Exempt Treatment of Financial Intermediation Services Under a Value-Added Tax: An Assessment of Alternatives

PRÉCIS

Il est courant, dans la plupart des pays qui adoptent une taxe sur la valeur ajoutée (« TVA »), d’accorder une exemption pour les services rendus par les intermédiaires financiers. En général, cette exemption est considérée comme étant peu souhaitable, mais inévitable en raison des problèmes techniques reliés à l’application de la TVA à ce genre de services. Cet article comporte d’abord un examen des arguments en faveur du maintien de l’exemption, puis du bien-fondé de deux solutions récemment proposées dans des textes de nature fiscale. La première consiste à appliquer la taxe sur la trésorerie provenant des services fournis par les intermédiaires financiers, d’une manière qui est en harmonie avec la TVA sur la facturation (la méthode prédominante). La deuxième solution est un régime détaillé de détaxation des services fournis par les intermédiaires financiers, qui s’appuie sur le fait que la consommation de ces services par les ménages est décrite comme étant non taxable.

L’auteur soutient que chacune de ces deux solutions au régime d’exemption comporte des difficultés tant du point de vue théorique qu’au chapitre de la mise en place, et que le maintien de l’exemption constitue donc la solution la plus appropriée, du moins à court terme. Cependant, une solution plus simple comportant la modification d’un seul aspect du régime d’exemption permettrait d’alléger les aspects plus problématiques. Bon nombre des problèmes d’interprétation et une grande partie de l’inefficacité du régime d’exemption...
découlent du besoin de différencier les services financiers taxables des services financiers exonérés. L'auteur soutient que ces problèmes peuvent être éliminés dans une grande mesure si la distinction est fondée sur la manière dont les prix sont imputés. Pour appuyer cette méthode, il souligne qu'elle rejoint les motifs sous-tendant l'application de l'exemption.

L'auteur examine d'autres modifications possibles, mais les rejette aussitôt ou les considère avec scepticisme. Par exemple, l'auteur critique les raisons qui semblent appuyer l'application de la taxe sur la trésorerie des sociétés d'assurances multirisques. Il rejette également les propositions visant à accepter un certain relâchement dans la répartition, par les intermédiaires financiers, du coût des entrants d'entreprise entre les services exonérés et les services taxables pour calculer le crédit de taxe sur les intrants. Enfin, l'auteur met en doute l'efficacité d'une réponse au moyen d'une politique pour régler les aspects défavorables d'un régime d'exemption applicable aux fournitures internes par les intermédiaires financiers.

ABSTRACT

Most countries with a value-added tax (VAT) exempt financial intermediation services from the tax. While exemption is generally perceived to be undesirable, it is also widely regarded as unavoidable because of technical difficulties in applying VAT to these services. This article reviews the standard rationale for exempt treatment and then considers the relative merits of two recent challenges raised in the tax literature. The first challenge involves the application of cash flow taxation to financial intermediation services in a manner that is consistent with an invoice/credit VAT (which is the dominant form). The second challenge proposes a comprehensive system of zero-rating of financial intermediation services, which is supported by a characterization of the household consumption of such services as non-taxable.

The author argues that each of these alternatives to an exemption system suffers from both theoretical and practical implementation difficulties that make maintenance of exempt treatment the preferred approach, at least in the short term. There is, however, a simpler alternative to these fundamental reform options, involving modification of just one aspect of an exemption system to relieve some of its more problematic aspects. Many of the interpretative problems and associated inefficiencies that plague an exemption system arise from the need to distinguish between taxable and exempt financial services. The author argues that these difficulties can be eliminated, to a large extent, by basing the distinction on the form of prices. In support of this approach, he points out that it is consistent with the underlying reasons for the application of exempt treatment. The author considers a number of other possible modifications, but these are either rejected outright or viewed with a healthy skepticism. For example, the author is critical of the apparent rationale for the application of cash flow taxation to property and

(2001), Vol. 49, No. 5 / n° 5
casualty insurers. He also rejects proposals that accept some looseness in the formulaic allocation by financial intermediaries of the costs of business inputs between exempt and taxable services for input credit purposes. In his view, an explicit reliance on pricing structures to draw the boundary between exempt and taxable services is preferable to the provision of relief for blocked input tax credits of financial intermediaries. Finally, the author is skeptical of the case for a policy response intended to address the tax bias under an exemption system for financial intermediaries to insource supplies. Keywords: Consumption taxes; exemptions; financial institutions; financial services; GST; VAT.

INTRODUCTION

The dominant form of consumption taxation is the broad-based multistage tax on business value-added. The preferred form of the tax is the invoice/credit method, referred to as the value-added tax (VAT) in Europe and the goods and services tax (GST) in Australia, Canada, and New Zealand. The broad design features of this type of consumption tax are well known and are not reviewed here. Instead, this article focuses on one specific feature of existing VAT regimes—the exempt treatment of financial intermediation services. Under standard country practice, the provision of financial services is exempt from VAT, and the tax on associated inputs is ineligible for credit to the provider of the particular services. This treatment of financial services is commonly perceived as undesirable; but because of the technical complexity of taxing financial intermediation, it is widely accepted as an unavoidable feature of a VAT system.

A body of recent tax literature, including a study commissioned by the European Commission, has been devoted to the design of mechanisms that permit the taxation of financial services in a way that is consistent with the invoice/credit type of VAT. This article assesses the merits of this particular challenge to exempt treatment. It also considers other recent literature questioning the accepted wisdom that the consumption of financial intermediation services should be taxed under a VAT, and that only technical measurement difficulties prevent the implementation of this principle. It is argued that, in fact, these challenges to exempt treatment offer little in the way of fresh insights on the issue. More important perhaps, the alternatives to exemption, which are the logical outcomes of the premises underlying these challenges, suffer from deficiencies that render them problematic in themselves. In short, none of the alternatives offered to date clearly amounts to a feasible improvement on the status quo.

An important focus of the article is the attempt to construct possible arguments for the exemption of financial services under a VAT. This analysis informs much of the assessment of the various alternatives to exempt treatment. Possible reasons for exemption are constructed by returning to basic principles of consumption taxes. In particular, the analysis refers to the principles reflected in a cash flow
personal expenditure tax (PET), which serves as the equivalent of a transaction-based VAT under the following conditions:

- the PET is imposed at a flat rate; and
- the VAT is shifted fully forward and borne by households as consumers.

The discussion that follows is divided into four main sections. The first of these describes some preliminary concepts and analytical constructs. In particular, it briefly reviews the nature of financial intermediation and the various categories of associated services, and the basic design features of a cash flow PET as the equivalent of a VAT. There is also an attempt to demonstrate, by means of some simple numerical examples, that the taxation of intermediation fees does not disturb the ratio between current and deferred consumption, assuming that the household consumption of financial intermediation services is properly characterized as taxable. Given this assumption, the exemption of financial intermediation under a VAT cannot be justified on the basis that the tax imposes a wedge between the pre- and post-tax rates of return to saving (and the pre- and post-tax cost of borrowing) which distorts the relative values of current and deferred consumption.

Next, the article considers possible arguments for exemption of financial intermediation services under consumption taxes. One argument in the recent literature is that the household consumption of financial intermediation services is not properly characterized as taxable consumption; in this case, the neutrality assumption of a cash flow PET does not hold as applied to these services. The more conventional case for exemption is based on the proposition that financial intermediation charges are commonly embedded in financial margins and are not readily observable in a way that permits their allocation to particular consumers on a transactional basis.

The article then reviews and assesses two recently proposed alternatives to exempt treatment: zero-rating and cash flow taxation of financial intermediation services. These two approaches are the most complete alternatives proposed to date whose mechanics are consistent with an invoice/credit VAT. They differ significantly in the ways they respond to the presumed rationale for exemption. Through the assessment of these alternatives, a case is made for maintaining an exemption system. Essentially, the theoretical and implementation problems associated with both alternatives leave exempt treatment as the more feasible and desirable approach, at least in the short to medium term.

The final section of the article considers certain modifications of the exemption approach to better reflect the presumed rationale for exempt treatment. These modifications focus primarily on the definition of exempt financial services. In particular, this section outlines some broad features of a concept of “financial services” consistent with the possible arguments for exemption. These features are offered as general criteria that may provide guidance in categorizing particular financial services as exempt. The section concludes with a discussion of the
intractable problem of the allocation of input tax paid by financial intermediaries between their taxable and exempt services. The discussion focuses on the case for a policy response to the tax bias under an exemption system for financial intermediaries to insource supplies.

**SOME PRELIMINARY CONCEPTS AND ANALYTICAL CONSTRUCTS**

**Types of Financial Intermediation**

The term “intermediary,” in its broadest sense, includes any person who serves to bring other persons together. In a commercial context, intermediation is the service provided by a person in bringing together suppliers and consumers of particular goods or services. Without the assistance of the intermediary, suppliers and consumers would incur higher transaction costs in the effort to contract. Intermediaries thus complete markets in particular goods and services by reducing transaction costs otherwise associated with the matching of suppliers and consumers.

The function of financial intermediation can be divided into four distinct types:

1) intermediation between suppliers and users of financial capital (“deposit-taking intermediation”);
2) intermediation between persons with different exposures and/or tastes for risk (“risk intermediation”);
3) intermediation between persons with exposure to similar risks (“the insurance function”); and
4) intermediation between buyers and sellers of commodities, currencies, and/or debt and equity securities (“brokerage services”).

Deposit-taking intermediation involves the making of deposits and debt investments with an intermediary who provides the relevant funds to users of capital in the form of loans. Risk intermediation involves the acceptance by the intermediary of exposure to a specified risk that the transferor is unwilling to bear, and the transfer by the intermediary of that exposure to another person willing to accept it. The insurance function involves the pooling of funds received from persons who prefer to diversify their exposure to risk by spreading that exposure among a number of similarly situated persons or a number of widely different investments. The provision of brokerage services is a specialized form of intermediation, in which the intermediary stands between buyers and sellers of commodities, currencies, or debt and equity securities. In effect, the willingness of the intermediary to assume long and short positions in the specified assets on a continuing basis matches buyers and sellers of the specified asset in a “market-making function.” In addition to these intermediation services, firms may also provide advisory and administrative services, such as record-keeping and cash management functions and credit and investment evaluation.
Table 1 summarizes the cash flows associated with each of the four types of financial intermediation. At least in terms of basic principles, the application of a VAT to these cash flows has generally been assumed to be straightforward. The charge for the service provided by the intermediary should be subject to tax payable on the invoice price. A consumer of the service that is registered for VAT purposes should be able to claim an input credit for the VAT payable on the consumption of intermediation services. A consumer that is unregistered should not be able to claim an input credit. In this situation, the tax is borne by the consumer as a cost of taxable consumption. Under existing VAT systems, this simple prescription has broken down with respect to the taxation of implicit prices embedded in the cash flows associated with the various forms of financial intermediation. As noted above, it is standard country practice to exempt all or most of the financial services provided by financial intermediaries. Exempt status means that input credits for supplies consumed by financial intermediaries are denied, and registered businesses do not receive input tax credits in respect of their consumption of a broad range of financial intermediation services.

Assessment of the basis for this treatment begins with a review of the conceptual model from which a VAT is derived, namely, a cash flow PET, and in particular one of its important characteristics—the non-distortionary nature of the tax with respect to the decision to engage in current or deferred consumption. In the discussion below, some simple numerical examples will show that this quality is not compromised by the imposition of the tax on financial intermediation fees. Moreover, neutrality is maintained for all four types of intermediation. Insofar as neutrality is a desirable property of consumption taxes generally, there appears to be an argument for the application of such taxes to financial intermediation services, subject to any unique features that might justify deviation from this simple policy prescription.

**Neutrality of a Consumption Tax as Applied to Financial Intermediation Charges**

A cash flow PET applies to a base defined as personal income less savings. This base may also be thought of as “consumed income,” “expenditure,” or “cash flow.” A VAT also applies to this base, provided that the legal incidence of the tax is shifted fully forward in prices and borne ultimately by households as consumers.

Consumption can be taxed under a cash flow PET by using either the deduction method or the prepayment method. The deduction method requires individuals to include all cash receipts and pay tax on the difference between the amount of those receipts and the amount of all cash outlays attributable to qualified savings. The deduction for qualified savings ensures the full current expensing of capital assets other than consumer durables; for individuals, this current expensing is achieved by permitting a deduction for contributions to qualified savings accounts. Withdrawals from such accounts must be included in taxable income, and tax is paid on the amount of the withdrawal. Equivalent treatment occurs under a VAT
<table>
<thead>
<tr>
<th>Deposit-taking intermediation</th>
<th>Risk intermediation(^a)</th>
<th>Insurance function</th>
<th>Brokerage services</th>
</tr>
</thead>
<tbody>
<tr>
<td>The advance of a principal sum by the supplier of capital through the intermediary to the user of capital</td>
<td>The payment by the losing counterparty to a bet of the amount of that losing position to the intermediary</td>
<td>Payment by an insured of premiums (or savings in the case of portfolio diversification) to an intermediary for coverage in respect of a specified item</td>
<td>Payment by a purchaser to the intermediary of the purchase price for a specified item</td>
</tr>
<tr>
<td>The repayment of the principal sum by the user of capital through the intermediary to the supplier of capital</td>
<td>The payment by the intermediary of the amount of its losing bet to the winning counterparty</td>
<td>Payment by the intermediary to an insured of proceeds in respect of the occurrence of the specified risk (or the payoff on an interest in a diversified savings portfolio)</td>
<td>Receipt by a seller through the intermediary of the sale price for a specified item</td>
</tr>
<tr>
<td>The time-value return or interest charge that compensates the supplier of capital for the use of its funds by the user of capital</td>
<td>The fee charged by the intermediary for the provision of intermediation services</td>
<td>The fee charged by the intermediary for the provision of intermediation services</td>
<td>The fee charged by the intermediary for the provision of intermediation services</td>
</tr>
<tr>
<td>The premium charged by the intermediary to compensate for expected defaults on payment obligations of users of capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The fee charged by the intermediary for the provision of intermediation services</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) The first two cash flows are channelled through the intermediary, which does not bear the risk associated with either side of the bet. The only risk assumed by the intermediary is the credit risk associated with the chance that a losing party to a bet might default on its payment obligations, leaving the intermediary to make good on those obligations. A portion of the intermediation charge compensates for the assumption of this default risk. In those instances in which the intermediary does not transfer the risk associated with one of the sides to a bet, the related cash flows arising on the resolution of the bet accrue to the intermediary.
because the tax does not apply generally to cash flows that are saved by households (who are unregistered persons) but applies only to cash flows that are used to consume goods or services in a market transaction. The prepayment method realizes the same result as the deduction method in respect of the expected return on assets other than those held in a qualified savings plan. In effect, the cost of acquisition of all assets is non-deductible, and the related cash flow is taxed. However, all returns on the asset are exempt from taxation. Exemption is provided because the subsequent tax that would otherwise be payable under the deduction method on the cash flows realized on an asset is “prepaid” through the elimination of the deduction for the cost of acquisition of the asset.11

A cash flow PET avoids the double taxation of savings under an income tax and, accordingly, maintains the pre- and post-tax ratio between current and deferred consumption. In this way, neutrality is maintained in the choice between current and deferred consumption.

Example 1: Consumption Tax Treatment of Saving Without Financial Intermediation

Tax rate = 50 percent
Discount rate = 6 percent (compounded at T(1))
2-year loan made at T(0) and repaid at T(2)

Cash flows for holder:

| T(0) | loan principal | 100 |
| T(1) | interest | 6 |
| T(2) | interest | 6.36 |
|      | principal repayment | 100 |

Current and deferred consumption have the same present values for the holder in a no-tax world and under a PET. In the former environment, $112.36 worth of consumption that is deferred until T(2) has the same present value as $100 worth of current consumption at T(0) ($112.36 \times 0.5). The ratio of current to deferred consumption in a no-tax world in this example is 1:1.1236. Imposition of a PET does not alter this basic relationship. Under a PET, the after-tax value of current consumption is $50 ($100 \times 0.5), and the after-tax value of deferred consumption is $56.18 ($112.36 \times 0.5). These after-tax values are derived under either a deduction-method or a prepayment PET ($100 − $50 tax at T(0) + non-taxable return of $6.18 realized at T(2)). At a discount rate of 6 percent, the after-tax present value of $56.18 of consumption that is deferred until T(2) equals the $50 after-tax value of current consumption at T(0). Avoidance of any distortion of the choice between current and deferred consumption is revealed by the fact that the ratio of after-tax current to deferred consumption is 50:56.18 or 1:1.1236, which is the same as the ratio in a no-tax world.
The same relationship between the value of current and deferred consumption is maintained when (1) intermediation services are required to match the holder with a borrower, (2) the holder bears the cost of those services, and (3) those services are taxed under a PET.

**Example 2: Consumption Tax Treatment of Saving with an Explicit Charge for Intermediation Services**

2-year loan made at T(0) and repaid at T(2)

Tax rate = 50 percent

Discount rate = 6 percent (compounded at T(1))

Intermediation fee borne by the holder = $2.10 per annum payable at T(1) and T(2)

Cash flows for holder:

<table>
<thead>
<tr>
<th>T(0)</th>
<th>loan principal</th>
<th>(100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>T(1)</td>
<td>interest</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>intermediation fee</td>
<td>(2.10)</td>
</tr>
<tr>
<td>T(2)</td>
<td>interest</td>
<td>6.36</td>
</tr>
<tr>
<td></td>
<td>intermediation fee</td>
<td>(2.10)</td>
</tr>
<tr>
<td></td>
<td>principal repayment</td>
<td>100</td>
</tr>
</tbody>
</table>

In a no-tax world, the holder realizes net cash flows at T(1) and T(2) of $108.16 ($112.36 − $4.20 of intermediation fees). These cash flows have a present value at T(0) of $96.26 as compared with $100 of current consumption at T(0). However, the intermediation services are also considered to represent consumption; that is, the holder realizes an additional $4.20 of deferred consumption at T(1) and T(2). The present value of this deferred consumption is $3.74 ($4.20 discounted to T(0) at 6 percent). The total of this present value and the $96.26 present value of the $108.16 payoff at T(2) is $100, which equals the value of current consumption at T(0). The holder thereby enjoys deferred consumption of $112.36 at T(1) and T(2), which has a present value equal to the value of current consumption at T(0). The ratio of current to deferred consumption is 1:1.1236.

Imposition of a PET does not disturb this relationship between current and deferred consumption. The after-tax value of deferred consumption of $112.36 for the depositor is $56.18 ($108.16 payoff at T(2) + $4.20 of intermediation charges at T(1) and T(2)). This value can be compared with the $50 after-tax value of $100 of current consumption at T(0), which leaves a ratio of current to deferred consumption of 1:1.1236. This ratio is identical to that in a no-tax world, and these values and ratios hold whether a PET is implemented using the deduction method or the prepayment method.

The fundamental neutrality of a cash flow PET for the savings decision holds equally for consumption borrowing or the dissaving decision.
Example 3: Consumption Tax Treatment of Consumption Borrowing Without Financial Intermediation

2-year borrowing made at $T(0)$ and repaid at $T(2)$
Tax rate = 50 percent
Discount rate = 6 percent (compounded at $T(1)$)
2-year loan made at $T(0)$ and repaid at $T(2)$

Cash flows for consumer borrower:

<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$T(0)$</td>
<td>loan principal</td>
<td>100</td>
</tr>
<tr>
<td>$T(1)$</td>
<td>interest</td>
<td>(6)</td>
</tr>
<tr>
<td>$T(2)$</td>
<td>interest</td>
<td>(6.36)</td>
</tr>
<tr>
<td></td>
<td>principal repayment</td>
<td>(100)</td>
</tr>
</tbody>
</table>

In a no-tax world, current and deferred consumption have the same present value of $100 for the consumer borrower. Imposition of a PET does not alter this basic relationship. Under a deduction-method PET, the initial cash flow received on the consumer borrowing is taxed, and the after-tax value is $50.\textsuperscript{12} Subsequent payments of interest and principal are deducted so that the subsequent cash inflows used to service the loan payments are treated as savings, and the value of the borrower’s consumption is taxed once at $T(0)$.\textsuperscript{13} This result is identical to the taxation of $112.36$ of consumption deferred until $T(2)$, which leaves $56.18$ of after-tax value. The present value of this consumption at $T(0)$ is $50$, and the ratio of current to deferred consumption is $1:1.1236$, which is the same as that in a no-tax world. The same result holds under a prepayment PET in which the amount advanced under a consumer borrowing is ignored, along with subsequent payments of interest and principal.\textsuperscript{14} In that case, the subsequent cash flows used to service the payment obligations are taxed at $T(2)$ as deferred consumption ($112.36$), which leaves the same after-tax present value as that associated with $100$ of consumption taxed at $T(0)$. The ratio between current and deferred consumption is thus the same as that in a no-tax world.

The same relationship between the value of current and deferred consumption is maintained when (1) intermediation services are required to match a consumer borrower with a lender, (2) the borrower bears the cost of those services, and (3) those services are taxed under a PET.

Example 4: Consumption Tax Treatment of Consumption Borrowing with an Explicit Charge for Intermediation Services

2-year borrowing made at $T(0)$ and repaid at $T(2)$
Tax rate = 50 percent
Discount rate = 6 percent (compounded at $T(1)$)
Intermediation fee borne by the holder = $2.14$ per annum payable at $T(1)$ and $T(2)$

Cash flows for consumer borrower:

<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$T(0)$</td>
<td>loan principal</td>
<td>100</td>
</tr>
</tbody>
</table>
T(1)  interest  (6)
       intermediation fee  (2.14)
T(2)  interest  (6.36)
       intermediation fee  (2.14)
       principal repayment  (100)

In a no-tax world, the consumer borrower has total cash outflows of $116.64 at T(1) and T(2). The present value of these cash flows at T(0) is $103.81 ($116.64 discounted at 6 percent). This present value consists of $100 of current consumption represented by the cash flow received at T(0) plus the present value of the $4.28 charge for intermediation services payable at T(1) and T(2). The ratio between current and deferred consumption is 1:1.1236, and the consumer borrower is indifferent as between current consumption at T(0) of $103.81 and deferred consumption at T(2) of $116.64.

Imposition of a PET does not disturb this relationship between current and deferred consumption for the consumer borrower. On the assumption that the consumption of financial intermediation services is properly characterized as taxable consumption, the after-tax value of deferred consumption of $116.64 is $58.32. This value can be compared with the $51.91 after-tax value of current consumption of $103.81 at T(0), which leaves a ratio of current to deferred consumption of 1:1.1236. This ratio is identical to that in a no-tax world, and the result holds whether a PET is implemented using the deduction method or the prepayment method. Under the former, the receipt of $100 under the borrowing would be taxed, along with an additional cash flow of $3.81 dedicated to current consumption. The total tax of $51.91 would be paid at T(0), and subsequent payments of interest, principal, and service fees would be treated as savings. Under the prepayment method, receipt of the borrowing would be ignored, along with payments of interest, principal, and service fees. The result would be to tax $116.64 of deferred consumption at T(1) and T(2), so that tax payable would be $58.32.

The neutrality illustrated above in the context of deposit-taking intermediation (both saving and borrowing) holds for a borrowing used to acquire an investment asset (an “investment borrowing”), as well as the other types of financial intermediation. In a no-tax world where intermediation is not required, an investment borrowing involves both dissaving and savings elements that together generate an amount of consumption to the extent that the cash flows associated with the savings element exceed the cash flows associated with the dissaving element.\textsuperscript{15} Where intermediation services are required to match borrowers with lenders and other borrowers, taxation of the intermediation charges borne by investment borrowers does not disturb the decision to engage in current or deferred consumption, provided that the consumption of intermediation services is considered taxable consumption.\textsuperscript{16}

Neutrality also holds for the insurance function. In this context, the saving decision is transformed into the choice between consumption in a “good state”
In effect, the insurance function permits the transfer of consumption from the former to the latter state in the same way that deposit-taking intermediation permits the intertemporal transfer of consumption from period T(0) (current consumption) to period T(2) (deferred consumption). The neutrality of a cash flow PET as applied to these forms of financial intermediation can be illustrated by simply substituting in the first two examples above (1) the insurance premium for the amount of savings and (2) the insurance proceeds for the payoff at T(2).

With risk intermediation, the intermediation charge is a cost of transferring unwanted risk or accepting a specified risk. The cost of effecting the transfer is itself a form of consumption associated with the transfer. Taxing that consumption does not itself affect the pre- and post-tax values of consumption patterns associated with a non-transfer and a transfer. Much the same conclusion applies to brokerage fees for the purchase and sale of commodities.

Brokerage fees for the purchase and sale of investment instruments can be seen as equivalent to the intermediation fees charged by deposit-taking intermediaries in connection with saving and dissaving choices. Accordingly, the neutrality of a cash flow PET for deposit-taking intermediation, as described in the first two examples above, should hold for brokerage services also. Purchase of a debt or equity instrument is equivalent to deferred consumption in the form of the savings instruments described above. Sale of such an instrument is equivalent to the payoff at T(2) in respect of the deferred consumption. An investment borrowing may also be effected to purchase deferred consumption in the form of a debt or equity security, with the associated brokerage charges in respect of the purchase and the deposit-taking intermediation charges in respect of the borrowing.

ARGUMENTS FOR EXEMPTION OF FINANCIAL INTERMEDIATION CHARGES UNDER A VAT

The tax literature appears to present three possible arguments for the exemption of financial services from the application of VAT systems. One argument (referred to here as “rationale 1”) posits that the application of a VAT to charges for financial intermediation, whether explicit or implicit, results in the double taxation of a portion of the time-value return to saving, which distorts the decision between current and deferred consumption. Exemption of financial intermediation services is justified on the basis that such treatment avoids this result and maintains the neutrality of a consumption tax with respect to this decision. Another argument (referred to here as “rationale 2”) posits that the charge for financial intermediation is commonly not priced explicitly but is buried in the spread between long and short positions in the specified assets. Consequently, the charge is often not readily observable in a manner that permits imposition of a VAT. A related argument (referred to here as “rationale 3”) posits that, even if the margin or spread associated with financial intermediation can be measured or observed, it cannot be allocated accurately among the consumers of the intermediation services. This
allocation issue is critical under a VAT in determining the availability of input tax credits for those consumers who are registered persons. Absent an ability to accurately allocate the implicit price for financial intermediation services, exemption of those services from a VAT is considered preferable.

As described immediately below and developed further in a later section, the integrity and implications of these arguments depend critically on the characterization of the household consumption of financial intermediation services and the neutrality of consumption taxes as applied to such services.

