Opting for Opting In? An Evaluation of the Commission's Proposals for Reforming VAT for Financial Services

Rita de la Feria and Ben Lockwood*

October 2009

This paper provides a legal and economic analysis of the European Commission's recent proposals for reforming the application of VAT to financial services, with particular focus on their "third pillar", under which firms would be allowed to opt-into taxation on exempt insurance and financial services. From a legal perspective, we show that the proposals' "first and second pillar" would give rise to considerable interpretative and qualification problems, resulting in as much complexity and legal uncertainty as the current regime. Equally, an option to tax could potentially follow significantly different legal designs, which would give rise to discrepancies in the application of the option amongst Member States. On the economic side, we show that quite generally, firms have an incentive to opt-in only on business-to-business transactions. An estimate of the upper bound on the amount of tax revenue that might be lost from allowing opting-in is provided.

* Senior Research Fellow, Centre for Business Taxation, University of Oxford and Professor, Department of Economics, University of Warwick, respectively. We would like to thank Michael Devereux for his comments and suggestions on earlier drafts. Earlier versions of this paper were presented at the *Seminar on VAT Treatment of Insurance and Financial Services*, organised jointly by the Centre for Business Taxation and the European Commission, and held at Oxford, on December 10, 2008; as well as at the *European Tax Policy Forum (ETPF) Annual Conference*, held at the Institute for Fiscal Studies, London, on April 21, 2009. We are grateful for the comments received at those presentations. The usual disclaimer applies. The authors also gratefully acknowledge funding from the ETPF for carrying out this research.

1. Introduction

Within the European Union most financial (and insurance) services, albeit not all, are currently exempt under Article 135(1)(a) to (g) of the VAT Directive.[1] Contrary to what the use of the word "exemption" might indicate, being exempt actually carries significant VAT costs. Under Article 168 of the Directive, VAT paid on input transactions will only be deductible "in so far as the goods and services are used for the purposes of the taxed transactions of a taxable person". Thus, where VAT is paid in connection with exempt financial supplies it will not, in principle, be deductible. The only exception to this rule applies to situations where the customer is established outside the Community, or where the financial transactions relate directly to goods to be exported out of the Community; in these cases, the taxable person will be entitled to deduct any related input VAT, under Article 169 of the Directive.

In November 2007, following a lengthy consultation procedure initiated in the wake of the ruling from the Court of Justice (ECJ) in *Accenture*,[2] the European Commission presented two legislative proposals with a view to amending the EU VAT treatment of financial (including insurance) services (Commission of the European Communities (2007a) and Commission of the European Communities (2007b)). In the words of the Commission, the objectives were two-fold: to increase legal certainty, and to reduce the impact of non-recoverable VAT for financial institutions. These objectives are to be achieved through what has been designated as "three pillars": clarification of the rules governing the exemption for financial supplies, in particular re-definition of financial services which are subject to exemption; introduction of a cost-sharing group, allowing economic operators to pool investments and re-distribute the costs of these investments to the members of the group, exempt from VAT; and introduction of a compulsory option to tax, i.e. compulsory for Member States to allow taxation, but optional for financial institutions to opt-in for taxation.

[1] Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax, OJ L347, 11/12/2006, 1-118, hereafter "VAT Directive".

[2] See Commission of the European Communities (2006), and case C-472/03, [2005] ECR I-1719. For an analysis of the *Accenture* ruling and its impact, see de la Feria (2007).

The negotiations at the Council of Ministers started soon after the proposal was put forward by the Commission, and have been ongoing ever since.[3] Keeping up with the contents of the negotiations is an almost impossible task, but it is reasonable to assume from all official documentation available that negotiations have been difficult, in particular insofar as pillar three, the option to tax, is concerned. Negotiations have concentrated primarily on discussions over the first pillar of the proposal (clarification and re-definition of exemptions), whilst almost no time has been devoted to pillar two (cost-sharing arrangements). Pillar three (the option to tax) has also been the subject of lengthy discussions, but most national delegations, including that from the United Kingdom, have reportedly manifested their scepticism as regards any change to the current legal provisions.[4]

Member States' reservations are to some extent justified. Arguably, all the proposed measures can potentially give rise to considerable difficulties, with the option to tax being indeed the most controversial. The aim of this paper is therefore to consider all measures, and in particular the option to tax, from both a legal and an economic perspective, assessing whether they do indeed constitute an improvement on the current regime. It starts in part two with a discussion of the particular challenges of levying VAT on financial services products and discussion of the "size of the problem " i.e. the amount of irrecoverable VAT paid by the financial services sector. A legal and economic analysis of the merits and demerits of the Commission's three pillars will then be undertaken, starting in part three with a legal examination of the first two proposed pillars, namely clarification of exemptions and legal definitions, and cost-sharing groups. In part four the focus will shift to the third pillar, i.e. the option to tax. Following an analysis of the

[3] The Council's Working Party on Taxation Questions – Indirect Taxation (VAT) has met over fifteen times since January 2008 to discuss these proposals, see the following Communications from the Council of the European Union: CM 7/08, 3 January 2008; CM 347/08, 28 January 2008; CM 936/08, 6 March 2008; CM 1613/08, 30 April 2008; CM 2354/08, 23 June 2008; CM 2639/08, 10 July 2008 and CM 2639/1/08 REV1, 14 July 2008; CM 2979/08, 1 September 2008; CM 3350/08, 25 September 2008 and CM 3350/1/08 REV1, 1 October 2008; CM 3665/08, 14 October 2008 and CM 3665/2/08 REV2, 23 October 2008; CM 3972/08, 31 October 2008, CM 3972/1/08 REV 1, 3 November 2008 and CM 3972/2/08 REV2, 10 November 2008; CM 4157/08, 13 November 2008, CM 4157/1/08 REV1, 14 November 2008 and CM 4157/2/08 REV2, 17 November 2008; CM 4424/08, 9 December 2008; CM 101/09, 13 January 2009; CM 677/09, 12 February 2009; CM 1330/09, 20 March 2009; and CM 1735/09, 17 April 2009.

[4] See Document 15793/08 FISC 156, 14 November 2008 from Presidency of the Council of the European Union to the Working Party on Tax Questions – Indirect Taxation (VAT), at 3-6; and Document 11013/08 FISC 80, 23 June 2008.

optional legal regimes currently applicable within the EU, an assessment of the possible legal designs for an EU wide option to tax will be undertaken. This legal analysis will be followed by a detailed economic assessment of the consequences of introducing an EU wide option to tax, including some estimates of the amount of tax revenue that might be lost from adopting the option.

2. Some Background

2.1 Why it is Difficult to Tax Financial Services

If a financial services company is providing a product that can be priced via the charging of fees and commissions (such as consultancy services, commissions charged by brokers on acquisitions and dispositions of securities, etc), this can be made subject to VAT in the normal way. The problem arises with margin-based products, such as bank lending or insurance. Consider the case of bank lending, as a simple illustration. The simplest situation is where both the depositor and the borrower are consumers i.e. not liable for VAT.

The difficulties are demonstrated by the following example. In the first period, a depositor deposits 100, which the bank lends on to a borrower. In the second period, the borrower repays the principal plus interest at 15%, and the bank repays the principal plus 7% interest to the depositor. In this, case, the value of intermediation services is 15-7=8, and VAT should be paid on this value-added.

In the case where either the borrower or depositor is a business, an additional complication arises. Suppose, for example, that the borrower is a business liable for VAT. In this case, if the bank charges VAT, the value of intermediation services supplied to the borrower must be identified, so that the borrower can claim back VAT paid on the intermediation services supplied to it by the bank. The standard approach in this case has been to imagine a hypothetical "pure" interest rate at which the depositor could have lent (without enjoying the other services offered by the bank, such as the use of a debit card etc), and at which the business could have borrowed, had they been able to find suitable lenders without the help of the bank. For example, suppose that such a rate was 12%.

Then, the value of intermediation services supplied to the borrower would be 15-12=3, and the value supplied to the lender, would be 12-7=5.

The practical problem of course with the above, of course, is that such a "pure" rate of interest is a theoretical construct. Any rule used in practice to proxy it (for example, using the interest paid on government bonds) will have an impact, in this example, on the amount of VAT creditable by the borrowing business, or more generally, where the depositor is also a business, on the division the total amount of VAT creditable between the borrower and the lender.

Insurance services create their own specific similar problems[5]. Here, it is useful to distinguish pure insurance from life insurance and annuities. In principle, pure insurance can be made subject to VAT by treating premiums paid as sales, and the payment of claims as purchases. But, matters are more complicated with life insurance and annuities, as the case of these services there is an additional savings dimension to take into consideration (Barham, Poddar and Whalley (1987)).

