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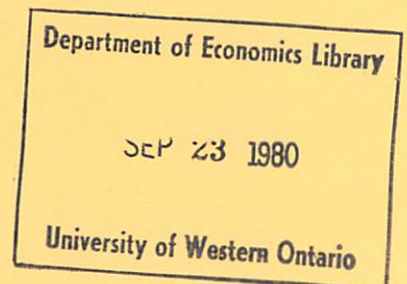
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INTERNATIONAL TRADE NEUTRALITY PROPOSITIONS FOR MOVEMENTS
BETWEEN 'ORIGIN/SPLIT-RATE' AND 'DESTINATION/CREDIT' TAX BASES

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This paper contains preliminary findings from research work still in progress and should not be quoted without prior approval of the author.

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International Trade Neutrality Propositions for Movements
Between 'Origin/Split-Rate' and 'Destination/Credit' Tax Bases

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I. Introduction

This paper suggests generalizations of existing international trade neutrality propositions for movements between origin and destination bases for indirect taxation to include international taxation of investment income through different systems of corporate tax.¹ Existing neutrality propositions for indirect taxes stress exchange rate accommodation (or accommodation via domestic price level changes under fixed exchange rate regimes) to tax basis changes leaving real long-run equilibrium trade flows unchanged. Here neutrality for movement between 'origin/split-rate' and 'destination/credit' systems is demonstrated under alternative external sector treatments. Under these arrangements origin based indirect taxes are linked to split-rate corporate taxes and destination basis indirect taxes to integrated personal and corporate taxes with dividend tax credits under the personal income tax.² Appropriate linking of corporate and indirect tax rates is required for neutrality to prevail.³

That generalizations of this type are possible if investment-related³

¹International taxation of investment income is a complex institutional area involving not only corporate tax treatment but also withholding taxes on interest, dividends, and royalties; bilateral tax treaty reliefs (usually in the form of a bilateral reduction in withholding tax rates); and unilateral reliefs either of the credit or exemption type; (see Adams and Whalley [1977]). This paper is solely concerned with the corporate tax treatment. There is therefore a clear difference between the complexity of tax arrangements in practice and the abstract system arrangements considered here and readers of this paper should keep this point in mind.

²The major difference between split-rate and credit corporate tax systems lies in the external sector treatment and the choice between these is usually discussed on the basis of both fixed exchange rates and domestic price levels. The credit system is often argued for over a split-rate system as a way of taxing foreigners more harshly through non-refundable credits. Extending the origin/destination results to this area suggests that exchange rate variations will partially offset any variation between the two corporate tax systems, with the extent of offset depending on the mix of 'merchandise/service' and investment related transactions in the balance of payments. In extreme cases, a complete exchange rate (or price level) offset will occur.

³Dividend and interest receipts and payments, along with inward and outward investment expenditures.

transactions are included in external sector modelling along with merchandise trade should not be surprising since these transactions also enter balance of payments accounts. However, the policy implications of the results demonstrated are of some importance and appear to have gone unnoticed. These generalizations suggest that the issue of the origin versus the destination basis for indirect taxation should not be discussed independently of the tax basis for international taxation of investment income through the corporate tax as is currently the case. A point of current policy relevance is that the EEC harmonization proposal for a credit corporate tax system with refundable credits only for internal EEC transactions shows a strong similarity to the restricted origin basis proposed for a harmonized VAT even though the two proposals have originated independently. It would seem clear, in the light of the results of the present paper, that such proposals should be evaluated jointly rather than separately as at present.

The paper first discusses the origin and destination bases for merchandise trade, and the credit and split-rate corporate tax systems drawing the parallels between the two. The following section outlines the well-known proposition that movements between origin and destination bases for general indirect taxes will be offset in long-run equilibrium by exchange rate variations (or price level variations for a fixed exchange rate regime). This approach is then applied to economies open only in the restricted sense of allowing for dividend flows to show that movements between split-rate and credit corporate tax systems can be offset by exchange rate variations in such circumstances. The neutrality propositions are then developed for movements between the 'origin-split-rate' basis and the 'destination-credit' basis for economies with both merchandise trade and investment transactions in the external sector (involving both dividend flows and new investments). The current EEC situation is discussed and a

parallel drawn between the restricted origin principle proposed for VAT harmonization and the restricted credit system proposed for EEC corporate tax harmonization.

