VAT and Financial Supplies: What should be taxed?

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1. Issues arising from the financial supplies in the VAT

Virtually all VAT systems have special rules for "financial supplies", the generic term describing a range of supplies including the supply of ownership rights in legal persons and relationships (shares in companies and mutual funds and interests in fixed trusts), the supply of financial pooling services such as insurance, and three types of supplies associated with loans: the supply of credit to borrowers, the supply of financial assets to lenders, and the supply of intermediary services linking borrowers and lenders.[1] With a limited number of exceptions, countries using a VAT-style consumption tax treat all these types of financial supplies as "exempt" supplies, the mis-named description for supplies that attract no explicit

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[1] Financial intermediary services are sometimes divided into four classifications: intermediation between suppliers and users of financial capital ("deposit-taking intermediation"); intermediation between persons with different exposures and/or tastes for risk ("risk intermediation"); intermediation between persons with exposure to similar risks ("the insurance function"); and intermediation between buyers and sellers of commodities, currencies and/or debt and equity securities ("brokerage services"). See Carl Bakker and Phil Chronican, Financial Services and the GST - Discussion Paper (Wellington: Victoria University Press for the Institute for Policy Studies, 1985), at 7-12 and Tim Edgar, "Exempt Treatment of Financial Intermediation Services Under a Value-Added Tax: An Assessment of Alternatives" (2001) 49(5) *Canadian Tax Journal* 1133-1219.

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tax liability but which nevertheless bear a tax burden as the supplier cannot recover VAT imposed on acquisitions related to the supplies.

The unrecognized tax is treated by suppliers as a cost of business and passed on to customers in the form of higher prices. As a consequence, both final consumers and intermediate enterprises along the production and sales chain who acquire exempt supplies are "input taxed", meaning they bear an embedded tax in every exempt acquisition. Conventional theory suggests the result is under-taxation of the final consumer who faces a tax burden equal to the tax on inputs used by the supplier, without any further tax amount for the value added by the supplier, and over-taxation of passive investors and businesses who should be able to recover all tax imposed on inputs under a true consumption tax.[2]

This paper considers the application of VAT to the three types of financial supplies noted earlier and considers the appropriate VAT treatment of the transactions from the perspective of two views of "consumption", the concept at the heart of the tax base for VAT and all other consumption taxes.

The alternative views share a common starting point – the VAT is a form of consumption tax with the aim of taxing final consumption. They also jointly recognise the limitations of a transaction-based consumption tax in contrast with the theoretically equivalent benchmark expenditure tax. The benchmark expenditure tax measures consumption each tax period as total income derived in the period less amounts spent to derive more income and amounts invested in savings.[3] All income not applied to one of these two purposes is presumed to apply to be used for consumption. In contrast, a transaction based consumption tax is imposed at the time consumption takes place. In the case of the VAT, the tax is collected from a registered supplier who may not know the purpose to which the supply of goods or services will be put. The structural features of the VAT, and particularly its reliance on registration to allocate the burden of tax to final consumption and to provide relief from tax for other acquisitions, makes it difficult to engineer the appropriate outcome in a number of transactions involving financial supplies.

The divergence between the two views of consumption results from different focal points for identifying when consumption takes place. The traditional expenditure view of consumption starting from the expenditure tax base (consumption is income minus amounts invested in savings) considers consumption solely from the perspective of the person making an expenditure, without regard to the impact of the outgoing on the person receiving funds or other persons. It is a broad view of consumption, catching any application of a person's resources. Under the traditional expenditure tax view, if the person making a payment for a supply cannot show the outgoing was incurred directly in the course of generating income or acquiring an investment, it is assumed the expenditure was for private consumption.

[2] The negative economic consequences of this overtaxation including cascading and vertical integration are reviewed in Ine Lejeune, David Stevens and Mark Killer, "The Interational Direction in the VAT Treatment of Financial Services" in Michael Lang, Peter Melz and Eleonor Krisoffersson, *Value Added Tax and Direct Taxation* (Amsterdam: IBFD, 2009) 673-701, at 678-687.

[3] The most important modern exposition of the expenditure tax is considered to be Irving Fisher, "Income in Theory and Income Taxation in Practice" (1937) 5 *Econometrica* 1-55, later refined by Nicholas Kaldor, *The Expenditure Tax* (London: Allen & Unwin, 1955) and Institute for Fiscal Studies (Meade Report), *The Structure and Reform of Direct Taxation* (London: George Allen and Unwin, 1978).

A different view of consumption, enjoying a respected heritage stretching back three and a half centuries to the work of Thomas Hobbes[4] and almost a century and a half to John Stuart Mills and reappearing in much modern consumption tax literature relies on the conventional economists' utilitarian view based on total consumption in the country (which in contemporary terms would be a measurement of national consumption for national accounts purposes). This utilitarian view starts with a potential consumption pie comprising all available goods and services in society and identifies an individual's consumption as uses of real resources from the pool available to all participants in the economy. If the application of personal resources does not remove goods or services from the pool, making them unavailable to others, the outgoing is not viewed as a payment for consumption. The transference of resources between persons does not enter into the calculation of consumption under the social pool view.

Another way of reaching this Hobbes or social view of consumption is by way of a 'Pareto optimal' analysis. The Pareto optimal perspective seeks to maximise private utility subject to the government budget or resource constraint. The policy is optimal in the sense that it aims to leave individual consumers with the maximum economic resources possible without making the government worse off. As Pareto optimal analysis focuses on the allocation of social resources, the analysis is not concerned with personal utility if maximising personal utility does not involve an extraction of resources from the social pool (and thus making them unavailable to other persons or the government).

The differences between these two views might be seen in the simple case of a gift. In traditional income tax and consumption tax analysis, a cash gift is considered income to the recipient (the person enjoys an increase in economic capacity) and consumption to the donor. In terms of the benchmark expenditure tax, the taxpayer has incurred an outgoing that was not applied to savings or investment and is thus treated as consumption. As the economic power transferred by this person could have been used to acquire goods or services in the market, it is assumed the donor must have derived utility equal to the goods or services forgone in favour of the gift.[5] The social pool view, in contrast, would not consider the gift to be consumption by the donor as it does not reduce the consumption opportunities of anyone else. There is no extraction from the consumption pie until the donee uses the funds to acquire goods or services.

The two views of consumption yield different tax bases and, if one assumes that consumption is an appropriate measure of ability-to-pay, different measurements of ability-to-pay. Under the broader personal view, consumption and ability to pay is based on the exercise of command over resources. Under the social pool view, ability to pay is is measured in terms of actual use of resources by an individual.

The two views of consumption also yield different perspectives of neutrality. The personal view of consumption seeks to achieve neutrality in terms of an individual's spending by imposing the same tax burden on all applications of income other than investment in savings. Under this view, the taxpayer should bear the same tax whether she or he uses income to acquire services, goods or gives away the money. The social pool view of consumption, in contrast, is not concerned with neutrality in terms of an individual deciding how to apply his or her resources. Rather it looks at neutrality in terms of the cost to government of

[4] Thomas Hobbes, Leviathan (Cooke, 1651), ch. 30; John Stuart Mills, *Principles of Political Economy*, (original edition, 1848; this edition London: Longmans, Green and Co., 1871) Book 1, ch. II, s. 4.
[5] This approach was advocated by one of the strongest proponents of an expenditure tax, Nicholas Kaldor, above note 2 at 203.

alternative consumption choices and accepts that the consumption tax can be non-neutral in terms of an individual's consumption choices.

The discussion in the following parts illustrates how these alternative perspectives may reinforce conclusions regarding the appropriate VAT treatment of payments for services ancillary to the acquisition of investments and lead to different conclusions in respect to intermediary services provided to individuals borrowing for personal consumption purposes.[6]

2. Ownership assets and derivative instruments

The supply of ownership assets (such as shares, units in fixed trusts, or interests in mutual funds) or derivative instruments (such as options and convertible notes) is commonly characterised as a type of financial supply. Under any legal or economic test, there is no consumption character to the acquisition of investment assets and in theory this type of supply should raise few conceptual issues from a VAT perspective. The only practical question is how can the transactions be made tax free in the context of the mechanics of an operational VAT. The question of appropriate VAT treatment of services ancillary to the acquisition of assets may involve some borderline characterisations that make articulation of the optimal benchmark more difficult.

2.1 Removing VAT from investments

The benchmark consumption tax would leave the supply of ownership assets or derivative instruments free of tax. The challenge in the context of a transaction type tax such as the VAT is how to achieve the benchmark. Removing tax from investments is relatively simple in alternative consumption taxes. The expenditure tax automatically exempts investments from tax by subtracting amounts spent on savings from the tax base. The retail sales tax can avoid tax on savings by suspending the tax on the supply of investment assets and associated services. But the VAT uses a unique process to eliminate tax on supplies that are not acquired for final consumption, initially treating every supply as a supply for final consumption, imposing tax across the board and then rebating the tax back to registered customers who did not acquire in the course of personal consumption. Since registered customers are limited to persons carrying on a business or enterprise, passive investors are normally excluded from the rebate system and have no way of recovering incurred directly or indirectly in respect of the acquisition of financial assets.

The rule that VAT registration is limited to business enterprises arose initially as a consequence of the adoption of the VAT in Europe as a replacement for the business turnover tax then in use. The target group for the replacement tax comprised the active businesses that were already registered for turnover tax purposes. Eligibility for registration and input tax credits or refunds remained limited as courts interpreted the definitions of business and enterprise narrowly.[7] Attempts have been made in some jurisdictions to extend

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[6] The economic debate surrounding these viewpoints is summarised in Daniela Monacelli and Maria Grazia Pazienza, "VAT exemption of financial services in the EU: An Assessment of the Italian case", paper presented at the (2007) 63rd Congress of the International Institute of Public Finance.