The best-known solution to this "dividing the value added" problem was proposed initially by Hoffman, Poddar and Whalley (1987) and Barham, Poddar and Whalley (1987), and later developed by Poddar and English (1997), via the use of a cash-flow tax. In this system, all inflows to banks are treated as taxable supplies, taxed at the rate of VAT, and all outflows are credited as VAT inputs paid. The method however has both conceptual and practical difficulties. At a conceptual level, it constituted a clear departure from the general principle, according to which VAT is calculated on a transaction-by-transaction basis. Although the authors of the proposal did argued that its application would have similar results as if the financial or insurance institutions were to be able to "identify the value added in each transaction, charge tax on it, and provide the appropriate invoice to allow business customers to claim input tax credits" (Poddar and English (1997), p. 92).

From a practical perspective there were also several problems: first, the total margin must be divided using a pure rate of interest, and this must be chosen in some way; second,

[5] This does not mean that insurance products are exempt from tax. For example, the UK has an insurance premium tax levied at a rate of either 5% or 17.5% on a range of standard products.

large cash payments need to be made by the financial intermediary at the time of taking deposits and lending; and finally it cannot easily deal with tax changes. On this last point, suppose for example that a VAT was introduced after a borrower took out a loan. That borrower would receive a tax rebate on the principal and interest paid to the bank, despite never having paid tax on the original loan (the inflow). To deal with both these difficulties Poddar and English propose a tax calculation account (TCA).[6]

It was against this background that in the mid 1990s the European Commission set out to review the EU VAT treatment of insurance and financial services. Its starting point was the possibility of taxing these services through the cash-flow mechanism, which was viewed as a feasible and promising mechanism for full taxation. The method, however, did present some potential difficulties, not least the possibility for high compliance costs, which in the case of small and medium sized companies could reduce the effective benefit of having access to input tax credits. The principal aim of the Commission's initiative therefore was to establish whether these difficulties could be overcome, and if so in what fashion.

The results of the review, commissioned to Ernst & Young, were the subject of a Report published in 2000. The Report identified an advanced cash-flow method for charging VAT – an alteration to the original cash-flow approach, known as the truncated cash-flow method (TCA) – as the most viable solution. Under the TCA system, B2B transactions would be subject to zero rating of VAT, whilst B2C transactions would be charged VAT at standard rate (Commission of the European Communities (2000)). Although the Report demonstrated that this method could successfully allow full taxation of financial services, and its technical feasibility was further confirmed by field testing undertaken by the Commission across a range of financial institutions, it was received with little enthusiasm by tax administrations and businesses alike.

Like the original cash-flow mechanism, the TCA system was criticised from both a conceptual (Teather (2002)) and practical perspectives. Ultimately, the general consensus was that the resultant benefits of applying the TCA could not justify either

---

[6] In the TCA, "tax that would otherwise be payable / creditable is instead debited / credited to the TCA and carried forward to the period during which the capital transaction is reversed…..However, these deferrals are subject to interest charges at the government borrowing rate".

such a profound change to the system, or the perceived complexity of running that system, so no further action was taken (Commission of the European Communities (2006), pp. 2-3; Commission of the European Communities (2007c), p. 8). The failure to reach an agreement on the introduction of a TCA system did not, however, remove the difficulties caused by exempting financial services. If anything, the need to find a satisfactory solution had increased since the beginning of the Commission's review process in the mid-1990s (de la Feria (2007)). In 2004, with a view to assessing the views of tax administrations and economic operators alike, the Commission convened a Fiscalis Seminar,[7] the principal focus of which was the VAT treatment of financial services, and in particular the possibility of moving towards full taxation of these services. The seminar reportedly highlighted an overwhelming consensus against this move, leading the Commission to abandon in the medium term any attempts to undertake it.

2.2 The Size of the Irrecoverable VAT problem

According to the Commission the current proposals are largely motivated by the fact that irrecoverable VAT is perceived as a major problem within the industry. Surprisingly, however, and as acknowledged by the Commission itself, not much is known about the scale of the problem (Commission of the European Communities (2007c), p. 4).

A report commissioned by the Commission to PWC (Price Waterhouse Coopers (2006)) studies 22 financial services firms, and finds a great deal of heterogeneity. Between 0% and 74% of VAT on inputs was recovered, this figure varying with the location of the firm, the nature of the customer base,[8] etc. The average recovery rate was 20.7%. The report concludes that "costs associated with irrecoverable VAT have a clear bearing on the profitability of EU25 financial services firms, with net profit margins rising between 1 and 3 percentiles or 5 and 10% in the case of nearly all of the Case Study Companies for which information is available" (PWC (2006), p 95).

[7] Fiscalis is a training programme organised by the European Commission, and directed at the officials of national tax administrations. Its principal aim is to improve the operation of taxation systems in the EU, see Decision No. 1482/2007/EC of the European Parliament and of the Council of 11 December 2007, OJ L330, 15/12/2007, 1-7.

[8] If the customer base is largely outside the EU, for example, then much VAT will be recovered, as input VAT is recoverable on exports to outside the EU.

Huizinga(2002), using national accounts data, calculated that across EU countries, 41.7% total inputs to the financial services sector were intermediate inputs, and thus potentially, VAT was irrecoverable on this fraction of total inputs. He notes that this is higher than a Commission study of individual banks and insurance firms (a precursor to the PWC study), which found that the share of bank inputs with currently irrecoverable VAT averaged 16.5% across six banks and three insurance companies in the EU. He explains the difference as follows: "the main reason (for the discrepancy) must be that tax administrations currently provide banks with almost full input credits – against the letter of the exemption system".

Note that the PWC study and Huizinga's study are quantifying different aspects of the problem. The PWC study estimates the percentage of potentially irrecoverable VAT that is in fact recovered for a sample of companies. Huizinga's study measures the percentage of inputs (including labour) to the financial services sector that are intermediate and thus subject to VAT. But, to date, no figures for the overall monetary size of irrecoverable VAT have been calculated, except in the case of the UK. The UK Treasury estimates that in 2006, VAT revenue lost due to exemptions in the financial services sector were £4200 million, rising to £4500 in the following year (HM Treasury (2007)).

In Appendix A, we calculate VAT revenue lost (in Million Euro, for 2006), due to exemptions in the financial services sector for a selection of other EU countries (France, Germany, Italy, Netherlands, Spain) using national input-output tables from the OECD, other information about the VAT system, and the data from the PWC study. These estimates are therefore "top down", and thus very approximate, and should be taken as indicating no more than orders of magnitude. The results of these calculations are reported in Table A1. Note that we also give the figure for the UK, calculated in the same way. This is quite a bit larger than the UK Treasury estimate, albeit the same order of magnitude, as indicated in Table A1. More importantly, these estimates indicate that estimated irrecoverable VAT is less than 1% of total tax revenue for all countries except for the UK, and even in the UK, where a much more authoritative figure is available, the figure is about 0.8% of total tax revenue.

3. A Review of the EU Proposals: The First Two Pillars

3.1 Clarification of Exemptions and Legal Definitions

The legal provisions regarding the VAT treatment of financial supplies, and in particular Article 135(1)(b) to (g) of the VAT Directive, are difficult to interpret. Determining the scope of any exemption will always be a problematic task, however, this is particularly evident as regards the exemption applicable to supplies of financial services. The last decade has witnessed a significant development in new forms of finance products, as well as the emergence of new supply structures, which make use of, *inter alia*, outsourcing, sub-contracting and pooling techniques. Traders and national tax administrations alike have been increasingly unsure as to whether these new products, and more questionably these new supply structures, fall within the scope of those exemptions. In many cases establishing whether a particular service is exempt or taxable, can prove extremely difficult. Moreover, as demonstrated by the OECD 1998 Report on the application of VAT to financial services, Member States' application of the VAT Directive provisions in this area is far from uniform (OECD (1998) and Kogels (2003), pp. 34-41).

In this context, the growing level of case law emerging from the ECJ on the scope of the exemptions applicable to financial supplies should come as little surprise. In fact, since the mid-1990s, the ECJ has been consistently asked by national courts to rule on the interpretation of those exemptions. The most common concern, as well as the most controversial, has been the inclusion, or exclusion, of new commercial practices, within their scope. Ironically, whilst the Court's efforts to clarify the scope of these exemptions are not in question, it is also clear that the rulings have in many cases heightened the level of legal uncertainty. Decisions of the ECJ are by their own nature concrete and specific, based on a given set of facts. Consequently, extrapolating general principles from the Court's decisions and applying those to distinct factual scenarios can be a precarious task. In areas which are by their very nature complex, such as financial supplies, the result has been that the introduction of a general principle in a given ruling has demanded extra qualifications and explanations by the Court in subsequent rulings (Swinkels (2005), p. 246). As a result, the body of case law in this area is not only complex, but is equally filled with factual minutiae (de la Feria (2007)).

