How the EU VAT exemptions impact the Banking Sector

18 October 2011

Study to assess whether banks enjoy a tax advantage as a result of the EU VAT exemption system.

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1. Executive Summary

VAT is a significant cost for banks under the current EU VAT system. Earlier studies[1] have shown that the financial services sector is a significant payer of VAT. This is a consequence of the design of the current EU VAT system, under which financial services are exempt, and therefore financial services providers are not entitled to recover VAT paid to their suppliers. While there is no definitive estimate of the total amount of irrecoverable VAT suffered by the financial services sector in the EU 27 Member States, the Eurostat macroeconomic data used in this Study indicates that in 2007, the banking sector alone suffered up to € 33 bn of irrecoverable VAT in the EU. In addition, a PwC survey of the The Network shows that on average € 7 bn per year of irrecoverable VAT was borne by the 16 respondents to this survey alone in connection with their core banking services over the 2008-2010 period.

Background and reasons for commissioning this report

In 2010, the IMF[2] and the European Commission[3] published reports that consider the introduction of a Financial Transaction Tax (FTT) and/or a Financial Activities Tax (FAT). Both the Commission and the IMF have suggested that banks may be under-taxed, because their services are to a large extent exempt from VAT:

> *"The extent to which applying VAT to the financial sector would raise additional tax revenues and consequently the extent to which the exemption constitutes an under-taxation case for the financial sector is an unsettled empirical question."[4]*

> *"For technical reasons, financial services are commonly VAT-exempt - which means that, purely for tax reasons, the financial sector may be under-taxed and hence perhaps too big."[5]*

On 28 September 2011 the European Commission presented a proposal for a Financial Transaction Tax ('FTT') in the 27 Member States of the EU.[6] The tax would be levied on all transactions on financial instruments between financial institutions when at least one party to the transaction is located in the EU. The European Commission has proposed that the tax should come into effect from 1 January 2014. According to the Press Release:

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[1] PwC, November 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] IMF, September 2010, Financial Sector taxation. The IMF's Report to the G-20 and background material. Eds. S. Claessens, M. Keen and C. Pazarbasioglu.

[3] European Commission staff working document, SEC (2010) 1166, Financial Sector Taxation– 7 October 2010.

[4] European Commission staff working document, SEC (2010) 1166, Financial Sector Taxation, 7 October 2010, p. 9.

[5] IMF, June 2010, A Fair and Substantial Contribution by the Financial Sector (Final Report For The G-20), p. 22.

[6] Proposal for a Council Directive on a common system of financial transaction tax and amending Directive 2008/7/EC, 28 September 2011, COM(2011) 594 final.

> *"The financial sector enjoys a tax advantage of approximately € 18 bn per year because of VAT exemption on financial services."*[7]

However, in Annex 5 to the Impact Assessment accompanying the FTT proposal the Commission notes that:

> *"... all these estimates are very rough and should be interpreted with caution given the strong assumptions made when calculating the irrecoverable VAT."*[8]

The above comments from the EU and IMF indicate that there remains a good deal of uncertainty over whether the VAT exemption does in fact lead to a tax advantage for the financial services sector.

Do banks enjoy a tax advantage as a result of the VAT exemptions as set down in the EU VAT Directive[9]?

The goal of this Study is to provide objective input into the debate as to whether the banking sector is under-taxed as a result of the VAT exemption for certain financial services.

The central research questions in this report are:

a) whether the VAT exemptions for banks in the EU lead to a lower level of (Government) VAT revenues, compared to the position if banks were subject to VAT (as other business sectors), and

b) whether the current VAT exemptions system has any other benefit or cost for the banking sector.

To answer these questions, this report looks at the issues from two perspectives:

- **Empirical analysis** - An estimate of the effect on Governments' VAT revenues of the exemptions for core banking services compared to applying VAT to banks as any other business, using Eurostat national income account data for the period 2000 to 2007. In addition, a measure of irrecoverable VAT is obtained from a survey of The Network banks for the period 2008 to 2010.

- **Conceptual analysis** - An analysis of the mechanics of the VAT exemptions and their impact on purchases and supplies made by banks, VAT compliance costs, and international competition in the banking sector.

Collaboration with Professor B. Lockwood of Warwick University

Appendix 2 of this report includes a macroeconomic study prepared by Professor Lockwood. The study considers whether the VAT exemptions of banking services in the EU lead to a lower level of revenues as compared to a full taxation regime. The methodology and results are summarised in Section 4.

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[7] Press release of the European Commission of 28 September 2011, Financial Transaction Tax: Making the financial sector pay its fair share.

[8] Commission Staff Working Paper, Impact Assessment accompanying the document Proposal for a Council Directive on a common system of financial transaction tax and amending Directive 2008/7/EC, SEC(2011) 1102 final, Vol. 6, Annex 5, p. 5.

[9] Art. 135 (1) (b)-(g) Directive 2006/112/EC.

Key Conclusions

Empirical Analysis

In the macroeconomic analysis performed by Professor Lockwood, two calculations have been made. In our basic calculation we have utilised 2000 - 2007 Eurostat/sectoral account data for 26 EU Member States[10], to estimate the effect on Member States' VAT revenues of applying a full taxation regime to banking services. In this calculation, we used the same data source as the European Commission did in their study. This analysis finds that imposition of VAT on banking services might not lead to a material increase in VAT revenues. In fact, in four out of eight years (2000, 2001, 2002 and 2007) over the period 2000-2007, the outcome shows a loss in Member States' overall VAT revenues. Secondly, Professor Lockwood used an alternative Eurostat data source to the one used by the European Commission on financial intermediation services ('FIS') sales in the period 2000-2007. Using these data, Professor Lockwood's conclusion is that there could even be a reduction in Member States' VAT revenues between 6.4 and 7.6 bn p.a. on average for all years.

The European Commission report issued on 28 September 2011 uses some different assumptions to Professor Lockwood's study. These assumptions, which are set out in more detail in section 4.1, lead to the Commission arriving at higher estimates of future tax revenues resulting from an imposition of VAT on the banking sector. The principal differences are that the Commission's study:

- Assumes that banks either do not pass through the cost of irrecoverable VAT to their customers under the existing exemption regime or would not pass on the cost savings they would incur if banks became fully taxable.

- Does not include any estimates for the "second round effect". Second round effects broadly describe behavioral changes in consumption caused by the imposition of VAT on output services.

- For the purpose of determining the amount of VAT incurred on inputs, assumes that banks have similar purchasing patterns to households.

- Uses an input tax recovery rate of 21 %.

In relation to the input tax recovery rate of 21% the Commission has obtained this recovery rate from a 2006 report prepared by PwC[11]. This recovery rate was a measure of input tax recovery for all providers of financial services rather than just the core banking industry which is the subject of both this and the Commission's study. As an example, financial services also include asset management which is taxable and thus typically has a much higher recovery rate than the core banking industry. For this reason we do not believe that the 21% recovery rate is the most appropriate rate. By using this recovery rate, the irrecoverable VAT for core banking services is in our view underestimated, and the envisaged VAT revenues are being overstated.

While there is considerable common ground between Professor Lockwood's study and the Commission's study, there are also significant differences in methodology. One factor, which would

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[10] From Cyprus no data were available.
[11] PwC, November 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.

lead to a reduction in VAT revenues under a full taxation system has not been considered in either of the studies: Both studies assume that the risk premium on loans made to consumers would be taxable under a full VAT regime for banks, contrary to the theoretical approach outlined in a 1996 report published by the European Commission.[12] One reason why this has not been estimated in either study relates to the difficulty of obtaining accurate estimates from national income data. Nonetheless, this factor should not be ignored when judging whether banks are over- or undertaxed.

Conceptual analysis

A VAT exemption for financial services may evoke the image that banks are treated favourably as compared to fully taxed businesses ('FTB's'). In principle the outputs of FTB's are taxed with VAT, whereas the outputs of banks are not. However, that image does not reflect that there are other critical factors to consider when comparing banks and FTB's. In essence, these other factors are:

– Banks cannot deduct input VAT on goods/services acquired whereas FTB's can; and

– Banks are confronted with a set of negative side-effects of the VAT exemption for financial services which adversely affect their ability to operate more efficiently.

The fact that banks cannot recover input VAT whereas FTB's can, erodes the idea that the VAT exemption for financial services means that banks must be taxed at a lower level than FTB's. In effect under the current system, VAT becomes a tax on banks rather than a tax on consumption if non-deductible input VAT is not fully passed through to customers.

Since the EU VAT was introduced, irrecoverable input VAT has become a much more significant cost for banks. Some of the reasons for this are:

– Developments in the banking sector (e.g. globalization, increased competition, automation, outsourcing, shared service centers, and regulatory developments) which have tended to increase the supplies to banks that bear VAT; and

– Changes in VAT legislation (e.g. increase of VAT rates, change of place of taxation of services in 2010) which have led to higher levels of non-deductible input VAT.

The conceptual analysis shows that, due to non-deductible input VAT, exempt financial services in the business-to-business ("B2B") domain are treated less favourably than taxed supplies, because B2B customers have no ability to recover any VAT costs borne by the banks. By contrast, business-to-consumer ("B2C") exempted financial services are treated more favourably compared to taxed supplies. Whether the banking sector is treated favourably compared to the FTBs depends on the mix of B2B and B2C banking activities and the level of irrecoverable VAT. The extent to which the banking sector is treated less favourably (B2B) and more favourably (B2C) is analyzed in the empirical part of our Study.

The current VAT exemption system for financial services also results in an economic "excess burden":

• The fact that banks need to take VAT costs on certain inter-company transactions and outsourced services into account which in some cases inhibits them from choosing a business

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[12] European Commission, *Value Added Tax: A Study of Methods of Taxing Financial and Insurance Services*, A study carried out for the European Commission by Ernst & Young, 1996.

model that most fits their needs from an economic, regulatory (e.g. Basel III) and tax (e.g. bank levies) perspective;

- The legal uncertainty connected to the different application of the VAT exemption of financial services in the various Member States; and

- The additional administrative requirements applicable to banks (e.g. pro-rata calculations).

These hidden costs of the application of VAT exemptions are borne by the banks or their customers to the extent that these costs are passed on.

Over-taxation of B2B services supplied by banks

While various studies have come to different conclusions about whether, on balance, EU banks are under- or over-taxed as a result of the application of the VAT exemptions, there is certainty regarding the conclusion that financial services supplied to EU business customers are over-taxed. Under the assumption of full pass through as set out in Section 4.1 the amount of over-taxation is at least equal to the irrecoverable VAT incurred with respect to these services. We estimate the irrecoverable input VAT allocable to banking services supplied in B2B to amount to € 18 bn.

2. Introduction

2.1. Assignment

PricewaterhouseCoopers AG Wirtschaftsprüfungsgesellschaft ("PwC") has performed a Study ("the Study") for the CFO Network ("The Network") on the impacts of the Value Added Tax (VAT) exemptions for the EU Banking Sector ("the banking sector" or "banks"). The Network represents the following banks: Barclays, BBVA, BNP Paribas, BPCE, Commerzbank, Crédit Agricole, Danske Bank, Deutsche Bank, Dexia, DZ Bank, Grupo Santander, HSBC, ING Bank, Intesa Sanpaolo, Lloyds, Nordea Bank, Rabobank, Royal Bank of Scotland, Société Générale and UniCredit.

This report provides a conceptual and an empirical analysis of (the impact of) the VAT exemption for core banking services. In this report we provide an objective analysis with respect to the positive and negative impacts of the VAT exemption on the banking industry.

In order to achieve this analysis a macroeconomic study is performed based on statistical data from the National Income Accounts of 26 EU Member States. This part of the Study is conducted in cooperation with Professor B. Lockwood of the Economics department of the University of Warwick. Furthermore, a survey was held amongst the members of the The Network. We received specific detailed data from 16 banks.

2.2. Research question

This document contains a summary of the Study on the impacts of the VAT exemptions for the Banking Sector. The International Monetary Fund (IMF) and European Commission have considered the case for further taxation in the financial services sector and in particular have drawn attention to the impact of the VAT exemption in the banking and financial services sector.

In its Report on Financial Sector Taxation, the European Commission stated:

> *"The extent to which applying VAT to the financial sector would raise additional tax revenues and consequently the extent to which the exemption constitutes an under-taxation case for the financial sector is an unsettled empirical question.*
>
> *... the VAT exemption of financial services might lead to a favourable tax treatment of the sector despite the fact that input VAT is not deductible for the sector."* [13]

The IMF in its report for the G20 stated:

> *"For technical reasons, financial services are commonly VAT-exempt—which means that, purely for tax reasons, the financial sector may be under-taxed and hence perhaps too big."* [14]

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[13] European Commission staff working document, Financial Sector Taxation, SEC (2010) 1166, 7 October 2010, p. 9.

[14] International Monetary Fund: A Fair and Substantial Contribution by the Financial Sector (Final Report For The G-20), June 2010, p. 22.

On 28 September 2011 the European Commission presented a proposal for a financial transaction tax ('FTT') in the 27 Member States of the EU.[15] The tax would be levied on all transactions on financial instruments between financial institutions when at least one party to the transaction is located in the EU. The Commission has proposed that the tax should come into effect from 1 January 2014. According to the Press Release of the European Commission:

> *"The financial sector enjoys a tax advantage of approximately € 18 bn per year because of VAT exemption on financial services."*[16]

However, in Annex 5 to the Impact Assessment accompanying the FTT-proposal the Commission notes that:

> *"all these estimates are very rough and should be interpreted with caution given the strong assumptions made when calculating the irrecoverable VAT."*[17]

The aim of this Study is to provide some objective input into the debate as to whether the banking sector is under-taxed as a result of the VAT exemption for financial services.