[7] An extreme early example was the decision of the European Court of Justice (ECJ) in Polysar Investments Netherlands BV (1991), Case C-60/90, where a holding company was not entitled to input tax credits because it was not carrying on an enterprise. Realising the damage that would be inflicted if the approach were allowed to stand, the ECJ retreated significantly from the extreme position in subsequent cases such as Floridienne und Berginvest (2000) Case C-142/99, Cibo Participants SA (2001) Case C-16/00, SKF (2009) Case C-29/08.

the registration system to particular types of passive investors[8] but for the most part they remain ineligible for direct relief.

Using the ordinary VAT process – imposing tax on all supplies and registering customers entitled to a refund of tax to remove the tax burden on supplies of investment assets – is not a practicable solution. No VAT system could cope with the registration of every individual in the nation who holds investments and subsequent claims for refunds of tax imposed on the supply of the investments. The logistics of registering this number of persons, processing returns, auditing questionable claims, and processing refunds would be overwhelming. Relief from consumption taxation could only be provided by eliminating tax on the supply of the asset in the first place. In the VAT, this can be done by treating the supply as a zero-rated supply (no tax is imposed on the supply and the supplier is entitled to full credit for all tax incurred on inputs used to make the supply).

There are two possible impediments to the use of zero-rating as a means of eliminating the tax on investments. The first identifying appropriate types of financial assets to be subject to a zero-rating rule – shares, options, interests in investment trusts, etc. – may be feasible but compiling an exhaustive list could be difficult. Also, care would be needed to ensure the process does not create avoidance opportunities. An example would be the use of an interposed company to acquire personal consumption assets – creating a company to acquire the summer home or winter ski-chalet, for example. If the issuance of shares to the company owner is to be treated as a zero-rated supply, complementary rules would be needed to ensure all benefits provided to shareholders or related persons (such as use of company assets) are taxable supplies.

It might be thought that the apparently obvious benchmark VAT of the supply of investments (a mechanism to remove any tax burden from the supply) would apply equally to the supply of services such as brokerage services or investment advice that are ancillary to the acquisition of investments , or services related to the acquisition of these investments. There is, however, some debate over the issue.

2.2 VAT and services ancillary to the acquisition of investments

On their face, ancillary services are simply part of the cost of acquiring an investment or savings, analogous to the stamp duty or the title registration fee incurred on real property purchases in some jurisdictions. A personal perspective analysis would leave these services tax free as there is no net expenditure by the investor; the use of services to acquire alternative investments is simply a cost related to the substitution of one type of savings with another type. A Pareto analysis approach would support this view, as it is presumed an investor would only incur costs for ancillary services such as brokerage if the average anticipated return from investments exceeded the risk-free rate of return available through government debt plus the cost of ancillary services to access alternative investments. If this is the case, the most efficient allocation of capital will generate higher returns for the investor and, via eventual taxation of the gains, for the government. In other words, while there is an extraction from the social pool by the investor using investment services, there is a compensating increase in taxable output through the more efficient allocation of the investment capital. Imposing a tax on part of the cost of acquiring the investment would amount to double taxation, reduce the return and distorting investment choices, discouraging the optimal investment and leaving both the individual and government worse off.

[8] Australia, for example, included passive ownership of rental real property in the definition of an "enterprise".

The view that services ancillary to the acquisition of savings investments are part of the cost of savings is not universally held, however. An alternative view considers the ancillary and indirect cost of acquiring an investment as part of the ultimate consumption from investment returns and not the cost of saving.[9] The different conclusions reflect the different starting points for each approach. The first approach, which would provide similar tax treatment to the person who incurs a brokerage fee to buy a machine and the person who incurs the fee to buy shares in the entity that will buy the machine, seeks to distinguish consumption from savings at the time of investment. The second approach, would treat the brokerage fee paid in the course of acquiring shares as part of the consumption if the investor ultimately plans on using the investment returns to buy consumption goods or services, works back from a model based on tax mix change rather than one that looks directly at what is acquired with the outgoing. While the former approach is consistent with analysis of a consumption tax as a tax on consumption, the latter approach is concerned with designing a consumption tax that could substitute for an income tax with minimal impact on asset pricing.

A more problematic issue may be identifying qualifying ancillary expenses, particularly where the type of service such as legal, accounting, or advising, is a type used for both personal consumption and the acquisition or maintenance of investments or where the service itself may contain a consumption element. Consider, for example the investor who chooses a broker who charges 20% more than her discount counterpart, provides identical advice to the discount broker, but has a great sense of humour and provides service with such charm and wit that the investor is more than happy to pay for the premium brokerage service. Is the premium fee attributable to personal consumption by the investor over and above the investment advice and brokerage service? Or, is the difference between the two services akin to the difference between a veneer desk and a solid wood desk acquired by two different enterprises with the owner of the second business acknowledging his preference for the more expensive desk because he prefers to work on the aesthetically superior but functionally equivalent equipment?

There may be marginal personal consumption elements in a wide range of business and investment expenses. With few exceptions, however, both the income tax and consumption tax systems adopt a "business and investment judgment" approach of not seeking to second guess the judgment of the business person or investor. The exceptions are cases where it is assumed most of the expense is for personal consumption, the classic examples being food and entertainment expenditures supposedly connected with business activities. In these cases, particularly where the expense is one such as meals that the person would have incurred even if there were no business activity, tax systems often treat the entire expense or a substantial portion of it as personal consumption. Subject to these exceptions, it is

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[9] The alternative view is illustrated in the work of Auerbach and Gordon who model the service fee as part of the price of the consumption good. The approach appears to find favour with de la Feria and Lockwood. In contrast, Grubert and Mackie model the fee as part of the cost of the investment asset. The approach taken by Boadway and Keen is not dissimilar from that of Grubert and Mackie in this respect. The alternative approaches are reviewed in Appendix 2. See further Alan J. Auerbach and Roger H. Gordon, "Taxation of Financial Services under A VAT" (2002) 92 *American Economic Review*, Papers and Proceedings 411-416.; Robin Boadway and Michael Keen, "Theoretical Perspectives on the Taxation of Capital Income and Financial Services: A Survey" in Patrick Honahan ed., *Taxation of Financial Intermediation: Theory and Practice for Emerging Economies* (Washington: World Bank and Oxford University Press, 2003) 31-80; Harry Grubert and James Mackie, "Must Financial Services be Taxed under a Consumption Tax?" (1999) 53 *National Tax Journal* 23-40; Rita de la Feria and Ben Lockwood, "Opting for Opting In? An evaluation of the European Commission's Proposals for Reforming VAT on Financial Services" Warwick Economic Research Papers No. 927.

assumed that any personal element in business and investment acquisitions such as that of the investor who opts for the more costly kibitzer broker or businessperson the more expensive desk is marginal and can be left out of the income tax or consumption tax without damage to the integrity of the taxes. Quite likely, the untaxed personal element, if any, is offset by higher returns or higher productivity in any case as the investor visits the broker more often and the businessperson spends more hours at the desk.

3. Loans

Loans enjoy a number of features that distinguishes them from other types of financial supplies and supplies more generally and that consequently give rise to unique issues in the world of VAT. A key distinguishing feature is that the movements of loan funds do not reflect consumption as is the case with, say, payments to merchants for the acquisition of goods or services. A loan creates an asset or type of savings for the lender and a debt obligation for the borrower but these bookkeeping annotations will not affect tax liability in a consumption tax. Rather, it is the use to which funds are put that should determine tax liability. So long as the lender acquires and retains a savings asset (a right to repayment of principal and payment of interest or discount while the loan is outstanding), the lender has merely augmented savings or altered the form of prior savings. The borrower, on the other hand, has had a "dis-saving" (repayment of a loan is akin to saving) but should incur no consumption tax if the borrowed funds are used to acquire investments or applied to business purposes. If the funds are used to acquire personal consumption supplies, the consumption should be taxed.

A second unique feature of loan transactions is the fact that the persons on opposite sides of the transaction often share the same financial services. While there are some direct connections between lenders and borrowers, as is the case, for example, with individuals who acquire debentures issued by corporations, most loans are provided through financial intermediaries, primarily banks, that provide a financial intermediary service of linking lenders and borrowers. The cost of this intermediary service is borne by both the lenders and borrowers and collected implicitly by the intermediary through the interest rate spread between a lower interest paid to depositors and higher interest charged to borrowers as compared with the rate they would have struck in a direct loan.

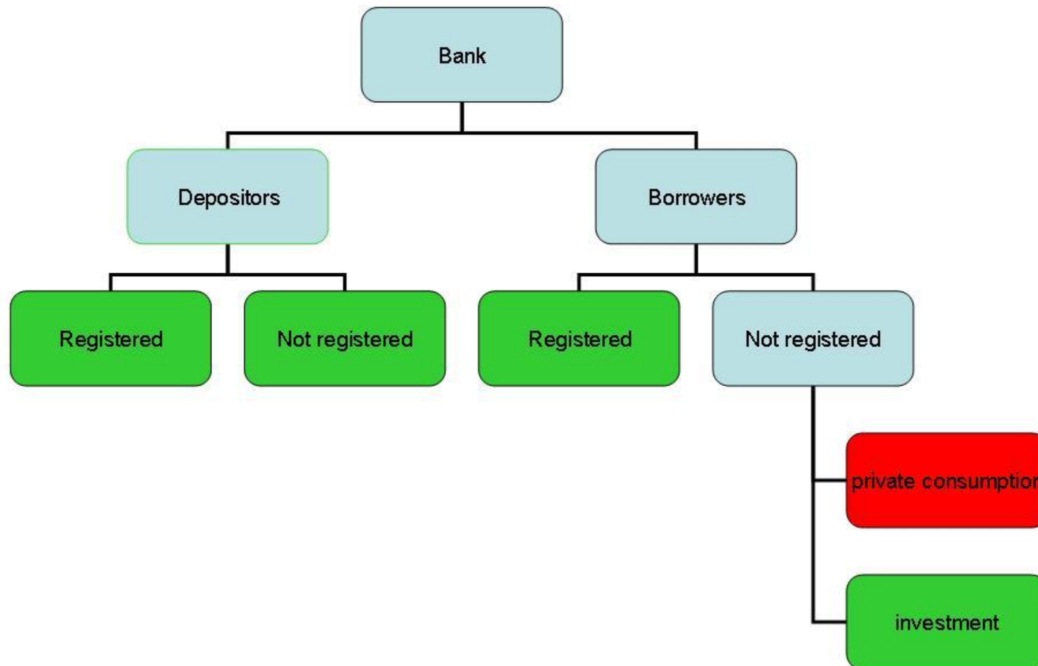
And finally, financial arrangements involving loans differ from most other transactions in the extent to which so many of parties involved are not registered for VAT purposes. All private depositors and private borrowers investing or borrowing outside of an unincorporated business will be unregistered persons.

