

# TREASURY WORKING PAPER

99/1

## Towards a Practical Cash-Flow Tax

Dieter Katz

*A paper presented to the Australasian Tax Teachers' Association Conference  
February 1999*

### **ABSTRACT**

There is a wide consensus amongst economists that a cash-flow tax, in concept, is superior to an income tax. The most difficult problem is the transition, which can create either a huge fiscal cost, very large compliance costs or economic dislocation. This paper explores a set of rules that could potentially avoid economic disruption yet keeps fiscal and compliance costs to a manageable level. Features are a general tax exemption for interest and dividends, a cash-flow tax for increments to the existing capital invested in business activities and continuation of income tax rules for existing capital. The paper identifies general areas where further development of the rules is required.

*This working paper represents the views of the New Zealand Treasury as at March 1999.*

# TREASURY'S 1996-98 CASH-FLOW TAX PROJECT:

## OVERVIEW

	Page
1. INTRODUCTION.....	2
2. THE PROJECT'S ANTECEDENTS.....	2
3. WORK UNDERTAKEN .....	3
4. QUICK OVERVIEW OF CONSUMPTION TAXES .....	4
a) Relationship of Cash-flow, Consumption or Expenditure Tax to an Income Tax and a GST .....	4
i) <i>What is an Income Tax?</i> .....	5
ii) <i>What is an Expenditure Tax?</i> .....	6
b) How does a Cash-Flow Tax Work: Broad Outline.....	7
c) Economics of expenditure versus income taxes .....	7
d) The Transition from Income Tax to Cash-flow Tax .....	8
5. THE CFT.....	10
a) The Steady State.....	10
b) The Transition .....	12
i) <i>Outline of the Rules</i> .....	12
6. ASSESSMENT .....	13
a) Mechanics (Complexity and Compliance Costs).....	13
b) Economics.....	14
7. IMPLEMENTATION ISSUES .....	15
8. FURTHER WORK.....	15
9. CONCLUSION .....	16

## 1. Introduction

The perennial tax policy problem is how to impose the least costs on the economy while raising a given level of tax, subject to distributional concerns. One of the important ways of reducing the costs of tax is to ensure the tax base is broad, and there are not significant distortions arising from different effective tax rates being faced by different parts of the economy. As the tax base is broadened, however, compliance costs also tend to increase as it becomes harder to identify and measure taxable amounts.

New Zealand's current tax system, based around an income tax and GST, is well regarded internationally, in large part because it is broadly based. The New Zealand tax system is, however, approaching the point where further base broadening is becoming increasingly difficult.

As well as continuing to examine opportunities to improve the current tax system Treasury also considers, from time to time, new forms of tax altogether. The work presented in this paper, examining a cash-flow tax, falls into this category.

## 2. The Project's Antecedents

Expenditure, consumption and cash-flow taxes (CFT) (these all have a similar economic effect) have been considered in the literature since the last century. GST is an *indirect* consumption tax, because the legal liability for the tax falls on businesses. Direct expenditure or consumption taxes are levied directly on individuals – and thus have more of the characteristics of an income tax than their indirect counterparts. The best known modern study of *direct* consumption taxes is that of the "Meade Committee", a non-governmental academic group<sup>1</sup>, which advocated the adoption of a direct expenditure tax.

A direct expenditure or consumption tax was considered intermittently by Treasury in the 1982-85 period, and almost certainly also earlier. It was concluded that broadening the then rather narrow income tax base, the abolition of wholesale sales taxes and a move to a GST (an indirect expenditure tax) was

---

<sup>1</sup> Meade, J E et al (1978), *The Structure and Reform of Direct Taxation*, Institute of Fiscal Studies, George Allen & Unwin, London.

the better course of action<sup>2</sup>. A study carried out by Paul Bevin in 1985<sup>3</sup> for the VUW Institute of Policy Studies came to a similar conclusion.

In 1995/96 Treasury decided to review direct expenditure taxes afresh, for the following reasons:

- the issue of converting to an expenditure tax gained some prominence in the run-up to the 1996 US presidential elections, suggesting a need to prepare for a possible debate in other countries as well;
- the large forecast fiscal surpluses appeared to provide an opportunity to switch to a CFT without having to increase tax rates; and
- a CFT seemed a possible way of delivering tax reductions that was more efficient than reducing any of the personal marginal tax rates.