This Study considers key questions in the discussion of financial services taxation:

a) whether the VAT exemptions for banks in the EU lead to a lower level of VAT revenues, compared to the position if banks were fully taxable (as other business sectors are), and

b) whether the current VAT exemptions system has any other benefit or cost for the banking sector.

2.3. Scope

Since financial services generally require a regulatory license in the EU, they are mostly supplied by insurance companies, asset managers, (pension)funds and the banking sector; only the latter is within the scope of this Study. Furthermore, for the empirical part of the Study (both for the macroeconomic/statistic analysis and for the survey) the scope has been limited to the core banking activities as mentioned in Section 65 of the statistical classification of economic activities in the European Union.[18] This classification system, which is used by Eurostat, is referred to as NACE (Nomenclature statistique des activités économiques dans la Communauté européenne). Section 65 of Section J of version 1 of NACE includes the following financial intermediation services:

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[15] Proposal for a Council Directive on a common system of financial transaction tax and amending Directive 2008/7/EC, 28 September 2011, COM(2011) 594 final.
[16] Press release of the European Commission of 28 September 2011, Financial Transaction Tax: Making the financial sector pay its fair share.
[17] Commission Staff Working Paper, Impact Assessment accompanying the document Proposal for a Council Directive on a common system of financial transaction tax and amending Directive 2008/7/EC, SEC(2011) 1102 final, Vol. 6, Annex 5, p. 5.
[18] Commission Regulation (EC) No. 29/2002 of 19 December 2001 amending Council Regulation (EEC) No. 3037/90 on the statistical classification of economic activities in the European Community.

NACE-1, Section J, Financial Intermediation	
65	Financial intermediation, except insurance and pension
65.1	*Monetary intermediation*
65.11	Central banking
65.12	Other monetary intermediation
65.2	*Other intermediation*
65.21	Financial leasing
65.22	Other credit granting
65.23	Other financial intermediation n.e.c.

2.4. Structure of the report

The Study consists of two main parts. The first part of the Study (Chapter 3) deals with the conceptual analysis of the research question. The second part of the Study (Chapter 4) covers an empirical review of the research question. The conceptual analysis elaborates on the original design of the financial services ("FS") VAT exemption system and what the impacts have been for the current banking sector. This chapter includes a description of how the current VAT regime affects the banking sector especially in view of general commercial needs for efficient business structuring, in view of the economic trends of the past decades and in view of structural requirements emerging from proposed or implemented regulatory reforms following from the G20 meeting in Pittsburgh in 2009, generally known as Basel III and bank levy regimes.

Chapter 4 covers our empirical study, which consists of two pillars. The first pillar of the empirical analysis is based on a separate paper of Professor B. Lockwood of the University of Warwick (see Appendix 2). In this part we analyze from a macroeconomic point of view what the impact is if the core financial intermediation services of banks would be under a full taxation regime. This part of our analysis is based on statistical information and provides estimates of the impact that the FS VAT exemptions of core financial intermediation services have on the VAT revenues of EU Member States. The second pillar of the empirical analysis is based on a survey amongst 19 of the largest European banks ('The Network Banks'). This survey aims at establishing an estimate of the amount of irrecoverable VAT incurred by these banks.

In Chapter 5 we present our conclusions from both the conceptual and empirical analyses.

The methodologies used in the conceptual and empirical parts of this report are set out briefly in the next sections below.

2.4.1. Methodology for the Conceptual analysis

In order to carry out the conceptual analysis, it is required to compare the taxation of (the supplies of) banks with the taxation of (the supplies of) businesses with taxed supplies. The conceptual analysis necessary to answer the central research question 'whether the VAT exemptions for banks in the EU lead to a lower level of VAT revenues, compared to the position if banks were fully taxable and whether the current VAT exemptions system has any other benefit or cost for the banking sector' is built upon two pillars. The first pillar is that the VAT treatment of (supplies of) banks is different from the VAT treatment of (supplies of) fully taxed businesses ('FTB's'). The second pillar is that banks might be treated favourably or less favourably in comparison to FTB's.

As regards the first pillar, it should be noted that it basically entails a test against the principle of equal treatment, or of its reflection in the field of VAT, the principle of neutrality. To this end a comparison is made from two different perspectives: the perspective of the businesses (the taxable person perspective) and the perspective of the transactions they carry out (the transactional perspective).

The second pillar entails a test that builds further on the outcome of the tests performed with regard to the first pillar. If a comparison between the banking sector and FTB is to be made, not only the VAT treatment of the output supplies of banks and FTB must be compared, but also the input (purchases) of both should be included in the comparison. In this research, the fact that FTB can recover/deduct the VAT on their inputs, but banks cannot, is included in the comparison between the VAT treatment of (supplies by) FTB's and banks. Moreover, various side-effects, such as administrative and compliance requirements and VAT cash flow effects, are taken into account when comparing the consequences of VAT exemptions for the banking sector in comparison with the consequences of taxation of supplies.

2.4.2. Methodology for the Empirical analysis

As indicated, the empirical analysis of our Study consists of two pillars: the macroeconomic analysis based on a separate paper of Professor Lockwood (see Appendix 2) and the survey amongst The Network Banks.

For the macroeconomic analysis, National Income Accounts data are used to provide estimates of the impact that exemption of core financial intermediation services would have on the VAT revenues of EU Member States. To this end core financial intermediation services are defined as the financial intermediation services of the statistical classification of economic activities in the European Union (Section 65 of Section J of version 1 of NACE; see Section 2.3). This part of the report builds upon an earlier study by Huizinga to estimate the revenue impact of the VAT exemption for financial services.[19] The macroeconomic part of this report updates, extends, and refines Huizinga's work as follows: (1) 2007 National Income Accounts data are used (the most recent currently online available), (2) results are calculated for 26 of the 27 EU Member States (data is not available for Cyprus) and (3) several methodological refinements are made, including accounting for 'zero-rating'[20] of extra-Community exports[21], and taking account of VAT exempt bank purchases (from other VAT exempt businesses). It includes both a 'static' and a 'dynamic' analysis. In the static analysis the revenue effect of exempting financial intermediation is compared to full taxation but assumes that the volume of services supplied is unaffected. To account for volume changes, a second round analysis also is performed. Combining the results of the first and second round analyses provides a 'dynamic' assessment of the impact of full VAT taxation of financial intermediation services.

The survey carried out amongst The Network banks aims at establishing an estimate of the impact of the VAT exemption for financial services on these banks by assessing the magnitude of their irrecoverable VAT. As well as for the macroeconomic analysis, only the impact on the VAT exemption

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[19] H. Huizinga, *Financial Services—VAT in Europe?*, Economic Policy, October 2002, pp. 499-534.
[20] Although commonly referred to as 'zero-rating' in economic studies, from a legal point of view financial services to customers established outside the EU are regarded as VAT exempt services with a right to deduct input VAT on the basis of Art. 169(c) VAT Directive.
[21] From the separate paper of Professor Lockwood we take that as far as he can reconcile, Huizinga did not include exports in his study.

for core financial intermediation services is measured. Therefore, also for this part of the Study, financial intermediation services are defined according to the statistical classification of economic activities in the European Union (Section 65 of Section J of version 1 of NACE; see Section 2.3). The survey builds upon earlier studies which have indicated that the financial sector is a significant payer of VAT.[22]

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[22] See 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, 2 November 2006 and PwC, Report for the City of London Corporation, December 2010, The Total Tax Contribution of UK Financial Services (third edition).

3. Conceptual Analysis

3.1. Research Question and Theoretical Framework

Both the European Commission and the International Monetary Fund have suggested that banks may be under-taxed, because their services are to a large extent exempt from VAT.

> *"The extent to which applying VAT to the financial sector would raise additional tax revenues and consequently the extent to which the exemption constitutes an under-taxation case for the financial sector is an unsettled empirical question."*
> European Commission staff working document, Financial Sector Taxation, SEC (2010) 1166, p.9
>
> *"For technical reasons, financial services are commonly VAT-exempt - which means that, purely for tax reasons, the financial sector may be under-taxed and hence perhaps too big"*
> International Monetary Fund: A Fair and Substantial Contribution by the Financial Sector (Final Report For The G-20), p. 22

Both the European Commission and IMF clearly indicate that their suggestion that banks are under-taxed as a result of the VAT exemption for financial services is only a hypothesis and requires further investigation. This research aims to provide some objective input into the debate as to whether the banking sector is under-taxed as a result of the VAT exemption for financial services.

Therefore, the central research question is "whether the VAT exemptions for banks in the EU lead to a lower level of VAT revenues, compared to the position if banks were fully taxable and whether the current VAT exemptions system has any other benefit or cost for the banking sector."

In order to carry out such research, it is required to compare the taxation of (the supplies of) banks with the taxation of (the supplies of) businesses with taxed supplies.

In this chapter, the research question is answered from a conceptual perspective on the function and functioning of the VAT exemption for financial services.

3.2. Structure of the Conceptual Analysis and Terminology

In this part of the Study the research question is answered from a conceptual point of view. First, the purpose, scope and methodology of the conceptual analysis is set out (Section 3.3).

Second, the fundamentals of the EU VAT system are addressed (Section 3.4). This section provides an overview of the characteristics of EU VAT as an indirect tax on consumption (Section 3.4.1). The functioning and effects of VAT exemptions in EU VAT also are elaborated (Section 3.4.2).

Third, the taxation of the banking sector under the current EU VAT system is described (Section 3.5). This analysis includes the existing legal framework (Section 3.5.1), the historical perspective on the

VAT exemptions for financial services (Section 3.5.2) and the functioning and effects of these exemptions (Section 3.5.3).

Fourth, the impact of important developments in the banking sector in relation to taxation under the EU VAT system is addressed in Section 3.6). Developments with an impact on the banking sector include globalization (Section 3.6.1), automation (Section 3.6.2), outsourcing (Section 3.6.3), offshoring (Section 3.6.4), the introduction of shared service centres (Section 3.6.5) and regulatory developments (Section 3.6.6).

Fifth, the recent developments in EU VAT case law and EU VAT legislation are set out (Section 3.7). Besides European Court of Justice case law developments, the proposals of the European Commission to modernize the VAT exemptions for financial services are addressed.

Sixth, on the basis of these analyses the taxation of (the supplies of) banks is compared with the taxation of (the supplies of) businesses with taxed supplies only (Section 3.8) in order to answer the central research question. The question "whether the VAT exemptions for banks in the EU lead to a lower level of VAT revenues, compared to the position if banks were fully taxable and whether the current VAT exemptions system has any other benefit or cost for the banking sector" is addressed from two perspectives. First of all, the question is addressed from a taxable person perspective (banks with exempt supplies of financial services vs businesses with taxed supplies only; Section 3.8.1). Secondly, the question is addressed from a transactional perspective (exempt supplies of financial services of banks with vs taxed supplies of fully taxed businesses; Section 3.8.2). Moreover, the possible relevance of wholesale banking (B2B banking) and retail banking (B2C banking) for the comparison between the banking sector and fully taxed businesses is analyzed (Section 3.8.3).

Finally, the conclusion provides an answer to the central research question from a conceptual point of view in (Section 3.9).

In this Chapter we will address two different categories of customers of banks and fully taxed businesses: (business) customers with a right to fully recover input VAT on goods and services purchased in the course their economic activities and customers without a right to recover input VAT. Services provided to the first category of customers will be referred to as B2B services, whereas services provided to the latter category will be referred to as B2C services. For the purposes of this chapter the category of B2C services does not include services rendered to private individuals / end-consumers only, but also services rendered to other customers without a right to deduct input VAT, such as medical organizations, educational institutions and government bodies. When referring to fully taxed businesses with a right to full recovery of input VAT we will hereafter use the abbreviation 'FTB'.

3.3. Scope and Methods of the Conceptual Analysis

Extensive conceptual research has already been carried out as to the question whether from a legal perspective the application of exemptions without a right of deduction, such as the exemption for financial services, are compatible with the underlying principles of the EU VAT system.[23] These

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[23] See, *for example*: L. Ebrill, M. Keen, J-P Bodin and V. Summers, *The Modern VAT*, International Monetary Fund, 2001, p. 100, Value Added Tax, A Study of Methods of Taxing Financial and Insurance Services, carried out for the European Commission by Ernst & Young, M. Lamensch, *Commission Proposal for a Modernization of the VAT rules that are Applied in Respect of Financial and Insurance Services,* Intertax,

underlying principles are in essence to be found in the preamble to the VAT Directive and Art. 1 (2) VAT Directive and are confirmed in ECJ case law.[24] The essential principles of the (overall design of the) EU VAT system are[25]:

1. VAT is a tax on consumption (legal character);[26]

2. VAT is general[27], objective[28] tax (general, objective character);

3. VAT is exactly proportional to the price of the goods or services;[29]

4. VAT is levied in a neutral manner.[30]

The overall conclusion of the aforementioned research is that the exemptions without a right of deduction, and in particular the exemption for financial services, is incompatible with some of the underlying principles of the European VAT system, in particular the legal character of VAT, the general character of VAT, the principle that VAT is proportional to the prices and the neutrality principle.[31]

2008, No. 8/9, pp. 371-378, O. Henkow, *Financial activities in European VAT - A theoretical and legal research of the European VAT system and the Actual and preferred treatment of financial activities*, Kluwer Law International, Alphen aan den Rijn, 2008 and R. de la Feria and B. Lockwood, *Opting for Opting In? An Evaluation of the Commission's Proposals for Reforming VAT for Financial Services*, 2010, Fiscal Studies 31(2).

