	-4.3	-4.2	-4.3	-1.3
Federal Deficit (billions of current dollars)						
Prebudget Base Case With Budget World Price	-10.7	-12.5	-13.2	-14.4	-13.0	-15.6
Budget With No Alternative Energy Investment	-11.0	-9.3	-7.0	-4.5	-0.5	1.9
Provincial Surplus (billions of current dollars)						
Prebudget Base Case With Budget World Price	2.4	4.5	6.4	8.0	9.6	11.1
Budget With No Alternative Energy Investment	1.9	2.6	3.3	3.9	5.1	6.6

1 Both cases reported in this table have the same World Pricing assumption; they differ in domestic policy only. Differences include: taxation with respect to energy; expenditure incentives and subsidy payments; certain specific assumptions related to domestic demand and pricing for gasoline, fuel oil, natural gas; and exports and imports of crude petroleum and natural gas.

2 CANDIDE Model 2.0, November 1980.

energy package, is the main cause for improvement in the energy balance and associated improvement in the current account balance. Government spending is lower, because reduced revenues lead to a reduction in real provincial expenditures that exceeds the assumed increase in federal defence spending. The increase in the CPI and the subsequent decline in real income accounts for the fall in consumption from the previous alternative. Similarly, the reduced rate of growth of output contributes to lower rates of capital formation.

It is interesting to compare the direct effects of the Federal Budget on the federal deficit and the provincial surplus, as derived in the section on assumptions, with the direct and indirect effects as recorded in Table 17. Initially the sum of direct and indirect effects on the federal position is less than the direct effects. By the end of the period, however, it is greater than the direct effects. The difference is due to two factors. Initially, profit levels are lower because of the lower activity effects and some revenue redistribution. Thus lower corporate profit taxes accrue to the federal government. Later in the period, the impact of lower interest rates combined with the longer-term reduction in the stock of debt leads to a substantial reduction in debt servicing charges.

In the provincial sector, the direct and indirect effects are always negative. The initial reduction in provincial revenues caused by the decline in royalties is further reinforced by lower tax revenues from a smaller activity base.

Table 17

Deviation of Budget (With No Alternate Energy Investment) from Prebudget Base Case (With Budget World Price) for Selected Economic Indicators¹

	1981	1982	1983	1984	1985
Gross National Expenditure (billions of 1971 dollars)	-.745	-1.023	-1.417	-1.977	-2.756
Consumption	-.656	-.920	-1.331	-1.790	-2.439
Government	-.116	-.101	-.119	-.161	-.171
Investment	-.237	-.382	-.420	-.474	-.670
Exports	-.112	-.124	-.143	-.180	-.231
less					
Imports	-.377	-.504	-.595	-.629	-.755
Current Account Balance (billions of current dollars)	-.4	1.0	3.9	5.4	10.6
Non-Energy Balance	.8	1.0	1.1	1.0	1.0
Federal Deficit (billions of current dollars)					
Direct Effect ²	3.8	6.8	10.0	11.4	14.7
Direct plus Indirect Effect	3.2	6.2	9.9	12.5	17.5
Provincial Surplus (billions of current dollars)					
Direct Effect ³	-1.8	-2.6	-3.2	-3.4	-2.9
Direct plus Indirect Effect	-1.9	-3.1	-4.0	-4.5	-4.5

1 CANDIDE Model 2.0, November 1980.

2 Total change in federal position taken from Table 14.

3 Total change to provincial revenue taken from Table 15.

We add the following caveats. Should the response of prices be greater than that indicated in our calculations, then the depressing effects on output would be greater. Furthermore, if the assumed decline in oil imports does not occur, this will have repercussions not only on the output effects, but also on subsidy payments and, therefore, on the federal deficit itself.

In fact, the reduction in crude petroleum imports is the primary cause for the improved current account trade balance as seen in Table 17. There is only slight improvement in the non-energy trade balance. By 1985 the improvement in this area is only \$1.3 billion, whereas it reaches \$11 billion for the total trade balance. This dramatic improvement has a positive effect on the exchange rate, and this helps to cushion the domestic rate of inflation. It is important to recognize that the crude petroleum import assumptions with their implied effects on the trade balance and, subsequently, on the exchange rate with its cushioning effects on the inflation rate through appreciation in the long run, are not necessarily results that we obtain endogenously in CANDIDE Model 2.0. The trade balance effects result primarily from our use of the National Energy Program assumptions for oil imports. The exchange rate effects follow endogenously from the impact that these assumptions have on the trade balance.

SECTION 6

BUDGET WITH ALTERNATIVE ENERGY INVESTMENT - ASSUMPTIONS

The assumptions concerning both the timing and magnitude of the large energy projects and utilities investment differ between the Prebudget Base Case and those assumed in the medium-term prospects document issued with the Federal Budget Papers. To make a proper comparison between the Department of Finance projections offered in the Budget Papers and our Budget impact alternative, it is necessary to impose upon the case discussed in the previous section similar energy investment assumptions. We do this in order to indicate that major near-term differences between our Budget impact assessment and the medium-term track of the Department of Finance are primarily due to non-Budget assumptions.

The difference in the energy investment assumptions is illustrated in Table 18. In this third alternative, investment in public utilities by 1985 is cumulatively lower by \$2.5 billion (\$1971), compared with the Budget impact assessment alternative. The greatest differences arise during the period 1981-83. In the Budget impact alternative, we assume no real growth for utilities investment in 1980 and 1981, and then an annual increase of 2 per cent during the remainder of the projection period. In the alternative discussed here, we impose a decline in utilities investment of approximately 14 per cent in 1980, with very

Table 18

Budget With Alternative Energy Investment Assumptions¹

	1980	1981	1982	1983	1984	1985
Crude Petroleum and Natural Gas Mining Investment						
Construction						
Budget With No Alternative Energy Investment (millions of 1971 dollars)	2044.9	2619.8	3224.2	3840.9	4455.0	4929.3
Budget With Alternative Energy Investment - \$ Deviation	-154.4	-365.2	-204.4	-77.7	112.0	208.3
Machinery & Equipment						
Budget With No Alternative Energy Investment (millions of 1971 dollars)	275.0	346.7	392.2	440.1	507.1	562.0
Budget With Alternative Energy Investment - \$ Deviation	-51.2	-121.3	-67.7	-25.4	38.1	70.6
Transportation Investment						
Construction						
Budget With No Alternative Energy Investment (millions of 1971 dollars)	708.3	1049.8	1336.7	1444.1	1403.0	1193.2
Budget With Alternative Energy Investment - \$ Deviation	24.2	-36.3	-24.6	-121.0	-72.2	43.5
Machinery & Equipment						
Budget With No Alternative Energy Investment (millions of 1971 dollars)	1003.3	1133.3	1258.7	1355.4	1424.3	1466.4
Budget With Alternative Energy Investment - \$ Deviation	15.9	28.7	57.9	37.7	43.8	54.1
Utilities Investment						
Construction						
Budget With No Alternative Energy Investment (millions of 1971 dollars)	2166.4	2166.4	2209.6	2253.8	2298.9	2344.9
Budget With Alternative Energy Investment - \$ Deviation	-252.5	-348.2	-382.4	-360.8	-188.1	-196.2
Machinery & Equipment						
Budget With No Alternative Energy Investment (millions of 1971 dollars)	1151.2	1150.6	1174.5	1199.8	1225.7	1252.5
Budget With Alternative Energy Investment - \$ Deviation	-114.2	-165.5	-184.4	-174.1	-82.1	-88.2

¹ CANDIDE Model 2.0, November 1980.

small increases during the period 1981-83, a large increase in 1984, and then only modest growth in 1985. This path for utilities investment, combined with changes in the path for the pipeline and oil sands investment projects, implies considerable reductions in investment during the period 1980-85, compared with our Budget impact alternative.

SECTION 7

THE IMPACT OF THE BUDGET WITH ALTERNATIVE ENERGY INVESTMENT

A comparison between selected economic indicators for this alternative and those of the alternative in the previous section is recorded in Table 19. The rate of growth in real GNE is reduced, particularly in 1980 and 1981. The growth rate in 1980 falls from -0.6 to -1.1 per cent, while in 1981 it declines from 1.1 to 0.5 per cent. Between 1982 and 1985, growth in real gross national expenditure is marginally higher, reflecting the impact of the altered timing associated with major energy project investment.

In this alternative, the unemployment rate in 1980 is 8.2 per cent, up from 8.0 per cent in the previous alternative. It increases by 0.4 per cent in 1981, from 8.2 to 8.6 per cent, with smaller increases in 1982 and 1983. It is not until 1985 that the unemployment rate descends to the level projected in the Budget impact alternative -- 6.9 per cent.

Decreased activity levels imply reduced tax receipts for the federal government, as well as higher unemployment insurance payments. As a result, the federal deficit rises by \$900 million in 1981 and 1982 and by \$1.2 billion in 1983. It is not until the end of the period that the federal deficit improves, relative to the Budget impact alternative. A similar pattern is

Table 19

Impact of Revised Energy Investment on the Budget (with no alternative energy investment)^{1,2}

	1980	1981	1982	1983	1984	1985
Real GNE (per cent change)						
Budget With No Alternative Energy Investment	-0.6	1.1	3.0	3.4	3.0	2.1
Budget With Alternative Energy Investment	-1.1	0.5	3.2	3.5	3.7	2.3
Consumer Price Index (per cent change)						
Budget With No Alternative Energy Investment	10.1	11.1	10.0	9.1	9.5	9.1
Budget With Alternative Energy Investment	9.8	11.4	10.0	9.2	9.4	9.3
Unemployment Rate (per cent level)						
Budget With No Alternative Energy Investment	8.0	8.2	7.8	7.4	7.1	6.9
Budget With Alternative Energy Investment	8.2	8.6	8.3	7.8	7.3	6.9
Exchange Rate (\$ CDN/ \$ US)						
Budget With No Alternative Energy Investment	1.175	1.163	1.158	1.164	1.166	1.155
Budget With Alternative Energy Investment	1.173	1.159	1.154	1.161	1.167	1.157
Current Account Balance (billions of current dollars)						
Budget With No Alternative Energy Investment	-6.4	-5.5	-4.3	-4.2	-4.3	-1.3
Budget With Alternative Energy Investment	-5.9	-4.3	-3.4	-3.4	-4.6	-1.8
Federal Deficit (billions of current dollars)						
Budget With No Alternative Energy Investment	-11.0	-9.3	-7.0	-4.5	-0.5	1.9
Budget With Alternative Energy Investment	-11.4	-10.2	-8.1	-5.7	-1.0	2.4
Provincial Surplus (billions of current dollars)						
Budget With No Alternative Energy Investment	1.9	2.6	3.3	3.9	5.1	6.6
Budget With Alternative Energy Investment	1.8	2.2	3.1	3.7	5.1	6.7

1 Differences in assumptions between these alternatives reflect only differences in energy investment assumptions contained in Budget Papers.

2 CANDIDE Model 2.0, November 1980.

observed in the provincial position, due to a decline in tax receipts caused by reduced activity. However, the impact on provincial revenues is not as severe.

There is improvement in the current account balance, as import leakage declines while the export position changes little from the Budget impact alternative. It is not until the end of the quinquennium that a deterioration in the current account balance is observed. Similarly, there is marginal improvement in the exchange rate during the early period.

SECTION 8

A COMPARISON OF THE DEPARTMENT OF FINANCE PROJECTIONS WITH THE BUDGET IMPACT ASSESSMENT USING CANDIDE MODEL 2.0

We now compare the three CANDIDE Model 2.0 alternatives which assess the medium-term impact of the Federal Budget with the Department of Finance medium-term projections. Our point of departure for this exercise is the Economic Council of Canada's Prebudget Base Case, as described in Chapter 2 of the Seventeenth Annual Review. In order to assess the differences that exist between the Prebudget Base Case and the Department of Finance's medium-term projections, which include not only an assessment of the economic outlook but also, implicitly, the impact of the Federal Budget, it is necessary to proceed in a gradual manner.

First, the world pricing assumptions in the Budget Papers differ from those used in the Prebudget Base Case. Second, the Prebudget Base Case were different from the pricing policies for domestic crude petroleum and natural gas, nor did they include the new energy taxes, the expenditure incentives for off-oil conversion, substitution, and exploration, or the non-energy related revenue and expenditure changes contained in the Budget Papers. Furthermore, the Budget Papers included specific assumptions for the domestic consumption of fuel oils and natural gas, and imports of crude petroleum. A third difference between the projections of the Department of Finance and the Prebudget

Base Case is associated with the assumed paths for investment in certain large energy projects and in public utilities.

In Table 20 we report for selected economic indicators the results obtained from our analysis. Four of the projections in the table are derived from CANDIDE Model 2.0, while the fifth is that of the Department of Finance. The reasons for the differences between the Department of Finance projection and our Prebudget Base Case are now evident. The widest difference in the growth rate in real GNE in 1980 is associated with differences in assumptions related to energy investment and especially those associated with public utilities. The Federal Budget impact lowers the CANDIDE Model 2.0 growth rate in 1980 from -0.4 to -0.6 per cent. Using the Budget projections for energy investment further reduces it to -1.1 per cent. This is very close to the Department of Finance projection of -1.0 per cent.

The differences are also clear in 1981. The imposition of the Federal Budget assumptions without the alternative energy investment assumptions lowers the CANDIDE Model 2.0 growth rate from 1.4 to 1.1 per cent. Adding the alternative energy investment assumptions of the Department of Finance further reduces the growth rate to 0.5 per cent. This compares with the Department of Finance projection of 1.0 per cent. For the remainder of the decade, the Department of Finance projection shows higher growth rates on average than either of the

Table 20

Impact on Selected Economic Indicators - Summary

	1980	1981	1982	1983	1984	1985
Real GNE (per cent change)						
Prebudget Base Case ¹	-0.4	1.4	3.1	3.5	3.3	2.4
Prebudget Base Case With Budget World Price	-0.5	1.5	3.2	3.7	3.4	2.6
Budget With No Alternative Energy Investment	-0.6	1.1	3.0	3.4	3.0	2.1
Budget With Alternative Energy ₂ Investment	-1.1	0.5	3.2	3.5	3.7	2.3
Finance Medium Term Projection ²	-1.0	1.0	4.0	3.7	3.6	3.3
Consumer Price Index (per cent change)						
Prebudget Base Case ¹	9.8	10.6	9.9	9.0	9.0	8.7
Prebudget Base Case With Budget World Price	9.9	10.6	9.9	9.0	9.1	8.6
Budget With No Alternative Energy Investment	10.1	11.1	10.0	9.1	9.5	9.1
Budget With Alternative Energy ₂ Investment	9.8	11.4	10.0	9.2	9.4	9.3
Finance Medium Term Projection ²	9.7	10.2	9.4	8.8	8.6	8.2
Unemployment Rate (per cent level)						
Prebudget Base Case ¹	7.9	8.0	7.5	7.0	6.7	6.5
Prebudget Base Case With Budget World Price	7.9	8.0	7.4	6.9	6.5	6.2
Budget With No Alternative Energy Investment	8.0	8.2	7.8	7.4	7.1	6.9
Budget With Alternative Energy ₂ Investment	8.2	8.6	8.3	7.8	7.3	6.9
Finance Medium Term Projection ²	7.7	8.7	8.4	8.1	7.8	7.7
Exchange Rate (\$ CDN/ \$ US)						
Prebudget Base Case ¹	1.172	1.169	1.171	1.186	1.193	1.200
Prebudget Base Case With Budget World Price	1.172	1.167	1.170	1.187	1.195	1.204
Budget With No Alternative Energy Investment	1.175	1.163	1.158	1.164	1.166	1.155
Budget With Alternative Energy ₂ Investment	1.173	1.159	1.154	1.161	1.167	1.157
Finance Medium Term Projection ²	1.163	1.143	1.136	1.136	1.136	1.136
Current Account Balance (billions of current dollars)						
Prebudget Base Case ¹	-5.2	-5.6	-5.8	-8.1	-9.6	-11.1
Prebudget Base Case With Budget World Price	-5.3	-5.1	-5.3	-8.1	-9.7	-12.0
Budget With No Alternative Energy Investment	-6.4	-5.5	-4.3	-4.2	-4.3	-1.3
Budget With Alternative Energy ₂ Investment	-5.9	-4.3	-3.4	-3.4	-4.6	-1.8
Finance Medium Term Projection ²	-6.2	-5.5	-4.0	-4.9	-5.1	-5.0
Federal Deficit (billions of current dollars)						
Prebudget Base Case ¹	-10.8	-12.5	-12.8	-13.3	-11.4	-12.5
Prebudget Base Case With Budget World Price	-10.7	-12.5	-13.2	-14.4	-13.0	-15.6
Budget With No Alternative Energy Investment	-11.0	-9.3	-7.0	-4.5	-0.5	1.9
Budget With Alternative Energy ₂ Investment	-11.4	-10.2	-8.1	-5.7	-1.0	2.4
Finance Medium Term Projection ^{2,3}	-11.9	-10.1	-8.5	-7.5	N/A	N/A
Provincial Surplus (billions of current dollars)						
Prebudget Base Case ¹	2.7	4.5	6.1	7.3	8.7	10.0
Prebudget Base Case With Budget World Price	2.4	4.5	6.4	8.0	9.6	11.1
Budget With No Alternative Energy Investment	1.9	2.6	3.3	3.9	5.1	6.6
Budget With Alternative Energy ₂ Investment	1.8	2.2	3.1	3.7	5.1	6.7
Finance Medium Term Projection ²	N/A	N/A	N/A	N/A	N/A	N/A

1 Taken from Canada - The Medium Term Performance and Issues, Background Document for the 17th Annual Review, Economic Council of Canada, November 1980.