The diagram below illustrates the five categories of persons on the borrowing and lending sides of financial transactions arranged by financial intermediaries. As a general rule, no VAT on intermediary services should be borne by depositors as the services are ancillary to savings investments by these persons. The key question is not whether the transactions should be free of VAT but rather how this can be accomplished in the context of a VAT.

This is also true of intermediary services provided to registered persons and unregistered persons who borrow for business or investment purposes. There is no consumption element to these services but relieving the service from taxation is challenging.

The only significant conceptual debate encountered in the analysis of VAT and intermediary supplies arises in respect of supplies to persons who borrow for private consumption purposes. In this case, the two different views of what constitutes consumption yield

different outcomes, ironically with the broader view of consumption suggesting these services should not be taxed when provided to unregistered persons using borrowed funds for private consumption and the narrower view suggesting that intermediary services should be taxed in these circumstances.



3.1 Intermediary and transaction services provided to depositors

The cost borne by depositors (registered or unregistered) for a financial institution's intermediary service is part of the cost of acquiring a debt investment, analogous to the cost imposed by a broker to acquire shares or a real estate agent to locate an investment property. Were ownership of a loan asset in the form of a bank account or term deposit the only benefit derived by a depositor as a consequence of the intermediary charge collected by financial institutions, it would be simple to conclude that the fee is incurred wholly for the acquisition of an investment and should therefore be shielded from VAT.[10] Normally, however, tacked on to a deposit account are a range of services that allow the investor to withdraw some of his or her savings for the purpose of investment elsewhere or consumption. These include access to the account in various locations via ATMs, internet transfer options, direct debit cards, automatic payment systems and chequing facilities.

In some cases, financial institutions impose explicit charges for withdrawals from savings while in others they are collected implicitly as a reduction in the interest rate paid on the deposits. However, the fees are charged, the cost of withdrawal services varies with the ease of withdrawal. Accounts paying the highest returns usually have the most restrictions on withdrawals, often accompanied by explicit withdrawal fees, while those paying lower

[10] Hoffman, Poddar and Whalley would tax households on financial services related to both borrowing and deposits, though the rationale for extending the tax to savings by unregistered businesses is not made clear. See Lorey Arthur Hoffman, Satya N. Poddar and John Whalley, "Taxation of Banking Services Under a Consumption Type, Destination Basis VAT" (1987) 40(4) *National Tax Journal* 547-554, at 552.

returns provide progressively greater access to withdrawals. The extreme case is the zero interest account that provides unlimited cheque or withdrawal facilities. In this case, viewed in isolation, the depositor appears to derive no benefit from saving apart from safeguarding the deposit. Most likely, however, the depositor using a no interest chequing account would also hold another higher interest savings account with fewer or no chequing options. In effect, the investor has divided investments between a savings vehicle that offers easy and unlimited access to savings and another with higher returns and more limited access in preference to holding a single intermediate account that provided intermediate access to withdrawals of savings and intermediate returns.

There are two views on the character of implicit or explicit charges imposed for the withdrawal of services.[11] Under one view, the cost of retrieving savings should be coloured by the use to which the withdrawn amounts are put. Under this view, the cost of a cheque or ATM withdrawal (or the implicit fee embedded in lower interest rate on deposits) should be subject to tax if the withdrawn amount is applied to final consumption and exempt from tax if it is reinvested elsewhere or used to cover business or investment expenses. Under the alternative view, the service of returning part of the investment to the depositor provides no consumption benefit to investor but rather it is through the application of the returned funds that the investor converts his or her savings into consumption.

Another approach is to consider the nature of a withdrawal service. If the service is simply a direct return of investment and withdrawals through a particular type of account incur a service fee, the fee can be seen as the cost of accessing savings, a service that involves no direct consumption and which therefore should not bear tax. By way of contrast, other withdrawal methods may involve both a withdrawal of funds from savings plus a delivery service. Thus, for example, an ATM fee is a primarily a charge for delivery of cash to the depositor's location. Similarly, a charge for the use of a cheque is a charge for the delivery of withdrawn funds to the account of the beneficiary of the cheque. To the extent the charge associated with the withdrawal of savings is a fee for delivery, the account holder has received a service distinct from withdrawal.

Whether that charge should bear tax in a pure consumption tax model will depend on the use to which the funds are put. If a bank imposes a "delivery fee" on funds transferred by cheque to a stock broker for the acquisition of shares or to an institution for the acquisition of bonds or debentures, the expense is ancillary to the process of investment and savings and should bear no consumption tax. If the delivery is to the provider of a final consumption goods and services, the delivery fee is not associated with savings and should bear tax.

Importantly, the conceptual question of whether the service of returning funds to the depositor amounts to consumption or is ancillary to a further savings investment is separate from the question as to whether VAT could accommodate different tax outcomes if it is decided that the character of withdrawal transaction services depends on the use to which withdrawn funds are put. It may be impossible in the context of a VAT regime to provide alternative treatments for withdrawal expenses depending on the use to which the funds are

[11] The key contributions to the debate are set out in Ewen McCann and Tim Edgar, "VAT Treatment of Interest and Financial Services with Competitive Banking and Insurance Sectors" (2003) 30 *Tax Notes International* 791-808, at 792-794. Edgar concludes it will be difficult to assert with conviction that one or the other should be followed and he proposes a half-way house that would retain the current exempt treatment of financial supplies but build into the system provisions that would allow for taxation of some types of supplies based on pricing structures rather than the possible nature of the service to the recipient. See Edgar, above note 1.

put as the financial institution has no way of knowing how the goods or services bought with a cheque or ATM withdrawal or online transfer will be used.

3.2 Interest and intermediary services to unregistered borrowers not using borrowings for personal consumption

Whatever view is taken of personal consumption, it seems clear that loan intermediary services provided by a financial institution to creditors who borrow for business or investment purposes fall outside the scope of private consumption and accordingly should not bear any consumption tax. The borrowing fee is part of the integrated investment process. It has, however, been suggested that financial intermediation costs incurred by unregistered persons borrowing for the purpose of investing should be subject to VAT. The rationale appears to be that the expenses would be treated as personal outgoings under the personal expenditure tax, the alternative consumption tax that should make the same distinctions between personal and investment expenses as the VAT. This argument assumes that expenses associated with "dis-saving" or borrowing will always be characterized as personal because they are not an element of investment.[12]

It may well be that current judicial doctrines characterise these expenses for income tax purposes as non-business expenses but it does not hold this characterisation is correct as a matter of tax policy. The question is not whether the expenditure is associated with borrowing or saving, but rather whether the borrowing is used for consumption or investment. If the funds are applied for investment purposes, all ancillary expenses should be treated as expenses incurred in the course of income generation, not outlays for immediate consumption.

The appropriate VAT treatment of financial intermediary service costs for loans used for private consumption purposes is less clear. As is explained further below, tax scholars hold two opposing views on the appropriate treatment in a VAT of financial intermediation expenses embedded in the cost of borrowing by final consumers. Both camps agree VAT should not be levied on pure interest charges but one characterises financial intermediation expenses in the same manner as pure interest while the other views it as payment for personal consumption component. In fact, some in the second group suggest that the current system of partial taxation of loan intermediary supplies (by treating them as exempt, input taxed supplies) is preferable to not taxing the supplies if this is the only effective way of taxing private borrowers, implying that the benefits of taxing consumer borrowers outweighs the economic costs of biases and cascading taxes caused by over-taxation of business if intermediation services are input taxed.

The rationales for the opposing views on whether loan intermediary services to private borrowers should be subject to tax is distinguishable from the explanation of why both camps agree pure interest on these loans should not be taxed. A supply of credit differs from all other supplies of goods or services in that there is no utility value to the provision of financing. A cash loan can be contrasted with the loan of any tangible or intangible asset other than cash in this regard. The difference may be illustrated with a rental contract for a £50,000 car for one year and a loan of £50,000 for one year. In both cases, the customers "borrow" something worth £50,000, pay a cost for the use of the thing for a year, and then return it after a year. But while the gross amount of the car rental payments is the value of

[12] See Tim Edgar "The Concept of Taxable Consumption and the Deductibility of Expenses Under an Ideal Personal Income Tax Base," in Richard Krever, ed., *Tax Conversations* (London: Kluwer Law International, 1997), 293-363, at 293-94.

the customer's consumption for the year (driving around in a car), the interest charge for the loan is not the cost of consumption. There is no utility from receiving £50,000 cash and at the same time incurring a liability to repay £50,000 after a year. The consumption element of the transaction arises when the borrower uses the funds to acquire goods or services. The supply of a car should be subject to consumption tax; the supply of loan funds should not.

