Tax reform in relation to general economic objectives

Bryan Philpott*

I. INTRODUCTION

Amidst all the strident and often ill-informed clamour for reductions in government expenditure, reductions in taxes and reform of the tax system, there is a grave danger that, as is so often the case, the authorities will fall into the trap of concentrating solely on these questions in isolation from, instead of in the context of, the complex of economic problems which face us at the present time. The solution of these problems requires a package of interrelated policies of which tax reform is only one aspect.

For this reason, I believe we must consider the various proposals for tax reform in the light of our general economic objectives taking account of the interrelated nature of these objectives and of the policies required to achieve them. I should like to say a bit more about this before discussing tax per se.

II. VICIOUS CIRCLES AND BLACK HOLES

A. Vicious Circles

There is a grave danger in official and popular circles of us holding almost passionate beliefs in there being one single cause of our economic problems and that economic policy should be concentrated on attacking that single cause, such as reducing government expenditure or reducing the money supply or reducing real wages or whatever, by providing one single cure.

The fact is that economies are very complex, interdependent, systems and, similarly, all our economic problems are interdependent. They come in packages requiring policy packages which recognise this interdependence. By attacking only one salient problem, we run the risk not only of not solving the problem, but cf actually making the problem worse. We run the risk, that is, of being embroiled in a series of vicious circles.

I could cite many examples of these vicious circles, some from recent economic history and some from current policy.

Our main overall policy objective in New Zealand must be to secure a faster rate of economic growth to provide full employment and raise living standards, and to

* McCarthy Professor of Economics, Victoria University of Wellington

achieve this in a way which reduces, rather than increases, inflation, and which does not lead to large unmanageable overseas balance of payments deficits.

The tendency has been for us to attack these problems piecemeal, to try and do something first about inflation, and then about the balance of payments, and then when both of these areas are under control to consider it safe to encourage an expansion in the economy.

The attack on inflation and on the balance of payments has in both cases taken the form of slowing down the economy to try to reduce wage claims and prices, and to release home resources from domestic consumption to exports.

The trouble is that a zero growth economy of the sort we have had since 1977 produces as many new problems on the inflation front as it aims to cure. This is because under static conditions not only are there higher wage claims to maintain living standards, but static or even falling output and static productivity makes it more difficult for firms to absorb wage increases and to spread overhead costs over higher output. A greater proportion of wage increases has to be passed on in prices, and this makes inflation worse, not better. With worsening inflation, there is a rise in the costs of exporting, especially for farmers, and so progress on the overseas balance of payments front is also severely frustrated.

B. Population

Population policy also represents an example of a vicious circle. In the early seventies, the level of immigration was thought to be too high, causing excessive pressure on resources, especially housing and the building industry. For these reasons, we drastically reduced the inflow of migrants so that when the effects of slow growth on employment were also showing themselves, the net inflow turned into a net outflow — mainly of skilled people to Australia. This, of course, meant a much reduced demand for houses and other types of social infrastructure and led to further cut-backs in the building industry and further emigration of building labour and slower economic growth and so on. Thus from trying to rectify what appeared to be too high a rate of population growth, we finished up with a negative rate with disastrous consequences.

One could cite a number of other examples of these vicious circles which stem from the complex interdependencies in the economy. The general upshot is that in attacking problems piecemeal, we run the danger of solving nothing and, indeed, of worsening our situation.

C. Black Holes

Consequently, when viewing our recent economic progress in New Zealand, I am sometimes reminded of the new phenomenon discovered by astronomers of "black holes" in outer space. These black holes, we are told, are the result of stars imploding or collapsing in on themselves with enormous bursts of energy such that all their matter is compressed into a tiny space with intense gravitational forces sufficient to trap any radiation including light. Because they cannot be seen, these stars disappear from the observable universe, hence the name "black holes". When reading about this bizarre phenomenon, I sometimes think it aptly describes what could happen to our economy if we continue to ignore the dangers of piecemeal approaches to our problems.

Let us now descend from the stratosphere to the questions of taxation in relation to our economic objectives.

III. TAXATION AND ECONOMIC OBJECTIVES

A. The Level of Taxation

At the present time we have an economy with persistent high inflation, high and growing unemployment and an increasing overseas balance of payments deficit. None of these problems can, or should, in my view, be tackled in isolation; they are all symptoms of our wretchedly low growth rate which itself stems from our inability or unwillingness to come to grips with the control of inflation.