2 Taken from The Medium - Term Prospects for the Canadian Economy, 1980-1985, Department of Finance, Canada, October 1980.

3 Fiscal years 1980/81 to 1983/84.

Budget assessment calculations derived from CANDIDE Model 2.0.

Let us now turn to the rate of inflation.

There are important differences between the Department of Finance projection and the CANDIDE Model 2.0 projections with regard to the rate of inflation. On average, during the period 1981-85, the rate of inflation in the two sets of projections differs by approximately 1.0 percentage points per year. For 1981, Budget projections with CANDIDE Model 2.0 show a rate of inflation above 11.0 per cent. This compares with the Department of Finance projection of 10.2 per cent.

The general impact of the Federal Budget appears to be one that increases the rate of unemployment. The Prebudget Base Case suggests an unemployment rate of 8.0 per cent for 1981, but in our Budget alternatives it ranges between 8.2 and 8.6 per cent. This compares with Finance's projection of 8.7 per cent. However, our Budget projections show a more rapid decline than that of the Department of Finance. CANDIDE Model 2.0 Budget projections nonetheless show higher unemployment rates in 1985 than those recorded in the Prebudget Base Case.

The impact on the current account balance and the exchange rate, as we move from the Prebudget Base Case to the Budget impact assessment cases, is interesting. By 1984 the differences

between the Department of Finance projections and our Budget assessment cases are small compared to those between our Prebudget Base Case and Finance's projections. The Department of Finance assessment implies a slightly stronger dollar than do our Budget assessment alternatives. It must be remembered that the path for the current account balance in our Budget assessment cases is influenced by the assumed path for imports of crude petroleum. In fact, we have used the same assumed path as that of the Finance projections.

The impact that the Budget will have on the federal deficit is also interesting. Although the Finance medium-term projection figures are for fiscal years, our Budget impact assessment cases, which are for calendar years, suggest an improvement in the federal position not unlike that resulting from the Federal Budget.

This exercise must be interpreted with a great deal of caution. We have been careful to break the assessment into three important steps. However, there are still a number of critical assumptions that must not be overlooked. The most critical is the assumed path for crude petroleum imports and the implied substitution of natural gas for domestic fuel oil in residential and commercial use. This has an important bearing on the outcome for both the current account balance and the federal deficit. If this import and domestic off-oil substitution does not occur, import subsidy payments will not decline and the current account balance will not improve. This will imply less appreciation in the exchange rate, which in turn will imply upward pressure on the inflation rate. If the import compensation charge is increased

to offset the need for higher subsidies, this will also lead to higher rates of inflation.

None of the outcomes for growth in real GNE in 1981 are encouraging. They range from 0.5 to 1.1 per cent. The recovery in 1982 and 1983 is not spectacular. In the long run the federal deficit declines, approaching near balance by 1984, with a combined federal-provincial surplus materializing in the period 1984-85. Most of this surplus is still attributable to the provincial sector. It appears that surpluses will continue to emerge in the provincial sector, stemming primarily from oil and gas rents accruing to the three Western provinces.

If, by the end of the period, the federal deficit is lowered to near balance, what then might be the effect on the composition of savings? Table 21 contains the deviation of the Budget alternative from the Prebudget Base Case for this item in the period 1981-85. Initially, the federal proportion increases at the expense of the provincial and business sectors. By 1984-85, the foreign sector is also making a substantial contribution. Thus, one of the hidden impacts of the Federal Budget is its compositional effect on savings. It will have a tendency to reduce the percentage of savings accruing to provincial governments, the corporate sector, and the personal sector, and at the same time to decrease the proportion of dis-savings

Table 21
 Deviation of Budget (With No Alternative Energy Investment) From Prebudget
 Base Case For the Composition of Savings (Per Cent)¹

	1981	1982	1983	1984	1985
Personal Sector	-0.3	-0.1	-0.0	-0.2	-0.3
Government Sector	1.7	3.4	5.2	6.0	8.4
Federal	4.1	6.5	8.5	9.1	10.9
Provincial	-2.4	-3.1	-3.2	-3.0	-2.4
Municipal	-0.0	-0.0	-0.0	0.0	0.0
Hospital	0.0	0.0	-0.0	-0.0	-0.0
Canada Pension	0.0	-0.0	-0.0	-0.1	-0.1
Quebec Pension	0.0	-0.0	-0.0	-0.0	-0.0
Business Sector	-1.4	-1.6	-1.3	-1.4	-0.7
Foreign Sector	-0.1	-1.7	-3.8	-4.4	-7.3

¹ CANDIDE Model 2.0, November 1980. Total of the shifts in the four sectors should add to zero, plus or minus rounding differences.

or increase the proportion of savings accruing to the federal sector.

The reader might wish to review Chapters 2 and 3 of the Seventeenth Annual Review. In Chapter 3 we discuss two alternative approaches that the federal government might consider in order to reduce its deficit. One of these approaches deals with a number of initiatives that include, among other things: 1) a blended pricing scheme; 2) a natural gas export tax; and 3) increased corporate taxation. We called this the oil-based deficit reduction alternative.

In Chapter 3 we indicate that the oil-based deficit reduction alternative should only be considered in joint consultation with the provinces, especially the oil-producing provinces. However, we did not include in this alternative a different path for crude petroleum and natural gas consumption, import substitution away from crude petroleum, or the off-oil incentives. As a result, the alternative in Chapter 3 of the Seventeenth Review is devoid of the balance-of-payments and exchange rate effects observed in the Federal Budget impact assessment alternatives. However, the compositional shifts in savings from the corporate, provincial, and personal sectors were observed and highlighted.

In Chapter 3 we also presented an alternative that did not assume joint action between the provinces and the federal

government to reduce the federal deficit, but instead assumed unilateral action by the federal government. In particular, this second alternative excluded the blended pricing scheme as an option, but included our Prebudget Base Case assumption on oil pricing. It also included much higher direct taxation by the federal government on all Canadians. In Chapter 3 we indicated that the alternative based on joint action between the provinces and the federal government to reduce the federal deficit was more attractive, from the point of view of its effect on output and jobs, than the unilateral action case.

The Federal Budget does more than what was suggested in the oil-based deficit reduction alternative reported in Chapter 3 of the Seventeenth Review. It introduces elaborate incentives supported by spending in the area of capital assistance and subsidies for off-oil substitution, import substitution, and increased use of natural gas in commercial, industrial, and residential use, along with exploration and Canadian ownership incentives. If we had to point to those areas where the Federal Budget is optimistic, with respect either to its impact or to its assumptions, we would have to include the domestic substitution of natural gas for crude petroleum and the associated import substitution away from crude petroleum that the Budget projections imply. Although incentives for substitution have been offered by way, not only of higher prices (market induced substitution) but also of subsidies and capital assistance (non-market induced substitution), these assumptions may not, in fact, be the actual outcome. Furthermore, the compositional

shift in savings that we observe in our calculations and in the oil-based deficit reduction alternative reported in Chapter 3 of the Review is currently under public discussion. The impact that this shift will have on investment should be studied carefully.

If off-oil and import substitution does not occur as assumed in the Federal Budget and if reduced investment spending results from the shift in savings (away from producers to the federal sector), we may find a situation where domestic supply is reduced and domestic demand is unchanged, thereby resulting in further dependence on imported crude petroleum.

We need only remember that, in the mid-1970s, the oil import subsidy programme was introduced under the assumption that the OPEC price shock of late 1973 was a once-in-a-lifetime event. From this point of view, the programme appeared to be the best way to absorb the impact of the shock on Canadian incomes over the medium run, as domestic crude petroleum prices adjusted upwards. As it turned out, this was not the case. We must be careful that we do not make the same mistake with respect to off-oil and import substitution and to the impact that the Budget could have on the composition of savings and on the level of investment.

Footnotes

1 Economic Council of Canada, Canada - The Medium Term, Performance and Issues, Background Document for the 17th Annual Review, (December 1980).

2 Economic Council of Canada, Seventeenth Annual Review: A Climate of Uncertainty, (Ottawa: Supply and Services Canada, 1980).

3 The Medium - Term Prospects for the Canadian Economy, 1980-1985, Department of Finance Canada, October 1980.

4 The National Energy Program, 1980, Energy, Mines and Resources Canada.

APPENDIX I

The tables in Appendix I present a comparison between the Prebudget Base Case and the three alternatives for the indicators discussed in the text. Data is also included for indicators such as the percentage change in productivity, the cumulative difference in nonresidential investment expenditures from the Prebudget Base Case, the savings rate, the exchange rate, and growth in the money supply. Additional information for other economic indicators in CANDIDE Model 2.0 is available upon request.

CANDIDE MODEL (2.) - ECONOMIC COUNCIL OF CANADA

TABLE 1.00 CONSUMER PRICE INDEX (% CHANGE) - (CPI)

LINE	ITEM	1980	1981	1982	1983	1984	1985
1							
2	B U D G E T 1 9 8 0						
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.52 REAL)-----	9.8	10.6	9.9	9.0	9.0	8.7
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	9.9	10.6	9.9	9.0	9.1	8.6
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	10.1	11.1	10.0	9.1	9.5	9.1
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	9.8	11.4	10.0	9.2	9.4	9.3

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 2.00 GROSS NATIONAL PRODUCT 1971\$ (% CHANGE) - GNE

LINE	ITEM	1980	1981	1982	1983	1984	1985
1	B U D G E T 1 9 3 0						
2							
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)	-0.4	1.4	3.1	3.5	3.3	2.4
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE	-0.5	1.5	3.2	3.7	3.4	2.5
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT	-0.6	1.1	3.0	3.4	3.0	2.1
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT	-1.1	0.5	3.2	3.5	3.7	2.3

CANDIDE MODEL 2.) - ECONOMIC COUNCIL OF CANADA
 TABLE 3.00 GROSS NATIONAL PRODUCT 1971\$ (BILLION) - GNE

LINE	ITEM	1980	1981	1982	1983	1984	1985
1	B U D G E T						
2							
3							
4							
5	PRE-BUDGET BASE CASE (ACTUAL)						
6	=====						
7	8 OIL \$4 - WORLD PRICE LUM (1.0-1.5% REAL)-----	128.8	130.6	134.6	139.4	144.0	147.5
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	SHOCK - CONTROL (DIFFERENCE)						
14	-----						
15							
16	PRE-BUDGET BASE CASE WITH BUDGET WOPLO PRICE-----	-0.1	0.1	0.2	0.4	0.6	0.9
17							
18	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	-0.3	-0.7	-0.8	-1.0	-1.4	-1.9
19							
20	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	-0.8	-2.0	-2.0	-2.1	-1.7	-2.0

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 TABLE 4.00 PRODUCTIVITY (% CHANGE) - GNE/4E

LINE	ITEM	1980	1981	1982	1983	1984	1985
1	B U D G E T						
2							
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)-----	-2.3	-0.7	0.9	1.3	1.1	1.0
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	-2.3	-0.6	0.9	1.4	1.1	1.1
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	-2.5	-0.7	1.0	1.3	0.9	0.9
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	-2.6	-1.1	1.2	1.3	1.2	0.7

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 5.00 REAL WAGE RATE (% CHANGE) - W/CPI

LINE	ITEM	1980	1981	1982	1983	1984	1985
1	B U D G E T 1 9 8 0						
2							
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)-----	-2.2	-2.4	-0.1	0.7	0.5	1.2
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	-2.2	-2.3	-0.1	0.7	0.5	1.4
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	-2.5	-2.6	0.1	0.6	-0.0	0.8
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	-2.2	-3.2	0.2	0.6	0.1	0.6

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 6-00 REAL DISPOSABLE INCOME (% CHANGE) - PDY%/CPI

LINE	ITEM	1980	1981	1982	1983	1984	1985
1							
2	B U D G E T 1 9 8 0						
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)-----	0.5	0.0	1.3	2.1	1.8	2.1
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	0.6	0.2	1.5	2.3	1.9	2.6
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	0.1	-0.8	1.0	1.9	1.2	1.6
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	0.1	-1.3	1.2	1.9	1.6	1.4

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 7.00 UNEMPLOYMENT RATE (LEVEL) - DURATE

LINE	I T E M	1980	1981	1982	1983	1984	1985
1							
2	B U D G E T 1 9 8 0						
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.52 REAL)-----	7.9	8.0	7.5	7.0	6.7	6.5
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	7.9	8.0	7.4	6.9	6.5	6.2
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	8.0	8.2	7.8	7.4	7.1	6.9
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	8.2	8.6	8.3	7.8	7.3	5.9

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 8.00 TOTAL DEFICIT AT ALL LEVELS OF GOVT. (BILLION) - GDP

LINE	ITEM	1980	1981	1982	1983	1984	1985
1	B U D G E T						
2							
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)-----	-4.8	-3.8	-2.0	-0.9	3.0	3.3
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	-5.0	-3.8	-2.1	-1.4	2.3	1.5
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	-5.8	-2.6	1.0	4.4	10.2	14.3
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	-6.3	-3.8	-0.3	3.1	9.7	14.9

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 9.00 TOTAL DEFICIT PERCENT OF G.N.P. - GDB/GNES

LINE	ITEM	1980	1981	1982	1983	1984	1985
1							
2	B U D G E T						
3							
4							
5	PRE-BUDGET BASE CASE						
6							
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5x REAL)	-1.7	-1.2	-0.6	-0.2	0.7	0.7
9	BUDGET ALTERNATIVES						
10							
11							
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE	-1.8	-1.2	-0.6	-0.3	0.5	0.3
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT	-2.0	-0.8	0.3	1.1	2.3	2.8
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT	-2.3	-1.2	-0.1	0.8	2.2	3.0

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 TABLE 10.00 FEDERAL GOVERNMENT DEFICIT (BILLION) - GDP\$

LINE	I T E M	1980	1981	1982	1983	1984	1985
1	B U D G E T						
2							
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)	-10.8	-12.5	-12.8	-13.3	-11.4	-12.5
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE	-10.7	-12.5	-13.2	-14.4	-13.0	-15.6
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT	-11.0	-9.3	-7.0	-4.5	-0.5	1.9
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT	-11.4	-10.2	-8.1	-5.7	-1.0	2.4

CANIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 11.00 FEDERAL DEFICIT PERCENT OF G.V.P. - \$BIL/GNES

LINE	I T E M	1980	1981	1982	1983	1984	1985
1							
2	B U D G E T						
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)-----	-3.8	-4.0	-3.6	-3.3	-2.5	-2.5
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WOFLO PRICE-----	-3.8	-3.9	-3.7	-3.6	-2.9	-3.1
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	-3.9	-5.0	-2.0	-1.1	-0.1	0.4
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	-4.1	-3.3	-2.3	-1.4	-0.2	0.5

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 12.00 PROVINCIAL GOVERNMENT DEFICIT (BILLION) - GDP\$

LINE	I T E M	1980	1981	1982	1983	1984	1985
1							
2	B U D G E T I Y B C						
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.52 REAL)-----	2.7	4.5	6.1	7.3	8.7	10.0
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	2.4	4.5	6.4	8.0	9.6	11.1
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	1.9	2.6	3.3	3.9	5.1	6.6
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	1.8	2.2	3.1	3.7	5.1	5.7

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 TABLE 13.00 PROVINCIAL DEFICIT PERCENT OF G.N.P. - GDP1/GNE1

LINE	J I E M	1980	1981	1982	1983	1984	1985
1	B U D G E T						
2							
3							
4							
5	PRE-BUDGET BASE CASE						
6	*****						
7							
8	Oil \$4 - WORLD PRICE LOW (1.0-1.52 REAL)	1.0	1.4	1.7	1.8	1.9	2.0
9							
10	BUDGET ALTERNATIVES						
11	*****						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE	0.8	1.4	1.8	2.0	2.1	2.2
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT	0.7	0.8	0.9	1.0	1.1	1.3
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT	0.6	0.7	0.9	0.9	1.1	1.3

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 TABLE 14.00 CURRENT ACCOUNT BALANCE (BILLION) - Y3C.BAL.CAMS

LINE	TITLE	1980	1981	1982	1983	1984	1985
1	B U D G E T I S B C						
2							
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.52 REAL)-----	-5.2	-5.6	-5.8	-8.1	-9.6	-11.1
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	-5.3	-5.1	-5.3	-3.1	-9.7	-12.0
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	-6.4	-5.5	-4.3	-4.2	-4.3	-1.3
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	-5.9	-4.3	-3.4	-3.4	-4.6	-1.9

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 15.00 CURRENT ACCOUNT BALANCE PERCENT OF G.N.P. - CAN\$/5NEP

LINE	ITEM	1980	1981	1982	1983	1984	1985
1	B U D G E T 1 9 8 0						
2							
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)-----	-1.8	-1.8	-1.6	-2.0	-2.1	-2.2
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	-1.9	-1.6	-1.5	-2.0	-2.2	-2.4
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	-2.3	-1.7	-1.2	-1.0	-1.0	-0.3
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	-2.1	-1.4	-1.0	-0.9	-1.0	-0.4

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 16.00 ENERGY BALANCE (BILLION) - TBC-BAL-FOSSIL