The case for not taxing interest charges is not immediately intuitive, however, even if it is accepted that a supply of money is not equivalent to the supply of an asset. If a borrower has a choice of consuming £100 today using borrowed funds or £110 next year using her own (assuming a 10 percent interest charge so the borrower would have otherwise had to spend the £110 to repay the loan principal and interest), the £10 interest payable for use of the borrowed funds looks to be the price the consumer's been willing to pay to shift the time of consumption. In this sense, the interest payment is the cost of choosing when to consume, which looks like a form of consumption akin to consuming goods or services.

If, however, the effect of the time value of money is considered, the case for taxing interest falls away. This may be illustrated by comparing the person who borrows £100 at 10% interest and repays £110 the following year with the person who saves and consumes £110 in year two. If the borrower were charged 20 percent consumption tax on the initial £100 used to buy goods and services and then charged consumption tax on the £10 interest charge, the total tax paid would be £20 in year one and £2 in year two for a total of £22 tax. The saver, on the other hand, would buy £110 of goods and services in year two and pay £22 tax in year two. It can be seen that both persons ended up paying £22 tax but the first person had to pay most of it a year before the second person, in effect paying a higher tax because that person lost access to the initial £20 payment for the year. And from the government's perspective, it collected much of the tax from the first person far earlier than from the second so it ends up with more tax from the person who borrowed to accelerate consumption.

If tax is imposed only on the actual consumption of goods and services and not on the interest incurred to move consumption forward, however, the two taxpayers face economically equal burdens. The person who consumes earlier pays less tax (£20) but parts with his or her money sooner, putting that person in the same final economic position as the person who consumes later, paying more tax (£22) but at a later time.

The time value of money can also be illustrated with the example of how VAT systems deal with consumer durables. When a consumer buys a durable (an asset with a life extending for several years), the purchase is similar to the acquisition of savings. In fact, it is identical to the acquisition of a depreciable asset for business purposes. The consumption that derives from purchasing a durable is not the acquisition of the asset itself but the use of it over its life. It would, however, be impossible to impose consumption tax on this basis since consumers are not registered, it would be impossible to calculate the annual consumption value of every consumer durable purchased, and it would be overwhelming providing every consumer with a refund of VAT incurred on purchase and periodic collection of tax from those persons as the asset is used. The solution is to tax the upfront acquisition of the asset as the initial value of the asset is equal to the present value of periodic consumption over the life of the asset and the tax levied on that purchase price is the present value of the tax that would have been payable if each period's consumption were measured and taxed separately. This system is also self-correcting for private sales and purchases of used goods. The vendor recoups the value of VAT paid on any unused consumption as the market value of private-

use used goods is based on the depreciated after-tax cost of goods, and the purchase of used good effectively bears the cost of the tax recouped by the seller.[13]

Thus, once the time value of money is taken into account, it can be seen that the person who shifts consumption forward and consumes less but pays tax on the consumption sooner ultimately enjoys the same economic benefit as the person who consumes more later but had to wait a year without consumption in order to do this. Put another way, in a consumption tax world, a consumer who accelerates consumption or defers consumption will have less to consume after tax than she or he would in a no-tax world but the relative value of current to deferred consumption is identical if no tax is levied on the interest paid by the borrower until the lender uses it to consume.[14]

3.3 Margin charges for intermediary services to consumer borrowers

The key question with respect to the taxation of financial services is not the treatment of pure interest borne by private borrowers – the price of bringing forward consumption (and a tax liability) – but rather the financial intermediary charges that are bundled into interest and it is on this point that the two views of "consumption" yield different answers. The point of departure between the views is the appropriate discount formula to apply to the consumer borrower's preference for accelerated consumption. The alternatives are the borrower's rate of time preference based on all the expenses incurred to accelerate consumption (including the margin charged by the financial intermediary supplier for its services) and the borrower's rate of time preference in terms of the pure interest component of the cost or borrowing (that is, the part of the interest equal to the interest payable on riskless government bonds) without regard to the financial intermediary services component.

Perspectives on the character of financial intermediary services fall into two camps. One view is that all costs incurred to accelerate consumption are elements of an individual borrower's time preference value. Under this view, the price for the intermediary service would be considered an ancillary charge for the provision of credit similar to interest and be excluded from consumption tax in the same way as interest. This approach assumes that the present value of future consumption varies from borrower to borrower (largely dependent on their personal risk profiles, their need to access intermediary services, and the relative cost of arranging the loan given its size) and that any intermediary fees incorporated into the interest charged are simply further costs of bringing forward consumption that should be treated similarly to the pure interest rate. The assumption under this view, thus, is that there is no utility to the borrower from these charges; rather, they are a means to an end which is acceleration of actual consumption.[15] Whatever components are included in the borrower's cost of shifting consumption, the present value of VAT on accelerated consumption and the larger amount of VAT on deferred consumption will always be equal in economic terms to the borrower.

It has been suggested that it is a "fallacy" to suggest there is no utility to the borrower from expenses incurred to access credit simply because the borrower does not directly consume the benefit acquired. Advocates of this position argue that if this view were taken to its

[13] The modern VAT used in jurisdictions such as Australia and Canada extend this treatment to residential premises, subjecting only the first sale of housing to tax.

[14] Edgar, above note 1.

[15] Grubert and Mackie, above note 9, Ngee-Choon Chia and John Whalley, "The Tax Treatment of Financial Intermediation" (1999) 31(4) *Journal of Money, Credit and Banking* 704-719. Employing a slightly different mode of analysis, Jack also concludes intermediary fees incorporated into interest spreads should not be taxed. See William Jack, "The Treatment of Financial Services under a Broad-Based Consumption Tax" (1980) 53 *National Tax Journal* 841-51.

logical conclusion, there would be no reason to tax the acquisition of any durable such as cutlery or cars since no durables provide direct utility for consumers. Rather, all these assets are the means to consumption over time.[16] The argument appears to bypass the reason on the acquisition of consumer assets is subject to consumption taxation. As noted earlier, the goal is not to tax acquisition of the asset itself but rather to impose tax on the acquisition value of the asset as the present value for the future consumption from the use of the asset.

Under the contrasting social pool view of consumption, the intermediary cost would be dissected from the other costs borne by the borrower to shift the time of consumption and treated as the price of acquiring separate taxable service. While the individual might regard the higher interest charge incorporating an intermediary fee as the cost of shifting consumption forward, unlike interest, this fee is used to acquire actual services and if the consumer borrower were not acquiring these services, the capital and labour used to provide the services would be used to provide services to other persons. In other words, the acquisition uses real resources from the pool of economic resources and would thus amount to consumption under the social pool perspective.[17]

Importantly, the personal view which treats intermediary charges as part of the cost of shifting the time of consumption (and hence yielding no separate utility to the borrower), does not consider the impact of the transaction from the government's perspective and the revenue constraints that the government might face if intermediary services are not subject to tax. The present value of accelerated consumption (using borrowed funds) or deferred consumption will be the same for the consumer which means the value of tax paid on accelerated consumption should equal the tax paid on deferred consumption.

In contrast to (higher) payments for interest borne by private consumers, which shifts the time of consumption but utilises no real resources, payments for financial intermediary services are used to acquire real labour and capital inputs. Had the consumer chosen to defer consumption and spend the funds on other services, the alternative acquisitions would be subject to tax. For tax revenues from accelerated or deferred consumption to be equal, therefore, the acquisition of financial intermediary services by the person who accelerates consumption must be taxed in the same manner as the acquisition of non-financial services by the person who defers consumption. Only this way will the total tax paid by the person who accelerates consumption equal the tax paid by the person who defers consumption and the decision to accelerate or defer consumption have no impact on the government's revenue constraint.[18]

The revenue constraint consideration that arises in the case of the borrower is not mirrored in the case of the depositor or investor. There is a similar use of real resources, but the saver is not acquiring these inputs as an alternative to other forms of consumption. Rather the saver is acquiring the inputs in the course of saving for future consumption. As the anticipated gross

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[16] Robin Boadway and Michael Keen, above note 9.

[17] It has been suggested that the portion of the embedded financial services fee that compensates the intermediary for risk of default by the borrower is not payment for any service provided by the intermediary and the portion of the implicit fee representing compensation for risk should not be subject to tax even if it is concluded the service fee to consumer borrowers should otherwise be subject to VAT. This view has not widely supported, perhaps because the assumption of risk is in fact a central element of financial intermediary services. See Robert Carroll and Alan D. Viard, "Value Added Tax: Basic Concepts and Unresolved Issues" (2010) 126 *Tax Notes* 1117-1126; Alan Schenk, "Taxation of Financial Services Under a Value Added Tax: A Critique of the Treatment Abroad and the Proposals in the United States" (1994) 9 *Tax Notes International* 823-840, at 831.

[18] This outcome is illustrated in Appendix 1.

return on the investment will be larger than the return anticipated from investments made without reliance on investment services, the government loses no revenue by treating the fees for investment services as part of the cost of the investment.

The revenue constraint consideration is significant. If resources used to provide financial intermediary services are not taxed and alternative consumption is, the tax treatment will by itself distort consumption decisions, with further distortions caused by the government's need to impose higher taxes on services that are taxed to maintain revenues that would have been realised with lower rates imposed on a broader base. The revenue constraint consideration has altered the views of some who have argued there is no personal utility from the use of financial intermediary services by consumer borrowers and led them to suggest nevertheless that the services should be taxed.[19]

Another argument used to make the case for taxing borrowers on the cost of intermediation services is based on the comparison of the person who borrows to buy a consumer durable and the person who leases the durable. Operating lease payments are currently subject to tax in all VAT systems. If the payments include a financing charge and that charge includes financial intermediation services as well as implicit interest, there would clearly be inconsistent treatment between the lessee and person who borrowed to buy the same asset,[20] just as there would be between the purchaser who borrowed externally to buy a lower priced durable and the consumer who pays a higher purchase price for the durable advertised as being sold on a "no payments for six months" basis. However, the case for parity between operating leases and financial intermediary supplies appears not to recognise that any credit supplied in the operating lease case is from a financial institution to the supplier, not from the supplier to the customer. Unlike a finance lease where the customer pays and implicit credit component to acquire a new asset, an operating lease is merely the provision of a service and if the supplier passes on to the customer some of the supplier's financing charges, they are similar to all other expenses passed on to the customer as part of the bundle of inputs used to calculate the value of the service provided.