The tax burden would not be anywhere near so onerous and there would not be nearly so much clamour for tax reductions, if we were enjoying our normal growth in economic activity and incomes. Nor would government expenditure be so high, nor regarded with such distaste, in a growing, non-inflationary economy. For one thing, the very high transfer expenditures on unemployment benefits, on supplementary minimum payments and on superannuation would be much lower or, at least, under control. Furthermore, government non-transfer expenditure, (that is, expenditure on goods and services), is not much higher in real terms, as a percentage of real GNP, than it was in the sixties or early seventies and would be lower still if real GNP had been growing.

It is true that that percentage is high, but this is the price we pay (if it is a price) for being a mini-nation of three million people requiring all the appropriate modern government infrastructure of a nation of thirty million.

If we wish to continue as a developed and progressive mini-nation — as I do then, while there are plenty of arguments for ensuring maximum efficiency in government spending (no less than in private spending), there can be no argument on this account for reducing government expenditure.

Indeed, if we are concerned also with economic growth, reductions in government non-transfer expenditure may extinguish what little growth there already is in the economy since there is no prospect of the resources released by government being absorbed by the private sector.

For the above reasons, I see no reason to believe that we can escape paying the same level of total tax as we are at present, and the real question is concerned with whether there should be a switch in the method by which this tax is collected from direct to indirect taxation. The question then arises as to what sort of indirect tax. It is here that we must consider the interrelated nature of our economic problems and the implications of indirect taxes for each. I deal first with inflation.

B. Inflation

Whatever indirect taxes we introduce will have the inevitable effect of raising the price level which, if followed by compensating wage increases, leads to an acceleration of inflation. This can only be prevented if, at the same time as indirect taxes are raised, direct taxes are lowered as part of a tax-wage bargain under a general incomes policy. Thus, our choice of indirect taxes must be guided by the need to contribute minimally to price increases and maximally to the tax-wage trade-off. Which of the numerous taxes fall into this class, we will investigate later.

C. Growth

Economic growth depends on a number of things, but first among them is a high level of investment and optimum allocation of such investment. Investment depends partly on profitability; profitability depends on two things. First, it requires control over costs, especially real wage rates. As far as indirect taxes are concerned, this again demands that the type of tax introduced is one which contributes best to a tax-wage bargain to restrain money wage increases while sustaining real disposable wages.

Profitability (and therefore growth) also depends on maintaining a high level of demand for goods and services produced by firms. If, therefore, there is an attempt to reduce real wage costs for firms, there must, as I have said, not only be maintenance of disposable or tax paid real wage income to sustain demand but, also, if possible, other measures to raise demand for New Zealand produced output.

The problem that arises, in that event, is that running high levels of demand immediately spills over into import spending and, thus, into excessively high balance of payments deficits, so we need now to mention indirect taxes in relation to the overseas balance of payments, dealing first with exports.

D. Exports

Our main consideration with exports is to prevent production costs rising, especially in price-taking industries like agriculture. Whatever indirect tax is chosen should therefore have minimal effect on exporters' costs and maximum benefit on exporters' output. This, of course, has to be judged in the light of a tax-wage bargain and so depends on the impact of wage costs to exporters as well as non-wage costs.

E. Import Substitutes

The other aspect of the overseas balance of payments, and the one bearing most on levels of demand in New Zealand, is the efficient output of substitutes for imports. Import substituting manufacturers have tariffs to encourage them, but there are great potential areas for import substitution outside of manufacturing, especially in contracting for the big projects, and in services and the like where no such protection is provided. The awarding of dam construction contracts to overseas consortia as compared with the Ministry of Works and the whole Poly-Computer fiasco are good examples. More important, expansion of import substitution activities contributes to the expansion of internal demand on which, as I have suggested earlier, economic growth depends.

Thus, our choice of indirect taxes should be guided by the need to discourage imports by making them relatively more expensive, and to encourage output demand for home produced import substitutes by making them relatively cheaper. In this context, it is a fundamental criticism of all the proposals of the Task Force on Tax Reform and the government's current indirect tax policies that they do just the opposite. Sales taxes, wholesale taxes, and the like raise the price of New Zealand output relative to comparable imported goods and services and, consequently, reduce the demand for New Zealand content which is just the opposite of what we require.

F. Full Employment

Employment depends on three things, and to the extent we wish to see high employment (as I do) we require the indirect taxes we choose to introduce to contribute to these three requirements.