LINE	ITEM	1980	1981	1982	1983	1984	1985
1							
2	B U D G E T						
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.53 REAL)	3.5	4.8	5.2	3.8	3.5	2.0
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE	3.4	5.4	6.1	4.6	4.2	2.3
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT	2.1	4.2	6.1	7.4	8.6	12.0
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT	2.1	4.2	6.0	7.4	8.6	12.0

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 17.00 ENERGY FALANCE PERCENT OF G.N.P. - TBC.BNL.FOSSIL/GNES

LINE	ITEM	1980	1981	1982	1983	1984	1985
1	B U D G E T 1 9 8 0						
2							
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)-----	1.2	1.5	1.5	0.9	0.8	0.4
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	1.2	1.7	1.7	1.1	0.9	0.5
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	0.7	1.3	1.7	1.8	1.9	2.4
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	0.7	1.4	1.7	1.9	1.9	2.4

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 18.00 NON-ENERGY BALANCE (BILLION) - TBC.BAL.CAWI-FOSSIL

LINE	I T E M	1980	1981	1982	1983	1984	1985
1							
2	B U D G E T						
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5\$ REAL)-----	-8.7	-10.3	-11.0	-11.9	-13.1	-13.1
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	-8.7	-10.5	-11.4	-12.7	-13.9	-14.3
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	-8.5	-9.7	-10.4	-11.6	-12.9	-13.3
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	-8.0	-8.6	-9.5	-10.8	-13.2	-13.2

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 19.00 NON-ENERGY BALANCE PERCENT OF G.N.P. - CAUS-FOSSIL/GNEFS

LINE	T I T L E	1980	1981	1982	1983	1984	1985
1							
2	B U D G E T						
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)	-3.1	-3.3	-3.1	-3.0	-2.9	-2.6
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE	-3.1	-3.3	-3.2	-3.2	-3.1	-2.9
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT	-3.0	-3.1	-2.9	-2.9	-2.9	-2.7
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT	-2.8	-2.8	-2.7	-2.7	-2.9	-2.7

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 20.00 SAVING RATE (LEVEL) - \$B/PDY\$

LINE	I T E M	1980	1981	1982	1983	1984	1985
1							
2	B U D G E T						
3	-----						
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7	8 OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)-----	10.1	9.5	9.2	9.1	8.8	8.5
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	10.1	9.5	9.2	9.1	8.9	8.7
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	10.1	9.4	9.1	9.1	8.8	8.5
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	10.2	9.4	9.0	9.1	8.8	8.5

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 21.00 INVESTMENT PERCENT OF G.N.P. - (IBNAM1+19VAC08)/GNE\$

LINE	ITEM	1980	1981	1982	1983	1984	1985
1	B U D G E T 1 9 8 0						
2							
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5\$ REAL)-----	15.9	16.3	16.8	17.6	18.3	19.6
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	15.8	16.3	16.8	17.7	18.5	18.8
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	15.9	16.4	16.7	17.4	18.1	19.2
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	15.5	15.5	16.0	16.8	17.9	18.2

CANDIDE MODEL 2.) - ECONOMIC COUNCIL OF CANADA

TABLE 22.00 EXCHANGE RATE (U.S. CENTS) - 1/REKCAN

LINE	ITEM	1980	1981	1982	1983	1984	1985
1							
2	B U D G E T						
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7	0 OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)-----	85.3	85.6	85.4	84.3	83.8	83.4
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	85.4	85.7	85.5	84.3	83.7	83.0
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	85.1	86.0	86.3	85.9	85.8	86.6
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	85.3	86.3	86.6	86.1	85.7	85.4

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 23.00 MONEY SUPPLY (% CHANGE) - FADNEYSJPLY

LINE	ITEM	1980	1981	1982	1983	1984	1985
1	B U D G E T 1 9 8 0						
2							
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7	8 OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)-----	8.1	7.9	8.0	8.1	8.1	8.0
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	8.2	8.1	8.0	8.1	8.0	8.4
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	8.4	8.6	8.0	7.7	6.9	5.8
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	8.6	8.8	8.6	7.9	7.3	6.1

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 24.00 SHORT TERM INTEREST RATE - FRATE.FCPAPER3M

LINE	ITEM	1980	1981	1982	1983	1984	1985
1							
2	B U D G E T						
3							
4							
5	PRE-BUDGET BASE CASE						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.52 REAL)-----	12.1	12.4	11.0	11.0	10.6	10.8
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	12.1	12.4	11.0	11.1	10.7	10.9
14							
15	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	12.1	12.3	10.8	10.8	10.3	10.3
16							
17	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	12.1	12.3	10.8	10.9	10.4	10.4

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 25.00 EMPLOYMENT (THOUSANDS) - VE

LINE	ITEM	1980	1981	1982	1983	1984	1985
1	E U D G E T 1 9 8 0						
2							
3							
4							
5	PRE-BUDGET BASE CASE (ACTUAL)						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.52 REAL)-----	10360.1	10566.9	10823.2	11085.7	11346.8	11543.5
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	SHOCK - CONTROL (CUMALATIVE DIFFERENCE)						
14	-----						
15							
16	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	-3.3	-0.5	0.1	29.6	60.4	103.1
17							
18	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	-14.1	-52.9	-109.5	-176.7	-255.1	-347.3
19							
20	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	-34.4	-122.7	-233.5	-355.0	-457.2	-557.0

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 26.00 GROSS NATIONAL PRODUCT 1971\$ (BILLION) - GNE

LINE	ITEM	1980	1981	1982	1983	1984	1985
1							
2	B U D G E T						
3	-----						
4							
5	PRE-BUDGET BASE CASE (ACTUAL)						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)	128.8	130.6	134.6	139.4	144.0	147.5
9	-----						
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	SHOCK - CONTROL (CUMALATIVE DIFFERENCE)						
14	-----						
15							
16	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE	-0.1	0.0	0.2	0.7	1.2	2.1
17	-----						
18	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT	-0.3	-1.0	-1.8	-2.8	-4.2	-6.1
19	-----						
20	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT	-0.8	-2.8	-4.8	-7.0	-8.7	-10.7

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 TABLE 27.00 INVESTMENT CONSTRUCTION & ME (BILLION) - 13VM46*18VAC31

LINE	ITEM	1980	1981	1982	1983	1984	1985
1	BUDGET						
2							
3							
4	PRE-BUDGET BASE CASE (ACTUAL)						
5	=====						
6	=====						
7	=====						
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)-----	44.9	51.6	59.6	70.1	81.9	92.2
9							
10	BUDGET ALTERNATIVES						
11	=====						
12	=====						
13	SHOCK - CONTROL (CUMALATIVE DIFFERENCE)						
14	-----						
15							
16	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	0.0	0.1	0.6	1.6	3.1	5.2
17							
18	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	-0.0	-0.2	-0.5	-0.9	-1.3	-2.3
19							
20	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	-1.4	-4.6	-7.9	-11.2	-12.6	-13.1

CANADIAN MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 TABLE 28.00 FEDERAL & PROVINCIAL DEFICIT (BILLION) - GDP%+GDP%

LINE	ITEM	1980	1981	1982	1983	1984	1985
1							
2	BUDGET						
3							
4							
5	PRE-BUDGET BASE CASE (ACTUAL)						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)	-8.1	-6.0	-6.7	-5.9	-2.7	-2.6
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	SHOCK - CONTROL (CUMULATIVE DIFFERENCE)						
14	=====						
15							
16	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE	-0.2	-0.2	-0.3	-0.8	-1.6	-3.4
17							
18	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT	-1.0	0.3	3.3	8.6	15.9	27.0
19							
20	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT	-1.6	-1.5	0.1	4.1	10.9	22.6

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA

TABLE 29.00 BUSINESS UNREMITTED PROFITS (BILLION) - Y-URPROF.CORPS

LINE	ITEM	1930	1961	1982	1983	1984	1985
1							
2							
3							
4							
5	PRE-BUDGET BASE CASE (ACTUAL)						
6	=====						
7							
8	OIL \$4 - WORLD PRICE LOW (1.0-1.5% REAL)-----	16.4	18.1	21.1	25.4	28.8	31.0
9							
10	BUDGET ALTERNATIVES						
11	=====						
12							
13	SHOCK - CONTROL (CUMALATIVE DIFFERENCE)						
14	-----						
15							
16	PRE-BUDGET BASE CASE WITH BUDGET WORLD PRICE-----	0.2	0.8	1.9	3.5	5.3	7.7
17							
18	BUDGET WITH NO ALTERNATIVE ENERGY INVESTMENT-----	-0.2	-2.5	-5.5	-8.7	-12.3	-15.1
19							
20	BUDGET WITH ALTERNATIVE ENERGY INVESTMENT-----	-0.9	-3.7	-6.9	-10.2	-13.3	-16.5

APPENDIX II

Appendix II contains a set of three tables that present the major economic indicators for the three alternatives discussed in the text, each in comparison with the Prebudget Base Case. The first table compares the Prebudget Base Case with the Budget world price alternative with the Prebudget Base Case. The second compares the Budget with No Alternative Energy Investment alternative with the Prebudget Base Case. Similarly, the third table compares the Budget with Alternative Energy Investment alternative with the Prebudget Base Case.

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET LCT 8) (1) - BUDGET'S HIGH WORLD PRICE
 DOMESTIC OIL PRICE INCREASE \$4/CRL/YEAR - EXTERNAL JJILOJK L04

TABLE 50.20 SELECTED INDICATORS (\$MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	J	T	E	M	1980	1981	1982	1983	1984	1985
1											
2											
3	GNE\$										
4	GNE\$										
5	GNE\$										
6	GNE\$										
7											
8	GNE\$										
9	GNE\$										
10	GNE\$										
11	GNE\$										
12											
13											
14	GNE										
15	GNE										
16	GNE										
17	GNE										
18											
19	GNE										
20	GNE										
21	GNE										
22	GNE										
23											
24											
25	PFGE										
26	PFGE										
27	PFGE										
28	PFGE										
29											
30	PFGE										
31	PFGE										
32	PFGE										
33	PFGE										
34											
35											
36	DTOTLF										
37	DTOTLF										
38	DTOTLF										
39	DTOTLF										
40											
41	DTOTLF										
42	DTOTLF										
43	DTOTLF										
44	DTOTLF										
45											
46											
47	NE										
48	NE										
49	NE										
50	NE										

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET OCT 8) (1) - BUDGET'S HIGH WORLD PRICE
 DOMESTIC OIL PRICE INCREASE \$4/PRL/YEAR - EXTERNAL OUTLOOK LOW

TABLE 50.20 SELECTED INDICATORS (\$BILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	J	T	E	M	1980	1991	1982	1993	1984	1985
1											
2	NE					2.0	2.1	2.5	2.5	2.4	1.8
3	NE					2.0	2.0	2.4	2.4	2.4	1.7
4	NE					-0.0	0.1	0.1	0.1	0.1	0.1
5	NE					-1.63	2.98	2.25	4.86	3.32	5.77
6											
7											
8	Y.PROFIT.CORP\$					34844.3	39337.9	46313.6	54667.6	63139.5	69911.2
9	Y.PROFIT.CORP\$					34554.1	38531.6	43997.7	51114.2	58668.5	64177.2
10	Y.PROFIT.CORP\$					290.1	1308.3	2315.9	3555.5	4471.0	5734.0
11	Y.PROFIT.CORP\$					0.84	3.40	5.26	6.96	7.62	8.93
12											
13	Y.PROFIT.CORP\$					1.5	14.3	15.2	18.0	15.5	10.7
14	Y.PROFIT.CORP\$					0.7	11.5	14.2	16.2	14.8	9.4
15	Y.PROFIT.CORP\$					0.8	2.8	2.1	1.9	0.7	1.3
16	Y.PROFIT.CORP\$					123.80	24.55	14.54	11.55	4.83	14.22
17											
18											
19	MBTOT					159487.9	175961.2	197635.2	221871.9	248705.1	277800.7
20	MBTOT					159555.4	175910.0	197442.4	221424.7	247907.1	276342.5
21	MBTOT					-67.4	51.3	152.9	447.2	798.1	1458.2
22	MBTOT					-0.04	0.03	0.08	0.20	0.32	0.53
23											
24	MBTOT					9.5	10.3	12.3	12.3	12.1	11.7
25	MBTOT					9.5	10.3	12.2	12.1	12.0	11.5
26	MBTOT					-0.0	0.1	0.1	0.1	0.1	0.2
27	MBTOT					-0.49	0.77	0.49	1.10	1.12	1.99
28											
29											
30	PYS					23299.9	25924.6	28830.1	32164.7	35817.2	398053.0
31	PYS					23302.2	25818.4	287427.6	320450.4	356398.2	395985.1
32	PYS					-20.4	326.2	632.6	1196.3	1769.0	2867.9
33	PYS					-0.01	0.13	0.22	0.37	0.50	0.72
34											
35	PYS					10.7	11.0	11.4	11.7	11.4	11.4
36	PYS					10.7	10.8	11.3	11.5	11.2	11.1
37	PYS					-0.0	0.1	0.1	0.2	0.1	0.3
38	PYS					-0.09	1.39	0.92	1.48	1.22	2.27
39											
40											
41	POYS/CPI					90492.9	90698.0	92022.6	94149.4	95955.7	98231.8
42	POYS/CPI					90520.2	90544.6	91715.3	93645.3	95375.0	97342.0
43	POYS/CPI					-27.3	153.4	307.3	506.1	580.7	889.8
44	POYS/CPI					-0.03	0.17	0.34	0.54	0.61	0.91
45											
46	POYS/CPI					0.4	0.2	1.5	2.3	1.9	2.4
47	POYS/CPI					0.5	0.0	1.3	2.1	1.8	2.1
48	POYS/CPI					-0.0	0.2	0.2	0.2	0.2	0.3
49	POYS/CPI					-6.34	741.54	12.95	9.83	3.87	15.01

CANADIAN MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET OCT 80 (1) - BUDGET'S HIGH WORLD PRICE
 DOMESTIC OIL PRICE INCREASE \$4/URL/YEAR - EXTERNAL OILLOCK LOW

TABLE 50.20 SELECTED INDICATORS (\$MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	ITEM	1980	1981	1982	1983	1984	1985
1								
2		REAL AVERAGE HOURLY WAGE RATE						
3	W/CPI	LX\$4-BUDGET01	3.97	3.38	3.89	3.91	3.93	3.98
4	W/CPI	OIL-LEXHOL-\$4	3.97	3.88	3.87	3.90	3.92	3.97
5	W/CPI	DIFFERENCE	-0.00	0.00	0.00	0.01	0.00	0.01
6	W/CPI	% DIFFERENCE	-0.04	0.03	0.10	0.15	0.13	0.33
7		% CHANGE						
8	W/CPI	LX\$4-BUDGET01	-2.2	-2.3	-0.1	0.7	0.5	1.4
9	W/CPI	OIL-LEXHOL-\$4	-2.2	-2.4	-0.1	0.7	0.5	1.2
10	W/CPI	DIFFERENCE	-0.0	0.1	0.1	0.0	-0.0	0.2
11	W/CPI	% DIFFERENCE	1.66	-2.70	-53.67	7.18	-4.33	17.80
12								
13		RATES						
14		UNEMPLOYMENT RATE (PERCENT)						
15	DURATE	LX\$4-BUDGET01	7.9	8.0	7.6	6.9	6.5	6.2
16	DURATE	OIL-LEXHOL-\$4	7.9	8.0	7.5	7.0	6.7	6.5
17	DURATE	DIFFERENCE	0.0	-0.0	-0.1	-0.1	-0.2	-0.3
18	DURATE	% DIFFERENCE	0.30	-0.27	-0.72	-1.92	-3.02	-4.03
19		RATE OF CHANGE OF OUTPUT PER MANHOUR						
20	GNE/ME	LX\$4-BUDGET01	-2.3	-3.6	0.9	1.4	1.1	1.1
21	GNE/ME	OIL-LEXHOL-\$4	-2.3	-0.7	0.9	1.3	1.1	1.0
22	GNE/ME	DIFFERENCE	-0.0	0.1	0.0	0.1	-0.0	0.1
23	GNE/ME	% DIFFERENCE	0.67	-7.92	5.04	4.49	-0.84	11.60
24		PERSONAL SAVINGS RATE (PERCENT)						
25	\$\$/PDY\$	LX\$4-BUDGET01	10.1	9.5	9.2	9.1	8.9	8.7
26	\$\$/PDY\$	OIL-LEXHOL-\$4	10.1	9.5	9.2	9.1	8.8	8.6
27	\$\$/PDY\$	DIFFERENCE	0.0	0.0	0.1	0.1	0.1	0.1
28	\$\$/PDY\$	% DIFFERENCE	0.09	3.25	3.96	0.72	0.60	0.82
29								
30		SURPLUS OR DEFICIT						
31		ALL GOVERNMENTS						
32	G0\$	LX\$4-BUDGET01	-4980.2	-3819.1	-2122.9	-1390.5	2299.6	1500.7
33	G0\$	OIL-LEXHOL-\$4	-4768.0	-3835.9	-1986.6	-869.3	3030.7	3348.3
34	G0\$	DIFFERENCE	-212.2	16.8	-136.3	-521.2	-731.1	-1847.6
35	G0\$	% DIFFERENCE	4.45	-0.44	6.86	59.96	-26.12	-55.18
36		FEDERAL						
37	G0\$	LX\$4-BUDGET01	-10714.0	-12464.6	-13211.0	-14399.5	-12957.2	-15564.7
38	G0\$	OIL-LEXHOL-\$4	-10814.5	-12494.2	-12835.1	-13265.4	-11353.0	-12545.7
39	G0\$	DIFFERENCE	100.5	29.5	-624.0	-865.9	1604.2	3019.0
40	G0\$	% DIFFERENCE	-0.93	-0.24	3.17	8.55	14.13	24.06
41		PROVINCIAL						
42	G0\$	LX\$4-BUDGET01	2403.6	4472.9	6332.1	7963.5	9554.0	11105.4
43	G0\$	OIL-LEXHOL-\$4	2714.9	4481.2	6113.9	7349.9	8687.7	9950.4
44	G0\$	DIFFERENCE	-311.4	-8.3	268.2	613.6	866.4	1155.2
45	G0\$	% DIFFERENCE	-11.47	-0.19	4.39	8.35	9.97	11.61
46		LOCAL						
47	G0\$	LX\$4-BUDGET01	20.8	412.5	398.7	296.3	569.7	521.9
48	G0\$	OIL-LEXHOL-\$4	21.7	415.7	398.9	306.0	582.6	546.8
49	G0\$	DIFFERENCE	-0.9	-3.2	-0.3	-9.7	-12.9	-25.0
50	G0\$	% DIFFERENCE	-4.28	-3.77	-3.37	-3.18	-2.21	-4.57

