


# Integration of Social Program Payments into the Income Tax System

A discussion paper  
on the feasibility of integration

November 1978



Res  
HJ4662  
T3C26  




Department of Finance  
Canada

Ministère des Finances  
Canada



HJ4662  
T3C26

---

# Integration of Social Program Payments into the Income Tax System

---

A discussion paper  
on the feasibility of integration

November 1978



## PREFACE

On August 24, 1978, the Minister of Finance, the Honourable Jean Chrétien, announced that the federal government intended to introduce changes in over-all child benefit programs, including a refundable child tax credit. This announcement was the culmination of a lengthy review of the issue by the government.

The idea that integration of various transfer programs with the personal income tax system might be an effective means to achieve a number of public policy objectives has been under examination for more than five years. Indeed, the use of tax credits in the income tax system has been the subject of discussion since the report of the Royal Commission on Taxation in 1967.

In 1973, it was given impetus in Canada by the joint Federal-Provincial Social Security Review and more particularly by the federal government's proposal for an income support/supplementation plan. When it became uncertain, after the 1976 Federal-Provincial Welfare Ministers' Conference, whether provincial governments - which were to administer the distribution of income benefits to qualified recipients - would accept such a plan, consideration of using the federal tax system to implement the proposal took on renewed importance.

This initiative was given further emphasis by the publication in the fall of 1976 of a federal discussion paper, The Way Ahead. That document underlined the desirability of aiming assistance under various social policies more directly towards those in need through greater integration of existing programs. It proposed that to the extent possible this should be done through programs encouraging self-help and by administrative systems protecting the dignity of individuals.

The government, therefore, continued to study the possibility of integrating social programs with the personal income tax system. An inter-departmental Task Force comprising officials from the Departments of Finance and National Health & Welfare and from the Treasury Board Secretariat was established. This Task Force reported to a steering committee chaired by Marshall A. Cohen, then Assistant Deputy Minister, Tax Policy & Federal-Provincial Relations, Department of Finance. The Task Force began work in the fall of 1976 and reported to Cabinet in the summer of 1977. After consideration of the report, the Departments of Finance and National Health & Welfare were instructed jointly to continue an examination of specific possibilities for integration, including the feasibility of a refundable child tax credit. Further memoranda on the question were therefore prepared, leading to the announcement of August 24.

In a broader context, discussion of social policies has often turned to some form of integration which would result in a guaranteed annual income or the so-called negative income tax. While perceptions of a guaranteed annual income differ, a common theme would probably include the following: payments to individuals would be substantial and would take the place of virtually all existing transfer payments; payments would be made monthly and would be responsive to the current needs of individuals; payments would be related to the size and income of families; and payments might or might not be closely related to the tax system.

A negative income tax would have the same basic features as a guaranteed annual income but it also implies a system more thoroughly integrated with the tax system. Indeed, a negative income tax would involve not only a restructuring of existing transfer programs but massive restructuring of the personal income tax system. It would be necessary to have a common definition of income; a common unit of taxation (i.e., family, individual, etc.), and the benefit schedule (i.e., the rate schedule by which benefits would be "taxed back" or income-tested) would have to merge smoothly with the rate schedule under the present Income Tax Act.

There is serious concern about many of the issues involved. Not least, of course, are questions of cost and the impact on work incentives. The purpose of this discussion paper is not to examine or pronounce on these larger issues. Rather, it examines the feasibility, given the present tax system, of integrating existing transfer programs into the personal income tax system. Many of the lessons learned from the analysis underlying the paper would also apply to the more ambitious proposals.

It is the government's hope, in issuing this discussion paper at this time, that it will facilitate consideration and understanding of the proposed refundable child tax credit plan.

# CONTENTS

Page

## PREFACE

1.	INTRODUCTION .....	1
2.	THE PERSONAL INCOME TAX SYSTEM AND TRANSFER PAYMENTS TO PERSONS .....	2
	Personal Income Tax System .....	2
	Transfer Payments to Persons .....	3
	Tax Credits .....	4
	Integration in Design, Assessment and Delivery .....	5
3.	REFUNDABLE TAX CREDITS .....	8
	General Features .....	8
	A Refundable Child Tax Credit .....	10
4.	INCOME-TESTED REFUNDABLE TAX CREDITS .....	13
	General Features .....	13
	A Simple Income-Tested Tax Credit .....	17
	An Income Supplementation Tax Credit .....	18
	A Home Heating Tax Credit .....	20
5.	OLD AGE BENEFIT SYSTEM .....	23
6.	OTHER TRANSFER PROGRAMS .....	26
7.	LONGER-TERM CONSIDERATIONS .....	28
8.	CONCLUSIONS .....	31

## 1. INTRODUCTION

The growth of government expenditure, particularly transfer payments, in recent years has highlighted the need to increase the effectiveness of existing transfer programs and to ensure that any new transfer programs are aimed at those they are intended to assist. This growth has also highlighted the need to improve the method by which such payments are delivered and to explore alternative delivery systems. In the years ahead the need to protect certain segments of the population from the effects of serious structural price changes (e.g., oil and food) may become more important. The government, therefore, may wish to make decisions regarding such structural price changes independently of decisions regarding income distribution. This would be possible if the adverse consequences of price changes for particular groups could be overcome by appropriate changes in the tax/transfer system.

These concerns have led to the idea of exploring the feasibility of integrating transfer payment programs into the current personal income tax system in order to gauge the extent to which a comprehensive tax/transfer system might help to achieve these ends.

## 2. THE PERSONAL INCOME TAX SYSTEM AND TRANSFER PAYMENTS TO PERSONS

The integration of transfer payments into the personal income tax system is best discussed in terms of three concepts: The design of the system or the calculations necessary to measure the value of a payment or benefit; the timing and frequency of assessment of the benefit; and the manner of delivery. The various alternatives with respect to design, assessment and delivery depend on how the personal income tax system works and on what it is trying to do. The alternatives also depend on the objectives and characteristics of the various transfer payment programs which might be integrated.

### Personal Income Tax System

For purposes of this paper, the personal income tax system may be considered as essentially a "collection system". However, it does include devices to relieve or eliminate the tax burden on certain individuals for various reasons and, as discussed later, there is a technique for using the tax system to deliver funds even to those who pay no taxes. The personal income tax system involves a number of basic design features: The filing unit; the concept of income; and the nominal rate schedule.

Filing Unit: This is the person or persons whose activities are relevant to the determination of tax due. The nominal filing unit for the current tax system is the individual but the characteristics (e.g., income and age) of spouses and dependants may affect tax liability. The filing unit may be composed of one or more individuals.

Concept of Income: This encompasses the inclusions, exclusions, deductions and exemptions involved in calculating total income, net income and taxable income on the year-end tax return. It should be noted that income from sources such as workmen's compensation, war disability pensions, guaranteed income supplements, spouse's allowances, lottery winnings and inheritances are excluded from income for income tax purposes. It is also significant that the Income Tax Act only records income flows; it does not measure or record assets held as might be required to establish the degree of need for a payment.

Nominal Rate Schedule: This defines income brackets and the tax rate applicable to each. The effective tax rate, or the amount of tax expressed as a percentage of total income, is a product of the combined effect of the nominal rate schedule and the various deductions, exemptions and tax credits allowed. The marginal tax rate is the effective tax rate applied to the last dollar of a filer's taxable income.

A number of devices have been developed to administer the personal income tax: The annual personal income tax return; the deduction-at-source system; and the instalment system.

Annual Personal Income Tax Return: This is the key document in the system. The return must be filed on or before April 30 each year, and records information for the preceding calendar year. On this return, the tax filer calculates his liability, documents the amounts paid by deduction-at-source or instalment and computes the balance owing or the refund due.

Deduction-at-Source System: Employers are required to withhold specified amounts from each employee's remuneration and to remit these amounts to the government as tax on employment income. The deduction-at-source system provides for well-controlled, relatively frequent contact between the employee and the government through the intermediary of the employer.

Instalment System: All individuals whose income subject to the deduction-at-source system is less than 75 per cent of their net income must make instalment payments. This would include the self-employed and persons with substantial interest, dividend or capital gain income. Farmers and fishermen are required to pay two-thirds of their estimated tax for the year (or two-thirds of their prior year's actual tax) by December 31 and the balance by April 30. Others must make quarterly instalments on the same basis and pay the balance by April 30. Such payments are administered by the individual and lack the control and frequent contact of the deduction-at-source system.

### Transfer Payments to Persons

The government has a number of programs under which transfer payments are made to individuals. Table 1 indicates the amounts involved in the major programs.

Table 1

### MAJOR TRANSFER PAYMENTS AND SUBSIDIES TO PERSONS

1977-78 ESTIMATES

---

(millions of dollars)

Old age security pensions	3,633
Family allowances	2,152
Guaranteed income supplements	1,144
Spouses' allowances	110
Government contribution to unemployment insurance	1,374
Veterans' pensions	414
War veterans' allowances	258
Manpower training allowances	205
Oil compensation payments	800
Agricultural stabilization payments	352

---

Source: Estimates, Table 7.