Rationale 1: Challenge to the Neutrality of a Consumption Tax as Applied to Financial Intermediation Charges

The examples set out above demonstrate that the taxation of financial intermediation charges under a cash flow PET does not disturb the relative value of current and deferred consumption, provided that the consumption of the related services is characterized as taxable consumption. A much different conclusion regarding the neutrality of consumption taxes follows if consumption of financial intermediation services is characterized as non-taxable. Under this characterization, a PET maintains the relative values of current to deferred consumption, and is thereby non-distortionary, only if the charge for such services is not taxed. Take, for example, the depositor in example 2. If the provision of financial intermediation is characterized as non-taxable consumption, the depositor is faced with a choice between current consumption of $96.26 at T(0) and deferred consumption of $108.16 at T(2). In a no-tax world, the present value of the consumption between the two periods is equal, and the ratio between current and deferred consumption is 1:1.1236. These relative values can be maintained under a PET by expensing the future value of the intermediation charges against the future cash flow associated with the deposit, or by expensing the $3.74 present value of those future payments in full at T(0). Either treatment effectively exempts the value of the intermediation fee from taxation. The depositor would be considered to enjoy only $108.16 of deferred consumption at T(2) ($112.36 payoff – $4.20 of intermediation fees) and would pay tax of $54.08, leaving an after-tax value of $54.08. This value can be compared with an equivalent amount of $96.26 of pre-tax consumption at T(0), with an after-tax value of $48.13. The present value of current to deferred consumption at T(0) under this PET treatment remains equal, and the ratio between consumption at T(0) and T(2) remains at 1:1.1236. In effect, the imposition of a PET leaves the relative ratio and values of current to deferred consumption undisturbed as compared with those in a no-tax world.

If the consumption of financial intermediation services is characterized as non-taxable consumption, taxation of the associated charges imposes a wedge that, in fact, alters the relative value of current and deferred consumption as compared with that in a no-tax world. This result can be demonstrated by drawing again on example 2. Given the premise that the consumption of financial intermediation does not constitute taxable consumption, in a no-tax world the depositor...
in the example enjoys $108.16 of deferred consumption at T(2) as compared with $96.26 of consumption at T(0). By not expensing the charge for financial intermediation services, a PET taxes the charge by assuming that the taxpayer enjoys $112.36 of consumption at T(2). The tax on this consumption is $56.18, which leaves the taxpayer with $51.98 of deferred consumption ($108.16 payoff at T(2) − $56.18 of tax payable at T(2)). By comparison, the after-tax value of $96.26 of current consumption at T(0) is $48.13. The present value at T(0) of the after-tax value of the deferred consumption at T(2) is $46.26, and the ratio of current to deferred consumption is reduced to 1:1.08. Accordingly, the imposition of a PET introduces a tax bias in favour of current consumption, with possible effects on the price of deferred consumption.

The dominant position in the tax literature appears to accept the proposition that household consumption of financial intermediation services is properly characterized as taxable consumption. This characterization appears to be based on the proposition that the provision of intermediation services uses up real resources and creates value-added. Non-taxable characterization is limited to the consumption of financial intermediation services by registered businesses, which should be able to expense the associated charges, and perhaps the household consumption of insurance coverage. A contrary view, articulated most clearly and most recently by Grubert and Mackie, extends non-taxable characterization to the household consumption of financial intermediation services generally, on the basis that such consumption does not enter the consumer utility function. That is, the household consumption of financial intermediation services only smooths consumption of commodities that provide personal gratification for the consumer and thus enter the utility function. Accepting this non-taxable characterization as correct, Grubert and Mackie then formally prove that taxation of the household consumption of financial intermediation services distorts the choice between current and deferred consumption, as well as the choice to transfer consumption from good to bad states (the insurance function). The intuition underlying their formal proof is reflected in the examples presented earlier and specifically in the discussion of example 2 immediately above.

Non-taxable characterization of the household consumption of financial intermediation services is not a particularly radical notion, at least when considered in terms of the characterization of such consumption under the income tax. Indeed, the remarkable feature of the dominant view reflected in the consumption tax literature is its neglect of the income tax parallel and the ramifications of that parallel for an otherwise uncritical acceptance of the taxability of financial intermediation services under a VAT. Under the Haig-Simons or comprehensive income tax base, which is generally accepted as the benchmark for income tax systems, income is the sum of taxable consumption and the change in savings of a taxpayer occurring in the tax period. A benchmark PET differs only in its exclusion of the savings element from the consumption tax base. Both benchmarks require a concept of taxable consumption as a means of drawing a boundary between taxable and non-taxable forms of consumption. The concept under income tax
systems tends to reflect the notion of the consumer utility function by permitting the costs associated with the earning of investment income to be deducted as reductions in the amount of savings accumulated in a particular period. Where the charges take the form of explicit fees or commissions, deductibility is provided explicitly by the characterization of those charges as an income-earning expense that is either recognized currently or capitalized in the cost of an investment asset. Where the charges take the form of implicit fees embedded in higher interest charges, deductibility is provided for investment borrowings by recognizing the associated increase in the amount of deductible interest expense. For investment assets, effective deductibility is provided by limiting income recognition to the amount of interest income reduced by the embedded charge for financial intermediation. Similarly, implicit fees embedded in the bid-ask spreads of a financial intermediary are effectively recognized through recognition of a reduced amount of proceeds for an asset or through recognition of an increased cost base.

The significant differences between the characterization articulated by Grubert and Mackie and the standard characterization of the consumption of financial intermediation services under income tax systems concern charges related to consumer borrowing, service charges related to personal chequing and savings accounts, insurance intermediation, and retirement savings that are accorded cash flow PET treatment under the income tax. In each of these areas, Grubert and Mackie would characterize the explicit and implicit charges as non-taxable consumption. This characterization contrasts with the general non-deductibility status of these charges for income tax purposes, which implies a characterization of the consumption of the associated financial intermediation services as taxable consumption.

As reviewed below in a later section, the challenge to the neutrality of a PET as applied to financial intermediation charges has potentially sweeping implications. In particular, it provides a rationale for the non-taxation of financial intermediation services (and possibly even some non-financial services) that extends beyond the range of exempt financial services under most existing VAT systems.

Rationales 2 and 3: Identification and Measurement Problems

The more conventional rationale for the exemption of financial intermediation services under a VAT is a perceived inability to identify on a transactional basis those intermediation charges that are not explicit. In the absence of a method for accurately imputing financial margins to consumers of financial intermediation services, tax policy makers have tended to exempt a range of financial intermediation charges from VAT.

Charges for a range of financial intermediation services are commonly embedded in the margin or spread between long and short positions in particular assets and do not take the form of explicit prices. Deposit-taking intermediation provides the canonical case of the identification and measurement problem. In that context, it is common to find the charge for financial intermediation services embedded in the spread between interest charged to borrowers and interest paid to depositors.
For example, in example 2 above, the charge for financial intermediation borne by the depositor may take the form of a 2 percent reduction in the interest rate paid on the amount on deposit with the financial intermediary. Similarly, in example 4, the charge for financial intermediation services borne by the borrower may take the form of a 2 percent increase in the interest rate on the amount of the loan made by the financial intermediary.

The embedding of otherwise explicit charges in the spread between long and short positions assumed by a financial intermediary is not restricted, however, to deposit-taking intermediation. This kind of implicit pricing can be effected with risk intermediation (the difference in price of an on-market bet and the prices entered into by the intermediary to assume offsetting long and short positions with different counterparties), the insurance function (the difference between the amount of premium payments received and all amounts paid in satisfaction of claims—"the pure insurance coverage"), and brokerage services (the difference in purchase and sale prices offered to consumers of the intermediation service). Life insurance differs from property and casualty insurance only in the long-term nature of the risks assumed by the intermediary. The nature of these risks means that a portion of the premium payments represents the cost of pure insurance coverage, while another portion represents savings for the insured. To the extent that a savings element exists, the life insurer acts as a deposit-taking intermediary, as well as providing an insurance function. The spread between what the life insurer credits to the insured’s savings account ("the policy reserve") and what the insurer earns with the funds represents an implicit price for deposit-taking intermediation. The cost of pure insurance coverage less the amount of claims paid is the implicit price for providing the life insurance function.

It is important not to misstate the nature of the identification and measurement problem associated with the implicit pricing of financial intermediation services. The problem is not one of identifying and measuring the implicit price reflected in the margin of a particular financial intermediary. In fact, the margin can be identified and measured relatively easily for any particular intermediary, using a cash flow base written as:

\[
[\text{revenues from sales of goods and services} + \text{dividends received, interest income, and capital gains}] - [\text{current non-wage expenses} + \text{capital expenditures} + \text{purchases of financial assets} + \text{dividends paid, interest expenses, and capital losses}].
\]

For a financial intermediary, this subtraction approach to the measurement of its value-added is equivalent to an addition approach, whereby value-added is computed as the sum of wages and economic profits.

Identification and measurement of the aggregate implicit charge for financial intermediation services is, however, an indirect process, at least from the perspective of the particular consumers of those services. For each consumer, the amount of that charge will differ, and a multistage VAT requires the allocation of some portion of the aggregate charge of the intermediary to particular consumers on a
transactional basis. The identification and measurement problem under a VAT is therefore the more specific problem associated with the need to impute the amount of the implicit price to consumers of financial intermediation services.\textsuperscript{34} Imputation is required if household consumers of financial intermediation charges are to be taxed on the value of this consumption.\textsuperscript{35} With business consumers, imputation is required to the extent that it is a necessary condition for the expensing of the charge and the related input costs of the financial intermediary. Expensing results in the effective offset of the imputed taxable amount, which is shifted forward in the price of the services or goods provided by the business consumer of the financial intermediation services.

Any attempt to impute the implicit price for intermediation embedded in financial margins is bound to be inaccurate, since the margin for any particular transaction may be difficult to observe. More important, even if the margin is observable in respect of a particular transaction, it can be difficult to observe the allocation of the relevant amount between particular consumers of the intermediation service. This problem of observation and allocation is attributable to various factors that are common to the establishment of financial margins.\textsuperscript{36} For example, margins are extremely fluid; in fact, they change hourly. This factor makes it impossible in many instances to calculate the margin in advance at the time of a transaction. There also may be cross-subsidization of margins associated with the provision of other financial intermediation services. Furthermore, the price implicit in the margin may be bundled with the price for administrative services provided by the financial intermediary. As with charges for financial intermediation, the implicit pricing of these other services must similarly be observed and imputed to consumers for consumption tax purposes. The bundling is problematic to the extent that the consumption of financial intermediation services and the consumption of administrative services are taxed differently—that is, if one category is accorded exempt treatment because of a failure to impute a price, while another category is treated as taxable on the basis of an imputed price.

\textbf{ALTERNATIVES TO EXEMPT TREATMENT}

\textbf{Zero-Rating and Cash Flow Taxation as Responses to the Arguments for Exemption}

If household consumption of financial intermediation services is properly considered non-taxable consumption, application of an exemption system to such services appears to be entirely inappropriate. Under such a system, financial intermediaries are denied credits for VAT paid on the cost of business inputs, and they may attempt to recover the tax by charging higher prices for their services. In effect, household consumption of these services is taxed indirectly. If, on the other hand, household consumption of financial intermediation services is properly considered taxable consumption, exemption appears to be entirely appropriate to the extent that technical identification and measurement problems associated with implicit prices prevent the implementation of full taxation.
As alternatives to the exempt treatment of financial intermediation services, zero-rating and cash flow taxation are the two principal approaches\(^3\) broadly consistent with an invoice/credit VAT in the sense that they explicitly address the need to measure and allocate prices among consumers on a transactional basis. Another alternative—the measurement of financial margins on an aggregate basis at the level of particular financial intermediaries, using a subtraction or addition method—is generally viewed as incompatible with an invoice/credit VAT, in that it does not provide for transactional price allocation.\(^3\) Instead, this approach relies on the application of a formula to allocate tax payable for input credit purposes among household and business consumers of the associated intermediation services.\(^3\) Although any attempt to measure margins and allocate them among consumers involves a rough approximation of actual margins measured on a transactional basis, the kind of formulary apportionment required as a supplement to the subtraction or addition method may be particularly vulnerable to attempts to allocate margins in a manner that maximizes input tax credits.\(^3\) Moreover, formulary apportionment is also required to determine the portion of aggregate margins that is properly allocable to non-resident consumers and thus eligible for a zero rate of tax with related input tax credits for financial intermediaries.

The zero-rating approach rejects the need to engage in the process of measuring and allocating financial margins among consumers, as well as the underlying assumption that problems with identification and measurement justify exempt treatment. Zero-rating is the logical outcome of a characterization of the household consumption of financial intermediation services as non-taxable. Exempt treatment is rejected because of its failure to fully relieve VAT payable on such consumption. As noted above, the failure arises to the extent that non-refundable VAT on business inputs consumed by financial intermediaries is shifted forward in the form of higher prices charged to households for the consumption of financial intermediation services. With taxation of those services at a zero rate, financial intermediaries are able to claim tax credits for VAT on associated inputs. The combination of zero-rating of services and the availability of input tax credits for financial intermediaries eliminates tax distortion for households of the choice between current and deferred consumption. Zero-rating also eliminates any competitive advantage that offshore providers of financial intermediation services may enjoy as a result of providing services to households and registered business consumers free of VAT.

In general, the implementation and design details of the zero-rating alternative are relatively simple and require nothing more than the extension of the current standard treatment of financial intermediation services provided by resident taxpayers to non-resident consumers.\(^3\) Although the focus of zero-rating is the appropriate treatment of the household consumption of financial intermediation services, the same non-taxable consumption characterization can be applied to business consumption. Zero-rating can thus be extended to consumption by registered businesses as an alternative to taxation of financial intermediation services with an offsetting input tax credit for such businesses.
In contrast to zero-rating, cash flow taxation is based on the assumption that the household consumption of financial intermediation services is properly regarded as taxable consumption. As developed most completely by Satya Poddar and Morley English, both independently and in work for the European Commission,\textsuperscript{42} cash flow taxation is designed to measure financial margins consistent with a subtraction VAT, but in a way that permits the allocation of the aggregate margin and associated tax to consumers on a transactional basis.\textsuperscript{43} In effect, this alternative to exempt treatment attempts to overcome the identification and measurement problems that are perceived to justify such treatment. It is argued that the exemption of services results in three kinds of distortions,\textsuperscript{44} which have been experienced to varying degrees in several countries but, to date, have not been the subject of any systematic study in the literature.\textsuperscript{45} Indeed, the overall significance and direction of these distortions remain unclear.\textsuperscript{46}

The first distortion involves demand effects on the household consumption of financial intermediation charges. It is seen to follow from the undertaxation of such consumption as compared with the consumption of other goods and services. Undertaxation is attributable to the input taxation of financial intermediation services rather than the full taxation of the value of such services consumed by households.\textsuperscript{47} Depending on the price elasticity of consumer demand, undertaxation may result in an inefficient allocation of household resources to the consumption of tax-preferred financial intermediation services.

The second distortion involves both demand and supply effects on the business consumption of financial intermediation services. It is seen to follow from the overtaxation of the consumption of financial intermediation services by registered businesses as compared with the consumption of other business inputs. The most significant source of overtaxation is the double tax on business inputs used by financial intermediaries. Double taxation occurs because of the input taxation of financial intermediation services rather than the full taxation of the value of such services with an offsetting input tax credit for consumers who are identified as registered businesses for VAT purposes. To the extent that the cost of business inputs used by financial intermediaries is shifted forward in prices charged to business customers and on to final consumers of non-financial goods and services, the inputs bear tax once on consumption by the financial intermediaries and again on consumption by the businesses that use financial intermediation services. Overtaxation also occurs because of tax cascading, since the unrecoverable VAT on business inputs used by financial intermediaries is itself subject to tax when passed on in the form of higher prices to the final consumer of goods and services of a non-financial business using financial intermediation services. The over-taxation that results from the imposition of this tax on a tax, as well as the double taxation of business inputs, can lead to competitive distortions and a misallocation of resources in the sense that there may be less consumption of goods and services that involve higher amounts of consumption of financial intermediation services.\textsuperscript{48}

To the extent that the embedded tax on business inputs cannot be shifted forward to consumers in the form of higher prices or backward to suppliers in the form of
lower prices for their goods or services, the tax may lower the after-tax returns to capital in the financial sector and result in underinvestment in that sector. Whatever the extent of shifting of the embedded tax, offshore suppliers of financial intermediation services enjoy a competitive advantage over domestic suppliers to the extent that they can deliver services to business consumers free of VAT. In response to this tax bias, domestic financial intermediaries may move the provision of certain services to domestic customers offshore, with revenue loss and possible inefficiencies associated with the different organizational structure.

The third distortion involves supply effects for financial intermediaries. It is seen to follow from the incentive that financial intermediaries have under an exemption system to avoid non-recoverable VAT on outsourced services by substituting insourced services. This substitution effect (commonly referred to as “vertical integration”) may impose efficiency costs to the extent that the outsourcing of services is the preferred pattern of production ignoring tax considerations. A misallocation of resources also arises to the extent that certain segments of the financial sector are unable to engage in substitution, and there is a resulting shift in resources to those segments that can readily substitute one form of organization for another. Where there is no mechanism requiring financial intermediaries to self-assess VAT on imported services, there is also an incentive to substitute offshore supplies of services free of VAT for domestic supplies subject to the tax.

Cash flow taxation of financial margins addresses the first distortion by taxing in full the household consumption of financial intermediation. The second and third distortions are addressed by taxing the consumption of financial intermediation services by registered businesses and providing an offsetting input tax credit. Taxation of financial margins is realized through the application of the basic principles of a cash flow tax to the cash inflows and outflows associated with financial transactions. Conceptually, this limited application of cash flow taxation is tantamount to a comprehensive application of the financial transactions base (commonly referred to as “the F-base”) of a cash flow consumption tax to businesses. The principal difference from the cash flow base described in the literature is the application of the F-base alongside a multistage VAT to non-financial goods and services (commonly referred to as “the R-base”). In effect, financial margins are measured over the term of a financial transaction using the same subtraction method, noted above, but on a cash flow basis that alters the subtraction method to make it compatible with an invoice/credit VAT applied on a transactional basis. The literature developing cash flow taxation for financial transactions identifies three different forms of this approach: the pure cash flow method, the tax calculation account (TCA) method, and the truncated cash flow method with TCA.

The pure cash flow method treats all cash inflows from financial transactions as taxable sales subject to VAT. All cash outflows from financial transactions are treated as taxed purchases eligible for input tax credits. This treatment applies equally to the cash flows realized by financial intermediaries and non-financial registered businesses that purchase financial intermediation services. As Poddar
and English illustrate in the context of simple deposit-taking intermediation,\textsuperscript{56} the pure cash flow method measures and correctly taxes the implicit fees for financial intermediation embedded in financial margins, which are identified in terms of the net cash inflows or outflows associated with a financial transaction. It also allocates the margin between borrowers and lenders. In effect, the taxable position of the financial intermediary is the mirror image of the position of the particular consumer of intermediation services. Accordingly, the pure cash flow method can be applied on a transactional basis consistent with an invoice/credit VAT as a means of measuring financial margins, with registered businesses receiving appropriate input credits. Because households do not receive such credits, they effectively pay VAT on financial margins, assuming that the tax paid by the financial intermediary is shifted forward in the price paid by households for the intermediation services.\textsuperscript{57}

Poddar and English point out,\textsuperscript{58} however, that the application of pure cash flow taxation to financial transactions suffers from three significant problems that undermine its effectiveness as an alternative to exempt treatment. First, the requirement that registered business borrowers pay tax on cash inflows would create additional borrowing requirements and cash flow problems attributable to the additional tax payment. Recovery of the tax on repayment of the borrowing would provide input tax credits as an offset on the initial cash inflow but would not alleviate the cash flow problem for non-financial businesses.\textsuperscript{59} Second, registered businesses would be required to carry out all of the necessary calculations in order to obtain input tax credits for cash outflows. This requirement would impose a compliance burden that would be particularly onerous for small and medium-sized registered businesses. Third, the correct amount of tax in respect of the financial margin associated with a financial transaction would be charged only where all capital inflows and outflows were subject to tax at the same rate. This condition would create obvious transitional problems on the initial application of pure cash flow taxation and on subsequent changes in the VAT rate. In effect, cash flows arising before the introduction of the tax or on a subsequent change in rate would not have been subjected to tax at a rate equal to that imposed on an offsetting cash flow arising afterward. The transitional problem could be addressed by subjecting the excess of pre-enactment or pre-change cash inflows over outflows of registered businesses to an additional tax equal to the amount of the excess multiplied by the increase in the tax rate. The associated cash flow problems, however, would make it problematic to accomplish this adjustment in practice.

The other two cash flow taxation methods attempt to maintain the basic principles of the application of pure cash flow taxation to financial transactions while addressing the perceived problems associated with that method. The TCA method addresses both the cash flow problem for registered non-financial businesses and the transitional problems associated with the introduction of cash flow taxation or a change in tax rates.\textsuperscript{60} To deal with the first problem, a tax suspense account (that is, a TCA) is created as a means of effectively taxing capital cash flows without requiring the payment of tax on inflows or the payment of input
tax credits on outflows. As described by Poddar and English, this modified approach operates as follows:

- Tax payable on cash inflows received by financial intermediaries and registered businesses in connection with a financial transaction is debited to the TCA.
- Tax credits on cash outflows paid by financial intermediaries and registered businesses in connection with a financial transaction are credited to the TCA.
- The balance in the TCA is subject to an interest deferral charge (referred to as an “indexing adjustment”).
- The balance in the TCA that is payable or refundable periodically is determined after notionally closing out the account by subtracting an amount equal to the value of the relevant financial instrument at the end of the period multiplied by the tax rate.

As Poddar and English illustrate, again in the context of simple deposit-taking intermediation, the TCA method produces the same result as pure cash flow taxation. The principal difference is the timing of the tax payments, which are equal in present value terms because of the deferral charge associated with debits and credits to the TCA.

The TCA method addresses transitional problems associated with the application of pure cash flow taxation by requiring only an appropriate gross-up of existing TCAs or TCAs created on the introduction of cash flow taxation. The gross-up would be made to ensure that debit or credit balances created by cash flows arising before the rate change or the introduction of the system are accounted for at the same tax rate as subsequent cash flows that reverse the relevant transaction. The use of the TCA and interest deferral charges as a substitute for taxation of capital cash flows means that no cash flow problems would be created by the need to charge additional tax on net financial cash flows of financial intermediaries and registered businesses existing on the effective date of a rate change or on the introduction of cash flow taxation.

Under the TCA method, financial intermediaries and registered businesses would maintain mirror TCAs. In present value terms, registered businesses would receive appropriate input credits on financial margins, while households would be taxed on their consumption of financial intermediation services, assuming again that the tax is shifted fully forward in prices for such services. The truncated cash flow method with TCA is intended to capture the benefits of the TCA and, in addition, to address the compliance burden otherwise associated with the requirement of registered non-financial businesses to maintain TCAs in order to claim input credits for tax paid on financial margins. This goal is realized by shifting the tax accounting burden to financial intermediaries, which would be required to maintain TCAs in respect of their tax positions associated with a particular financial transaction, as well as the mirror image TCAs for registered non-financial businesses that are counterparties to the same transaction. Tax payable on positive
margins would be remitted by the financial intermediary and claimed as an input tax credit by a registered business on the other side of the particular transaction. VAT calculated under the TCA on negative margins would be refunded to the financial intermediary and would be required to be remitted as tax payable by a registered business on the other side of the transaction. The financial intermediary would be required to provide registered businesses with periodic tax invoices, which would be the basis for input tax credit claims in respect of positive margins and tax payable in respect of negative margins.

A report prepared for the European Commission describes in detail the basic methodologies for the application of cash flow taxation to financial margins associated with each of deposit-taking intermediation, risk intermediation, the insurance function, and brokerage services. The report also includes extensive numerical examples intended to illustrate the application of these basic cash flow taxation methodologies. No attempt is made here to reproduce those examples or to describe the application of the basic methodologies. For ease of reference, an appendix to this article summarizes the methodologies, including some of the specialized design details described in the report.

The Case for the Status Quo Based on Deficiencies in the Alternatives

It is conceded here that exemption is clearly not a first-best response to the argument that the application of a consumption tax to financial intermediation charges entails intertemporal distortion of consumption decisions (rationale 1 described above). Furthermore, it is conceded that proponents of cash flow taxation have demonstrated that this method can be suitably modified to provide effective techniques that overcome perceived difficulties in identifying, measuring, and taxing financial margins in a manner that is consistent with an invoice/credit VAT (reasons 2 and 3 described above). As a result, the case for maintenance of exempt treatment is a negative one that depends on perceived difficulties and deficiencies associated with the alternatives of zero-rating and cash flow taxation. These difficulties and deficiencies are reviewed below.

It is argued that, from a purely theoretical perspective, as between the two alternatives a more compelling case can be made for zero-rating. However, there are certain practical policy constraints that preclude the introduction of zero-rating for a broad range of financial intermediation services. Moreover, even as a matter of principle, it is not clear that the whole range of financial intermediation charges should be zero-rated. In fact, a recent challenge in the literature to the efficiency-based argument for zero-rating supports a taxonomy that is broadly consistent with the status quo under exemption systems. A comprehensive application of cash flow taxation is similarly rejected because of a questionable premise and the severe compliance and administrative burden that is attributable, at least in part, to required compromises in measurement principles.
Zero-Rating
The case for comprehensive zero-rating of the consumption of financial interme-
diation services suffers from two principal deficiencies. First, as articulated by
Grubert and Mackie,\textsuperscript{68} the efficiency-based challenge to taxation of the household
consumption of financial intermediation services, which provides the conceptual
basis for zero-rating, is arguably overstated in terms of the range of services that
are properly considered non-taxable. Closer consideration of the characterization
issue suggests that some services can be considered taxable without any efficiency
consequences. Second, revenue implications and political perceptions severely
undermine the feasibility of zero-rating for more than a limited range of services.
These practical considerations constrain the ability of tax policy makers to choose
the alternative of zero-rating and, in fact, leave exempt treatment as a second-
best approach for a range of financial intermediation services.

Questions About the Robustness of the Premise
An efficiency-based challenge to the consumption taxation of financial interme-
diation services is compelling only to the extent of the integrity of a non-taxable
characterization of household consumption. In this respect, a concept of the con-
sumer utility function that is limited to certain consumption items, such as “food,
clothing, housing, recreation and entertainment” is apparently accepted as norma-
tively prescriptive.\textsuperscript{69} Under this prescription, all household consumption of finan-
cial intermediation services is considered non-taxable. It does not matter whether
the price for such services is explicit or implicit. The rationale for non-taxation
applies equally to a price in either form which represents a cost of investment, a
cost of borrowing, or a cost of smoothing consumption from a good to a bad
state. On the view that these costs do not enter the consumer utility function and
therefore are not taxable consumption, any attempt to tax them is seen to distort
the choice between current and deferred consumption, as well as the choice to
transfer consumption from a good to a bad state.