[24] Settled ECJ case law confirms that the features of VAT described in Art. 1(2) VAT Directive are in fact the underlying principles on which the EU VAT system is based. See, *for example*: ECJ 27 November 1985, Case 295/84, *SA Rousseau Wilmot v Caisse de compensation de l'Organisation autonome nationale de l'industrie et du commerce (Organic)*, [1985] ECR 03759, ECJ 1 March 1992, Case C-200/90, *Dansk Denkavit ApS and P. Poulsen Trading ApS, supported by Monsanto-Searle A/S v Skatteministeriet*, [1992] ECR I-02217 and ECJ 3 October 2006, Case C-475/03, *Banca popolare di Cremona Soc. coop. arl v Agenzia Entrate Ufficio Cremona*, [2006] ECR I-09373.

[25] Principles that can also be considered as underlying the VAT system, such as the principle of the prohibition of abuse of rights and the principle of legal certainty, are left aside. While they underlie the VAT system, they are not determinant for the *design* of the VAT system. Hence, they have no immediate bearing to the existence of the exemption for financial services.

[26] Art. 2(1) VAT Directive.

[27] See, *for example*: ECJ 13 July 1989, Joined cases 93/88 and 94/88, *Wisselink en Co. BV and others v Staatssecretaris van Financiën*, [1989] ECR 02671, and ECJ, 26 June 1997, Joined cases C-370/95, C-371/95 and C-372/95, *Careda SA (C-370/95)*, *Federación nacional de operadores de máquinas recreativas y de azar (Femara) (C-371/95)* and *Asociación española de empresarios de máquinas recreativas (Facomare) (C-372/95) v Administración General del Estado*, [1997] ECR I-03721 and ECJ 16 December 1992, Case C-208/91, *Raymond Beaulande v Directeur des services fiscaux de Nantes*, [1992] ECR I-06709.

[28] See, *for example*: ECJ 5 May 1982, Case 15/81, *Gaston Schul Douane Expediteur BV v Inspecteur der Invoerrechten en Accijnzen, Roosendaal*, [1982] ECR 01409 and ECJ 6 April 1995, Case C-4/94, *BLP Group plc v Commissioners of Customs & Excise*, [1995] ECR I-00983.

[29] The price proportionality principle not only entails that double non-taxation is prohibited but also that cascading of VAT in the production and distribution chain is not allowed. See, *for example*: ECJ 25 May 1993, Case C-193/91, *Finanzamt München III v Gerhard Mohsche*, [1993] ECR I-02615, ECJ 8 November 2001, Case C-338/98, *Commission of the European Communities v Kingdom of the Netherlands*, [2001] ECR I-08265 and ECJ 10 July 2008, Case C-484/06, *Fiscale eenheid Koninklijke Ahold NV v Staatssecretaris van Financiën*, [2008] ECR I-05097.

[30] See, *for example*: ECJ 22 May 2008, Case C-162/07, *Ampliscientifica Srl and Amplifin SpA v Ministero dell'Economia e delle Finanze and Agenzia delle Entrate*, [2008] ECR I-04019. The principle of neutrality is considered as the reflection in the field of VAT of the general principle of equal treatment. See, *for example*: ECJ 10 July 2008, Case C-484/06, *Fiscale eenheid Koninklijke Ahold NV v Staatssecretaris van Financiën*, [2008] ECR I-05097.

[31] It is also settled ECJ case law that exemptions are contrary to the principle of VAT as a broad based tax. See, *for example*: ECJ 5 June 1997, Case C-2/95, *Sparekassernes Datacenter (SDC) v Skatteministeriet*, [1997]

The statements of the European Commission and the IMF, that banks might be under-taxed does not seem to dispute the outcome of the aforementioned research. Rather, the European Commission and the IMF suggest that instead of testing the (functioning of the) VAT rules applicable to financial services against the underlying principles of the VAT system (an 'external benchmark'), the consequences of the VAT rules applicable to financial services carried out by banks must be tested against the consequences of the VAT rules applicable to standard rated supplies (carried out by 'fully taxed taxable persons'). That is a different, internal, benchmark, which requires a comparison of the VAT treatment of (supplies by) banks[32] and the VAT treatment of (supplies by) FTB's.[33] This comparison is the key benchmark to which the central question in this research, as formulated in Section 3.1 is tested.

In the European Commission's and the IMF's suggestions that banks are under-taxed, lies the presumption that banks and FTB's are treated differently. Therefore, the central research question in this analysis is build upon two pillars. The first pillar is the presumption that the VAT treatment of (supplies of) banks is *different* from the VAT treatment of (supplies of) FTB's. The second pillar is the presumption that banks might be treated *favourably* in comparison to FTB's.

As regards the first pillar, it should be noted that it basically entails a test against the principle of equal treatment, or of its reflection in the field of VAT, the principle of neutrality. In this respect, the statements of the European Commission and the IMF require that a comparison is made from two different perspectives: the perspective of the businesses (the taxable person perspective) and the perspective of the transactions they carry out (the transactional perspective).

The second pillar entails a test that builds further on the outcome of the tests performed in the first pillar. For, the European Commission's and the IMF's suggestions that banks are under-taxed presuppose that there are other businesses that are taxed in a normal manner or that are over-taxed.[34] This hypothesis seems to be based solely on the difference in the VAT treatment of the (financial) supplies by banks (exempt from VAT) and the supplies by FTB's (taxed). It must be observed that such a comparison, which is only based on the difference in VAT treatment of services of banks as opposed to the VAT treatment of supplies of goods and services by FTB's is imperfect.

ECR I-03017, ECJ 26 May 2005, Case C-498/03, *Kingscrest Associates Ltd and Montecello Ltd v Commissioners of Customs & Excise*, [2005] ECR I-04427, and ECJ 9 February 2006, Case C-415/04, *Staatssecretaris van Financiën v Stichting Kinderopvang Enschede*, [2006] ECR I-01385. Also see: European Commission, Green Paper on the future of VAT – Towards a simpler, more robust and efficient VAT system, COM(2010) 695 final.

[32] Under the EU VAT system, certain *transactions* rather than certain taxable *persons* are exempt. Therefore, the term 'VAT exempt bank' is imperfect. However, the term concisely expresses the fact that banks carry out VAT exempt financial transactions. Therefore banks making exempt supplies of financial services are often referred to as 'VAT exempt banks'.

[33] Under the EU VAT system, certain *transactions* rather than certain taxable *persons* are exempt. Therefore, the term 'FTB's' is imperfect. However, the term concisely expresses the contrast between banks who dominantly carry out exempt transactions and 'other businesses' that dominantly carry out taxed transactions. For that reason, the term 'FTB' is used in this research.

[34] A difference in the VAT treatment of banks and fully taxed persons raises the question whether such a discrimination is compatible with the various provisions in the Treaty on the Functioning of the European Union, OJEU 2010 C88/47 that safeguard equal treatment of persons that are objectively comparable. However, it must be realized that the VAT exemption for financial services is a choice of design. Moreover, a correct analysis of the central research question essentially requires a comparison between banks and FTB's operating in the same Member State. Therefore, a test against the provisions of the TFEU is left outside the scope of this analysis.

Since banks and FTB play different roles and have different functions in the economy, operate in different manners and make different types of supplies[35], in principle the two cannot be compared.

Nonetheless, if a comparison is to be made, not only the VAT treatment of the output supplies of banks and FTB must be compared, but also the input (purchases) of both should be included in the comparison (see Section 3.8). In this respect it is noteworthy that the European Commission suggests that even though FTB can, but banks cannot recover the VAT on their purchases, banks are under-taxed due to the VAT exemption for financial services:

> *"... the VAT exemption of financial services might lead to a favourable tax treatment of the sector despite the fact that input VAT is not deductible for the sector."*
> European Commission staff working document, Financial Sector Taxation, SEC (2010) 1166, p.9

In this research, the fact that FTB can deduct the VAT on their inputs, but banks cannot, is included in the comparison between the VAT treatment of (supplies by) FTB's and banks.

Connected to both the levy of and the exemption from VAT are various side-effects, such as administrative and compliance requirements and VAT cash flow effects. These side-effects generally entail important financial consequences for businesses. An assessment of the consequences of VAT exemptions for the financial sector in comparison with the consequences of supplies by FTB's would be unbalanced, if the side-effects were not to be included. Therefore, the material side-effects of the exemption of financial services and the side-effects of the full taxation of supplies by fully taxed persons are put into the second pillar of the comparison.

3.4. The Fundamentals of the EU VAT system

In this section, the fundamentals of the European VAT system are set out in order to get a clear understanding of the effects of exemptions in the EU VAT system.

3.4.1. EU VAT as an Indirect Tax on Consumption

Art. 1(2) VAT Directive states that VAT is a general tax on consumption. It is beyond reasonable doubt that the term 'consumption' is to be understood as 'private consumption', rather than 'productive consumption'.[36] 'Private consumption' is to be understood as consumption by end-consumers, whereas 'productive consumption' is to be understood as consumption by business customers. The latter type of consumption is consumption necessary in the course of the economic activities of businesses. In principle this type of consumption is not to be taxed by consumption taxes. However, for simplicity and neutrality reasons[37], VAT is levied in all stages of the production and distribution chain, also taxing productive consumption. To achieve the goal of the EU VAT system and to only tax private consumption with VAT, taxable persons (Art. 9 VAT Directive) can in principle deduct the VAT charged to them. This system of deduction of input VAT intends to relieve the trader

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[35] O. Henkow, *Financial activities in European VAT - A theoretical and legal research of the European VAT system and the Actual and preferred treatment of financial activities*, Kluwer Law International, Alphen aan den Rijn, 2008, p. 1 and pp. 23-55.
[36] OECD, draft Chapter II of the International VAT/GST Guidelines, p. 2.
[37] See point 5 of the preamble to the VAT Directive.

entirely of the burden of the VAT payable or paid in the course of all his economic activities[38] and is as such an integral part of the VAT system and in principle may not be limited.[39] Diagram 3.1 illustrates this:

		Recovery		Recovery	

Diagram 3.1

A FTB supplies goods or services to another taxed business. The value (price) of the supply is 100. The VAT rate is assumed to be 20%. As the supply is a taxed supply, 20 VAT is added to the price of the goods or services. The customer, who is also a FTB, can fully recover this VAT. Therefore, this input VAT is not a cost for him. It is assumed that the customer adds 100 value to the goods or services he purchased, bringing the total value of the goods or services to 200. Since the customer carries out taxed supplies, he is required to add 40 VAT on his invoice to the last customer in this production and distribution chain. The last customer, who is also a FTB, can fully recover this VAT. Therefore, the VAT is not a cost for him either.

The system of deduction of VAT illustrates that VAT taxes consumption in an indirect manner. By passing on the VAT to their customers (charging VAT to customers) on the on hand and by deducting the VAT charged to them (deduction of input VAT), taxable persons fulfil in essence an intermediary role in the functioning of the VAT system. Ultimately, only the private consumption by an end consumer is effectively taxed. VAT is not intended as a tax on businesses.[40]

That conclusion does not imply that VAT is not a burden at all for FTB's. For, the mere fact that FTB's are – for example – required to charge VAT on their invoices, report that VAT on their VAT returns and pay the VAT collected from their customers to the tax authorities requires FTB's to put in place various processes to deal with the administrative requirements that come with VAT.

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[38] See, *for example*: ECJ14 February 1985, Case 268/83, *D.A. Rompelman and E.A. Rompelman-Van Deelen v Minister van Financiën*, [1985] ECR 00655, para. 19.

[39] ECJ 26 May 2005, Case C-465/03, *Kretztechnik AG v Finanzamt Linz*, [2005] ECR I-04357, para. 33, ECJ 13 March 2008, Case C-437/06, *Securenta Göttinger Immobilienanlagen und Vermögensmanagement AG v Finanzamt Göttingen*, [2008] ECR I-1597, para. 24, ECJ 4 June 2009, Case C-102/08, *Finanzamt Düsseldorf-Süd v SALIX Grundstücks-Vermietungsgesellschaft mbH & Co. Objekt Offenbach KG*, [2009] ECR I-04629, para. 70 and ECJ 29 October 2009, Case C-29/08, *Skatteverket v AB SKF*, [2009] ECR I-10413, para. 56.

[40] See: European Commission, Green Paper on the future of VAT, Towards a simpler, more robust and efficient VAT system, 1 December 2010, COM(2010) 695 final. The European Commission states that: "Moreover, the key role of businesses collecting VAT must be properly recognized, since VAT is a consumption tax and not a tax on businesses".

3.4.2. The Functioning and the Effects of Exemptions under EU VAT

In principle there should be no room for exemptions under a general consumption tax.[41] The reason for that being that exemptions necessarily cause some part of the private consumption to remain untaxed. Nonetheless, EU VAT contains various exemptions to the general taxation of goods and services (see Section 3.5.2 for the reasons why there is an exemption for financial services in EU VAT). It is clear that in B2C relations[42], an exemption will have the effect that the goods or services purchased by the consumer are not taxed.