- (a) Aggregate demand This I have already discussed above.
- (b) Wage-capital price ratio

Excessively high real wage costs lead to greater emphasis on capital intensive labour saving technology which reduces employment. Thus, our indirect taxes should be such as to contribute to reducing real labour costs via the tax-wage bargain as discussed in connection with inflation. Again, there is no conflict.

(c) Structure of the economy

By this, we mean the relative accent on sectors and industries which by their nature are capital or labour intensive in their operation. A desirable trend towards labour intensity (on employment grounds) is again likely to be encouraged by containing real wage costs and again argues for indirect taxes which contribute to a tax-wage bargain.

G. Tax-Wage Bargains

There are, of course, economic objectives other than the ones I have discussed, such as equity, justice, equality of opportunity and the like which cannot be considered here. For the moment, let us note the accent I have placed in the context of coherent, well designed and administered incomes policies. And let us note that the basic aim of such tax-wage bargains and incomes policies is to attempt to reduce the level of wages as a cost to employers while maintaining the level in real terms of income of employees. In this context, let us now examine empirically which of the various indirect taxes which have been proposed contribute best to achieving the economic objectives set down.

For this purpose, I want to detail some results from some quantitative economic research being conducted in our Research Project on Economic Planning in this university carried out by Mr Richard Wallace under my direction.

IV. MODELLING ECONOMIC INTERDEPENDENCE

Our aim is to ask what would happen to inflation, growth, employment and the balance of payments if we introduced any one of a number of different sorts of indirect taxes or other fiscal policies. To answer this question, we use a complex mathematical computer model of the economy which takes account of all the interdependencies in the economy which I have stressed before as being so important.

I do not intend to describe the intricacies of this economic model in detail but I should give a broad description of what we are simulating:

- (a) The economy is divided up into 26 producing sectors or industry groupings, each producing various goods and services as exports, import substitutes and the like, and for home consumers and for investment;
- (b) Each sector buys and sells goods and services to each other sector and also from overseas in proportions dependent on relative prices;
- (c) Each sector uses capital and labour for production according to relative wagecapital costs;
- (d) Prices of goods and services, both local and overseas, are determined by wage levels and import prices plus indirect taxes imposed. Export prices depend on what is produced and on overseas demand response to New Zealand selling prices;
- (e) Consumers' incomes are determined by employment and economic activity, by wage and income levels after tax, and in the light of prices charged for goods and services. These incomes are spent on local compared with imported goods according to relative prices and price elasticities of demand.

This model, which is called JOANNA¹ is thus able to trace through the whole economy the effects on output, imports, exports, price levels, employment and so on in each sector of any change in direct or indirect taxes, tariffs, wage trade-offs and the like. In doing this, it takes account of all the interrelationships which make up a modern economy.

I now propose to present some results from JOANNA showing what contribution to our general economic objectives would follow from some alternative fiscal policies.

V. RESULTS

A. The Questions

The results thrown up by JOANNA are shown in the table following. These results follow from asking the question:

1 Further details of this model are described by Richard Wallace and Bryan Philpott in "JOANNA — A Johansen type General Equilibrium Model for New Zealand", P.E.P. Occasional Paper No. 43, November 1980 and "Alternative Tax Switches and Tax-Wage Bargains: A General Equilibrium Analysis Using Short-Run JOANNA Model", P.E.P. Occasional Paper No. 57, August 1982.

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Say there was an income tax cut of 1,000 million dollars offset by the imposition of one of a number of different indirect taxes yielding 1,000 million dollars revenue, so that there would be no change in the government deficit, plus a money wage reduction sufficient when everything had worked its way through the system to hold real disposable wages constant; what then would be the effect on a number of variables, many of which represent our general economic objectives, such as real GDP, real consumption, price levels, export and import volumes and the balance of payments? Lastly, what would be the size of the money wage cut required to achieve the new equilibrium situation?

It should be noted that these results are all over and above whatever else is in any case happening in the economy. They are expressed (except for the balance of payments) in percentage change terms and, therefore, and by way of example, in column (i) a fall in money wage rates of 3.974% means not an absolute fall of \$3.974%, but 3.974% below what they otherwise would be. Similarly, for other magnitudes shown on the table.