This characterization leaves a boundary between those charges (whether impli-
cit or explicit) that are properly considered a cost of transferring consumption
intertemporally (non-taxable consumption) and those that are not (taxable con-
sumption). In general, this boundary does not require difficult distinctions to be
drawn among types of financial intermediation. In effect, the rationale may apply
equally to the four types of financial intermediation identified earlier. More par-
ticularly, Grubert and Mackie articulate a boundary between, on the one hand,
intermediation charges for the intertemporal transfer of consumption and, on the
other hand, intermediation charges for the spatial transfer of consumption. They
argue that non-taxable status should be limited to the former category, and that
such status should extend to the financial intermediation charge associated with
the insurance function. They distinguish non-financial intermediation services,
such as transportation services requiring payment of a fee to transport consump-
tion goods interspatially, from financial intermediation services on the basis that
“there is no natural transportation counterpart to the savings good.” The difference apparently lies in the absence of a sale at the new location for proceeds that can be consumed. Fees paid for interspatial transfers of consumption are considered to be part of the price for the relevant consumption goods and should be taxed to ensure neutrality in the choice between current and deferred consumption. As argued by Grubert and Mackie, the main definitional issues for financial intermediaries concern the appropriate classification of administrative services, such as bookkeeping and safe deposit services.

Acceptance of non-taxable status for the household consumption of financial intermediation services and the resulting zero-rating requires agreement with two assumptions that are, in fact, far from unassailable. The first assumption is that the distortionary effect of a consumption tax is significant enough to warrant non-taxation. Essentially, the fact that consumption of financial intermediation services does not enter the consumer utility function is accepted as a basis for non-taxation without any further inquiry into the impact of taxation on the savings decision at the margin. At least as an initial proposition, it is not at all clear that the effect, if any, is significant, particularly when viewed against the more substantial tax bias imposed by the double taxation of savings under the income tax. The issue is complicated further by the offset to this bias provided by the consumption tax treatment of preferred savings, such as retirement savings, in many countries. The efficiency-based challenge to the taxation of household consumption of financial intermediation services under a consumption tax ignores these kinds of relative effects. It also ignores other possible offsetting effects, such as a tax bias against borrowing for current consumption, which arises equally because of the taxation of financial intermediation charges associated with such borrowing.

The efficiency-based challenge to the consumption taxation of financial intermediation services also assumes that perceived distortions between current and deferred consumption arise equally across types of financial intermediation. However, among proponents of the efficiency-based rationale for the non-taxable status of financial intermediation charges, there is considerable disagreement over the boundary between taxable and non-taxable intermediation. Whalley, for example, argues that the case for non-taxable status applies equally to financial intermediation charges and transportation charges. He also appears to imply that the rationale for non-taxable status does not apply to financial intermediation charges associated with the insurance function, and he even suggests that an efficiency-based argument does not justify zero-rating of deposit-taking intermediation services. In effect, he seems to suggest that some taxation of these latter services may be necessary as a means to reduce their overconsumption.

More recently, Jack has articulated an efficiency-based analysis that challenges both of the assumptions underlying the analysis of Grubert and Mackie and, in particular, its broad policy implications. Jack’s analysis focuses on the efficiency properties associated with the form of the prices charged for the household consumption of financial intermediation services. He suggests that this different focus
yields a range of non-taxable household consumption of financial intermediation services that is more precise than that suggested by Grubert and Mackie. Consistent with their analysis, Jack accepts two basic premises. The first premise posits that the concept of taxable consumption should be defined in terms of those goods and services that enter the utility function of an individual directly in the sense that they “effectively provide direct benefits to individuals.” The second premise posits that “the underlying feature of a consumption tax” is the desire to avoid distorting the relative prices of different consumption goods. With financial intermediation charges, this desire translates into the avoidance of distortions of the relative prices of consumption across time—that is, the relative prices of “goods consumed in different states of the world.”

Rather than focusing on the efficiency properties of the consumption taxation of types of financial intermediation, Jack describes three general categories of financial intermediation charges and their associated consumption tax treatment, which are said to follow from an efficiency-based analysis. One category consists of spread-based charges that are “proportional to the nominal value of the underlying financial transfer.” This category includes

- charges for deposit-taking intermediation in the form of interest-rate spreads;
- charges for the insurance function in the form of the spread between the amount of premiums received plus investment income less claims paid and interest credited to policy holders; and
- charges for brokerage services and financial risk intermediation in the form of the spread between bid and ask prices.

A second category consists of charges that are fixed in amount and cover administrative costs. These charges are a “form of non-linear pricing” that does not vary with the nominal amount of a transaction. Examples include fixed charges for opening a bank account balance or for the use of a credit card. A third category consists of “quasi-fixed fees” that are “proportional to the real value of the underlying transfer.” In the context of deposit-taking intermediation, Jack cites as examples of these kinds of fees the charges that are imposed for the use of automated teller machines and automatic debit cards. He also cites as an example the fees that are imposed for the use of credit cards where the amount is based on the number of transactions and payment of the balance owing before the accrual of interest charges. The term “quasi-fixed” is used to denote the fact that the fee is proportional to the use of the relevant services by a consumer in the form of the number of transactions undertaken.

Using numerical examples in the context of simple models of deposit-taking intermediation and the insurance function, Jack formally proves that the appropriate consumption tax treatment of financial intermediation is derived from his taxonomy of financial charges. He concludes that an efficiency-based analysis supports the proposition that only spread-based charges should be non-taxable under a consumption tax that attempts to avoid intertemporal distortion of the
relative price of consumption goods. Taxation of these forms of charges is considered distorting because the amount of the finance charge automatically increases proportionately in response to a tax on final consumption. In contrast, explicit fees can be subjected to consumption taxation with little distortion of the relative price of the consumption of goods at different times or in different states of the world. This proposition apparently follows from the non-linear nature of the pricing provided by explicit fees; the tax on such fees is effectively a lump-sum levy with no effect on prices at the margin, which are the prices that determine efficiency properties. Jack concedes only that consumption taxation of explicit fees for financial intermediation services could induce a behavioural change for households that save small amounts. In effect, the greater impact of the lump-sum levy on the marginal decisions of this category of savers might induce a substitution of current for deferred consumption in the face of taxation of the explicit intermediation fee associated with the latter.

Finally, with respect to financial charges in the third category, Jack proposes that quasi-fixed fees should be taxed under a consumption tax in order to avoid intertemporal distortion of the relative price of consumption goods. Reasoning from the fact that the transaction-based fee structure for financial intermediation is effectively proportional to the “quantity of consumption goods purchased in a period,” Jack characterizes the relevant services as those which do not “facilitate inter-temporal substitution of consumption but which reduce the cost of current consumption.” Accordingly, the fees must be taxed as a cost of current consumption, much like the cost of transporting consumption goods from one location to another.

Practical Policy Constraints

Even accepting that there is a defensible range of household consumption of financial intermediation that is properly considered non-taxable, the zero-rating outcome that follows from an efficiency-based rationale is severely constrained by certain practical considerations. Although, in principle, these considerations should not be determinative of the choice between zero-rating and exemption of financial intermediation charges, they do become significant when the scope of the application of zero-rating is contentious. Indeed, these practical considerations can become determinative when the range of household consumption of financial intermediation services that should properly be considered non-taxable is problematic.

The most obvious practical policy constraint for a move to a general system of zero-rating is the revenue loss from elimination of the VAT embedded in the price of business inputs consumed by financial intermediaries providing exempt services. As noted above, this loss arises from the provision of input tax credits to financial intermediaries with respect to the delivery of zero-rated services. The extent of this revenue loss depends on the scope of zero-rating—that is, the range of financial intermediation charges determined to be non-taxable under an efficiency-based analysis. Clearly, the adoption of zero-rated status for all types
of financial intermediation and all types of associated charges would result in the most extensive potential revenue loss. That loss would have to be made up through other taxes, and efficiency costs could result which would offset any efficiency gains from the replacement of the existing exemption with comprehensive zero-rating. Moreover, the expectation of efficiency gains is itself of little weight in the absence of substantiation through systematic study. A more limited extension of zero-rated status would involve smaller revenue loss (and smaller potential efficiency gains) and would reduce both the need to make up the loss with other taxes and the associated efficiency losses.

Another practical policy constraint, which cannot be quantified but is no less significant than potential revenue loss, is the prospect that a comprehensive zero-rating system would place financial intermediaries in a perpetually negative tax position. In effect, financial intermediaries would receive VAT refunds on business inputs and would not be liable for VAT payable on taxable sales. The political obstacles raised by this result are fairly obvious, given the negative public perception of the financial sector in most countries. The adoption of exempt treatment encountered similar political difficulties, although the consequences of the exemption have not been as advantageous to financial intermediaries as those that would follow from zero-rating. A further consideration is that public attention would be focused on the proposed change to zero-rating as yet another advantage conferred on a sector already perceived as receiving preferential treatment. It would have been much easier, politically, to implement zero-rating at the time the VAT system itself was introduced.

In addition to revenue loss and problems of public perception, the zero-rating approach suffers from a number of technical difficulties. Although these difficulties are very limited by comparison with those associated with an exemption system or with cash flow taxation, it is questionable whether it is worthwhile to try to resolve them given the doubts raised earlier about the underlying assumptions of this approach and uncertainty about the actual efficiency gains that might be realized from its implementation. Some critics have questioned whether zero-rating can, in fact, achieve its basic goal—that is, non-taxation of household consumption of financial intermediation services. Even under a comprehensive zero-rating system applied to financial intermediation services, there will be some indirect taxation of household consumption of those services, to the extent that prices for non-financial goods and services purchased by households include financial intermediation charges. Taxation of the household consumption of financial intermediation services can be eliminated completely only if the appropriate portion of the retail price of non-financial goods and services attributable to financial intermediation inputs can be determined and zero-rated. The severe compliance burden associated with this requirement means that a measure of indirect taxation is inevitable.

Any move away from exempt treatment to zero-rating of financial intermediation services also would involve difficult transitional issues. Existing stock of business inputs of financial intermediaries that have borne non-refundable VAT
would have to be accounted for appropriately under a comprehensive system of zero-rating. To the extent that refunds are provided for notional VAT on the value of the existing stock of business inputs, windfall gains would arise if financial intermediation charges for a transaction implemented before the introduction of zero-rated status were determined on an effective VAT-inclusive basis. As in the case of the limited technical design difficulties noted immediately above, it may not be worthwhile to seek solutions to these and other transitional issues if a comprehensive system of zero-rating of financial intermediation services is not the correct policy response as a matter of basic principle.

**Cash Flow Taxation**

The truncated cash flow method with TCA is clearly the preferred form of cash flow taxation in the sense that it overcomes the design problems that make the application of pure cash flow taxation or the TCA method infeasible. After some 10 years of development, this particular form of cash flow taxation represents an internally logical and coherent approach to the taxation, under an invoice/credit VAT, of implicit fees embedded in financial margins. Furthermore, as noted already, the TCA provides a convenient means to address transitional issues that arise on introduction of the system or subsequently on a change in the VAT rate. A move to taxing margins also does not involve the same problem of revenue loss that arises with a move to zero-rating.

However, limitation of the application of cash flow taxation to financial intermediaries, in combination with the use of the TCA, imposes a substantial compliance burden. This compliance burden has been identified in much of the literature as the principal weakness in the case for taxing financial margins. Arguably, the associated costs can be justified only if the premises underlying the approach are sound, and in fact they are not. Indeed, it seems perverse to impose a relatively complex system on taxpayers when the premise underlying that system is contentious. These two shortcomings are discussed below.

**Complexity and Compliance Costs**

Complexity and the compliance burden associated with the adoption of the truncated cash flow method with TCA are attributable to factors that arise at two distinct levels. At one level is the very general fact that financial intermediaries would be required to adopt and maintain TCAs in an effort to measure and tax financial margins in respect of specific transactions or categories of transactions entered into with their customers. Although margins are measured in the aggregate for financial management and accounting purposes, as well as income tax purposes, the accounting required for VAT purposes would be substantially independent of the accounting in these other areas. As a result, the compliance burden and associated costs would be solely a function of the adoption of a truncated cash flow method with TCA. Those costs include both the one-time costs attributable to the establishment of the required accounting systems on the adoption of
of this cash flow method and the continuing costs of maintaining the systems after implementation. To some extent, these latter costs would be offset by the savings derived from the elimination of the need to allocate business inputs between exempt and taxable supplies for input credit purposes under an exemption system for a broad range of financial intermediation services. The extent of any offset is nonetheless difficult to quantify, and any savings would be lost entirely if certain design features, noted below, must be adopted under the truncated cash flow method with TCA.

At a more specific level, compliance costs are attributable to certain design features that are required for the efficient implementation of the truncated cash flow method with TCA. These features would create difficult boundaries with associated distortions, as well as a measure of complexity that would be in addition to the complexity attributable to the implementation of accounting systems for the application of the basic methodology. In this respect, four features are especially notable.

First, the category of taxpayers that are required to maintain TCAs must be defined. One approach to this definitional issue focuses on the nature of the taxpayer as a “financial institution.” Poddar and English propose to include in this category

- banks, credit unions, and trust, loan, and acceptance companies;
- credit card companies;
- investment dealers;
- life insurers and property and casualty insurers; and
- persons whose principal business is lending money, accepting deposits, or purchasing or selling debt securities.

Pension funds, investment funds, and financial holding corporations that provide services primarily to affiliated members of the same corporate group would be specifically excluded from the category of financial institutions. The first two organizational forms would be excluded on the apparent basis that their activities tend to be in the nature of portfolio investment, rather than financial intermediation, and would not be subject to VAT if carried on directly by investors. Financial holding corporations would be excluded on the apparent basis that their services are provided primarily to registered businesses that could claim input tax credits for financial intermediation charges in any event.

This suggested definitional approach would create an important boundary between non-financial businesses and financial institutions subject to the truncated cash flow method with TCA. The boundary would be problematic to the extent that certain businesses whose activities include substantial financial intermediation elements are not within the definition of a financial institution because those elements do not amount to their principal business. Policing of the boundary entails administrative and compliance costs focused on the application of a principal business requirement for taxpayers that are not otherwise within the
definition of a financial institution. Underinclusiveness in this definition and the ability to manipulate the boundary can result in competitive distortions, which arise most obviously where financial intermediation services are provided to households that would otherwise be subject to tax on their consumption of financial intermediation services. These distortions could be addressed by adopting a definitional approach that focuses on the nature of a business as financial or non-financial. Although this functional approach would eliminate possible distortions, as well as compliance and administrative costs associated with a boundary between financial and non-financial firms, it would also entail other administrative and compliance costs. In particular, tax administrators and taxpayers would be required to distinguish between particular businesses that are subject to the cash flow method with TCA and non-financial businesses that are not. Moreover, items of income and expense would have to be allocated between the businesses to determine which items must be subject to the cash flow method. These costs are, in fact, similar to those associated with the need under an exemption system to allocate business inputs between exempt and taxable activities for the purposes of input tax credits. Accordingly, any compliance cost savings attributable to the elimination of this particular allocation issue under an exemption system could be washed out by the need to allocate revenue and expenses among different businesses of a taxpayer for the purpose of the application of the truncated cash flow method with TCA.

Second, in principle, financial intermediaries should be provided with a notional interest charge on equity capital in an attempt to measure the financial margin attributable to the use of this funding source. In the absence of such a charge, application of cash flow taxation to equity cash flows would provide opportunities to shelter the full amount of the intermediation charge associated with the use of equity capital. An administratively simple response to these opportunities involves the exclusion from the application of the truncated cash flow method with TCA of all cash flows related to transactions with shareholders. Similarly, the cash flows related to all financial transactions with affiliated enterprises would be excluded. These exclusions would require a definition of affiliated enterprises and working concepts of debt and equity capital. Although the former is required under VAT systems in other areas, the latter is not. Experience under the income tax suggests that the boundary between debt and equity capital is a difficult one to police, and the effort to maintain it incurs considerable administrative and compliance costs.

Third, non-equity financial instruments would have to be classified as either debt or derivative instruments for TCA purposes. This boundary would generally be clear with simple forms of these categories of instruments. However, again as experience with the income tax suggests, the boundary is blurred and difficult to police in the case of more sophisticated instruments, such as prepaid and off-market forwards and swaps and deep-in-the-money options with an embedded debt element. Synthetic debt may also be created by combining long and short positions in derivatives with long and short positions in specified underlying assets.
It is not clear that applying the different cash flow methodologies separately to the components of a synthetic instrument would produce a result consistent with an application of the appropriate methodology to the debt instrument replicated by the synthetic. Inconsistency would arise particularly where the cash flows associated with a position in the underlying non-financial asset or equity security that is part of a synthetic debt instrument are excluded from the application of the truncated cash flow method with TCA.

Fourth, certain compromises in principle would be required to measure financial margins in a manner that is administratively feasible. These compromises and the associated problems include the following:

- For reasons of administrative simplicity, financial intermediaries would be required to use a single indexing rate applicable to all types of financial transactions over the taxable period.\textsuperscript{106} The proposed rate would be the short-term interbank lending rate, which is assumed to provide a reasonable proxy for the riskless interest rate without any financial margin. Although administratively feasible, the use of such a rate would produce odd results in the earlier years of longer-term financial transactions in which there is an upward-sloping yield curve. In that environment, the indexing rate may fall outside the range of short and long positions in the particular asset and produce negative margins in the earlier years of the transaction.\textsuperscript{107} These negative margins would require the provision of refunds to financial intermediaries that would have to be taxed back as taxable sales by registered non-financial businesses consuming the particular intermediation services.\textsuperscript{108} The same provision of services to households would have to be treated as exempt supplies without any refunds to the financial intermediary in respect of the financial margin and with no tax payable by the household consumers.\textsuperscript{109}

- The need to provide input tax credits to financial intermediaries in respect of negative margins that arise with bad loans would create a net revenue loss.\textsuperscript{110} Although under a pure cash flow tax, the amount of the credit would be offset by the tax payable by the borrower on receipt of the loan proceeds, the TCA suspends payment of this tax, which would be unrecoverable from a defaulting borrower.\textsuperscript{111} With household borrowers, the input tax credit on the negative margin would be offset by tax payable on the portion of interest payments intended to compensate lenders for the default risk.\textsuperscript{112} With registered business borrowers, the offset would be lost because of the input tax credit available to this category of borrowers. This treatment of bad debts is consistent with that for bad debts under VAT systems in respect of the sale of goods and the provision of non-financial services. Nonetheless, the extent of the associated revenue loss would be magnified because of the larger loan portfolios of financial intermediaries.\textsuperscript{113} The need to provide recognition for bad loans arises from a compromise in measurement principles that would be made for reasons of administrative convenience. In particular, the portion of interest payments that represents the risk premium comprises two
conceptually distinct components. One component compensates the financial intermediary for expected defaults associated with a loan portfolio and is not part of the intermediary’s margin that should be taxed. The other component compensates the financial intermediary for credit evaluation services and should be taxed as part of the margin. Difficulties in accurately distinguishing these two components of the risk premium and taxing them appropriately would necessitate taxation of the whole of the risk premium, with an input tax credit for the negative margins attributable to bad loans.114

- Changes in the indexing rate over the term of a financial transaction would mean that the taxable margin associated with the transaction would vary over the term.113 This ex post measurement is simply a function of the fact that value-added in the form of the financial margin must be measured over the term of a financial transaction. Although not especially inconsistent with VAT principles applied to the sale of goods and non-financial services, the variability of the margin over the term of a financial transaction would make the pricing of financial intermediation services problematic. In effect, while a financial intermediary would like to price its services on a VAT-inclusive basis, the pricing must be done on the basis of expected margins over the term of a financial transaction.116 If the intermediary were not perfectly hedged against movements in the indexing rate that affect the margin measured ex post, it would bear the risk of the payment of additional VAT in the event that ex post margins were greater than anticipated margins. Conversely, windfall profits would arise to the extent that ex post margins turned out to be less than anticipated margins and those profits were not passed on to consumers.117 The effect on VAT pricing would probably be greatest for deposit-taking intermediation and the life insurance function, where exposure to movements in interest rates can significantly affect the amount credited to depositors and policy holders and the resulting margin.118 Where non-tax factors dictate the use of VAT-inclusive pricing, the exposure to tax risk could be managed only with appropriate hedging strategies.

- Difficulties in identifying securities that are held by a financial intermediary as part of its margin operations would dictate the recognition of all unexpected gains and losses on all securities held by financial intermediaries.119 Furthermore, the lack of identifiable counterparties in respect of securities that trade in active markets would mean that such securities held by financial intermediaries must be treated as bearer securities, with cash flow taxation applied exclusively to the cash flows realized by the financial intermediary.120 To the extent that prices for securities are determined internationally, the tax could not be shifted forward to customers in the form of lower bid prices and higher ask prices. To avoid the effect of taxing profits of financial intermediaries on securities held in their inventory accounts and not as part of their margin operations, financial intermediaries would have to gross up the amount of their holdings by the amount of the input tax credit received on the purchase of securities.121 Income earned on the increased amount of...
holdings could be used to effectively pay the VAT on the profits on the entire amount of the relevant security holdings. The amount of after-tax gains and losses would remain the same as the amount realized in the absence of the VAT, provided that the investments were appropriately grossed up.\(^{122}\)

In terms of fundamental measurement principles, the most significant compromise that would be required for the feasible application of the truncated cash flow method with TCA is probably the use of a single short-term lending rate as the indexing rate that allocates financial margins among consumers of financial intermediation services.\(^{123}\) Although intuitively appealing, the use of this rate as an allocation mechanism is ultimately a proxy for the explicit prices that would otherwise be charged to particular consumers. In a very real sense, allocating implicit prices on the basis of an indexing rate yields results that are not unlike those that follow from the use of allocation formulas based on relative asset or liability values. Indeed, any attempt to apply cash flow taxation to all financial intermediation services involves an allocation of the implicit prices for such services among consumers as a proxy for explicit prices.\(^{124}\) Any correlation between the allocation of the implicit price on the basis of the deferral charge used for TCA purposes and the amount of an explicit price that would have been charged on a transactional basis is entirely accidental. It is therefore not entirely clear that the truncated cash flow method with TCA yields a result that is any more accurate than other formulary allocations using factors such as relative asset and liability values. The one possible feature to recommend the former over the latter may be a reduced susceptibility to tax-motivated allocations of financial margins.

Significance of a Questionable Premise

Although difficult to quantify, the compliance burden attributable to the above kinds of complexities should not be understated. Indeed, experience with a pilot project in the European Union suggests that the compliance costs following from the adoption of the truncated cash flow method with TCA would be severe and unavoidable. Nonetheless, it is not entirely clear that the complexities and the compliance burden imposed by the basic computational requirements of the TCA system compromise the approach to the extent that it should be rejected as an alternative to an exemption system. For example, these difficulties could be mitigated by the adoption of zero-rating of financial margins allocated to transactions with registered businesses.\(^{125}\) Modification in this respect would require identification of transactions as between the two categories of consumers and would leave taxation of the household consumption of financial intermediation services as the target of cash flow taxation. With or without modification, tax policy makers should attempt to assess the relative significance of undesirable effects as against the supposed desirable results underlying the case for the truncated cash flow method with TCA as an approach to the taxation of financial margins. This assessment is a difficult one if the claims made for the method are uncontentious. It is much easier if there are grounds for challenging those claims. It is argued
here that the basic premise underlying the cash flow taxation approach is flawed and that, accordingly, tax policy makers should view any form of cash flow taxation with a healthy skepticism. Until such time as this inherent weakness is resolved, the complexities and compliance costs associated with a move to cash flow taxation must be considered prohibitive.

The basic premise underlying any form of cash flow taxation of financial margins is the assumption that the household consumption of financial intermediation services is properly considered taxable consumption. Indeed, full taxation of household consumption of these services is one of the two principal effects of the application of cash flow taxation. The other principal effect is the elimination of the embedded input tax for business consumption of financial intermediation services. The tax is eliminated by the provision of input tax credits for both business inputs of financial intermediaries and taxable purchases of financial intermediation services by non-financial businesses.

This basic premise, however, is arguably incorrect. Indeed, the only issue is probably the extent of the incorrectness. Although there is some legitimate disagreement over the range of financial intermediation services and/or charges that should not be taxed in the context of household consumption, there seems to be little, if any, support in the literature for comprehensive consumption taxation of financial intermediation services. Characterization of a range of financial intermediation charges as non-taxable consumption under the income tax only supports this proposition. As described above, the significance of this basic characterization issue lies in the fact that any attempt to tax this type of non-taxable household consumption imposes inefficiencies attributable to the distorting effect on the choice between current and deferred consumption. As compared with a system of exemption, cash flow taxation exacerbates this distortion by taxing directly the household consumption of financial intermediation services.126 A system of exemption ignores this last stage of consumption and taxes it only indirectly to the extent of unrecoverable VAT on the business inputs consumed by financial intermediaries and shifted forward to consumers. The additional level of tax on household consumption of financial intermediation services under cash flow taxation similarly exacerbates the bias in favour of the purchase by domestic households of financial intermediation services offered free of VAT by offshore intermediaries. This distortion is most obvious with brokerage services and the insurance function, which intermediaries can easily deliver to domestic households without the need for any presence in the taxing jurisdiction. The offshore bias places additional pressure on place-of-supply rules for VAT purposes and the associated efforts to enforce the destination principle of multistage sales taxes in the specific context of business-to-consumer transactions.127 The competitive distortion is a serious concern, given the problematic nature of the alternatives available to enforce the destination principle in this particular context.128

Proponents of cash flow taxation of the business consumption of financial intermediation services maintain that the taxation of financial margins is required to eliminate the perceived distortions attributable to the input taxation of such
consumption under an exemption system. This view is based on two further assumptions: first, that the perceived distortions are significant enough to warrant replacement of the exemption; and second, that cash flow taxation is the preferred means to realize this goal. As noted above, the former assumption has not been the subject of any systematic assessment in the literature. However, even accepting it without further proof, the second assumption—that cash flow taxation is an appropriate response—becomes problematic if the household consumption of a substantial range of financial intermediation services is properly considered non-taxable. In fact, doubts about the robustness of the need to tax all household consumption of financial intermediation are fatal to the case for the application of any form of cash flow taxation to the business consumption of these services. It is accepted, of course, that business consumption is properly characterized as non-taxable. The main policy issue is how best to relieve the supposed over-taxation that occurs under a system of exemption and, in particular, to remedy the failure of that system to provide appropriate input tax credits. The subjection of the business consumption of financial intermediation services to taxation under a cash flow methodology, with offsetting input credits, is nothing more than a convenient add-on feature of a system that is designed to measure financial margins and tax them as charged to households. If it is accepted that comprehensive taxation of household consumption of financial intermediation services is inappropriate, it is difficult to justify the complexity and compliance burden associated with a system of cash flow taxation as a means to relieve overtaxation of business consumption. Zero-rating is clearly a much simpler and equally effective approach to the realization of this particular goal.