One of the main obstacles that had prevented direct consumption taxes being implemented previously was that this would involve a complete change in the tax system and considerable revenue cost. The central motivating idea behind the current project was that a change to a direct consumption tax could potentially be achieved with a limited set of modifications to the current income tax, rather than by wholesale replacement of the income tax with a new tax. The main modification would be to allow tax deductibility for all business expenditure at the time that payments are made, and to make dividend and interest payments non-taxable in the hands of the recipient. Allowing immediate deductibility would mean that businesses are taxed on their cash-flows - hence the label "cash-flow" tax, or CFT.

### **3. Work Undertaken**

A crucial question was whether introducing a direct consumption tax would be feasible, since no country has actually managed a transition to such a tax<sup>4</sup>. Most of the work in this project has therefore addressed itself to:

---

<sup>2</sup> The Treasury (1984), *Economic Management* (post-election briefing).

<sup>3</sup> Bevin, Paul (1985) *How Should Business be Taxed? An Examination of Defects in Business Taxation and Suggestions for Reform*, Institute of Policy Studies, Victoria University of Wellington.

<sup>4</sup> Croatia has recently introduced such a tax, but it did not have an income tax at the time. Introduction of a direct consumption tax is relatively straight forward in the absence of an income tax; as this paper argues it is the transition from an income tax to a direct consumption tax that is particularly troublesome.

- reviewing the economic arguments for or against a direct consumption tax, and
- developing reasonably detailed rules for a cash-flow tax as well as for the transition to such a tax.

The detailed rules are set out in the following two internal working papers and will not be repeated here:

- *Towards an Implementable Cash-flow Tax* October 1997 which discusses the rules proposed for the CFT.
- *Summary of Transitional Rules* of 5 February 1998 which sets out the mechanical aspects of the CFT rules with special emphasis on the transition rules.

#### 4. Quick Overview of Consumption Taxes

##### a) *Relationship of Cash-flow, Consumption or Expenditure Tax to an Income Tax and a GST*

In essence, cash-flow, consumption and expenditure taxes, including GST, all have in common the feature that tax is effectively levied only at the point in time when individuals spend<sup>5</sup> their money and consume<sup>6</sup> what they have previously earned and saved. The economic effect is that the return from savings is not taxed - removing the tax driven incentive to consume now rather than later. Under an income tax, however, the return on savings is taxed, which means that there is an economic disincentive to saving, and hence to consuming later rather than sooner.

As explained above, a cash-flow tax is a particular form of an expenditure or consumption tax. And a GST differs from an expenditure or consumption tax only in terms of from *whom* the tax is collected. However, the fact that direct consumption taxes are collected directly from individuals, means that they can have a progressive tax rate structure. This is, of course, not possible with a GST.

---

<sup>5</sup> Hence the label "expenditure tax".

<sup>6</sup> This is why this type of tax is referred to as a "consumption tax".

The following paragraphs set out these relationships in more detail:

*i) What is an Income Tax?*

Under a pure income tax, the tax would be levied on:

- for individuals:
  - \* net increase in wealth plus value of consumption (including the imputed rental value of consumer durables), or, equivalently;
  - \* net income from labour plus net income from investments (including capital gains and income in kind).
- for businesses:
  - \* increase in the value of net assets (if dividend and interest payments are deductible) or, equivalently;
  - \* increase in the value of net assets before dividend payments (if dividends are non-deductible) or, equivalently;
  - \* net profits from trading activities plus net income from investments, including capital gains (if dividends are non-deductible).

Under a comprehensive accruals income tax, companies and other business entities would not need to be taxed except in order to save on overall compliance or transactions-costs. If they are taxed, they are taxed effectively as agents for individuals. The tax on them is effectively a withholding tax on the investment income flowing to individuals (just as PAYE and FBT are withholding taxes on labour income flowing to individuals).

Real-world income taxes typically have narrower bases than this, either to reduce compliance costs or for political reasons. For example, capital gains are seldom taxed on an accruals basis, if they are taxed at all, as the compliance costs in terms of annual valuations would be substantial and taxpayers object to being taxed when they haven't received the cash.

ii) *What is an Expenditure Tax?*

Direct expenditure taxes are levied on individuals and typically also on businesses as withholding agents. One way of implementing a pure direct expenditure tax base would be:

- For individuals:
  - \* A tax on all expenditure. This is equivalent to taxing net income from labour plus above-normal<sup>7</sup> returns on investments. Because the tax rate could be varied according to the amount of income earned, the tax could be made progressive.
- For businesses:
  - \* cash inflows less cash outflows (hence a "cash-flow tax" or CFT), or equivalently;
  - \* sales minus purchases of real assets and services (financial assets and related flows are generally ignored, including interest and dividend payments).