Some of these transfer payments are quite simple in design and provide flat rate benefits that relate to age, number of dependants or other factors aside from income -- for example, old age security pensions and family allowances.

Other transfer payment programs are based on income; these include guaranteed income supplements and spouse's allowances. Since they are based on annual income, these transfer payments generally are not responsive to changes during the year in a recipient's income. However, some transfer programs which are based on income such as provincial social assistance programs (which are 50 per cent funded by the Government of Canada under the Canada Assistance Plan), must respond to changes in a recipient's income during the year and therefore are assessed more frequently during the year.

Another set of government transfer programs is based on the past earnings experience of recipients. These include social insurance programs such as unemployment insurance and the Canada Pension Plan. The government also contributes to a number of agricultural stabilization funds with payments based on a number of elements including contributions by participants, agricultural market prices and costs of production.

Some transfer payments take into account factors in addition to, or other than, current (or past) income. For example, war veterans' pensions are based on the degree of injury sustained or aggravated during military service. Manpower training allowances are provided to qualified individuals enrolled in manpower training programs.

Finally, the government provides subsidies or transfer payments to individuals indirectly. For example, oil import compensation payments to oil refineries to enable them to keep down the price of fuel to consumers can be viewed as transfer payments to individuals delivered indirectly via the refineries. Similarly, federal transfer payments to renters which take the form of rents below normal market levels are generally delivered via provincial public housing agencies. The government also subsidizes mortgage rates and makes direct payments to home owners under the Assisted Home Ownership Plan.

### Tax Credits

A tax credit is a deduction from taxes payable. The personal income tax system currently provides for a dividend tax credit on dividends from taxable Canadian corporations; a basic tax credit or tax reduction (9 per cent of basic federal tax plus \$50 per dependent resident child under 18, with a minimum \$300 and a maximum \$500); a foreign tax credit in respect of foreign taxes paid; a political contribution tax credit for contributions to federal political parties and candidates; and an investment tax credit for investment in specified business assets.

Four provinces have introduced tax credits which are administered by the federal government. Ontario has a property tax credit, a sales tax credit, a pensioner tax credit and a political contributions tax credit; Manitoba has a property tax credit and a cost-of-living tax credit; Alberta has a renter assistance tax credit; and British Columbia has a renters' tax credit.

Tax credits may be non-refundable, like the current federal credits, or refundable, like the provincial credits (except the Ontario political contribution tax credit). A non-refundable tax credit may reduce or eliminate taxes payable by a taxpayer, but, if his income is so low that he is not taxable, does not help him. A taxpayer owing taxes less than the value of his credit receives a benefit equal only to the taxes owing.

A refundable tax credit means that the individual receives the full amount of his credit even when the tax credit exceeds taxes otherwise payable. If the credit exceeds his tax liability, he receives the excess as a cash payment. The credit is delivered as a reduction of taxes to the extent possible, with any excess paid directly as a year-end tax refund. The method for integrating a transfer payment program into the personal income tax system would have to be refundable if the target group includes those with low incomes and thus with little or no tax to pay.

Another possible feature of a tax credit is "income-testing". With an income-tested tax credit, the value of the benefit is calculated on the income of the filing unit, generally decreasing as income increases. The value of a credit which is not income-tested obviously is determined solely by the eligibility criteria (e.g., the age or number of dependants of the claimant) and does not vary with income. The benefit structure must define income and specify precisely how the value of the credit is to vary with income. An income-tested tax credit may be based on a definition of income which differs from the definition in the personal income tax system.

#### Integration in Design, Assessment and Delivery

As mentioned earlier, there are three concepts involved in the integration of transfer payments into the personal income tax system -- integration of design, integration of assessment and integration of delivery.

Integration in Design: This involves harmonizing the rules for the determination of transfer payments with the rules underlying the tax system. As noted earlier, the essential design features of the tax system are the filing unit, the concept of income and the rate schedule. The rate schedule would not normally be relevant to the integration of transfer programs and the tax system using the refundable tax credit. However, integration of design requires that the transfer payment program adopt either the same filing unit and definition of income (where applicable) as the tax system or ones that are administratively compatible. For example, eligibility conditions for the guaranteed income supplement include a definition of income that involves only items disclosed on the tax return and a minimum of additional calculations. The guaranteed income supplement therefore is in effect largely integrated in design with the present tax system. (It should be noted that integration in design of an existing transfer program into the tax system will change the patterns of benefits if the existing design features of the transfer program have to be altered to coincide with those of the tax system.)

Integration of Assessment: This involves questions of how and how often eligibility for benefits can be tested. The objective of a more frequent assessment is to ensure that benefits respond to changes in a recipient's

circumstances. This requires frequent contact with recipients. The present tax system is capable only of assessment upon receipt of the annual tax return. On the other hand, current transfer programs are assessed and delivered in a variety of ways. Welfare payments are frequently assessed and frequently delivered. Guaranteed income supplement payments are assessed once a year and then delivered frequently over the ensuing year. Agricultural stabilization payments are assessed and delivered on an annual basis. Family allowances and old age security pensions are assessed once and delivered monthly thereafter. Veterans' pensions may be assessed at any time injuries are diagnosed.

Integration of Delivery: Perhaps the most difficult question is whether it is possible to use the present income tax collection system to actually deliver benefits, particularly benefits which must respond quickly to changes in income. Delivery of a benefit by the tax system requires a reduction in taxes collected. If this is to be done during the year it means reducing deduction-at-source or instalment payments. If it is to be done annually on assessment of the tax return, tax otherwise payable must be decreased or the refund otherwise due must be increased.

A number of alternatives have been considered for delivery of payments via the present tax system:

Annual Cheque Only: A refundable tax credit could be delivered by cheque at year-end. Benefits could be calculated on the basis of information supplied on the year-end tax return and delivery could be a part of the annual tax refund cheque. (A variation on this alternative would be to have annual assessment, but to spread out payments over the ensuing year as in the case of the guaranteed income supplement.)

Deduction-at-Source Only: If a refundable tax credit is to be delivered on a frequent basis by the present taxation system (rather than through a separate delivery administration) then it would be necessary to use the deduction-at-source system. However, it could never be possible to reach all recipients in this way. Some people are never employees. Others become employed or lose jobs during the year. In order to deliver to them, it will always be necessary to mail cheques.

Two alternatives present themselves in an attempt to utilize the deduction-at-source. Under the first, each recipient would be in contact with only one system at any one time -- either the deduction-at-source or cheque-delivery system. Under the second alternative, all beneficiaries would receive a portion of the total benefit by cheque and those who are in the deduction-at-source or instalment systems would receive an additional portion through one or both of those systems.

Periodic Cheque OR Deduction-at-Source: Such a system would have to be designed to encourage people to use the deduction-at-source system whenever possible; to ensure that recipients do not derive benefits from both systems at any one time; and to ensure that people do not get "lost" shifting from one system to the other. Two possibilities have been explored. Both pose serious administrative problems.

One possibility would be to issue some type of documentation entitling the recipient to benefits. He could deposit this document with his employer and receive benefits through the deduction-at-source system or he could deposit it directly with the cheque delivery agency and receive benefits by mail. This would ensure that more than one set of benefits could not be obtained by individuals holding more than one job or by families with more than one job holder. This alternative would create a number of problems. There would be delays if the documentation was lost or unduly delayed in the mail when the beneficiary was changing jobs. The documentation might be forged or sold. If used in respect of family-based benefits such as family allowances, one spouse might leave the family unit and retain the card, leaving the other spouse with the burden of raising the children. Also, if the benefits due were greater than the tax deducted at source, how would the shortfall be paid? Requiring employers to make up the balance would create a new form of cash flow problem for the business community.

Another possibility would be to have a highly efficient central cross-checking system. When an individual became employed, the employer would notify a central registry which would stop cheque delivery and advise the employer whether to reduce source deductions. When employment terminated, the employer (and/or employee) would advise the central registry to start cheque delivery. This would impose a considerable additional administrative burden on the tax system.

Periodic Cheque AND Deduction-at-Source: The second alternative would be to use the deduction-at-source/instalment system and the cheque-delivery system simultaneously. (If current family allowances and exemptions for wholly dependent children are regarded as a "child benefit system", then this is the delivery system currently in place.) If the total benefit were available through both devices, it is probable that some individuals would arrange to obtain double benefits and overpayments would result. Therefore, this system would have to provide that only a portion of the total refundable tax credit be delivered to all beneficiaries by cheque during the year and that a further portion be delivered through the deduction at-source/instalment system. Amounts delivered through these two mechanisms during the year would be reconciled with each beneficiary's annual entitlement on the year-end tax return and the appropriate adjustment payment made with the annual tax refund cheque.