II. Parallels between the Origin and Destination Bases for Indirect Taxation, and Split-Rate and Credit Corporate Tax Systems

Under the origin basis for indirect taxation, taxes are collected at point of production and no adjustments for taxation are made as goods cross national borders. Under the destination basis, taxes are collected at point of purchase and so any taxes already collected from producers are rebated on exports while taxes are charged on imports. Under an origin basis exports are taxed while imports are not, while under a destination basis imports are taxed while exports are not. The issue of choice of basis for such taxes as the VAT and the like is thus one of whether or not border tax adjustments apply to goods crossing national borders.

The public finance literature emphasizes a well-known proposition that in a conventional factor immobile, commodity mobile international trade model, movements between the origin and destination basis for broadly-based taxes will (in long-run equilibrium) affect only the exchange rate leaving the real characteristics of an international trade equilibrium unchanged.¹ The change in tax basis is solely as a monetary phenomenon with no impact on long-run equilibrium quantities or relative commodity prices in domestic currencies. This idea has been extensively used to counter the claim that a destination-based tax is a protective device since it is levied on imports and rebated on

¹See Shoup [1953, 1969], Shibata [1967], Johnson and Krauss [1970], Prest [1975], and Due and Friedlaender [1977].

imports and rebated on exports (unlike the origin basis).¹ The implication in this literature is that the choice of tax basis must rest solely on administrative issues (such as the EEC desire to abolish 'Fiscal Frontiers').²

While the origin-destination basis discussion for indirect taxation solely involves external sector issues, the choice of system for corporate taxation reflects the availability of different methods by which to integrate personal and corporate taxes. While at first sight these issues appear unrelated, the choice between the two most commonly-proposed integration systems frequently involves discussion of external sector impacts and these provide the link between the issues.

Proposals to integrate personal and corporate taxes are best understood in terms of the objectives of the corporate tax in counteracting incentives for income tax deferral. Under a traditional income tax, stockholders are taxed

¹In recent years the divergence seems to have widened between academic opinion, which stresses exchange rate adjustments to tax basis changes, and the views often expressed by participants in the policy formulation process that tax basis changes can impede trade and act as protective devices. Complaints are frequently made by US trade officials that the destination based commodity tax in Japan which is applied to imports but not to exports gives Japanese exporters an unfair trade advantage. This tax situation is one of the main arguments currently offered in favour of proposals to protect U.S. colour T.V. producers and other groups through tariff and quota restrictions. Similar complaints are sometimes directed at the Federal Manufacturers Sales Tax in Canada and the Value Added Tax in the EEC both of which are administered on a destination basis. Complaints are also made about the balance of indirect taxation to direct taxation being higher in certain countries giving them trading advantages. In the cases of Canadian-U.S. and Japanese-U.S. trade this issue has been raised as the perception is that Canada relies more on indirect taxation than the U.S., and Japan less. Sentiments have been expressed in the U.S. in favour of a federal sales or value-added tax which could be administered on a destination basis to counteract tax arrangements abroad. An alternative suggestion has been that in negotiations with foreign countries, trade policy concessions should be offered to encourage them to operate origin based taxes with no tax adjustments at the border.

²The EEC situation is made more complex by the preference for a geographically discriminatory tax basis under which the origin basis applies for inter EEC trade but the destination basis applies for trade between any EEC member state and any non-member country. This 'restricted origin principle' (see Shibata [1967]) is discussed later.

on dividends received rather than earnings per share. Stockholders, therefore, have an incentive to vote for retention rather than distribution of profits since reinvesting profits in the company defers income tax liabilities of stockholders. The corporate tax attempts to counteract these deferral incentives through separate taxation of corporate profits at source.¹

To counteract income tax deferral incentives a tax on undistributed profits of corporations rather than on total profits is required. The U.S. style 'classical' system of corporate tax, however, applies to all corporate profits (at a single uniform rate) rather than just to undistributed profits. Under this system the incentives for tax deferral which give rise to the need for a separate corporate tax in the first place remain unaffected leading to pressure to 'reform' the corporate tax by 'integrating' corporate and personal income taxes.