However, this ultimate consequence is somewhat mitigated under EU VAT. For, taxable persons carrying out exempt supplies of goods or services cannot deduct the VAT charged to them on goods or services that are used for the purposes of these exempt supplies.[43] If, in a B2C relation, non-deductible tax is passed on to the consumer as part of the prices charged to that consumer, this consumer will at least pay the non-deductible VAT hidden in the price of the goods or services he purchases.[44] Consequently, the supply to the consumer is not completely free of VAT. Diagram 3.2 is to illustrate this:

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[41] It is settled ECJ case law that (terms used in provisions containing) exemptions are to be interpreted strictly since exemptions constitute exceptions to the general principle that VAT is to be levied on all services supplied for consideration by a taxable person. See *for example*: ECJ 15 June 1989, Case 348/87, *Staatssecretaris van Financiën v Stichting Uitvoering Financiële Acties*, ECJ 5 June 1997, Case C-2/95, *Sparekassernes Datacenter (SDC) v Skatteministeriet*, [1997] ECR I-03017, ECJ 6 November 2003, Case C-45/01, *Christoph-Dornier-Stiftung für Klinische Psychologie v Finanzamt Gießen*, [2003] ECR I-12911, ECJ 3 March 2005, Case C-472/03, *Staatssecretaris van Financiën v Arthur Andersen & Co. Accountants c.s.*, [2005] ECR I-01719, ECJ 2 October 2009, Case C-242/08, *Swiss Re Germany Holding GmbH v Finanzamt München für Körperschaften*, [2009] ECR I-10099, ECJ 28 January 2010, Case C-473/08, *Ingenieurbüro Eulitz GbR Thomas und Marion Eulitz v Finanzamt Dresden I*, [2010] ECR I-00000 (not yet published) and ECJ 18 December 2010, Case C-175/09, *Commissioners for Her Majesty's Revenue and Customs v AXA UK PLC*, [2010] ECR I-00000 (not yet published).

[42] In this report B2C relations are not only understood to be relations between taxable persons on the one hand and private consumers on the other hand, but also include relations with other parties that cannot deduct input VAT, such as government bodies, hospitals, educational institutions etc.

[43] However, there are a few exceptions to that main rule: see Art. 169 VAT Directive (e.g. input VAT deduction is allowed if costs bearing input VAT are directly and immediately linked to exempt financial transactions, where the customer is established outside the EU).

[44] It has been considered paradoxical that a taxable person making taxed supplies is completely relieved of the burden of VAT (through the right of deduction of VAT) but the taxable person making exempt supplies bears a burden of VAT (since he cannot deduct input VAT). See *for example*: G. Vassalakis, *Value Added Taxation, Greece*, IBFD (password restricted online website), par. 1.1, J.P. Becks, *Value Added Taxation, The Netherlands*, IBFD (password restricted online website), par. 1.1, D. Balaban, *Value Added Taxation, Romania*, IBFD (online website), par. 1.1 and J.F.M. Giele, De BTW op Europees palet (*'The VAT on a European Pallet'*), Gouda Quint bv, Arnhem, 1990, pp. 8-9.
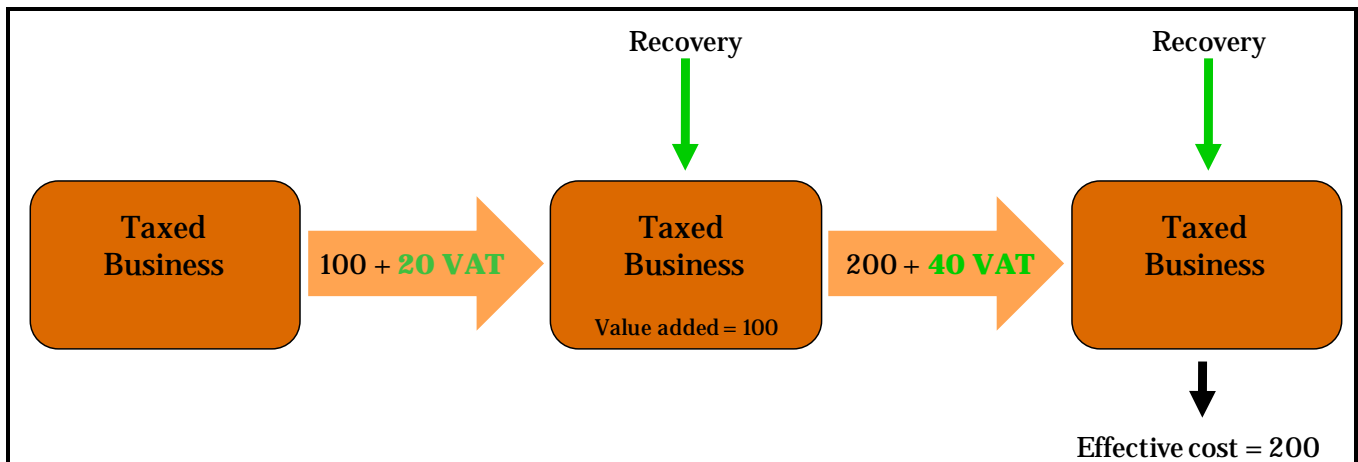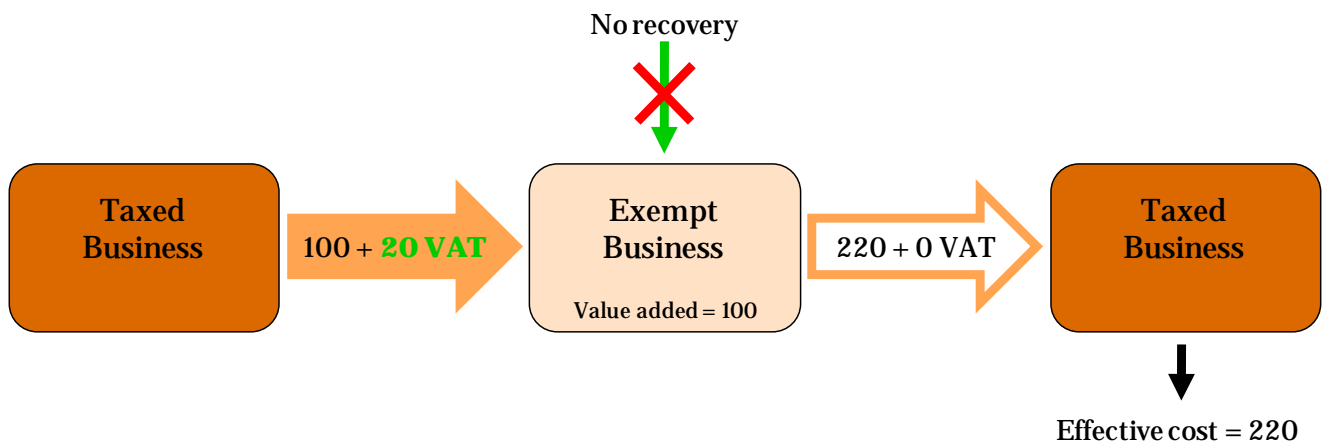
Diagram 3.2

A FTB supplies goods or services to a fully exempt business. The value (price) of the supply is 100. The VAT rate is assumed to be 20%. As the supply is a taxed supply, 20 VAT is added to the price of the goods or services. The customer, who is also a fully exempt business, cannot recover this VAT. Therefore, this input VAT is a cost for him. It is assumed that the customer adds 100 value to the goods or services he purchased, bringing the total value of the goods or services to 200. In this example it is assumed that the customer (exempt business) passes on the irrecoverable VAT (20) to his customer and includes the irrecoverable VAT in the prices of his exempt supplies. Since the customer carries out exempt supplies, he is not allowed to add VAT on his invoice to the last customer in this production and distribution chain. Nonetheless, the last customer, who is also a FTB, pays a price which includes the irrecoverable VAT. Therefore, this VAT becomes also a cost for him.

If non-deductible VAT is passed on to another taxable person in the production and distribution chain (B2B supply) as a cost component of the goods or services supplied (as 'hidden VAT'), the result is not only that the customer pays the hidden VAT, but also that the hidden VAT becomes a part of the price of that customer's supplies. If that customer's supplies are VAT taxed, VAT also will be applied to the hidden VAT which is included in the price. In the example depicted in Diagram 3.2, this would be the case if the last customer, who is a FTB, makes a taxed supply to a next customer. In that case, the FTB would be required to charge VAT on a price inclusive of the VAT that was irrecoverable by the previous (exempt) business in the production and distribution chain. Effectively, the third party in the chain charges VAT on (unrecovered) VAT, resulting in cascading of VAT.[45] Such a cascading of VAT is contrary to the principle of neutrality and in particular against the general principle that VAT is exactly proportional to the prices.[46]

If non-deductible VAT is not passed on to the next party, it will lower the taxable person's profit margin. Then VAT becomes a tax on production (a tax on the business that makes the exempt supply), rather than a tax on consumption, which is not in conformity with VAT's legal character, being a tax on private consumption by private consumers rather than a tax on businesses (see Section 3.4.1).From a theoretical perspective, it can be argued that exemptions do not fit the design of the EU

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[45] Tax cascading creates numerous economic distortions, see S. Poddar and M. English, *Taxation of financial services under a value-added tax: applying the cash-flow approach*, National Tax Journal Vol. 50, No. 1 (March 1997), p. 89.

[46] See, *for example*: ECJ 29 April 2004, Case C-137/02, *Finanzamt Offenbach am Main-Land v Faxworld Vorgründungsgesellschaft Peter Hünninghausen und Wolfgang Klein GbR*, [2004] ECR I-05547.

VAT system.[47] Nonetheless, there may be valid reasons that can justify the existence of a particular exemption. However, less to no arguments from a conceptual perspective can be found to justify the concept that no right of deduction exists with respect to VAT on goods and services that are used for exempt supplies. It appears that VAT exemptions, for which no right of deduction exists, are merely a choice of design. It has been posed that the only reasons for exemptions for which no right of deduction exist, are that some Member States already had such exemptions in their national VAT law before the EU VAT system was put in place and that they stem from cumulative turnover tax systems in which taxable persons do not have a right of deduction (and the turnover tax accumulates in each stage of the production- or distribution chain).[48]

Exemptions without a right of deduction bear various disadvantages in them.[49] For example, they create an incentive to insource services, rather than to outsource them, and are prone to cause distortions of competition due to differences in VAT rates.[50] Moreover, the exemptions may constitute an incentive for (aggressive) tax planning. They may even lead to cascading of VAT in the production and distribution chain in cases where a FTB purchases services from financial institutions in the prices of which hidden VAT is included. It has also been argued that – in particular exemptions for financial services – give rise to definitional and interpretative problems and create difficulties in calculating the portion deductible of VAT.[51] It is fair to state that where FTB's are confronted with administrative burdens as a consequence of their transactions being taxed, fully exempt businesses are confronted with administrative burdens and additional costs as a consequence of their transactions being exempt.

3.5. Taxation of the Banking Sector under the EU VAT system

3.5.1. Legal Framework

The VAT Directive includes exemptions for various financial services.[52] Just like the other exemptions contained in the VAT Directive, these exemptions ('FS VAT exemptions') are an exception to the general rule that VAT is levied in all stages of the production and distribution chain (see Section 3.4). As for many exemptions, however, there are valid arguments justifying the inconsistency of the FS VAT exemptions with the general design and character of EU VAT.

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[47] Cp. L. Ebrill, M. Keen, J-P Bodin and V. Summers, The Modern VAT, International Monetary Fund, 2001, p. 100.

[48] See D.B. Bijl, M.E. van Hilten and D.G. van Vliet, Europese BTW en Nederlandse omzetbelasting ('*European VAT and Dutch Turnover Tax*'), Kluwer, Deventer, 2001, p. 218. and M.E. van Hilten, Bancaire en financiële prestaties in de Europese BTW ('*Banking and Financial Supplies in European VAT*'), Kluwer, Deventer, 1992. See further: section 3.5.2 on the historical perspective on FS exemptions.

[49] See, *for example*: S. Cnossen, *Value-Added Tax and Excises: Commentary, VAT coordination issues in the European Union*, Commentary on the Mirrlees Review paper on VAT and Excises, Prepared for the Report of a Commission on Reforming the Tax System for the 21st Century, Chaired by Sir James Mirrlees, The Institute for Fiscal Studies, 2008, p. 10.

[50] See, *for example*: I. Crawford, M. Keen and S. Smith, *Value-Added Tax and Excises*, Background paper for the Mirrlees Review, Prepared for the Report of a Commission on Reforming the Tax System for the 21st Century, Chaired by Sir James Mirrlees, The Institute for Fiscal Studies, 2008, p. 29.

[51] See: R. de la Feria and B. Lockwood, *Opting for Opting In? An Evaluation of the Commission's Proposals for Reforming VAT for Financial Services*, Fiscal Studies 31(2), 2010.

[52] Art. 135(1)(b)-(g) VAT Directive.