Given the foregoing assessment of alternatives, arguably tax policy makers face the difficult choice between exempt treatment with its associated distortions and zero-rating with its practical policy constraints. On the assumption that there is a significant range of household consumption of financial intermediation services that is properly considered non-taxable, comprehensive taxation of financial margins is an overly complex method to provide relief from the effects of input taxation of the business consumption of such services under an exemption system. At best, there may a defensible case for the taxation of a limited range of household consumption of financial services and/or charges, with some limited relief from input taxation in response to evidence of tax-induced distortions. These possibilities are discussed in the next section of the article.

MODIFYING THE APPLICATION OF AN EXEMPTION SYSTEM

The general policy direction of an exemption system is relatively straightforward. Exempt treatment should be limited to financial intermediation services and credits denied for tax payable on the cost of associated inputs. Non-financial services should be taxable and offsetting credits provided for tax payable on the cost of associated inputs. These simple policy prescriptions give rise to two general design issues that have complicated the implementation of an exemption system. First, a
boundary must be drawn between exempt financial intermediation services and taxable financial and non-financial services; and, to maintain this boundary, a method must be devised for identifying and properly characterizing exempt financial services and taxable services that are bundled together in a single supply. Second, the costs of business inputs consumed by financial intermediaries must be allocated between exempt and taxable supplies for input tax credit purposes.

It is argued below that, when assessed against the various arguments for exemption, the concept of exempt financial services has not been articulated clearly enough under standard country practice. More particularly, it has been developed with a largely unnecessary focus on the characterization of administrative and cash management services that lie along the boundary between exempt financial services and taxable services. This focus is driven, in part, by concerns regarding the substitutability of pricing structures, which have led to an unwarranted extension of the concept of exempt services. Rather than basing this concept on assumptions about the usual pricing structures for particular services and concerns over substitutability of such structures, tax policy makers could accept the form of financial intermediation charges as determinative for classification purposes. This alternative focus arguably provides a clearer and more obviously “policy-based” definitional approach, which permits the inclusion within the concept of financial services of a broad range of administrative services that are related to the core intermediation functions. Although a focus on pricing structures would suggest that all financial margins associated with the core financial intermediation functions should be exempt under an invoice/credit VAT, some countries treat the margin charged for property and casualty insurance coverage as properly taxable. It is argued here that the premises underlying this exception to exempt treatment are questionable, and the better view is that the particular features of property and casualty insurance do not provide a basis for treatment different from that for margins associated with other core financial intermediation functions.

On the issue of the allocation of the costs of inputs consumed by financial intermediaries, it is accepted that methods of formulary apportionment for costs that are not directly attributable to particular services are imperfect and complicating aspects of an exemption system, but are nonetheless necessary. As a means of reducing the perceived distortions associated with an exemption system, tax policy makers should reject proposals for an acceptable “looseness” in the use of formulas for the allocation of business inputs between taxable and exempt financial services. While there may be simplification gains in accepting such “looser” allocation approaches, particularly those that do not require direct attribution of the costs of business inputs consumed by financial intermediaries, the efficiency and revenue impacts are sufficiently uncertain that policy makers should prefer more specifically targeted responses. The first-best response is, of course, fundamental reform along the lines of a comprehensive application of zero-rating or cash flow taxation to financial intermediation services. However, for the reasons discussed above, there are at present significant obstacles to the adoption of either of these alternatives.
A less sweeping policy response might be to alleviate the tax bias to “vertically integrate” patterns of production under an exemption system. One approach would be to adjust the boundary between taxable and exempt financial services so as to expand the range of taxable services for suppliers of financial intermediaries. This adjustment could increase pressure to alleviate the burden of the tax on such supplies as it is shifted forward to financial intermediaries in the form of higher prices. It is accepted here that a concessionary input tax credit or a self-supply tax is the preferable response to vertical integration in the sense that either approach is explicitly targeted to the tax bias under an exemption system in favour of insourced services. However, as will be discussed at length below, there are a number of policy concerns, as well as associated targeting problems, that provide grounds for caution in the pursuit of these solutions. In fact, if it is decided to adopt a boundary between exempt and taxable services that is based on the form of pricing structures, a targeted response to vertical integration may not be warranted. Since the new definitional approach would allow financial intermediaries to expand the range of their taxable supplies and associated input tax credits, the vertical integration bias may no longer be a dominant concern.

Defining Exempt Financial Services on the Basis of the Arguments for Exemption

Using Pricing Structures To Draw the Boundary Between Exempt and Taxable Services

Ideally, the identification of financial services subject to exempt treatment under VAT systems should bear a close relationship to the rationale for exemption. At least on a general level, the arguments for exemption should suggest some criteria that can be referred to in deciding whether particular services should be subject to exempt treatment.

This relationship is not always clearly reflected in standard country practice, which involves the use of “activity-based” legislative definitions of exempt services. These definitions tend to focus on the classification of three general categories of services: (1) the core intermediation functions (deposit-taking intermediation, risk intermediation, the insurance function, and brokerage services); (2) administrative and cash management services; and (3) agency and advisory services. All or most of the intermediation functions within the first category are classified as exempt financial services on the basis that charges for these services are often not readily observable and measurable (rationales 2 and 3 for exemption). These core intermediation services are commonly defined legislatively to include dealings in money, shares, debt securities, and cash-settled derivative financial instruments, the provision of credit (including guarantees and indemnities in respect of specified securities), and the writing of insurance. Although exemption should be limited, in principle, to those fees that are embedded in financial margins, exempt treatment is extended to explicit fees for these services, apparently on the assumption
that any attempt to tax them would induce undesirable changes in the form of pricing structures.\textsuperscript{134} The classification of administrative and cash management services depends on characterization of these services as either falling within the specified range of core intermediation functions or being incidental to one or more of those functions.\textsuperscript{135} These services include the operation and maintenance of accounts, data processing, debt collection, clearing and settlement services (including credit card operations), general accounting and record-keeping services, insurance adjustment and property appraisal, custodial services, and trust and estate administration.\textsuperscript{136} To the extent that the services are considered either to fall within the definition of the core intermediation functions or to be incidental to those functions, they are generally classified as exempt. In effect, they take their character from an identifiable or related core service, whether the charge for the particular administrative or cash management service is explicit or is embedded in financial margins associated with the core service.\textsuperscript{137} As with the treatment of explicit prices for the core financial intermediation services, exempt classification may be extended to a range of administrative and cash management services on the assumption that a taxable classification would induce undesirable changes in the form of pricing structures. Application of taxable status may be limited to administrative and cash management services that are provided independently by a person that is not a party to an underlying transaction that constitutes a related core intermediation function.\textsuperscript{138} In this instance, the services are considered taxable on the assumption that their pricing is commonly explicit. Presumably, the basis for this assumption is that the different identities of the providers of the core intermediation services and the related administrative services generally act as a barrier to the ability to disguise an explicit price for the latter in the financial margin associated with the former.

Advisory services (including investment management services) provided in relation to the core intermediation functions are generally classified as taxable on essentially the same basis as that underlying the taxable classification of other administrative and cash management services.\textsuperscript{139} Taxable services commonly include professional services provided by an accountant, actuary, lawyer, or notary in the course of a professional practice.\textsuperscript{140} In contrast, agency or facilitation services provided in connection with any of the core financial intermediation functions are generally classified as exempt financial services.\textsuperscript{141} In particular, these services tend to fall within the concept of “agreeing to do, or arranging for” any of the core intermediation functions that are specified as exempt financial services.\textsuperscript{142} This extension of the definition of exempt financial services to include agency and facilitation services may again be based on assumptions about the ability to substitute pricing structures to attract a more advantageous tax treatment. It has also been suggested that the extension may be made, at least in part, to alleviate the bias to insource services, which arises when a financial intermediary must pay unrecoverable VAT on outsourced services.\textsuperscript{143} In other words, by “extending the scope of input taxation ‘upstream’ to another layer of suppliers,”\textsuperscript{144} extension
of exempt treatment to agency and facilitation services may alleviate the burden of non-recoverable VAT on this particular category of supplies consumed by financial intermediaries.\textsuperscript{145}

These broad features of the standard definitional approach to the category of exempt financial services create a boundary between incidental and non- incidental administrative and cash management services, as well as a boundary between the activities of advising on a financial service and arranging such a service. Because of the associated differences in tax treatment, these boundaries are an obvious source of dispute between taxpayers and tax administrators. It is argued here that the significance of the boundaries can be reduced without any significant loss of policy content. Indeed, the Australian Treasury department apparently recognized and accepted this point as the basis for its proposals to apply a taxable classification to a broad range of administrative and cash management services and agency and facilitation services.\textsuperscript{146} As implemented in the GST regulations, these proposals are intended to limit the category of exempt financial services to those services that are normally charged for in financial margins.\textsuperscript{147} The proposed classification in these regulations is thus based on assumptions about the conventional pricing of financial intermediation services. The definitional approach suggested here goes one step further than the Australian definitional approach by accepting the form of pricing for intermediation services as determinative for classification purposes. Under this approach, no assumptions need to be made about the normal pricing for any particular services that fall within one or more of the categories of core financial intermediation services, administrative and cash management services, and agency or facilitation services. The result is a taxonomy of financial intermediation services that more closely reflects the arguments for exemption. This alternative definitional approach consists of two discrete steps.

The first step is to define the necessary boundary between the provision of financial services, which may or may not be exempt, and the provision of taxable non-financial services. In conformity with existing country practice, this boundary would be established by focusing on particular activities. An activity-based approach ensures consistency of tax treatment and avoids the difficulties inherent in a system that attempts to distinguish between enterprises.\textsuperscript{148} The definition of financial services would incorporate the following elements:

1) \textit{The specific exclusion of the payment or receipt of money as consideration for property other than a financial instrument or for a service other than a financial service.}\textsuperscript{149} This exclusion would cover, for example, operating leases and derivative financial instruments and other similar contracts that are settled with the delivery of an asset or service other than money, a financial instrument, or a financial service.

2) \textit{The specific inclusion of activities integral to the core financial intermediation functions (deposit-taking intermediation, risk intermediation, the insurance function, and brokerage services), defined along the lines of the core services.}\textsuperscript{150}
element of the definition of exempt financial services under standard country practice.

3) The inclusion of a wide range of specifically listed administrative and cash management services.

4) The inclusion of both advisory services and agency and facilitation services to the extent that they are provided in respect of the core intermediation functions.

The third element would depart from existing country practice primarily at the margin by characterizing the broadest possible range of administrative and cash management services as financial services. The fourth element also would depart from existing practice by eliminating the need to distinguish between advising on a financial service and arranging such a service. To ensure a sufficient connection with the provision of core financial intermediation activities, the extension of the definition of financial services realized by the third and fourth elements could be limited to the provision of these specific services by an enterprise whose principal business is the provision of core financial intermediation services. This limitation would ensure that such services could not be provided on an effectively zero-rated basis through the ability to claim input credits for tax payable on costs related to the provision of exempt services. This ability would arise to the extent that the supplier of the services would not be required to allocate expenses between exempt and taxable supplies for input credit purposes because it is not a listed financial institution or a “de minimis” financial institution.

The second step in the suggested definitional approach is to define the boundary between exempt and taxable financial services. The aim here is to identify exempt financial services in a manner that is broadly consistent with the arguments for exemption but is more transparent than existing country practice. Consistency, however, requires acceptance of a limited view of the implications of an efficiency-based rationale for exemption.

As an initial proposition, acceptance of rationale 1 for exemption appears to necessitate the exemption for VAT purposes of the whole range of charges for household consumption of financial intermediation services. As discussed above, rationale 1 posits that household consumption of all financial intermediation services is properly considered non-taxable, and that any attempt to tax it results in inefficiencies associated with distortion of the choice between current and deferred consumption. However, as also discussed above, Jack has argued that an efficiency-based analysis of the consumption tax treatment of financial intermediation services depends critically on the form of the pricing for such services. He suggests that consumption taxes can be applied to explicit fixed fees for financial services and should be applied to quasi-fees that are charged on a per transaction basis and are proportional to the real value of the consumption of services. Exempt treatment should be limited to spread-based charges that are “proportional to the nominal value of the underlying financial transfer.”
Jack’s suggested taxonomy derived from rationale 1 for exemption is broadly consistent with a general taxonomy derived from the perceived measurement and allocation problems associated with implicit pricing that is the basis of rationales 2 and 3. As discussed earlier, these latter arguments rely on the premise that financial intermediation charges should be subject to consumption tax. The application of this principle is complicated by the fact that some charges are not identifiable as explicit prices but instead are embedded in an implicit pricing structure. One solution to this difficulty is to draw a boundary between taxable and exempt charges on the basis of the following propositions: first, that charges that conventionally take the form of explicit fees or commissions can be taxed; and second, that charges that take the form of implicit prices or spread-based fees should be subject to exempt treatment. In short, exempt status should apply to all financial intermediation charges that are implicitly priced and are therefore difficult to allocate among consumers on a transactional basis because of various factors noted earlier in this article (fluid margins, cross-subsidization of services, and the bundling of charges for other services with charges for financial intermediation).154

Although broadly consistent with all of the arguments for exemption, a boundary between exempt and taxable financial services based on the form of particular charges is open to the criticism that it is susceptible to the tax-motivated substitution of one form of pricing for another.155 Explicit charges otherwise taxable for household consumers may be disguised as exempt implicit prices embedded in financial margins. Implicit charges for registered business consumers may be converted to explicit taxable charges in an effort to access input tax credits for business consumers and financial intermediaries in respect of tax paid on their associated costs. This tax-induced substitution could result in inefficiencies to the extent that explicit prices for household consumers and implicit prices for business consumers would be preferred in the absence of the different tax treatment. In instances of perfect substitutability (that is, where there are no non-tax frictions dictating one form of pricing over another), taxing the relevant charges in an explicit form accomplishes nothing except a loss of revenue attributable to the tax-induced substitution of the form of pricing for financial intermediation services.

Arguably, however, substitutability is not problematic to the extent that changes in the form of pricing structures are accompanied by changes in the substance of those prices that are relevant from a policy perspective. Changes in form unaccompanied by changes in substance are limited to those instances in which the amount of particular charges can be scaled so as to equal the amount that would otherwise be charged in a non-tax-preferred form.156 It is not clear to what extent financial intermediaries would be free to engage in such scaling.157 Moreover, concerns about tax-effective substitutability of pricing structures are compelling largely in the context of the first-best approach of a comprehensive system of zero-rating, which attempts to implement the efficiency-based rationale for exemption. In that context, the difference in tax treatment based on different forms of pricing is significant and can induce a high degree of substitution that undermines the efficiency-based rationale for a boundary between taxable and
non-taxable services derived from the form of the associated pricing. By comparison, a system of exemption is hopelessly compromised in terms of underlying principle and is acceptable only because of practical policy constraints preventing the comprehensive application of zero-rating to household consumption of financial intermediation services. It is unclear in this very different context whether substitutability of pricing structures should be viewed as especially problematic, particularly given some of the gains that may be realized through the use of a definitional approach based on the form of prices charged for financial intermediation services.

More particularly, any assessment of the significance of the substitutability of pricing structures under a system of exemption must recognize that the provision of financial intermediation services to both households and business consumers in the form of spread-based charges remains taxable indirectly, because of the unrecoverable tax on the associated business inputs consumed by financial intermediaries. In the case of household consumption, this indirect taxation means that the tax savings and revenue loss from the substitution of exempt spread-based charges for taxable explicit charges are limited to the tax that would otherwise apply directly to the relevant charge. In effect, by indirectly taxing spread-based financial charges, an exemption system compromises an efficiency-based rationale for non-taxable status to such an extent that it is unclear whether the substitution of such charges for explicit fees should be viewed as problematic. At least in terms of the integrity of underlying principles, the lost additional tax appears to be problematic only if it is accepted that all household consumption of financial intermediation services is properly taxable. However, the problems associated with the comprehensive application of cash flow taxation necessitate the limitation of taxable status to charges in the form of explicit prices or commissions. In that instance, the exempt treatment of implicit prices may be considered appropriate because it substitutes the embedded tax on associated business inputs used by the financial intermediary for direct taxation to households. Because the lost tax on the substituted fee or commission is precisely the tax that is supposed to be chargeable, substitution of implicit prices for explicit charges to households appears problematic.

As described in the preceding section, however, a characterization of the whole range of household consumption as taxable consumption is itself problematic. In fact, if it is accepted that some range of household consumption of financial intermediation services is properly considered non-taxable, substitution of implicit prices for explicit charges to households appears much less problematic. Moreover, even if it is accepted that explicit prices and quasi-fees charged to households can and should be taxed, non-tax factors dictating the use of explicit pricing may serve as effective constraints on the free substitutability of pricing structures and any associated revenue and efficiency losses.

Any concerns over the substitutability of pricing structures for household consumption of financial intermediation services should also be assessed against potential gains that can be realized by acceptance of a degree of substitutability. Perhaps
most important, for the non-taxable consumption of financial intermediation services by registered businesses, a division in tax treatment based on the form of prices favours a substitution of taxable explicit prices for exempt spread-based prices subject to input taxation. The shift is required to ensure that input tax credits are available both for the consumer of financial intermediation services on the relevant charges and for the financial intermediary on its costs attributable to the provision of the services. At least in terms of defensible principles, this substitution is not problematic; in fact, it suitably addresses the distortions attributable to the input taxation of business consumption of financial intermediation services.

As indicated earlier, a reliance on the form of prices to draw the boundary between taxable and exempt financial intermediation services could also relieve some of the administrative and compliance costs attributable to troublesome boundaries under existing country practice. In particular, the concept of financial services could be extended to include those administrative and cash management services and advisory services that are currently excluded, and the form of their pricing could determine their characterization as exempt or taxable. Reliance on the form of pricing structures could similarly relieve some of the administrative and compliance costs attributable to the need to characterize exempt and taxable financial services that are bundled together. On the assumption that the whole of a supply must be characterized as taxable or exempt on the basis of its predominant characteristics, difficult distinctions between single and multiple supplies of taxable and exempt components are required under existing country practice. If the tax treatment of financial services were based on the form of the pricing structure, bundling would raise complications only where it involved financial and non-financial services.

**Characterization of Household Consumption of Property and Casualty Insurance**

As articulated in the literature and discussed above, the efficiency-based rationale for the non-taxable characterization of household consumption of financial intermediation services applies equally to the insurance function. Consistent with that rationale, most countries include all insurance functions within the concept of exempt financial services under an invoice/credit VAT. Two important exceptions are New Zealand and Australia. In both countries, property and casualty insurance is excluded from the definition of exempt financial services, and cash flow taxation is applied to tax the margin associated with this intermediation function. This selective application is questionable, in terms of both the underlying premises and the possible efficiency effects on the pattern of consumption of financial intermediation services.

The basic mechanics of the approach under the New Zealand legislation correspond to the pure cash flow method of taxation described earlier in this article. Insurance premiums are subject to tax as taxable supplies provided by insurers. Credit for tax paid on premiums is limited to insured persons that are registered
businesses. The payment of claims to registered businesses is treated as the pro-
vision of a taxable supply by the insured, and input tax credits are available to
insurers for tax payable on the supply. No net tax is ultimately payable by claim-
ants to the extent that the proceeds received under a policy are used to purchase
repair services or replacement property subject to creditable input tax. On the pay-
ment of claims to unregistered insured persons, it is assumed that insurers will
gross up the amount to reimburse the insured for tax payable on the acquisition of
repair services or replacement property. Insurers can claim the amount of the
assumed gross-up as a notional input credit. This application of cash flow tax-
ation results in the taxation of the insurer’s financial margin. For household con-
sumers of property and casualty insurance, it also taxes the present value of the
purchase price of repairs or replacement property at the VAT rate applicable to
policy premiums. In effect, the portion of premium payments attributable to the
present value of claims payouts used by households to purchase repairs or replace-
ment property is taxed up front in a manner consistent with a prepayment PET.

The Australian legislation reflects a modified approach that recognizes that no
net tax is payable under a cash flow method where the insured are registered
businesses. As a simplification measure, the payment of claims to this class of
insured is ignored for purposes of input credits for insurers and tax payable by
the insured, without any apparent change to the result provided by treating such
payments as taxable sales; that is, no net tax is payable on the transaction.

Premium payments remain taxable for insurers and creditable for the insured,
presumably to ensure that insurers can claim full input credits for taxable pur-
chases of inputs other than the payment of claims. On the payment of claims to
unregistered insured persons, insurers are entitled to a “decreasing adjustment”
of their net tax liability, which provides the same result as a notional input tax
credit in respect of the payment.

The rationale for the limited application of cash flow taxation to property and
casualty insurance appears to be closely related to the perceived problems of
identifying and allocating on a transactional basis the implicit price embedded in
financial margins (the basis for rationales 2 and 3 in defence of an exemption).
New Zealand and Australian tax policy makers have apparently rejected the
argument that exemption is the preferred solution to these problems, at least in
the limited context of property and casualty insurance. Because of the pooled
nature of covered risks, cash flow taxation is applied to tax these particular insur-
ance margins on a pooled basis. Margins are defined as the difference between
premiums received by insurers and the amount of claims paid plus related admin-
istrative expenses.

At a general level of principle, this selective application of cash flow taxation
appears to be based on two premises. The first is that the measurement of the
associated financial margin on a pooled basis is appropriate and cannot be readily
applied to other core intermediation functions. The second premise is that house-
hold consumption of property and casualty insurance can properly be charac-
terized as taxable consumption. Each of these premises is, however, questionable.
With respect to the first premise, it is clear that, as a means of taxing the risk intermediation margin of property and casualty insurers, application of cash flow taxation on a pooled basis realizes the correct result at the level of the insurer. It is equally clear that the approach does not yield the correct result at the level of the policy holders, if they are viewed individually and not as a group. In short, the application of cash flow taxation on a pooled basis taxes the risk intermediation margin of an insurer, but policy holders who do not receive payouts that reverse the flow of premium payments remain taxable on the gross amount of those payments. This basis of taxation is problematic for households that purchase property and casualty insurance and cannot claim input tax credits. For registered businesses, any taxation of the gross amount of the premium is offset with an input tax credit.

The taxation of risk intermediation margins on a pooled basis can be justified as a defensible second-best approach that avoids the administrative and compliance burden associated with the need to identify, measure, and allocate the appropriate portion of financial margins to individual policy holders for VAT purposes. It is not clear, however, why this concession to accuracy in measurement is accepted in the context of the risk intermediation function performed by property and casualty insurers, but not in the context of the other core intermediation functions. The ability to solve the technical measurement problem in the context of property and casualty insurance hardly constitutes a defensible basis to apply cash flow taxation in a selective manner, given the possible efficiency consequences of doing so. In particular, when compared with other financial intermediation functions subject to an exemption regime, the household consumption of property and casualty insurance is taxed more heavily. Conversely, the elimination of input taxation of business consumption of property and casualty insurance means that such consumption is taxed more lightly than the consumption of other core intermediation functions. The different tax regimes can have efficiency consequences for the allocation of resources on both the demand and the supply side for financial intermediation services, depending on the extent and the direction of the shifting of consumption taxes by intermediaries. Furthermore, development of the cash flow method over the last five years suggests that it is no longer obvious that the measurement and allocation of financial margins on a transactional basis can be satisfactorily resolved only for the taxation of the consumption of risk intermediation provided by property and casualty insurers. As described earlier, the technical details of cash flow taxation are now relatively well developed for the other core intermediation functions. If those details are considered to be overly complex for implementation purposes, cash flow taxation could be applied to financial intermediation generally on a pooled basis by measuring margins using the subtraction method described above. The aggregate margin could be allocated to consumers for input tax credits using formulary apportionment methods. From the perspective of individual consumers, the rough approximation of the actual amount of financial margins that is realized by these apportionment methods may be no less acceptable than the approximation realized
by the selective application of cash flow taxation to the margins associated with property and casualty insurance.

In terms of underlying premises, this selective application of cash flow taxation can be justified only to the extent of the integrity of the second premise noted above. More specifically, within an exemption system for the core intermediation functions, taxation of household consumption of property and casualty insurance is defensible if such consumption has characteristics that distinguish it from household consumption of the other functions.\textsuperscript{177} In that case, the whole of the premium payment can be considered properly taxable as attributable to taxable consumption, which includes consumption of both pure insurance coverage and the intermediation service. This characterization may be supported on either of two bases, neither of which is especially compelling. The first basis is an analogy between the consumption of pure insurance coverage and the consumption associated with a warranty agreement, which is generally treated as taxable consumption under VAT systems.\textsuperscript{178} In effect, both forms of consumption are seen to be functionally equivalent in the sense that a particular consumer pays a fee to move consumption from a good state to a bad state, which is defined by the occurrence of specified contingencies. Consistency in tax treatment is seen to require a taxable consumption characterization of the purchase of the pure insurance coverage provided by a property and casualty policy. The second basis for the same characterization is the argument that household consumption of property and casualty insurance enters the consumer utility function through the security that it provides. In effect, a particular consumer derives a benefit in the form of psychic satisfaction, which enters the utility function, even if no shift of consumption from a good to a bad state occurs through the payment of a claim to the consumer on the occurrence of a specified contingency.\textsuperscript{179}

A problem with the first basis for taxable characterization is the fact that it is based on an assumption that the taxable treatment of the supply of a warranty is the benchmark treatment as a matter of general principle.\textsuperscript{180} It is equally plausible, however, that the appropriate principle is exemption of the margin associated with all risk intermediation, but that the taxable treatment of the supply of a warranty is mandated because of its packaging with an underlying taxable supply of goods or services. Assuming that administrative and compliance costs constrain the attempt to apportion total proceeds between a warranty and the sale price of the warranted asset or service, the supply of the warranty assumes the same character as the predominant element of the bundled supply (that is, the sale of the taxable goods or services). Because the supply of property and casualty insurance is not bundled with the consideration for an underlying asset, administrative and compliance considerations do not constrain maintenance of the principle that household consumption of the insurance function is non-taxable.\textsuperscript{181}

A problem with the second basis for taxable characterization is its limitation to the risk intermediation associated with the property and casualty insurance function. In particular, it is arguable that the decision to save is made, at least in part, because of the psychic satisfaction that is derived from the associated security,
which is similar to that provided by insurance coverage. The primary difference between the two decisions is the fact that the savings decision will result in an intertemporal shift of consumption. The decision to purchase property and casualty insurance will not necessarily result in a shift of consumption from a good state to a bad state; therefore, the satisfaction derived from the purchase may be considered an end in itself.\textsuperscript{182} It is not entirely clear, however, that this is a distinction that should have any tax relevance for the characterization of the consumption of risk intermediation and the other core intermediation functions. It is at least arguable that the household consumption of both deposit-taking intermediation and the insurance function should either be subject to cash flow taxation as taxable consumption or be granted exempt status as non-taxable consumption.