An *indirect* expenditure tax is levied at the business level only, in effect as a final withholding tax. The GST is an example. The tax base is:

- \* sales minus purchases of real assets and services except wages. This is equivalent to the value of consumption (including imputed rental value of consumer durables) to the individual. This is also in effect a cash-flow tax.

A cash-flow tax therefore differs from an income tax in that a part of the rate of return on investment income is not taxed (compare second dot point of paragraph 13 with first dot point of paragraph 16).

---

<sup>7</sup> Sometimes it is also referred to as the return in excess of the risk-free rate. Both are inaccurate; strictly speaking it is the return in excess of the government borrowing rate. The fact that this excess return is taxed is simply the result of cash-flow taxation - however, it is also desirable from an economic point of view that such excess returns be taxed.

### **b) How does a Cash-Flow Tax Work: Broad Outline**

If cash outflows relating to a project are deductible and cash inflows are taxable at the time they occur, and the rate of return on the project is equal to the "normal" or "risk-free" rate of return (see footnote 7), then the following example shows that the effective tax rate on the project is zero, regardless of what the statutory tax rate is:

Consider an asset that is purchased in the first year for \$100. In the second year it produces income of \$10 before tax and is then sold for \$100. The rate of return to the asset is  $10/100$ , or 10 percent. At a tax rate of 33 percent, immediate deductibility results in a first year tax refund of \$33. So the after-tax cost of buying the asset is just \$67. In the second year, the sale of \$100 and the income of \$10 are also taxed at 33 percent, leaving \$73.70 after tax. The after-tax rate of return to the asset is  $(73.7-67)/67 = 10\%$ , the same as the before-tax rate of return.

In contrast, under an income tax the \$100 purchase price is not deductible until the asset is sold. The tax is calculated in the second year at 33% of \$10 in income plus \$100 sales revenue minus \$100 purchase price. The after-tax rate of return to the asset is  $\$6.7 / \$100 = 6.7\%$ .

Appropriate modification to the example will show that if the project makes a bigger return than the normal or risk-free rate of return, then the excess return is fully taxed at the statutory tax rate.

### **c) Economics of expenditure versus income taxes**

Our review of the literature on empirical simulation studies indicated that the effect of switching from an income tax to a cash-flow tax on the growth rate is positive rather than negative, but there is no consensus that it is *significantly* positive.

Theoretical considerations suggest that a switch from an income tax to a CFT should produce a significant positive welfare effect. It should produce a one-off increase in the level of GNP (albeit spread over a number of transition years), even if it does not permanently increase the growth rate.<sup>8</sup>

---

<sup>8</sup> The logic goes roughly as follows:

- The tax optimisation problem can be formulated as a Ramsey tax problem. Suppose there is one consumer and 3 commodities - present consumption,  $c_0$ , future consumption,  $c_1$ , and present leisure (or non-market time),  $L$ . Note that taxing present and future consumption at the same rate constitutes a uniform consumption tax, which in turn is equivalent to a tax on labour income. An income tax taxes future consumption more heavily than present consumption.
- If we assume that leisure cannot be taxed, then the Ramsey tax rule says that the optimal rates for taxing  $c_0$  and  $c_1$  depend on the extent to which each is complementary with  $L$ . If equally complementary,  $c_0$  and  $c_1$  should be taxed at the same rate, i.e. an expenditure tax would be optimal. If  $c_1$  is more complementary with leisure than  $c_0$ , then  $c_1$  should be taxed at a higher rate (which would move things in the direction of an income tax).

Taking real-world constraints into account, additional economic arguments in favour of an expenditure tax are that:

- There are insuperable practical difficulties in measuring income accurately. On the other hand, cash-flows are easy to observe and measure. Therefore, whereas an *ideal* income tax is probably impossible, it may be possible to get closer to an *ideal* expenditure tax.
- Under an expenditure tax the effective tax rate would be zero in all industries. This could lead to a reduced pressure for industry specific tax concessions, because the status quo would be much closer to the ideal form of the tax and because departures would be more transparent.
- Being simpler, and with fewer ambiguous boundary issues than are inevitable in an income tax, an expenditure tax would also be likely to be more resistant to tax avoidance.