It is against this background that the Commission is now proposing clarification both of the rules governing exemptions, and of legal definitions. Under the 2007 proposals this clarification is achieved through two means: amendment of the VAT Directive, where broad interpretative guidelines are provided; and inclusion in a separate, ancillary, regulation of two extremely detailed lists of financial products, one of products which are exempt from VAT, and one other of products that are taxable. The rationale for such detailed listings is clear: to avoid the high level of legal uncertainty which the current provisions give rise to. It is possible that this will be achieved to some extent: the new provisions are likely to constitute helpful guidelines to national administrations, as well as courts, providing a better insight into the legislator's intention. The new provisions will not, however, ensure complete legal certainty, or avoid litigation altogether. In fact, they can themselves be a source of considerable difficulties in the short to medium term.

Firstly, detailed listings limit in practice the potential for adaptability of legal provisions to potential new financial realities. It is likely that such lists will be out of date almost immediately after approval. The problem is highlighted by an example, that of the so-called Islamic financial products, i.e. financial products which comply with Sharia law: these products are not included in the proposed regulation, but as soon as this was presented, it became clear that this was a problem for several Member States with large Islamic communities, such as the UK. Also symptomatic of this problem is the fact that the negotiations at the Council regarding the proposals seem to focus primarily in the details of the financial products' listings.[9] The proposed regulation includes provisions allowing for a quick process of amendment of the listings, however, continued requirement for unanimity voting will make such procedure difficult to implement. Secondly, detailed listings always give rise to complications at the edges, creating perfect conditions for the proliferation of planning and avoidance opportunities, one of the same exact problems which the current review is aimed at resolving.

3.2 Cost-Sharing Groups

[9] See the following documents from the Presidency of the Council of the European Union to the Working Party on Tax Questions – Indirect Taxation (VAT): 11801/08 FISC 93, 14 July 2008; 13627/08 FISC 123, 29 September 2008; 14472/08 FISC 135, 17 October 2008; 15056/08 FISC 145, 3 November 2008; 16967/08 FISC 183, 5162/09 FISC 2, 9 January 2009; and 7889/09 FISC 36, 20 March 2009.

Under certain conditions, cost-sharing groups are already allowed under Article 132(1)(f) of the VAT Directive, with various Member States applying specific legislation on this regard. Under that Article supply of services by "independent groups of persons", i.e. cost-sharing groups, carrying out activities for their members will under certain conditions be deemed exempt. The broad scope of the provision means in practice that the exemption has been interpreted by some as applicable to cost-sharing groups performing any exempt activity, such as – but not exclusively –financial and insurance services. The European Commission has expressed some reservations as regards such interpretation, primarily because Article 132(1)(f) is located in a section of the Directive dedicated to "exemptions in the public interest", whilst the exemptions for insurance and financial services are located in another part of the Directive. The matter will be likely to be settled soon, when the ECJ issues its judgment in *AXA Belgium*, which concerns the interpretation of Article 132(1)(f) in the context of cost-sharing groups applicable to the insurance industry.[10]

Yet, despite these reservations, in practice national provisions allowing for cost-sharing groups within the field of insurance and financial services can be found in several Member States, namely in those that do not allow VAT groups, such as Portugal or Luxembourg. The legal design of these provisions can diverge substantially amongst themselves,[11] mainly as regards the type of members which can be part of cost-sharing groups: provisions may require all members to be established within the territory of the country, or may allow for cross-border groups, which can be either intra-community, or worldwide cross-border groups, i.e. to either include group members established in another Member State, or to include also group members established outside the EU; they may also impose requirements as regards the deductibility status of group members, from being fully exempt, to having a small amount of taxable activities, in which case the acceptable level of taxable activities can equally vary substantially, from 10% to more generous amounts.

The aim of the proposed new provisions is to clarify the legislative framework applicable at present to cost-sharing bodies, by setting out a specific regime applicable only to cost-

[10] Case C-168/07, OJ C129, 09/06/2007, p. 8.
[11] For an analysis of the legal design of the cost-sharing group provisions in Portugal, see Deloitte (2008).

sharing groups engaging in financial and insurance services. Under this proposed regime, group members must fulfil the following conditions: the group itself and all its members are established or resident in the Community; the group carries out an autonomous activity and acts as an independent entity towards its members; members of the group are supplying financial or insurance services which are exempt under Article 135(1)(a) to (g) or other services in respect of which they are not taxable persons; the services are supplied by the group only to its members and are necessary to allow members to supply services which are exempt pursuant to Article 135(1)(a) to (g); and the group claims from its members only the exact reimbursement of their share of the joint expenses,[12] excluding any transfer-pricing adjustments made for the purposes of direct taxation.

Importantly, the proposed provisions clarify that cost-sharing groups do indeed apply to financial and insurance services. Moreover, their detailed nature would indeed help clarify some of the ambiguities which the wording of Article 132(1)(f) of the VAT Directive currently gives rise to. The problematic reference to "distortions of competition" included in that Article has been eliminated;[13] and it has been made clear that transfer-pricing adjustments are to be disregarded for the purposes of services provided by the cost-sharing groups. More importantly perhaps, the proposed provisions establish with certainty that group members must be established within the territory of the Community, i.e. members can be established in any of the Member States, but not in their countries. Thus harmonising one of the main points of divergence between Member States allowing for cost-sharing groups under the current Article 132(1)(f).

Yet, there are difficulties. First, it is note worthy that cross-border cost-sharing groups are inherently vulnerable to aggressive VAT planning schemes (Swinkels (2008), p. 17). Second, the proposed provisions remain silent about one other main point of divergence: whether to allow the group to include members which are merely partially exempt, or whether to restrict membership to full exempt businesses. This is not a trivial matter, mostly when considering that most financial and insurances institutions are allowed to

[12] The meaning of the expression "reimbursement of their share of the joint expenses" in current Article 132(1)(f) was recently object of debate in *Stichting Centraal Begeleidingsorgaan voor de Intercollegiale Toetsing*, case C-407/07, Judgment of 11 December 2008.

[13] The meaning of the reference to "distortions of competition" in Article 132(1)(f) was the main issue in *Assurandor-Societetet*, case C-8/01, [2003] ECR I-13711.

recover a small part of their input VAT. The Commission has expressed its own vision that cost-sharing groups should be able to include partially exempt financial institutions, and even perhaps fully taxable persons (Commission of the European Communities (2008), pp. 15-16). However, the lack of actual harmonisation on the issue is likely to result in different national legal designs, with consequent discrepancies regarding the scope of national provisions on cost-sharing group.

Moreover, the new regime is aimed at removing the bias towards self-supply which the current exemption system gives rise to. Yet, in practice such bodies are of limited application, only resolving the problems arising from pooling structures, but not those emerging from the set-up of either outsourcing or sub-contracting structures. Proof of this is the fact that commercial structures-related problems still arise in Member States which already apply specific legislation in this area. As the Commission itself acknowledges, cost-sharing groups are likely to be useful only for small operators (Commission of the European Communities (2008), p. 14). Thus, it is unlikely that these new measures will achieve their aim of removing the bias towards self-supply.

4. A Review of the EU Proposals: The Option to Tax

4.1 Option To Tax: The Current Situation

In order to avoid the intrinsic difficulties resulting from treating financial services as exempt, the VAT Directive currently allows (but does not compel) Member States to introduce an option to tax. Under the optional clause in Article 137(a), Member States may allow taxable persons a right of option for taxation in respect of financial transactions referred to in points (b) to (g) of Article 135(1), although not in respect of insurance transactions, under point (a) of Article 135(1). Unfortunately the clause does not include any guidelines on how to apply such an option to tax, including the method of taxation, or the scope of the right to opt. Its paragraph 2 merely states that it will be left to the Member States to lay down the rules governing exercise of the option, which may include a restriction of the scope of the right to opt. Perhaps due to the lack of guidance and vagueness of the clause, only a few Member States have availed of the clause by introducing an option to tax: Austria, Belgium, Estonia, France, Germany, and Lithuania.

Unsurprisingly, both the scope of application and the method of exercising the option vary considerably amongst those Member States.

In Austria the option for taxation is only available to two types of transactions, namely the granting of credit, when credit is granted as payment for a taxed supply, and supplies of debts, liabilities and securities in connection with credit cards.[14] The wording of the Austrian provision is broad, thus including the possibility to opt to tax on a transaction by transaction basis. Unfortunately, Austrian VAT does not contain any rules regarding the calculation of the taxable amount where the option to tax is availed of.

In Belgium the option to tax is restricted to transactions concerning payments and receipts, including negotiation. The option is available on a supplier-by-supplier basis and irrevocable, i.e. once a supplier opts for taxation, VAT will apply to all transactions made henceforward, including both B2B and B2C supplies.[15] The fact that the option is irrevocable and applicable to all supplies, including those made to costumers who cannot deduct VAT, effectively deters most financial services suppliers from availing of it (Henkow (2008), p. 335).

In Estonia, under the VAT Code, taxable persons are allowed to opt for taxation of financial services where certain conditions are met (IBFD (2006), p. 30).