In fact, the selective application of cash flow taxation to property and casualty insurance may be justifiable solely in the context of an exemption system that depends on the form of pricing structures to determine the exempt and taxable status of financial services. Given this classification system, the insurance function, and property and casualty insurance in particular, differs from the other core intermediation functions in an important respect. Unlike deposit-taking intermediation, risk intermediation using derivative financial instruments, and brokerage services, pricing of the insurance function is exclusively spread-based. As compared with intermediaries engaged in these types of financial intermediation, insurers may thus be significantly constrained in their ability to substitute explicit for implicit prices to gain greater access to input tax credits. Selective application of cash flow taxation may be justified as a means of permitting greater access to input credits in an effort to relieve the overtaxation of business consumption of insurance. Selective application may even be limited to property and casualty insurance on the assumption that a more significant portion of this type of insurance is consumed by registered businesses. However, tax policy makers must determine that the efficiency gains attributable to relief of the overtaxation of business consumption of property and casualty insurance offset the efficiency losses attributable to the additional layer of tax on household consumption of this type of insurance. To date, there has been no attempt in the literature to quantify these important offsetting effects. The proposition that household consumption of property and casualty insurance is properly considered to be taxable is sufficiently contentious that it should not be accepted as a means of avoiding the issues associated with the exemption alternative.

**Responding to the Problem of “Vertical Integration”**

**Articulating the Case for a Response**

On the assumption that financial intermediaries cannot shift the tax on business inputs forward to the consumers of their services (in the form of higher prices) or backward to the suppliers of the inputs (in the form of lower prices), the input tax must be borne by the financial sector (with the kinds of associated distortions noted previously).\textsuperscript{183} By vertically integrating the patterns of production (that is,
substituting insourced for outsourced services), financial intermediaries can avoid the incidence of input taxation. The avoidance occurs because the value added by insourced labour is exempt from VAT to the extent that it is allocable to the provision of exempt financial services. By comparison, the value added by outsourced labour is subject to VAT that cannot be recovered by the purchasing financial intermediary to the extent that it is allocable to the provision of exempt financial services. This value-added may also be taxed again to consumers of non-financial goods and services to the extent that it is passed on by registered businesses that consume financial intermediation services in the production and distribution chain.

As suggested earlier, given the inherent difficulties with fundamental reform in the form of comprehensive zero-rating or cash flow taxation, tax policy makers must decide whether the prospect of vertical integration requires a policy response and, if so, what that response should be. It must be acknowledged at the outset that the case for a response rests on shaky grounds. In particular, it is unclear to what extent financial intermediaries are free to substitute insourced for outsourced services in response to a tax bias in favour of the former. Empirical evidence of VAT-induced substitutability is unsystematic and anecdotal in nature. Moreover, income tax, social security tax, and non-tax factors can offset any tax bias to vertical integration under a VAT, and thus provide barriers to substitutability and the associated inefficiencies in patterns of production for financial intermediaries. It is therefore not clear that financial intermediaries that are large enough to vertically integrate in fact do so in response to the taxation of business inputs under an exemption system. Indeed, it is not clear whether larger intermediaries enjoy a competitive advantage over smaller enterprises in this respect.

As an initial proposition, there does not appear to be any compelling reason to single out the perceived distortions associated with vertical integration for a policy response. Tax policy makers may simply accept these particular distortions, along with the other perceived distortions attributable to the imperfections of an exemption system, or they may resolve them by implementing fundamental reforms that address the whole range of distortions. However, the distortions associated with vertical integration have tended to receive specific attention in the context of exemption systems, in part perhaps because it seems possible to address this particular problem without recourse to fundamental reform. As well, pressure from smaller financial intermediaries, which may be constrained in their ability to engage in the substitution of insourced for outsourced supplies, can provide a political stimulus to a policy response.

In deciding whether or not a remedy for vertical integration is called for, one must begin with an assessment of the inefficiencies associated with the substitutability of patterns of production—in particular, those arising from “imperfect,” as opposed to “perfect,” substitutability of insourced for outsourced supplies. Instances of perfect substitutability arise where the non-tax cost structures of insourced and outsourced services consumed by a financial intermediary are equivalent. Assume, for example, that a financial intermediary consumes a valuation
service from an outsourced supplier and that this service is required in support of the provision of exempt financial services by the intermediary. In providing the valuation service, the outsourced supplier uses goods with a cost of $30 and labour with a value of $70. The price charged to the financial intermediary for the taxable valuation service is $100, with $10 of VAT payable at a 10 percent tax rate, which is partially offset by a $3 input tax credit on the taxed purchase of the goods. On the assumption that the $10 of VAT cannot be shifted by the financial intermediary, 70 percent of that tax is attributable to the value added by the labour of the outsourced supplier and can be eliminated by insourcing the service. In effect, the financial intermediary can hire its own labour force to provide the valuation service. In that instance, the financial intermediary must purchase the $30 of related goods directly on a tax-inclusive basis of $33, since VAT on the goods cannot be recovered by the intermediary. The $70 of value-added in the form of wages for employee labour expended on the valuation service is not subject to tax to the extent that it is embedded in the price charged by the financial intermediary for the provision of exempt financial services. This substitution of an insourced supply of the valuation services for an outsourced supply is perfect in the sense that the non-tax cost structures of the two patterns of production are equivalent (that is, $100 each). The insourced service is preferable because of the different tax treatment of insourced versus outsourced supplies under an exemption system for financial intermediation services. In that environment, an insourced service has a tax-cost structure of $103 compared with a tax-cost structure of $110 for the equivalent outsourced service.

Instances of imperfect substitutability arise where the non-tax cost structures of insourced and outsourced services are different. Assume, for example, that the non-tax cost structure of the outsourced valuation service described above is $99 ($30 cost of goods + $69 cost of labour) and the non-tax cost of the insourced valuation service is $100 ($30 cost of goods + $70 cost of labour). In the absence of tax considerations, a financial intermediary will prefer the outsourced supply. The application of VAT means, however, that the tax-cost structure of the insourced service is $103 (as described above), while the tax-cost structure of the outsourced service is $108.90 ($30 cost of goods + $69 cost of labour + $9.90 VAT). The introduction of different tax treatment of the two patterns of production creates a preference for the insourced supply, which would have otherwise been rejected.

Where the non-tax cost structures of insourced and outsourced supplies are equivalent, the substitutability of the former for the latter in response to differences in tax treatment is perfect in the sense that the substitution itself does not entail efficiency losses. The non-tax equivalence of the respective cost structures means that the substitution entails only revenue losses. Where the non-tax cost structures differ, the same substitution of insourced supplies for outsourced supplies entails efficiency losses attributable to the adoption of a pattern of production that is sub-optimal from a non-tax perspective. These losses are in addition to revenue losses. Moreover, as suggested above, smaller financial intermediaries may suffer a competitive disadvantage vis-à-vis larger financial intermediaries to
the extent that they are constrained in their ability to insource supplies. The competitive disadvantage can distort patterns of investment within the financial sector, as well as patterns of consumption of financial intermediation services.190

The parameters of the category of imperfect substitution are a function of (1) the relative non-tax cost structures of insourced and outsourced services, (2) the extent of the different tax treatment of insourced and outsourced services, and (3) the composition of the financial sector (that is, the proportion of large and small financial intermediaries). For instance, it was assumed in the above example that the required information was available to derive the relative non-tax cost structures of insourcing ($30 cost of goods + $70 cost of labour) and outsourcing ($30 cost of goods + $70 or $69 cost of labour). The different tax treatment of the particular service delivered on an insourced versus an outsourced basis was also assumed. Given those assumptions (and a 10 percent VAT rate), it can be determined that the outer bound of the range of imperfect substitutability of insourced for outsourced services is a cost structure for the latter of $93.64. With that structure, the tax cost of an outsourced service would be $103 ($30 cost of goods + $63.64 cost of labour + $9.36 VAT), which equals the tax cost of the insourced service ($33 input taxed cost of goods + $70 cost of labour). With a non-tax cost structure below $93.64, the outsourced service would be preferred, even in the presence of different VAT treatment of insourced and outsourced services, and no substitution would occur. With a non-tax cost structure for outsourced services in excess of $100, insourced services would be preferred even without the tax advantage.

Although the dimensions of the substitution of insourced for outsourced services are obviously of first importance to any assessment of the need for a policy response, this variable has not been the subject of any modelling or empirical assessment in the literature. The lack of any evidence of the associated inefficiencies may be a function of informational constraints. In particular, it is difficult to acquire sufficient information about non-tax cost structures for particular insourced and outsourced services. Once this particular variable is determined, modelling the range of imperfect substitutability between insourced and outsourced services is relatively straightforward. The assessment must, however, be undertaken for each of the various services consumed by financial intermediaries, accounting for differences in VAT treatment of outsourced supplies. Despite the informational constraints, tax policy makers ideally should have some sense of each of the above variables in a particular setting before making any assessment of the efficiency losses attributable to the imperfect substitution of insourced for outsourced services.

As an alternative to this line of inquiry, the dimensions of the substitutability problem might be assessed by observing the behaviour of financial intermediaries regarding patterns of production and drawing some assumptions about the role of input taxation of outsourced services in that behaviour. Even in this respect, however, the literature fails to provide any assessment of the extent of the substitution of insourced for outsourced services in the financial sector. Such an
assessment could presumably be provided by the financial sector itself, which should have the necessary data. In the absence of a reliable empirical estimate of the substitution effect associated with vertical integration, tax policy makers are left to rely on anecdotal evidence in support of an assumption that the relative non-tax cost structures of insourced and outsourced services are such that different tax treatment under VAT systems induces a significant range of instances of imperfect substitutability. Alternatively, it may be assumed that shifting of the tax on outsourced services either forward to consumers of financial services (in the form of higher prices) or backward to suppliers (in the form of lower prices) distorts patterns of consumption or production in a way that has nothing to do with the substitution of insourced for outsourced services. By eliminating the legal incidence of input taxation of outsourced services, a response focused on the substitution problem can, in fact, eliminate the economic incidence of the tax and the associated distortions that may arise under different assumptions regarding shifting. Under this assumption regarding tax shifting, the pattern and directions of the distortion attributable to the input taxation of outsourced supplies may not affect the broad case for a policy response.

Assessing Possible Responses

As described immediately below, each of the possible responses to vertical integration has design weaknesses that make adoption problematic, particularly in view of the ambiguous case for a policy response. In the absence of more compelling grounds for a targeted response, it is suggested here that reliance on the form of pricing structures to draw the boundary between taxable and exempt financial services may be sufficient. Under that classification approach, a wider range of financial intermediation services may become taxable and thus provide financial intermediaries with increased access to input tax credits on outsourced services. This increased access may be sufficient to mute any tax bias in favour of insourced services. Admittedly, this effect is uncertain and is entirely incidental in the sense that it does not provide a rationale for acceptance of pricing structures as determinative for VAT purposes. Even so, tax policy makers might defensibly wait to see whether this effect develops under an exemption system that depends on the form of pricing structures for classification purposes.

Within the constraints of an exemption system, there are four possible responses to the tax bias in favour of insourcing of services by financial intermediaries:

1) the extension of exempt status to a range of outsourced services;
2) the provision of a concessionary input tax credit;
3) the application of a self-supply tax; or
4) the provision of an option to tax otherwise exempt financial services.

The first response to vertical integration was described in the immediately preceding section of this article. When exempt tax treatment is extended to a
range of supplies consumed by financial intermediaries, the resulting input taxation of outsourced supplies equates the tax cost structure with that of the insourced supplies. Assume, for example, that the valuation service described in the example presented earlier is input taxed as an exempt supply. The $100 non-tax cost structure of the outsourced supply ($30 cost of goods + $70 cost of labour) has a tax cost of $103 ($33 input taxed cost of goods + $70 cost of labour), which equals that of an insourced supply with the same non-tax cost structure. For the reasons already described, however, this extension of input taxation should be rejected in favour of a broader application of taxable status based on the form of pricing structures for financial services, including the core intermediation functions, administrative and cash management services, and advisory, agency, and facilitation services. There are then three possible alternatives to be considered as a policy response to vertical integration. It should be noted that expansion of the range of input taxed supplies that would likely occur under the suggested taxonomy of financial services would exacerbate the incentive to vertically integrate and could increase the pressure for a response.

Concessionary Input Tax Credit and a Self-Supply Tax

As an alternative to the movement of input taxation “upstream” to outsourced suppliers, the second and third responses listed above also attempt to equate the tax-cost structures of insourced and outsourced services. The second response realizes this result by providing a concessionary input credit for tax on value added by fully taxed outsourced suppliers, the cost of which is attributable to the provision of exempt services by financial intermediaries. The third response realizes the same result by imposing VAT on otherwise exempt value added by insourced services. For example, an outsourced service with a non-tax cost structure of $100 ($30 cost of goods + $70 cost of labour) could be eligible for a concessionary input tax credit provided to a financial intermediary that consumes the service. At a VAT rate of 10 percent, the tax-cost structure of the outsourced service would be $103 ($30 cost of goods + $70 cost of labour + $10 VAT − $7 concessionary input credit), provided that the amount of the credit was equal to the tax on the value added by the outsourced supplier. This tax-cost structure would equal that of an insourced service with the same non-tax cost structure ($33 cost of input taxed goods + $70 cost of exempt labour). Alternatively, an insourced service with a non-tax cost structure of $100 ($30 cost of goods + $70 cost of labour) could be subject to tax on value added in respect of the service by the insourcing financial intermediary. At a VAT rate of 10 percent, the tax-cost structure of the insourced service would be $110 ($33 input taxed cost of goods + $70 cost of labour + $7 self-supply tax), provided that the amount of the self-supply tax was equal to the tax on the value added by the insourcing financial intermediary. This tax-cost structure would equal that of an outsourced service with the same non-tax cost structure ($30 cost of goods + $70 cost of labour + $10 non-creditable VAT for the consuming financial intermediary).
Conceptually and in terms of their design features, a concessionary input tax credit and a self-supply tax are indistinguishable. The principal difference is the benchmark that is accepted as the basis for realization of equivalent tax treatment of insourced and outsourced services. A concessionary input tax credit is based on the premise that the appropriate benchmark is the input taxed cost structure of an insourced service (or an exempt outsourced service) that is perfectly substitutable for a comparable outsourced service that is fully taxable. To realize this benchmark tax treatment, the credit mechanism reduces the tax-cost structure of the fully taxed outsourced service. A self-supply tax is based on the premise that the appropriate benchmark is the tax-cost structure of a fully taxed outsourced service that is perfectly substitutable for a comparable insourced service (or an exempt outsourced service) that is input taxed. To realize this benchmark treatment, the tax mechanism increases the tax-cost structure of the comparable input taxed service.

At least in terms of the benchmark used for equivalent tax treatment, there may be a marginal preference for a self-supply tax over a concessionary input tax credit. More particularly, the benchmark treatment that is the basis of a self-supply tax maintains, to a greater extent, the basic principles of an invoice/credit VAT; that is, fully taxable suppliers must charge VAT on sales of goods and services, and a credit is provided for taxed purchases of inputs. A self-supply tax accepts these basic principles as applied to all outsourced suppliers of financial intermediaries and attempts to equate substituted insourced services with those principles. The benchmark treatment that is the basis of a concessionary input tax credit accepts the input taxation of insourced services (and exempt outsourced services) as a feature of an exemption system for financial intermediation. It then attempts to equate the treatment of a broader range of outsourced services with that benchmark treatment. Input taxation is, however, a compromised approach in the sense that it is inconsistent with the basic principles of an invoice/credit VAT and probably should be limited to those instances in which practical policy constraints prevent the adoption of the first-best approach. The issue is whether input taxation under an exemption system, which is defensible as applied to financial intermediaries, should be extended to outsourced suppliers of the financial sector. As explained earlier, there are sound policy reasons for avoiding such an extension. Nonetheless, a concessionary input tax credit is based on the premise that extension of input taxation is the preferred benchmark treatment of outsourced and insourced services. A credit mechanism differs from an extension of input taxation to outsourced services only in its limitation of the effects of such taxation to financial intermediaries. Under a credit regime, outsourced suppliers continue to operate as taxable suppliers, and the credit limits both the economic and the legal incidence of input taxation to financial intermediaries. This approach may be a defensible way to avoid shifting the problems of input taxation “upstream” to suppliers of exempt outsourced services for financial intermediaries. It is just not clear why tax policy makers should accept input taxation of outsourced suppliers as a benchmark for comparison with comparable insourced services.
An apparently more compelling policy rationale for use of a concessionary input tax credit follows from assumptions regarding the shifting of the input tax on outsourced services. The effectiveness of a self-supply tax depends on the integrity of the assumption regarding the inability of financial intermediaries to shift the tax. In effect, this approach assumes that the input tax is borne by financial intermediaries, who will choose insourced services to avoid the tax within a range of non-tax cost structures. If the tax is, in fact, shifted forward to consumers of exempt financial services (in the form of higher prices) or backward to suppliers (in the form of lower prices), a tax on insourced services has no effect. In contrast, the effectiveness of a concessionary input credit does not depend as critically on the integrity of assumptions regarding tax shifting. In effect, when the input tax on outsourced services is eliminated, a concessionary input credit is indifferent to shifting of the tax. Distortions associated with forward or backward shifting of the tax are addressed equally with distortions associated with substitution of insourced for outsourced services, on the assumption that input taxation of outsourced services is borne by financial intermediaries. Tax policy makers may prefer a self-supply tax if they are confident that input taxation of outsourced services is borne fully by financial intermediaries, and the only associated distortions arise from the substitution of insourced for outsourced services. Policy makers may prefer a concessionary input credit if they are not as confident about the shifting of the input tax on outsourced services, and if they believe that the full range of possible distortions associated with shifting assumptions merits a policy response.

This broader rationale for adoption of a concessionary input tax credit is, however, much the same rationale underlying the case for fundamental reform of an exemption system. First-best approaches intended to address the whole range of distortions associated with the input taxation of financial intermediation services entail the replacement of an exemption system with a comprehensive application of zero-rating or cash flow taxation. In the event that these approaches are rejected for the reasons described previously, it is not clear why tax policy makers should implement a concessionary input tax credit for any reason other than as a response to the inefficiencies associated with the substitution of insourced for outsourced services. In short, given the constraints of an exemption system, a credit mechanism can probably be justified only on the same basis and under the same assumptions regarding the shifting of input taxation of outsourced services that underlie a self-supply tax.

Whatever the choice of benchmark treatment for insourced and outsourced services, no country that applies exempt treatment to financial intermediation services in fact applies a comprehensive self-supply tax to insourced services, and only Australia has introduced a concessionary input tax credit for outsourced services (referred to as “the reduced input tax credit”). The preferred response apparently remains an extension of exempt status upstream to a range of outsourced services, particularly agency and facilitation services. Although arguably preferable to this existing country practice, a concessionary input credit and a self-supply tax both suffer from targeting problems that undermine their attractiveness.
and may explain, in part, their rejection as reflected in standard country practice. In particular, in contrast to an extension of exempt status to a range of outsourced services, the targeting problems associated with a concessionary input credit and a self-supply tax have both a quantitative and qualitative dimension. Extension of exempt status raises only a qualitative problem, which may not be as problematic as the quantitative problem associated with either a concessionary input tax credit or a self-supply tax.

The qualitative targeting problem concerns the definition of the range of outsourced services that qualify for a concessionary tax credit or the definition of the insourced services that are subject to a self-supply tax. The same problem arises with an extension of input taxation, which requires a definition of outsourced services that are treated as exempt financial services. To the extent that the required definition of specified services includes services that are not commonly insourced, a concessionary input tax credit or an extension of exempt status will be overinclusive in the sense that relief will be provided to a range of outsourced services that are not readily substitutable with insourced services. To the extent that the required definition of specified services does not include services that are commonly insourced, a concessionary input tax credit or an extension of exempt status will be underinclusive in the sense that relief will not be provided to a range of outsourced services that are readily substitutable with insourced services. The same problem of overinclusiveness arises with a self-supply tax, to the extent that the required definition of specified services includes services that are not commonly outsourced. The range of these services that are insourced will be subject to the tax, even though they are not readily substitutable with outsourced services. Underinclusiveness arises to the extent that the required definition of specified services does not include services that are commonly insourced. The range of these services that are insourced will be excluded from the application of a self-supply tax, even though they are readily substitutable with outsourced services.

Adequate development of the required definition of substitutable services obviously requires some empirical assessment of the structure of the provision of service inputs consumed by financial intermediaries in the delivery of the core intermediation functions. Maintenance of the definition also requires some ongoing monitoring of these structures as the basis for necessary amendments. As evidenced by the experience with the extension of input taxation to certain outsourced services, the precise dimensions of the definition of specified services eligible for a concessionary tax credit or subject to a self-supply tax would be a likely source of contention between tax administrators and taxpayers, with some associated compliance and administrative costs. At the margin, these definitional issues must be resolved on a case-by-case basis. Tax policy makers should retain the ability to amend the definition expeditiously in order to incorporate any changes needed to address problems of over- and underinclusiveness.

The quantitative targeting problem with a concessionary input tax credit or a self-supply tax concerns the definition of the amount of the credit or the tax. This
targeting requirement does not arise under an extension of input taxation to a range of outsourced services, since exempt treatment applies to the value added by the supplier in precisely the same manner as the comparable amount of value-added under an insourced cost structure. The same pre- and post-tax ratios of comparable outsourced and insourced supplies are thereby maintained automatically by extending the same exempt tax treatment to the relative amounts of value-added under either cost structure. This result is realized under a concessionary input tax credit only if the credit is provided at the relevant VAT rate on the actual amount of value added by the outsourced supplier. Similarly, a self-supply tax must be applied at the relevant VAT rate to the actual amount of value added by an insourced supplier. This required condition, however, imposes onerous informational requirements, with associated compliance and administrative costs. To alleviate these costs, the credit or tax rate most likely must be applied to an assumed amount of value added by the outsourced or insourced supplier. For example, the Australian reduced input tax credit equals 75 percent of the GST charged to a financial intermediary on a specified outsourced service attributable to the provision of exempt financial services. This single rate effectively provides the credit at the 10 percent GST rate applied to an assumed amount of value added by an outsourced service equal to 75 percent of the price charged to a financial intermediary. The comparable approach under a self-supply tax would involve the application of the relevant VAT rate to a specified portion of the salary and wages paid by a financial intermediary, which is effectively considered allocable to the provision of specified services on an insourced basis.

Although administratively convenient, the use of a single rate to determine the portion of value added by an outsourced or insourced service provides only a rough approximation of value-added that will inevitably be either over- or under-inclusive, depending on the actual amount of value-added. Where the value-added under the non-tax cost structure of an outsourced service is less than the assumed rate for purposes of a concessionary input tax credit, the result is revenue loss and a windfall for the particular outsourced service attributable to the tax bias in its favour. Assume, for example, that the non-tax cost structure of an outsourced service is $100 ($30 cost of goods + $70 cost of labour), while the assumed value-added for purposes of a concessionary input tax credit is 75 percent of that structure (as reflected in a concessionary input tax credit equal to 75 percent of the VAT payable on the price charged to a financial intermediary). The tax-cost structure of this outsourced service after the concessionary input tax credit is $102.50 ($30 cost of goods + $70 cost of labour + $10 VAT − $7.50 input tax credit), which is $0.50 less than the tax-cost structure of an insourced service with an identical non-tax cost structure ($33 input tax cost of goods + $70 cost of labour = $103). The provision of the $0.50 of input tax credit on an assumed amount of $5 of value-added that is not, in fact, added by the outsourced supplier creates a tax bias in favour of that pattern of production. The tax bias would mean that an insourced service would have an equivalent tax-cost structure only where its non-tax cost structure was equal to 99.5 percent of the non-tax cost.
structure of an outsourced service ($33 input taxed cost of goods + $69.50 labour = $102.50).202

Conversely, where the value-added under the non-tax cost structure of an outsourced service is greater than the assumed rate for purposes of a concessionary input tax credit, the result is a reduction, but not the elimination, of a tax bias in favour of insourced services. For instance, assume in the immediately above example that, for purposes of a concessionary input tax credit, the assumed value added by the outsourced supplier is 65 percent of the non-tax cost structure. The tax-cost structure of the outsourced service after the concessionary input tax is $103.50 ($30 cost of goods + $70 cost of labour + $10 VAT − $6.50 input tax credit), which is $0.50 more than the tax-cost structure of an insourced service with an identical non-tax cost structure ($33 input taxed cost of goods + $70 cost of labour = $103). The failure to provide $0.50 of input tax credit on an actual amount of $5 of value added by the outsourced supplier leaves a tax bias in favour of the insourced service. The tax bias would mean that an outsourced service would have an equivalent tax-cost structure only where its non-tax cost structure was equal to 99.5 percent of the non-tax cost structure of an insourced service ($30 cost of goods + $69.50 labour + $9.95 VAT − $6.45 input tax credit = $103).203

Similar quantitative targeting problems arise under a self-supply tax. Where the assumed value added by an insourced service is greater than the actual amount of value-added, a self-supply tax would create a tax bias in favour of outsourced services in the same way as a concessionary input tax credit that is overinclusive in terms of the specified amount. Where the assumed value added by an insourced service is less than the actual amount of value-added, a self-supply tax would leave a tax bias in favour of insourced services in the same way as a concessionary input tax credit that is underinclusive in terms of the specified amount.