Periodic Cheques Only: It is evident that a large proportion of the beneficiaries of some frequently-delivered transfer payments is not in contact with the deduction-at-source/instalment system. Retired people who now receive old age security pensions and guaranteed income supplements, and mothers who now receive family allowance payments are generally in this position. To make these payments to them under a refundable tax credit system, cheque delivery would have to continue to be the prime delivery mechanism. Depending on the nature of the credit, the precise amount of a refundable tax credit could then be calculated from the information on the tax return and any excess or deficiency corrected.

### 3. REFUNDABLE TAX CREDITS

#### General Features

As noted, the government has several non-refundable tax credits in use. Four provinces have enacted refundable credits administered by the federal tax system. The following paragraphs identify the design, assessment and delivery features which must be defined to create a refundable credit, as well as the matter of accounting for refundable tax credits. A case study of the integration of family allowances and the personal income tax system is then presented.

Design: The main elements to consider in the design of a refundable tax credit are the eligibility criteria, the filing unit, the recipient unit and the benefit structure.

Eligibility criteria define the circumstances or conditions under which benefits are to be paid -- the presence of children, age, residence, degree of disability, etc. These criteria should be identifiable by information that is either currently on the tax return or is readily accessible, or a proxy must be developed. For example, the Ontario property tax credit may be claimed by residents of Ontario on December 31 who paid rent or property tax. All the required information on income is available and documented on either the individual's, his spouse's or his parent's return. Information on rent or property taxes paid is not documented with the return and must be verified by audit to the degree deemed necessary. The Ontario sales tax credit uses total personal exemptions as a proxy for the value of purchases subject to provincial sales tax.

The filing unit specifies the person or persons whose attributes are to be assessed against the eligibility criteria. For example, the Ontario property tax credit must be claimed by the higher-income spouse where a working husband and working wife reside together.

The recipient unit identifies the person to whom the actual payment will be made. The recipient will normally be part of the filing unit.

---

While the integration of family allowances and the personal income tax is described as a "Refundable Child Tax Credit", it will become apparent that such a credit is quite independent of the tax system and like the current family allowance program would still involve monthly cheque delivery. The label refundable "tax credit" is therefore not fully descriptive, but the example does serve to illustrate in concrete terms the considerations involved in integrating a specific transfer program into the personal income tax system.

Once the eligibility criteria, filing and recipient units have been determined, the amount of the benefit must be calculated. The benefit structure may be extremely simple, such as one per cent of total personal exemptions for the Ontario sales tax credit, or somewhat more complex as in the calculation of the property tax credit. Criteria like the age and number of children -- the basic criteria for family allowances -- could easily be employed.

Assessment: The second feature of a refundable tax credit which must be defined is the frequency of assessment (i.e. how often eligibility criteria will be verified). Existing provincial refundable tax credits are assessed once a year on the year-end tax return. The annual tax return necessarily looks back at the prior year's situation. However, the present system can, in some instances, respond to a change during the year. For example, part-year residents are eligible to claim prorated exemptions at year-end and an individual can amend his deduction-at-source or instalment payments to reflect a change in taxable status during the year. However, the present tax system could not start or, more importantly, could not stop benefits during the year without the initiative and cooperation of the tax filer. Indeed, it would be administratively difficult to stop payments even with the cooperation of the tax filer.

Delivery: Delivery of a refundable credit involves the frequency of delivery or payment and the method of payment. The frequency of delivery or payment specifies how often benefits will be paid to the recipient unit. For example, current provincial refundable tax credits are delivered once at year-end. The method of payment involves both the form of payment and the actual delivery mechanism. Payment may take the form of a direct cash payment, a reduction in taxes payable or a reduction in the cost of a commodity or service. The delivery mechanism may involve a cheque through the mails; a face-to-face payment in cash or a reduction in periodic tax withholdings. The method of delivery of existing provincial refundable tax credits is a single cheque delivered as part of the year-end tax refund.

Accounting for Refundable Tax Credits: There are three methods of accounting for refundable tax credits: As a reduction of (or offset to) revenue; as an explicit expenditure; or as part revenue reduction and part expenditure. A new program with a relatively low cost could be accounted for as a reduction of revenue. This is the approach taken, for example, by Ontario for its refundable tax credits. However, if the credit replaces a significant existing transfer program, and especially if the net flow from the public to the private sector is relatively unchanged, the change from treatment as an expenditure (with the transfer program) to treatment as a reduction of revenue (with refundable credit) would be somewhat artificial. Accounting for a refundable credit as an explicit expenditure characterizes most accurately the redistributive nature of the program. The third approach would be to treat the portion of the credit that reduces tax liabilities as a revenue reduction, and any portion that is actually mailed out by cheque as an explicit expenditure. This treatment has been adopted by the United States for its Earned Income Tax Credit.

## Refundable Child Tax Credit

A number of benefits in respect of children are now provided through both the expenditure and tax systems. The possibility of integrating these benefits into a tax credit provides a good example with which to consider the elements of a refundable tax credit and the major issues relevant to the integration of existing transfer payment programs into the tax system. Because of the importance of retaining the basic features of family allowances such as monthly delivery, and delivery to mothers, the refundable child tax credit discussed here retains all the features of a conventional monthly cheque-delivered transfer program which is quite independent of the tax system.

The elements of the 1978 child benefit system are:

- (j) A taxable family allowance of \$25.68 per child under age 18;
- (ii) a maximum tax exemption of \$460 for dependent children under 16 and \$840 for dependants 16 and over, both tested by the child's net income; and
- (iii) a \$50 non-refundable tax credit per child under age 18 and resident in Canada.

In Quebec and Alberta, family allowance payments vary with the age and/or the number of children in a family. Family allowances are generally paid to mothers, while the benefits of exemptions for dependent children typically accrue to husbands in the form of higher take-home pay.

Set out below are four steps in the integration of family allowances and the exemptions for wholly dependent children and other dependants.<sup>1</sup> They are presented as a sequence of steps, each involving more change from the status quo, but moving towards a system using only refundable tax credits to provide benefits in respect of children. Implementation would not have to start with "the first step" and intermediate steps could be combined.

Table 2 sets out the net effect of the family allowance and the tax exemption for a child under 16 at various marginal tax rates. In the current system, an individual receives a taxable cash benefit (family allowance) of \$308 and a tax exemption of \$460. The net value of each varies with the individual's marginal tax rate. This is equivalent to a system in which he would receive a non-taxable cash benefit of \$308 (a refundable credit) and a tax exemption of \$152; the net value of the exemption would continue to vary with his marginal tax rate. Total benefits in both systems are the same at various marginal tax rates, as illustrated in Table 2.

---

<sup>1</sup> The analysis does not take into account the existing \$50 non-refundable tax credit per child. While this section is primarily concerned with children and the exemptions in respect of children, some individuals over 21 years of age -- full-time students and the infirm -- may be claimed as dependants under the relevant sections of the Income Tax Act.

Table 2

## CURRENT CHILD BENEFIT SYSTEM

1978

Benefits	Marginal Tax Rate		
	0	10%	50%
	(dollars)		
<u>Actual System</u>			
Family allowance	308	308	308
Less tax	0	-31	-154
Value of exemption of \$460	0	46	230
Total benefit	308	323	384
<u>Equivalent System</u>			
Refundable tax credit <sup>(1)</sup>	308	308	308
Value of exemption of \$152	0	15	76
Total benefit	308	323	384

(1) The refundable tax credit would not be taxable.

First Step: Convert the present system to the equivalent system as illustrated in the second half of Table 2. The equivalent system, which produces the same total benefit, would provide a refundable tax credit of \$308 per child and exemptions of \$152 per child under 16 (\$528 per child for those 16 and 17).

Second Step: Eliminate the "residual" exemption of \$152 for those under 16 and reduce that of those 16 and 17 by the same amount. This step would generate extra revenues because those now claiming exemptions for children under 18 would pay more in taxes. If the revenues so generated were used to increase the amount of the monthly payment, this would leave federal revenues unchanged and would maintain the current relative position of the 16- and 17-year-olds. It would also simplify the treatment of those under 16 and would result in some redistribution from high- to low-income families as the credit (i.e., the monthly payment) would be of the same value regardless of the income of the claimant. The value of current exemptions is directly related to income level and the marginal tax rate, and consequently current exemptions are of no value to those with no taxable income.

Third Step: Eliminate the remaining exemptions for children 16 and 17 and use the resulting extra tax revenues to increase the credit for this group. With this step, exemptions for children under 18 would be totally replaced by credits whose value would be greater for those 16 and 17 than for those under 16.



Fourth Step: Eliminate the differential in benefit by age (under 16 and 17) and introduce a single credit of equal value for children under 18 for whom family allowances are now being paid. Again, the tax increase resulting from eliminating exemptions could be used to finance an increase in the refundable credit over the current level of family allowances. Such a benefit structure would result in more redistribution from high- to low-income families and redistribution from those families with children aged 16 and 17 to those with younger children.