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET OCT 8) (1) - BUDGET'S HIGH WORLD PRICE
 DOMESTIC OIL PRICE INCREASE \$4/EK/L/YEAR - EXTERNAL OUTLOOK LOW

TABLE 50-20 SELECTED INDICATORS (\$MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	ITEM	1980	1991	1982	1983	1984	1985
1		HOSPITALS						
2	GDH\$	LX\$4.BUDGET\$01	222.4	185.1	230.4	210.9	244.1	234.3
3	GDH\$	OIL.LEXHOL.\$4	222.3	186.5	230.4	210.4	244.3	230.3
4	GDH\$	DIFFERENCE	0.2	-0.4	-0.1	0.5	-0.2	4.3
5	GDH\$	% DIFFERENCE	0.07	-0.24	-0.03	0.25	-0.07	1.86
6		CANADA & QUEBEC PENSION PLANS						
7	GSPENC\$+GSPENQ\$	LX\$4.BUDGET\$01	3087.3	3573.9	4376.7	4538.2	4888.4	5203.1
8	GSPENC\$+GSPENQ\$	OIL.LEXHOL.\$4	3087.7	3574.7	4375.0	4529.4	4868.8	5167.9
9	GSPENC\$+GSPENQ\$	DIFFERENCE	-0.3	-0.8	1.8	8.8	19.5	35.2
10	GSPENC\$+GSPENQ\$	% DIFFERENCE	-0.01	-0.02	0.04	0.19	0.40	0.68
11		CURRENT ACCOUNT OF BALANCE OF PAYMENTS						
12	TBC.BAL.CAMS	LX\$4.BUDGET\$01	-5250.9	-5089.0	-5272.2	-8050.3	-9720.8	-11969.7
13	TBC.BAL.CAMS	OIL.LEXHOL.\$4	-5185.1	-5570.2	-5784.6	-8126.8	-9589.0	-11082.4
14	TBC.BAL.CAMS	DIFFERENCE	-65.8	481.2	512.6	76.5	-131.9	-887.3
15	TBC.BAL.CAMS	% DIFFERENCE	1.27	-8.64	-9.86	-0.94	1.38	8.01
16								
17		RATIOS (PERCENT)						
18		COMPENSATION OF EMPLOYEES / NET NATIONAL INCOME						
19	WBTOT/NNIS	LX\$4.BUDGET\$01	71.5	70.4	59.7	69.3	69.0	69.3
20	WBTOT/NNIS	OIL.LEXHOL.\$4	71.5	70.7	70.2	70.0	69.8	70.1
21	WBTOT/NNIS	DIFFERENCE	0.0	-0.3	-0.5	-0.7	-0.8	-0.3
22	WBTOT/NNIS	% DIFFERENCE	0.05	-0.40	-0.70	-0.97	-1.10	-1.22
23		PROFITS / NET NATIONAL INCOME						
24	CORP\$/NNIS	LX\$4.BUDGET\$01	15.6	15.9	16.3	17.1	17.5	17.4
25	CORP\$/NNIS	OIL.LEXHOL.\$4	15.5	15.5	15.6	16.2	16.5	16.3
26	CORP\$/NNIS	DIFFERENCE	0.1	0.5	0.7	0.9	1.0	1.1
27	CORP\$/NNIS	% DIFFERENCE	0.93	2.95	4.44	5.70	6.09	7.04
28		ALL INVESTMENT / GROSS NATIONAL EXPENDITURE						
29	GFC\$/GNES	LX\$4.BUDGET\$01	23.8	24.1	24.4	25.2	26.0	26.3
30	GFC\$/GNES	OIL.LEXHOL.\$4	23.8	24.1	24.4	25.1	25.9	26.1
31	GFC\$/GNES	DIFFERENCE	0.0	-0.0	0.0	0.1	0.2	0.3
32	GFC\$/GNES	% DIFFERENCE	0.08	-0.04	0.18	0.52	0.73	1.02
33		PRIVATE NON-RESIDENTIAL CONSTR.+HCE / GNE						
34	IBN/GNES	LX\$4.BUDGET\$01	15.8	16.3	16.8	17.7	18.5	18.4
35	IBN/GNES	OIL.LEXHOL.\$4	15.8	16.3	16.8	17.6	18.3	18.6
36	IBN/GNES	DIFFERENCE	0.0	-0.0	0.1	0.1	0.2	0.3
37	IBN/GNES	% DIFFERENCE	0.07	-0.01	0.33	0.82	1.11	1.43
38		GOVERNMENT SURPLUS / GROSS NATIONAL EXPENDITURE						
39	GD\$/GNES	LX\$4.BUDGET\$01	-1.8	-1.2	-0.6	-0.3	0.5	0.3
40	GD\$/GNES	OIL.LEXHOL.\$4	-1.7	-1.2	-0.6	-0.2	0.7	0.7
41	GD\$/GNES	DIFFERENCE	-0.1	0.0	-0.0	-0.1	-0.2	-0.4
42	GD\$/GNES	% DIFFERENCE	4.51	-0.73	6.41	59.35	-24.67	-55.54
43		GOVERNMENT REVENUE / GROSS NATIONAL EXPENDITURE						
44	GR\$/GNES	LX\$4.BUDGET\$01	38.2	38.9	38.8	38.9	38.9	38.9
45	GR\$/GNES	OIL.LEXHOL.\$4	38.3	38.9	38.7	38.5	38.4	38.4
46	GR\$/GNES	DIFFERENCE	-0.1	0.0	0.2	0.4	0.5	0.6
47	GR\$/GNES	% DIFFERENCE	-0.27	0.05	0.45	0.35	1.19	1.47

CANDIDE MODEL 2.3 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET (CT 83 (1)) - BUDGET'S HIGH WORLD PRICE
 DOMESTIC OIL PRICE INCREASE \$4/FRL/YEAR - EXTERNAL OUTLOOK LOW
 TABLE 50.20 SELECTED INDICATORS (\$MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	ITEM	1980	1981	1982	1983	1984	1985
1		PERSONAL INCOME TAXES / PERSONAL INCOME						
2	GR.DT.KATEX100	LX\$4.BUDGET\$01	12.7	12.6	12.5	12.6	12.7	12.9
3	GR.DT.RATEX100	OIL.LEXHOL.\$4	12.7	12.6	12.5	12.6	12.7	12.9
4	GR.DT.RATEX100	DIFFERENCE	-0.0	-0.0	-0.0	-0.0	-0.0	0.0
5	GR.DT.RATEX100	% DIFFERENCE	-0.01	-0.10	-0.11	-0.11	-0.06	0.01
6		CURRENT ACCOUNT SURPLUS / GROSS NAIL EXPENDITURE						
7	BAL.CAMS/GNES	LX\$4.BUDGET\$01	-1.9	-1.6	-1.5	-2.0	-2.2	-2.4
8	BAL.CAMS/GNES	OIL.LEXHOL.\$4	-1.8	-1.8	-1.6	-2.0	-2.1	-2.2
9	BAL.CAMS/GNES	DIFFERENCE	-0.0	0.2	0.2	0.0	-0.0	-0.2
10	BAL.CAMS/GNES	% DIFFERENCE	1.33	-8.90	-9.24	-1.50	0.65	7.14
11								
12		MONETARY SECTOR						
13		MONEY SUPPLY (NARROW DEFINITION)						
14	FMONEY SUPPLY	B LX\$4.BUDGET\$01	26187.7	28296.4	30551.4	33028.0	35686.2	38683.5
15	FMONEY SUPPLY	B OIL.LEXHOL.\$4	26160.3	28239.0	30486.8	32942.5	35596.7	38443.7
16	FMONEY SUPPLY	B DIFFERENCE	27.4	57.3	64.6	85.5	89.5	239.8
17	FMONEY SUPPLY	B % DIFFERENCE	0.10	0.20	0.21	0.26	0.25	0.62
18		% CHANGE						
19	FMONEY SUPPLY	B LX\$4.BUDGET\$01	8.2	8.1	8.0	8.1	8.0	8.4
20	FMONEY SUPPLY	B OIL.LEXHOL.\$4	8.1	7.9	8.0	8.1	8.1	8.0
21	FMONEY SUPPLY	B DIFFERENCE	0.1	0.1	0.0	0.1	-0.0	0.4
22	FMONEY SUPPLY	B % DIFFERENCE	1.40	1.33	0.12	0.64	-0.11	5.01
23		FINANCE COMPANY PAPER						
24	FRATE.FCPAPER3M	B LX\$4.BUDGET\$01	12.1	12.4	11.0	11.1	10.7	10.3
25	FRATE.FCPAPER3M	B OIL.LEXHOL.\$4	12.1	12.4	11.0	11.0	10.6	10.8
26	FRATE.FCPAPER3M	B DIFFERENCE	-0.0	0.0	0.1	0.1	0.1	0.1
27	FRATE.FCPAPER3M	B % DIFFERENCE	-0.08	0.18	0.51	0.73	0.99	0.93
28		GOVERNMENT 10 YEAR BONDS						
29	FRATE.GBOND.10Y	B LX\$4.BUDGET\$01	12.1	12.2	12.0	11.7	11.4	11.6
30	FRATE.GBOND.10Y	B OIL.LEXHOL.\$4	12.1	12.2	12.0	11.6	11.3	11.5
31	FRATE.GBOND.10Y	B DIFFERENCE	-0.0	0.0	0.0	0.0	0.1	0.1
32	FRATE.GBOND.10Y	B % DIFFERENCE	-0.03	0.03	0.16	0.39	0.63	1.04
33		INDUSTRIAL 10 YEAR BONDS						
34	FRATE.IBOND.10Y	B LX\$4.BUDGET\$01	13.2	13.0	12.2	11.9	11.6	11.8
35	FRATE.IBOND.10Y	B OIL.LEXHOL.\$4	13.2	13.0	12.2	11.9	11.6	11.8
36	FRATE.IBOND.10Y	B DIFFERENCE	-0.0	0.0	0.0	0.0	0.0	0.0
37	FRATE.IBOND.10Y	B % DIFFERENCE	-0.01	0.02	0.10	0.19	0.28	0.31
38		G.O.F.C.DIRECT GUAR. SECURITIES						
39	FGD.TSEC	I LX\$4.BUDGET\$01	76869.1	90424.3	104733.6	120419.6	134320.3	151893.2
40	FGD.TSEC	I OIL.LEXHOL.\$4	76975.2	90451.8	104253.2	118498.4	130896.7	144485.3
41	FGD.TSEC	I DIFFERENCE	-106.1	-27.5	490.3	1921.1	3423.6	7407.9
42	FGD.TSEC	I % DIFFERENCE	-0.14	-0.03	0.46	1.62	2.62	5.13
43		PROV.MUNIC. SECURITIES HELD BY NON FINANC. PUBLIC						
44	FGD.P+MSEC.PUB	B LX\$4.BUDGET\$01	60136.4	62913.9	64769.5	66273.8	67252.2	68060.8
45	FGD.P+MSEC.PUB	B OIL.LEXHOL.\$4	59994.8	62770.4	64758.6	66554.5	67942.7	69288.4
46	FGD.P+MSEC.PUB	B DIFFERENCE	141.6	143.5	10.9	-280.7	-690.5	-1228.0
47	FGD.P+MSEC.PUB	B % DIFFERENCE	0.24	0.23	0.02	-0.62	-1.02	-1.77

CAVIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET CCT 80 (1) - BUDGET'S HIGH WORLD PRICE
 DOMESTIC OIL PRICE INCREASE \$4/BBL/YEAR - EXTERNAL OUTLOOK LOW
 TABLE 50.20 SELECTED INDICATORS (\$MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	1980	1981	1982	1983	1984	1985
PROVINCIAL SECURITIES HELD BY NON-RESIDENTS							
1	LX\$4.BUDGET801	26036.3	26519.2	26305.2	26482.4	25486.4	23867.5
2	LX\$4.BUDGET801	25866.5	26438.5	26751.9	26752.4	26199.1	25170.7
3	OIL.LEXHOL.\$4	169.7	179.6	44.4	-270.0	-712.7	-1303.2
4	% DIFFERENCE	0.66	0.68	0.17	-1.01	-2.72	-5.86
STOCK OF PROV+LOCAL BONDS NET OF PEMS							
5	LX\$4.BUDGET801	60509.8	60345.3	58362.2	55054.4	50198.6	44235.3
6	LX\$4.BUDGET801	60198.2	60021.1	58307.7	55614.6	51631.0	46830.3
7	OIL.LEXHOL.\$4	311.7	324.2	54.6	-560.2	-1432.3	-2595.1
8	% DIFFERENCE	0.52	0.54	0.09	-1.01	-2.77	-5.54
HOUSING (THOUSANDS)							
9	TOTAL HOUSING STARTS	160.4	177.7	176.1	177.0	197.4	192.1
10	LX\$4.BUDGET801	160.2	177.7	176.8	178.4	199.3	193.6
11	OIL.LEXHOL.\$4	0.2	-0.0	-0.7	-1.4	-1.9	-1.5
12	% DIFFERENCE	0.14	-0.01	-0.39	-0.76	-0.94	-0.75
PRICES - LEVEL							
CONSUMER EXPENDITURE DEFLATOR							
13	LX\$4.BUDGET801	2.036	2.242	2.449	2.657	2.888	3.122
14	LX\$4.BUDGET801	2.036	2.244	2.455	2.666	2.896	3.135
15	OIL.LEXHOL.\$4	0.001	-0.001	-0.005	-0.009	-0.008	-0.013
16	% DIFFERENCE	0.03	-0.07	-0.20	-0.32	-0.29	-0.41
CONSUMER PRICE INDEX							
17	LX\$4.BUDGET801	2.100	2.322	2.551	2.780	3.033	3.293
18	LX\$4.BUDGET801	2.099	2.322	2.553	2.784	3.035	3.298
19	OIL.LEXHOL.\$4	0.001	-0.000	-0.002	-0.004	-0.002	-0.005
20	% DIFFERENCE	0.02	-0.02	-0.08	-0.13	-0.07	-0.14
GOVERNMENT CURRENT EXPENDITURE DEFLATOR							
21	LX\$4.BUDGET801	2.473	2.661	2.878	3.123	3.380	3.658
22	LX\$4.BUDGET801	2.473	2.660	2.876	3.119	3.375	3.651
23	OIL.LEXHOL.\$4	0.000	0.001	0.002	0.004	0.005	0.008
24	% DIFFERENCE	0.00	0.04	0.07	0.12	0.15	0.21
FIXED INVESTMENT DEFLATOR							
25	LX\$4.BUDGET801	2.314	2.542	2.790	3.043	3.301	3.584
26	LX\$4.BUDGET801	2.313	2.536	2.777	3.017	3.264	3.533
27	OIL.LEXHOL.\$4	0.001	0.006	0.014	0.026	0.037	0.050
28	% DIFFERENCE	0.03	0.24	0.50	0.87	1.15	1.43
EXPORTS DEFLATOR							
29	LX\$4.BUDGET801	2.792	3.111	3.413	3.732	4.044	4.360
30	LX\$4.BUDGET801	2.794	3.076	3.348	3.634	3.923	4.219
31	OIL.LEXHOL.\$4	-0.002	0.035	0.065	0.098	0.120	0.141
32	% DIFFERENCE	-0.06	1.13	1.93	2.70	3.07	3.35
IMPORTS DEFLATOR							
33	LX\$4.BUDGET801	2.590	2.848	3.121	3.449	3.726	4.035
34	LX\$4.BUDGET801	2.589	2.838	3.093	3.390	3.646	3.928
35	OIL.LEXHOL.\$4	0.001	0.010	0.029	0.059	0.079	0.107
36	% DIFFERENCE	0.05	0.35	0.90	1.75	2.18	2.73

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET OCT 80 (1) - BUDGET'S HIGH WORLD PRICE
 DOMESTIC OIL PRICE INCREASE \$4/UNKL/YEAR - EXTERNAL OILFLOCK LOW