The extent of the quantitative targeting problem and the associated tax bias under either a concessionary input tax credit or a self-supply tax depends on the deviation between the actual and assumed amounts of value added by outsourced suppliers and the relevant VAT rate.204 The deviation is significant to the extent that it arises on an average or aggregate basis for specified services and is therefore systemic. In this respect, it is notable that the Australian Treasury department apparently chose to set the rate of a concessionary input tax credit at an amount that is, on average, overinclusive.205 There is, however, no principled basis for such a policy choice. Indeed, the choice of an inflated concessionary input credit is no more defensible than the choice of an inflated self-supply tax. In both instances, a bias in favour of outsourced services operates equally. Any systemic bias in favour of outsourced services effectively offsets, in part, the benefits from eliminating the tax bias in favour of insourcing and should be avoided by tax policy makers. The goal should be, instead, the establishment of a rate of concessionary input tax credit or a self-supply tax that, on average, equates the tax-cost structures of outsourced and insourced services.206 As indicated above, this targeting goal entails onerous informational requirements that cannot always
be satisfied with any confidence. The limited Australian experience with a concessionary input tax credit does not indicate how these informational requirements were satisfied.207

**Option To Tax Financial Services**

As with a concessionary input tax credit or a self-supply tax, the fourth possible response to vertical integration listed above could be adopted in the context of an exemption system that is applied to financial intermediation services on the basis of the form of pricing structures. By providing a taxpayer option to elect taxable treatment for otherwise exempt services, this fourth possible response addresses the tax bias in favour of vertical integration by providing a financial intermediary with greater access to credits for VAT payable on outsourced services. Assume, for example, that a financial intermediary consuming an outsourced service with a non-tax cost structure of $100 ($30 cost of goods + $70 cost of labour) could elect to treat as taxable the financial services to which the outsourced service was directly attributable. In that case, the tax-cost structure would also be $100 ($30 cost of goods + $70 cost of labour + $10 VAT − $10 input credit), and the registered business that consumed the taxable financial intermediation service would be able to claim input credit for VAT paid on the service. The identical result would hold for an insourced service, provided that the same election were made to treat as taxable the financial intermediation services to which the insourced services are directly attributable ($30 cost of goods + $3 VAT + $70 cost of labour + $7 VAT − $10 input tax credit = $100 tax cost). Where the outsourced and insourced services are allocable, in part, to taxable and exempt financial services, the election to treat as taxable a greater range of the latter services would allow proportionately greater access to input tax credits. The election should affect equally outsourced and insourced services with comparable non-tax cost structures, provided that the range of financial services affected by an election remains constant.

To maximize its effectiveness in relieving input taxation of exempt financial services, an option to tax should be flexible in the sense that it can be exercised on a per transaction basis208 and can be applied to the whole range of financial intermediation services provided to registered businesses where the associated charges are otherwise exempt because they are embedded in financial margins.209 This kind of option to tax eliminates both the qualitative and quantitative targeting problems that plague a concessionary input tax credit or a self-supply tax. In effect, any tax bias to insource services is addressed by permitting particular financial intermediaries to eliminate or reduce the distorting input taxation of an outsourced service whose non-tax cost structure is otherwise preferable to that of an insourced service. No assumptions need to be made about the type of activities whose pattern of production is substitutable or the amount of a concessionary input tax credit or self-supply tax that is necessary to equate the tax-cost structures of outsourced and insourced services. However, an option to tax suffers from two
obvious problems. First, application of the option would entail complexities associated with the need to apply some form of cash flow taxation to the implicit price charged for the relevant financial service. The complexity would entail compliance and administrative burdens similar to the burdens associated with a comprehensive application of cash flow taxation described earlier in this article. Second, elimination of the input taxation of otherwise exempt financial intermediation services would have an uncertain revenue cost attributable to the elimination of the overtaxation of business consumption of these services.

Complexity and potential revenue loss are not unique attributes of an option to tax. A concessionary input tax credit obviously involves potential revenue loss. Although a self-supply tax avoids this loss and even produces some potential revenue gain, it is not clear that this option would be acceptable from a practical perspective. Both alternatives entail complexities attributable to the need to target the range of services that are considered to have substitutable patterns of production. A concessionary input tax credit adds further complexity associated with the need to allocate the tax payable on outsourced services that is otherwise ineligible for credit to the category of concessionary input credits.210

In fact, as a possible response to the perceived problem of vertical integration, the more fundamental and unique weakness of an option to tax is the fact that it is not primarily a response to this problem, but is only a poor second-best alternative to replacement of an exemption system. By eliminating tax cascading generally where it is invoked, an option to tax responds to the full range of distortions described above that are supposedly attributable to the overtaxation of business consumption of financial intermediation services. Like the comprehensive application of zero-rating or the comprehensive application of cash flow taxation, an option to tax addresses the tax bias to insource services under an exemption system, as well as possible distortions of the patterns of consumption, by replacing that system. If tax policy makers wish to respond to the full range of these possible distortions, there is no obvious reason to choose an option to tax over more comprehensive responses. Similarly, if policy makers decide to reject zero-rating and the comprehensive application of cash flow taxation, there is no obvious reason to choose an option to tax in their place. In particular, experience with such an approach has been mixed; it has been found to result in uncertain and uneven taxation of financial intermediation services.211 Furthermore, an option to tax maintains the complexity and associated compliance and administrative burdens attributable to the need to allocate tax payable on outsourced supplies between exempt and taxable financial services.212

CONCLUSION

Recent literature has developed the case for cash flow taxation and a comprehensive system of zero-rating as alternatives to the exempt treatment of financial intermediation services under a VAT. This article has emphasized the significance of the different premises underlying these alternatives. Cash flow taxation is based
on the premise that household consumption of financial intermediation services is properly characterized as taxable. Zero-rating is based on the premise that such consumption is properly considered non-taxable. The policy case for either approach depends on the resolution of this fundamental characterization issue. However, the required resolution is sufficiently contentious to undermine the case for either alternative to an exemption system. The administrative and compliance burden associated with the application of cash flow taxation is arguably justifiable only if the basic premise underlying the approach is sound. Similarly, the revenue loss associated with the adoption of a comprehensive system of zero-rating is acceptable only if the much different premise of this alternative is sound.

In the absence of any consensus regarding the appropriate characterization of the household consumption of financial intermediation services, tax policy makers are left with a menu of incremental initiatives designed to modify an exemption system to address perceived distortions. Yet, because there has been no systematic study of the pattern and significance of these distortions, choices must be made largely in a state of ignorance. Given this unsatisfactory policy-making environment, the article has suggested that the boundary between exempt and taxable financial services should be drawn on the basis of the form of pricing structures. This definitional approach could minimize inefficiencies attributable to current country practices. Moreover, the theoretical basis of the approach does not depend on resolution of the characterization of household consumption as properly taxable or non-taxable. Indeed, the suggested approach is consistent with either characterization.

With respect to other incremental modifications of an exemption system, the article has been much more skeptical. It has been critical, for example, of the selected application of cash flow taxation to property and casualty insurers, as well as proposals that accept a certain looseness in the use of formulas for the allocation of the costs of business inputs consumed by financial intermediaries. The article has been similarly critical of the case for a policy response intended to address the tax bias for financial intermediaries to insource supplies under an exemption system. Even accepting the debatable premise that there is a need for such a response, it is virtually impossible to design a response that is appropriately targeted. The article has suggested, instead, that a reliance on the form of pricing structures to draw the boundary between exempt and taxable supplies is a more limited response that could increase the access of financial intermediaries to input tax credits. The same definitional approach would allow registered businesses that consume financial intermediation services to gain access to greater input tax credits in respect of these services. This enhanced access may, in fact, be a suitable alternative to a specific response to the tax bias for financial intermediaries to insource supplies. It may also alleviate the imperative to accept a certain looseness in the use of formulas for the allocation of the costs of business inputs consumed by financial intermediaries.
Basic Methodologies

There are two basic methodologies for the application of the tax calculation account (TCA) method to loans and deposits:

1) the sum of the cash flows method, and
2) the interest margin method.

The sum of the cash flows method involves the calculation of the VAT base for a period by

1) debiting the TCA by the amount of all cash inflows associated with loans or deposits in the period;
2) crediting the TCA by the amount of all cash outflows associated with a loan or deposit in the period;
3) multiplying the net debit or credit balance by the indexing rate, which results in a debit or credit entry in the TCA for the period; and
4) reducing the TCA balance at the end of the period by the loan or deposit balance, which becomes the opening balance for the next period.

The interest margin method involves the calculation of the VAT base for a period by

1) determining the difference between the contracted interest in the period on a loan or deposit and the indexing adjustment;
2) applying the indexing adjustment to the margin for the period; and
3) multiplying the TCA balance by the VAT rate for the period.

The sum of the cash flows method does not require a distinction to be made between interest and principal cash flows, since the closing balance reduction ensures that no net VAT is paid or credited on the relevant principal amount.

The interest margin method requires a distinction to be made between interest and principal cash flows.

Specialized Design Features

The negative balance represented by the amount of a bad loan is permitted as an offset to the full inclusion of the amount of interest on the loan (including the risk premium).

Interest is recognized on either a cash or an accrual basis with no difference in the present value of the amount of VAT liability.
Discounts are recognized as interest over the term of a debt security; premiums are recognized as cash inflow for the issuer and cash outflow for the holder.

The use of short-term interest rates as the indexing adjustment for fixed-rate long-term loans and deposits means that the amount of the financial margin varies over the term and negative margins arise where the indexing rate is outside the range of deposit and lending rates.

TCA calculations for foreign-currency loans and deposits are based on foreign-currency cash flows and short-term interest rates in the foreign currency; consequently, the amount of the financial margin associated with such loans and deposits excludes unexpected exchange gains and losses.

Penalties for early withdrawal of deposits and early repayment of mortgages create a TCA debit.

Credit card receivables are treated as customer loans subject to TCA treatment. There is no need to adjust for capitalized interest charges, which otherwise create a TCA credit that offsets the TCA debit associated with the interest charge.

Cash balances maintained to service customers or to comply with regulatory requirements are treated as equity capital with no indexing adjustment.

Risk Intermediation: Transactions in Derivatives

Basic Methodologies

Pure cash flow taxation is applied to risk intermediation involving the writing of exchange-traded derivative financial instruments.

Over-the-counter (OTC) derivatives (including interest-rate swaps, forwards, equity swaps, commodity swaps, and options) are subject to either pure cash flow taxation or the TCA method at the option of the financial institution.

Pure cash flow taxation is applied to the total net cash flows associated with derivatives written by financial intermediaries and requires the treatment of

1) amounts paid by financial intermediaries as taxed purchases eligible for VAT refunds; and
2) amounts received by financial institutions as taxable sales subject to VAT.

The TCA method involves

1) treatment of the “inception profit” associated with the writing of a derivative as the equivalent of an explicit intermediation fee subject to VAT; and
2) treatment of the inception profit as a loan to the counterparty in respect of which the TCA is established to compute VAT on the financial margin over the term of the derivative.

The inception profit is equal to the present value of the anticipated margin associated with the writing of a derivative. It is determined as the difference between the price specified under the instrument and the midmarket price for the same position in the same instrument.
The midmarket price is determined as the midpoint between the bid and ask prices for long and short positions in the particular derivative.

Subsequent cash flows under a derivative instrument are treated as debits or credits to the TCA with indexing adjustments.

**Specialized Design Features**

**Foreign-Currency Swaps and Forwards**

The brokerage method is applied to foreign-currency swaps and forwards in order to eliminate the recognition of unanticipated exchange gains and losses attributable to changes in the spot exchange rate.

The brokerage method involves payment of VAT on the present value of the financial intermediary’s inception profit measured at the time of entering into a foreign-currency swap or forward.

**Exchange-Traded Derivatives**

The clearinghouse is treated as a financial institution, and clearing brokers are required to apply the cash flow method for trades on behalf of their customers.

Trades by the clearinghouse on its own account or with a financial institution are zero-rated.

VAT can be calculated on a portfolio basis for particular customers.

The TCA method for deposit-taking intermediation is applied to interest earned on cash margin balances maintained with the clearinghouse for clearing brokers and with clearing brokers for customers.

**OTC Derivatives**

Where an OTC derivative is settled by cash on a net basis, only the net cash flow (that is, gain or loss on the particular instrument paid by one counterparty to the other) is subject to the cash flow or TCA method.

Where an OTC derivative is settled by physical delivery of the underlying commodity, payment for the commodity is not subject to the cash flow or TCA method if a sale of the commodity is subject to VAT.

Where an OTC derivative is settled by physical delivery of the underlying commodity, payment for the commodity is subject to the TCA method if a sale of the commodity is not otherwise subject to tax, and the closing balance of the TCA is equal to the fair market value of the underlying commodity.

**Insurance Function**

**Basic Methodologies**

Property and casualty insurers and life insurers have the option to apply either pure cash flow taxation or the TCA method.
Either method measures both the risk intermediation margin and the net investment margin of insurers.

Pure cash flow taxation requires the application of VAT to all cash inflows of an insurer from premiums and investments. Input credits are provided for all amounts that are paid as claims and are credited as interest to policy reserves.

Amounts paid as claims to registered businesses are treated as taxable sales by such businesses and are subject to remittance of VAT.

Application of the TCA method to insurance policies involves

1) the debiting of the amount of cash inflows (premiums) associated with a particular policy for the relevant period;
2) the crediting of the amount of cash outflows (claims, bonuses, and policy surrenders) associated with a particular policy for the relevant period;
3) a debiting or crediting equal to the net debit or credit balance for the period multiplied by the indexing rate;
4) a reduction equal to the amount of the reserve balance associated with a particular policy at the end of the period; and
5) the remittance or refund of amounts equal to the TCA balance at the end of the period multiplied by the VAT rate.

The closing TCA balance for a period becomes the opening TCA balance for the following period.

Specialized Design Features

VAT on investment income is determined on an aggregate portfolio basis for insurers on bearer securities, with flexibility in determining the closing value of securities on hand for TCA closing balance purposes.

Reinsurance transactions are zero-rated.

The amount of policy reserves is equal to the amount of the reserves either for corporate income tax purposes or for financial accounting purposes.

The amount of policy reserves must be allocated to particular policies for purposes of the TCA applied on a per transaction/per customer basis.

Separate TCAs must be maintained for insurance policies and for investments of insurers. The indexing adjustment serves to allocate the total margin earned by insurers between insurance policies (the risk intermediation margin) and investments (the investment intermediation margin).

Insurers are entitled to input credits for VAT paid on property acquired for settlement of claims in kind and for other services consumed in the claims settlement process.

Investments of insurers in real estate are excluded from the application of the cash flow or TCA method.
Brokerage Services: Transactions in Securities

Basic Methodology

The difference between the bid price paid by a financial intermediary for the purchase of a security as a principal and the midmarket price is deemed to be a brokerage fee charged to the seller.

The difference between the ask price received by a financial intermediary for the sale of a security as a principal and the midmarket price is deemed to be a brokerage fee charged to the purchaser.

The total amount paid or received by customers is deemed to include VAT on the deemed brokerage fee.

The midmarket price is equal to the midpoint between the dealer bid and ask prices. The dealer spread is thus converted to an explicit fee allocated between purchasers and sellers of securities through a financial intermediary.

Specialized Design Features

Unanticipated Gains and Losses on Inventory

Gains and losses on securities held in the inventory account of a financial institution are recognized for VAT purposes under either the cash flow or the TCA method.

Gains and losses on shares in affiliates in which the financial institution owns at least a 50 percent interest are excepted from the application of the cash flow or the TCA method.

The cash flow method treats

1) all cash outflows from purchases as taxed purchases eligible for VAT refunds;
2) all cash inflows from sales as taxable sales subject to VAT; and
3) all cash inflows from the receipt of dividends or interest as taxable sales subject to VAT.

The application of the TCA method is similar to that for deposit-taking intermediation:

1) all cash inflows are debited to the account;
2) all cash outflows are credited to the account;
3) the net balance in the TCA for a period is multiplied by the indexing rate and is credited to the TCA;
4) the closing value of a security on hand is debited to the account to offset the credit associated with its purchase;
5) VAT is calculated on the closing balance; and
6) the closing value of a security becomes the opening balance in the TCA for the subsequent period.

VAT is calculated on the basis of cash flows associated with an entire security portfolio and is deemed to be derived from bearer securities without any counterparty. Consequently, the burden of the VAT falls on financial institutions.
Debt securities issued by financial institutions in registered form are subject to the basic methodology for deposits under deposit-taking intermediation. Cash flows are deemed to be VAT inclusive, but the amount of gain or loss is determined after excluding the deemed brokerage fee subject to VAT; that is, the cost of a security is deemed to include the amount of the deemed brokerage fee subject to VAT, and the proceeds for a security are deemed to be reduced by the amount of the deemed brokerage fee subject to VAT.

**Securities Lending**

The posting of cash collateral by a securities borrower and the crediting of interest are subject to the TCA applicable to deposit-taking intermediation. The securities lending fee is subject to VAT under normal rules.

Dividend compensation payments are subject to VAT if the lender is registered, but VAT is suspended for all compensation payments made to exempt entities (for example, pension funds).

**Notes**

1. The acronyms VAT and GST are used interchangeably in the article.
2. Although there are important differences in the details of the application of exemption systems, the core features of exempt treatment are consistent across countries. See, for example, Organisation for Economic Co-operation and Development, *Indirect Tax Treatment of Financial Services and Instruments* (Paris: OECD, October 1998).
3. The principal exceptions are Argentina and Israel. The former applies VAT to the gross amount of interest payments on loans made by financial institutions, with input tax credits for registered businesses. There is, however, also a significant range of exemptions for specific types of interest charges, which require the allocation of input tax credits of financial institutions between exempt and taxable cash inflows. See Cristian E. Rosso Alba, “Taxation of Financial Services Under the Value Added Tax: A Survey of Alternatives and an Analysis of the Argentine Approach” (1995), vol. 6, no. 6 *International VAT Monitor* 335-49. Israel applies an addition-method VAT to insurers and deposit-taking institutions apart from the regular invoice/credit VAT. No credits are available for VAT paid on inputs consumed by affected insurers and deposit-taking institutions. In addition, registered businesses cannot claim credits for VAT paid on their consumption of insurance and deposit-taking intermediation. See David Gliksberg, “Israel’s Value Added Tax Law” (July 1992), 3 *International VAT Monitor* 2-14, at 12-13. More limited exceptions to exempt treatment of financial intermediation services are provided by Australia, New Zealand, and Singapore (cash flow taxation of property and casualty insurance); Belgium, France, and Germany (option to treat financial intermediation services as taxable); and South Africa (taxation of a broad range of fee-based financial intermediation services, as well as property and casualty insurance). For a review and brief assessment of these particular country practices, see Alan Schenk and Howell H. Zee, “Treating Financial Services Under a Value Added Tax: Conceptual Issues and Country Practices” (2001), vol. 22, no. 26 *Tax Notes International* 3309-16. See also Commonwealth Treasury of Australia, *Economic Roundup: Spring 2000* (Canberra: AusInfo, December 2000), 49-57; Roger Muir, “The Treatment of Insurance Transactions Under the New Zealand GST” (December 1992), 2 *International VAT Monitor* 2-5; and James Dixon, “Option To Tax Financial Services—Part 1” (July-August 1991), 2 *International VAT Monitor* 2-12 and “. . . Part 2” (September 1991), 2 *International VAT Monitor* 2-9.
4 Ernst & Young, The TCA System—A Detailed Description, Reports and Studies Commissioned for the European Commission (Brussels: European Commission, Taxation and Customs Union, 1998).

5 A notable exception is William Jack, “The Treatment of Financial Services Under a Broad-Based Consumption Tax” (2000), vol. 53, no. 4 National Tax Journal 841-51. As described more fully in the text accompanying notes 126 to 151, infra, Jack’s efficiency-based analysis provides the basis for a taxonomy of financial charges under an exemption system that corresponds more closely to the possible arguments for exemption than does the definitional approach characteristic of standard country practice.


7 See, in this respect, Graeme S. Cooper and Richard J. Vann, “Implementing the Goods and Services Tax” (1999), vol. 21, no. 3 Sydney Law Review 337-436, at 413, where the authors suggest that exempt treatment is the safest course until “an internationally agreed method is found” as an acceptable alternative. The present article takes a somewhat different position in arguing that exempt treatment may, in fact, be preferable in the absence of a compelling resolution of certain weaknesses in the assumptions on which the recent challenges are based.

8 For a similar categorization, see Carl Bakker and Phil Chronican, Financial Services and the GST, Discussion Paper (Wellington: Victoria University Press for the Institute for Policy Studies, 1985), 7-12.


11 Returns in excess of the expected or normal rate of return are exempted under the prepayment approach but remain taxable under a deduction-method PET, since the cost of a capital asset is expensed at a present value that reflects the opportunity cost of capital or the normal rate of return. Under the deduction-method PET, all returns, including those in excess of the normal rate of return, remain taxable. See Alvin C. Warren Jr., “How Much Capital Income ‘Taxed Under an Income Tax Is Exempt Under a Cash Flow Tax?’” (1996), vol. 52, no. 1 Tax Law Review 1-16.

12 The cash inflow under a borrowing must be included in taxable income in order to measure taxable consumption in the tax period.

13 Payments of interest and loan principal are effectively considered a form of saving and are deductible as cash outflows. The equivalent result arises under a VAT for household borrowings used to purchase taxable goods or services. Because subsequent repayment of the loan principal and payments of interest are not dedicated to the acquisition of taxable consumption, they are effectively expensed against subsequent cash inflows.

14 Under the prepayment method, the cash inflows used to service the payment obligations on the borrowing are effectively taxed as subsequent consumption. In present value terms, the tax on this subsequent consumption equals the tax that would be paid under the deduction method on receipt of the loan proceeds.

15 **Example 5: Consumption Tax Treatment of an Investment Borrowing Without Financial Intermediation**

<table>
<thead>
<tr>
<th>Description</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-year borrowing made at T(0) and repaid at T(2)</td>
<td>Tax rate = 50 percent</td>
</tr>
<tr>
<td>2-year loan made at T(0) and repaid at T(2)</td>
<td>Discount rate = 6 percent (compounded at T(1))</td>
</tr>
</tbody>
</table>

(2001), Vol. 49, No. 5 / n° 5
Cash flows associated with lending asset:

| T(0)       | loan principal (100) |
| T(1)       | interest 6           |
| T(2)       | interest 6.36, principal repayment 100 |

Cash flows associated with borrowing:

| T(0)       | loan principal 100   |
| T(1)       | interest (6)         |
| T(2)       | interest (6.36), principal repayment (100) |

The cash inflow under the borrowing is offset by the cash outflow on the making of the loan, and cash inflows on the loan are perfectly offset by cash outflows on the borrowing. Assume, however, that the loan generates a return of $4.14 at T(1) and T(2) ($8.28 in total) in excess of the cash flows under the related borrowing. In that case, the taxpayer realizes $8.28 of deferred consumption, which is equal to $7.37 of current consumption at T(0). The ratio between current and deferred consumption is thus 1:1.1236. Under a deduction-method PET, this result is undisturbed. The taxpayer is not taxed at T(0), because the $100 cash inflow under the borrowing is offset by a $100 deduction for the cash outflow on the acquisition of the loan. Realization of the cash inflows under the loan is offset by the cash outflows under the borrowing, so that only the excess of the former over the latter is taxed. Assuming again that an excess of $8.28 is realized, this amount would be taxed at T(1) and T(2), leaving the taxpayer with $4.14 of deferred consumption. The present value of this consumption at T(0) is $3.68, and the ratio between current and deferred consumption is 1:1.1236, which is the same as that in a no-tax world. This result holds under a prepayment cash flow PET, but only to the extent that the yield on an investment asset in excess of the cost of borrowing is an expected or normal rate of return. Unexpected returns are, in fact, exempt under the prepayment method and taxable under a deduction-method PET. This treatment should not distort the choice between current and deferred consumption, since the return is entirely unexpected when viewed ex ante at the time that the decision must be made.

16 Example 6: Consumption Tax Treatment of an Investment Borrowing with an Explicit Charge for Intermediation Services

- 2-year borrowing made at T(0) and repaid at T(2)
- 2-year loan made at T(0) and repaid at T(2)
- Tax rate = 50 percent
- Discount rate = 6 percent (compounded at T(1))

Cash flows associated with lending asset:

| T(0)       | loan principal (107.55) |
| T(1)       | interest 6.45, intermediation fee (2.10) |
| T(2)       | interest 6.84, intermediation fee (2.10), principal repayment 107.55 |

Cash flows associated with borrowing:

| T(0)       | loan principal 100 |
| T(1)       | interest (6), intermediation fee (2.14) |
| T(2)       | interest (6.36), intermediation fee (2.14), principal repayment (100) |
In a no-tax world, the taxpayer must invest an amount equal to the $100 on the borrowing plus the present value of the intermediation services on both sides of the transaction ($7.55) to realize cash flows on the lending asset that offset the cash flows under the borrowing. In effect, the payoff on the lending asset at T(2) ($120.84) less the intermediation fee associated with the asset ($4.20) provides a net payoff of $116.64, which offsets the cash outflows under the borrowing. The taxpayer must pay an additional $7.55 at T(0) for the consumption of the intermediation services under the borrowing and the lending. The present value at T(0) of the charges for those services at T(1) and T(2) ($8.48 in total) is $7.55, which represents the value of current consumption at T(0) (ratio of current to deferred consumption equals 1:1.1236). The taxpayer realizes no net consumption, other than the consumption of these intermediation services, because the positive payoff on the lending asset is completely offset by the negative payoff on the borrowing. Any other consumption arises only to the extent that the taxpayer realizes a payoff on the lending asset in excess of $120.84. As compared with example 5, supra note 15, and a no-tax world without intermediation, the cost of the borrowing and investment transaction is simply increased by the charge for the intermediation services.

Implementation of a PET does not disturb the underlying economics of this investment borrowing in a no-tax world. Under a deduction-method PET, the taxpayer is taxed on the $100 received at T(0) under the borrowing. This amount is offset by a deduction of $107.55 for the cost of the lending asset. The additional $7.55 deduction effectively offsets, in present value terms, $8.48 of the payoff at T(1) and T(2) that is used to service the charges for the consumption of the intermediation services. The $112.36 balance of the interest and principal payments on the lending asset ($120.84 payoff less $8.48 of intermediation charges) must be included in the PET base, but it is offset by the interest and principal payments on the related borrowing. The taxpayer is taxed only on any unexpected return on the lending asset in excess of the expected payoff of $120.84. This unexpected return represents deferred consumption that is taxed at T(2) unless it is saved. Moreover, the tax on this deferred consumption does not alter the relative values and ratios of current to deferred consumption in a no-tax world. It can be seen, therefore, that taxation of the intermediation services under a PET does not drive a wedge between the two sides of an investment borrowing that affects the decision to enter into the transaction as a means of generating deferred consumption or to simply engage in current consumption. Although unexpected returns on the lending side of an investment borrowing are exempt under a prepayment PET, this treatment should not distort the choice between current and deferred consumption, for the reasons stated above (see note 15, supra).