We should also note that all the results are self-consistent and they take account of all the interdependencies in the economic system. Thus, in column (i), account has been taken by the model of the effects of the surcharge on all prices including the counteracting effect on prices of the cut in money wage rates, as well as the response of consumers at their new real income levels to the new

	(i) A foreign exchange surcharge of 10.650%	(ii) A cut in government consumption expenditure of \$1,000m, i.e. 19.55%	(iii) A general goods and services tax of 2½%	(iv) A Value Added Tax of 3.2%	(v) A general private consumption tax of 5.8%
	Percentage Change				
Real GDP	1.597	0.484	0.565	1.178	0.005
Employment	2.405	0.620	0.806	1.773	0.035
Consumer Prices	2.101	4.536	2.747	2.078	6.575
Capital Goods' Prices	3.291	4.514	2.785	1.736	0.346
Real Private					
Consumption	2.677	2.155	1.137	2.087	0.291
Export Volume	1.068	7.923	0.064	0.245	0.588
Import Volume	0.517	0.304	0.455	0.733	0.114
Balance of Payments					
(\$m) (76/77 prices)	+2.5m.	+125.8m.	20.5m.	25.6m.	
Money Wage Rates					0.501
Real Disposable Wage					
Rates	0	0	0	0	0

TAX WAGE BARGAINS WITH ALTERNATIVE INDIRECT TAXES

A personal income tax cut of \$1,000m combined with indirect tax as shown and a cut in money wage rates to hold disposable (after-tax) real wage rates constant

Source: Richard Wallace and Bryan Philpott: "Alternative Tax Switches and Tax-Wage Bargains", P.E.P. Occasional Paper No. 57.

relative price structure and of producers and consumers in buying imported compared with local products, and of exporters changing their output levels in response to cost changes and so on.

B. The Taxes

The indirect taxes which are examined are:

Col. (i) A foreign exchange surcharge (or tax) of 10.65%.

- Col. (iii) A general goods and services or wholesale tax levied on all goods and services and their associated inputs excluding exports. The tax is only levied once, so it does not cascade and existing sales taxes are removed.
- Col. (iv) A value added tax (VAT) levied on factor incomes at each stage in the production and distribution chain with imports included but exports excluded.
- Col. (v) A private consumption tax levied on all private or household consumption sales of goods and services on top of existing consumption taxes.

Lastly, as shown in column (ii), not a tax at all, but an alternative policy, namely, a cut in government consumption expenditure of 1,000 million dollars, that is, of 19.55%.

C. The Answers

Looking at the results very briefly we note, and for the moment ignoring the cut in government expenditure:

- (a) Economic growth, as measured by real GDP, is greater with the foreign exchange surcharge (FES) due largely, as we shall see, to import substitution and higher levels of private consumption expenditure;
- (b) Employment again improves markedly with FES due to the same factors as for growth (indeed, it is a reflection of it) and, possibly, also due to higher prices of capital goods. Employment is worst for the consumption goods taxes since these raise the cost of living a lot and reduce real consumption accordingly;
- (c) Import volumes fall only with the FES because of the relative rise in import prices in all other cases, the price situation is such as to encourage imports relative to home production;
- (d) Export volumes deteriorate with the FES due to cost increases facing exporters and due to the absence of an export rebate as is the case with the other wholesale taxes;
- (e) Balance of payments shows some improvement with the FES and is certainly preferable to the deterioration shown with the other taxes — this improvement is due to the fall in import volumes which alone characterises this tax policy;
- (f) Price levels, especially for capital goods' prices, are quite high with the FES but for consumer prices nowhere near as high as with consumer taxes;

- (g) The money wage reduction required to effect each policy is shown in the second to last row of the table;
- (h) Lastly, the government consumption expenditure cut (column ii) shows inferior results for growth, employment and money wage cuts required, but superior results for exports, balance of payments and price levels. Thus, these are secured at the expense of two of our objectives, namely, growth and employment.

VI. AN OPTIMUM POLICY

Which policy is best depends on our view as to the relative importance of each of our economic objectives. If we rate employment highest on the list, as I do, we will plump for the FES. If we regard high levels of government expenditure as an unnecessary evil (as I do not), we will plump for a cut in government expenditure.

There is, in fact, no need for us to plump for one or other of these two policies. There are an infinite number of combinations of them which could be explored which secure the best of both worlds and for which we can measure the trade-offs between the level of achievement of each of our economic objectives. Such an examination of combinations of policies is, however, beyond the scope of this paper and one can only conclude by urging, as I did at the beginning of my paper, that tax policies be looked at in this framework if we do not want New Zealand to become an economic "black hole".