If it is difficult to determine from any inherent feature of the services themselves itself whether financial intermediary services amount to consumption from a social pool perspective or are merely expense incurred to shift the time of consumption from the borrower's perspective, it is equally difficult to find the answer by looking at the question from the perspective of the recipient of tax revenues, the government. As noted, because of the different discount rates for the government and private consumers, the government will always enjoy higher tax revenue from individuals who defer consumption than it gains from those who accelerate consumption. At the same time, a consideration of revenue constraints suggests financial intermediary services should be taxed in the same way as the alternative services for which they substitute.

At the end of the day, debate comes back to a single question – what is the correct comparison of the value of accelerated and deferred consumption: is it based on the consumer's full cost of borrowing, including financial intermediary charges, or is it based on the actual interest paid by the borrower, with the use of financial intermediary services being a deliberate substitute consumption choice by the borrower? The case for regarding the services to be consumption in their own right rather than part of the cost of shifting other consumption forward is strong if the Pareto optimal perspective is considered and weak if

[19] See Appendix 2.
[20] Jack M. Mintz, "Taxing Financial Activity" (2004) 58(3) *Bulletin for International Fiscal Documentation* 99-111 at 108.

the pure personal perspective is used. For those who would otherwise endorse the personal perspective outcome, the revenue constraint consideration may tip the balance in favour of taxing intermediary services.

3.4 Reforming the VAT on financial intermediary services

The jury is out on the appropriate VAT treatment of financial intermediary supplies to consumer borrowers and the lack of consensus may help explain in part why many commentators have advocated treating consumer loans as exempt supplies, leaving them partially taxed. Concern that input taxation of these supplies over the bias towards vertical integration and in-house provision of services that could be acquired from possibly more efficient external suppliers caused by of these supplies has led some advocates of the exempt treatment to suggest financial institutions be allowed partial input tax credits to reduce the tax burden on all or selected outsourced inputs to,[21] an approach now used in Australia. Clearly a preferable solution would be to tax the value in full if it is concluded the services should be taxed when provided to consumer borrowers, with full input tax credits to the service providers, or to remove all tax if it is concluded the services should not be taxed.

While there may be some debate in respect of the appropriate tax treatment of intermediary services to consumer borrowers, there is little debate as to the need to remove VAT from intermediary supplies to depositors and business borrowers. This outcome follows automatically in the context of an expenditure tax and is relatively easy to achieve in a transaction tax such as a retail sales tax that suspends all tax on business to business transactions. There is, however, no simple way to fit loan transactions in the standard VAT system as it is impossible to calculate the value of a supply of intermediary loan financial services on a transaction-by-transaction basis, a cornerstone principle of the VAT where the charge is levied through a margin on interest rates paid and payable.[22]

It is, however, possible to determining the value of the services indirectly at the level of the financial institution providing intermediary services and then collect VAT from the service provider. Four methods of applying VAT in this way have been devised: a “subtraction” calculation, an “addition” calculation, a “cash flow: calculation and a “reverse charge” calculation.[23]

[21] See Tim Edgar, “Exempt Treatment of Financial Intermediation Services under a Value-Added Tax: Assessing the Significance of Recent Challenges to an Imperfect Status Quo” (2001) 49(5) *Canadian Tax Journal* 1133-1219, at 1187. The partial input tax credit for outsourced acquisitions is a feature of the Australian GST system.

[22] No similar problem arises with financial services for explicit fees but surprisingly only South Africa has included all these services in the ordinary VAT system. See Satya Poddar, “VAT on Financial Services – Searching for a Workable Compromise” in David White and Richard Krever, *GST in Retrospect and Prospect* (Wellington: Thomson Brookers, 2007) 179-204 at 188.

[23] The first three of these are explained in more detail in Sijbren Cnossen, “VAT Treatment of Financial Services” in Gustaf Lindencrona, Sven-Olof Lodin and Bertil Wiman, International Studies in Taxation: Law and Economics (London: Kluwer Law International, 1999) 91-94. Also see (for a description of all four methods) Arthur Kerrigan, “The Elusiveness of Neutrality – Why is it so difficult to apply VAT to Financial Services” (2010) 21(2) *International VAT Monitor* 102-112, at 105-107 and, for a review that includes other alternatives see Pierre-Pascal Gendron, “VAT Treatment of Financial Services: Assessment and Policy Proposal for Developing Countries” (2008) 62(11) *Bulletin for International Taxation* 494-507. A comprehensive description of cash flow options is set out in Morley English, “Taxation of financial services under a value-added tax: applying the cash-flow approach” (1997) 50(1) *National Tax Journal* 89-111.

The subtraction method is based on the calculation from business accounts of value added as gross revenue less allowable purchases.[24] The addition calculation measures the value of intermediation services as using a formula based on taxable income plus wages and salaries.[25] The cash flow method measures the value of intermediation services by tracking the gross cash flows of the financial intermediary – the deposits it receives and repays and the loans it makes and those that are repaid.[26] The reverse-charge method involves a financial intermediary notionally imposing tax on the implicit intermediary service charge its passes on to depositors through lower interest and issuing a tax invoice to itself so it can recover the tax from the intermediary charge it bundles into the interest payable by borrowers.[27]

While there are isolated instances in which some of these alternatives that have been seriously contemplated or, more rarely, adopted, none have had widespread acceptance. This is partly a consequence of path determinacy. The first EU VATs classified financial supplies as exempt supplies only for historical reasons (this was equivalent to the system used in predecessor taxes)[28] and the precedent was followed in the Sixth Directive,[29] the binding European Commission law that subsequently later governed the design for all European VATs, establishing a mould that has been followed since internationally.

Another factor that may explain the continuing preference for exempt treatment of loans in VAT jurisdictions is the difficulty of allocating VAT to individual customers if the tax base is calculated on the basis of total supplies by the intermediary service provider. If the VAT cannot be attributed to each customer in a tax invoice, business borrowers would be unable to claim input tax credits and would bear far more VAT than is the case with the current rule treating the supplies as input taxed supplies. The same would be true of unregistered individual depositors and individuals borrowing for investment purposes, all of whom should be paying less tax than they now do, not more. While proposals have been developed for the allocation of VAT under the cash flow version of VAT on financial intermediaries[30] and it

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[24] The Philippines came very close to adopting a system based on the subtraction method but ultimately retreated from the proposal, in part because of the difficulty in allocating the tax to business customers via tax invoices. See Milwida M. Guevara, 'A Better Alternative Tax for the Financial Sector' available at http://www.asiataxforum.org/index.php?option=com_docman&task=doc_view&gid=8 (last visited 13 January 2010).

[25] Israel applies the addition method to tax financial services. See David Gliksberg, "Israel's Value Added Tax Law" (1992) 3(7) *International VAT Monitor* 2-14.

26 This approach was first proposed in Satya Poddar and Morley English, "Taxation of Financial Services Under a Value-added Tax: Applying the Cash-flow Approach," (1997) 50 *National Tax Journal* 89-111. Ernst & Young prepared a further study on this approach for the Commission of the European Communities in 1994: "Treatment of Financial Servcies under a VAT: Further Exploration of the Cash-flow Method of Taxation)and was considered by the European Commission in European Commission TCM/TCA System of VAT for Financial Servcies (2000).

[27] This system was proposed by Howell H. Zee in "A New Approach to Taxing Financial Intermediation Services Under a Value-Added Tax" (2005) 58(1) *National Tax Journal* 77-92.

[28] See Robert F. van Brederode, *Systems of General Sales Taxation* (Alphen aan den Rijn: Kluwer Law International, 2009) 138-139.

[29] Directive 77/388/EEC of 17 May 1977 ("the Sixth Directive"), subsequently replaced by Directive 2006/112/EC of ("the VAT Directive").

[30] See, for example, Commission of the European Communities, Proposal for a Council Directive amending Directive 2006/112/EC on the common system of value added tax, as regards the treatment of insurance and financial services, COM(2007) 747 final, 28 November 2007 and Commission of the European Communities (2007a), Proposal for a Council Regulation laying down implementing measures for Directive 2006/112/EC on the common system of value added tax, as regards the treatment of insurance and financial services, COM(2007) 746 final, 28 November 2007.

appears tax invoices for individual borrowers may also be possible under the reverse-charge system,[31] no jurisdiction has been willing to test the theories in practice.

The economic costs of this additional, sometimes cascading, over-taxation may be significant.[32] Businesses that rely on services from a chain of other businesses which employ financial services bear more embedded VAT than businesses in a chain that does not rely on banking services to the same extent, leaving the first type of business leaving the first type of business less competitive. Also, to reduce the level of non-claimable taxes they must pass on to customers, financial institutions are likely to become more vertically integrated, using their own labour to provide a wide range of services that could be more efficiently provided by external specialist organisations and in the process raising the cost to customers of their services. It may also favour foreign suppliers over internal suppliers,[33] who are able to recover all their input taxes,[34] although in practice the supposed advantage should be completely offset by the import VAT collected from the customer.[35]

In the absence of proven examples of new systems that can relieve business borrowers from tax, in the short term alternative solutions that fit directly into the current VAT system appear to be the most logical reform route. Limited attempts have been made to do this in the EU, where individual countries currently have the option to treat some types of financial supplies as taxable supplies,[36] an approach encouraged by the European Banking Federation.[37] More recently, the European Commission has proposed changes to EU law to shift the power to opt for taxation of financial services from EU member states to financial institutions, subject to common rules to be incorporated in the Directive that governs VAT in the EU.[38] The practical difficulties with these proposals may not be insurmountable, but they are considerable[39] and experts have suggested an alternative approach, used by two

[31] See Zee, above note 27.