In principle, therefore, a real-world income tax is likely to create larger production distortions than an expenditure tax<sup>9</sup>.

#### **d) *The Transition from Income Tax to Cash-flow Tax***

Any unanticipated change in taxation upsets existing economic expectations. Decisions such as whether to work, save and invest will be disrupted, giving rise to economic costs. Such costs would be very high if, for

- 
- In a multiperiod situation, the effective tax rate on future consumption (and hence the distortion between present and future consumption) caused by taxing capital income will compound over time and become large - probably larger than anything that could be justified by a Ramsey-type argument for taxing some goods higher than others. If the effective tax rate on capital income is 33% and the interest rate is 5%, then the decision to save money for 20 years costs 27% of the amount a person could otherwise consume. If the person saves for 50 years then the income tax reduces the amount a person can consume to less than half.
  - It is therefore difficult to see how an individual's preferences (in particular that leisure is so complementary with  $c_t$ ) could be such that an income tax is more efficient than an expenditure tax.

<sup>9</sup> Note that neither an ideal income tax nor an ideal expenditure tax create production inefficiencies, i.e. differences in effective marginal tax rates across different production sectors.

example, the income tax rules for a business were simply replaced on a given day with cash-flow tax rules. We have referred to such a transition as a "cold turkey" transition:

Suppose I borrow \$100 and buy a machine for \$100 that depreciates at 20%. Income is \$30 p.a., interest on debt is \$10, and \$20 is used to reduce the debt (so that it is paid off by the time the machine ceases to be useful). I expect to pay no tax (\$30 income less \$10 interest expense less \$20 deduction for depreciation).

A CFT is introduced soon after purchase of machine. Sale of machine would be taxable and there is no longer an allowance for depreciation. Real income is taxable and real (as opposed to financial) expenditures are deductible.

In year 1 I am taxed on \$30 (at, say, 33%), leaving me \$20.10. This is insufficient to pay interest and amortise the debt. After 5 years I will have a worthless machine and outstanding debt of \$45.50. I will go bankrupt.

An alternative transition sometimes considered in the literature is what we referred to as the "free entry" transition. In this transition, on the implementation date all taxpayers get an immediate tax deduction equal to the value of their existing capital. This transition will not bankrupt any firms, but it might get close to bankrupting the government, as the fiscal cost would be huge<sup>10</sup>. It also entails large wealth transfers, in this case from those without savings (who will have to pay a larger tax on labour income to finance the fiscal cost) to those with savings (who get an unanticipated increase in the after-tax rate of return on their investments). But more importantly, from an efficiency point of view the higher tax on labour means an increase in dead-weight economic costs that will partially or wholly offset any economic gains from moving to an expenditure tax.

Both the "cold turkey" and "free entry" transition strategies create costs as a consequence of the way old assets are migrated through to a cash-flow treatment. In principle these costs could be avoidable if the new tax rules applied to new economic decisions only. In other words, if old assets continued to be taxed under the Income Tax regime, and only new assets were subject to the cash-flow tax.

In practice this would be very difficult, as most economic decisions evolve over time and are interdependent. For example, a company may appear to be making a discrete investment decision but this is in itself dependent on a shareholder's earlier decision to work, to save part of the resulting income and to invest in the company.

---

<sup>10</sup> There may well be some \$100 billion of income-earning assets in the NZ economy at present. Perhaps some \$30-40 billion of that would have been deductible in the first year after implementation date anyway (trading stock and depreciation), which leaves \$60-70 billion new deductions. This means a government liability for tax refunds or tax offsets against future income of over \$20 billion. Compare this with total annual tax revenue of around \$34 billion.

Devising a set of rules that approximately distinguishes between old and new economic decisions is therefore a complicated business and will necessarily entail high compliance costs. The less perfect the rules are, the more scope they will leave for "tax leakage", i.e. for the recharacterisation of old capital as new capital, with attendant economic costs in the form of higher labour taxes to finance the resulting drop in fiscal revenue, and uneven effective marginal tax rates.

The design of these transition rules is technically the most difficult and economically the most important aspect of the design of a CFT. They are considered further under the heading "The Transition" below.