If monthly delivery of benefits to mothers is to be retained, then the refundable child tax credit would have to be delivered by monthly cheque. It is not feasible to deliver payments to mothers through the deduction-at-source system for a number of reasons. This system does not cover everyone who would be eligible. A maximum of about 25 per cent of benefits could be delivered to mothers in this manner. (Delivering to fathers could raise this figure to 75 per cent.) Administrative and enforcement problems arise in the case of families with more than one earner, individuals with more than one job and the self-employed. Family formation and dissolution and changes in delivery status, such as where a recipient gains or loses contact with the deduction-at-source system part way through the year, also give rise to problems. A reimbursement system would be needed for employers whose credit pay-outs exceed taxes withheld.

Introduction of a refundable child tax credit by integrating family allowances and exemptions for dependent children would result in little real change. The total cost to the government would be essentially unchanged, although there might be some redistribution of the total benefit among income groups. Mothers would continue to receive a monthly cheque and the delivery system would be quite independent of the tax system. Indeed, it would not even be necessary to make provision for the refundable child tax credit on the year-end tax return unless it was for purposes of "topping-up" the monthly payments for low-income groups.

#### 4. INCOME-TESTED REFUNDABLE TAX CREDITS

##### General Features

The value of a refundable tax credit can be made to vary with the income of an individual filing unit by relating the credit to income and reducing its net value as income increases. The same elements must be defined for an income-tested refundable tax credit as for a simple refundable credit: Eligibility criteria, filing and recipient units, benefit structure, frequency of assessment and frequency and method of payment or delivery. Two additional elements arise: A definition of income and the problem of "stacking" of the benefit structure.

The range of choices with respect to any of the design, assessment and delivery elements of an income-tested credit clearly depends on how these elements are defined in the tax system. The closer the elements of the credit are to existing tax definitions and concepts, the fewer the additional requirements involved in administering the credit. However, it may be that administrative simplicity can be achieved only at the expense of sacrifices to the achievement of the objectives of an income-tested credit. The areas in which these sacrifices may be particularly significant are: The filing unit, the definition of income; the frequency of assessment; and the benefit schedule and stacking.

##### (1) Filing Unit

There are four main alternatives regarding whose income is to be taken into account for purposes of income-testing: The individual; the primary earner in the family (spouse with the higher income); the primary earner plus the spouse; and all family members.

Individual: The simplest unit is the individual because this is the nominal filing unit for the present income tax system. For example, the Ontario sales tax credit may be claimed by certain individuals who are 16 years or older, resident in Ontario on December 31 and not claimed as dependants on someone else's return. Adopting the individual filing unit would achieve maximum compatibility with the current tax system. However, for those programs ideally based on family income, use of the individual as the filing unit would lead to unintended results in that low-income individuals would receive benefits even though total family income was quite high (e.g., the millionaire's spouse).

Primary Earner or Spouse with Higher Income: One solution to the problem of the millionaire's spouse is to allow only the spouse with the higher income (primary earner) to file for the credit. This approach is used in the case of the Ontario property tax credit. For example, one could define a family-based refundable tax credit where the gross benefit depended only on family size. The gross credit would then be reduced according to the income of the higher-income spouse. However, this type of income-testing could still result in inequities on a family basis as two families with the same total income could end up with different credits after income-testing,

depending upon how that income was distributed within the family. A similar situation exists in the current income tax system, but it has not caused serious difficulties.

It should be recognized that Revenue Canada will not be able to identify the spouse with the higher income unless both spouses file (or are required to file) a tax return, or one spouse is claimed as a dependant by the other, and the definition of income is net income. The extent of this problem, in this and the two filing units discussed later, would have to be recognized and evaluated in any specific design decision.

Primary Earner Plus Spouse: In this approach the income of the filing unit would be defined as the sum of the incomes of the primary earner and his or her spouse. Under this approach unintended payments to families with low-income parents and high-income children would be possible. As with previous alternatives, if the information is present to determine and verify which spouse had the higher income, little additional auditing would be required to determine the sum of their incomes and to use this figure for income-testing. However, a move to any type of "joint filing" for purposes of the Income Tax Act would be very significant, both conceptually and in terms of administrative complexity.

Family: The final filing unit is the family itself, including the incomes of children. However, there is a range of possible definitions of the family. One possibility, in the spirit of the refundable child tax credit, would be to include only children 18 or under. In any event, the main issue distinguishing this form of filing unit from the preceding one is whether the reduction in unintended payments would be worth the increased complexity given that most children under 17 do not have significant incomes. The problem remains, however, that it might appear somewhat anomalous for a "low-income" family to be receiving a credit in respect of a child who has enough income to file his own tax return.

It is possible to define an income-tested refundable tax credit using any of these approaches. The choice will depend on the the particular objectives of any given credit and the trade-off between payments to inappropriate recipient groups and increased filing and administrative complexity.

## (2) Income Definition

A second area where conflict might arise between the objectives of a specific credit and the features of the current tax system is in the definition of income for purposes of income-testing. The four provinces with refundable credits have chosen a relatively simple measure of income which is defined for income tax purposes as "taxable income". For example, Ontario reduces the gross benefit of the sales tax credit by 2 per cent of taxable income. At the other extreme, more involved income and asset reporting may be required, as for example by the Family Income Plan in Saskatchewan, in order to attain more precisely the objectives of the program. But here, as in many similar choices, objectives are in conflict and a trade-off must be accepted. In this case, there is a clear trade-off between the simplicity of using income concepts

already defined in the tax system, such as total income, net income or taxable income, and the provision of income definitions tailored to the objectives of a particular credit. Also, if the concept of income is adjusted to meet the objectives of a particular credit, it may be difficult to draw the line and limit the number of adjustments. The self-employed present particular difficulties because they may have a measure of control over the income reported for tax purposes. In any case, the interaction of tax and transfer programs in an integrated system could lead to inflexibility in amending the definitions of income for either purpose.

Total Income: Total income is the most inclusive definition of income which can be taken directly from a tax return. It includes income from some transfer payments, such as old age security, Canada Pension Plan, and unemployment insurance benefits which might be more appropriately treated in a special manner for some types of credits. For example, such payments might be fully offset against the credit. On the other hand, total income does not include certain other transfer payments, such as workmen's compensation and veterans' allowances, which one may not want to ignore. Total income does not include one-half of capital gains. It does include the 50 per cent gross-up of dividends from taxable Canadian corporations, which is not actually received by individuals. Capital cost allowances and other elements of self-employment income over which an individual may have control could give rise to a situation where an individual with substantial cash flow or net assets could receive a refundable credit from the government -- presumably an unacceptable result. Saskatchewan's Family Income Plan dealt with this problem by disallowing all capital cost allowance claims and by instituting an overall asset test of eligibility. It must be recognized, however, that there is a limit to the amount of special "tailoring" which can realistically be loaded onto the tax return, from the point of view of both the filer and the administrator.

Net Income: Another relatively simple definition of income which could be used is net income. The use of net income would effectively subsidize deductions over which the filer has some discretion, such as registered savings plan contributions. This may not be desirable. On the other hand, Canada Pension Plan (or Quebec Pension Plan) and unemployment insurance contributions are also allowed as deductions in calculating net income and, for purposes of some credits, it might be desirable to take such forms of income into account.

Taxable Income: The major deductions from net income in arriving at taxable income are personal exemptions for dependants. Also included, however, are deductions for interest and dividend income, and capital and non-capital losses of preceding years. Again, given the objectives of a particular credit, it might be best to take items such as these into account when measuring income.

It is evident that there are difficulties in selecting any relatively simple definition of income. While four provinces use taxable income to test their benefits, the benefits provided are relatively small. At higher levels of benefits, this test may not be appropriate and difficult choices between simplicity and the appropriateness of the income test would have to be made.

### (3) Frequency of Assessment

The frequency of assessment and hence the degree of responsiveness of a credit may assume greater importance for an income-tested method than for a simple refundable credit, depending on the objectives of the program. As noted under the general discussion of refundable credits, the tax system relies on annual assessment and reconciliation. Thus, any income-tested transfer which aims to address immediate needs (such as provincial social welfare and veterans' allowances) may not be an appropriate candidate for integration. Two basic types of responsiveness have been identified -- annual assessment and intra-year assessment.

Annual Assessment: Income and all other criteria would be assessed at year-end in conjunction with the processing of income tax returns. Benefits would be paid either as a lump-sum cheque exactly like current refunds of tax over payments, or as instalments over a number of months.

Intra-year Assessment: Income, and possibly other criteria in the benefit determination, would be assessed on a regular monthly or quarterly basis. At year-end, payments and annual income could be reconciled. This would involve a substantial increase in administrative complexity compared to annual assessment. The deduction-at-source system uses the "individual plus dependants" filing unit whereas many income-tested credits are most desirably based on family income. Therefore, the incomes of all family members could not be assessed by the deduction-at-source system during the year when benefits were being paid, and overpayments could result. While there may be some measures which would reduce these problems, development of a capability for assessment more frequent than once a year through the deduction-at-source system must be regarded as at best a longer-run objective. More frequent assessment could be done by new or existing government field offices, but would not constitute delivery by the tax system.