With respect to the banking sector, exemptions apply to the granting of credit, dealings in credit guarantees, transactions concerning payments, transactions concerning currency, bank notes and coins, transactions in shares and other securities and the management of special investment funds. [53] Also intermediary services in respect of most financial services are VAT exempt. However, not all financial services are exempt. Services like investment advice, safekeeping and debt collection are taxed. Banks are therefore required to keep detailed records that allow tax authorities to calculate how much value added is created by the taxed financial services as opposed to the exempt financial services. [54]

In some Member States, banks have the option to tax rather than to exempt their financial services. For, the VAT Directive allows Member States to introduce an option to tax otherwise VAT exempt financial services. [55] Seven Member States introduced an option to tax: Austria, Belgium, Bulgaria, Estonia, France, Germany and Lithuania.

The option for banks to tax their financial services removes one of the striking systematic disadvantages of the VAT exemptions. For, if a bank opts to tax its financial services supplied to FTB's (B2B supplies), which have a right to recover the VAT on those services, the problem of VAT cascading in the production and distribution chain is removed (see Section 3.4.2, in particular Diagram 3.2). Because the taxation of financial services is an option in the seven Member States, B2C supplies of financial services can – in some of those Member States – (see below) still be exempt. In B2C situations it is advantageous for banks not to opt for taxation, because end-consumers cannot deduct input VAT. Exempting B2C financial services has the effect that the prices of these services are lower if compared to taxed (financial) services.

It is up to these Member States to lay down the detailed rules governing exercise of the option to tax. Since the introduction of the option to tax as well as the conditions for application of the option to tax are left to the discretion of the Member States, distortion of competition between banks in the various Member States is bound to occur. Clearly, the optional character is not in line with the fundamental principle of fiscal neutrality, which serves to attain the objective to eliminate, as far as possible, factors which may distort conditions of competition, whether at national or Community level. [56] Indeed, as a result of the option to tax in the VAT Directive there is no level playing field in the EU banking sector. [57] The conditions for taxing financial services differ per Member State. For example, the option to tax may be applied on a transactional basis (Germany) or per taxable person (France) or may be limited to only one type of financial services (transactions concerning payments and receipts in Belgium). In monetary terms, these differences are substantial. The fact that the option to tax has not been harmonized at a community level distorts the conditions of competition for banks. FTB's are not confronted with such a distortion of the conditions of competition.

3.5.2. Historical Perspective on FS VAT Exemptions

When the European VAT system was introduced in 1978, the world and the business environment was quite different from what it is now. Globalization and technological developments have caused structural changes in doing business. Since 1978, the banking sector has changed rapidly. At the time

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[53] We refer to section 2.3 where the scope of this Study is addressed.
[54] H. Huizinga, *A European VAT on Financial Services?*, Economic Policy 2002, p. 499.
[55] Art. 137(2) VAT Directive.
[56] Point 4 of the preamble to the VAT Directive.
[57] 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, 28 October 2009.

the EU VAT system entered into force, banks were smaller, more focussed on local activities and offered a smaller range of financial services. Upon introduction of EU VAT, the FS VAT exemptions were designed on the basis of the manner in which the banking sector functioned at that moment in time. The FS VAT exemptions were designed to exempt financial services and not to exempt financial institutions in themselves, consistent with the principle that VAT is intended to be a tax on consumption rather than a tax on businesses. That being said, it cannot be concealed that the original intent of the European VAT legislator appears to have been to exempt supplies of banking and financial institutions themselves (and to tax financial services carried out by other businesses).[58] However, it is perfectly clear that the exemption for financial services took the form as exemptions of transactions rather than exemptions of banks.

There is little to no legislative history from which 'the' ratio legis for the exemptions of financial services can be derived. Consequently, it is difficult to pinpoint the exact reasons for the introduction and existence of these exemptions. What can be established is that the Second VAT Directive, which is one of the VAT Directives preceding the current VAT Directive, allowed Member States the possibility to apply the exemptions they deemed necessary, with some exceptions. In the proposal for a Sixth VAT Directive (also one of the VAT Directives preceding the current VAT Directive) a number of FS VAT exemptions was first introduced. The application of these exemptions was no longer left at the discretion of the Member States.

The Explanatory Memorandum to this proposal mentions that the exemptions are justified for reasons of 'general policy common to all Member States'.[59] Neither the Sixth VAT Directive nor the current VAT Directive and their respective preambles offer an insight on the 'general policy reasons common to all Member States' for introducing the FS VAT exemptions. The exemptions, however, reflect the way that Member States treated financial services prior to the Sixth VAT Directive.[60] In Germany, for example, the exemption for certain banking services dates back to the first German Turnover Tax Act of 1918.

Generally, the difficulty to tax financial services is considered one of the main reasons for the introduction of the FS VAT exemptions.[61] It is believed to be difficult to define the value added of financial services. The calculation of the price actually paid for financial services is hard to establish. A bank's value added relates to services rendered to both depositors and borrowers, including

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[58] ECJ 27 October 1993, Case C-81/91, *Muys' en De Winter's Bouw- en Aannemingsbedrijf BV v Staatssecretaris van Financiën*, [1993] ECR I- 05405. See p. 6 report for the hearing and par. 10 of the Opinion of A-G Jacobs.

[59] Proposal for a Sixth Council Directive 1973, p. 15.

[60] S. Menner and H. Hermann, *Application of Article 13(b) of the Sixth VAT Directive to Data Service Companies*, International VAT Monitor 2001, No. 2, p. 67. It also follows from the OECD report of 22 October 1998 on the Indirect Tax Treatment of Financial Services and Instruments, p.1, that historically many financial services have been exempted from consumption taxes.

[61] See, *for example*, European Commission, Consultation Paper on modernizing the Value Added Tax obligations for financial services and insurance, p. 2 and European Commission, Green Paper on the future of VAT, Towards a simpler, more robust and efficient VAT system, 1 December 2010, COM(2010) 695 final, p. 11. Also see: W. Jack, The treatment of financial services under a broad-based consumption tax, National Tax Journal Vol. 53, No. 4 (December 2000), p. 841, H. Huizinga, *A European VAT on Financial Services?*, Economic Policy 2002, pp. 500, R. de la Feria, The EU VAT treatment of insurance and financial services (again) under review, EC Tax Review 2007/2, p. 74 and O. Henkow, *Financial activities in European VAT - A theoretical and legal research of the European VAT system and the Actual and preferred treatment of financial activities*, Kluwer Law International, Alphen aan den Rijn, 2008, p. 97, A. Kerrigan, *The elusiveness of neutrality – why is it so difficult to apply VAT to financial services?*, International VAT Monitor 2010, No. 2, p. 103 and P.R. Merrill, '*VAT treatment of the financial sector*', in: The VAT Reader – What a federal consumption tax would mean for America, Tax Analysts 2011, p. 163.

compensation for risk of loss. It is believed to be difficult to allocate the value added between the two sides of a financial transaction (e.g. between borrowers and lenders). In the current EU VAT system this value is indeed very difficult to tax. The exemption of financial services is, therefore, based on pragmatic considerations. Over the years, many studies have been carried out to investigate solutions to overcome this problem and to try to find ways of taxing financial services. It is not in scope of this report to further address these proposed methodologies.[62]

There are also more theoretical reasons for exempting financial services. As the OECD indicated in its 1998 report on indirect taxation and financial services, it is the view of many commentators that to tax the use of capital may be damaging to an economy.[63] Taxation of deposits is a tax on savings rather than consumption which reduces the funds available for investment.

This connects to the function of banks as organizations for the public interest. The banking sector, for example, enables the public to make payments, to deposit savings and to obtain credit. Financial services are also believed to be exempt in order to avoid an increase in the cost of consumer credit.[64] The European Court of Justice has explicitly mentioned this as the reason for the exemptions in its judgments in the Velvet & Steel and Swiss Re cases.[65]

Although this argumentation is valid with respect to the exemption for the granting of credit, this reasoning cannot immediately explain the rationale of other FS VAT exemptions such as the exemption for transactions in shares. Moreover, it can be argued that the legal character of VAT, being a tax on consumption is a justification ground for exempting financial services. This line of reasoning is as follows.[66] European VAT aims at taxing consumption. This is achieved by levying tax with respect to private expenditures. The means of exchange necessary to make these expenditures, money, should however not be taxed. This explains the exemptions for transactions concerning currency, bank notes and coins and concerning payments. The same reasons have been brought forward to explain the existence of other FS VAT exemptions.[67] However, this latter reasoning seems not to apply as the other exempt financial services cannot be regarded to represent an exchange.[68]

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[62] Compare, *for example*, H. Huizinga, *A European VAT on Financial Services?*, Economic Policy 2002, pp. 499-534, O. Henkow, *Financial activities in European VAT - A theoretical and legal research of the European VAT system and the Actual and preferred treatment of financial activities*, Kluwer Law International, Alphen aan den Rijn, 2008, pp. 315-338 and A. Kerrigan, *The elusiveness of neutrality – why is it so difficult to apply VAT to financial services?*, International VAT Monitor 2010, No. 2, pp. 103-112.

[63] OECD report of 22 October 1998 on the Indirect Tax Treatment of Financial Services and Instruments, p.1, referring to H. Grubert and J. Mackie, *An unnecessary complication: Must financial services be taxed under a consumption tax?*, 1996.

[64] C. Amand and V. Lenoir, *Pro rata deduction by financial institutions, Gross margin or interest?*, International VAT Monitor 2006, No. 1, p. 17 mention that the VAT exemption for credit transactions historically was a demand of the Banque de France. The bank refused to accept a tax system under which private individuals incurred VAT twice: first, when they purchased goods and, second, when they borrowed the funds necessary to finance those purchases.

[65] ECJ 19 April 2007, Case C-455/05, *Velvet & Steel Immobilien und Handels GmbH v Finanzamt Hamburg-Eimsbüttel*, [2007] ECR I-03225 and ECJ 2 October 2009, Case C-242/08, *Swiss Re Germany Holding GmbH v Finanzamt München für Körperschaften*, [2009] ECR I-10099.

[66] M.E. van Hilten, Bancaire en financiële prestaties in de Europese BTW ('*Banking and Financial Supplies in European VAT*'), Kluwer, Deventer, 1992, pp. 19-22.

[67] J.C.L. Huiskamp, De omzetbelasting in internationaal verband ('*Turnover tax in an international perspective*'), Kluwer, Deventer, 1966, p. 113.

[68] See M.E. van Hilten, '*Value Added Taxation in the Netherlands*', in: Consumption taxation and financial services, Cahiers de droit fiscal international, volume LXXXVIIIb, Kluwer Law International, The Hague, 2003, p. 604 who feels the reasoning only applies to payments.

Another reason for exemption of financial services is that financial intermediation does not represent consumption, but instead a means shifting consumption through time: deferring consumption through savings and advancing consumption through borrowing.[69]

On balance, the following general reasons are believed to have been decisive when the FS VAT exemptions were introduced in the EU VAT system:

- Member States already had exemptions prior to EU VAT legislation;

- Difficulties to tax financial services;

- Taxing the use of capital may damage the economy;

- Avoiding an increase in the cost of consumer credit;

- Only expenditures should be taxed, not savings.

3.5.3. *Functioning and Consequences of FS VAT Exemptions*

Businesses that are engaged in VAT exempt financial services cannot recover the VAT paid on goods and services that are used for the purposes of these exempt services. Although the FS VAT exemptions apply to services, and not to the businesses carrying out these services, in practice it is the banking sector which has to deal with the issue of non-recoverable VAT. The consequences of the FS VAT exemptions on banks in essence depend on two factors:

1. the category their customers are in (B2B ('FTB') or B2C[70]); and
2. the possibility to fully, or partially, pass on input VAT incurred.

If banks pass on non-deductible VAT to their business customers (B2B) as cost-component of their financial services ('hidden VAT'), the effective cost of these financial services purchased will be higher than under a full taxation regime. The hidden VAT actually represents a cost for these business customers, whereas it would not be in case of 'true' VAT. That VAT would be recoverable and thus not represent a cost. This is illustrated in Diagram 3.3 below. Passing on the VAT to business customers leads to cascading of VAT. These businesses will (also) calculate VAT over the hidden VAT which is included in the prices of their supplies of goods and services. As indicated in Section 3.2.2, this is contrary to the principle of neutrality and in particular against the general principle that VAT is exactly proportional to the prices.

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[69] M.E. van Hilten, Bancaire en financiële prestaties in de Europese BTW ('*Banking and Financial Supplies in European VAT*'), Kluwer, Deventer, 1992.

[70] B2B customers are often referred to as VAT registered customers, whereas B2C customers are addressed as non-registered customers. This does not completely match our definition of B2B and B2C customers, as the latter category may also include VAT exempt businesses which are VAT registered. We refer to section 3.2 for the terminology used.

No recovery ❌

| Taxed Business | → 100 + **20 VAT** → | Bank
Value added = 100 | ⟹ 220 + 0 VAT ⟹ | Taxed Business |

Effective cost = 220

Diagram 3.3

A FTB supplies goods or services to a fully exempt bank. The value (price) of the supply is 100. The VAT rate is assumed to be 20%. As the supply is a taxed supply, 20 VAT is added to the price of the goods or services. The bank cannot recover this VAT. Therefore, this input VAT is a cost. It is assumed that bank adds 100 value to the goods or services he purchased, bringing the total value of the financial services the bank supplies to 200. In this example it is assumed that the bank passes on the irrecoverable VAT (20) to his business customer (includes the irrecoverable VAT in the prices of his exempt financial services). Since the bank carries out exempt financial services, he is not allowed to add VAT on his invoice to his business customer. Nonetheless, this business customer, who is a FTB, pays a price which includes the irrecoverable VAT. Therefore, this VAT becomes also a cost for him.