17 See, for example, Lorey A. Hoffman, S.N. Poddar, and John Whalley, “Taxation of Banking Services Under a Consumption Type, Destination Basis VAT” (1987), vol. 40, no. 4 National Tax Journal 547-54; and Vicky Barham, Satya Poddar, and John Whalley, “The Tax Treatment of Insurance Under a Consumption Type, Destination Basis VAT” (1987), vol. 40, no. 2 National Tax Journal 171-82. As described in the text accompanying notes 119 to 122, infra, this view underlies the work of Poddar and English in developing a cash flow basis for the taxation of financial intermediation services under a VAT: Satya Poddar and Morley English, “Taxation of Financial Services Under a Value-Added Tax: Applying the Cash-Flow Approach” (1997), vol. 50, no. 1 National Tax Journal 89-111. See also Ernst & Young, The TCA System, supra note 4; Bakker and Chronican, supra note 8; and Alan Schenk and Oliver Oldman, “Analysis of Tax Treatment of Financial Services Under a Consumption-Style VAT—Report of the American Bar Association Section of Taxation Committee on Value Added Tax” (1990), vol. 44, no. 2 The Tax Lawyer 181-94.


Grubert and Mackie, supra note 9. The same non-taxable characterization should presumably extend to non-governmental organizations and governmental agencies that are exempt from VAT to the extent that they are effectively considered end-users equivalent to households. Small businesses and other entities that are not considered end-users, but are permitted to make exempt supplies for other policy reasons, should not be treated as equivalent to households. While their consumption of these services might be considered non-taxable on the same basis as consumption by registered businesses, their unregistered status means that such consumption should be input taxed in the same manner as their consumption of other business inputs. In short, there appears to be no policy reason grounded in the consumption of financial intermediation services by these entities that would justify concessionary treatment.

See, for example, Deborah Butler, “VAT as a Tax on Consumption: Some Thoughts on the Recent Judgment in Parker Hale Ltd. v. Customs and Excise Commissioners” [2000], no. 5 British Tax Review 545-53 (emphasizing the nature of a VAT as a tax on the household consumption of goods and services).


Merrill, supra note 22, at 9-15.

Ibid.

Ibid.

See also Thompson, supra note 19, at 1201, citing Gillis, supra note 19, regarding the questionability of the characterization of household consumption of insurance intermediation services as taxable consumption.

Service charges are, however, effectively deductible under an income tax where the charges are embedded in a reduced rate of interest on outstanding cash balances and only this reduced rate must be brought to account. Bradford, supra note 22, argues that both income and consumption taxes require the imputation of the value of these services to consumers provided that the household consumption of these services is properly considered taxable.
See Peter R. Merrill and Harold Adrion, “Treatment of Financial Services Under Consumption-Based Tax Systems” (1995), vol. 68, no. 12 Tax Notes 1496-1500, at 1497: “Historically, the exemption of financial services from value-added taxation has been justified on the ground that it is difficult to identify and measure value added by financial intermediation”; and Schenk and Zee, supra note 3, at 3311: “The difficulty in identifying the value of intermediation services and other financial services with implicit fees has led most countries to adopt the exemption approach.” Similar observations are found in various government and OECD documents. See, for example, Commonwealth Treasury of Australia, The Application of Goods and Services Tax to Financial Services, Consultation Document (Canberra: AusInfo, August 1999), 1: “Financial services are generally input taxed in overseas jurisdictions due to the difficulty of identifying, for individual transactions, the value added in a financial intermediary’s margin.” OECD, Indirect Tax Treatment of Financial Services and Instruments, supra note 2, at 5, where it is suggested that the exempt treatment of financial services can be rationalized on either of the following grounds: (1) the application of VAT to these services would distort the choice between current and deferred consumption, or (2) the identification and measurement of financial margins is too difficult in practice. Canada, Department of Finance, Goods and Services Tax: Technical Paper (Ottawa: Department of Finance, August 1989), 141: “While conceptually it is possible to identify these implicit prices, doing so in practice is extremely complex.” New Zealand Inland Revenue, Proposed Application of GST to Financial Services (Wellington: Inland Revenue, June 1985), 1: “For financial services this relatively simple system [invoice/credit VAT] breaks down as it is difficult in many cases to identify the price charged for the services.”

The difference between property and casualty insurers and life insurers is one of degree only. The shorter-term nature of property and casualty coverage means that a much smaller portion of the premium paid represents savings in the form of a deposit.

See Cooper and Vann, supra note 7, at 413.

Lorey Arthur Hoffman, “The Application of a Value-Added Tax to Financial Services” (1988), vol. 36, no. 5 Canadian Tax Journal 1204-24, at 1208. This cash flow base is often referred to as the “F-base” portion of a cash flow consumption tax collected from businesses. The other portion is the “R-base,” calculated as all cash inflows from sales of goods and services less all cash outflows for the purchase of business inputs. The F-base applies to the financial transactions of businesses. The R-base applies to “real” goods and services produced by businesses. If wages are deductible, the consumption tax is left to apply to the value-added associated with the economic rent or pure profits realized by businesses. The value added by labour inputs can be taxed under a personal expenditure tax applied to the wages of individuals less personal savings in the relevant tax period. If the wages are not deductible under the R and F bases, the value added by labour inputs is taxed at the business level and borne by households to the extent that the tax is shifted forward.

The original Canadian sales tax proposals included the application of a subtraction-method VAT to the margins of financial intermediaries as a substitute for the invoice/credit method applied to other sectors. The supply and purchase of non-financial goods and services by financial intermediaries was to remain subject to the mainstream invoice/credit method. See Canada, Department of Finance, Tax Reform 1987: Sales Tax Reform (Ottawa: Department of Finance, June 18, 1987), 119-41. For a comparison of proposals in the United States for the application of various subtraction methods intended to measure the value added by financial intermediaries, see Peter R. Merrill and Chris R. Edwards, “Cash-Flow Taxation of Financial Services” (1996), vol. 49, no. 3 National Tax Journal 487-500.

Canada, Department of Finance, Sales Tax Reform, supra note 33, at 121-22; Bakker and Chronican, supra note 8, at 9-10 (drawing an analogy with trading in second-hand goods, where the value of the service provided by the intermediary is difficult to measure for particular transactions); and Cooper and Vann, supra note 7, at 413. See also Schenk, supra note 18, at 832: “Charges for intermediation services rendered by financial institutions can be brought within a
European-style VAT if a mechanism can be developed to measure the value of intermediation services rendered to depositors and borrowers on a transaction-by-transaction basis.”

35 Bradford, supra note 22, argues that the same problem of imputation arises under the income tax, and it is only the visibility of the problem under consumption taxes that has attracted attention.

36 Henderson, supra note 19, at 41-42. See also Bakker and Chronican, supra note 8, at 10-12.

37 “Full invoicing” and “separate tax rates” are two other alternatives to exemption identified in the literature preceding the detailed development of cash flow taxation. See, for example, Bakker and Chronican, supra note 8, at 16-27; and New Zealand Inland Revenue, Second Report of the Advisory Panel on Goods and Services Tax to the Minister of Finance (Wellington: Inland Revenue, July 1985). Full invoicing involves the application of VAT to the nominal amount of financial transactions for which an explicit fee or commission is not charged. Financial intermediaries would be able to claim credits on inputs, and lenders and borrowers would have to register for VAT purposes. A separate tax rate approach involves the identification of the average margin for particular financial intermediation services and the application of an adjusted rate to the associated cash flows determined on a gross basis. The rate would be set at an amount that would ensure taxation of the value of the financial intermediation service embedded in the gross cash flows. Both of these approaches are rejected here as independent alternatives to an exemption system, since both their underlying concepts and their basic mechanics are incorporated into a fully developed cash flow tax system applied to financial intermediation.

38 If the subtraction or addition method were applied without any provision for input tax credits, there would be no need to allocate margins among consumers. As noted supra, note 3, this approach is used in Israel with the application of an addition-method VAT to deposit-taking intermediaries. The obvious problem with this approach is distortion of patterns of production attributable to the additional layer of unrelieved tax on business consumers. See the text accompanying notes 47 to 52, infra, for a brief description of some of the possible distortions associated with the input taxation of the business consumption of financial intermediation services. Application of the subtraction method to financial intermediation was originally proposed in Canada in the context of an invoice/credit VAT, but was subsequently rejected, at least in part, because of a general inability to allocate financial margins to business consumers for input credit purposes. The only exception to this failure to allocate financial margins was the proposed availability of input tax credits in respect of the business consumption of property and casualty insurance. See Canada, Department of Finance, Sales Tax Reform, supra note 33, at 123. When the Department of Finance rejected these proposals in favour of an exemption system, exempt status was extended to property and casualty insurance. In contrast, New Zealand chose to impose GST on the margin associated with general insurance. The Australian Treasury department subsequently followed the New Zealand approach. The defensibility of this approach in the context of a general exemption system is discussed in the text accompanying notes 160 to 182, infra.

39 For example, see Henderson, supra note 19, for an allocation proposal using relative asset and liability values.

40 See, for example, Cooper and Vann, supra note 7, at 413: “Experience with apportionment for banks in the income tax area suggests extreme caution in entering into any arrangement for the GST.”

41 New Zealand Inland Revenue, GST: A Review, supra note 6, at 114. For an example of the application of a comprehensive system of zero-rating, see Quebec Sales Tax Act, RSQ, c. T-0.1, section 198(1), which zero-rates the supply of financial services generally for sales tax purposes in Quebec.

42 See Poddar and English, supra note 17; and Ernst & Young, The TCA System, supra note 4. See also Satya Poddar and Morley English, “Taxation of Financial Services Under a VAT: Issues and Options,” paper presented at the National Tax Association Conference on Taxation of Financial Services, Clearwater, Florida, February 24-25, 1994; Morley English, David Leslie, and Satya
Poddar, “Treatment of Financial Services Under a VAT: Further Exploration of the Cash-Flow Method of Taxation,” report prepared for the Commission of the European Communities (Toronto, September 1994); and Ernst & Young, “Treatment of Financial Services Under a VAT.” report prepared for the Commission of the European Communities (Toronto). For an earlier articulation of the basic concepts underlying the application of cash flow taxation to financial intermediation services, see Hoffman, Poddar, and Whalley, supra note 17; Barham, Poddar, and Whalley, supra note 17; and John Whalley and Deborah Fretz, The Economics of the Goods and Services Tax, Canadian Tax Paper no. 88 (Toronto: Canadian Tax Foundation, 1990), 100-15.

Under the approach developed by Poddar and English, cash flow taxation would be applied comprehensively to all types of financial intermediation. Cash flow taxation could also be applied on a taxpayer-elective basis. See the text accompanying notes 208 to 212, infra, for a brief discussion of the role of an option to apply cash flow taxation as an alternative to a comprehensive application.

See, for example, New Zealand Inland Revenue, GST: A Review, supra note 6, at 113-14.

OECD, Indirect Taxation of Financial Institutions and Instruments, supra note 2, at 36: “At present, there is little reliable information regarding the quantum of ‘hidden’ tax arising from the broad exemption of financial services.” The lack of systematic study of the effects of exempt tax treatment is not limited to financial intermediaries; there is little information on the effect of exempt treatment generally under VATs. See, for example, Konstantinos Zacharopoulos, “Value-Added Tax: The Partial Exemption Regime” (2001), vol. 49, no. 1 Canadian Tax Journal 102-26, at 120: “At present, there is little reliable information provided by [EU] member states regarding the extent and the quantum of hidden tax and its ensuing distortions arising from the broad exemptions. However, such distortions do arise in practice, especially in the financial sector.”

Serious study of the significance and overall direction of the perceived distortions would require an assessment of the impact of any offsetting non-tax distortions and the significance of other distortions under income and excise taxes. See, for example, OECD, Indirect Taxation of Financial Institutions and Instruments, supra note 2, at 6: “The distortive impact of differences in the taxation of financial services should be considered in the context of the wider range of other potentially distortive influences including regulatory constraints, market developments, time zones and country location.”

But see, in this respect, Julian S. Alworth, “VAT and the Organisation of Financial Institutions and Markets,” unpublished paper presented at the Seminar on the Treatment of Financial Services Under VAT Systems, sponsored jointly by the European Commission and the OECD, Paris, March 6 and 7, 1995, 5-6. Alworth suggests that the undertaxation of the household consumption of financial intermediation charges may be offset, in part, by the attempt to shift the burden of unrecoverable VAT on business inputs to households in the form of higher prices. If this shift occurs where business consumers have access to the offshore provision of financial intermediation services free of VAT, the embedded tax on business inputs used by financial intermediaries cannot be shifted forward to domestic business consumers of financial intermediation services.

But see Merrill, supra note 22, at 48, note 16: “If the cost of tax cascading is insignificant, the current exemption system may not create large distortions in the financial sectors of countries that impose VAT.” In the Canadian context, it has been suggested that the distortions imposed by capital taxes, retail sales taxes, and taxes on insurance premiums are more significant than the inability of financial intermediaries to claim GST credits on the cost of inputs attributable to the provision of exempt services. See Kevin J. Dancey, Impact of Taxation on the Financial Services Sector, research report prepared for the Task Force on the Future of the Canadian Financial Services Sector (Ottawa: Department of Finance, September 1998), 47; and Duanjie Chen and Jack Mintz, “Premium and Capital Taxes Impact Negatively on Canadian Property and Casualty Insurance Industry” (2001), vol. 22, no. 12 Tax Notes International 1415-31.

For example, international competition and the ability to avoid higher prices through disintermediation may mean that any embedded VAT on business inputs must be borne by financial
intermediaries. See, in this respect, Malcolm Levitt, “VAT on Financial Services,” paper presented at the Seminar on the Treatment of Financial Services Under VAT Systems, sponsored jointly by the European Commission and the OECD, Paris, March 6 and 7, 1995, 16: “The tax cascading effect should not be exaggerated because a significant proportion of the input tax which is initially borne by financial institutions rests with them and only a small proportion is probably recovered via interest margins or fees and other charges.” See also New Zealand Inland Revenue, GST: A Review, supra note 6, at 113.

50 The same advantage arises for the supply of financial intermediation services to households.

51 Bossons, supra note 19, at 97. See also New Zealand Inland Revenue, Second Report of the Advisory Panel, supra note 37, at 4-5.

52 A “reverse charge” mechanism is used by many countries as a means to require self-assessment of VAT on services imported by exempt domestic enterprises which would be taxable if provided by domestic suppliers. See New Zealand Inland Revenue, GST and Imported Services—A Challenge in an Electronic Commerce Environment (Wellington: Inland Revenue, Policy Advice Division, June 2001), for a discussion of the use of this mechanism. Taxable enterprises are not subject to the reverse charge on the assumption that the cost of the imported supplies is effectively subject to VAT when it is shifted forward in prices charged to domestic consumers of the taxable supplies of the enterprises. Domestic households are generally excluded from the reverse charge for administrative and compliance reasons. Although Canada and Switzerland do require households to self-assess tax on imported services, the unenforceability of the requirement severely undermines its effectiveness in alleviating competitive distortions. The original sales tax proposals in Canada included a proposal to require domestic household and business consumers of offshore financial services to self-assess tax on an imputed amount of fees or commissions. This proposal was subsequently abandoned with the abandonment of the proposal to tax financial margins in favour of a general system of exemption, with a reverse charge mechanism applicable to imported services that would otherwise be taxable if provided domestically.

53 See supra note 32 for a brief description of the F-base of a cash flow business tax.

54 See ibid. for a brief description of the R-base of a cash flow business tax.

55 Poddar and English, supra note 17; and Ernst & Young, The TCA System, supra note 4. For earlier development of these three forms of cash flow taxation applied to financial intermediation services, see also the sources cited in note 42, supra.

56 Poddar and English, supra note 17, at 92-98.

57 Although illustrated in the context of simple deposit-taking transactions, the basic principles and mechanics of the cash flow method can be applied equally to risk intermediation, the insurance function, and brokerage services. See Ernst & Young, The TCA System, supra note 4, and the appendix to this article.

58 Poddar and English, supra note 17, at 98-99.

59 But see Merrill and Edwards, supra note 33, at 499, note 13, who argue that the liquidity concerns have been given too much credence, since the amount of VAT imposed on a registered business in respect of the amount of a loan advance would be offset by an input tax credit associated with the use of the funds to purchase business inputs. A liquidity problem remains, however, to the extent that the input tax credits would otherwise be available to offset VAT on taxable sales and would not be needed to offset VAT on the amount of loan advances.

60 Poddar and English, supra note 17, at 99-103.

61 Ibid.

62 Ibid., at 102-3.

63 Ibid., at 101.

64 Ibid., at 101-2. The unavailability of input tax credits for households means that TCAs could be maintained on an aggregate basis for this category of consumers.
65 Ibid., at 107.
66 Ernst & Young, The TCA System, supra note 4.
67 Jack, supra note 5.
68 Grubert and Mackie, supra note 9.
69 Ibid., at 25. See also Chia and Whalley, supra note 19; and Whalley, supra note 18, at 277: “[I]ndividual preferences are not defined over intermediation services but only over the goods that are consumed with the aid of the service rendered. To put the matter, simply, intermediation services facilitate consumption but do not directly provide utility.”
70 Grubert and Mackie, supra note 9, at 30. Jonathan Kesselman, “Comment,” in Taxation to 2000 and Beyond, supra note 18, 286-94, at 289, also disputes Whalley’s suggested extension of the efficiency argument to intermediation that permits the transport of consumption across space (see infra note 73). Kesselman suggests that “transportation and distribution of goods in the marketplace do not serve an analogous function,” and adds that an exemption for services generally would distort patterns of production, since manufacturers would have a tax incentive to “contract out or move service inputs downstream.”
71 The same analysis applies to personal service fees generally, which do not have a natural counterpart to the savings good. Fees paid for the transport of business goods are considered non-taxable consumption because of the presence of a sale at the new location for proceeds that can be consumed. In effect, there is a natural counterpart to the savings good in this context that supports characterization of the transportation fees as non-taxable. Grubert and Mackie, supra note 9, at 30.
72 There may also be some question about the appropriate characterization of the intermediation fee embedded in lease payments. In particular, the full amount of lease payments may be taxed either on the assumption that they represent the value of a consumption flow (under an operating lease) or on the assumption that their discounted present value equals the purchase price of the consumption asset (under a financial lease). However, if the intermediation charge associated with a consumer borrowing is not taxed, consistent treatment of a financial lease requires the identification of the embedded intermediation charge and the application of an equivalent non-taxable characterization. But see Grubert and Mackie, supra note 9, at 36-37, who argue that the full taxation of lease payments would not create a bias in favour of consumer borrowing in the presence of the non-taxation of charges for deposit-taking intermediation.
73 Whalley, supra note 18, at 279, argues that intermediation services provided for the transfer of goods interspatially do not enter the consumer utility function: “The transportation of goods would seem to be analogous, as physical intermediation over space, to financial intermediation over time, and to be subject to the same treatment.”
74 Ibid.: “To the extent that life policies involve a savings component, the argument would also seem to apply to insurance.” This statement apparently implies that the distortionary effect of imposing a consumption tax is limited to the savings element of insurance coverage and does not involve the intermediation charge associated with the insurance function. See Grubert and Mackie, supra note 9, at 38.
75 Whalley, supra note 18. But see Grubert and Mackie, supra note 9, who challenge the proposition that, in a no-tax world, there are externalities that justify a positive tax rate for financial intermediation services.
76 Jack, supra note 5.
77 Ibid., at 842.
78 Ibid.
79 Ibid.
80 Ibid.
EXCEMPT TREATMENT OF FINANCIAL INTERMEDIATION SERVICES

Ibid., at 843.

Ibid., at 842.

Ibid.

Ibid., at 844.

Ibid.

Merrill and Adrion, supra note 29, at 1498; and Merrill, supra note 22, at 27. See also New Zealand Inland Revenue, *GST: A Review*, supra note 6, at 114; and Schenk and Zee, supra note 3, at 3315, who note that the magnitude of the loss depends on the relevant tax rates, the value added by financial intermediaries, and the degree of overtaxation of the consumption of intermediation services by registered businesses.

Merrill, supra note 22, at 27.

Merrill and Adrion, supra note 29, at 1498; and Merrill, supra note 22, at 18-19.

See the text accompanying notes 58 to 66, supra.

The precise dimensions of the revenue consequences of a move to taxing financial margins depend on the extent of unrelieved tax on business inputs and the undertaxation of household consumption of financial intermediation. A comprehensive system of cash flow taxation would reduce the tax burden on business consumption of financial intermediation and would increase the tax on household consumption. Levitt, supra note 49, at 5-6, notes that the historical exclusion of financial intermediation services from national accounts makes it difficult to estimate the revenue effects of a move to taxing financial margins. Any revenue gain would be reduced in those countries that impose excise taxes on the consumption of financial intermediation services as a substitute for exempt treatment under VAT, provided that those taxes were repealed on the introduction of a system of taxing margins under the VAT. See also Scott, supra note 6, at 23.

See, for example, Merrill, supra note 22, at 41; and Merrill and Edwards, supra note 33, at 496.

A definition would also be required to determine the availability of zero-rating of the provision of financial intermediation services between financial intermediaries. See Ernst & Young, *The TCA System*, supra note 4, at 10.

Poddar and English, supra note 17, at 108-9; and Ernst & Young, *The TCA System*, supra note 4, at 7.

Poddar and English, supra note 17, at 108-9.

Ibid.

The provision of credit card services by a department store to its customers is the one example of these competitive distortions cited by Poddar and English, ibid., at 109. See also Ernst & Young, *The TCA System*, supra note 4, at 7.

Poddar and English, supra note 17, at 109.

Merrill, supra note 22, at 36-37.

Ibid.

See, for example, Canada, Department of Finance, *Sales Tax Reform*, supra note 33, at 127-28; and Hoffman, supra note 32, at 1217-18.

See Merrill and Edwards, supra note 33, at 494.

Ernst & Young, *The TCA System*, supra note 4, at 9.

Ibid., at 10.

See infra note 119. The suggested definition would apply for the purpose of the exclusion of transactions in securities of an affiliated enterprise from the application of the truncated cash flow method with TCA.

(2001), Vol. 49, No. 5 / n° 5
105 See, for example, Alworth, supra note 47.
106 Poddar and English, supra note 17, at 104; and Ernst & Young, The TCA System, supra note 4, at 11-12.
107 Poddar and English, supra note 17, at 104-5; and Ernst & Young, The TCA System, supra note 4, at 19-22 (long-term loans and deposits) and 68 (long-term interest-rate swaps).
108 Poddar and English, supra note 17, at 105. See also Merrill, supra note 22, at 41; and Merrill and Edwards, supra note 33, at 496.
109 Ibid.
110 Ernst & Young, The TCA System, supra note 4, at 16-18.
111 Ibid., at 17. See also Merrill, supra note 22, at 27.
112 Ernst & Young, The TCA System, supra note 4, at 17.
113 Ibid., at 17-18.
114 Ibid.
115 Poddar and English, supra note 17, at 105-6.
116 Ernst & Young, The TCA System, supra note 4, at 19-30 (long-term loans and deposits) and 102-4 (investment margin associated with life insurance policies).
117 Ibid.
118 Ibid.
119 The principal exception would be for securities of affiliated enterprises held by a financial intermediary. See Ernst & Young, The TCA System, supra note 4, at 41. The exclusion requires policing of the boundary between affiliated and unaffiliated persons, with consequent administrative and compliance costs. See the text accompanying notes 100 to 104, supra, for a discussion of a similar problem in the context of transactions with shareholders and affiliated enterprises generally. The suggested use of a 50 percent equity interest as the relevant standard is a simplistic one that could form only the core of that standard. Technical questions that would have to be resolved include the need to define the criteria on which the standard is based and the need for anti-avoidance rules addressing those instances in which taxpayers satisfy the standard temporarily in order to access available benefits.
120 Ernst & Young, The TCA System, supra note 4, at 48-49.
121 Ibid., at 51-53.
122 In some instances, the ability to gross up investments may depend on the availability of borrowing at short-term interbank lending rates: ibid., at 51. The income available to offset the VAT on the income on the portfolio would be net of the interest charges on funds used to gross up the investment.
123 With brokerage intermediation and risk intermediation using over-the-counter (OTC) derivatives, the midpoint between dealer bid and ask prices would serve the same function as the indexing rate in determining deemed brokerage fees and inception profits. See the appendix to this article.
124 See, for example, Levitt, supra note 49, at 7, 9-10, and 16. Levitt characterizes the use of a single reference rate as creating an entirely arbitrary measure of value added by financial intermediation services.
125 See Ernst & Young, The TCA System, supra note 4, which refers to this approach as creating a “black box” for transactions with registered businesses.
126 For example, Levitt, supra note 49, at 15-16, notes the possible negative impact of taxing margins on the incentive for households to save and the increased cost of household borrowing, particularly mortgage loans. He points out that “the distributional consequences could be severe” in that the poorest households incur some of the highest costs of credit. The higher costs are not attributable to better financial intermediation but are instead a function of increased credit risk.
This effect is recognized in Ernst & Young, *The TCA System*, supra note 4, at 9. The report offers no solutions to this competitive distortion.

See, for example, New Zealand Inland Revenue, *GST and Imported Services*, supra note 52, chapter 9, for a discussion of the various policy options. See also Organisation for Economic Co-operation and Development, Committee on Fiscal Affairs, Working Party no. 9, *Consumption Tax Aspects of Electronic Commerce* (Paris: OECD, February 2001).

As discussed in the text accompanying notes 160 to 173, infra, the New Zealand and Australian GST legislation includes only the writing of life insurance within the definition of exempt financial services. Property and casualty insurance is treated as a taxable financial service. This different treatment of the insurance sector is also characteristic of the VATs in Singapore and South Africa. See Schenk and Zee, supra note 3, at 3315-16.

See Zacharopoulos, supra note 45, for a description and assessment of various approaches to cost allocation.

The simplification gains would be realized by financial intermediaries otherwise subject to an allocation requirement. It is standard country practice to exempt from such a requirement taxpayers that provide a level of financial services that does not exceed a specified threshold. See infra note 151. These taxpayers are effectively permitted to allocate the cost of all business inputs to the provision of taxable supplies.