Two methods for integration have been prominent in recent 'reform' discussions, especially in Western Europe. Under the first (the 'split-rate' method) a lower corporate tax rate applies for distributed than for undistributed profits with the income tax continuing to tax dividends along with other incomes as before. Under the second (the 'credit' method) a uniform rate of corporate tax is maintained but an income tax credit is given to stockholders on receipt of dividends for a portion or all of corporate taxes paid.²

¹ Three points which can be made concerning this argument are that (i) it is impossible to exactly counteract deferral with a single rate corporate tax since its value depends on the marginal income tax bracket of the stockholder (along with the holding period of stock) (ii) an alternative and superior mechanism for exactly counteracting deferral is to tax earnings per share (rather than dividends) under the income tax and not have a separate corporate tax (iii) under an expenditure tax issues of tax deferral do not arise and no separate corporate tax is called for.

² Extensive policy discussions have occurred in a number of countries in recent years on the relative merits of these systems. In the UK between 1971 and 1973 such a discussion occurred before a credit system was adopted; in West Germany there has been a debate for many years as to whether they should move from a split-rate to a credit system (they currently have a mixed split-rate/credit system); in the US the relative merits of the two systems have been debated as part of the attempts to move towards an integrated system during the Carter administration (no such move currently seems likely).

Consider a single stockholder with a marginal income tax rate t_p . Under the credit system the corporate tax rate is t_c and f defines the proportion of corporate taxes on profits underlying dividends for which an income tax credit is given. The credit itself is assumed to be taxable under the income tax to simplify the calculations.¹ Under the split-rate system t_c^U and t_c^D define the corporate tax rates on undistributed and distributed profits respectively.

Assuming that profits earned are immediately paid out in dividends if they are ever to be distributed, and retained profits are retained forever with permanent deferral of income taxes,² the total taxes paid per dollar of distributed and undistributed profits under the two system is

Total Taxes Paid per Dollar of Distributed and Undistributed Profits

<u>Credit System</u>		<u>Split-Rate System</u>	
<u>Undistributed Profits</u>	<u>Distributed Profits</u>	<u>Undistributed Profits</u>	<u>Distributed Profits</u>
t_c	$t_c + t_p(1-t_c + ft_c)$	t_c^U	$t_c^D + (1-t_c^D)t_p$
	$- ft_c$		

If $t_c = t_c^U$ and $t_c(1-f) = t_c^D$ the two tax systems are equivalent in their total (corporate and personal) tax treatment of both distributed and undistributed profits. The equivalence holds independently of the value of t_p ; the extreme case of a full credit is equivalent to a zero tax rate on undistributed profits.

¹This also is the way in which credit systems operate in practice.

²Alternatively, with perfect capitalization of retained profits into capital gains and no capital gains tax the profits can be considered to be 'received' through capital gains.

This equivalence breaks down, however, in an open economy case and this provides the link to the origin destination basis debate. Foreigners receiving dividends from domestic companies in which they own stock receive a credit against income tax liabilities which they typically do not have. On the other hand, under a split rate system the lower rate on distributed profits applies equally to domestic and foreign stockholders. The credit system is therefore frequently advocated as a way of penalizing foreigners, and forcing them to renegotiate existing double taxation treaties on more favourable terms.

The parallels between the origin/destination basis discussion and the credit/split-rate issue thus become apparent. Under both credit and split-rate systems undistributed profits are taxed identically. The difference lies in the tax treatment of distributed profits (dividends). Under an extreme split-rate system where there is no corporate tax on distributed profits, the country which originates investments (receives the dividends) collects the tax on distributed profits. Under an extreme credit system where the credit exactly offsets personal income tax liabilities of domestic resident shareholders, the country to which investments are destined (the payer of dividends) collects the tax. A movement from one tax basis to the other should be able to be offset by exchange rate accommodation in a simple international capital flow model and the result combined with existing origin/destination basis arguments.