If banks cannot (or partially cannot) pass on non-deductible VAT to their business customers (B2B), this will lower these banks' profit margins. Then VAT becomes a business tax (a tax on the business that makes the exempt supply), rather than a tax on consumption, which is not in conformity with the legal character of EU VAT (see Section 3.4.1). This is known as the VAT paradox: businesses that perform VAT exempt activities are in fact taxed and businesses that perform VAT taxable activities are in fact exempt.[71] This is illustrated in Diagram 3.4 below.

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[71] G. Vassalakis, *Value Added Taxation, Greece*, IBFD (password restricted online website), par. 1.1, J.P. Becks, *Value Added Taxation, The Netherlands*, IBFD (password restricted online website), par. 1.1, D. Balaban, *Value Added Taxation, Romania*, IBFD (password restricted online website), par. 1.1 and M.E. van Hilten and H.W.M. van Kesteren, Omzetbelasting ('*Turnover tax*'), Kluwer, Deventer, 2010, blz. 23.

Diagram 3.4

A FTB supplies goods or services to a fully exempt bank. The value (price) of the supply is 100. The VAT rate is assumed to be 20%. As the supply is a taxed supply, 20 VAT is added to the price of the goods or services. The bank cannot recover this VAT. Therefore, this input VAT is a cost for him. It is assumed that bank adds 100 value to the goods or services he purchased, bringing the total value of the financial services the bank supplies to 200. In this example it is assumed that the bank cannot pass on the irrecoverable VAT (20) to his business customer (cannot include the irrecoverable VAT in the prices of his exempt financial services). Since the bank carries out exempt financial services, he is not allowed to add VAT on his invoice to his business customer. This business customer, who is a FTB, does not pay a price which includes the irrecoverable VAT. However, the profit margin of the bank is lowered with 20.

If banks pass non-deductible VAT on to end-consumers (B2C) as cost-component of their financial services ('hidden VAT'), the effective cost of these financial services is lower than the effective cost under a full taxation regime. Under the latter regime, the full price is taxed with 'true' VAT, whereas the 'taxation' of exempt financial services is limited to the amount of hidden VAT included in the effective cost of these services. In this scenario the amount of VAT carried by the end-consumer depends on the amount of costs the bank incurs in respect of its exempt financial services. This is illustrated in Diagram 3.5 below.

Diagram 3.5

A FTB supplies goods or services to a fully exempt bank. The value (price) of the supply is 100. The VAT rate is assumed to be 20%. As the supply is a taxed supply, 20 VAT is added to the price of the goods or services. The bank, who is fully exempt, cannot recover this VAT. Therefore, this input VAT is a cost. It is assumed that the bank adds 100 value to the goods or services he purchased, bringing the total value of the financial services the bank provides to 200. In this example it is assumed that the bank passes on the irrecoverable VAT (20) to his customer, an end-consumer that has no right to deduct input VAT (includes the irrecoverable VAT in the prices of his exempt financial services). Since the bank carries out exempt financial services, he is not allowed to add VAT on his invoice to the end-consumer. The end-consumer, who has no right to deduct input VAT, pays a price which includes an amount of 20 of VAT being the VAT on the bank purchases. This is a bias to insource.

If banks cannot (or partially cannot) pass on non-deductible VAT to end-consumers (B2C), this will lower these banks' profit margins. Under these circumstances the effect of the exemption of financial services is similar to the effect occurring in case banks cannot pass on non-deductible VAT to business customers (B2B). In both situations VAT becomes a business tax (a tax on the business that makes the exempt supply), rather than a tax on consumption. This is illustrated in Diagram 3.6 below.

No recovery

| Taxed Business | 100 + **20 VAT** → | Bank — Value added = 100 | 200 + 0 VAT → | Consumer |

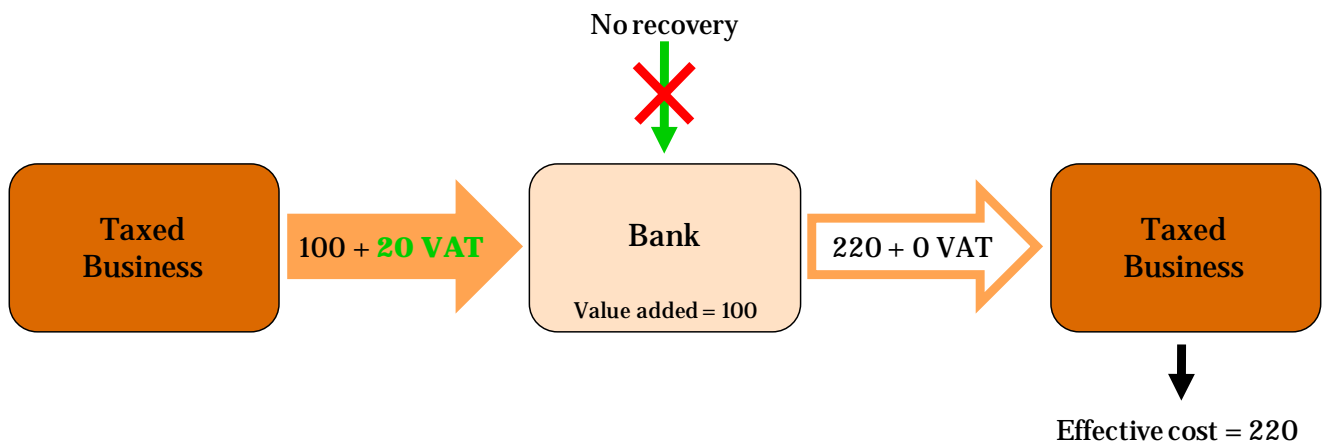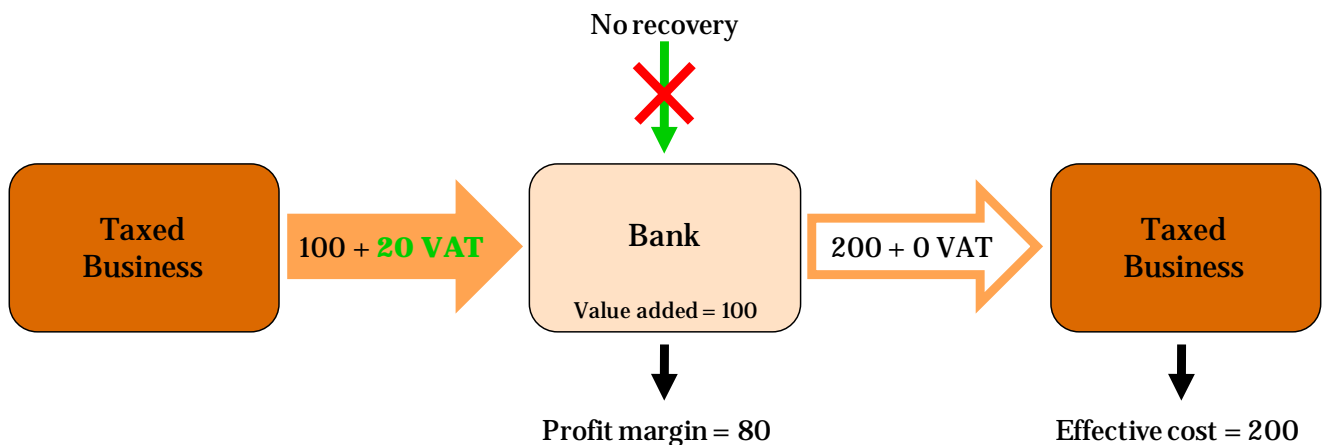Profit margin = 80   Effective cost = 200

Diagram 3.6

A FTB supplies goods or services to a fully exempt bank. The value (price) of the supply is 100. The VAT rate is assumed to be 20%. As the supply is a taxed supply, 20 VAT is added to the price of the goods or services. The bank, who is fully exempt, cannot recover this VAT. Therefore, this input VAT is a cost for him. It is assumed that the bank adds 100 value to the goods or services he purchased, bringing the total value of the financial services the bank provides to 200.

In this example it is assumed that the bank cannot pass on the irrecoverable VAT (20) to his customer, an end-consumer that has no right to deduct input VAT (cannot include the irrecoverable VAT in the prices of his exempt financial services). Since the bank carries out exempt financial services, he is not allowed to add VAT on his invoice to the end-consumer. The end-consumer does not pay a price which includes the irrecoverable VAT. However, the profit margin of the bank is lowered with 20.

In Member States that have exercised the option to introduce an option to tax financial services (see Section 3.5.1), banks can choose to tax their financial services. Clearly, they can only opt under the conditions prescribed by the Member States. The option to tax provides the banking sector with the possibility to eliminate the negative effects of the FS VAT exemption, when supplying financial services to business customers with a right to fully recover input VAT (B2B) as set out in Diagram 3.7. A bank that opts to tax his otherwise VAT exempt financial services that he provides to business customers with a right to fully recover input VAT (B2B) is entitled to deduct all input VAT directly attributable to these financial services. Without the option to tax, the bank would incur non-deductible input VAT. The business customer can simply deduct the VAT charged by the bank as he is entitled to fully deduct input VAT. On balance, the business customer receives financial services at a lower price (in case the bank would fully pass on non-deductible input VAT under an exemption regime), the bank's profit is not lowered with the amount of non-deductible input VAT (in case the bank would not pass on non-deductible input VAT under an exemption regime) or any combination of the two. In fact, the option to tax allows a bank to operate likewise to FTB (see Section 3.4.1 and Diagram 3.1). This is illustrated in Diagram 3.7 below.

Recovery

Recovery

Taxed Business → 100 + **20 VAT** → Bank *Option to Tax* Value added = 100 → 200 + **40 VAT** → Taxed Business
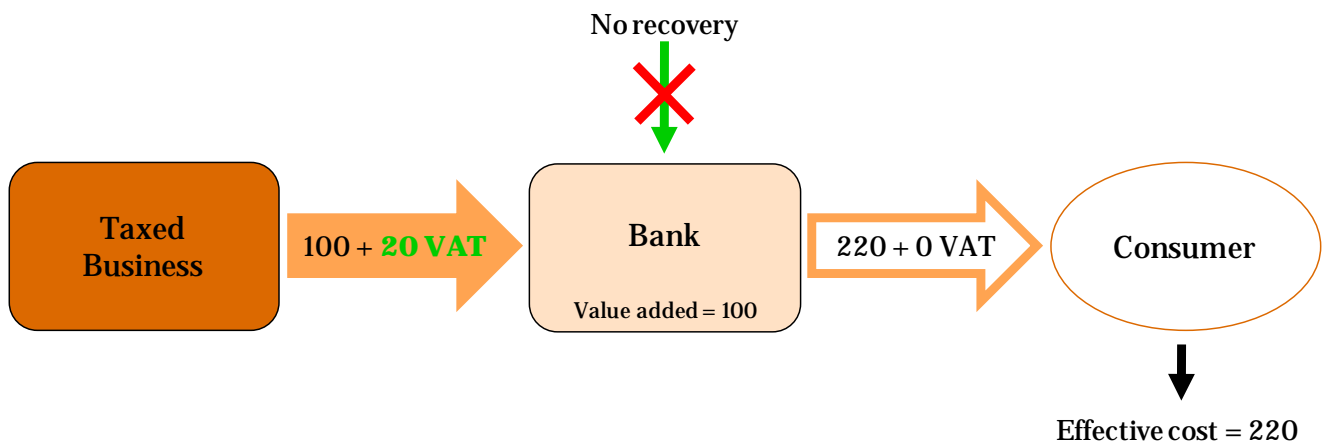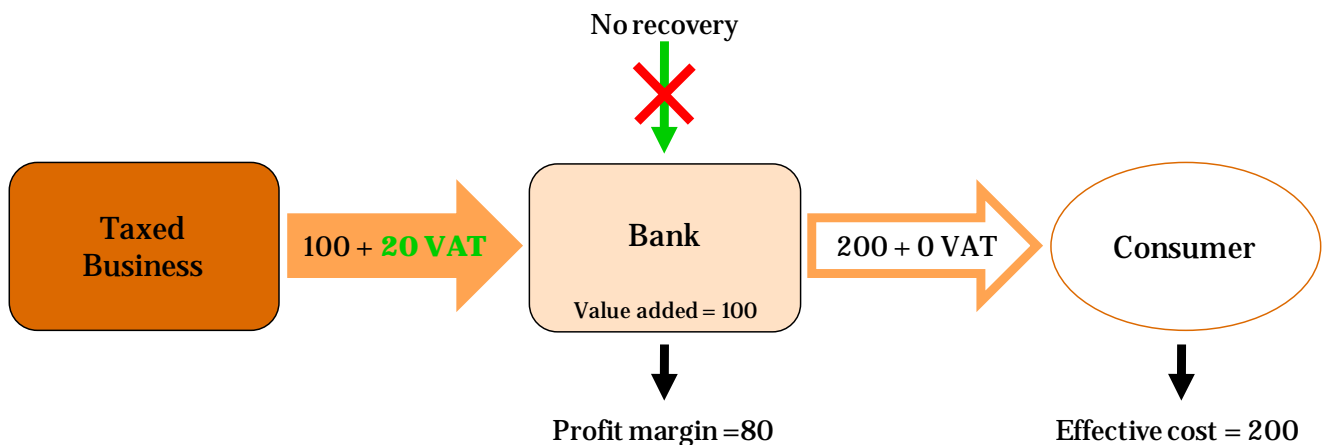
Effective cost = 200
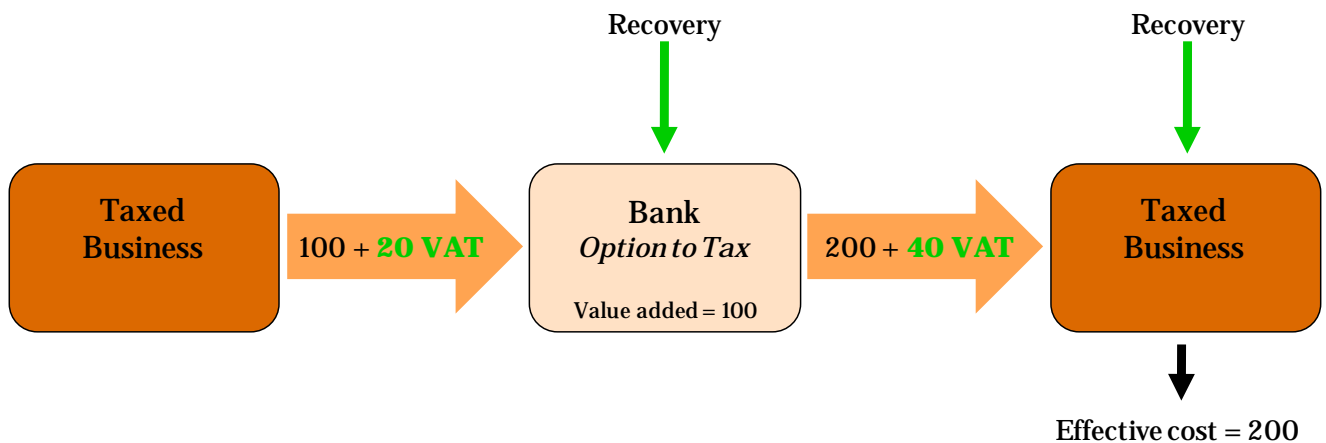
Diagram 3.7