TABLE 50.20 SELECTED INDICATORS (\$MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	I T E M	1980	1981	1982	1983	1984	1985
1		EXCHANGE RATE						
2	REXCAN	LXHS4-BUDGETB01	1.172	1.167	1.170	1.187	1.195	1.204
3	REXCAN	B OIL-LEXHOL . \$4	1.172	1.169	1.171	1.186	1.193	1.200
4	REXCAN	B DIFFERENCE	-0.000	-0.002	-0.001	0.001	0.002	0.005
5	REXCAN	B % DIFFERENCE	-0.002	-0.14	-0.08	0.09	0.15	0.39
6								
7		PRICES - PERCENTAGE CHANGE						
8		CONSUMER EXPENDITURE DEFLATOR						
9	PFC	LXHS4-BUDGETB01	9.8	10.1	9.2	8.5	8.7	8.1
10	PFC	B OIL-LEXHOL . \$4	9.8	10.2	9.4	8.6	8.6	8.3
11	PFC	B DIFFERENCE	0.0	-0.1	-0.2	-0.1	0.0	-0.1
12	PFC	B % DIFFERENCE	0.29	-0.99	-1.61	-1.50	0.61	-1.59
13		CONSUMER PRICE INDEX						
14	CPI	LXHS4-BUDGETB01	9.9	10.6	9.9	9.0	9.1	8.6
15	CPI	B OIL-LEXHOL . \$4	9.8	10.6	9.9	9.0	9.0	8.7
16	CPI	B DIFFERENCE	0.0	-0.0	-0.1	-0.0	0.1	-0.1
17	CPI	B % DIFFERENCE	0.27	-0.66	-0.73	-0.53	0.64	-0.85
18		GOVERNMENT CURRENT EXPENDITURE DEFLATOR						
19	PFGE-CGS	LXHS4-BUDGETB01	8.2	7.6	8.2	8.5	8.2	8.2
20	PFGE-CGS	B OIL-LEXHOL . \$4	8.2	7.5	8.1	8.5	8.2	8.2
21	PFGE-CGS	B DIFFERENCE	-0.0	0.0	0.0	0.0	0.0	0.1
22	PFGE-CGS	B % DIFFERENCE	-0.00	0.50	0.52	0.55	0.49	0.71
23		FIXED INVESTMENT DEFLATOR						
24	PFGFC	LXHS4-BUDGETB01	10.4	9.8	9.8	9.1	8.5	8.6
25	PFGFC	B OIL-LEXHOL . \$4	10.3	9.6	9.5	8.7	8.2	8.3
26	PFGFC	B DIFFERENCE	0.0	0.2	0.3	0.4	0.3	0.3
27	PFGFC	B % DIFFERENCE	0.37	2.34	2.94	4.64	3.65	3.63
28		EXPORTS DEFLATOR						
29	PTE-CA-G+SW	LXHS4-BUDGETB01	15.3	11.4	9.7	9.4	8.3	7.8
30	PTE-CA-G+SW	B OIL-LEXHOL . \$4	15.4	10.1	8.8	8.5	8.0	7.5
31	PTE-CA-G+SW	B DIFFERENCE	-0.1	1.3	0.9	0.8	0.4	0.3
32	PTE-CA-G+SW	B % DIFFERENCE	-0.45	13.04	9.68	9.54	6.90	3.96
33		IMPORTS DEFLATOR						
34	PTM-CA-G+SW	LXHS4-BUDGETB01	14.2	10.0	9.6	10.5	8.0	8.3
35	PTM-CA-G+SW	B OIL-LEXHOL . \$4	14.2	9.6	9.0	9.6	7.6	7.7
36	PTM-CA-G+SW	B DIFFERENCE	0.1	0.3	0.6	0.9	0.5	0.6
37	PTM-CA-G+SW	B % DIFFERENCE	0.36	3.48	5.50	9.61	5.00	7.55
38		CONSUMER PRICE EXPECTATIONS						
39	-CPIE	LXHS4-BUDGETB01	8.0	7.6	9.1	8.6	8.0	8.1
40	-CPIE	B OIL-LEXHOL . \$4	8.0	7.5	9.1	8.6	8.0	8.0
41	-CPIE	B DIFFERENCE	0.0	0.0	-0.0	-0.0	-0.0	0.1
42	-CPIE	B % DIFFERENCE	0.00	0.31	-0.03	-0.29	-0.36	0.65
43								
44		PERCENT OF GROSS NATIONAL EXPENDITURE (GNIE)						
45		TRANSF TO PROV, HOSPITAL						
46	MOSS\$/GNE\$	LXHS4-BUDGETB01	1.19	1.12	1.06	1.04	1.01	0.99
47	MOSS\$/GNE\$	B OIL-LEXHOL . \$4	1.19	1.00	1.07	1.05	1.02	1.00
48	MOSS\$/GNE\$	B DIFFERENCE	0.00	-0.00	-0.00	-0.01	-0.01	-0.01
49	MOSS\$/GNE\$	B % DIFFERENCE	0.00	-0.29	-0.62	-0.56	-0.72	-0.80

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET OCT 80 (1) - BUDGET'S HIGH WORLD PRICE
 DOMESTIC OIL PRICE INCREASE \$4/TKL/YEAR - EXTERNAL OUTLOOK LOW

TABLE 50.20 SELECTED INDICATORS (\$MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	ITEM	1980	1981	1982	1983	1984	1985
1		TRNSF TO PROV, MEDICARE						
2	MED\$/GNE\$	LXH\$4.BUDGETB01	0.30	0.33	0.49	0.69	0.47	0.46
3	MED\$/GNE\$	OIL.LEXHOL.\$4	0.30	0.33	0.49	0.69	0.47	0.47
4	MED\$/GNE\$	DIFFERENCE	0.00	-0.00	-0.00	-0.00	-0.00	-0.00
5	MED\$/GNE\$	% DIFFERENCE	0.06	-0.29	-0.42	-0.56	-0.72	-0.80
6		TRNSF TO PROV, TAXATION						
7	TAX\$/GNE\$	LXH\$4.BUDGETB01	1.22	1.20	1.12	1.07	1.02	0.98
8	TAX\$/GNE\$	OIL.LEXHOL.\$4	1.22	1.20	1.12	1.08	1.03	0.99
9	TAX\$/GNE\$	DIFFERENCE	0.00	-0.00	-0.00	-0.01	-0.01	-0.01
10	TAX\$/GNE\$	% DIFFERENCE	0.06	-0.29	-0.62	-0.56	-0.72	-0.80
11		TRNSF TO PROV, POST-SEC EDUCATION						
12	GRU\$/GNE\$	LXH\$4.BUDGETB01	0.59	0.56	0.55	0.56	0.54	0.53
13	GRU\$/GNE\$	OIL.LEXHOL.\$4	0.59	0.56	0.56	0.56	0.54	0.54
14	GRU\$/GNE\$	DIFFERENCE	0.00	-0.00	-0.00	-0.00	-0.00	-0.00
15	GRU\$/GNE\$	% DIFFERENCE	0.06	-0.29	-0.42	-0.56	-0.72	-0.80
16		TRNSF TO PROV, OTHER						
17	OTHR\$/GNE\$	LXH\$4.BUDGETB01	0.43	0.41	0.39	0.37	0.36	0.34
18	OTHR\$/GNE\$	OIL.LEXHOL.\$4	0.43	0.42	0.39	0.38	0.36	0.35
19	OTHR\$/GNE\$	DIFFERENCE	0.00	-0.00	-0.00	-0.00	-0.00	-0.00
20	OTHR\$/GNE\$	% DIFFERENCE	0.06	-0.29	-0.42	-0.56	-0.72	-0.80
21								
22		PERCENT OF FED GOVT TOTAL CURRENT EXPENDITURE						
23		TRNSF TO PROV, HOSPITAL						
24	HOS\$/GEF.C\$	LXH\$4.BUDGETB01	5.77	5.35	5.16	5.05	5.04	4.87
25	HOS\$/GEF.C\$	OIL.LEXHOL.\$4	5.77	5.38	5.25	5.21	5.25	5.15
26	HOS\$/GEF.C\$	DIFFERENCE	0.00	-0.03	-0.09	-0.16	-0.21	-0.28
27	HOS\$/GEF.C\$	% DIFFERENCE	0.06	-0.58	-1.71	-3.15	-3.97	-5.49
28		TRNSF TO PROV, MEDICARE						
29	MED\$/GEF.C\$	LXH\$4.BUDGETB01	1.46	1.59	2.38	2.36	2.36	2.28
30	MED\$/GEF.C\$	OIL.LEXHOL.\$4	1.46	1.60	2.42	2.44	2.45	2.41
31	MED\$/GEF.C\$	DIFFERENCE	0.00	-0.01	-0.04	-0.08	-0.10	-0.13
32	MED\$/GEF.C\$	% DIFFERENCE	0.06	-0.58	-1.71	-3.15	-3.97	-5.49
33		TRNSF TO PROV, TAXATION						
34	TAX\$/GEF.C\$	LXH\$4.BUDGETB01	5.93	5.74	5.44	5.19	5.09	4.83
35	TAX\$/GEF.C\$	OIL.LEXHOL.\$4	5.93	5.78	5.53	5.36	5.30	5.11
36	TAX\$/GEF.C\$	DIFFERENCE	0.00	-0.03	-0.09	-0.17	-0.21	-0.28
37	TAX\$/GEF.C\$	% DIFFERENCE	0.06	-0.58	-1.71	-3.15	-3.97	-5.49
38		TRNSF TO PROV, POST-SEC EDUCATION						
39	GRU\$/GEF.C\$	LXH\$4.BUDGETB01	2.84	2.67	2.68	2.70	2.70	2.61
40	GRU\$/GEF.C\$	OIL.LEXHOL.\$4	2.84	2.69	2.73	2.79	2.81	2.76
41	GRU\$/GEF.C\$	DIFFERENCE	0.00	-0.02	-0.05	-0.09	-0.11	-0.15
42	GRU\$/GEF.C\$	% DIFFERENCE	0.06	-0.58	-1.71	-3.15	-3.97	-5.49
43		TRNSF TO PROV, OTHER						
44	OTHR\$/GEF.C\$	LXH\$4.BUDGETB01	2.09	1.98	1.91	1.81	1.78	1.69
45	OTHR\$/GEF.C\$	OIL.LEXHOL.\$4	2.09	1.99	1.94	1.87	1.85	1.78
46	OTHR\$/GEF.C\$	DIFFERENCE	0.00	-0.01	-0.03	-0.06	-0.07	-0.10
47	OTHR\$/GEF.C\$	% DIFFERENCE	0.06	-0.58	-1.71	-3.15	-3.97	-5.49

CANDID MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FISCAL BUDGET (C1 80:12) - I.C.C. ENERGY INVESTMENT
 DOMESTIC OIL PRICE INCREASE \$4/BBL/YEAR - EXTERNAL OUTLOOK LLM

TABLE 50.2C SELECTED INDICATORS (\$ MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	1979	1980	1981	1982	1983	1984	1985
1								
2	REAL AVERAGE HOURLY WAGE RATE							
3	LXP\$4.RUDGET8C2	4.06	3.96	3.86	3.86	3.88	3.88	3.91
4	W/CPI	4.06	3.96	3.86	3.86	3.90	3.92	3.97
5	CIL.LEXPCL.84	-0.00	-0.01	-0.02	-0.01	-0.02	-0.04	-0.05
6	DIFFERENCE	-0.00	-0.30	-0.58	-0.37	-0.39	-0.92	-1.29
7	CHANGE							
8	LXP\$4.RUDGET8C2	-1.2	-2.5	-2.6	0.1	0.6	-0.0	0.8
9	W/CPI	-1.2	-2.2	-2.4	-0.1	0.7	0.5	1.2
10	CIL.LEXPCL.84	-0.0	-0.3	-0.3	0.2	-0.0	-0.5	-0.4
11	DIFFERENCE	0.04	13.39	11.52	-148.08	-3.26	-103.83	-32.20
12								
13	RATES							
14	UNEMPLOYMENT RATE (PERCENT)							
15	LXP\$4.RUDGET8C2	7.5	8.0	8.2	7.8	7.4	7.1	6.9
16	DIRATE	7.5	7.9	8.0	7.5	7.0	6.7	6.5
17	CIL.LEXPCL.84	-0.0	0.1	0.2	0.3	0.4	0.4	0.5
18	DIFFERENCE	-0.00	0.99	0.68	4.32	5.60	6.44	7.06
19	RATE OF CHANGE OF OUTPUT PER MAN-HOUR							
20	LXP\$4.RUDGET8C2	-0.2	-2.5	-0.7	1.0	1.3	0.9	0.8
21	GAE/ME	-0.2	-2.3	-0.7	0.9	1.3	1.1	1.0
22	CIL.LEXPCL.84	-0.0	-0.1	-0.1	0.1	0.0	-0.2	-0.3
23	DIFFERENCE	0.19	11.86	12.17	0.83	0.83	-24.68	-25.18
24	PERSONAL SAVINGS RATE (PERCENT)							
25	LXP\$4.RUDGET8C2	10.5	10.1	9.4	9.1	9.1	8.8	8.5
26	S8/PDY8	10.5	10.1	9.5	9.2	9.1	8.8	8.6
27	CIL.LEXPCL.84	0.0	-0.0	-0.1	-0.1	0.0	-0.1	-0.2
28	DIFFERENCE	-0.00	-0.08	-0.94	-0.56	0.17	-0.79	-1.74
29								
30	SURPLUS OR DEFICIT							
31	ALL GOVERNMENTS							
32	LXP\$4.RUDGET8C2	-4554.5	-5785.0	-2562.9	962.2	4413.7	10200.1	14302.3
33	GC9	-4554.5	-4768.0	-3835.9	-1986.6	-869.3	3030.7	3248.3
34	CIL.LEXPCL.84	0.0	-1017.0	1273.3	2948.8	5283.0	7169.4	10954.0
35	DIFFERENCE	-0.00	21.33	-33.19	-148.43	-607.73	236.55	227.16
36	FEDERAL							
37	LXP\$4.RUDGET8C2	-5122.8	-11041.6	-9319.0	-7011.8	-4507.8	-469.6	1919.2
38	GDF8	-5132.7	-10814.5	-12494.2	-12805.1	-13265.4	-11353.0	-12545.7
39	CIL.LEXPCL.84	-0.1	-227.1	3175.2	5793.3	8757.5	10883.4	14484.5
40	DIFFERENCE	0.00	2.10	-25.41	-45.24	-66.02	-95.86	-115.30
41	PROVINCIAL							
42	LXP\$4.RUDGET8C2	957.1	1929.9	2613.8	3307.9	3939.3	5051.2	6573.6
43	GCPI	956.8	2714.9	4481.2	6113.9	7349.9	8687.7	9550.4
44	CIL.LEXPCL.84	0.3	-785.0	-1867.4	-2806.0	-3410.7	-3636.5	-2276.8
45	DIFFERENCE	0.00	-28.91	-41.67	-45.89	-46.40	-41.86	-33.94
46	TOTAL							
47	LXP\$4.RUDGET8C2	756.1	18.6	373.8	393.6	306.8	631.2	645.1
48	GCPI	756.1	21.7	415.7	398.9	306.0	582.4	46.5
49	CIL.LEXPCL.84	-0.0	-3.1	-21.9	-5.4	-1.2	48.7	98.2
50	DIFFERENCE	-0.00	-14.44	-1.26	-1.34	-0.40	8.35	17.96

CANDID MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET FCT 80 (2) - E.C.C. ENERGY INVESTMENT
 DOMESTIC OIL PRICE INCREASE \$4/BBL/YEAR - EXTERNAL OUTLOOK LOW