III. Exchange Rate Adjustments to Origin and Destination Basis Changes and Split Rate/Credit System Variations

The proposition that under a broadly based tax a movement from an origin basis to a destination basis will only affect the exchange rate and leave relative commodity and factor prices unaffected (and thus real trade flows unchanged) is stated in a number of places in the literature. The statement is usually made in terms of a sales tax which is described as general in that the tax does not distort relative domestic commodity prices faced by consumers, i.e., purchases of all products are taxed at the same rate.

A typical statement of the proposition is given in Shoup [1969] who says (p. 644), "If exchange rates are flexible and the sales tax is truly general, international trade will not be disturbed if all countries move from the destination principle to the origin principle, or vice versa, provided that the balance of trade is in equilibrium and provided that international flows of services and capital and transfer payments are either zero or balanced before and after the exchange rate is altered;" Shoup quotes Shibata [1967] where a similar view is stated. A further source is Krauss and Johnson [1970] who state (p. 596) "...in a longer run context in which the international adjustment mechanism is assumed to be functioning, changes in border tax adjustments should make no difference to international trade, provided that the taxes to which the adjustments apply are truly general." Johnson and Krauss go on to make the additional argument that an equal rate tax on all factor incomes replacing an equal rate tax on all consumer expenditures will produce the same result. A tax on incomes appears in exporters' costs but does not affect import costs and can be considered to be equivalent in effect to an origin based sales tax paid by producers. If such taxes replace a destination based sales tax, only a change in exchange rate is needed to maintain both international and domestic equilibrium conditions.

The analogues of these neutrality propositions for origin/destination basis changes as they apply to movements between split-rate and credit corporate tax systems can be shown to hold in a number of situations of increasing complexity. The complexities stem from the incorporation of cross border investment expenditures on newly produced capital goods and these are first avoided by assuming that international taxation of investment income only affects dividends paid abroad to foreigners who own domestically used capital. This is the somewhat artificial case of investments abroad having occurred in earlier years, with no new investment in the period under consideration. This assumption is subsequently relaxed. Under the two corporate tax systems considered, the tax treatment of domestic transactions is identical and only the international transactions need be considered to establish neutrality propositions for movements between the two tax systems (at equivalent rates). The corporate tax is treated as an equal rate ad valorem tax on all uses of capital services.

A. Dividend Flows Only; No Transactions in Goods.

The first situation considered is extremely artificial in that it is assumed that no new cross border investments occur in the year of the tax system switch and no international transactions occur in goods. The only cross border flows are dividends paid to foreign capital owners as a result of previous investments. K_2^1 refers to the capital located in country 1 (2) owned by residents of country 2 (1); if the rental price of capital in country 1 is r_1 , dividends paid by 1 to 2 (in terms of country 1's currency) are $r_1 K_2^1$. The tax basis change argument in this case is that if the only transactions between countries involve dividend payments, a movement from a split-rate system to a credit system will be accompanied by an exchange rate

variation such that the net of tax dividend flow in the currency of the receiving country remains unchanged. This occurs even though gross of tax dividends in the currency of the paying country are unchanged when a switch between tax systems occurs since exchange rates adjust. In this simple case, dividends from one country are exchanged for dividends from the other country and no national advantage is gained by a change from (to) a split-rate to (from) a credit system. Such a result is clearly in striking contrast to current opinion which treats a credit system (at comparable rates) as disadvantageous to foreigners.

This argument can be made as follows. Suppose only country 1 has any taxes and operates both a corporate and personal income tax system. No additional withholding taxes apply to dividend payments made abroad. Suppose further that all international settlements take place in the currency of country 1 and e is the exchange rate giving the price of a unit of country 2's currency in terms of country 1's. Consider the external sector transactions in any given year in an equilibrium situation achieved under a credit corporate tax system.

Let D_1^2 (D_2^1) be the local currency denominated gross of corporate tax profits accruing to country 2 (1) from investments in country 1 (2). $D_1^2 = r_1 K_2^1$ and $D_2^1 = r_2 K_1^2$. Let t_1^c be the corporate tax rate in country 1 under the credit system, and t_1^p be personal income tax rate in country 1. Suppose a (taxable) income tax credit of a fraction f of corporate taxes paid per dollar of gross of corporate tax profits is given in country 1 under the credit corporate tax. The tax paid on profits distributed to domestic stockholders is $t_1^c + t_1^p(1-t_1^c) - f t_1^c(1-t_1^p)$ ($= (1-f)t_1^c(1-t_1^p) + t_1^p$), taxes paid per dollar on profits distributed to foreign stockholders are t_1^c , and on undistributed profits t_1^c (neglecting any accrued capital gains tax liability). If f equals one, the tax on profits distributed to domestic stockholders reduces to t_1^p .