[32] The identified problems are reviewed in Pierre-Pascal Gendron, above note 23.

[33] Alan Schenk, "Taxation of Financial Services (Including Insurance) under a United States Value Added Tax" (2010) 63(2) *Tax Law Review* 409-4, text after note 38.

[34] This is because they are supplying, from their perspective, exported services, normally qualifying for a zero-rate, thus allowing them to recover all input taxes incurred to make the supply.

[35] VAT systems normally collect VAT on imported goods from the importer and on imported services from the receiving customer, at least where the customer makes exempt supplies such as financial supplies. The rules that collect VAT from customers of imported services are known as "reverse charge" rules.

[36] These rules are described in Sandhya Natheoin and Ted Braakman, "Option for Taxation of Financial Services – is It an Option?" (2010) 21(2) *International VAT Monitor* 113-118. See also Sijbren Cnossen, "VAT Treatment of Financial Services" in Gustaf Lindencroan, Sven-Olof Lodin and Bertil Wiman, *International Studies in Taxation: Law and Economics* (London: Kluwer Law International, 1999) 92-103 at 98-99.

[37] For a comprehensive review of the issues raised by the option to tax approach, see Ernst & Young, *Design and Impact of the 'Option to Tax' System for Application of VAT to Financial Services (Report prepared for the European Banking Federation* (Ernst & Young, 2009).

[38] The EU proposals are the most recent in a debate over the optimal taxation of financial supplies under the European VAT that stretches back for over two decades. The key stages are summaries in Rita de la Feria, "The EU VAT treatment of insurance and financial services (again) under review" [2007] (2) *EC Tax Review* 74-89. For the most recent "opt in" proposal, see "Proposal for a Council Directive amending Directive 2006/112/EC on the common system of value added tax, as regards the treatment of insurance and financial services", COM/2007/0747, which was accompanied by a "Proposal for a Council Regulation laying down implementing measures for Directive 2006/112/EC on the common system of value added tax, as regards the treatment of insurance and financial services", COM/(2007/746.

[39] Many of the issues are canvassed in Ernst & Young, *Design and impact of the Option-to-Tax System for application of the VAT to financial services - Report prepared for the European Banking Federation*, 28 October 2009;

countries – Singapore and New Zealand – may be preferable,[40] adding technical rationales to the theoretical case that has been made in Europe for a zero-rating system for supplies to business.[41]

These two jurisdictions have retained the exempt supply treatment of financial supplies for non-commercial borrowers but relieve business borrowers from any VAT on their acquisitions of intermediary services by directly or indirectly treating the supplies to VAT registered borrowers as zero-rated supplies[42] Whatever system might be adopted for loan intermediary services provided non-business borrowers, the zero-rated route appears to be the optimal solution in terms of simplicity and effectiveness for removing any consumption taxes from non-personal loans made to registered businesses. It has been suggested that the zero-rating rule is flawed when applied to businesses that in turn make both taxable and exempt supplies (by removing any tax from the exempt supplies),[43] but this observation is probably most useful as a case for reviewing the rationale and design of the exempt supplies that might be made by customers of a financial institution.[44]

Australia recently proposed an alternative approach which would impose VAT on financial institutions based on the value of their intermediary services using an additive calculation while excluding supplies to registered businesses.[45] The proposal achieves the desired neutrality of non-taxation for business customers but increases the tax burden imposed on unregistered investors. Depending on the view one takes of consumer borrowers, it would lead to greater over-taxation or more appropriate full taxation of these users of financial intermediary services compared to the current input taxation system.

4. Indirect credit charges

Financial institutions that offer credit by way of credit cards impose implicit intermediary fees on users of the credit facility by embedding that fee in the interest rate charged to users of the credit facility. The higher rate imposed on credit card users also pays for the provision of credit to card holders who pay their accounts within the "no interest" grace period between the time of sale and time a monthly credit card bill is payable. In practice, the only true credit provided to these credit card users is the period between the time the credit card

[40] The New Zealand and Singapore regimes are described in Lee Burns, "Consumption Taxation of Supplies of Financial Services in the Asia-Pacific Region" (2008) 14(5) *Asia-Pacific Tax Bulletin* 352-362, at 354-355.

[41] Harry Huizinga, 'A European VAT on financial services' (2002) 17(35) *Economic Policy* 498-534; Alan Schenk and Howell H. Zee, "Treating Financial Services Under a Value Added Tax: Conceptual Issues and Country Practices" (2001) 22 *Tax Notes Int'l* 3309-3316, updated as "Financial Services and the Value-Added Tax" in Howell Zee (ed.), *Taxing the Financial Sector: Concepts, Issues, and Practices* (Washington: IMF, 2004) 60-74.

[42] The background to the New Zealand regime is set out in Policy Advice Division of the Inland Revenue, GST and financial services; a government discussion paper (Wellington, 2002). See further Marie Pallot and David White, "Improvements to the GST Treatment of Financial Sercies – the Proposed New Zealand Approach" (2002) 13(6) *International VAT Monitor* 481-486; Andrew Maples, 'The Zero-Rating of Financial services and Introduction of a Reverse Charge in New Zealand (At Last!)' (2004) 58(5) *Bulletin for International Fiscal Documentation* 213-224; Marie Pallot, "GST and Financial Services – Rating Zero-rating" in David White and Richard Krever, *GST in Retrospect and Prospect* (Wellington: Thomson Brookers, 2007) 163-178.

[43] Alan Schenk, Taxation of Financial Services Under a Value Added Tax: A Critique of the Treatment Abroad (1994) 9 *Tax Notes Int'l* 823 at 840-841

[44] Apart from designating financial supplies as exempt supplies, most countries use exemptions primarily as a means of subsidising preferred types of consumption such as food, education and health services. The use of randomly imposed inputs as a means of providing concessionally-priced goods or services is difficult to sustain.

[45] The proposals grew out of a tax review that explicitly excluded changes to the GST from the terms of reference so the proposal adopted a new term for the VAT applied to financial intermediaries, a "financial transactions tax". See Australia, [45] Australia's Future Tax System Review Panel, *Australia's future tax system: Report to the Treasurer* (December 2009).

provider pays the retailer and the time the card holder pays his or her credit card account. As there are competitive limits to the rates that can be charged to users of the credit facility, the cost of the interest-free period is recouped partly from the charge imposed on retailers. The charge paid by retailers also covers the credit card providers' sale enhancing services (bringing credit card customers to the retailers) and payment systems (enabling the retailers to avoid problems with non-sufficient-funds cheques).

In some jurisdictions, credit card companies pass the charges they pay to credit card providers on to all customers embedding the expense in higher prices for goods or services, a process that leads to customer paying cash subsidising those paying with credit cards. Other jurisdictions allow retailers to charge credit card users a fixed or percentage fee for purchasers paid by way of credit card.

Disputes have arisen regarding the character of charges paid by retailers to credit card providers[46] and the explicit surcharges paid by consumers to retailers.[47] The primary question in the latter case is whether the payments should be treated as consideration for a separate supply by the retailer or regarded as a further cost of acquiring the goods or services acquired with the credit card. Tax authorities and appeal tribunals treat the surcharge as part of the cost of the underlying goods or services – that is, they assume the retailer in effect has a dual pricing system, selling the same goods or services at a higher price if the customer wishes to pay by credit card. This result appears to be an appropriate outcome from a policy perspective as the additional cost is not directly connected with a cost for intermediary services used to shift the time of consumption. The outgoing is not payment for "financial services" per se, but rather a fee for using a payment system that imposes additional operating costs on the retailer.

A related question regularly encountered is whether this fee for using a credit card payment should be imbued with the same character of the underlying service or goods if the acquisition is entitled to a tax expenditure subsidy and treated as a zero-rated, exempt, or concessional rate supply. If the subsidy is intended to promote a positive externality, correct a market failure, or act as a redistributive transfer payment, the target might be presumed to be the specific goods and services identified in the legislation. However, the vendor making the qualifying supply is not providing the customer with any ancillary services by offering alternative payment systems where one payment system attracts a surcharge. The utility provided to the customer derives from the goods or services supplied, not the use of a more expensive payment system. Treating the underlying expense and surcharge as dissected payments for a single composite supply of subsidised goods or services similarly appears to be an appropriate outcome from a policy perspective.

5. Pooling services

Financial intermediaries providing "pooling" services offer a fundamentally different service from those linking savers and borrowers. In the pooling case, a group of persons agrees that each member of the group will contribute to a common pool and the proceeds of the pool will be distributed to select members of the pool –the winners with the lucky numbers in collective gambling transactions such as a lottery or the losers suffering catastrophe in the case of insurance. In the case of both types of pooling (more so for insurance than lottery pooling), there will be some investment of pooled funds by the service provider prior to the

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[46] See, for example, the Canadian case of *Costco Wholesale Canada Ltd. v. The Queen* 2009 TCC 134.

[47] See, for example, the Australian decision in *Waverley Council and FCT* [2009] AATA 442, where it was held that the surcharge imposed on a credit card user was a cost of acquiring the service for which the consumer was paying.

payout to enhance the value of the distribution relative to the amount provided initially by way of insurance premiums or lottery ticket cost.

In one case users of the pooling are risk takers and in the other they are risk averse but in both cases a large group of contributors provide the funds that a much smaller subset will use to acquire goods and services. The size of the insurance premium will reflect the actuarially determined likelihood of some of the participants in the pool becoming entitled to compensation for losses. In the case of lotteries, by way of contrast, the price of participation is usually fixed and the number of participants and number of winners will normally determine the value of distribution for each level of winner. The cost of the pooling service for both lotteries and insurance is the difference between the revenue received by the service provider (either from the scheme participants or as investment income) and the amount paid out to the winners or losers, as the case may be.