### (4) Benefit Schedule and Stacking

There is a further area of conflict which involves the "tax back" or "reduction" rate. This is the rate or schedule that relates the gross credit and total income subject to testing to the final or net value of the credit. The simplest schedule would involve one "turning point" and one "reduction rate". The turning point is a specified income level below which there would be no income-testing. The reduction rate is the rate at which the gross credit is reduced as income exceeds the turning point. For example, if the turning point were \$4,000, any claimant with income less than \$4,000 would receive the full amount of the gross or basic credit. Then, if the reduction rate were 10 per cent, the basic credit would be reduced by 10 per cent of the amount by which the claimant's income exceeded \$4,000, until the credit was reduced to zero. The income level at which the credit is reduced to zero is called the "break-even point".

A central issue with regard to the design of the reduction rate schedule is the extent to which "stacking" would be involved. Stacking refers to the situation in which an individual involved in more than one program finds that an additional dollar of income is reduced by each program. The combined

effect of positive income tax rates and income-testing by one or more tax credit programs could result in very high combined reduction rates. The problem with high reduction rates is that they destroy the incentive to earn more.

If the benefits provided by a particular program are relatively small (such as benefits under the various provincial income-tested refundable tax credits) then a low reduction rate can be used. Benefits will not be spread too far up the income scale and no serious stacking problems will result.

However, a more generous program might require a higher reduction rate to avoid providing benefits to relatively well-to-do families. A high reduction rate would then "stack" with the positive tax rate schedule to discourage individuals from earning additional income. For example, suppose a certain income-tested credit is reduced to 35 per cent in the \$5,000 to \$10,000 income range. The combined federal and provincial tax rate on a family in this range could be 25 per cent, thus resulting in a total marginal rate of 60 per cent. This would be higher than the rate faced by both poorer and richer families in nearby brackets. This situation could be improved by tying income-tested credits more closely to the positive tax rate schedule and thus in effect moving towards a negative income tax system. Such a move, however, implies fundamental changes to the current tax system. In addition, provincially- and municipally-administered social assistance programs are income-tested programs which, in conjunction with an income-tested tax credit, could give rise to high combined tax rates.

In summary, any attempt to deliver income-tested benefits via refundable tax credits involves trade-offs between the specific objectives of the benefit system and the administrative complexity and taxpayer burden imposed by the tax system. The following examples illustrate the nature of these trade-offs for a simple income-tested refundable credit, an income supplementation tax credit and a home heating tax credit.

#### A Simple Income-Tested Tax Credit

It is feasible to introduce a simple income-tested refundable tax credit which would provide benefits to lower-income groups. Simplicity in the design, assessment and delivery characteristics of the credit would minimize any additional filing complications for taxpayers and administrative work for tax administrators. Development of such a credit would require decisions on each of the basic elements noted above under general features: Eligibility criteria, filing unit, recipient unit, definition of income, benefit structure, frequency of assessment and frequency and method of payment.

Eligibility Criteria: The general eligibility criteria of a simple credit would be determined by information already on the tax form or readily verifiable. For example, the age and province of residence at year-end of the filer and the age and number of dependent children are possible criteria for which information is currently provided on the tax return. A proxy which itself is either available on the return or readily verifiable could be used for other specific criteria.

Filing Unit: The filing unit under the tax system is essentially the individual and any move to a different filing unit for a tax credit would involve some additional complexity for filers and the tax administration. However, it is relatively easy to specify one filer per family (for example, the higher-income spouse) as spouses' returns can, in most instances, be cross-referenced by spouses' names and social insurance numbers, which are currently required on all returns.

Recipient Unit: The recipient unit would have to be an individual since tax refunds or taxes payable are calculated for individuals.

Definition of Income: A simple credit would use a definition already determined on the tax return, such as total income, net income or taxable income. Some degree of adjustment would be feasible without too much complication arising (for example, the guaranteed income supplement uses net income plus old age security payments) but such adjustments should be kept to a minimum.

Benefit Structure: There are two parts to the benefit structure of an income-tested refundable credit. The first part determines the gross entitlement. A simple credit would involve calculations based on information on the return or readily verifiable such as size of family, number of children, or age of family members. The second part of the benefit structure is the income-testing or reduction rate based on income. The reduction rate of a simple income-tested credit would be relatively low to avoid adverse stacking problems with other programs and the positive tax system. For example, provincial income-tested credits use one per cent or 2 per cent of taxable income to reduce the gross entitlement. One effect of a low reduction rate, however, is that programs with large gross entitlements provide benefits to relatively high-income individuals.

Frequency of Assessment: A simple income-tested credit would use the annual assessment period used on the year-end tax return.

Frequency and Method of Payment: The most feasible approach would be to include the benefit from the refundable credit with the tax refund cheque or reduction of taxes otherwise payable as calculated when the tax return is assessed.

### An Income Supplementation Tax Credit

The 1976 proposal of the Government of Canada to the provincial governments for income supplementation outlined a particular income-tested transfer payment directed mainly at the "working poor" and to be delivered by provincial authorities. Benefits were to be:

- (i) Based on family size, composition and income levels;
- (ii) structured to avoid adverse stacking with other programs; and
- (iii) available only after proof of attachment to the labour force as measured by an employment availability assessment.

In addition, provinces were encouraged to adopt reasonably frequent assessment and delivery. Integration of this proposal would involve trade-offs between the specific design features noted above and administrative compatibility with the tax system.

Frequency of Assessment and Delivery: The tax system essentially provides for annual assessment and cannot, in its present form, respond to changes during the year in income levels. Substantial modifications to the tax system would be required to allow for such responsiveness and development of such an option must therefore be regarded only as a long-term possibility. However, annual assessment and year-end delivery as part of the tax refund is clearly feasible and indeed is the practice under the various provincial income-tested refundable credits. Alternatively, annual assessment with monthly delivery during the ensuing year could be used, as is now done for delivery of the guaranteed income supplement.

Family-Based Benefit and Income-Testing: Since supplementation is intended to assist low-income families, it would be appropriate to adopt a filing unit which included both spouses. Also, the family-based nature of supplementation implies that the benefit should vary by family size. This combination would require some form of family reporting schedule. As noted under general features, any move to "joint" or "family" filing for purposes of calculating a tax credit would involve major changes to the present tax system.

Benefit Structure and Stacking: The particular objectives of supplementation have direct implications for the benefit structure of an income-tested credit which go considerably beyond the general issues already discussed. For example, the 1976 proposal for income supplementation was designed to ensure that a "welfare trap" was not introduced into the overall income maintenance system. Avoiding such a trap requires that disposable income never fall as earnings rise. Consequently, a particular consideration was to set the benefit structure so that the combined effect of social assistance and supplementation always provides an increase in disposable income as families earn more.

In the context of a year-end supplementation tax credit, one approach would be to set the rate at which supplementation benefits are reduced as income rises (i.e., the reduction rate) at a sufficiently low level (e.g., one per cent) so that any additional work disincentive would not be a problem. With this type of credit, benefit levels and reduction schedules could be set so as to tailor the overall program costs to virtually any budget constraint. The distribution of benefits across income classes would be affected by these choices. For given benefit levels, the lower the reduction rate, the higher the income levels at which benefits cease, and the higher the reduction rate, the lower the income levels at which benefits cease.

While the use of a low reduction rate resolves concerns about a welfare trap, it also means that benefit levels cannot be very high without resulting in payments flowing to families with relatively high incomes. An alternative approach would be to have a somewhat higher reduction rate and to set the income level at which benefits start to be reduced (the turning point) at a level high enough to avoid the welfare trap.



By choices relating to the benefit structure, the design of a supplementation tax credit would be adapted to emphasize various social and economic goals. For example, if increasing financial work incentives for those with very low earnings were a priority, the tax credit could be designed so that potential entitlement to benefits was contingent upon work effort as reflected by earned income. Under this approach, those with annual earnings below some threshold would simply not be entitled to benefits. Above this "earnings threshold", potential entitlement to benefits would increase in direct proportion to earnings until maximum potential entitlement was attained at a level of earnings corresponding roughly to full-time employment at the minimum wage (i.e., \$5,000-\$6,000). Once potential entitlement to benefits had been established on the basis of earnings, total income (earned and unearned) would, of course, be taken into account in determining the level of benefits actually payable. The United States tax credit for the working poor (the Earned Income Tax Credit) employs this approach.