With a split-rate system with tax rates calculated to give equivalent total tax effects in a closed economy, corporate tax rates t_1^c on undistributed profits and $t_1^c(1-f)$ on distributed profits apply.

Under these two tax regimes, with the calculation for tax rate equivalence as above, the balance of payments conditions are:

credit system in 1

$$(1) \quad D_2^1(1-t_1^c) = e^c D_1^2$$

split-rate system in 1

$$(2) \quad D_2^1(1-t_1^c(1-f)) = e^s D_1^2$$

where e^c and e^s are the exchange rates under the two regimes.

If $e^s = (1-t_1^c(1-f)) e^c / (1-t_1^c)$, then under a switch to (from) a credit system (to) a split-rate system the balance of payments conditions (1) and (2) can be satisfied by the same gross of tax dividend payments in the currency of the paying country and the same net of tax dividend receipts in the currency of the receiving country. D_2^1 , D_1^2 , r^1 and r^2 will all remain unchanged as a switch between tax bases occurs. As with a move from the origin to the destination basis (or vice versa) for merchandise trade, movements between the split-rate and credit corporate tax systems can be offset by exchange rate variations leaving the real characteristics of the equilibrium unaffected. Although higher tax rates in domestic currency are collected from foreigners, the exchange rate adjusts so that the net of tax dividends paid are the same as before in the currency of the recipient country.

A similar argument to the above also applies for the introduction of (or changes in) withholding taxes on dividends paid abroad which can similarly be offset by exchange rate variations under the same simplified assumptions. An argument commonly made is that a harsher withholding tax aids national interest by extracting more taxes from foreigners. A case where this is relevant is with Advanced Corporation Tax in the UK which since its introduction in 1973 has not

been regarded by the UK government as a withholding tax and thus not subject to tax treaty limitations. In certain cases it effectively operates as a withholding tax and has been supported on occasions as nationally desirable harsh treatment for foreign owners of capital. A further implication of the same neutrality discussion applies to Hamada's [1966] model of strategic aspects of taxation of foreign investment income in which a retaliatory process of increasing foreign investment tax rates by each country in a two country model occurs. This model is structurally identical to the optimal tariff with retaliation discussion in the trade literature where the non-cooperative (post-retaliation) outcome is a Nash equilibrium. With the above neutrality result, any action by one country which varies its investment tax rate will be offset by an exchange rate variation if an explicit balance of payments condition is incorporated. Retaliatory processes in the Hamada model will have thus no real effects once a balance of payments condition is incorporated, and presumably will not occur.

B. Dividend Flows (No New Investment) but with Transactions in Goods

The argument made in the preceding section can be generalized to situations where both merchandise trade in consumption goods and dividend flows occur. If the split-rate basis for the corporate tax is aggregated (at appropriate rates) with the origin basis for merchandise trade taxation to give an 'origin split-rate' basis for combined tax treatment of international transactions, and the credit corporate tax aggregated (at appropriate rates) with a destination basis merchandise trade tax to give a 'destination credit' basis, movements between the tax bases are neutral. This is a simple extension of both the familiar propositions concerning movements between simple origin and destination bases outlined above and the preceding credit-split/rate system change argument.