## **5. The CFT<sup>11</sup>**

A large part of the current project involved designing principles and rules, both for a cash-flow tax in steady state, and to cover the transition period.

### **a) *The Steady State***

Labour income (i.e. salary and wages) is taxed as under the income tax. The revenue from selling trading stock and indeed all income-earning assets is fully taxable. Goods and services which are purchased in order to earn income (i.e. business expenditure) are deductible when payments are made.

Financial transactions such as investments, interest and dividends are generally exempt. Exceptions would include transactions with taxpayers that have assets outside the tax base, such as owners of consumer durables and non-residents. Such investments together with associated interest and dividends are treated like the purchase and sale of goods and services - all receipts are taxable and all payments are deductible.

Tax credits (often referred to as tax losses), which arise whenever expenditure exceeds income, will be carried forward with interest, rather than cashed out as in the case of GST, in order to reduce disruption to fiscal cash-flows.

In general, businesses (including individuals who trade in their own capacity) will have to maintain a qualifying distributions account (QDA), in order to track amounts which have been taxed and which may be distributed tax-free to equity and debt holders.

---

<sup>11</sup> This proposal is a variant of the R-base expenditure tax (see Meade (Op. cit.)).

Example of how the CFT would work:

<i>Rules for a simple stylised business - 1 year project</i>		
This business raises equity or a loan and buys an asset which produces trading stock that is sold after the first balance date. The asset is then sold for its depreciated value. It makes profits (before dividends and interest) equal to the risk-free yield. For simplicity, the dividend or interest payable is also assumed to be equal to the risk-free yield. The equity or loan is then repaid.		
<i>Year 0</i>	<i>Tax accounts</i>	
Raise equity or loan (\$100)	exempt	0
Purchase of asset (\$100)	deductible	<u>-\$100</u>
Tax loss		-\$100
<i>Year 1</i>		
trading stock sold (\$30)	taxable	\$30
Asset sold (\$80)	taxable	\$80
Loss carried forward (-\$100)	deductible	-\$100
interest on loss carried forward (10%)	deductible	-\$10
Dividends or interest paid (\$10)	non-deductible*	0
Repay equity or loan (-\$100)	non-deductible	<u>0</u>
Taxable income		0
* But tax-free to recipient, see QDA account below		
<i>QDA account (amounts available at any time for tax-free distribution):</i>		
<i>Year 0</i>		
Equity or loan raised		<u>\$100</u>
Closing balance		\$100
<i>Year 1</i>		
Year 0 closing balance carried forward		\$100
Interest on Year 1 balance carried forward		\$10
Equity or loan repaid		-\$100
Dividend or interest paid		<u>-\$10</u>
Closing balance		\$0

This tax scheme seems pretty simple, and indeed that is part of the attraction of an expenditure tax. The main complication that arises in practice (aside from the very substantial complications relating to the transition - see below) relates to the boundary between taxable flows of goods and services and exempt financial flows. One example of this is the banking situation where certain kinds of fees for services are not separately identified to the customer but are in effect offset against or added to interest rates.

Despite this complication, the rules for a CFT are in principle much simpler than those for an income tax (transition aside - see below). Tax is levied or deductions are allowed on readily-identifiable and measurable business events. On the other hand, the measurement of income under an income tax poses severe problems. For example, accrued capital gains, depreciation and increases in human capital are difficult to measure. Practical income taxes

therefore require a set of rules that produce measures that approximate such asset value changes, with the attendant need for anti-avoidance rules. Or they simply don't tax them. Moreover, those rules must usually be varied to fit in with specific institutional and business arrangements. This means different rules for different business forms such as companies, trusts, unincorporated businesses, etc.

### ***b) The Transition***

In principle, both the economic dislocation of a "cold turkey" transition and the huge fiscal consequences of "free entry" could be avoided by applying the CFT to new economic decisions only. The challenge is to design rules that discriminate between capital held by businesses at implementation date and additional capital acquired after implementation date. If this could be done in a relatively straightforward way it would seem to offer a reasonable compromise between the two conflicting objectives of wanting to apply the rules to new economic decisions only and wanting to keep compliance costs, administration costs and tax avoidance to a minimum. Much of the work undertaken in the current project was targeted to this question.

The proposed mechanism we came up with involves subjecting all assets to the CFT rules from implementation date onwards, but adding special transitional adjustments to businesses' tax liability that claw back the benefits conferred by the CFT, to the extent there remains old capital in a business.