TABLE 30.20 SELECTED INDICATORS (MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	Y	F	M	1979	1980	1981	1982	1983	1984	1985
1	HOSPITALS										
2	EXP\$4. EDCET80C2				130.9	222.4	186.4	231.7	214.0	244.1	236.9
3	CIL. LE>PCL. \$4				120.9	222.3	186.5	230.4	210.4	244.3	230.0
4	DIFFERENCE				-0.0	0.1	-0.1	1.2	3.6	-0.1	6.9
5	DIFFERENCE				-0.02	0.06	-0.07	0.53	1.72	-0.05	2.99
6	CANADA / QUEBEC PEASICK PLANS										
7	GSPENC\$+GSPENCS				2724.6	3085.9	3562.2	4040.2	4463.2	4743.0	4928.3
8	GSPENC\$+GSPENCS				2724.6	3087.7	3574.7	4075.0	4529.4	4868.8	5167.9
9	GSPENC\$+GSPENCS				-0.0	-1.8	-12.4	-34.8	-66.2	-125.8	-239.6
10	DIFFERENCE				-0.00	-0.06	-0.35	-0.85	-1.46	-2.51	-4.64
11	CURRENT ACCLAT OF PAYMENTS										
12	EXP\$4. EDCET80C2				-5051.9	-6400.0	-5484.2	-4300.2	-4171.1	-4338.6	-1344.8
13	CIL. LE>XHOL. \$4				-5052.3	-5185.1	-5570.2	-5784.6	-8126.8	-9589.0	-11082.4
14	DIFFERENCE				0.5	-1214.9	86.0	1484.3	3955.6	5250.4	5737.5
15	DIFFERENCE				-0.01	23.43	-1.54	-25.66	-48.67	-54.75	-87.86
16											
17	RATIOS (PERCENT)										
18	COMPENSATION OF EMPLOYEES / NET NATION										
19	EXP\$4. EDCET80C2				71.4	71.5	72.0	71.6	71.3	70.8	70.6
20	CIL. LE>PCL. \$4				71.4	71.5	70.7	70.2	70.0	69.8	70.1
21	DIFFERENCE				-0.0	0.4	1.3	1.5	1.3	1.0	0.5
22	DIFFERENCE				-0.00	0.57	1.83	2.10	1.86	1.46	0.68
23	PROFITS / NET NATIONAL INCOME										
24	EXP\$4. EDCET80C2				16.8	15.4	14.7	14.6	15.1	15.4	15.2
25	CIL. LE>PCL. \$4				16.8	15.5	15.5	15.6	16.2	16.5	16.3
26	DIFFERENCE				0.0	-0.1	-0.8	-1.0	-1.1	-1.1	-1.0
27	DIFFERENCE				0.00	-0.42	-5.36	-6.58	-6.75	-6.57	-6.43
28	ALL INVESTMENT / GROSS NATIONAL EXPEND										
29	EXP\$4. EDCET80C2				23.0	23.9	24.2	24.4	24.9	25.6	25.5
30	CIL. LE>PCL. \$4				23.0	23.8	24.1	24.4	25.1	25.9	26.1
31	DIFFERENCE				-0.0	0.1	0.1	-0.0	-0.2	-0.3	-0.6
32	DIFFERENCE				-0.00	0.57	0.33	-0.11	-0.76	-1.07	-2.21
33	PRIVATE NON-RESIDENTIAL CONSTR. / MCE /										
34	EXP\$4. EDCET80C2				14.6	15.9	16.4	16.7	17.4	18.1	18.2
35	CIL. LE>XHOL. \$4				14.6	15.8	16.3	16.8	17.6	18.3	18.6
36	DIFFERENCE				-0.0	0.1	0.0	-0.1	-0.2	-0.2	-0.4
37	DIFFERENCE				-0.00	0.51	0.07	-0.35	-0.91	-1.04	-2.16
38	GOVERNMENT SURPLUS / GROSS NATIONAL EX										
39	EXP\$4. BUDGET80C2				-1.8	-2.0	-0.8	0.3	1.1	2.3	2.8
40	CIL. LE>PCL. \$4				-1.8	-1.7	-1.2	-0.6	-0.2	0.7	0.7
41	DIFFERENCE				0.0	-0.4	0.4	0.8	1.3	1.6	2.2
42	DIFFERENCE				-0.00	22.04	-32.91	-148.51	-605.75	234.81	322.29
43	GOVERNMENT REVENUE / GROSS NATIONAL EX										
44	EXP\$4. EDCET80C2				26.9	38.1	40.0	40.2	40.2	39.5	39.5
45	CIL. LE>PCL. \$4				26.9	38.3	38.9	38.7	38.5	38.4	38.4
46	DIFFERENCE				0.0	-0.2	1.1	1.5	1.7	1.5	1.2
47	DIFFERENCE				0.00	-0.59	2.75	4.00	4.32	3.84	3.03

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET OCT 80 (2) - E.C.C. ENERGY INVESTMENT
 ECONOMIC LIL PRICE INCREASE \$4/EPL/YEAR - EXTERNAL OILLOCK LIM

TABLE 50.2C SELECTED INDICATORS (\$MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	TYPE	1979	1980	1981	1982	1983	1984	1985
1		PERSONAL INCOME TAXES / PERSONAL INCOME							
2	GF.CT.RATEX10C	LX94.BUDGET82	12.8	12.7	12.7	12.6	12.6	12.7	12.8
3	GF.CT.RATEX10C	LX94.BUDGET82	12.8	12.7	12.6	12.5	12.6	12.7	12.9
4	GR.CT.RATEX10C	DIFFERENCE	0.0	0.0	0.0	0.0	-0.0	-0.1	-0.1
5	GF.CT.RATEX10C	% DIFFERENCE	C.CC	0.12	0.37	0.28	-0.11	-0.44	-1.02
6		CURRENT ACCOUNT SURPLUS / GROSS NATL E							
7	BAL.CANS/CNES	LX94.BUDGET82	-1.9	-2.3	-1.7	-1.2	-1.0	-1.0	-0.3
8	BAL.CANS/CNES	LX94.BUDGET82	-1.9	-1.8	-1.8	-1.6	-2.0	-2.1	-2.2
9	BAL.CANS/CNES	DIFFERENCE	0.0	0.4	0.0	0.4	1.0	1.2	2.0
10	BAL.CANS/CNES	% DIFFERENCE	-0.01	24.15	-1.13	-25.55	-48.87	-54.95	-28.00
11									
12		MONETARY SUPPLY (MARCH DEFINITION)							
13									
14	FMONEYSLPLY	LX94.BUDGET82	24201.2	26248.2	28494.3	30761.1	33141.1	35415.4	37820.7
15	FMONEYSLPLY	LX94.BUDGET82	24201.2	26160.3	28239.0	30486.8	32942.5	35596.7	38443.7
16	FMONEYSLPLY	DIFFERENCE	-0.1	88.0	255.2	274.3	198.6	-181.1	-823.0
17	FMONEYSLPLY	% DIFFERENCE	-0.00	0.34	0.90	0.90	0.60	-0.51	-1.62
18		% CHANGE							
19	FMONEYSLPLY	LX94.BUDGET82	3.7	8.4	8.6	8.0	7.7	6.9	6.8
20	FMONEYSLPLY	LX94.BUDGET82	3.7	8.1	7.9	8.0	8.1	8.1	8.0
21	FMONEYSLPLY	DIFFERENCE	-0.0	0.4	0.6	-0.0	-0.3	-1.2	-1.2
22	FMONEYSLPLY	% DIFFERENCE	-0.01	4.51	7.68	-0.06	-3.95	-14.82	-15.09
23		FINANCE COMPANY FUFER							
24	FPATE.FCPAPER3M	LX94.BUDGET82	12.1	12.1	12.3	10.8	10.8	10.3	10.3
25	FPATE.FCPAPER3M	LX94.BUDGET82	12.1	12.1	12.4	11.0	11.0	10.6	10.8
26	FPATE.FCPAPER3M	DIFFERENCE	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.5
27	FPATE.FCPAPER3M	% DIFFERENCE	C.CC	-0.45	-0.86	-1.50	-1.96	-2.58	-4.41
28		GOVERNMENT 10 YEAR BONDS							
29	FPATE.GROND.10Y	LX94.BUDGET82	10.2	12.1	12.2	11.8	11.3	10.8	10.8
30	FPATE.GROND.10Y	LX94.BUDGET82	10.2	12.1	12.2	12.0	11.6	11.3	11.5
31	FPATE.GROND.10Y	DIFFERENCE	C.C	-0.0	-0.1	-0.2	-0.3	-0.5	-0.7
32	FPATE.GROND.10Y	% DIFFERENCE	C.CC	-0.03	-0.48	-1.43	-2.62	-4.46	-6.17
33		INDUSTRIAL 10 YEAR BONDS							
34	FPATE.IBOND.10Y	LX94.BUDGET82	10.9	13.2	13.0	12.1	11.8	11.5	11.6
35	FPATE.IBOND.10Y	LX94.BUDGET82	10.5	13.2	13.0	12.2	11.9	11.4	11.8
36	FPATE.IBOND.10Y	DIFFERENCE	0.0	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1
37	FPATE.IBOND.10Y	% DIFFERENCE	C.CC	-0.08	-0.20	-0.37	-0.56	-0.82	-1.23
38		G.O.F. C.UTRECTGUAR. SECURITIES							
39	FGD.TSEC	LX94.BUDGET82	6753.7	77221.4	8583.4	9658.8	103107.7	103526.5	104755.1
40	FGD.TSEC	LX94.BUDGET82	6753.6	76575.2	50451.8	104253.2	118498.4	130896.7	144485.3
41	FGD.TSEC	DIFFERENCE	0.1	246.2	-1868.4	-7594.4	-15390.7	-27369.8	-39726.2
42	FGD.TSEC	% DIFFERENCE	C.CC	0.32	-2.07	-7.28	-12.99	-20.91	-27.49
43		PREV. PUBLIC SECURITIES HELD BY MCA FINA							
44	FGD.PAMSEC.FUF	LX94.BUDGET82	55754.0	60259.3	64008.3	67297.9	70676.4	73749.6	76658.3
45	FGD.PAMSEC.FUF	LX94.BUDGET82	55755.0	59994.8	62770.4	64758.6	66554.5	67942.7	69288.8
46	FGD.PAMSEC.FUF	DIFFERENCE	0.2	364.4	1231.9	2539.3	4121.9	5806.9	7369.5
47	FGD.PAMSEC.FUF	% DIFFERENCE	C.CC	0.61	1.97	3.92	6.19	8.55	10.64

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET CCI 80 (2) - E.C.C. ENERGY INVESTMENT
 DOMESTIC CIL PRICE INCREASE \$4/BBL/YEAR - EXTERNAL CUTOCK LHM
 TABLE C.C.C. SELECTED INDICATORS (MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	ITEM	1979	1980	1981	1982	1983	1984	1985
1		FRYCPUBIC SECURITIES HELD BY MGN-RESI							
2	TKM.STK.PMASC8	LXP84.PUDCET8C2	25135.4	26289.2	27875.6	29709.7	31530.3	32880.8	33569.3
3	TKM.STK.PMASC8	CIL.LEXPCL.84	25139.9	25866.5	26438.5	26761.8	26752.4	26199.1	25170.7
4	TKM.STK.PMASC8	I DIFFERENCE	-0.5	422.7	1437.1	2947.9	4777.9	6681.7	8358.6
5	TKM.STK.PMASC8	I DIFFERENCE	-C.CC	1.63	5.44	11.02	17.86	25.50	33.37
6		STOCK OF FRYCALOCAL PENSND RET OF PENS-							
7	GAP+L.B.STOCK	LXP84.PUDCET8C2	58269.8	60987.1	62710.3	63844.0	64629.5	64360.2	63079.1
8	GAP+L.B.STOCK	CIL.LEXPCL.84	58270.1	60198.2	60021.1	58307.7	55614.6	51631.0	46830.3
9	GAP+L.B.STOCK	I DIFFERENCE	-0.3	788.9	2689.2	5536.3	9014.9	12729.3	16248.8
10	GAP+L.B.STOCK	I DIFFERENCE	-C.CC	1.31	4.48	9.50	16.21	24.65	34.70
11		HOUSING (THOUSANDS)							
12		TOTAL HOUSING STARTS							
13		LXP84.ELDCET8C2	156.2	161.0	177.7	174.9	175.0	193.6	188.0
14	R15	CIL.LEXPCL.84	156.2	160.2	177.7	176.8	178.4	199.3	153.6
15	R15	I DIFFERENCE	-0.0	0.8	-0.0	-2.0	-3.4	-5.5	-5.6
16	R15	I DIFFERENCE	-C.CC	0.51	-0.01	-1.11	-1.89	-2.77	-2.91
17	R15	I DIFFERENCE							
18		PRICES - LEVEL							
19		CONSUMER EXPENDITURE DEFLATOR							
20	PFC	LXP84.PUDCET8C2	1.854	2.039	2.248	2.457	2.669	2.909	3.160
21	PFC	CIL.LEXPCL.84	1.854	2.036	2.244	2.455	2.666	2.854	3.135
22	PFC	I DIFFERENCE	C.CC	C.CC2	C.CC5	0.003	0.003	0.013	C.CC25
23	PFC	I DIFFERENCE	C.CC	0.15	0.20	0.11	0.11	0.44	0.80
24	PFC	I DIFFERENCE							
25		(CONSUMER PRICE INDE)							
26	CFI	LXP84.PUDCET8C2	1.912	2.105	2.338	2.572	2.807	3.074	3.354
27	CFI	CIL.LEXPCL.84	1.911	2.059	2.322	2.553	2.784	3.035	3.258
28	CFI	I DIFFERENCE	C.CC	C.CC6	0.016	0.019	0.023	0.035	0.056
29	CFI	I DIFFERENCE	C.CC	0.27	0.67	0.74	0.83	1.25	1.69
30		GOVERNMENT CURRENT EXPENDITURE DEFLATO							
31	PFGE.CGS	LXP84.ELDCET8C2	2.286	2.473	2.660	2.880	3.127	3.388	3.666
32	PFGE.CGS	CIL.LEXPCL.84	2.286	2.473	2.660	2.876	3.119	3.375	3.651
33	PFGE.CGS	I DIFFERENCE	C.CC	-C.CC0	-0.000	0.004	0.008	0.011	C.CC15
34	PFGE.CGS	I DIFFERENCE	0.00	-0.00	-0.00	0.13	0.25	0.33	0.41
35		FYEC INVESTMENT DEFLATOR							
36	PFGFC	LXP84.PUDCET8C2	2.056	2.314	2.544	2.787	3.028	3.274	3.533
37	PFGFC	CIL.LEXPCL.84	2.056	2.313	2.536	2.777	3.017	3.264	3.533
38	PFGFC	I DIFFERENCE	0.000	0.001	0.008	0.011	0.011	0.010	-0.000
39	PFGFC	I DIFFERENCE	C.CC	0.04	0.32	0.39	0.36	0.30	-C.CC1
40		EXPORTS DEFLATOR							
41	PTE.CA.G+SM	LXP84.PUDCET8C2	2.422	2.758	3.076	3.318	3.606	3.894	4.151
42	PTE.CA.G+SM	CIL.LEXPCL.84	2.422	2.794	3.076	3.348	3.634	3.923	4.219
43	PTE.CA.G+SM	I DIFFERENCE	C.CC0	-C.CC36	-0.040	-0.030	-0.028	-0.030	-0.067
44	PTE.CA.G+SM	I DIFFERENCE	C.CC	-1.28	-1.29	-0.91	-0.77	-0.76	-1.59
45		IMPORTS DEFLATOR							
46	PTM.CA.G+SM	LXP84.PUDCET8C2	2.267	2.593	2.814	3.042	3.277	3.501	3.646
47	PTM.CA.G+SM	CIL.LEXPCL.84	2.267	2.589	2.838	3.051	3.390	3.646	3.928
48	PTM.CA.G+SM	I DIFFERENCE	C.CC	C.CC5	-C.CC24	-0.051	-0.113	-0.146	-C.CC282
49	PTM.CA.G+SM	I DIFFERENCE	C.CC	0.18	-0.84	-1.66	-3.34	-4.00	-7.18

CARDIFF MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET FCT 80 (2) - E.C.C. ENERGY INVESTMENT
 DOMESTIC CIL PRICE INCREASE \$4/BBL/YEAR - EXTERNAL OUTLOOK LOW

TABLE 30.10 SELECTED INDICATORS (SPILLIENS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	TYPE	1979	1980	1981	1982	1983	1984	1985
1		EXCHANGE RATE							
2	REXCAN	L1979-RUCCE10C2	1.171	1.175	1.163	1.158	1.164	1.166	1.155
3	REXCAN	P CIL-LEXPCL.14	1.171	1.172	1.169	1.171	1.186	1.193	1.200
4	REXCAN	R R DIFFERENCE	C.000	C.003	-0.006	-0.013	-0.022	-0.027	-0.044
5	REXCAN	R R DIFFERENCE	C.000	0.26	-0.52	-1.10	-1.88	-2.25	-3.69
6									
7		PRICES - PERCENTAGE CHANGE							
8	PFC	CONSUMER EXPENDITURE DEFLATOR							
9	PFC	L1979-RUCCE10C2	5.1	9.9	10.3	9.3	8.6	9.0	8.7
10	PFC	P CIL-LEXPCL.14	9.1	9.8	10.2	9.4	8.6	8.6	8.3
11	PFC	R R DIFFERENCE	0.0	0.2	0.1	-0.1	0.0	0.2	C.4
12	PFC	R R DIFFERENCE	C.C1	1.69	0.55	-1.14	0.12	4.02	4.75
13	CPI	CONSUMER PRICE INDEX							
14	CPI	L1979-RUCCE10C2	9.1	10.1	11.1	10.0	9.1	9.5	9.3
15	CPI	P CIL-LEXPCL.14	9.1	9.8	10.6	9.9	9.0	9.0	8.7
16	CPI	R R DIFFERENCE	C.C	0.3	0.4	0.1	0.1	0.5	0.4
17	CPI	R R DIFFERENCE	C.C1	2.98	4.20	0.74	1.13	5.45	5.02
18	PFGE.CGS	GOVERNMENT CURRENT EXPENDITURE DEFLATOR							
19	PFGE.CGS	L1979-RUCCE10C2	7.5	8.2	7.5	8.3	8.6	8.3	8.3
20	PFGE.CGS	P CIL-LEXPCL.14	7.5	8.2	7.5	8.1	8.5	8.2	8.2
21	PFGE.CGS	R R DIFFERENCE	0.0	-0.0	-0.0	0.1	0.1	0.1	0.1
22	PFGE.CGS	R R DIFFERENCE	C.C0	-0.03	-0.00	1.76	1.54	1.10	1.01
23		FIXED INVESTMENT DEFLATOR							
24	PFGC	L1979-RUCCE10C2	5.6	10.4	9.9	9.6	8.6	8.1	7.9
25	PFGC	P CIL-LEXPCL.14	9.6	10.3	9.6	9.5	8.7	8.2	8.3
26	PFGC	R R DIFFERENCE	0.0	0.0	0.3	0.1	-0.0	-0.1	-0.3
27	PFGC	R R DIFFERENCE	0.01	0.42	3.17	0.83	-0.34	-0.77	-4.12
28		EXPORTS DEFLATOR							
29	PTB.CA.G+SM	L1979-RUCCE10C2	19.2	13.9	10.1	9.3	8.7	8.0	6.6
30	PTB.CA.G+SM	P CIL-LEXPCL.14	19.2	15.4	10.1	8.8	8.5	8.0	7.5
31	PTB.CA.G+SM	R R DIFFERENCE	0.0	-1.5	-0.0	0.4	0.1	0.0	-0.9
32	PTB.CA.G+SM	R R DIFFERENCE	C.C0	-9.59	-0.18	4.80	1.73	0.16	-11.94
33		IMPORTS DEFLATOR							
34	PTM.CA.G+SM	L1979-RUCCE10C2	14.7	14.4	8.5	8.1	7.7	6.8	4.2
35	PTM.CA.G+SM	P CIL-LEXPCL.14	14.7	14.2	9.6	9.0	9.6	7.6	7.7
36	PTM.CA.G+SM	R R DIFFERENCE	0.0	0.2	-1.1	-0.9	-1.9	-0.7	-3.6
37	PTM.CA.G+SM	R R DIFFERENCE	C.C0	1.46	-11.55	-10.06	-19.56	-9.64	-46.22
38		CONSUMER PRICE EXPECTATION							
39	.CPIE	L1979-RUCCE10C2	8.0	8.0	7.8	9.5	8.8	8.1	8.2
40	.CPIE	P CIL-LEXPCL.14	8.8	8.0	7.5	9.1	8.6	8.0	8.0
41	.CPIE	R R DIFFERENCE	C.C	0.0	0.2	0.4	0.2	0.1	0.2
42	.CPIE	R R DIFFERENCE	C.C	0.01	2.89	4.60	2.24	0.72	2.76
43									
44		PERCENT OF GROSS NATIONAL EXPENDITURE (GNES)							
45		IMPORTS TO GROSS NATIONAL EXPENDITURE							
46	MES1/GNES	L1979-RUCCE10C2	1.22	1.20	1.13	1.07	1.04	1.01	C.99
47	MES1/GNES	P CIL-LEXPCL.14	1.22	1.19	1.12	1.07	1.05	1.02	1.00
48	MES1/GNES	R R DIFFERENCE	-0.00	0.01	0.00	0.00	-0.00	-0.01	-0.01
49	MES1/GNES	R R DIFFERENCE	-0.00	0.59	0.42	0.15	-0.39	-0.52	-1.14

CARDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET (C) PO (2) - C.C.C. ENERGY INVESTMENT
 DOMESTIC CIL PRICE INCREASE \$4/BBL/YEAR - EXTERNAL OILPRICE LOW

TABLE 50.20 SELECTED INDICATORS (MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	1979	1980	1981	1982	1983	1984	1985
1	TRASF TO PREV, MEDICARE							
2	EXP94.ELDCETRC2	0.31	0.30	0.33	0.49	0.49	0.47	0.46
3	CIL.LEXPCL.94	0.31	0.30	0.33	0.49	0.49	0.48	0.47
4	DIFFERENCE	-0.00	0.00	0.00	0.00	-0.00	-0.01	-0.01
5	TRASF TO PREV, TAXATION							
6	EXP94.ELDCETRC2	1.22	1.23	1.21	1.13	1.07	1.01	0.94
7	CIL.LEXPCL.94	1.22	1.22	1.20	1.12	1.08	1.01	0.94
8	DIFFERENCE	-0.00	0.01	0.01	0.00	-0.01	-0.02	-0.01
9	TRASF TO PREV, POST-SEC EDUCATION							
10	EXP94.ELDCETRC2	0.59	0.59	0.42	0.15	-0.30	-0.51	-1.14
11	CIL.LEXPCL.94	0.59	0.59	0.56	0.56	0.56	0.54	0.54
12	DIFFERENCE	-0.00	0.00	0.00	0.00	-0.00	-0.01	-0.01
13	TRASF TO PREV, OTHER							
14	EXP94.ELDCETRC2	0.44	0.43	0.42	0.40	0.38	0.36	0.34
15	CIL.LEXPCL.94	0.44	0.43	0.42	0.39	0.38	0.36	0.35
16	DIFFERENCE	-0.00	0.00	0.01	0.00	0.00	0.00	-0.00
17	TRASF TO PREV, MEDICARE							
18	EXP94.ELDCETRC2	5.77	5.77	5.22	5.06	5.07	5.22	5.32
19	CIL.LEXPCL.94	5.77	5.77	5.38	5.25	5.21	5.25	5.15
20	DIFFERENCE	-0.00	-0.00	-0.16	-0.14	-0.14	-0.03	0.16
21	TRASF TO PREV, TAXATION							
22	EXP94.ELDCETRC2	1.58	1.46	1.55	2.34	2.37	2.44	2.48
23	CIL.LEXPCL.94	1.58	1.46	1.60	2.42	2.44	2.45	2.41
24	DIFFERENCE	-0.00	-0.00	-0.05	-0.09	-0.07	-0.02	0.08
25	TRASF TO PREV, POST-SEC EDUCATION							
26	EXP94.ELDCETRC2	6.16	5.92	5.60	5.33	5.22	5.27	5.27
27	CIL.LEXPCL.94	6.16	5.93	5.78	5.53	5.36	5.30	5.11
28	DIFFERENCE	-0.00	-0.00	-0.18	-0.20	-0.15	-0.03	0.16
29	TRASF TO PREV, OTHER							
30	EXP94.ELDCETRC2	2.99	2.84	2.61	2.63	2.71	2.75	2.85
31	CIL.LEXPCL.94	2.99	2.84	2.69	2.73	2.79	2.81	2.76
32	DIFFERENCE	-0.00	-0.00	-0.08	-0.10	-0.08	-0.02	0.09
33	TRASF TO PREV, MEDICARE							
34	EXP94.ELDCETRC2	2.22	2.09	1.95	1.89	1.84	1.86	1.85
35	CIL.LEXPCL.94	2.22	2.09	1.99	1.94	1.87	1.85	1.78
36	DIFFERENCE	-0.00	-0.00	-0.04	-0.05	-0.03	0.00	0.07
37	TRASF TO PREV, TAXATION							
38	EXP94.ELDCETRC2	1.94	1.89	1.84	1.89	1.84	1.86	1.85
39	CIL.LEXPCL.94	1.94	1.89	1.84	1.89	1.84	1.86	1.85
40	DIFFERENCE	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
41	TRASF TO PREV, OTHER							
42	EXP94.ELDCETRC2	1.94	1.89	1.84	1.89	1.84	1.86	1.85
43	CIL.LEXPCL.94	1.94	1.89	1.84	1.89	1.84	1.86	1.85
44	DIFFERENCE	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
45	TRASF TO PREV, MEDICARE							
46	EXP94.ELDCETRC2	1.94	1.89	1.84	1.89	1.84	1.86	1.85
47	CIL.LEXPCL.94	1.94	1.89	1.84	1.89	1.84	1.86	1.85
48	DIFFERENCE	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
49	TRASF TO PREV, TAXATION							
50	EXP94.ELDCETRC2	1.94	1.89	1.84	1.89	1.84	1.86	1.85
51	CIL.LEXPCL.94	1.94	1.89	1.84	1.89	1.84	1.86	1.85
52	DIFFERENCE	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00

PERCENT OF FED GOVT TOTAL CURRENT EXPENDITURE

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CANDIDATE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET (CT 80 (2)) - REVISED ENERGY INVESTMENT
 DOMESTIC CIL PRICE INCREASE \$4/BBL/YEAR - EXTERNAL OILLOCK LCM

TABLE 50.20 SELECTED INDICATORS (\$MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	1979	1980	1981	1982	1983	1984	1985
1								
2								
3	GAE4							
4	GAE4							
5	GPF4							
6	GDE4							
7								
8	GAE4							
9	GPF4							
10	GDE4							
11	GDE4							
12								
13								
14	GAE							
15	GAE							
16	GAE							
17	GAE							
18	GAE							
19	GAE							
20	GDE							
21	GAE							
22	GDE							
23								
24								
25	PFGNE							
26	PFGNE							
27	PFGNE							
28	PFGNE							
29	PFGNE							
30	PFGNE							
31	PFGNE							
32	PFGNE							
33	PFGNE							
34								
35								
36	D101LF							
37	D101LF							
38	D101LF							
39	D101LF							
40								
41	D101LF							
42	D101LF							
43	D101LF							
44	D101LF							
45								
46								
47	NE							
48	NE							
49	NE							
50	NE							

CARDIFF MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET (CY HO (2)) - REVISED ENERGY INVESTMENT
 DOMESTIC CIL PRICE INCREASE \$4/BRL/YEAR - EXTERNAL OUTLOOK LOW

TABLE 50.20 SELECTED INDICATORS (BILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR	LAEFFL	ITEM	1979	1980	1981	1982	1983	1984	1985
1			% CHANGE							
2	AE		LY84.BUDGET03	4.0	1.7	1.5	2.2	2.3	2.6	1.8
3	ME		CIL.LEXFL.84	4.0	2.0	2.0	2.4	2.4	2.4	1.7
4	ME		% DIFFERENCE	-0.0	-0.3	-0.5	-0.2	-0.1	0.2	0.0
5	ME		% DIFFERENCE	-0.01	-16.88	-25.84	-7.98	-3.09	8.56	2.14
6										
7			CORPORATE PROFITS (PRIVATE)							
8	Y.P.PROFBI.CORP4		LY84.BUDGET03	34220.9	22906.2	24512.6	39290.3	46267.4	54734.2	60832.4
9	Y.P.PROFBI.CORP4		CIL.LEXFL.84	34220.0	34554.1	38531.6	43997.7	51114.2	58668.5	64177.2
10	Y.P.PROFBI.CORP4		% DIFFERENCE	0.9	-1047.9	-4019.0	-4707.3	-4846.8	-3934.4	-3344.9
11	Y.P.PROFBI.CORP4		% DIFFERENCE	0.00	-4.77	-10.43	-10.70	-9.48	-6.71	-5.21
12			% CHANGE							
13	Y.P.PROFBI.CORP4		LY84.BUDGET03	31.7	-4.1	4.9	13.8	17.8	18.3	11.1
14	Y.P.PROFBI.CORP4		CIL.LEXFL.84	31.7	0.7	11.5	14.2	16.2	14.8	9.4
15	Y.P.PROFBI.CORP4		% DIFFERENCE	0.0	-4.8	-6.6	-0.3	1.6	3.5	1.8
16	Y.P.PROFBI.CORP4		% DIFFERENCE	0.01	-704.24	-57.59	-2.42	9.79	23.82	18.66
17										
18			COMPENSATION OF EMPLOYEES							
19	MBTOT		LY84.BUDGET03	145680.0	158889.2	174206.6	195731.4	219440.2	246320.4	274907.8
20	MBTOT		CIL.LEXFL.84	145680.2	155555.4	175910.0	197442.4	221424.7	247907.1	276342.5
21	MBTOT		% DIFFERENCE	-0.2	-666.2	-1703.4	-1711.0	-1984.4	-1586.7	-1434.7
22	MBTOT		% DIFFERENCE	-0.00	-0.42	-0.97	-0.87	-0.90	-0.64	-0.52
23			% CHANGE							
24	MBTOT		LY84.BUDGET03	10.6	9.1	9.6	12.4	12.1	12.2	11.6
25	MBTOT		CIL.LEXFL.84	10.8	9.5	10.3	12.2	12.1	12.0	11.5
26	MBTOT		% DIFFERENCE	-0.0	-0.5	-0.6	0.1	-0.0	0.2	0.1
27	MBTOT		% DIFFERENCE	-0.00	-4.80	-5.95	0.94	-0.28	2.42	1.18
28										
29			PERSONAL INCOME							
30	P18		LY84.BUDGET03	210480.9	222107.2	255749.3	284558.8	316940.2	352883.5	391459.9
31	P18		CIL.LEXFL.84	210481.4	23020.2	258198.4	287427.6	320450.4	356398.2	395585.1
32	P18		% DIFFERENCE	-0.5	-913.1	-2449.1	-2868.7	-3510.2	-3514.7	-4525.2
33	P18		% DIFFERENCE	-0.00	-0.39	-0.95	-1.00	-1.10	-0.95	-1.14
34			% CHANGE							
35	P18		LY84.BUDGET03	11.4	10.3	10.2	11.3	11.4	11.3	10.9
36	P18		CIL.LEXFL.84	11.4	10.7	10.8	11.3	11.5	11.2	11.1
37	P18		% DIFFERENCE	-0.0	-0.4	-0.6	-0.1	-0.1	0.1	-0.2
38	P18		% DIFFERENCE	-0.00	-4.05	-5.73	-0.49	-0.95	1.05	-1.58
39										
40			REAL DISPOSABLE INCOME							
41	PCV8/CPI		LY84.BUDGET03	50089.5	50151.4	88961.9	90031.8	91737.4	93221.4	94537.4
42	PCV8/CPI		CIL.LEXFL.84	50089.2	50520.2	50544.6	51715.3	53645.3	55375.0	57342.0
43	PCV8/CPI		% DIFFERENCE	-0.8	-368.8	-1582.7	-1683.5	-1907.9	-2153.6	-2804.6
44	PCV8/CPI		% DIFFERENCE	-0.00	-0.41	-1.75	-1.84	-2.04	-2.26	-2.68
45			% CHANGE							
46	PCV8/CPI		LY84.BUDGET03	2.5	0.1	-1.3	1.2	1.9	1.6	1.4
47	PCV8/CPI		CIL.LEXFL.84	2.5	0.5	0.0	1.3	2.1	1.8	2.1
48	PCV8/CPI		% DIFFERENCE	-0.0	-0.4	-1.3	-0.1	-0.2	-0.2	-0.7
49	PCV8/CPI		% DIFFERENCE	-0.03	-85.61	-4999.96	-6.99	-9.98	-12.42	-31.55

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET (C1 R0 (3)) - REVISED ENERGY INVESTMENT
 ECONOMIC CIL PRICE INCREASE 14/FFL/YEAR - EXTERNAL OUTLOOK LLW

TABLE 50.20 SELECTED INDICATORS (\$MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	1979	1980	1981	1982	1983	1984	1985
1								
2	REAL AVERAGE HOURLY WAGE RATE							
3	LX94.BUDGET03	4.06	3.97	3.85	3.85	3.87	3.88	3.90
4	CIL.LEXHOL.94	4.06	3.97	3.88	3.87	3.90	3.92	3.97
5	DIFFERENCE	-0.00	-0.00	-0.03	-0.02	-0.03	-0.04	-0.07
6	DIFFERENCE	-0.00	-0.03	-0.85	-0.56	-0.65	-1.03	-1.60
7	% CHANGE							
8	LX94.BUDGET03	-1.2	-2.2	-1.2	0.2	0.6	0.1	0.2
9	CIL.LEXHOL.94	-1.2	-2.2	-2.4	-0.1	0.7	0.1	1.2
10	DIFFERENCE	-0.0	-0.0	-0.4	0.3	-0.1	-0.4	-0.2
11	DIFFERENCE	0.04	1.13	34.28	-215.57	-15.05	-74.20	-50.40
12								
13	RATES							
14	UNEMPLOYMENT RATE (PERCENT)							
15	LX94.BUDGET03	7.5	8.2	8.6	8.3	7.8	7.3	6.9
16	CIL.LEXHOL.94	7.5	7.9	8.0	7.5	7.0	6.7	6.5
17	DIFFERENCE	-0.0	0.3	0.6	0.8	0.8	0.6	0.4
18	DIFFERENCE	-0.00	3.69	7.70	10.03	11.09	8.92	6.87
19	RATE OF CHANGE OF UNITARY PER PAPER							
20	LX94.BUDGET03	-0.2	-2.6	-1.1	1.2	1.3	1.2	0.7
21	CIL.LEXHOL.94	-0.2	-2.3	-0.7	0.9	1.3	1.1	1.0
22	DIFFERENCE	-0.0	-0.3	-0.5	0.3	0.0	0.1	-0.3
23	DIFFERENCE	0.18	11.69	71.22	35.73	0.70	6.44	-31.85
24	PERSONAL SAVINGS RATE (PERCENT)							
25	S94FDY9	10.5	10.2	9.4	9.0	9.1	8.8	8.5
26	S94PDY9	10.5	10.1	9.5	9.2	9.1	8.8	8.6
27	DIFFERENCE	-0.0	0.1	-0.1	-0.1	0.0	-0.1	-0.2
28	DIFFERENCE	-0.00	0.56	-1.03	-1.17	0.25	-0.93	-2.10
29								
30	SURPLUS OR DEFICIT							
31	ALL GOVERNMENTS							
32	LX94.BUDGET03	-4554.4	-4336.2	-3815.2	-331.4	3084.1	9724.2	14824.5
33	CIL.LEXHOL.94	-4554.5	-4768.0	-3835.9	-1986.6	-869.3	3030.7	3248.3
34	DIFFERENCE	0.1	-1568.2	20.7	1655.2	3953.4	6693.6	11536.2
35	DIFFERENCE	-0.00	32.89	-0.54	-83.32	-454.78	220.86	344.54
36	FEDERAL							
37	LX94.BUDGET03	-5132.8	-11449.6	-10223.3	-8098.2	-5652.4	-1044.7	2420.9
38	CIL.LEXHOL.94	-5132.7	-10814.5	-12494.2	-12805.1	-13265.4	-11353.0	-12545.7
39	DIFFERENCE	-0.1	-635.1	2270.8	4706.9	7612.9	10308.3	14966.6
40	DIFFERENCE	0.00	5.87	-18.18	-36.76	-57.39	-90.80	-119.30
41	PROVINCIAL							
42	LX94.BUDGET03	557.1	1784.8	2228.7	3061.2	3733.1	5140.7	6687.8
43	CIL.LEXHOL.94	556.8	2714.9	4481.2	6113.9	7349.9	8687.7	9950.4
44	DIFFERENCE	0.3	-930.1	-2252.5	-3052.7	-3616.9	-3547.0	-3262.6
45	DIFFERENCE	0.00	-34.26	-50.27	-49.93	-49.21	-40.82	-32.79
46	LOCAL							
47	LX94.BUDGET03	756.1	19.2	425.0	432.5	321.6	627.6	583.6
48	CIL.LEXHOL.94	756.1	21.7	415.7	398.9	306.0	582.6	546.9
49	DIFFERENCE	-0.0	-2.5	9.3	33.6	15.5	45.0	36.7
50	DIFFERENCE	-0.00	-11.38	2.24	8.42	5.08	7.72	6.71