Consider the same situation as above for the tax treatment of international flows of dividends. The same notation applies and only country 1 operates a tax system. For simplicity, the choice in country 1 is restricted to that between an extreme form of credit corporate tax system where $f = 1$ (full credit against personal income taxes for corporate taxes paid), or the extreme form of split-rate corporate tax where no tax is collected on distributed profits. The credit corporate tax is paired with a destination based indirect tax, and the split-rate corporate tax with an origin based indirect tax. Product prices received by domestic producers in local currency are P_i^1 for goods produced in 1 and P_j^2 for goods produced in 2. $X_{2_i}^1$ are purchases of good i by country 2 from country 1, $X_{j_1}^2$ are purchases of good j by country 1 from country 2. The origin basis tax rate in 1 is t_1^0 . Under the two tax regimes the balance of payments equilibrium conditions are given by

'Origin Split-Rate'

$$(3) \quad \sum_i P_i^1 X_{1_i}^2 (1 + t_1^0) - D_2^1 = e^0 (\sum_j P_j^2 X_{2_j}^1 - D_1^2)$$

'Destination Credit'

$$(4) \quad \sum_i P_i^1 X_{1_i}^2 - D_2^1 (1 - t_1^c) = e^D (\sum_j P_j^2 X_{2_j}^1 - D_1^2)$$

where e^0 and e^D are the exchange rates under the 'origin split-rate' and 'destination credit' bases respectively.

If $e^D = e^0 (1 - t_1^c)$ and tax rates are related such that $t_1^0 = t_1^c / (1 - t_1^c)$, a movement from an 'origin split-rate' basis to a 'destination credit' basis can be fully offset by an exchange rate variation. This leaves the real commodity trade unchanged, net of tax dividends in domestic currencies of the receiving country unchanged, and gross of tax dividends in the currency of the paying country unchanged. All relative commodity prices in domestic currencies are also unchanged. A movement from one basis to the other, as in the simple

origin-destination basis case is a purely monetary phenomenon which has no real effects.

For the case of a partial credit rather than a full credit a similar neutrality result can be demonstrated. In this instance the relation between the split in the rates under the split-rate system and the credit must be calculated as above so that 'equivalent' systems are involved, and the relation between the corporate and indirect tax rates needs to be recalculated. The proposition that a movement from an 'origin split-rate' to a 'destination credit' basis remains.

C. New Investment Flows Along with Trade in Goods

The analysis above becomes somewhat more complex when flows of inward outward investment expenditures are considered along with the dividends flows. The neutrality propositions demonstrated above still hold although under somewhat more restrictive assumptions. The simplest treatment is to recognize some of the traded goods as capital goods with the additional characteristic that outward investment expenditures represent capital good purchases abroad which are not repatriated. Two issues with this treatment are whether such transactions appear in the balance of payments account if they are financed by non-repatriated profits from earlier investments, and whether border tax adjustments apply to capital goods purchased abroad through outward investment flows even though the goods involved are not repatriated.

To preserve the neutrality propositions above the artificial assumption is adopted that 'borders' apply on a nationality basis rather than a geographical basis. Under this assumption all dividends are 'paid out' between countries whether or not they are repatriated and appear in the balance

of payments accounts even if used for reinvestment abroad.¹ This assumption also involves a border tax adjustment for expenditures by citizens of one country on the products of another country even if the products are not repatriated. This implication is clearly artificial in that border tax adjustments usually apply on a geographical rather than nationality basis.

Under these assumptions, extending the analysis in the preceding section above to also include inward and outward investment expenditures involves the same balance of payments conditions as in (3) and (4) with some of the goods i produced in 1 and goods j produced in 2 being capital goods. Dividends include non-repatriated dividends used for reinvestment, the trade in goods includes some capital goods bought abroad and not repatriated, and border tax adjustments apply to all transactions whether repatriation occurs or not.

In this formulation an expectations hypothesis for the income stream from foreign investment needs to be adopted to define the investment functions. If the simple myopic expectations hypothesis is adopted that a unit of a capital good i (j) produced in country 1 (2) today will provide an amount of capital services γ_{1i} (γ_{2j}) in all future time periods which can be sold at the current rental price r_1 (r_2) to provide a future consumption stream, the expected rates of return on investments by 2 (1) in country 1 (2) under the two alternative tax regimes are

¹This is, in fact, conventional treatment in Balance of Payments accounts.