In France financial services suppliers are entitled to opt for taxation in respect of all financial services, with the exception of those explicitly excluded from the French Tax Code, such as the granting of loans, provision of guarantees, intermediary services relating to the issue of or transactions in securities and foreign currency. Whilst until 2004 the scope of the option to tax was restricted (Cnossen (1999), pp. 98-99), its scope has been substantially widened by significant amendments introduced that year.[16] One of the most significant amendments is that the option is now revocable after a period of five years, albeit subject to strict conditions. Despite these, revocability is an important new feature, in particular in light of the fact that the option in France must be made on

[14] Article 6(2) of the UStG 1994.
[15] Article 44 of the Belgian VAT Code and Circular 79/018.
[16] Article 85 of the Amended Finance Law 2004 No. 2004-1485 of 30 December 2004.

supplier-by-supplier basis: once the option is made, it will apply to all financial services, irrespective of the status of the customer.[17]

In Germany the option is available as regards all exempt financial services, but solely on B2B transactions. The option is available on a transaction by transaction basis, i.e. it is possible to opt for a single supply, or a series of supplies, and it is revocable. The German model seems therefore to be the most flexible of the option systems, providing for the greatest input tax relief for financial service providers (Henkow (2008), p. 337).

In Lithuania, suppliers of exempt financial services may chose to levy VAT on those services, insofar as B2B transactions are concerned. The option to tax must be valid for at least two years, and exercised in respect of the taxable persons' every transaction (IBFD (2006), p. 56).[18]

4.2 Option to Tax: A Legal Analysis

As the above overview demonstrates, the design of the option to tax can diverge substantially, namely as regards the following: as regards the type of transactions included, the option can apply to all exempt financial services transactions, or only to specific transactions; VAT status of the acquirer of the financial service, the option may apply only to B2B transactions, or also to B2C;[19] in terms of the amount of transactions the option may apply to, it might have to be an "all-in" option, under which the supplier must opt in as regards all transactions or none at all, a supplier-by-supplier option, or it might allow the option to be available on a transaction-by-transaction basis; and finally, in terms of the applicable time span, the option might either be revocable or irrevocable.

Under the current proposal little detail is given as regards the rules which will govern the right to exercise the option to tax. It is merely stated that "Member States shall allow taxable persons a right of option for taxation in respect of the services referred to in points (a) to (g) of Article 135(1)". It is further added that it will be for the Council to "adopt the measures necessary for the implementation of paragraph 1 pursuant to the procedure provided for in Article 397. So long as the Council has not adopted such

[17] For a comprehensive description of the French option to tax see Pons (2006).
[18] Article 28 of the Lithuanian VAT Act.
[19] Theoretically the option may also be restricted only to B2C transactions, but in practice that would seem like an unlikely design.

measures, Member States may lay down the detailed rules governing exercise of the option under paragraph 1". From legal perspective this proposal for the extension of the option to tax is therefore problematic. The lack of guidelines as regards the legal design of the option is likely to give rise to very different national approaches as regards its scope. The only clear limitation under the proposal is that the option must apply to all exempt financial services transactions; in addition, although not specifically stated, the wording of the proposal also seems to indicate that the option must extent to both B2B and B2C transactions. In 2008 the Commission set out its own vision of how the option should be designed: it should apply to both B2B and B2C transactions; be available on a transaction-by-transaction basis; and without being subject to time-limits (Commission of the European Communities (2008), pp. 3-4). Where Member States to follow this design, this would eliminate the potential for national disparities, but of course they are not obliged to do so. In fact, presumably the Commission's vision of how the option to tax should look like is not included in the proposal *precisely* to give Member States the flexibility to decide on their own design.

The proposal is therefore not likely to eliminate all the difficulties connected with exemptions. Interpretative problems are still likely to exist, as will distortions to competition resulting from discrepancies in the scope of the options applicable across the EU. Depending on the scope of the option, planning and aggressive planning are still possible, and overall high compliance and administrative costs are also to be expected.

In addition to these practical aspects, a basic conceptual question also emerges. Application of an option to tax implies necessarily the existence of a method to tax those transactions. Yet, the proposal does not provide any indication on that regard. The Commission has stated that many suppliers of financial services are actually able to determine the appropriate remuneration for their services, which can then be used as basis for determining the taxable amount for VAT purposes; they contest most financial operators are increasingly using advanced book-keeping tools for matching input costs to specific outputs (Commission of the European Communities (2008), p. 9).

This assessment seems to be in contradiction with the current situation in Germany: there the method to tax financial services, under their option to tax, seems to be a closely held

secret by most German financial institutions. This raises the obvious question: if there was an obvious method of taxing financial supplies under VAT, why the need for secrecy amongst German financial institutions? Such secrecy only makes sense insofar as financial institutions consider that the method to tax constitutes a competitive advantage. The example in Germany appears to signal two important facts: first, financial institutions do not regard a method to tax financial services as self-evident; and second, the introduction of a compulsory option to tax, as set out in the current proposals, has the potential to distort competition, insofar as it will put financial institutions with "more suitable" methods of taxing their supplies in a competitive advantage.

Let us assume, however, that the Commission is correct in stating that the value added of financial services can indeed be now easily calculated. So far the rationale for not taxing financial services has been that those services are too difficult to tax under a VAT; then, if those technical difficulties could be overcome, why not bring those services within the scope of full taxation? Is there any good reason from a conceptual perspective to adopt a half-measure, by giving traders the option to tax?

4.3 Option to Tax: An Economic Analysis

4.3.1 The Incentives to Opt In

Here, we study the economic incentives to opt in by FS (financial services) firms. In our analysis, for clarity purposes, we assume that the firm can do so on a product-by-product basis,[20] and so we assume also, without much loss of generality, that the firm sells a single product. The costs and benefits of opting into VAT are clearest when the FS firm is a perfect competitor i.e. there are many such firms, selling a homogenous product, and each firm believes that it cannot affect the price.

Table 1 below makes our argument in the perfect competition case via a numerical example. We consider three scenarios. The first column of the table describes the initial situation where all firms are opting out. A firm combines an input liable for VAT e.g. computer services, which costs 100, and a factor of production (capital or labour), and produces an output (e.g. insurance services, of a bank loan) priced at 200. The tax-

[20] It is not certain that this will be the legal framework; see the discussion in Section 4.2 above.

inclusive price of the input is 110, and so the firm makes a profit of 90 which is the return to the fixed factor. This initial scenario could describe a B2B or a B2C transaction.

Table 1: Incentives to Opt In for Financial Service Suppliers				
	Opt out	opt in, B2C	opt in, B2B	Zero-rating
Price of input ex VAT	100	100	100	100
VAT on Input	10	10	10	10
Price of output inc. VAT	200	200	220	200
Price of output ex. VAT	200	181.8*	200	200
VAT on output	0	18.2	20	0
VAT paid by supplier	0	18.2-10 =8.2	20-10=10	0
Profit per unit of supplier	200-110=90	200 – 110 – 8.2=81.8	220 - 110 –10 100	200-100=100

*calculated as 200/(1.1)

Now consider a firm that is selling to the final consumer (B2C) and chooses to opt in. Its gain or loss is described by the second column of the table. The key point is that if a single firm decides to opt in, and all the other firms in the industry do not, this single firm cannot raise the price of its output, which, in the example, is fixed at 200. Thus, it bears the entire burden of the output VAT; at a VAT of 10%, as illustrated, its revenue per unit falls to approximately 182. It can now claim back the input VAT, so the price of the input effectively falls to 100, but its net profit is now only about 82. Consequently, it will be always worse off opting in.

It is fairly obvious that this extends to the general perfect competition case, as the VAT on the output, is effectively paid by the firm opting in, and that is always greater than the VAT payable on the inputs. But what about when the firm has market power? Could it now be better off by opting in, because it now has the option of raising its sales price (at the cost of lower sales) and thus passing on some of the burden of VAT? At first sight, it seems that this argument has some validity. But, it can be shown to be incorrect; even a firm with market power will not wish to opt in, when selling to tax-exempt customers. The intuition is simple. Suppose the VAT is at 10%. Fix the price that the firm sells its

output at some level, p. When opting out, the FS firm bears an additional cost (relative to no taxation), of 10% of the pre-tax price of those inputs that bear VAT. When opting in, the firm bears an additional cost (relative to no taxation) of the 10% of its re-tax revenue. Of course, the latter is bigger than the former. So, *whatever the price*, the firm is worse off when opting in. This point is made more formally in the Appendix.

We now turn to the case where the firm is selling to a VAT-registered purchaser (a B2B transaction), described in the third column of Table 1. We continue to assume that the firm is perfectly competitive. But now, when the firm opts in, there is a difference. It can raise its price from 200 and 220 and remain competitive, because the purchaser can claim back the 20 in VAT on the sale. So, now it makes a profit of 220, minus the cost of the input, 110, and its own net VAT payment of 10, which is 100. This is now higher than the opting out profit of 90, and so there is always an incentive to opt in. This argument is obviously quite general, in the case of perfect competition.