If the needs of low-income families with children were a priority, then potential entitlement to benefits could be contingent only upon the number of children. As with the approach outlined in the previous paragraph, total family income would, of course, be taken into account in determining the level of benefits payable. Unlike the above approach, however, this one could provide benefits to low-income families with children, even if the parents had little or no earned income; that is, entitlement to benefit would not be contingent upon earnings.

The above possibilities for emphasizing various government objectives in the design of a supplementation tax credit are, of course, neither exhaustive nor mutually exclusive. For example, it would be feasible to adopt a combination of the approaches. A family's potential entitlement to benefits in respect of its adult members might be conditional upon work effort while entitlement to benefits in respect of the children in the family might be dependent only on the number of children.

As under the previous approach, the overall costs of this kind of income supplementation tax credit could be tailored to meet virtually any budget constraint. Similarly, policy makers would have wide discretion under this approach with respect to which income groups receive benefits. However, it must be recognized that this type of tax credit would be more complex than the simple income-tested tax credit discussed in the previous section.

#### A Home Heating Tax Credit

This example of the possible use of an income-tested refundable tax credit involves a fundamental transformation of an existing program. It also illustrates how a tax-delivered refundable credit could be used as an adjunct to other policies, in this case energy policy. While the example deals specifically with the design of a home heating tax credit, the conclusions would generally be applicable to other producer or consumer subsidies. The case for consumer subsidies has recently been made in the context of rapidly increasing prices although it has traditionally been made for necessities even during periods of stable prices.

One way to protect consumers from price increases is to use a subsidy to keep prices down, as is now done with oil prices. This has the advantage of administrative simplicity since the government has only to deal with a few refiners instead of a multitude of consumers. It also restricts assistance to consumers and assists them in proportion to their consumption. However, many who could be expected to manage without subsidization would benefit from the subsidy, and quite possibly on forms of consumption that are not generally considered to be necessities. Government assistance is thus thinly spread instead of being concentrated where it is most needed.

A second approach is to introduce a more flexible instrument which is capable of pinpointing assistance more precisely. Such an instrument could take the form of an income-tested refundable tax credit. The possible features of such a credit are discussed below under the headings developed to define any refundable credit.

Eligibility Criteria: Anyone who buys an oil-based product (e.g., gasoline, home heating oil, plastics) could be eligible for an oil consumption tax credit. However, there is a reasonable argument that the government wants to cushion the effect of increased oil cost for necessities only. Probably the most important related necessity in Canada is home heating. Therefore, it would seem logical that the concept of an oil consumption credit be broadened to a home heating credit available to all households in Canada.

Filing Unit: Given that heating costs do not relate to individuals as much as to residences, it is reasonable to define the filing unit as all residents of each dwelling, usually the economic family. The complications of using such a filing unit rather than one which is more compatible with the tax system (e.g., individual, primary earner) would have to be weighed against the likelihood of an inappropriate payment.

Recipient Unit: The recipient unit is normally part of the filing unit and no particular problems are foreseen in choosing an appropriate unit.

Frequency of Assessment and Delivery: The relatively small amounts involved and the actual pattern of expenditures on energy (concentrated during the winter months) argue against monthly delivery of benefits. Annual delivery, as evidenced by the various provincial tax credit schemes, would present no major difficulties. Delivery via the tax system would make it necessary for those not filing at present to file a tax return to take advantage of the credit. This is not perceived to be a major problem.

Benefit Structure: In designing the benefit structure of a home heating tax credit, consideration must be given to the extent to which benefits should be related to consumption. One alternative is to provide a credit that is a fixed percentage of actual home heating expenditure. While such a direct relationship reflects the actual hardship resulting from the price increase, it does pose problems. For example, it does not distinguish between "legitimate" energy requirements and "wasteful" consumption; it subsidizes the two and generally leads to overconsumption. Given that the actual amount of assistance may be relatively small, the fine tuning offered by a direct relationship may not justify the considerable administrative machinery that would be required.

A second alternative in designing a benefit structure is to base assistance on some norm, say average consumption. Assuming for instance that a typical household of four has a fuel bill of \$400 a year and that the increase in the price of crude would raise this to \$480, then the average subsidy could be set at \$80, if it were the intention to fully compensate the average household for the price increase. The level of assistance could of course be set lower to reflect budgetary constraints. The \$80 for a family of four could be translated to \$20 per capita for other family sizes or, if one assumes decreasing costs per person of heating as household size increases, say \$40 for the first person in the household, \$20 for the second person, and \$10 for each additional person. A design of this type is obviously simpler to administer than one related directly to actual consumption. Further, since the reduction in consumption would not reduce the subsidy, this design would not discourage energy conservation.

A third alternative would involve a combination of the first two. A problem with the first alternative is that it does not really encourage conservation, which is a major objective of allowing the price of oil to rise. A problem with the second alternative is that the credit is not tied to oil or energy consumption, so that there may be some question as to why it is called an energy credit at all. A third alternative would therefore link the credit to actual consumption, but only up to some maximum. If a typical family consumes 1,000 gallons of oil, this maximum could be set at 350 gallons. For example, the gross or basic energy credit could allow a family to effectively purchase the first 350 gallons with "75-cent dollars" while all successive consumption would have to be paid for with "100-cent dollars".

Income-Testing: A home heating credit need not be income-tested. The distribution of benefits among households under a home heating credit would still be different from the current situation since the assistance would no longer be proportional to consumption. However, budgetary constraints and the regressive impact of the price increase suggest that concentration of the subsidy in the lower-income groups, by an income test, might constitute an improvement over the current Oil Import Compensation Program. Relatively low benefit levels would allow for a low reduction rate. For example, a maximum benefit of \$80 combined with a \$5,000 exemption and a reduction rate of 2 per cent would result in the net benefit being reduced to zero at \$9,000. Such a low reduction rate should not give rise to any serious stacking problems.

The foregoing suggests that a home heating tax credit based on concepts already used in the tax system would be technically feasible and could be delivered through the tax system at the end of the year. It has not been the purpose of this discussion paper, of course, to determine whether the option of allowing the price of oil to rise and compensating the poor accordingly is desirable; this must rest on a full assessment of the economic and energy policy implications of such a decision.

## 5. OLD AGE BENEFIT SYSTEM

The old age benefit system may be defined as an income-security scheme composed of four distinct layers:

- (i) An income guarantee taking the form of a taxable demogrant, old age security, with a value of \$1,841 in 1978;
- (ii) an income-tested supplement, the guaranteed income supplement/spouse's allowance, with a maximum benefit of \$1,291 for a single person and \$1,147 for each married individual (hence \$2,293 per couple) in 1978;
- (iii) a public pension scheme, Canada Pension Plan/Quebec Pension Plan with an average annual retirement pension in 1977 of \$1,027; and
- (iv) a set of tax reductions consisting of:
  - . the age exemption (\$1,520 in 1978);
  - . the pension income deduction (up to a maximum of \$1,000 in 1978); and
  - . the dividend and interest income deduction (up to a maximum of \$1,000 in 1978).

The layered structure of the old age benefit system parallels somewhat that of the child benefit system. Old age security benefits are taxable demogranths comparable to family allowances. The guaranteed income supplement/spouse's allowance benefits constitute an income-tested transfer resembling income supplementation. The old age exemption is the counterpart of the exemptions for dependent children. Also, at present the old age system has some design features which are compatible with the income tax system. The guaranteed income supplement/spouse's allowance system, for example, uses the tax definition of net income (minus old age security) to income-test benefits and is therefore already closely integrated in terms of design.

However, integration in design of the benefit structure does involve some problems. If, for example, the old age security benefit (\$1,841) and the old age exemption (\$1,520) were converted into a single refundable credit, some, perhaps inappropriate, redistribution would occur as explained below.

Table 3 illustrates the total benefit derived from old age security and the age exemption at different marginal tax rates. The total benefit diminishes as income and the marginal tax rate increase. Table 3 also illustrates that the present system is equivalent to a refundable tax credit of \$1,520 plus a taxable grant of \$321. (Note that this differs from the current child benefit system which is equivalent to a refundable tax credit plus a tax exemption).

Table 3

## BASIC OLD AGE BENEFIT SYSTEM

1978

Benefits	Marginal Tax Rate		
	0%	10%	50%
	(dollars)		
<u>Actual System</u>			
Old age security pension	1,841	1,841	1,841
Less tax	-0	-184	-920
Value of exemption of \$1,520	0	152	760
Total benefit	1,841	1,809	1,681
<u>Equivalent System</u>			
Refundable tax credit <sup>(1)</sup>	1,520	1,520	1,520
Taxable grant of \$321	321	321	321
Less tax	0	-32	-160
Total benefit	1,841	1,809	1,681

(1) The refundable tax credit would not be taxable.