The need for balance sheets and transitional adjustment rules means that taxpayers are in effect saddled with a dual tax regime, though at the business level only.

### ***i) Outline of the Rules***

In essence, the rules involve businesses setting up memorandum accounts that track the value of real and financial assets held on implementation date. Assets that are difficult to value would have their value estimated retrospectively at the time they are sold.

No deduction would be allowed for the purchase price of these assets when they are sold or depreciated, if the proceeds of the sale or the value of the depreciation is reinvested in further real assets. Rules have been devised with the purpose of ensuring this objective is preserved even if the proceeds of a sale are first invested in a financial instrument (e.g. deposited in the bank) and only later invested in a real asset.

The effect of this set of rules is that the capital value of real assets existing on implementation date is tracked irrespective of whether the assets are kept or replaced with new real assets. Moreover, this old capital effectively continues to get income tax treatment.

It is important to note, however, that additional rules would need to be developed to preserve certain kinds of tax concessions for this old capital which are available under the income tax regime (e.g. accelerated depreciation, assets held on capital account). The more accurately these concessions were to be preserved, the more complex the rules would be.

A deduction for the value of old capital against the sale price would be permitted, however, if the proceeds of the sale were to be distributed to the owners of the businesses or to debt-holders. In other words deductions for old capital would be permitted if the business were to wind down by making net distributions of capital. This would be consistent with normal income tax treatment for that old capital and would ensure that the effects of a "cold turkey" transition are avoided.

A deduction would also be permitted for depreciation of old capital if the total stock of real assets was allowed to run down. This would mean that depreciation would need to be calculated as long as the business exists (but, of course, not for a business that comes into existence after implementation date).

Special rules would be required to deal with the fact that many unincorporated taxpayers have both business and private assets. Special transitional rules would also be required for entities that can pass through tax preferences, such as qualifying companies.

On the other hand, a number of existing rules would become unnecessary, even during the transition, since dividend and interest payments could be made tax-free in the hands of recipients immediately. These include most of the dividend rules, the accrual rules for financial arrangements, various anti-streaming provisions, etc. And some sector-specific regimes (mineral mining, forestry, films) could be immediately repealed or simplified, since they already effectively confer cash-flow treatment.

## **6. Assessment**

### ***a) Mechanics (Complexity and Compliance Costs)***

The transition rules are quite different from anything currently in existence and seem complicated and lacking in intuitive appeal.

As they stand at present, the transition rules do not contemplate any of the concessions that are in the current Income Tax Act. To the extent those concessions could be eliminated in the context of introducing a cash-flow tax there is scope for significant simplification compared with the current tax rules.

However, there would undoubtedly be great pressure to replicate the current tax concessions, as otherwise most businesses would experience an increase in effective tax rates, at least until they grow significantly larger than they are at implementation date.

If the concessions are all replicated for the tax treatment of old capital, then the overall complexity (and hence the level of compliance costs) of the resulting tax system is unlikely to be significantly better than the current tax system (given the addition of the transitional rules but the removal of the rules for financial arrangements and dividends).

One of the main areas of practical difficulty would be the determination of "implementation date" tax book values for non-depreciable assets that are not sold for a long time, or have already been held for a long time, and which are difficult to value outside a sale situation. These sorts of issues have proved to be highly problematic in countries adopting a capital gains tax, and these difficulties would also surface here.

However, the rules would be considerably simpler for new businesses that come into existence after implementation date, and for businesses that have proportionately little old capital as a result of significant business expansion. These businesses will only have to concern themselves with the relatively straightforward CFT rules, but not with the transitional rules.

In principle, our work to date suggests a cash-flow tax system could be made to work. Given the reliance on cash based transactions we also expect that the rules are capable of being adequately robust against tax avoidance. The proposed scheme seems considerably more viable than any of the other schemes discussed in the literature.

Difficulties around the implementation of a cash-flow tax, and particularly the transition path for assets in existence on the day the regime commenced, are substantial and involved. Our assessment is not that these difficulties are insurmountable, but that resolving them would require a significant and sustained commitment of resources. As well as developing a set of rules, this further work would need to determine whether sufficient simplification and clarification could be achieved.