Again, the question arises as to whether the argument generalizes to the case where the FS firm has some monopoly power. In the Appendix, a situation is considered where the FS firm is the monopoly supplier of services to a purchasing firm, which uses those services as an input and produces a good for final consumption. The purchaser is also assumed a monopolist in the supply of the final good.

It is first shown that at a given price for final output, the joint profit of the two firms is always higher following opting in, because the FS firm can now recover VAT on the input. But, the key question is whether the FS firm alone will be better off, as that will determine whether it opts in or not. This will depend on how the intermediate input is priced.

One possibility is that the two firms bargain over this price. In this case, as joint profit is higher, the surplus available to be divided is higher, and both firms are better off. The other is that the two firms set their prices independently i.e. the purchaser first sets a price for final output, generating a derived demand for the FS firm's intermediate input, and then the FS firm sets p.

In the second case, suppose that the FS firm was initially opting out and sets a price p. It is shown that, following opting in, the FS firm makes a higher profit when it sets a tax

inclusive price p(1+t); (ii) the FS firm will actually want to set a tax-inclusive price lower than p(1+t) following opting in, so that the purchaser will also benefit. It wants to set a lower price because its' effective cost of production has fallen, because it can now recover VAT on the input. So, the general conclusion is that for B2B transactions, the firm *will always want to opt in, whatever the degree of competition in the market*.

4.3.2 Opting In With VAT Exempt Foreign Competitors

In practice, an important issue is the perceived loss of competitiveness due to unrecovered VAT. Specifically, EU-based firms lose out in competition with e.g. US-based firms, when they are both selling exempt services to customers located within the EU, because the irrecoverable VAT raises the costs of the former firms.

How will the option to tax affect this competitive disadvantage? We show in the Appendix that if the firms are selling to a final consumer, opting in worsens this competitive disadvantage, i.e. the effective unit costs of the EU firm are higher relative to the foreign competitor than they would be without opting in. By contrast, if the firms are selling to a business which can claim back VAT, opting in eliminates this competitive disadvantage, i.e. the effective unit costs of the EU firm are relative to the foreign competitor depend only on technology, etc and are unaffected by tax.

The impact of this on profit depends on how the firms compete. If they compete though selling quantities, then it is generally true that an increase in the marginal cost of production of any one firm decreases the equilibrium profits of that firm. If products are differentiated, then it is possible[21] (but not likely) that an increase in the marginal cost of production of any one firm can increase the equilibrium profits of that firm. So, we can safely conclude that the "option to tax" will be beneficial only EU-based firms in competition with foreign competitors in B2B transactions within the EU.

4.3.2 The Equivalence of Opting In and Zero-Rating on B2B Transactions

As described in Section 5.1.2, some countries operate zero-rating of VAT on B2B financial transactions. Using Table 1, it is easy to show that this is equivalent to opting in

[21] This is due to strategic effects; a marginal cost increase by one firm can under some conditions increase equilibrium profits in differentiated products Bertrand equilibrium by forcing the competitor up his reaction function, thus forcing him the raise his price also.

on B2B transactions. The last column of Table 1 shows what happens in this case. There is no VAT on the output, so revenue per unit is 200. VAT of 10 is paid on the input, but that can be reclaimed. So, profit per unit for the supplier is the same as with opting in. In the Appendix, this is shown to be generally true, even with imperfect competition. The implication of this is that zero-rating of VAT on B2B transactions should be considered as an alternative to the opting in reform. The proponents of zero-rating include Huizinga (2002), who argues that it is administratively simple. But, clearly, the costs in terms of lost revenue will be higher than with opting in.

4.3.3 The Effects of Opting In on VAT Revenues

We now turn to discuss the revenue effects of opting in. As acknowledged by the Commission, EU Member States are concerned about possible negative impact on tax revenue i.e. loss of irrecoverable VAT on inputs to the FS sector. Moreover, there appears to be the perception that this is the single most important challenge facing the proposals' approval by the Council (Commission of the European Communities (2007c)). We have already provided estimates of the total value of irrecoverable VAT in Table 1, here we address the question: how much of that revenue – which we estimate at nearly 3 billion Euro in the case of the UK – is "at risk" from the option to tax?

Our first point here is point here is a conceptual one: there are both direct and indirect effects of opting in on revenue. The *direct* effect is that the government loses the revenue from VAT on the input that was initially irrecoverable by the FS firm. The second effect is an *indirect*, or *general equilibrium* effect. The simplest way to see this effect is in the competitive case. Opting in reduces the costs of the FS firm. Assume they pass all of this cost reduction on in the form of a lower price of the input provided by the FS firm to the producer of the final good.[22] Then, in turn, because the producer of the final good is competitive, it will pass this lower cost on in the form of a lower final goods price. Then, in this simple scenario, the sign of the indirect effect turns on the elasticity of demand for the final good. If it has an elasticity greater than 1, the value of sales of the final good will increase, and thus the VAT revenue on final sales will increase. If it has an elasticity less

[22] This assumption maximises the magnitude of the general equilibrium effect, and so subsequent calculations should be interpreted as upper bounds on the size of this effect.

than 1, the value of sales of the final good will decrease, and thus the VAT revenue on final sales will decrease.

We first look at the direct effect. Given our estimates of irrecoverable VAT in Table A1, we can attempt a rough estimate of the maximum revenue losses from opting in. This is presented in table 3 below. The first column of table 3 gives our estimate of irrecoverable VAT from Table A1. Our theoretical analysis suggests that firms will only opt in on B-to-B transactions. Column 2 gives estimates for each of the six countries of the percentage of total output that is sold to buyers who can claim back VAT. An approximation is used; all intermediate purchasers, except for public administration and defence, education, health, community and social services sectors (who are clearly exempt), are assumed to be in this position. So, an upper bound on potential losses from allowing opting in is given in column 3, which is the product of columns 1 and 2. Although some countries, notably the UK, may risk losing several billion Euro in tax revenue, the amounts "at risk" are relatively small fractions of total tax revenue.

Table 2: Estimated Revenue Losses from Allowing Opting In

	Estimated irrecoverable VAT, million 2006 Euros	Intermediate demand as % of total output*	Estimated maximum loss from allowing opting in, million 2006 Euros	Estimated maximum loss from allowing opting in, % of total 2006 tax revenue
France	1337.61	0.67	3540.65	0.43
Germany	1752.71	0.70	4840.71	0.51
Italy	624.26	0.80	1969.70	0.31
Netherlands	357.14	0.59	833.74	0.39
Spain	398.95	0.74	1159.83	0.32
UK**	2806.13	0.58	3572.83	0.48

* excluding purchases by public administration and defence, education, health, community and social services sectors

** calculated using UK Treasury figure for irrecoverable VAT.

We now turn to the indirect effect. A detailed and credible calculation of the money value (or value as a % of tax revenue) of the indirect general equilibrium effect on tax revenue of opting in is beyond the scope of this paper. But, using an extended version of the model developed in the Appendix to analyse the incentive to opt in, we can attempt a comparison of the *relative* size of the direct and indirect effect.

The main features of this model are (i) demand for the final product is an iso-elastic function of price; (ii) the FS sector produces output from labour and an input, subject to VAT, via a fixed coefficients technology; (iii) The FS sector sells its output to another business sector ("manufacturing"), and in turn, manufacturing produces final output via a fixed-coefficients technology from the FS input and labour. So, labour should be viewed here as a composite of other inputs, as well as labour. The coefficients of the technology are calibrated (quite crudely) from UK input-output tables. All the details are in the Appendix. The main results are illustrated in the following Table.

Table 3: Direct and Indirect Revenue Effects

VAT rate	**10%**	**10%**	**10%**	**20%**	**20%**	**20%**	**30%**	**30%**	**30%**
elasticity of demand	-0.5	-1	-2	-0.5	-1	-2	-0.5	-1	-2
Sign of general equilibrium (GE) effect	negative	zero	positive	negative	zero	positive	negative	zero	positive
GE effect as fraction of total	0.05	0.00	0.09	0.11	0.00	0.17	0.18	0.00	0.23

As already remarked, the general equilibrium effect is negative, positive according to whether the elasticity of demand for the final product is less than one, greater than one, or equal to one. Generally, it is quite small in absolute value relative to the baseline effect, but can offset up to 23% of the baseline revenue loss.

6. Conclusion

In recent years a few countries have attempted alternatives to exempting insurance and financial services under a VAT (or GST) (Schenk and Zee (2004); Edgar (2001); and Zee (2006)). As regards financial services the following alternatives haves been adopted: Australia and Singapore exempt these services, whilst allowing limited credits (de la Feria and Walpole (2008), pp. 28-35; Jenkins and Khadka (1998)); New Zealand treats these services on B2B transactions as zero-rated (Pallot (2007)); New Jersey treats all

transactions as zero-rated; Argentina applies VAT to gross interest on loans (Alba (1995)); and Israel applies the VAT addition method to these services. In respect of insurance services, and namely non-life insurance, the following alternatives are currently in place: Australia, Singapore, and New Zealand apply VAT to some explicit fee-based services (Jenkins and Khadka (1998); Pallot (2007)); South Africa, as well as Namibia and Botswana apply VAT to all explicit fee-based services (Schenk (2008), pp. 41-42); and Israel applies the VAT addition method. No alternative methods are currently in place for VAT treatment of life insurances, which are so far universally exempt.