As is the case with financial intermediary services, real resources are used to provide these pooling services without any compensating increase in taxable consumption somewhere else and the portion of premiums or ticket cost used to pay for the pooling services should be subject to tax. However, from a Pareto optimal point of view, looking at consumption only in terms of the acquisition of resources from the social pool, the bulk of the lottery ticket cost or insurance premium that provided the funds paid to the losers or winners should not be taxed (that is, the premium or cost apart from the slice retained by the lottery intermediary or insurer for the pooling services). The rationale for this conclusion is similar to that applicable to consumer loans, which are analytically similar to insurance and lotteries. Consumer loans shift consumption between periods of time and lottery or insurance arrangement shifts consumption from one person to another but neither the interest in the loan case nor the premiums or ticket price in the pooling case give rise to consumption in the sense of taking real resources out of the economy.

A very different result would follow, however, if consumption is viewed from the personal perspective of the insured or lottery ticket buyer. From this perspective, the full premium or full lottery ticket cost may yield utility and consumption benefits equal in value to the alternative consumption that could have been acquired with the payment, even though the contribution to the redistribution pool does not in itself lead to the acquisition of real goods or services withdrawn from the economy.

5.1 Lotteries and gambling

While it is conceivable that an enterprise with a "system" could acquire lottery tickets as part of a business[48] or apply its capital to gambling activities rather than conventional business pursuits, it can be safely be assumed that most lottery tickets or gambling is acquired by individuals exercising final consumption choices. The cost of financial intermediation or pooling service is clearly a incident of personal consumption and should bear VAT. The value of this service is easily measured as the difference between the amount collected from lottery participants and the amount paid out to winners. Imposing tax on this amount has proved a simple way to tax the service.[49] Since all participants are assumed to be final consumers, there is no need to attribute the VAT payable for the purpose of allocating input tax credits.

[48] For a colourful example, see *The International Lotto Fund v. Virginia State Lottery Dept. and USA* (1994) 20 F.3d 589 and Anne Wagenbrenner, "Court may not stop withholding on Australian lottery winners." [1994] (6) *Journal of Accountancy* 177.
[49] This is the approach used in Australia.

Limiting VAT to the fee for pooling services provided by a lottery (or other gambling) provider yields an optimal outcome from a Hobbes or Pareto optimal perspective. This view looks only to the application of lottery winnings to acquire goods or services – that is, to acquire a slice of the economic pie. The supply of funds to the pool and the distribution from the pool to the winner is ignored under this approach. If ten persons each bought $11 lottery tickets and the lottery organiser distributed $100 and retained $10 as the fee for pooling services, the only acquisition out of the economic pie is the $10 of services; the savings remain to be spent.

This is not the outcome if the personal perspective of consumption is adopted. The personal perspective seeks to tax (and in the progressive expenditure tax, redistribute) the exercise of economic power through consumption choices, not the use of real resources from the social pool. Under this perspective, there is a case for imposing VAT on the entire amount wagered by a person acquiring a lottery ticket or otherwise gambling rather than limiting the tax base to the fee for the intermediation service. If one starts with the assumption that most ticket buyers (to cite on of the most widespread forms of gambling) realise they are not likely to win, from the perspective of the ticket buyer the purchase of a lottery ticket is an exercise of consumption. That is, most ticket buyers presumably recognise the fact that the odds are against them and are willing to part with the cash in the knowledge that it is likely not to be returned. Since the money could have been spent on other consumption, it can be assumed that the intangible benefits of holding a ticket – the thrill of being in the game, the chance to fantasise how the winnings might be spent, and so forth – were equal in value to the alternative forms of consumption available to the purchaser for the same cost. The fact that the ticket buyer chose to gamble with her or his money rather than buy certain goods and services supports the conclusion that the intangible gratification of participating in a lottery was equal in value to any alternative form of consumption available to participants. If this is the case, it might be argued that the full cost of a lottery ticket should be subject to tax, not just the portion that represents the cost of financial intermediation. This conclusion is strengthened if economic neutrality is considered as any alternative applications of the funds apart from the acquisition of investments would be subject to tax and in a neutral tax world non-taxation of lottery consumption would amount to a tax expenditure or subsidy for this form of consumption.

Those adopting the narrower Pareto school view of consumption might argue that taxation of full amount expended on a lottery ticket amounts to double taxation as the cost of the tickets will be taxed at the time of purchase and the funds will be taxed again when they are distributed to the winner and used to acquire goods and services in the marketplace. This conclusion rests on the circular logic that actual consumption consists of the extraction of goods or services from the marketplace so the initial contribution of funds to the lottery pool is not an act of consumption. There is, of course, no double taxation if the broader personal perspective view of consumption is used. If consumption is considered the application of funds to acquire a perceived benefit chosen over other possible benefits from the use of funds (which include extractions from the social pool), the initial purchase of a lottery ticket is consumption to the same extent the alternative purchase of a meal or drink would be.

The logic behind this approach is identical to the rationale explained earlier for treating gifts as consumption under the expenditure tax – the application of funds for any purpose other than investment or savings is a form of consumption from the perspective of the donor who made a consumption choice to give money away rather than spend it to acquire goods or services. The value of the gift to the donor is, as described earlier, the face value of the

funds donated, which is also the value of the goods or services that could have been acquired as an alternative to the gift.

A third way of looking at gambling focuses on the pooling nature of the exercise. The gambling provider's fee for the pooling service is collected by way of a difference between the value of bets placed (or lottery tickets purchased) and the amount of prizes distributed. The remainder of the funds wagered are distributed to the prize winners and ultimately used for consumption. The value of the proceeds may be thought of as a tax-inclusive value as the winnings can be used to pay the tax-inclusive price of goods and services. It can be seen, therefore, that persons laying bets or buying lottery tickets are providing a tax-inclusive value to the pool for the tax-inclusive consumption of the winner. If this view is accepted as a correct reflection of the nature of gambling, gamblers and lottery ticket purchasers do effectively pay VAT on their contributions to the pool as they are funding the full cost of tax-inclusive purchases from their pool.

At the end of the day, the appropriate VAT treatment of lottery and gambling expenditure will turn on whether a personal perspective or Hobbes / Pareto use of real resources from the social pool perspective of consumption is preferred. This, in turn, will depend on one's view as to the appropriate base for consumption taxation – extractions from the social pool or the exercise of economic power through the application of income or savings. While the broader view of consumption favoured by expenditure tax advocates cannot be applied to gifts in the VAT world (gift giving does not fall within the limited scope of the VAT applying to commercial activities of registered persons), from a purely technical perspective it would be possible to apply the broader view of consumption to lotteries and gambling. However, in the VAT world in practice (at least in those countries that impose VAT on lotteries and other gambling) only the value of intermediary pooling services is used as the VAT base, not the gross expenditures on gambling.

5.2 Insurance

As is the case with all input expenses incurred by businesses, there should be no VAT imposed on the cost of casualty insurance services provided to business customers. For historical reasons, the traditional European VAT continues to treat casualty insurance and insurance pooling services as exempt supplies. There is, however, general recognition that history alone explains retention of this rule; the treatment has never been defended on policy grounds. For business customers, this policy distorts business decisions and leads to cascading over-taxation of business inputs. At the same time, it under-taxes the consumption of pooling services provided to private insurance clients. To avoid these outcomes, the intermediary pooling service of insurers is treated as an ordinary taxable supply in some modern VAT systems, although several different systems are used to calculate the value of this service and impose tax on it.

Even if VAT on insurance is imposed only on the intermediary fee charged by the insurer for the service of pooling risk premiums, in a sense insured persons pay VAT on the full value of the premiums because the premiums are calculated to provide insurance claimants with the tax-inclusive cost of replacement goods. Consider for example, 10 private car buyers each buying a car worth with a cost of £100 plus £17 VAT (i.e., a tax inclusive cost of £117). If the actuarial evidence suggests one of these cars will be stolen in the year, the insurer would impose annual premiums of £11.70 and a pooling intermediary charge of, say, £1 for a total premium cost of £12.70 from each insured person. By the end of the year, the insurer would pay £117 to the unlucky car owner whose car was stolen and retain £10 as its intermediary fee. The person receiving the insurance benefit will acquire a new car for £117

including £17 VAT that in effect was paid by the insured persons through grossed-up premiums.

It could be argued that the implicit VAT imposed on insurance premiums is inappropriate if premiums are considered a substitute for savings for a privately insured person. Rather than pay insurance premiums, the person could self-insure and each year put £11.70 in a savings account to be drawn down if the vehicle is stolen. If both the insured person and the self-insured person have their cars stolen after ten years, they end up in the same position – with a new car and no savings remaining, an outcome consistent with the characterisation of premiums as a form of savings. On the other hand, if the cars are not stolen, the saver has £117 in the bank (plus accrued interest) at the end of ten years and the insured person has nothing to show apart from ten worry-free years, an outcome that challenges the characterisation of premiums as akin to savings.

The direct comparison of two individuals is misleading, however. A key point is that the insured person has contributed funds to a pool. While any one individual insured person might not consume goods or services in the year, if the actuarial predictions are accurate, some insured person will make a claim and consume with the proceeds from the pool (that is, the insurance premiums paid by all the insured persons less the part retained by the insurer as payment for the pooling service). Thus, persons acquiring insurance have no option but to consume each year, albeit for most the consumption will be vicarious, through the victim making an insurance claim. The actual acquisition of goods and services by the claimant is paid for by the other insured persons whose premiums, as noted, include the VAT charge that the claimant will pay when she or he acquires replacement property.

An alternative starting point for analysing insurance premiums is to compare them with warranty expenses. In addition to the price charged for a profitable sale of goods, the manufacturer may impose an explicit fee for warranty coverage or embed the fee in a higher price charged for the goods. However the cost of warranty coverage is paid, the amounts allocated to the warranty form a a pool of funds to cover the cost of repairing items that break down during the warranty period. Some consumers never purchase warranty coverage for assets they acquire and instead invest the savings so they are available for repairs if it turns out one of their purchases is a faulty product.