But see the Singapore Goods and Services Tax Act, section 20, which permits financial institutions to claim a fixed percentage of total input tax credits. This fixed-percentage recovery method is, in fact, an alternative to a recovery method that effectively zero-rates the supply of financial intermediation services to registered businesses by treating such supplies as taxable for input credit purposes only. The latter method, however, requires the attribution of inputs to intermediation services provided to registered businesses. The fixed-percentage recovery method avoids this attribution requirement by establishing generalized norms for categories of financial intermediaries. See generally Schenk and Zee, supra note 3, at 3313; and Glenn P. Jenkins and Rup Khadka, “Value Added Tax Policy and Implementation in Singapore” (1998), vol. 9, no. 2 *International VAT Monitor* 35-47, at 40-41.

Merrill, supra note 22, at 21. Legislative definitions of exempt financial services typically define these core financial intermediation services as including (1) the exchange, payment, issue, receipt, or transfer of money; (2) the making of an advance, the granting of credit, or the lending of money; (3) dealing in debt securities, equity securities, cash-settled derivatives, precious metals, and interests in a superannuation fund, an investment fund, a partnership, a trust, or an estate (or any right in respect of such an interest); (4) the provision of a guarantee, an acceptance, or an indemnity in respect of a financial instrument; (5) the payment or receipt of money as dividends, interest, claims, or benefits, or any other amount in respect of a financial instrument; (6) the underwriting of a financial instrument; and (7) the writing of insurance or reinsurance. See, for example, the definition of “financial services” in Canada’s GST legislation, the Excise Tax Act, RSC 1985, c. E-15, as amended, subsection 123(1). See also the definition of “financial services” in the New Zealand GST legislation, the Goods and Services Tax Act, 1985 (herein referred to as “the GST Act 1985”), section 3(1); the definition of “financial supplies” in the Australian GST legislation, A New Tax System (Goods and Services Tax) Regulations 1999 (herein referred to as “the GST Regulations 1999”), section 40-5(2); and the definition of “exempt financial services” in European Union, Sixth Council Directive on the Harmonization of Laws of the Member States Relating to Turnover Taxes—Common System of Value Added Tax: Uniform Basis of Assessment, 77/388/EEC, May 17, 1977, OJ no. L 145, as amended (herein referred to as “the sixth directive”), articles 13(B)(a) and (d). For a discussion of the development by the European Court of Justice of the boundary between exempt and taxable financial services created by the sixth directive, see Ian Roxan, “The Nature of VAT Supplies of Services in the Twenty-First Century” [2000], no. 6 *British Tax Review* 603-23, at 615-22. See also Abe I. Greenbaum, “The Canadian GST Treatment of Financial Services—What Lessons

---

(2001), Vol. 49, No. 5 / no 5

134 See Commonwealth Treasury of Australia, The Application of Goods and Services Tax to Financial Services, supra note 29, at 1, where it is suggested that the exempt classification of many explicit fees and commissions related to the provision of financial services was adopted “to avoid biases that would be caused by different tax treatments applying to similar services that happen to be charged for differently.” See also Canada, Department of Finance, Goods and Services Tax: Technical Paper, supra note 29, at 142, where it is suggested that a desire to narrow the range of exempt services to maintain neutrality with other taxable goods and services must be tempered to some extent by the need to extend exempt status to services that are closely related to the core financial intermediation function in order to minimize the incentive to disguise otherwise taxable charges for the former as exempt charges for the latter; and New Zealand Inland Revenue, Proposed Application of GST to Financial Services, supra note 29, at 4: “It is intended that all financial services, where the definition of an output price for the service is not apparent or where the method of charging can easily be shifted into another form will be covered by this proposal [for exempt treatment of financial services].”

135 See, for example, the GST Act 1985, section 14(1)(a), which includes within a supply of exempt financial services the supply of any other goods or services that are reasonably incidental and necessary to the supply of an underlying financial service. The definition of exempt financial services under part IX of the Excise Tax Act does not specifically include services that are incidental to those enumerated in the definition. The classification of administrative and cash management services thus depends on their characterization as enumerated services. Note, however, that section 139 of part IX of the Act provides that a supply is characterized as a financial service if it is bundled together with such a service and more than 50 percent of the value of the bundled supply is attributable to the financial service. In addition, section 138 of part IX of the Act provides generally that a supply that is incidental to a predominant supply takes on the character of the latter when the two are bundled together. The GST Regulations 1999 combine a listing approach with an “incidental supply” test. Regulation 40-5.09 and schedule 7 list items included within exempt financial supplies, and regulation 40-5.12 and schedule 8 list items that are excluded from the definition of exempt financial supplies. These specific exclusions are subject to regulation 40-5.10, which includes within the category of exempt financial supplies any supply that is incidental to an underlying financial supply, provided that the incidental supply (1) is made at or about the same time as the underlying supply; (2) is not separately charged for; and (3) is usually made with the underlying supply in the course of the enterprise of the supplier.

136 Application of exempt status to outsourced data processing services has been a particular source of dispute between tax administrators and taxpayers. See, for example, CIR v. Databank Systems Ltd. (1990), 14 TRNZ 905 (PC); and Sparekassernes Datacenter (SDC) v. Skatteministeriet, [1997] ECR 3041 (ECJ).

137 But see the GST Regulations 1999, regulation 40-5.10, which excludes incidental supplies from the category of exempt financial supplies if separate consideration is provided for the incidental supply.

138 See, for example, the GST Act 1985, section 14(1)(a) (general requirement that the supply of incidental goods and services must be made by the supplier of the underlying financial services); section 3(4)(b) (specific exclusion of debt collection services provided by a person other than the creditor whose debt is being collected); and section 3(5) (exclusion of general accounting and record packaging services provided to a supplier of financial services or directly to a customer of such a supplier). See also section 4 of the Financial Services (GST) Regulations under part IX of the Excise Tax Act (exclusion from the definition of exempt financial services...
of certain administrative services provided on a third-party basis in connection with the supply of an underlying financial service); and the GST Regulations 1999, regulation 40-5.10 (requirement that an incidental supply be made by the supplier of the underlying financial supply). Articles 13(B)(a) and (d) of the sixth directive provide no similar limitation on the range of exempt insurance and banking services. This treatment has caused some confusion over the status of outsourced services that might otherwise be within the category of exempt services supplied by a financial intermediary. See Stefan Menner and Harald Herrmann, “Application of Article 13(B) of the Sixth Directive to Data Service Companies” (2001), vol. 12, no. 2 International VAT Monitor 67-72.

139 See, for example, the GST Act 1985, section 3(1)(l) of the definition of “financial services”; paragraph (p) of the definition of “financial services” in subsection 123(1) of part IX of the Excise Tax Act; and the GST Regulations 1999, regulation 40-5.12 (item 3).

140 See, for example, paragraph (r) of the definition of “financial services” in subsection 123(1) of part IX of the Excise Tax Act; and the GST Regulations 1999, regulation 5.12 (item 3 and the examples in schedule 8).

141 But see the GST Regulations 1999, regulation 40-5.12 (item 11), which specifically excludes “broking services” from the category of exempt financial supplies.

142 See, for example, the GST Act 1985, section 3(1)(l) of the definition of “financial services”; and paragraph (l) of the definition of “financial services” in subsection 123(1) of part IX of the Excise Tax Act.


144 Ibid.

145 By narrowing the range of taxable services provided to financial intermediaries on an outsourced basis, this approach has the incidental effect of narrowing the application of a reverse charge mechanism to services imported by domestic financial intermediaries. See ibid., at 3.

146 Ibid., at 1-4.

147 Ibid. Singapore has adopted a similar definitional approach, extending taxable status to brokerage and advisory services that are charged for in the form of explicit prices. See Goods and Services Tax Act, fourth schedule, section 4(1); and Schenk and Zee, supra note 3, at 3313.

148 See, for example, Merrill and Adrion, supra note 29, at 1497: “A well-designed tax system must provide equal treatment of services whether or not provided by traditional financial institutions.”

149 See, for example, paragraph (n) of the definition of “financial services” in subsection 123(1) of part IX of the Excise Tax Act.

150 As a proxy for the “principal business” requirement, VAT and income tax legislation commonly use the concept of a “listed financial institution.” See, for example, paragraph 149(1)(a) of the definition of a “financial institution” in part IX of the Excise Tax Act, which includes (1) a bank; (2) a trust company; (3) a stockbroker, investment dealer, or currency trader; (4) a credit union; (5) an insurance corporation; (6) recognized investment funds; and (7) any person whose principal business is lending money or buying debt. See also the text accompanying notes 92 to 99, supra, regarding the use of this definition to limit the requirement to maintain TCAs under the truncated cash flow method of taxation with TCA.

151 The limitation of the allocation requirement to the category of “financial institutions” is generally made for administrative and compliance reasons. See supra note 150 for the standard list of enterprises included within the category of “listed financial institutions.” “De minimis” financial institutions are commonly defined as those taxpayers whose revenue from core financial intermediation services exceeds a defined threshold. See, for example, the 10 percent threshold specified in paragraph 149(1)(b) of the definition of a “financial institution” in part IX of the Excise Tax Act. See also the Australian statute A New Tax System (Goods and Services Tax) Act (2001), Vol. 49, No. 5 / n° 5
1999 (herein referred to as “the GST Act 1999”), section 11-15(4), which permits full input tax credits for acquisitions related to the provision of exempt financial supplies if the total of all input credits on such acquisitions does not exceed $50,000 and 10 percent of the total input credits over a rolling 12-month period; and the GST Act 1985, section 21(3), which permits full input credits for acquisitions related to the provision of exempt financial services if the principal purpose of the acquisition is the making of taxable supplies and it can reasonably be expected that the total value of exempt supplies over a rolling 12-month period will be less than the lesser of $90,000 and 5 percent of the total consideration for all taxable and exempt supplies.

152 See Jack, supra note 5, and the text accompanying notes 76 to 85, supra.

153 Jack, supra note 5, at 842.

154 This definitional approach is broadly consistent with that used under the South African VAT, which treats as taxable a broad range of fee-based financial intermediation services. See Schenk and Zee, supra note 3, at 3312.

155 See, for example, New Zealand Inland Revenue, Proposed Application of GST to Financial Services, supra note 29, at 4; and Schenk and Zee, supra note 3, at 3312.

156 The same incentive exists under exemption systems that zero-rate financial services provided to non-residents and provide for a mix of exempt and taxable services that may be delivered by financial intermediaries.

157 The incentive to alter the form of pricing structures and scale the amount of the relevant price would extend to outsourced suppliers of financial intermediaries. Because exempt services are not subject to a reverse charge mechanism, the incentive would be greatest for outsourced suppliers of services located offshore.

158 Jack, supra note 5, at 842, note 3, recognizes that his suggested taxonomy of financial charges could induce “some adjustment in the kinds of fees charged, which might have efficiency costs on the supply side.”

159 There is a trend among deposit-taking intermediaries toward greater use of explicit fees and commissions. See, for example, Levitt, supra note 49, regarding pricing structures in the UK banking sector. It is unclear what are the relative effects of consumption tax and non-tax factors on this direction in pricing structures. But see Schenk and Zee, supra note 3, at 3312, who suggest that pressure to maintain competitive margins on deposit-taking intermediation could cause banks to continue to charge explicit fees for many services provided to households.

160 See the GST Act 1985, section 3(1) definition of “financial services”; and the GST Regulations 1999, regulation 40-5(2) definition of “financial supplies.” Much the same approach is used in Singapore and South Africa. See Schenk and Zee, supra note 3, at 3316.

161 The application of cash flow taxation to property and casualty insurance was articulated early on in the academic literature. See Barham, Poddar, and Whalley, supra note 17; and Whalley and Fretz, supra note 42, at 100-3. This literature does not acknowledge the slightly earlier application of the same method to property and casualty insurance under the New Zealand GST.

162 Schenk, supra note 18, at 835.

163 See the text accompanying notes 56 to 60, supra; Ernst & Young, The TCA System, supra note 4, at chapter 6; and Barham, Poddar, and Whalley, supra note 17.

164 The GST Act 1985, section 5(13). Liability for GST extends to payments made directly under a contract of insurance to registered third parties.


166 Where the insurer settles a claim by directly purchasing repairs or replacement property, the VAT is borne directly by the insurer, which receives an input tax credit. To realize the same result as that for a cash payout, any subsequent transfer of property to the insured should not be treated as the provision of a taxable supply.
Assume, for example, that 10 households each pay $100 as a premium for coverage under a property and casualty insurance policy, and the insurer pays out a VAT-exclusive claim of $990. At an assumed VAT rate of 10 percent, $100 of tax would be payable on the $1,000 of total premiums paid. In order to reimburse the insured for VAT on the purchase of repairs or a replacement property, the insurer would pay out a VAT-inclusive amount of $1,089 and would claim a notional input tax credit of $99 in respect of the payout ($1,089 \times \frac{1}{11}$). After accounting for this input tax credit, net VAT of $1 would be paid on the insurer’s financial margin of $10 ($1,000 premiums received less $990 VAT-exclusive payout). But see Thomas G. Thornbury, “A Better Way To Include General Insurance in VAT Systems” (May 1991), 2 International VAT Monitor 2-11, at 3, who argues that the New Zealand cash flow approach does not accurately tax the financial margins of property and casualty insurers for a particular tax period. The inaccuracy is attributed to a failure to account for the use of investment income to fund part of claim payouts and the failure to provide recognition for outstanding claims on an accrual basis. See also Thomas S. Neubig and Harold L. Adrion, “Value Added Taxes and Other Consumption Taxes: Issues for Insurance Companies” (1993), vol. 61, no. 8 Tax Notes 1001-11, at 1008. By permitting a reduction of the TCA equal to the reserve balance associated with particular policies, the cash flow method with TCA described in Ernst & Young, The TCA System, supra note 4, would realize a more accurate measure of the financial margin of insurers.

For example, the insured in the example in note 167, supra, effectively prepay the $99 of VAT on the purchase price of repairs or replacement property when they pay the $990 of premiums used to fund that purchase on a claim payout.

The GST Act 1999, division 78. Schenk, supra note 18, at 836, note 58, notes that application of cash flow taxation to policies held by registered businesses results in no net tax payable on the cash flows under the policies, provided that the prices paid for repairs or replacement properties equal the amount of claim payouts.

Commonwealth Treasury of Australia, Economic Roundup, supra note 3, at 49-57. Assume, for example, that the insured in the example in note 167, supra, are registered businesses. Application of an unmodified cash flow method requires tax of $100 to be paid on the premium payments, which is offset by input tax credits for the insured. The unmodified method also requires tax of $99 to be charged by an insured on receipt of a VAT-exclusive claim payout of $990, which is offset by an input tax credit for the insurer. Accordingly, no net VAT is payable on the cash flows under the insurance policy. Application of a modified cash flow method permits the claim payout to be made on a VAT-exclusive basis, with the insurer forgoing any input tax credit. As with the application of an unmodified cash flow method, no net VAT is payable on the cash flows under the insurance policy. Moreover, either method ensures that the financial margin associated with the provision of the insurance function is subject to VAT, with input tax credits for the insured because of their status as registered businesses. This result is obtained under the unmodified cash flow method by the provision of an input tax credit for the insurer on the claim payout, and under the modified method by an input tax credit for VAT on the purchase of repairs or a replacement property. The equivalence holds, however, only to the extent that the purchase price of repairs or a replacement property equals the amount of the claim payout. Where the purchase price is greater or less than the claim payout, the margin is under- or overtaxed. Application of unmodified cash flow taxation ensures that the margin is taxed correctly and is not dependent on the purchase price of repairs or replacement property to realize that result.

The GST Act 1999, sections 78-10 and 78-15. The availability of the decreasing adjustment is limited to those circumstances in which there was no entitlement to an input credit for the premium paid in the period during which the event giving rise to the claim occurred. This condition attempts to ensure that the portion of the premiums attributable to the present value of claim payouts to households is, in fact, taxed on a prepaid basis and is not refunded to policy holders as an input credit. See supra note 169. The condition would apply, for example, to claim

(2001), Vol. 49, No. 5 / no 5
payouts on employer-provided insurance where the employer was entitled to input credits on premium payments. It would also apply to any payments made directly under a contract of insurance to unregistered third parties. The unavailability of the decreasing adjustment means that the insurer will pay the claim on a tax-exclusive basis, and the insured must bear the burden of any tax. Where the total of input credits on premium payments is less than the total tax paid on such payments, a claim payout is apportioned between the tax-paid and non-tax-paid premiums, and a decreasing adjustment is available for the portion attributable to the latter.

173 A different result occurs where the policy holder is a registered business and the insured is an unregistered person. As described in note 172, supra, the decreasing adjustment under the Australian legislation is available in these circumstances only to the extent that the claim payouts are funded by tax-paid premiums. The New Zealand legislation provides a notional input tax credit for all claim payouts to unregistered insured persons, except those payouts made for loss of earnings: the GST Act 1985, section 20(3)(d)(v). This exception recognizes that the claim payouts to unregistered insured persons will not be tax-paid because the premium payments in these circumstances will have been made by employers entitled to input tax credits.

174 See, for example, Commonwealth Treasury of Australia, Economic Roundup, supra note 3, at 50: “Supplies of general insurance are a type of supply which are often perceived as having valuation difficulties. As a result, most OECD countries have chosen to input tax these supplies.” See also New Zealand Inland Revenue, Proposed Application of GST to Financial Services, supra note 29, at 4: “Insurance other than life and other policies with savings elements does not present the same problems of the financial services and will be treated in accordance with the general GST rules.”

175 This focus on general policy principles conveniently ignores messy second-order design details, such as the appropriate treatment of policy excesses, subrogation payments, the treatment of policies that contain exempt life insurance and taxable property and casualty elements, and the availability of input tax credits for registered businesses that consume property and casualty insurance intermediation but supply both exempt and taxable goods and services (for example, other financial intermediaries). Resolution of these general principles is required, however, before these second-order details can be settled. It is argued here that there are legitimate questions concerning the integrity of the basic policy premises on which the application of cash flow taxation to property and casualty insurance is based.

176 Commonwealth Treasury of Australia, Economic Roundup, supra note 3, at 50: “GST should apply to the insurer’s value added which is essentially the difference between the amount of premiums collected and the amount of payouts made. However, it is considered too difficult, if not impossible, to determine this value added on an individual policy basis.” For example, the insured in the example in note 167, supra, should be taxed on their pro rata share of the margin, measured as the difference between premiums and claim payouts in the year under the relevant policy. Assuming a payout of $990 and premiums of $1,000, the $10 margin would have to be allocated and taxed to each insured. This approach is essentially a subtraction-method VAT applied at the level of the insurer with an allocation of the margin to the insured.

177 Schenk, supra note 18, at 835.

178 Ibid., at 835-36.

179 But see Grubert and Mackie, supra note 9, at 35: “Insurance offers no ‘peace of mind’ benefit, independent of the higher consumption it allows in the event of a disaster.”

180 For example, Grubert and Mackie, ibid., at 36, argue that the equivalence of property and casualty insurance and a warranty means that the intermediation charge embedded in the latter should be characterized as non-taxable consumption consistent with the intermediation charge associated with the former.

181 Grubert and Mackie, ibid., at 36, argue that the combination of the taxation of warranty payments and the non-taxation of repairs is a prepayment PET consistent with the non-taxation of insurance
premums and the taxation of repairs. In fact, the prepayment approach applied to warranty payments taxes any embedded intermediation fee in the same manner as the application of the cash flow method to property and casualty insurance under the New Zealand and Australian GST legislation. Inconsistency arises if the intermediation fee associated with the insurance function is taxed only in those instances in which the premium takes the form of a warranty payment.

182 In the presence of exempt treatment of deposit-taking intermediation and taxable treatment of the property and casualty insurance function, life insurance premiums should be separated into their taxable components (pure insurance coverage and the charge for the life insurance function) and their exempt components (pure time-value return and the deposit-taking intermediation charge). VAT should be applied to the portion of life insurance premiums representing pure insurance coverage, with a VAT gross-up and input credit for insurers on claim payouts less the amount of the savings element represented by the cash surrender value. See New Zealand Inland Revenue, *Second Report of the Advisory Panel*, supra note 37, at 19-20; Barham, Poddar, and Whalley, supra note 17, at 175-77; and Whalley and Fretz, supra note 42, at 104-5. Application of this approach appears to have been rejected in New Zealand and Australia for compliance and administrative reasons associated with the identification of the component elements of life insurance premiums. Even where these elements can be identified, certain modifications of the property and casualty insurance approach would likely have to be adopted to account for the variable portions of level-premium payments allocable to the cost of pure insurance coverage over the term of a life insurance policy. Whalley and Fretz, supra, suggest taxation of the full amount of premium payments in the earlier years of a policy; in later years, tax on the cost of pure insurance coverage in excess of the premium payments would be funded by drawing down on “tax-paid” policy reserves accumulated with the excess of premium payments over the cost of pure insurance coverage in the earlier years. See also Barham, Poddar, and Whalley, supra. Although this approach is correct in principle and avoids taxing deposit-taking intermediation performed by a life insurer, the administrative feasibility of the required second-order details has not been considered in any detail.

183 See supra note 49 and the accompanying text.

184 See supra note 52 and the accompanying text.

185 See the text immediately preceding note 48, supra.

186 As an example of fundamental reform intended to eliminate the perceived distortions attributable to over taxation of the consumption of financial intermediation services by registered businesses, see supra note 132 for a brief summary of the concessionary input tax credit available under the VAT in Singapore.

187 Pressure from smaller financial intermediaries, such as credit unions and building societies, appeared to be a significant factor in the decision of the Australian Treasury department to introduce a concessionary input tax credit to address a tax bias in favour of insourced services. See Commonwealth Treasury of Australia, *The Application of Goods and Services Tax to Financial Services*, supra note 29, at 18, and the discussion in the text below.

188 Commonwealth Treasury of Australia, *The Application of Goods and Services Tax to Financial Services*, supra note 29, at 23: “The bias to insource only has practical effect when the cost structures of outsourcing are similar.”

189 The source from which this example is taken is ibid., at 19-21.

190 Ibid., at 18.

191 Schenk, supra note 18, at 830-31.

192 The Canadian Department of Finance recognized this equivalence in its proposals to address the tax bias to insource associated with the exempt tax treatment of supplies made by municipalities, universities, schools, and hospitals (“the MUSH sector”). In its original sales tax proposals, the department proposed a self-supply tax to address this tax bias for this sector: *Sales Tax Reform,*
This approach was subsequently abandoned on the introduction of a concessionary input tax credit for the MUSH sector. The credit was provided, not to address the insourcing bias, but to ensure that the MUSH sector, as a final consumer, bore the same amount of tax as it did under the manufacturers’ and wholesalers’ sales tax, which the GST replaced. Nonetheless, the department accepted that the originally proposed self-supply tax was largely unnecessary, given the reduced GST burden for the MUSH sector attributable to the provision of the concessionary input tax credit. See Goods and Services Tax: Technical Paper, supra note 29, at 139.

193 This premise underlies the proposal for a concessionary tax credit in Commonwealth Treasury of Australia, The Application of Goods and Services Tax to Financial Services, supra note 29, at 18-24.

194 Article 5(7)(a) of the sixth directive provides a general authority for the application of self-supply taxation to goods that are dedicated by a business to business use, provided that the acquisition of those goods from a taxable person would not have been wholly deductible. No authority is provided for the application of self-supply taxation to insourced services.


196 See, for example, Schenk, supra note 18, at 830: “It is difficult, however, to identify the kinds of services that should be covered by a self-supply rule.”


198 The Australian reduced input tax credit is based on a listing approach to the definition of eligible outsourced services. See the GST Regulations 1999, regulation 70-5.02, which lists (1) transaction banking and cash management services; (2) payment and fund transfer services; (3) securities transactions services; (4) loans services; (5) credit union services; (6) debt collection services; (7) asset-based finance services; (8) trade finance services; (9) capital markets and financial instruments services; (10) funds management services; (11) insurance services; (12) services remunerated by commission and franchise fees; and (13) trustee and custodial services. The regulation provides detailed examples of services in each of these categories. See Commonwealth Treasury of Australia, The Application of Goods and Services Tax to Financial Services, supra note 29, at 25-30, for the predecessor to the lists in the regulation.

199 See ibid., at 22: “The rate for the reduced input tax credit for a specific service should equal the percentage of value added at the final stage of the production process.”

200 Ibid., at 22.

201 The rate originally proposed was 70 percent. Ibid., at 23.

202 Where an insourced service has a non-tax cost structure of $100 ($30 cost of goods + $70 cost of labour), the tax cost would be $103 ($33 input taxed cost of goods + $70 cost of labour). The tax bias provided by the overinclusive input tax credit would mean that an outsourced service with a non-tax cost structure of $100.50 ($30 cost of goods + $70.50 cost of labour) would have an equivalent tax-cost structure ($30 cost of goods + $70.50 cost of labour + $10.05 VAT − $7.55 input credit = $103).

203 Where an outsourced supply has a non-tax cost structure of $100 ($30 cost of goods + $70 cost of labour), the tax cost would be $103.50 ($30 cost of goods + $70 cost of labour + $10 VAT − $6.50 input credit). The tax bias provided by the underinclusive input tax credit would mean that an insourced supply with a non-tax cost structure of $100.50 ($30 cost of goods + $70.50 cost of labour) would have an equivalent tax-cost structure ($33 input taxed cost of goods + $70.50 cost of labour = $103.50).

Ibid., at 22: “In setting the rate, the Government intends to err on the side of a higher, rather than a lower rate.”

See, in this respect, ibid.: “The Government is committed to setting the reduced credit rate at a rate that, on average, correctly reflects the proportion of value added of the outsourced supplier.”

There is only some indication of an intention to collect and analyze cost data provided by financial intermediaries in establishing an appropriate average rate. See ibid., at 23-24. Specialized rates for specialized outsourced services were apparently rejected for reasons of administrative convenience associated with the use of a single average rate.

In this respect, the option to tax would be provided on a similar basis to that under the German VAT. See Dixon, supra note 3.

In this respect, the option would apply to a greater range of financial intermediation services than the options to tax under existing country practice. See ibid.; and OECD, Indirect Tax Treatment of Financial Services and Instruments, supra note 2.

See, for example, Ross Stitt, “GST and Financial Services” (June 2001), 4 The Tax Specialist 236-46, at 246; and Peter McMahon and Amrit MacIntyre, “GST and Financial Supplies” (2000), vol. 3, no. 3 Journal of Australian Taxation 167-97, at 194, emphasizing the compliance burden imposed by the allocation requirement for purposes of the Australian concessionary input tax credit.

See Dixon, supra note 3; and Merrill, supra note 22, at 28-30.

Merrill and Adrion, supra note 29, at 1498; and Merrill, supra note 22, at 28-30. An option to tax also creates an incentive to overstate prices charged for those services in respect of which an option is exercised. The incentive follows from the ability to gain greater access to input tax credits.

Derived from Ernst & Young, The TCA System, supra note 4.