The experiences in these countries, however, show that such alternatives have limitations. Whilst it is true that some of these initiatives have solved difficulties encountered under the traditional EU exemption model – such as the bias towards self-supply or the problem of tax cascading – they have failed to solve others, and indeed have arguably further exacerbated some of the problems (de la Feria and Walpole (2008), pp. 36-39). Additionally, transplantation of any of these models to the EU context, could give rise to extra problems due to EU specificities, making tax policy transfer extremely risky (de la Feria and Walpole (2008), at 39-40). It was perhaps an acknowledgement of these realities, together with the difficulties of securing agreement on full taxation, which led the European Commission to depart from previous experiences and to propose a new – and thus untested – approach:[23] a package of measures for treating financial services under VAT which, as a whole, aim to improve the levels of legal certainty and ensure neutrality.

The aim of this paper has been to test this new approach, by providing a legal and economic analysis of the European Commission's recent proposals for reforming the application of VAT to financial services. From a legal perspective, we show that the proposals' "first and second pillar" would give rise to considerable interpretative and qualification problems, resulting in as much complexity and legal uncertainty as the current regime. We also demonstrate that an option to tax, as set out in the proposal, would give rise to significant difficulties. From a legal perspective, significant discrepancies in the design and application of the option amongst Member States are

[23] Another method for applying VAT to financial services that has not yet been tried out in practice is the "modified reverse-charge", recently proposed by Zee (2005; 2006).

likely to emerge. On the economic side, we show that quite generally, firms have an incentive to opt-in only on business-to-business transactions. An estimate of the upper bound on the amount of tax revenue that might be lost from allowing opting-in is provided. We conclude that, similar to alternative methods tested in other countries, the Commission's new proposed approach to treat financial services under VAT presents some advantages, and might not have the significant negative revenue impact that the Member States fear. Equally, however, it is unlikely to either ensure the legal certainty, or create the neutrality, that the Commission seeks.

References

Alba, C.E.R. (1995), "Taxation of Financial Services Under the Value-Added Tax: A Survey of Alternatives and an Analysis of the Argentine Approach" *International VAT Monitor* 6, 335-349

Auerbach, A. J. and R.H. Gordon (2002), "Taxation of Financial Services under a VAT" *The American Economic Review*, Vol. 92, 411-416

Barham, V., S.N. Poddar and J. Whalley (1987), "The Tax Treatment of Insurance Under a Consumption Type, Destination Basis VAT" *National Tax Journal* 40, 171-182

Commission of the European Communities (2008), *Proposals on VAT Treatment of Insurance and Financial Services: Case Studies*

Commission of the European Communities (2007c), *Impact Assessment Summary – Commission Staff Working Paper accompanying the Proposal for a Directive amending Directive 2006/112/EC on the common system of value added tax, as regards the treatment of insurance and financial services*, SEC(2007) 1555, 28 November 2007

Commission of the European Communities (2007b), *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

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

Commission of the European Communities (2006), *Consultation Paper on Modernising Value Added Tax Obligations for Financial Services and Insurances*

Commission of the European Communities (2000), *The TCA System – A Detailed Description*

Cnossen, S. (1999), "VAT Treatment of Financial Services" in G. Lindenorwa, S.O. Lodin and B. Wiman (eds.) International Studies in Taxation: Law and Economics, (The Hague: Kluwer Law International, Series on International Taxation No. 21), 92-104

de la Feria, R. (2007), "The EU VAT treatment of insurance and financial services (again) under review" *EC Tax Review* 2, 74-89

de la Feria, R. and M. Walpole (2008), "Options for Taxing Financial Supplies in Value Added Tax: EU VAT and Australian GST Models Compared" *Oxford University Centre for Business Taxation Working Paper Series*, WP 08/08

Deloitte (2008), "Grupos de IVA e o Sector Financeiro", *IVA – 21%, 21 Anos, 21 Temas* (Estoril: Principia), 77-84

Ebrill, L., M. Keen, J-P. Bodin, and V. Summers (2001), *The Modern VAT* (Washington D.C.: International Monetary Fund)

Edgar, T. (2001), "Exempt Treatment of Financial Services Under Value-Added Tax: An Assessment of Alternatives" *Canadian Tax Journal* 49(5), 1133-1219

Henkow, O. (2008), *Financial Activities in European VAT – A Theoretical and Legal Research of the European VAT System and the Actual and Preferred Treatment of Financial Activities* (Austin / Boston / Chicago / New York / The Netherlands: Kluwer Law International, Eucotax Series on European Taxation)

HM Treasury (2007), *Tax Ready Reckoner and Tax Reliefs*

Hoffman, L.A., S.N. Poddar and J. Whalley (1987), "Taxation of Banking Services Under a Consumption Type, Destination Basis VAT" *National Tax Journal* 40, 547-554

Huizinga, H. (2002), "Financial Services – VAT in Europe?" *Economic Policy*, October, 499-534

IBFD (2006), *VAT Survey – Financial Services*, Survey on the recovery of input VAT in the financial sector carried out for the European Commission, December 2006

Jenkins, G.P. and R. Khadka (1998), "Value-Added Tax Policy and Implementation in Singapore" *International VAT Monitor* 9(2), 35-47

Kogels, H.A. (2003), “Consumption Taxes and Financial Services – General Report” *Cahiers de Droit Fiscal International* 88b, 21-41

Pallot, M. (2007), “GST and Financial Services – Rating Zero-rating” in R. Krever and D. White (eds.), *GST in Retrospect and Prospect* (Wellington: Thomson Brookers), 163-178

Poddar, S.N. and M. English (1997), “Taxation of Financial Services Under a Value-Added Tax: Applying the Cash-Flow Approach” *National Tax Journal* 50, 89-111

OECD (2008), *Consumption Tax Trends* (Paris: OECD)

OECD (1998), *Indirect Tax Treatment of Financial Services and Instruments*

Pons, T. (2006), “Option for Taxation of Financial Services in France” *International VAT Monitor* 3, 182-185

PriceWaterhouse Coopers (2006), *Study to Increase the Understanding of the Economic Effects of the VAT Exemption for Financial and Insurance Services - Final Report to the European Commission*, 2 November 2006

Schenk, A. (2008), “Financial Services” in R. Krever (ed.), VAT in Africa (Pretoria: Pretoria University Press), 31-46

Schenk, A. and H.H. Zee (2004), “Financial Services and the Value-Added Tax” in H.H. Zee (ed.), *Taxing the Financial Sector – Concepts, Issues, and Practices* (Washington DC: International Monetary Fund), 60-74

Swinkels, J. (2008), “The EU VAT Exemption for Cost-Sharing Associations” *International VAT Monitor* 1, 13-2

Swinkels, J. (2005), “Combating VAT avoidance” *International VAT Monitor* 4, 235-246

Tait, A.A. (1988), *Value Added Tax – International Practice and Problems* (Washington D.C.: International Monetary Fund)

Teather, R. (2002), “Financial Value-Added – An Analysis of the TCA System for Extending VAT to Insurance Services” *Journal of European Financial Services* 9(4), 13-24

Vyncke, K. (2007), “VAT Grouping in the European Union: Purposes, Possibilities and Limitations” *International VAT Monitor* 4, 250-261

Zee, H.H. (2006), “VAT Treatment of Financial Services: A Primer on Conceptual Issues and Country Practices” *Intertax* 34(10), 458-474

Zee, H.H. (2005), “A New Approach to Taxing Financial Intermediation Services Under a Value-Added Tax” *National Tax Journal* 53(1), 77-92

Appendix

A. Calculations of Irrecoverable VAT

First, we calculate the estimated value of purchases of intermediate inputs by the financial services industry from all other industries. The value of these purchases in 2006 Euros is given in column 1 of Table A1. If all these purchases were fully subject to the standard rate of VAT, we could then simply multiply column 1 by the standard rate of VAT in column 2 to get an estimate of VAT paid by the financial services industry on inputs.

But, several of these industries produce goods that are either zero-rated or exempt (financial services itself, and public administration and defence, education, health, community and social services) or charged at a lower rate (e.g. books, newspapers and magazines, domestic transport). We make an adjustment for this using the C-efficiency ratio. This is the ratio of actual VAT revenue raised to the potential VAT revenue if all consumption was taxed at the standard rate and there was no evasion (Ebrill *et al* (2001)). The latter is usually calculated as the standard rate of VAT for the country times the aggregate value of consumption. This C-efficiency ratio measures the shortfall in VAT revenue due to reduced rates, zero-rating and exemptions, and also evasion[24].