It would obviously be feasible to move to the equivalent system of a refundable tax credit and a taxable grant without altering anyone's income. However, in moving one step further and folding the taxable grant into the refundable tax credit (which would be non-taxable) it is evident that those in higher income tax brackets would benefit at the expense of those in lower brackets. This would occur because the average value of the taxable grant, after tax, would clearly be somewhat less than \$321. When this is converted into a non-taxable refundable credit of equal value for all those over 65 and added to the refundable tax credit of \$1,520, it is evident that the total benefit for someone with zero marginal tax rate would be less than \$2,162, while for someone with a 50 per cent marginal tax rate, it would be greater than \$2,002. This means that those with little or no tax to pay would receive less than they currently do and those with high marginal tax rates would receive more than they receive at present. This anomalous result arises because the old age security benefit exceeds the value of the age exemption.

Another possible route towards integration in design would involve adoption of an income-tested refundable tax credit which would replace guaranteed income supplement and spouse's allowance benefits. Given that these benefits are already income-tested on the basis of the tax definition of net income, and thus in effect are already closely integrated with the tax system, no substantial changes would be required. Further, one can envision integrating not only guaranteed income supplement/spouse's allowance benefits but also old age security payments along with the age exemption.

In terms of delivery, integration of old age security or guaranteed income supplement/spouse's allowance and the tax system does not offer any substantial advantages. The current cheque-delivery system would have to be retained given that frequent delivery during the year of benefits is required for the clients of old age security and guaranteed income supplement/spouse's allowance.

## 6. OTHER TRANSFER PROGRAMS

A number of other programs have been examined for their suitability for integration into the current tax system in the near future. Given the nature of these programs, it is apparent that integration in design would involve a major restructuring of each one. The information needed to calculate payments under these programs is not collected by the tax system and in many cases it is not even related to the type of information upon which the tax system relies. Any restructuring of the programs to make them more compatible with tax system concepts would result in a quite different distribution of benefits among individuals. In terms of delivery as well, these programs differ from each other and from the tax system. In each case, the delivery system is set to meet the objectives of the program. In most cases a responsive monthly (or more frequent) assessment and delivery system is necessary and a tax credit which would be calculated only at year-end would not be appropriate. For these reasons it is apparent that these programs, as now constituted, could not readily be integrated into the personal income tax system.

War Veterans' Pensions: These are paid to veterans or their survivors based on injuries caused by or aggravated by military service. The amount is based on the degree of disability and family size. Most pensions are permanent and once the amount has been determined, it does not vary except with changes in family size. Benefits are paid monthly and are not income-tested. They are non-taxable and indexed. The main administrative load appears to be at the time of determination of the initial benefit. There are about 140,000 recipients of these pensions, though the number is decreasing. The current cost is about \$400 million a year.

War Veterans' Allowances: These are paid to older veterans, to widows, widowers and orphans of veterans and to younger veterans who are deemed to be unemployable, subject to a set of residence requirements. There is a fairly complex set of eligible exemptions for other income after which benefits are reduced by one dollar for each dollar of income. The definition of income used is not the same as that in the Income Tax Act. Benefits are non-taxable, indexed and paid every two weeks. Claimants under age 60 for men and 55 for women require a medical examination to determine employability. Monthly reporting of income is required, and there is a substantial amount of discretion allowed in the administration of benefits. Total cost is about \$200 million. There are about 90,000 recipients, about 85 per cent of whom are over the age limits. The number of recipients is increasing.

Canada Manpower Training Program: This program provides instruction and allowances to trainees. Instruction is usually in educational institutions, but may be in a designated part of an industrial plant. The courses tend to be of relatively short duration (three days to three months). Unemployment or intermittent employment is a prerequisite for many courses. Benefits depend on previous employment income, family size and daily course attendance. A maximum of 24 hours per week part-time employment is allowed while on a course. The trainee must have been out of school for at least a year and must be at least one year over the school-leaving age. Canada Employment

Centres are responsible for client documentation, monitoring attendance and making benefit payments. The Department of Supply and Services calculates allowances as authorized, produces income tax slips for clients to include with their income tax return at year-end since the allowances are taxable and provides management information for the Employment Centres. Allowances amount to about \$200 million, while the payments to provinces for the use of the educational institutions are estimated at \$282 million for 1976-77.

Canada Manpower Industrial Training Program: This program provides mainly on-site training. The eligibility requirements are the same as those for the Canada Manpower Training Program except that "civil servants" (broadly defined) are excluded. The recipient is paid a normal wage while on training. Block grants of up to \$200,000 are paid to employers or unions to cover the costs of training. In some cases, part of the wage bill is also reimbursed. The cost of this program for 1976-77 is estimated at \$64 million.

Assisted Home Ownership Program: This is intended to assist families who wish to purchase a moderately-priced new home. Benefits consist of interest reduction loans and, if applicable, grants. Most benefits accrue to families within the moderate to upper-middle income range. Benefits are delivered monthly. It is the only federal housing program that delivers benefits directly to families, but it is a very small part of the federal housing budget.

Agricultural Stabilization Program: This seeks to stabilize farm incomes by supporting the prices of designated farm products. It operates on a calendar year basis. Payments are made to producers, who may be individual farmers, partnerships, or incorporated businesses. The amount of a producer's payments depends both on his own sales and on the overall market in the given year for each product. Payments have fluctuated widely over the last five years.



## 7. LONGER-TERM CONSIDERATIONS

The discussion up to this point has focussed on programs that might be integrated into the current income tax system within the next few years. However, a decision to introduce a refundable tax credit in the near future could well depend on the long-term strategy of which such a move may be a part. Consideration of tax integration in a longer-run context must be based on some view of the ultimate desired form of the tax/transfer system. While a range of such views is obviously conceivable, two basic characteristics of any view are the type of program that would be integrated into the tax system and the type of delivery system that is ultimately desired.

With respect to the type of program which might be integrated in the longer term, it may be helpful to consider five types of programs: Cash transfers, transfers-in-kind, programs concerned with the allocation of manpower and capital resources in the economy, social insurance programs and future initiatives. The purpose of this classification is to highlight the kinds of fundamental decisions that would be required in order for these types of programs to be integrated.

Cash Transfer Programs: Since the level of benefits is determined primarily by income and/or demographic characteristics, these programs are closest to the current personal income tax system in spirit. As a result, they constitute the most obvious candidates for integration. At the same time, their basic similarity with the tax system implies that the potential gains in efficiency of delivery and in aiming benefits at those most in need of them will likely be modest. With the child benefit system for example, the major potential is to change the overall redistributive impact of this bundle of programs and to set the stage for subsequent initiatives. Integration does not require any change in the basic nature of the programs involved. In the case of transfer programs associated with the elderly, some further consideration may be appropriate. As noted above, integration of old age security payments, while technically feasible, would lead to a perverse redistribution of income.

Transfers-In-Kind: In order for transfers-in-kind, such as subsidized housing, to be integrated with the personal income tax system, a basic decision would have to be made as to whether the transfer should be in cash rather than in the form of a particular commodity. Then consideration could be given to integrating the cash equivalent of the original program with the tax system. There are two basic approaches to the conversion of transfers-in-kind into cash transfers. One approach would retain the link between the transfer and the particular commodity. For example, a shelter allowance could take the form of a refundable tax credit whose value would be linked to some indicators of actual consumption of housing services, as well as income and family size. A second approach to integrating transfers-in-kind would go further and sever the link between the original transfer and the particular commodity involved. The funds currently used to subsidize particular forms of consumption would be reallocated to a general transfer of equivalent value. This could take the form, for example, of a refundable income tax credit dependent only on family size and income. Under both approaches, gains in administrative efficiency

are possible, particularly if some refundable income tax credit mechanism is already in place.

Resource Allocation Programs: The dividing line between programs that incorporate transfers-in-kind and programs that are basically concerned with the allocation of resources is not very sharp. The major difference is that resource allocation programs do not have as their sole objective the provision of a commodity at a subsidized rate to individuals or families. Oil import compensation payments, for example, in addition to cushioning the shock of recent oil price increases for families, are also important to industrial consumers and have an effect on the competitiveness of Canadian exports. One effect is to redistribute income, but another effect is to influence the allocation of resources in the Canadian economy. An alternative approach to the problems that give rise to the need for these programs would be to explicitly separate the redistributive and allocative objectives by employing separate policy instruments. With a refundable tax credit mechanism already in place, the transition would be easier. The advantage of moving in this direction is that policies currently being formulated to deal with allocation problems (such as a transition to U.S. or world price oil) would not necessarily be constrained by possibly adverse income distribution effects. If these income distribution effects could be ameliorated by corresponding adjustments in a tax/transfer system, then the range of plausible options to deal with structural price changes could be broader. Another effect of a general move in the direction of separating resource allocation and income distribution policy instruments is that the redistributive effect would be more readily identifiable. At present, redistributive efforts are diffuse, spread throughout many programs and departments, and it is very difficult to estimate their combined impact.