## ***b) Economics***

There is little empirical evidence in the literature that could be described as robust. No clear conclusions can be drawn from what there is. However, theoretical analysis of the effect that expenditure and income taxes have on economic distortions, and the likely behavioural responses, suggests that in the absence of any transition costs a change to an expenditure tax should produce significant welfare gains. Quantifying the economic costs arising as a consequence of the transition path is even more problematic. Further work would be required to fully assess whether the likely long term benefits of a cash-flow tax were sufficiently attractive to justify the short and medium term costs of the transition path.

## 7. Implementation Issues

The factors that are likely to impact most on whether a direct expenditure tax is possible include perceptions about the distributional effects, the international reaction, the fiscal cost (no detailed estimates have been made but we believe the cost would be in the \$1-3 billion range per annum over the first 10 years or so), the perceived complexity and novelty and the intuitive appeal of the features of the tax. In other words, could the benefits be explained in simple and concrete terms? Could the tax rules be made to make intuitive "sense"? Is there ever likely to be sufficient fiscal head-room to absorb the cost of such a change? And is there a sufficient problem, either with Government revenue, tax avoidance or something else (e.g. lack of national savings) that could justify the upheaval, the learning costs inherent in such a significant change and the risks<sup>12</sup>, given it is untried in any other country<sup>13</sup>?

## 8. Further Work

There are two broad directions that could be taken if the project is picked up again. The first is to continue along the path already taken, and complete the work to a point where a more confident assessment could be made of a CFT's prospects. This would involve:

- clarifying the rules for determining implementation date book values for long-lived assets;
- improving and refining the CFT and transition rules to make them simpler and easier to understand;
- exploring the implications of replicating in the CFT rules for old capital the concessions within the current income tax;
- clarifying the rules for people with both business and private assets;

---

<sup>12</sup> Implementation risk may not be as great as might seem. A resulting "income tax" with significant cash-flow tax elements, or an imperfect cash-flow tax with significant variability of effective marginal tax rates (EMTR), may not necessarily be less efficient than a relatively pure income tax that significantly increases the cost of capital (as the present income tax probably does).

<sup>13</sup> All countries with an income tax, including New Zealand, already have significant elements of a cash-flow tax within their system. To mention just the most obvious examples, New Zealand's forestry and mineral mining industries are taxed on a cash-flow basis. And in the U.K. and the U.S., deductions or other tax incentives for certain forms of savings and investment are available effectively giving them cash-flow treatment. Indeed, such "cash-flow taxes" within an income tax have always been popular with both the electorate and the business sector. It is therefore not a move to a cash-flow tax per se that would be novel. What would be novel is doing so systematically and excluding old capital from its benefits.

- researching and clarifying the distributional implications;
- estimating the fiscal cost;
- considering the role that a CFT might have in improving the national rate of saving;
- exploring the scope for presenting the benefits of a CFT in simpler and more concrete terms; and
- considering in detail the policy development, implementation and transition paths with a view to assessing the risks of policy derailment.

The second broad direction would involve consideration of other types of transitions which might be more feasible, even if they are conceptually more muddled. For example (this example is for illustration purposes only, as it has not been explored), there might be a way of introducing QDA accounts and making business taxation a final withholding tax (i.e. exempting shareholders from further tax) on its own merits. Then gradually (over the years), one might extend cash-flow tax treatment to an increasing number of asset classes or industries, while quarantining old capital. Allowing losses to be carried forward at interest could be introduced as an independent measure, also on its own merits.

## **9. Conclusion**

One of the key hypotheses we set out to explore: that a change to a direct consumption tax could be achieved with a limited set of modifications to the current income tax, rather than by wholesale repeal of the income tax and replacement with a new tax, has been supported.

However, the necessary transitional rules have proven to be more complicated than originally envisaged. Further, there are no immediate opportunities for large tax cuts. And in the course of this work we have become more aware of the mental adjustment that a change such as this would require of the tax-paying public.

Given this we were also conscious of the absence of a sufficient policy imperative to justify a change of this magnitude. The main possible motivators, being a desire for greater efficiency and, possibly, greater national savings, seemed too theoretical to be very persuasive.

Our overall assessment of the cash-flow tax project is that at some stage in the future it could be worthwhile developing it further. There is, however, a lot more work required before the project could be considered a real reform possibility, and even then more compelling arguments would need to be assembled to justify such a significant change. In light of these considerations it has been decided to cease active work on this issue.