So, we multiply the product of column 1 and column 2 by the C-efficiency ratio[25] in column 3, giving a money estimate of VAT paid in the by financial services sector[26] in column 4. We multiply the figures in column 4 by the average non-recovery rate of VAT in the PWC study, 0.79 to get column 5. This is expressed as a percentage of total 2006 tax revenue in Column 6.

[24] For example, the C-efficiency ratio for the UK is 0.49.This is in line with the IFS calculation for the UK that 56% of consumers' expenditure is subject to VAT at the standard rate, 3% at the reduced rate, and the remaining 41% is zero-rated or exempt.
[25] Taken from OECD (2008), table 3.14.
[26] This methodology is obviously subject to the flaw that the pattern of consumption of intermediate inputs by financial services is generally different to the pattern of aggregate consumption. But, given data limitations, there is no satisfactory way of making further adjustments to deal with this problem.

Table A1: Estimates of Irrecoverable VAT*						
Country	Value of purchases of intermediate inputs, million Euro, 2006	Standard rate of VAT (%)	C-efficiency ratio	Estimated VAT paid on inputs, million Euro, 2006	Estimated irrecoverable VAT, million Euro, 2006	Estimated irrecoverable VAT, % of total tax revenue
	1	2	3	4	5	6
France	66907.39	19.6	0.51	6688.06	5283.57	0.64
Germany	85414.57	19	0.54	8763.53	6923.19	0.74
Italy	38064.40	20	0.41	3121.28	2465.81	0.39
Netherlands	15407.45	19	0.61	1785.72	1410.72	0.65
Spain	22262.86	16	0.56	1994.75	1575.85	0.43
UK	163622.63	17.5	0.49	14030.64	11084.21	1.48
UK, Treasury Estimate**	n.a.	n.a.	n.a.	n.a.	6173.48	0.83

* Notes to table. Purchases of intermediate goods by the financial services sector taken from latest available OECD input-output tables, various dates. These figures are in national currency. They are converted to Euros using nominal exchange rates from Eurostat corresponding to the date of the input-output table, and then adjusted for nominal GDP growth between the date of the table and 2006 using nominal GDP data from Eurostat.

**£4200 million converted into Euros.

B. General Analysis of Opting Out on B-to-C Transactions

Consider a FS firm selling to final consumers who face a consumer price p and have an aggregate demand $Q(p)$. We assume, following Huizinga(2002), that financial services are produced from labour and another input (computer services) via a fixed coefficients technology. Let p^* be the fixed price of the input and w be the price of labour. By appropriate choice of units, we can assume w.l.o.g. that one unit of the input, plus one unit of labour, is needed to make one unit of the output.

Now suppose that there is VAT at rate t, but that the firm opts out. The firm pays a price $p^*(1+t)$ per unit of the input. Profit is:

$$\pi_{OUT} = (p - w - p^*(1+t))Q(p) \quad \text{(B1)}$$

If the firm opts in, it must charge VAT on sales. Profit is

$$\pi_{IN} = (p - w - p^*(1+t))Q(p) - \left[\frac{t}{1+t}p - tp^*\right]Q(p)$$
$$= (\frac{p}{1+t} - w - p^*)Q(p) \qquad \text{(B2)}$$

Note that the term in the square brackets is the net VAT payment made by the firm.

Now consider the perfect competition case first. Assume initially all firms are opting out. In this case, the price must be initially $p_{OUT} = w + p^*(1+t)$, and any individual firm takes this price as fixed. But then, from (B1),(B2):

$$\pi_{IN} - \pi_{OUT} = tQ(p_{OUT})\left\{p^* - \frac{p_{OUT}}{1+t}\right\} = -\frac{tQ(p_{OUT})w}{1+t} < 0$$

So, the firm will never wish to opt in.

Now suppose that this firm is a monopolist. Then, at some fixed p, again from (B1), (B2),

$$\pi_{IN} - \pi_{OUT} = tQ(p)\left\{p^* - \frac{p}{1+t}\right\}$$

But this is negative for any $p > p^*(1+t)$ and a monopolist will always set such a price (otherwise, he would not cover his wage costs, and make a loss). So, at any feasible price, the monopolist is better off opting out.

C. General Analysis of Opting in for Business to Business Transactions

Now suppose that our firm sells its product to another business, which is liable to VAT. Following Huizinga(2002), we assume that the purchaser produces a final good just from the input provided by the FS firm. Let the sale price to the final consumer be *q*, and the quantity sold be *Q(q)*. Now *p* is the price paid by the purchasing business (inclusive of VAT).

The purchaser's profit depends on whether seller opts in or out. Suppose the seller opts out. Then the purchaser cannot reclaim any VAT on its input, and so the profits of the purchaser and seller are:

$$\pi^P_{OUT} = [q - p]Q(q) - \frac{t}{1+t}qQ(q) = \left[\frac{q}{1+t} - p\right]Q(q) \qquad \text{(C1)}$$

$$\pi^S_{OUT} = \{p - w - p^*(1+t)\}Q(q) \tag{C2}$$

If the seller opts in, then the purchaser can reclaim VAT on its input, and so the profits of the purchaser and seller are

$$\pi^P_{IN} = [q - p]Q(q) - \left[\frac{t}{1+t}q - \frac{t}{1+t}p\right]Q(q) = \left(\frac{q-p}{1+t}\right)Q(q) \tag{C3}$$

$$\pi^S_{IN} = \left\{\frac{p}{1+t} - w - p^*\right\}Q(q) \tag{C4}$$

The first point to note is that this generalises Huizinga(2002): his model is a special case where both firms are perfectly competitive. In particular, setting $\pi^S_{IN} = \pi^P_{IN} = 0$, we see that the tax-inclusive price of the final output is $q_{IN} = (p^* + w)(1+t)$, and setting $\pi^S_{OUT} = \pi^P_{OUT} = 0$, we see that the tax-inclusive price of the final output is $q_{OUT} = p^*(1+t)^2 + w(1+t)$, exactly the formulae obtained by Huizinga(2002).

Now consider the choice of the seller to opt in or not. Here we consider the cases of perfect and imperfect competition separately. Assume perfect competition first. Assume all FS firms are currently opting out. If a particular FS firm is small, it will take p as given, but it anticipates that if it opts in, it can sell its output at p(1+t), as the purchaser can then recover VAT of amount tp. So, it calculates its profit from opting in at $\pi' = (p - w - p^*)Q$, which, at a given Q, is larger than (C4). So, opting in is always optimal.

The incentive for the seller to opt in under imperfect competition may depend on the way prices p,q are set. First note from (C1)-(C4) that at fixed p,q:

$$\pi^P_{IN} + \pi^s_{IN} = \left\{\frac{q}{1+t} - w - p^*\right\}Q(q) > \left\{\frac{q}{1+t} - w - p^*(1+t)\right\}Q(q) = \pi^P_{OUT} + \pi^s_{OUT} \tag{C5}$$

because by opting in, the seller and purchaser <u>together</u> can evade the burden of the input VAT.

The question is whether the seller alone has the incentive to opt in. If the two firms bargain over p, then it is likely that this will occur. For example, if they simply divide aggregate profit in some proportions, this will be the case from (C5).

The other form of price-setting that is commonly studied in this market is the following. (i) the purchaser sets q, taking p as given, and then (ii) the seller sets p, taking into account the effect of p on the purchaser's choice of q. With this price-setting behaviour, we first note that in the opt-in case, the purchaser will set a price

$$q = q(p) = \arg\max\{(q-p)Q(q)\}$$

So, the seller faces the derived demand curve $Q(q(p))$ and thus sets p to maximise

$$\pi_{IN}^{S}(p) = (\frac{p}{1+t} - w - p^{*})Q(q(p))$$

In the opt-out case, defining $x = p(1+t)$ it is clear that we can write purchaser profit as

$$\pi_{OUT}^{P} = \left[\frac{q-x}{1+t}\right]Q(q)$$

so that the seller faces the derived demand curve of the same form, with x replacing p i.e. $Q(q(x))$. Moreover,

$$\pi_{OUT}^{S}(x) = \{p - w - p*(1+t)\}Q(q) = \left\{\frac{x}{1+t} - w - p*(1+t)\right\}Q(q(x))$$

So, for any p=x, $\pi_{IN}^{S}(p) > \pi_{OUT}^{S}(x)$, so the seller must be better off opting in at price p than opting out at price p'=p/(1+t). Moreover, the optimal value of x set when the seller opts out will be higher than the p when the seller opts in. So, the buyer and the seller are both better off.

D. Opting In When Facing a VAT-Exempt Competitor

Now, suppose that there is a foreign supplier, superscripted F, who is not subject to VAT. For simplicity, we assume that the two suppliers sell identical products (this can be relaxed below), and that they compete in quantities.