A FTB supplies goods or services to a bank. The value (price) of the supply is 100. The VAT rate is assumed to be 20%. As the supply is a taxed supply, 20 VAT is added to the price of the goods or services. The bank, who in principle is not entitled to recover this input VAT, opts to tax the financial services that he supplies to a business customer, who is a FTB. Due to the option to tax, the supply of financial services is a taxed supply. As a result of the option to tax the bank can fully recover the input VAT. Therefore, this input VAT is not a cost. It is assumed that the bank adds 100 value to the goods or services he purchased, bringing the total value of the financial services to 200. Since the bank has opted to tax, he is required to add 40 VAT on his invoice to his business customer. His business customer, who is a FTB, can fully recover this VAT. Therefore, the VAT is not a cost for him either.

3.6. The Impact of Developments in the Banking Sector and EU VAT

Over the last decades various macroeconomic developments within the banking sector have resulted in structural changes which characterize the business of banks nowadays. Banks have become global financial players offering complex products worldwide.[72] For the impact of these changes on VAT, six important developments can be distinguished within the banking sector, i.e. globalization automation, outsourcing, offshoring, Shared Service Centers (SSC's) and regulatory developments.

3.6.1. Globalization

Further progress in liberalization and harmonization of the financial markets over the past decades have strongly affected the financial environment in which banks operate nowadays.[73] The first signs of liberalization and deregulation, after the increasing financial regulation following the Great Depression[74], were observed in the United States of America by passing the Depository Institutions

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[72] S. Claessens, *Competition in the Financial Sector: Overview of Competition Policies*, IMF Working Paper, WP/09/45, March 2009.

[73] J. Bikker and L. Spierdijk, *How Banking Competition Changed over Time*, DNB Working Paper, No. 167 / February 2008.

[74] The Great Depression was a severe worldwide economic depression, started around 1929 and lasted until the late 1930's or early 1940's. In response, various countries significantly increased its regulation and supervision on financial institutions.

Deregulation and Monetary Control Act of 1980 and the Garn-St. Germaine Depository Act of 1982. Other important changes, which significantly affected the banking environment in the United States of America, are the Riegle-Neal Act of 1994, allowing national banks to operate branches across state lines as of 1997, and the Gramm-Leach Bliley Act, which eliminated the Glass-Steagall Act restrictions against relations between commercial and investment banks. In the EU, the Second Banking Coordination Directive[75], as part of the single European market project in 1992[76], and the establishment of Economic and Monetary Union (EMU) in 1999 have removed important obstacles for cross-border competition.[77] The cross-border competition within the EU is currently still fully moving and developing due to the (potential) membership of new countries in Eastern and Central Europe. The Asian market joined the expansion movement during the late 1990's, after the financial reforms in Japan. Due to the deregulation in Japan many other Asian countries followed to keep up with the competition.

The deregulation around the world has permitted consolidation across more distant and different types of financial institutions.[78] These developments have reduced the costs of supplying banking services across borders.[79] As a result, significant changes are observed in the way banks operate and access capital markets. In this respect, traditional banks have converted into universal banks, offering a wide range of financial services worldwide.[80] Not only the globalization of the banking sector itself, however, stimulated the continuous growth of the banking sector, also the great increase in the demand from businesses, governments and other financial institutions stimulated the continuous growth of the banking sector. Next to this, the growth in the international activities and trade of multinational corporations have increased the demand for services from financial institutions that operate across borders. Encouraging the banks to increase volume by (international) mergers and acquisitions, resulted in universal banks operating worldwide with the establishment of cross-border branches and/or subsidiaries. Not only providing services to customers, but also providing intercompany services to foreign branches and/or subsidiaries.

Diagram 3.8 below gives a network overview of cross-border banking in 1980 and 2007.[81] This overview illustrates the evolution of interconnectedness in the global banking market.

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[75] The Banking Coordination (Second Council Directive) Regulations 1992, 89/646/EEC.

[76] Under the single European market project, the European Commission and the European Union Council of Ministers established directives intended to guarantee equal regulatory treatment of foreign banks by national authorities, unfettered provision of financial services across borders, home-country implementation of bank solvency requirements.

[77] A.N. Berger, D.C. Smith and J. Judge, *Global Integration in the Banking Industry*, Federal Reserve Bulletin, November and J. Bikker and L. Spierdijk, *How Banking Competition Changed over Time*, DNB Working Paper, No. 167 / February 2008.

[78] A.N. Berger, Q. Dai, S. Ongena and D.C. Smith, *To What Extent Will the Banking Industry be Globalized? A study of Bank Nationality and Reach in 20 European Nations*, Working Paper by the Federal Reserve Board, May 2002.

[79] A.N. Berger, D.C. Smith and J.Judge, *Global Integration in the Banking Industry*, Federal Reserve Bulletin, November 2003.

[80] S. Claessens, *Competition in the Financial Sector: Overview of Competition Policies*, IMF Working Paper, WP/09/45, March 2009.

[81] C. Minoiu and J.A. Reyes, *A network analysis of global banking: 1978-2009*, IMF Working Paper, WP/11/74, April 2011.
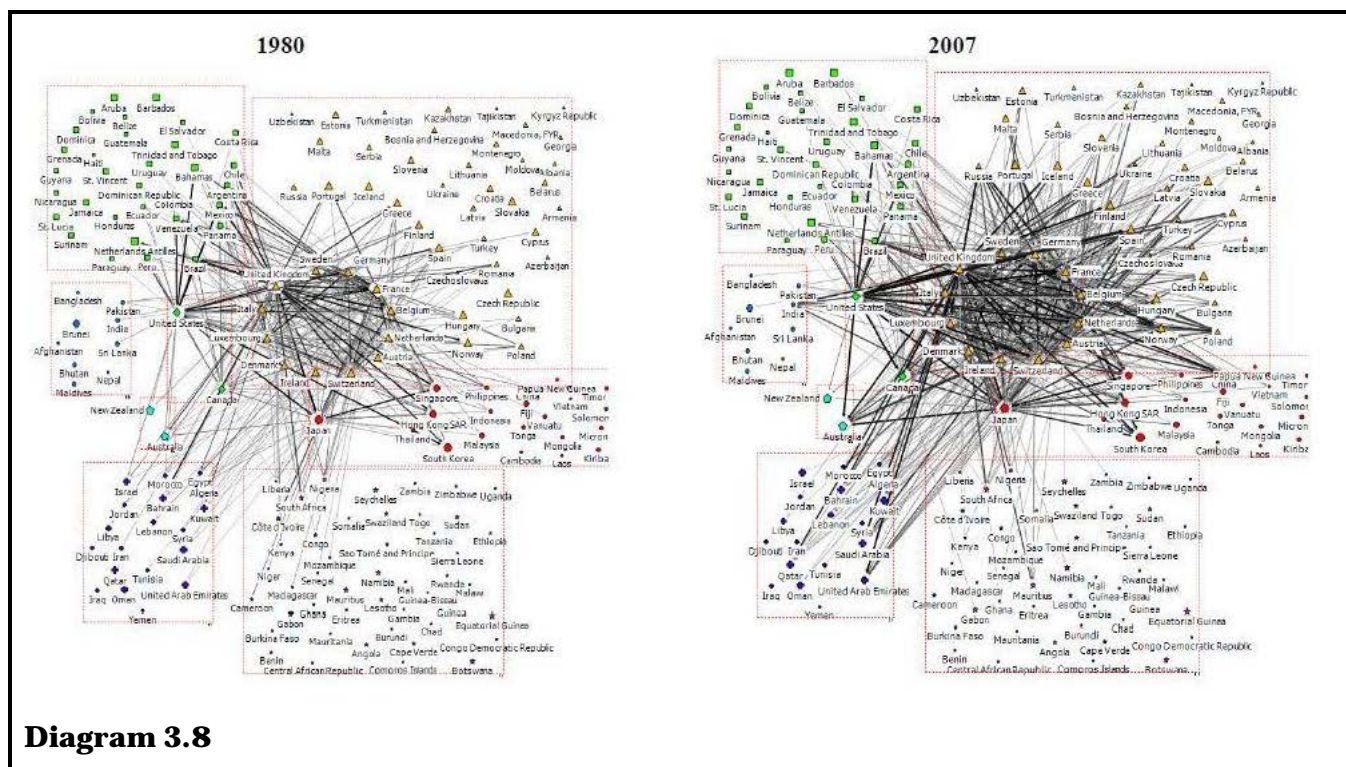
Diagram 3.8

Box 3.1:   The Impact of Globalization from a VAT perspective

From a VAT perspective globalization leads to high rates of irrecoverable VAT as a result of corporate structures based around subsidiaries. The expansion of banks into various countries leads to more transactions between various subsidiaries worldwide, resulting in more intercompany costs and VAT. Therefore, VAT has become a more important cost factor. In this respect it should be noted that from a legal, regulatory perspective it is not always possible to put into place a more VAT efficient structure for example with branches worldwide.

Other unstoppable effects of globalization within the banking sector are (1) the (increase of) unfair competition within the EU and (2) the (increase of) unfair competition with non-EU banks.

1. *For VAT exempt banks selling to FTB's, the lower the standard VAT rate and the more favourable the terms surrounding the VAT treatment of financial services (including the option to tax), the lower the embedded costs associated with VAT. In cross-border transactions, this may afford an important competitive advantage to a bank based in one EU Member State over another.*

2. *The advantage of non-EU banks, compared with the EU banking sector, is that they are not generally confronted with additional VAT costs. As a result, the cost prices of non-EU banks are lower than the cost prices of EU banks. A level playing field between the EU and non-EU banking sector is therefore lacking.*

Globalization and the immediate effects of deregulation also resulted in strong competition within the banking sector, which is nowadays still characteristic and dominating the sector. The competition in the banking sector is, however, an important factor for the efficiency of the production of financial services, the quality of financial products and the degree of innovation in the sector.[82] The strong competition within the sector has therefore encouraged the sector to explore new opportunities and new ways of processing, resulting in more complex banking products and the use of more technological processes.[83] In principle, most (economic) studies suggest that strong competition could lower costs as competition increases efficiency which may lead to less (labour and variable) costs.[84] The introduction of more complex banking products and the use of more technological processes may, however, have added to higher fixed costs in the banking industry, as for the use of technology huge initial investments may be required.[85]

Box 3.2: **The Impact of Competition from a VAT perspective**

The introduction of more complex banking products and the use of more technological processes may have increased fixed costs in the banking industry. Assuming that an important part of these costs are incurred from external service providers, this leads to an increase in non-deductible VAT for the EU banking sector. Therefore, VAT has become a more important cost factor.

3.6.2. Automation

As mentioned in the Section 3.6.1, the strong competition within the banking sector has encouraged the sector to explore new opportunities and new ways of processing. The developments in technology have contributed to rapid changes, both in the services provided by banks, as well as their internal operations. Continuously improvements in technology have led to regular improvements to the services and operations of banks.[86] The use of information technology can be an important source of competitive advantages for banks as it leads to better products and processes, which are important to clients, and enhance overall operational efficiency, resulting in variable cost savings. The expenditure on IT costs is relatively high in the financial sector (see Diagram 3.9 below).[87]

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[82] S. Claessens, *Competition in the Financial Sector: Overview of Competition Policies*, IMF Working Paper, WP/09/45, March 2009.