Social Insurance Programs: The two main social insurance programs of the government are unemployment insurance and the Canada Pension Plan. They are contributory income replacement programs rather than direct income-tested transfers. Since income replacement requires more complex information on income histories rather than just current income, a shift to a more explicit income transfer approach might involve basic changes in policy. If a refundable tax credit mechanism were in place, such a shift would be easier to implement. For example, the philosophy of unemployment insurance at present allocates part of the insurable risk to the government. This part of unemployment insurance benefits serves as an important fiscal policy device to maintain economic growth. However, this part of the program could be identified and delivered via the mechanism of a refundable income tax credit. If it was income-tested, this credit would retain the fiscal policy features while no longer requiring unemployment insurance to be a substitute for welfare or income maintenance.

Future Initiatives: The four broad categories of programs already discussed refer to existing programs. A fifth category of program that might be considered for integration into the tax system includes those future initiatives that could take the form of separate programs, but which might be significantly improved if a refundable tax credit mechanism were available. One likely area involves initiatives that might arise from future structural price changes similar to the recent change in oil prices. Generally, if an appropriate redistributive mechanism could be set up, it might well turn out to be very helpful for problems as yet unforeseen.

A general issue that has been raised with transfers-in-kind, resource allocation and social insurance programs is that these programs "target" their benefits on the basis of a fairly complex set of criteria. The Income Tax Act, on the other hand, is suited to aiming benefits at those in need on the basis of relatively simple criteria such as income and family size. As a result, these programs are not amenable to integration into the tax system without substantial changes in design; hence they are not prime candidates for integration in the short run. But if changes in design might improve the programs in terms of their fundamental objectives, then it is possible that a more efficient delivery system could also result. Such changes would be feasible and relatively easy to implement if a refundable tax credit mechanism were already in place.

Another issue concerns the frequency with which benefits are delivered and the frequency with which eligibility and entitlement are assessed. These aspects are further related to the lead time required for implementation and the kinds of programs that are suitable for integration given the particular characteristics of the assessment and delivery system. Generally speaking, more frequent assessment and delivery involve more administration, more cost and more lead time. Delivery of annually-assessed benefits could be implemented relatively quickly using the existing income tax return. Monthly delivery of benefits based on the previous year's income and demographic characteristics is also feasible in quite short order. The main issue associated with this retrospective type of delivery system is that it is not responsive to changes in family income or status. In the short run, if the only programs being integrated with the income tax system via refundable tax credit were the child-related programs or oil import compensation payments, action would not be needed. The reason is that existing unemployment insurance and provincially-and municipally-administered welfare programs could be relied upon to respond to more frequent changes. It is only in the longer term that programs being integrated into the tax system might require more frequent responsiveness.

## 8. CONCLUSIONS

This discussion paper has been concerned with the feasibility of integrating transfer payments into the present personal income tax system. There is a view that such a system might be desirable because it would increase the effectiveness of transfer payments, improve the efficiency of delivery and enable the government to make decisions on structural economic questions independently of decisions on income distribution.

The best way of integrating transfer programs into the tax system is clearly the refundable tax credit. While the analysis underlying the paper has been done on a case-by-case basis, it is evident that once a refundable tax credit is in place, it should be possible to develop a flexible system by adding additional credits and deleting others, as necessary, over time.

It is important to note that tax/transfer integration offers no costless panacea and any decision to move in this direction will involve some trade-offs among public policy objectives. No effort has been made in this paper to make judgements on these trade-off issues; rather the analysis has been limited to consideration of the technical issues involved in tax/transfer integration. Thus the paper has not addressed the question of whether the integration of transfer payments into the tax system should be pursued, but rather has considered how it might be pursued.

In order to understand properly the implications of integrating transfer payments into the tax system, one must appreciate the three concepts involved. The first is integration in design of the transfer payment and the tax system and the consequent calculation of benefits on the year-end tax return form. The second involves the timing and frequency of the assessment of benefits. The third involves the delivery of benefits or payments during the year, and the collection of taxes during the year through the current deduction-at-source/instalment system.

It is feasible to integrate virtually any transfer program into the tax system in terms of design. However, this might involve a trade-off between the administrative ease and simplicity of the tax-integrated program and the degree to which those in need of the transfer program can be identified. Such a trade-off will arise if the existing transfer program accurately delivers benefits to the intended group. On the other hand, if the people it is desired to assist can be defined more accurately by income-related measures, then integration may actually improve the degree of effectiveness. In either case, there will in all likelihood be some change in the current pattern of benefits.

The year-end tax return form could include a schedule and require supporting documentation to compute the value of any transfer payment. However, if this involves information not now collected by the tax system (such as information on medical history, agricultural production, types of income not taken into account in the tax system, employment history, etc.) and it is necessary to continue to collect this information in order to calculate benefits, then the

tax system would have to be expanded to take this type of information into account. An alternative would be for Revenue Canada to have access to files of the relevant departments. In the extreme, this could be virtually equivalent to maintaining the present administration of the relevant program and simply deeming the officials involved to be officials of Revenue Canada.

Alternatively, in order to avoid complicating the tax system unduly, or achieving integration in name only, the provisions of the transfer program could be altered to meet the provisions of the Income Tax Act more closely. This would involve shifting the basis of payments away from their present characteristics and moving towards an income basis, with the ability to take into account certain other characteristics such as family size, age, disability status, etc. This would mean that present programs based on detailed information which is not taken into account in the current tax system would in effect be considerably altered. This alteration would result in a different distribution of benefits.

The present personal income tax system depends upon an assessment only at year-end upon receipt of the tax return. If eligibility and the amount of payment depend on circumstances which arise during the year such as changes in income, productive output, employment status or health, payments could still only be assessed at the end of the year when such information became available. If payments must be reviewed during the year, and particularly if they must be responsive to changes in status, then it may be best to retain an explicit expenditure program with the appropriate administrative machinery.

Integration of delivery means delivery of a benefit via a reduction in taxes collected, either once a year following calculation on the year-end personal income tax return (by decreasing the balance otherwise payable or increasing the refund otherwise due); or during the year through the deduction-at-source system (by decreasing tax withheld to the extent possible and making direct payments for the balance). If such integration was possible, administrative savings would be realized in that the present cheque-delivery mechanism for transfer payments would not be required.

A benefit that need be delivered only once a year can easily be integrated. However, most transfer programs require more frequent delivery during the year and the deduction-at-source system is not a feasible alternative to the cheque mailing process. A large portion of transfer payment recipients, including many old age pensioners and mothers receiving family allowances, are not on the deduction-at-source tax system. There are also serious administrative problems in preventing duplicate payments to individuals holding more than one job and to families with more than one earner, and in delivering full benefits to low-income individuals whose tax withheld is less than benefits receivable. Therefore, there are no administrative savings (efficiency gains) to be realized from integration of transfer programs delivering benefits throughout the year.

The implications of a refundable tax credit would of course depend on the particular characteristics of each credit. It is therefore not possible in general to describe in detail the specific implications of tax/transfer integration. The fiscal implications for the government would obviously depend on any changes in the level of benefits if existing programs were integrated into the tax system, and on the level of benefits of any new refundable credits. One of the main points made in this analysis is that if

existing programs were integrated into the tax system, the distribution of benefits would be changed. The degree of change would vary directly with the extent to which existing programs would have to be altered in order to be integrated, and the design characteristics of the particular credits employed.

Any behavioural changes brought about by tax/transfer integration would likely depend on the extent of redistribution of income. Also the design of an income-tested refundable tax credit may affect work incentives. Refundable credits may increase the incentive to under-report income or to juggle income in order to be eligible for credits. The larger the year-end refund, the more serious the problem of tax discounters, and the greater the fiscal impact of the year-end tax refunds and consequently the need to consider spreading payments out over time. Again, however, the specifics of each case would have to be identified before any conclusions could be drawn on the likely consequences of behavioural changes. The economic implications would derive from behavioural changes such as changes in work incentives.

Any proposal to amend the Income Tax Act would have to take into account the ability of the tax filer and the administrator to cope with further complexity. There is evidence that many taxpayers find the current legislation, and therefore the tax return form, difficult to understand. An increasing number of taxpayers seek assistance from Revenue Canada and professional tax advisers and tax return preparation firms proliferate. However, still a substantial number of returns require correction by Revenue Canada each year. In 1976, over 4,500,000 enquiries were processed and over 3,000,000 taxpayers required assistance in completing returns. Of all returns received, 25 per cent required correction.

In summary, it is administratively feasible to introduce refundable tax credits. However, it is evident that at present there does not exist a neat system whereby each Canadian individual or family receives a number of regular monthly transfer payments and makes a regular monthly tax payment. Thus it is not possible simply to offset the two flows. The move towards a tax/transfer system may therefore have some costs in terms of the ability to aim programs at intended beneficiaries. Further, the current deduction-at-source system cannot be used to assess and deliver benefits on a responsive monthly basis. The present tax system can only be used to determine a year-end benefit, which could be delivered as part of the year-end tax refund cheque, and the scope to assess eligibility for tax credits is confined to the kinds of information typically collected by the present tax system.