First, we consider B-to-C transactions. Suppose that there is VAT at rate t, but that the domestic firm opts out. The profits of domestic and foreign firms are :

$$\pi_{OUT} = (p - w - p^*(1+t))Q_{OUT} \tag{D1}$$

$$\pi_F = (p - w - p^*)Q_F \tag{D2}$$

and finally the two firms face an inverse demand function $p = Q^{-1}(Q_{OUT} + Q_F)$. The domestic firm is clearly at a cost disadvantage relative to the foreign firm, so that in Cournot equilibrium, it will produce less.

If the firm opts in, it must charge VAT on sales. Profit is, from (B4) above,

$$\pi_{IN} = (\frac{p}{1+t} - w - p^*)Q_{IN} = \frac{1}{1+t}(p - w(1+t) - p^*(1+t))Q_{IN} \tag{D3}$$

The profit formula of the foreign competitor and the inverse demand curve have not changed. So, comparing (D2) and (D3), the firm effectively faces a worse cost disadvantage i.e. its effective marginal cost is $(w + p^*)(1+t)$, rather than $w + p^*(1+t)$, so its profit will be lower in Cournot equilibrium.

Now consider B2B transactions, so now Q_{IN}, Q_{OUT}, Q_F are interpreted as sales to the business purchaser. Consider first opting out. Moreover, the domestic and foreign firms must set the same price p for the output to the purchaser. So, with opting out, profits of the domestic and foreign FS firms are given by (D1), (D2) respectively. Moreover, the profit of the business purchaser is given by (B1). So, the two duopolists face the derived demand curve $Q(p) = Q(\tilde{q}(p))$ where

$$\tilde{q}(p) = \arg\max\left\{(\frac{q}{1+t} - p)Q(q)\right\}. \tag{D4}$$

So, the domestic firm is at a cost disadvantage.

Now, consider what happens when the domestic firm opts in. If the foreign firm sells to the business purchaser at price p, the domestic firm can sell at price p'=p(1+t), as the

business purchaser can reclaim pt. (In other words, the two goods are not really perfect substitutes any more). Profit of the domestic FS firm is thus

$$\pi_{IN} = (\frac{p'}{1+t} - w - p^*)Q_{IN} = (p - w - p^*)Q_{IN} \qquad \text{(D5)}$$

The profit formula of the foreign firm is unchanged, and so now both firms have the same per unit profit on any sales. Moreover, with the domestic firm setting at p(1+t), and the foreign firm selling at p, the profit and thus the derived demand of the business purchaser is still given by (D4).

Looking across the two equilibria, the only difference is that with opting in, the per unit costs of the domestic firm are lower, and so the domestic firm must prefer to opt in.

E. Effect on Tax Revenue of Opting In

We extend the above framework to make it more realistic. Specifically, we assume that a unit of financial services requires a units of intermediate inputs, and 1 units of inputs that are not subject to VAT e.g. labour. In the same way, final output requires b units of inputs from the financial services sector, 1 unit of inputs that are not subject to VAT e.g. labour. Note that Q(q) is final output, so bQ are purchases from the financial services sector by the rest of the economy, and in turn, abQp* is the value of intermediate inputs purchased by the financial services sector.

Tax revenues under opting out and in are:

$$R_{OUT} = \left(abp^* t + \frac{tq_{OUT}}{1+t} \right) Q(q_{OUT}), \quad R_{IN} = \left(\frac{t}{1+t} \right) q_{IN} Q(q_{IN})$$

So, the revenue loss from allowing opting in is

$$R_{OUT} - R_{IN} = abp^* tQ(q_{OUT}) - (q_{IN}Q(q_{IN}) - q_{OUT}Q(q_{OUT}))\frac{t}{1+t}$$

The first effect is the direct effect, and the second effect the indirect effect. Now we also assume (i) competitive firms, initially at least; iso-elastic demand i.e. $Q(q) = q^{-\varepsilon}$. Under these additional assumptions, prices are determined as follows:

$$p_{OUT} = ap^*(1+t) + w, \quad q_{OUT} = (bp_{OUT} + w)(1+t) = abp^*(1+t)^2 + w(1+b)(1+t)$$

$$p_{IN} = (ap^* + w)(1+t), \quad q_{IN} = (b\frac{p_{IN}}{1+t} + w)(1+t) = abp^*(1+t) + w(1+b)(1+t)$$

Note that $q_{IN} < q_{OUT}$ due to the fact that the input to the FS sector is no longer double-taxed following opting in. So, the revenue change is

$$R_{OUT} - R_{IN} = ap^* t(q_{OUT})^{-\varepsilon} - [(q_{IN})^{1-\varepsilon} - (q_{OUT})^{1-\varepsilon}]\frac{t}{1+t}$$

Finally, we need to choose a, b, p* and w. Assume for example that the sector purchasing inputs from the FS sector is manufacturing. Then

$$\frac{bp_{OUT}}{bp_{OUT} + w} = \frac{bp_{OUT}Q}{(bp_{OUT} + w)Q} = \frac{value\ \ of\ \ FS\ inputs\ to\ manufacturing\ \sec tor}{value\ of\ \ manufacturing\ \sec tor\ output}$$

$$\frac{ap^*}{ap^* + w} = \frac{ap^* bQ}{(ap^* + w)bQ} = \frac{value\, of\ \ inputs\ to\ FS\ \ \sec tor}{value\ of\ \ FS\ \sec tor\ output}$$

From the Summary Supply and Use tables for the UK, 2006, we can evaluate the RHS ratios. This gives

$$\frac{bp_{OUT}}{bp_{OUT} + w} = \frac{32154}{448147} = 0.071, \qquad \frac{ap^*}{ap^* + w} = \frac{230976}{595631} = 0.387$$

Finally, w.l.o.g, set p*=w=1. Then, we can solve these for a=0.387, and $\frac{b(a+1)}{b(a+1)+1} = 0.071 \Rightarrow b = 0.046$.

F. Equivalence of Opting In and Zero-Rating

If the intermediate firm is zero-rated, profits of the purchaser and seller are

$$\pi^P_{ZERO} = [q - p]Q(q) - \left[\frac{t}{1+t}q - p\right]Q(q) = \left\{\frac{q}{1+t} - p\right\}Q(q)$$

$$\pi^S_{ZERO} = \{p - w - p^*\}Q(q)$$

But then, these are the same as the opt-in in formulae except that *p/(1+t)* is replaced by *p*. So, if the decision variable p is replaced by x=p(1+t), profits can be rewritten

$$\pi_{ZERO}^{P} = [q-p]Q(q) - \left[\frac{t}{1+t}q - p\right]Q(q) = \left\{\frac{q-x}{1+t}\right\}Q(q)$$

$$\pi_{ZERO}^{S} = \left\{\frac{x}{1+t} - w - p*\right\}Q(q)$$

By inspection, these are exactly the same as in the opt in case. So, $\pi_{ZERO}^{S}, \pi_{ZERO}^{P}$, and the level of q and thus tax revenue will be the same as with opting in.

Obtaining a financial license. Services in Ukraine. Registration and support of companies.Â introduction of an obligation to pay VAT for electronic interfaces (for example, platforms) that facilitates the delivery of low-value goods imported or sold in the EU by the suppliers from outside the EU. Since the new legislation consists of a two-tiered package of measures, it comes into force in two phases: in 2019 and 2021.From 2019, the changes will touch the MOSS system.Â In this case, the logistics intermediaries can declare and pay VAT in the Member State ofÂ These initiatives are the next step towards the creation of a single European VAT area in accordance with the recent proposals of the Commission on reforming the European VAT. Order service. with our specialists. Opting for Opting-In? An Evaluation of the European Commission's Proposals for Reforming VAT on Financial Services*. Fiscal Studies, Vol. 31, Issue. 2, p. 171.Â 8 European Commission, Consultation Paper on Modernising Value Added Tax Obligations for Financial Services and Insurances (DG Taxation and Customs Union Brussels, 2006). Available at http://ec.europa.eu/taxation_customs/resources/documents/common/consultations/tax/modernising_VAT_en.pdf. 9 See PriceWaterhouseCoopers (PWC), Study to Increase the Understanding of the Economic Effects of the VAT Exemption for Financial and Insurance Services, Final Report to the European Commission, (November 2006). We also show that opting in eliminates the cost disadvantage that EU financial services firms face in competing with foreign firms for B2B sales. But, these results do not hold if firms can coordinate their behaviour.Â This paper provides a legal and economic analysis of the European Commissionâ€™s recent proposals for reforming the application of VAT to financial services, with particular focus on their â€œthird pillarâ€, under which firms would be allowed to opt-into taxation on exempt insurance and financial services. From a legal perspective, we show that the proposalsâ€™ â€œfirst and second pillarâ€ would give rise to considerable interpretative and qualification problems, resulting in as much complexity and legalâ€¦ CONTINUE READING. View via Publisher.