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET (CFR) (C) - REVISED ENERGY INVESTMENT
 DOMESTIC LIL PRICE INCREASE \$4/BBL/YEAR - EXTERNAL OIL/DOLN LIL
 TABLE A.C.C. SELECTED INDICATORS (MILLIONS, UNLESS OTHERWISE INDICATED)

LIAE	VAR LABEL	J T F M	1979	1980	1981	1982	1983	1984	1985
1	TEK.STK.PEMASC	1	25125.4	26364.5	28145.3	30099.9	32042.5	33373.1	34057.0
2	TEK.STK.PEMASC	1	25125.4	25866.5	26438.5	26761.8	26752.4	26199.1	25170.7
3	TEK.STK.PEMASC	1	-0.5	498.4	1706.8	3338.1	5290.5	7174.6	8886.4
4	TEK.STK.PEMASC	1	-0.00	1.93	6.46	12.47	19.78	27.39	35.30
5	TEK.STK.PEMASC	1	-0.00	1.93	6.46	12.47	19.78	27.39	35.30
6	GAP+L.B.STOCK	1	58249.8	61129.7	63201.7	64538.8	65508.9	65137.7	63776.5
7	GAP+L.B.STOCK	1	58270.1	60198.2	60021.1	58307.7	55614.6	51631.0	46830.3
8	GAP+L.B.STOCK	1	-0.3	931.5	3180.6	6231.2	9894.3	13506.8	16946.1
9	GAP+L.B.STOCK	1	-0.00	1.55	5.30	10.69	17.79	26.16	36.19
10	GAP+L.B.STOCK	1	-0.00	1.55	5.30	10.69	17.79	26.16	36.19
11	GAP+L.B.STOCK	1	-0.00	1.55	5.30	10.69	17.79	26.16	36.19
12	GAP+L.B.STOCK	1	-0.00	1.55	5.30	10.69	17.79	26.16	36.19
13	TOTAL HOUSING STARTS	---	196.2	160.4	178.2	176.7	176.3	195.5	187.3
14	RTS	1	166.2	160.2	177.7	176.8	178.4	199.3	153.6
15	RTS	1	166.2	160.2	177.7	176.8	178.4	199.3	153.6
16	RTS	1	-0.0	0.2	0.5	-0.1	-2.1	-3.8	-6.3
17	RTS	1	-0.00	0.13	0.28	-0.05	-1.17	-1.91	-3.24
18	RTS	1	-0.00	0.13	0.28	-0.05	-1.17	-1.91	-3.24
19	RTS	1	-0.00	0.13	0.28	-0.05	-1.17	-1.91	-3.24
20	PFC	1	1.854	2.031	2.249	2.459	2.671	2.907	3.164
21	PFC	1	1.854	2.036	2.244	2.455	2.666	2.896	3.135
22	PFC	1	0.000	-0.004	0.005	0.004	0.005	0.011	0.028
23	PFC	1	0.000	-0.021	0.24	0.16	0.20	0.36	0.90
24	PFC	1	0.000	-0.021	0.24	0.16	0.20	0.36	0.90
25	PFC	1	0.000	-0.021	0.24	0.16	0.20	0.36	0.90
26	CPI	1	1.912	2.099	2.338	2.572	2.808	3.072	3.356
27	CPI	1	1.911	2.099	2.322	2.553	2.784	3.035	3.298
28	CPI	1	0.000	-0.000	0.016	0.019	0.024	0.037	0.059
29	CPI	1	0.000	-0.000	0.016	0.019	0.024	0.037	0.059
30	CPI	1	0.000	-0.000	0.016	0.019	0.024	0.037	0.059
31	PFGE.CGS	1	2.286	2.472	2.656	2.877	3.126	3.387	3.668
32	PFGE.CGS	1	2.286	2.473	2.660	2.876	3.119	3.375	3.651
33	PFGE.CGS	1	0.000	-0.002	-0.004	0.001	0.007	0.012	0.017
34	PFGE.CGS	1	0.000	-0.006	-0.14	0.02	0.21	0.35	0.47
35	PFGE.CGS	1	0.000	-0.006	-0.14	0.02	0.21	0.35	0.47
36	PFGE.CGS	1	2.056	2.314	2.541	2.787	3.030	3.278	3.536
37	PFGE.CGS	1	2.056	2.313	2.536	2.777	3.017	3.264	3.523
38	PFGE.CGS	1	0.000	0.001	0.005	0.011	0.013	0.014	0.003
39	PFGE.CGS	1	0.000	0.004	0.22	0.38	0.43	0.42	0.08
40	PFGE.CGS	1	0.000	0.004	0.22	0.38	0.43	0.42	0.08
41	PFGE.CGS	1	2.422	2.754	3.026	3.307	3.599	3.857	4.158
42	PFGE.CGS	1	2.422	2.794	3.076	3.348	3.634	3.923	4.219
43	PFGE.CGS	1	0.000	-0.040	-0.050	-0.041	-0.035	-0.027	-0.060
44	PFGE.CGS	1	0.000	-1.44	-1.64	-1.22	-0.97	-0.68	-1.43
45	PFGE.CGS	1	0.000	-1.44	-1.64	-1.22	-0.97	-0.68	-1.43
46	PFGE.CGS	1	2.267	2.589	2.806	3.034	3.273	3.504	3.653
47	PFGE.CGS	1	2.267	2.589	2.838	3.093	3.340	3.646	3.928
48	PFGE.CGS	1	0.000	0.000	-0.032	-0.059	-0.117	-0.142	-0.275
49	PFGE.CGS	1	0.000	0.001	-1.12	-1.92	-3.46	-3.50	-1.00

CANDIDE MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE BUDGET (CT HC (3)) - REVISED ENERGY INVESTMENT
 DOMESTIC CIL PRICE INCREASE \$4/EFL/YEAR - EXTERNAL LUTLUCK LLW

TABLE 5(C.C) SELECTED INDICATORS (MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	ITEM	1979	1980	1981	1982	1983	1984	1985
1		EXCHANGE RATE							
2	REXCAN	LX\$4. BUDGET03	1.171	1.173	1.159	1.154	1.161	1.167	1.157
3	REXCAN	CIL. LEXHOL. \$4	1.171	1.172	1.169	1.171	1.186	1.193	1.200
4	REXCAN	B DIFFERENCE	C.CC	C.CC1	-0.010	-0.017	-0.025	-0.026	-0.042
5	REXCAN	B 2 DIFFERENCE	C.CC	0.10	-0.87	-1.42	-2.08	-2.17	-3.53
6									
7		PRICES - PERCENTAGE CHANGE							
8		CONSUMER EXPENDITURE DEFLATOR							
9	PFC	LX\$4. BUDGET03	5.1	9.5	10.7	9.3	8.7	8.8	8.8
10	PFC	CIL. LEXHOL. \$4	9.1	9.8	10.2	9.4	8.6	8.6	8.3
11	PFC	B DIFFERENCE	0.0	-0.2	0.5	-0.1	0.0	0.2	0.6
12	PFC	B 2 DIFFERENCE	0.01	-2.34	4.85	-0.91	0.52	2.00	6.96
13		CONSUMER PRICE INDEX							
14	CPI	LX\$4. BUDGET03	5.1	9.8	11.4	10.0	9.2	9.4	9.3
15	CPI	CIL. LEXHOL. \$4	9.1	9.8	10.6	9.9	9.0	9.0	8.7
16	CPI	B DIFFERENCE	0.0	-0.0	0.8	0.1	0.1	0.4	0.6
17	CPI	B 2 DIFFERENCE	0.01	-0.24	7.20	0.80	1.56	4.20	6.83
18		GOVERNMENT CURRENT EXPENDITURE (DEFLATD)							
19	PFGE.CGS	LX\$4. BUDGET03	7.5	8.2	7.5	8.3	8.7	8.3	8.3
20	PFGE.CGS	CIL. LEXHOL. \$4	7.5	8.2	7.5	8.1	8.5	8.2	8.2
21	PFGE.CGS	B DIFFERENCE	0.0	-0.1	-0.1	0.2	0.2	0.1	0.1
22	PFGE.CGS	B 2 DIFFERENCE	C.CC	-0.85	-1.05	2.12	2.42	1.8C	1.65
23		FIXED INVESTMENT DEFLATOR							
24	PFGC	LX\$4. BUDGET03	9.6	10.4	9.8	9.7	8.7	8.2	7.9
25	PFGC	CIL. LEXHOL. \$4	9.6	10.3	9.6	9.5	8.7	8.2	8.3
26	PFGC	B DIFFERENCE	0.0	0.0	0.2	0.2	0.0	-0.0	-0.4
27	PFGC	B 2 DIFFERENCE	C.CC1	0.45	1.96	1.95	0.53	-0.0C	-4.42
28		EXPORTS DEFLATOR							
29	PTC.CA.G+SM	LX\$4. BUDGET03	19.2	13.7	9.9	9.3	8.8	8.3	6.7
30	PTC.CA.G+SM	CIL. LEXHOL. \$4	19.2	15.4	10.1	8.8	8.5	8.0	7.5
31	PTC.CA.G+SM	B DIFFERENCE	0.0	-1.7	-0.2	0.5	0.3	0.2	-0.8
32	PTC.CA.G+SM	B 2 DIFFERENCE	C.CC	-10.79	-2.21	5.19	3.22	4.0C	-10.78
33		IMPORTS DEFLATOR							
34	PTM.CA.G+SM	LX\$4. BUDGET03	14.7	14.2	8.4	8.1	7.9	7.1	4.2
35	PTM.CA.G+SM	CIL. LEXHOL. \$4	14.7	14.2	9.6	9.0	9.6	7.6	7.7
36	PTM.CA.G+SM	B DIFFERENCE	0.0	0.0	-1.2	-0.9	-1.7	-0.5	-3.5
37	PTM.CA.G+SM	B 2 DIFFERENCE	C.CC	0.06	-12.86	-9.73	-17.97	-6.49	-45.02
38		CONSUMER PRICE EXPECTATIONS							
39	.CPIE	LX\$4. BUDGET03	8.8	8.0	7.6	9.8	8.9	8.2	8.2
40	.CPIE	CIL. LEXHOL. \$4	8.8	8.0	7.5	9.1	8.6	8.0	8.0
41	.CPIE	B DIFFERENCE	0.0	0.0	0.0	0.7	0.3	0.2	0.2
42	.CPIE	B 2 DIFFERENCE	0.0	0.01	0.04	7.47	3.14	2.93	2.37
43									
44		PERCENT OF GROSS NATIONAL EXPENDITURE (GNIES)							
45		TRANS TO PREV. HOSPITAL							
46	HES4/GNES	LX\$4. BUDGET03	1.22	1.21	1.14	1.08	1.05	1.01	0.99
47	HES4/GNES	CIL. LEXHOL. \$4	1.22	1.19	1.12	1.07	1.05	1.02	1.00
48	HES4/GNES	B DIFFERENCE	C.CC	0.01	0.02	0.01	0.09	-0.0C	-0.0C
49	HES4/GNES	B 2 DIFFERENCE	-C.CC	1.22	1.47	1.04	0.41	-0.25	-1.17

CANADIAN MODEL 2.0 - ECONOMIC COUNCIL OF CANADA
 FINANCE PROJECTIONS (C1 AND C2) - CENTRAL ENERGY INVESTMENT
 DOMESTIC OIL PRICE INCREASE \$4/REL YEAR - EXTERNAL OUTLOOK LOW
 TABLE 50.40 SELECTED INDICATORS (\$ MILLIONS, UNLESS OTHERWISE INDICATED)

LINE	VAR LABEL	1979	1980	1981	1982	1983	1984	1985
TRANSF TO PROV, MEDICARE								
1	LXP\$4.ELDCET8C3	0.31	0.20	0.34	0.50	0.49	0.47	0.46
2	CIL.LEXPCL.84	0.31	0.30	0.33	0.49	0.49	0.48	0.47
4	DIFFERENCE	-0.00	0.00	0.00	0.01	0.00	-0.00	-0.01
5	3 DIFFERENCE	-0.00	1.22	1.47	1.04	0.41	-0.25	-1.17
TRANSF TO PROV, TAXATION								
6	LXP\$4.ELDCET8C3	1.22	1.24	1.22	1.14	1.08	1.02	0.98
7	CIL.LEXPCL.84	1.22	1.22	1.20	1.12	1.08	1.02	0.99
8	DIFFERENCE	-0.00	0.01	0.02	0.01	0.00	-0.00	-0.01
9	3 DIFFERENCE	-0.00	1.22	1.47	1.04	0.41	-0.25	-1.17
TRANSF TO PROV, POST-SEC EDUCATION								
11	LXP\$4.ELDCET8C3	0.59	0.59	0.57	0.56	0.56	0.54	0.53
12	CIL.LEXPCL.84	0.59	0.59	0.56	0.56	0.56	0.54	0.54
13	DIFFERENCE	-0.00	0.01	0.01	0.01	0.00	-0.00	-0.01
14	3 DIFFERENCE	-0.00	1.22	1.47	1.04	0.41	-0.25	-1.17
TRANSF TO PROV, OTHER								
16	LXP\$4.ELDCET8C3	0.44	0.44	0.43	0.40	0.38	0.36	0.34
17	CIL.LEXPCL.84	0.44	0.43	0.42	0.39	0.38	0.36	0.35
18	DIFFERENCE	-0.00	0.01	0.01	0.01	0.01	0.00	-0.00
19	3 DIFFERENCE	-0.00	1.22	2.63	2.14	1.36	0.58	-0.38
20	OTHERS/GNE\$							
21	OTHERS/GNE\$							
PERCENT OF FED GOVT TOTAL CURRENT EXPENDITURE								
TRANSF TO PROV, HOSPITAL								
23	LXP\$4.ELDCET8C3	6.16	5.67	5.22	5.07	5.09	5.20	5.34
24	CIL.LEXPCL.84	6.16	5.77	5.38	5.25	5.21	5.25	5.15
25	DIFFERENCE	-0.00	-0.10	-0.16	-0.18	-0.13	-0.06	0.18
26	3 DIFFERENCE	-0.00	-1.72	-3.00	-3.48	-2.42	-1.07	3.55
TRANSF TO PROV, MEDICARE								
28	LXP\$4.ELDCET8C3	1.58	1.43	1.55	2.34	2.38	2.42	2.49
29	CIL.LEXPCL.84	1.58	1.46	1.60	2.42	2.44	2.45	2.41
30	DIFFERENCE	-0.00	-0.03	-0.05	-0.08	-0.06	-0.03	0.09
31	3 DIFFERENCE	-0.00	-1.72	-3.00	-3.48	-2.42	-1.07	3.55
TRANSF TO PROV, TAXATION								
32	LXP\$4.ELDCET8C3	6.16	5.82	5.60	5.34	5.23	5.25	5.29
33	CIL.LEXPCL.84	6.16	5.93	5.78	5.53	5.36	5.30	5.11
34	DIFFERENCE	-0.00	-0.10	-0.17	-0.19	-0.13	-0.04	0.18
35	3 DIFFERENCE	-0.00	-1.72	-3.00	-3.48	-2.42	-1.07	3.55
TRANSF TO PROV, POST-SEC EDUCATION								
36	LXP\$4.ELDCET8C3	2.59	2.79	2.61	2.64	2.72	2.78	2.86
37	CIL.LEXPCL.84	2.59	2.64	2.69	2.73	2.75	2.81	2.76
38	DIFFERENCE	-0.00	-0.05	-0.08	-0.09	-0.07	-0.03	0.10
39	3 DIFFERENCE	-0.00	-1.72	-3.00	-3.48	-2.42	-1.07	3.55
TRANSF TO PROV, OTHER								
43	LXP\$4.ELDCET8C3	1.22	2.06	1.95	1.89	1.84	1.85	1.86
44	CIL.LEXPCL.84	1.22	2.09	1.99	1.94	1.87	1.85	1.74
45	DIFFERENCE	-0.00	-0.04	-0.04	-0.05	-0.03	-0.00	0.08
46	3 DIFFERENCE	-0.00	-1.72	-1.94	-2.42	-1.50	-0.20	4.37

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