Expected Rate of Return on Investments in Capital Assets
Abroad Under Alternative Tax Systems

Return on Investments
in 1 made by 2

Origin Split-Rate

$$\frac{Y_{1i}r_1}{P_i^1(1+t_1^o)}$$

Destination Credit

$$\frac{Y_{1i}r_1(1-t_1^c)}{P_i^1}$$

Return on Investments
in 2 made by 1

Origin Split-Rate

$$\frac{Y_{2j}r_2}{P_j^2}$$

Destination Credit

$$\frac{Y_{2j}r_2}{P_j^2}$$

From the last section, neutrality requires that $t_1^o = t_1^c / (1 - t_1^c)$ which implies that $(1 + t_1^o) = \frac{1}{(1 - t_1^c)}$ and thus, the expected return on investments in 1 will remain unchanged under the tax system change. If this expected return determines investment expenditures abroad, a movement from one tax basis to the other will be equivalent to a purely monetary phenomenon by the same neutrality argument as above.

A qualification to this result is that ideally a richer model is needed to satisfactorily explain simultaneous investment in different types of capital assets. If expected income streams in national currencies are the only determinant of investment flows and are the same, investment in the various capital assets is indeterminate. Incorporating risk with complete loss in tax treatment of income returns however merely offsetting the variance of investment returns in the currency of the investing country would be unchanged under tax basis changes and neutrality still holds.

IV. A Restricted 'Origin Split-Rate' Basis

Given the parallels drawn in this paper between the origin-destination bases and split-rate-credit corporate tax systems it seems useful to stress the importance of the link for evaluation of current proposals in the EEC for the border tax adjustments which will eventually accompany harmonization of both value-added taxes and corporate taxation.

The current proposal for value-added taxation¹ is for a harmonization of tax bases and tax rates to be followed by an adoption of the so-called 'restricted origin' principle as an administrative basis for the tax. This is a geographically discriminatory basis under which the origin basis will apply to trade between EEC member states while the destination basis applies for trade between EEC member states and non-member states. Such a tax basis is only neutral compared to a general origin or destination tax, if each state's trade satisfies a bilateral balance condition with a separate balance prevailing for trade with EEC member countries and for trade with non-EEC member states (see Whalley (1979)).

With corporate taxation, the current harmonization proposal² calls for the adoption of a common credit system of corporate tax with a harmonized tax base and (eventually) harmonized tax rates, with credits refundable for dividends paid to other EEC member countries but non-refundable if paid outside the EEC. This is a form of dual system with, effectively, a split-rate corporate tax system applying to transactions internal to the EEC and a credit system applying to transactions outside the EEC.

¹As, for instance, in the sixth EEC draft direction on turnover taxation.

²Proposal for a Council Directive concerning the harmonization of systems of company taxation and of withholding taxes on dividends' EEC Commission, August 1975 and discussed in Chapter 13 of Adams and Whalley (1977).

In combination the two proposals amount to what may be termed a 'restricted origin split-rate' basis for taxation. The interesting feature of these proposals is that they have been arrived at independently although they fit together as a coherent system with the joint restriction as a characteristic. Although not demonstrated here, the neutrality proposition for a restricted origin principle under bilaterally balanced trade for the indirect tax case can be generalized for the 'restricted origin split-rate' basis. The parallels between the two proposals would seem to suggest clearly that they be evaluated together as a single tax system although this would appear not to have happened thus far.¹

V Conclusion

This paper suggests a generalization of the discussion of border tax adjustments under destination and origin bases for indirect taxation to include international taxation of investment income through the corporate tax. It is suggested that if the origin basis for indirect taxation is linked to a split-rate corporate tax system and the destination basis linked to a credit corporate tax, a movement from an 'origin split-rate' system to a destination credit system will also satisfy long-run neutrality propositions in much the same way as often argued for movements between simple origin and destination bases.

The policy implications of this discussion are that (i) adopting a credit rather than a split-rate corporate tax system may not have the harsher external sector taxation associated with it as often claimed, and (ii) it is misplaced to divorce discussion of origin and destination basis issues from the structure of international tax treatment of investment income as is usually done.

¹As different Directorate-generals are involved in the initiation and subsequent modification of these proposals, it seems unlikely, at least to the author, that any joint evaluation will ever occur.

Current EEC proposals for harmonization both of value added and corporate taxes are briefly discussed. Although these proposals have evolved independently it is suggested a common geographically discriminatory basis is implied. This is termed a 'restricted origin split-rate' basis.

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