On its face, the relative positions of those who purchase warranties to cover the cost of repairing defective goods and those who self-warranty through savings looks analogous to the positions of those who insure to cover theft or loss of those goods and those who self-insure through savings. There is an apparent difference between warranty and insurance arrangements in the timing of when VAT is remitted to the tax authority. The VAT on the cost of the warranty is remitted when the warranty is sold, not when the goods and services provided under the warranty are provided, while the VAT on replacement items acquired with insurance proceeds is remitted when the replacement items are acquired. The difference is an illusion, however, as the VAT payable on warranty coverage is a discounted present value of the VAT that would be payable when the goods and services are later provided so the value of VAT paid by insurance customers and warranty customers is actually comparable, as is the amount received by the government.

While the total amount of VAT payable on warranties and insurance is the appropriate amount in terms of the value of goods and services actually acquired at the end of the day, there is a mismatch in both cases of liability in terms of the persons paying for the service and the persons receiving it. The VAT component is borne equally by all persons acquiring

insurance or warranties only the person making an insurance claim or warranty claim receives the goods or services to which the VAT relates.

Insurance (and warranties) may be a rare instance where the Hobbes or Pareto analysis aligns with the personal perspective analysis. From a Pareto perspective, the result is correct because ultimately the government only receives tax in respect of the provision of goods and services extracted from the social pool. From a personal perspective, each person acquiring insurance or warranty coverage, including those who ultimately receive on benefit, has borne (implicitly) VAT on the entire amount of the premiums. For those who do not suffer loss, the implicit VAT may be seen as a tax burden on the personal value of insurance *coverage* – for these persons, the (grossed-up) premium is the price paid for the peace of mind that comes from knowing one is insured.

Thus, while the technical processes are entirely different, at the end of the day, insurance and warranties are very similar to savings in the consumption tax world. In the case of self-insured and self-warranty persons (the savers), VAT is remitted when goods or services are acquired. In the case of warranties, VAT is remitted when the warranties are acquired but, importantly, paid by many who will not enjoy the final consumption; their payment is best attributed to the benefit they receive from warranty coverage. And finally, in the case of insured persons, VAT can be borne by the insured by way of grossed-up premiums and transferred to the revenue authority when insurance benefits are used to acquire replacement goods and services. The fact that the VAT was in effect paid by many who will not enjoy the final consumption may once again be best attributed to the benefit they receive from their consumption choice to be safely insured in lieu of other consumption (rather than savings).

Separately, the VAT system applying to insurance must ensure that the charge for pooling services levied by an insurer (for which there is no equivalent in the case of the manufacturer covering the cost of warranty repairs through explicit warranty fees or by way of higher sale prices) is subject to VAT in a way that allows it to be recovered by business customers and not by unregistered final consumers.

END

Appendix 1: why intermediary services should be taxed

If consumers faced exactly the same borrowing costs as the government (banks provided financial intermediary services to consumers for free), the government would be indifferent between accelerated and deferred consumption as the tax collected from accelerated consumption would be equal in value from the government's perspective to the tax collected from deferred consumption.

For example, if the government's risk-free cost of capital is 10 percent and a consumer could borrow for the same interest rate (and avoid any financial intermediary charge), a consumer borrowing to buy goods worth £100 plus £20 VAT in year one would have to repay £120 plus £12 interest or £132 in total in year two. This means the saver who deferred consumption could spend £132 in year two and be in the same position. With these funds, the saver could acquire goods worth £110 plus £22 VAT in year two. Since the government's cost of funds is 10 percent, the government is completely indifferent between tax receipts of £20 in year one or £22 in year two.

However, individuals are not able to borrow at the government's cost of funds because they will incur charges for financial intermediary services. The present and deferred value of individual's consumption is determined by reference to their cost of capital, not the government's.

For example, if the government's risk-free cost of capital is 10 percent and a consumer could borrow for 11 percent, a consumer borrowing to buy goods worth £100 plus £20 VAT in year one would have to repay £120 plus £13.20 interest or £133.20 in total in year two. This person who defers consumption could spend £133.20 in year two as an alternative to spending £120 year one. The consumer who deferred spending until year two could acquire goods worth £111 plus £22.20 VAT in year two. For this consumer, £100 tax-exclusive consumption in year one is equal to £111 tax-exclusive consumption in year two.

If the value of consumption is the same in the individual's present value terms, the value of tax paid on accelerated or deferred consumption should also be the same in the individual's present value terms. This can only be achieved if the value of financial services are subject to tax.

The effect of taxing or not taxing this service charge can be seen if these two alternatives are compared with the tax that would be collected from the person who defers acceleration (£22.20):

1.taxing the financial services:
tax revenue year one = 20% x £100 consumption expenditure = £20 in year one (equal to £22 in year two at the government's borrowing rate) plus 20% x £1 service charge in year two = £22.20 tax in year two values.

2. not taxing the service charge:
tax revenue year one = 20% x £100 consumption expenditure = £20 (equal to £22 in year two at the government's borrowing rate) plus 0% x £1 service charge in year two = £22.00 tax in year two values.

3. taxing the deferred consumption in year two (no borrowing):
tax revenue year two = 20% x £111 deferred consumption = £22.20.

If the financial service is not taxed, the person who accelerates consumption will pay tax equal to £22.00 in year 2 values, calculated by reference to the government's borrowing rate, while the person who defers consumption would pay £22.20. In other words, the person who uses a financial service to accelerate consumption would pay less tax than the person who defers consumption of equal value. From a Pareto optimal perspective, the consumer's benefit comes at a direct cost to government – the revenue constraints preclude the trade-off.

Appendix 2: Summary Of Grubert and Mackie,[50] Auerbach and Gordon, [51]and Boadway and Keen[52]

[50] Grubert and Mackie, above, note 9.
[51] Auerbach and Gordon, above, note 9.
[52] Boadway and Keen, above, note 9.

Grubert and Mackie start with individual's inter-temporal budget constraint in a two period model. The individual has an endowment E in labour units which he can consume now (consumption period 1 = C_1) or save for next period (C_2). In the no tax case, $E=C_1+S$. There is a financial cost f to acquire the saving or capital good. The saving S therefore buys S/(1+f) of the capital good. The return on the saving asset is r. In the no tax case, S therefore is able to buy S(1+r)/(1+f) consumption goods. Substituting for S in the original budget constraint, it becomes, $E=C_1+C_2(1+f)/(1+r)$. The financial fee adds to the cost of future consumption and offsets some of the gross return. The trade-off between current and future consumption is 1 unit now versus (1+r)/(1+f) next period.

With VAT, if the tax exclusive rate is t, the budget constraint is $E=C_1(1+t)+S$. If the financial fee is not taxed, a given amount of S will now be able to buy the same amount of the saving good as in the no tax case and the individual's pre-tax income in the second period will therefore be the same. These proceeds will equal the amount spent on consumption in period 2, (1+t)C2. Therefore S will be able to buy (1/(1+t))S(1+r)/(1+f)=C2 units of consumption in period 2. Using this relationship to solve for S as a function of C2 and substituting for S in the budget constraint, the budget constraint now becomes $E=(1+t)C_1+(1+t)C_2(1+r)/(1+f)$. But we can divide through by (1+t) and get $E/(1+t)=C_1+C_2(1+r)/(1+f)$. The tax is therefore the equivalent of a lump sum tax and the no tax trade-off between present and future consumption is preserved.

Grubert and Mackie extended this argument beyond investment services to include consumer loans and insurance. But they did not consider the government's budget constraint and implicitly assumed that the government would accept any choice of consumption patterns individuals find optimal even if the financial service costs used resources without any compensating increase in output from society's point of view.

Boadway and Keen criticised Grubert and Mackie for stressing that financial services do not enter directly into the utility function, but their solution is in fact very close to that proposed by Grubert and Mackie. Their main departure is to note the implicit assumption in Grubert and Mackie that the financial fee f is a linear (proportional) function of the asset acquired. They state that if there is any fixed element, it should be subject to the VAT. That is not surprising. The tax would in that case become the equivalent of a lump sum tax. This nonlinearity issue may arise in other contexts like the price of various sizes of machines.

Boadway and Keen did not apply their solution to financial services like consumer loans and insurance. They also did not explicitly consider the government's budget constraint.

Auerbach and Gordon relied on the equivalence between a VAT and a flat wage tax plus a tax on initial capital. They stated that not taxing the fee "ignores the presence of real inputs in the production of financial services. If a labour income tax in fact is equivalent to a VAT, then use of these inputs should not change when one tax is replaced by the other tax." However, the same argument can be made for the taxation of inputs used to produce machines. They did not explain why the tax treatment of investment services and machines should be different. In fact both the worker producing the machine and the one offering the financial service is taxed when the goods resulting from the investment are taxed.

One difference between Auerbach and Gordon on the one hand and both Grubert and Mackie and Boadway and Keen on the other is that Auerbach and Gordon model the financial fee as part of the price of the consumption good, not the cost of the investment. Their argument may therefore fit consumer loan services better than investment services. They also assume

a given real discount rate without specifying how this relates to real rates of return in society after investment service costs. As suggested in the text, a complete analysis must describe how the government's cost of funds relates to private sector net returns.

Apart from the question of timing, warranty coverage and insurance premiums receive similar treatment under current VAT laws (apart from in the jurisdictions that treat property insurance as exempt supplies). In the warranty case, VAT is imposed at the time premiums are imposed and there is no further charge for when goods an services are provided under the warranty. In the insurance case, VAT is imposed at the time premiums are imposed and then refunded to insured persons by way of grossed-up benefits based on the tax-inclusive cost of replacement property and then imposed again when the replacement property is acquired.

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