[83] A. Berger and R. DeYoung, *Technological Progress and the Geographic Expansion of the Banking Industry*, Journal of Money, Credit and Banking, September 2006 and S. Claessens, *Competition in the Financial Sector: Overview of Competition Policies*, IMF Working Paper, WP/09/45, March 2009. The impact of the use of technological processes is further set out in section 3.6.2.

[84] Y. Sun, *Recent developments in European Bank Competition*, IMF Working Paper, WP/11/146, June 2011.

[85] J. Bikker and L. Spierdijk, *How Banking Competition Changed over Time*, DNB Working Paper, No. 167 / February 2008.

[86] *Commercial Banking in the US*, IBISWorld Industry Report 52211, July 2011

[87] Source: InformationWeek 500 ResourceCenter, September 2008.

% of Annual revenue spent on IT

Diagram 3.9
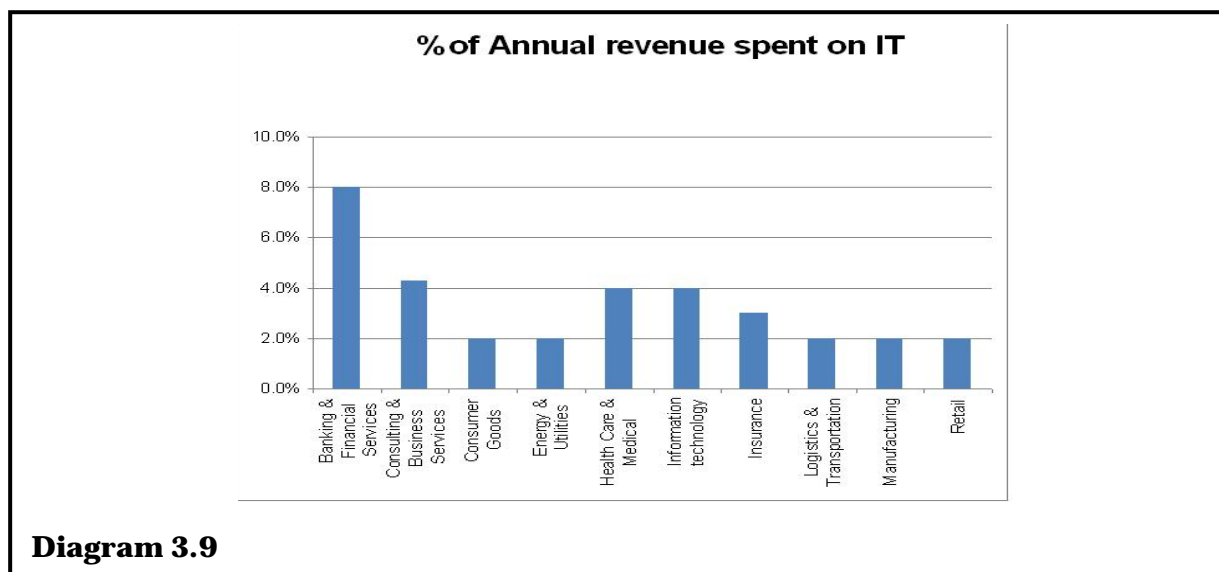
The changes brought by technology and automation to services provided by banks range from the introduction of ATM's, credit and debit cards and online banking facilities, to the trading of more complex and diverse financial products. The use of technology improves the efficiency and effectiveness in the distribution of services and information to clients. Technological developments have therefore enabled many non-depository institutions to offer products and services that traditionally were banking products, and for financial institutions to compete with IT companies in providing electronic financial products and services.[88] In this respect, the technological developments which followed from the strong competition within the banking sector, even have brought more competition within the sector.

The main effects of automation in the banking sector can be summarized as improved data transmission both internally and externally, and cost savings through reduction in labour and processing costs. However, the use of more technological processes may have added to higher fixed costs in the banking sector due to the initial investments made by banks. From a VAT perspective, automation within the banking sector has therefore in principle led to an increase in VAT costs, due to the increase in the input VAT incurred.

Automation of processes have also acted as a catalyst for outsourcing, offshoring and development of SSC's. Automation is in that respect a key step in relocating functions whether through outsourcing, offshoring or SSC's (see Sections 3.6.3, 3.6.4 and 3.6.5).

3.6.3. Outsourcing

The commercial banking sector is highly competitive and this drives the need to achieve operational excellence as means of reducing costs.[89] Driven by this need to reduce costs and focus on core business, outsourcing of activities is an important development within the current banking sector. The banking sector has, however, already outsourced quasi-clerical activities, such as printing and storage of data, since the 1970's.

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[88] *Commercial Banking in the US*, IBISWorld Industry Report 52211, July 2011.

[89] *Commercial Banking in the US*, IBISWorld Industry Report 52211, July 2011.

Outsourcing of information services gathered pace due to the rapid developments in the information technology sector in the 1980's and 1990's.[90] Current studies show that the outsourcing of activities within the banking sector still increases and moves towards the outsourcing of more knowledge processes and core activities within the banking business, instead of the traditional outsourcing of back-office activities.[91] For example, most banks outsource their transaction processing business[92] and post sale and administration functions.[93]

A study carried out by the European Central Bank shows the most important reason for outsourcing is the potential for significant cost savings, cited by almost 90% of the respondent banks.[94] An overview of the main reasons given in that study are set out in Diagram 3.10 below.

EU Banks' Motives for Outsourcing (%)

Motive	%
Cost reduction	89
Access new technology/better mgt	60
Focus on core	58
Scale economies	29
Free resources	24
Quality/service	24
Generate change/flexibility	16

Source: European Central Bank 2004

Diagram 3.10
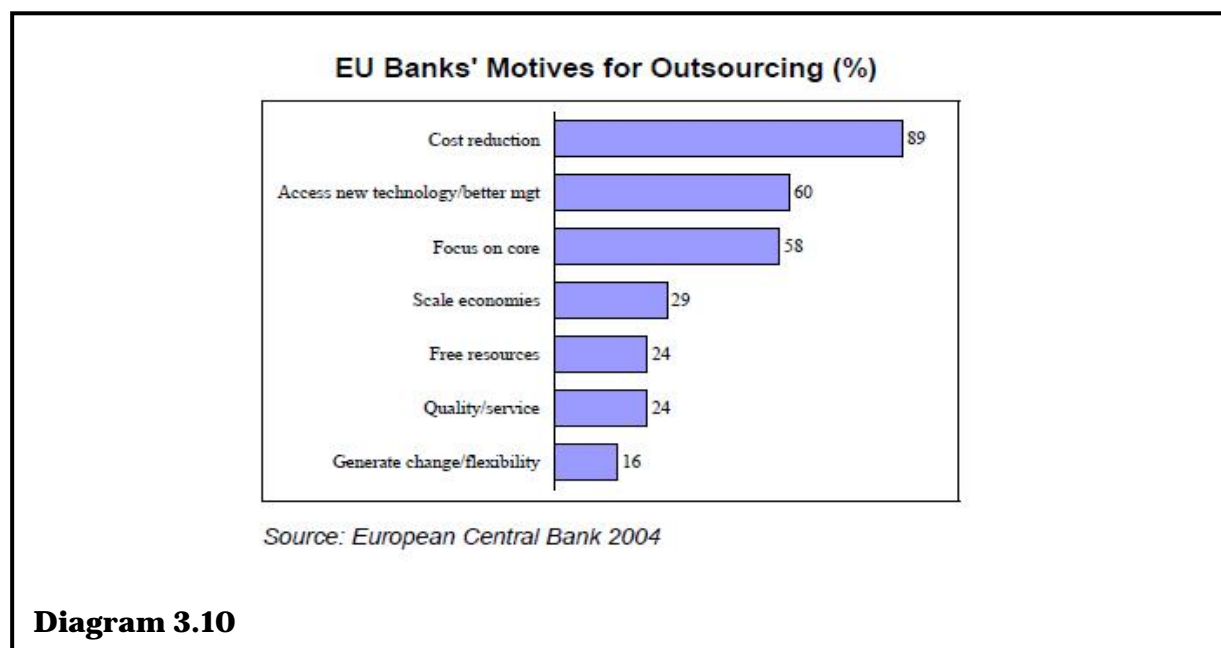
The idea that outsourcing has the potential for significant cost savings is supported by various studies touching on the subject.[95] In fact, a willingness to outsource where appropriate (e.g., non-core banking activities to other entities that have operating efficiencies in those areas) has been identified as one of the key success factors for global commercial banks.[96]

Outsourcing may, however, lead to additional VAT costs.[97] This depends on whether the activities are outsourced in-house or to a third party. Activities carried out in-house do not lead to any VAT costs. However, if a bank outsources services to a third party, it may very well be confronted with VAT on

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[90] Report on EU banking structure, European Central Bank, November 2004.
[91] S. Claessens, *Competition in the Financial Sector: Overview of Competition Policies*, , IMF Working Paper, March 2009, J. Bridgen, *Financial Services Sector: Show Me The Money*, Outsourcing Yearbook 2011 and *ICT outsourcing trends in the financial services sector*, Hudson & Yorke report, June 2011.
[92] *NFC and mobile payments: Excitement builds but rollout is likely to be gradual*, Goldman Sachs (Americas – Technology), 9 June 2011.
[93] *Operational Excellence in Retail Banking: How to become an All Star*, The Boston Consulting Group, February 2011.
[94] Report on EU banking structure, European Central Bank, November 2004.
[95] *Frontiers in Finance, Overcoming Uncertainty*, KPMG, September 2010.
[96] *Global Commercial Banks*, IBISWorld Industry Report J5511 – GL, 16 May 2011.
[97] See R. de la Feria, *The EU VAT treatment of insurance and financial services (again) under review*, EC Tax Review 2007/2, p. 78.

these services, unless an exemption applies.[98] In practise, outsourced services, such as IT and administrative services, tend to be outside the scope of the current FS VAT exemptions. Therefore generally outsourcing leads to additional VAT costs. Consequently, decisions to outsource services to (independent) third parties are influenced by the related VAT costs.[99] In principle, such a business decision should not be influenced by tax reasons.[100]

Box 3.3:   The influence of VAT on outsourcing

A bank decides to outsource its IT services to a third party. The annual in-house IT costs of the bank are 100. Outsourcing the IT leads to an annual decrease of IT costs of 10. Assume the VAT rate is 20%. When the bank outsources the IT services to the third party, it incurs a total amount of 108 (90 + 18 of VAT). Under the assumption that the bank cannot deduct any input VAT, outsourcing does not lead to an annual cost saving of 10 but to an annual cost increase of 8. As a result, outsourcing will not occur even where it is more efficient, lowering economic output and productivity.

3.6.4. Offshoring

Off shoring is the shifting of processing or servicing of a product or process to a lower cost location (e.g., India and China). This differs from outsourcing in that the people performing the work are employees of the company for whom the work is being performed. Offshoring operations generally tend to be more middle office, e.g., legal, HR operations, marketing and investment operations (back office services are generally outsourced), and based in low cost locations. As with outsourcing, offshoring is concentrated in areas where services are not seen as differentiating factors to potential clients.[101] Offshoring is, however, less common than outsourcing[102], as it is more difficult to offshore activities successfully due to the inability to find people with the required competence, and, for functions requiring client contact, and time-zone issues.[103]

A recent survey shows that less than 30 percent of the participants have offshored more than 20 percent of their processing activities, and few banks planned to take further steps in that regard.[104]

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[98] Depending on the type of services that are outsourced a financial exemption may apply. However, an exemption will only apply in case the strict conditions for application of the FS VAT exemptions as laid down in ECJ case law are met (see, *for example*, ECJ 5 June 1997, Case C-2/95, *Sparekassernes Datacenter (SDC) v Skatteministeriet*, [1995] ECR I-03017 and ECJ 4 May 2006, Case C-169/04, *Abbey National plc, Inscape Investment Fund v Commissioners of Customs & Excise*, [2006] ECR I-04027).

[99] Case study shows that the potential VAT costs leads to a disincentive for financial institutions to outsource a part of their activities. Study to Increase the understanding of the Economic Effects of the VAT exemption for Financial and Insurance Services, Final Report to the European Commission, PricewaterhouseCoopers, 2 November 2006.

[100] OECD, Electronic Commerce: Taxation Framework Conditions, A Report by the Committee on Fiscal Affairs, 8 October 1998, p. 4.

[101] *Outsourcing Opportunities and Strategies: Global Fund Manager Survey Report*, RCB Dexis, Accenture, February 2011.

[102] *Outsourcing Opportunities and Strategies: Global Fund Manager Survey Report*, RCB Dexis, Accenture, February 2011, IBISWorld, *Operational Excellence in Retail Banking: How to become an All Star*, The Boston Consulting Group, February 2011.

[103] *Outsourcing Opportunities and Strategies: Global Fund Manager Survey Report*, RCB Dexis, Accenture, February 2011.

[104] *Operational Excellence in Retail Banking: How to become an All Star*, The Boston Consulting Group, February 2011.

This can be contrasted with the fact that not only have nearly all major banks outsourced functions, but outsourcing where appropriate is considered a key success factor in improving organisational excellence and improving costs.[105] The harmonisation of accounting standards worldwide and developments in IT could, however, act as catalysts for offshoring.[106]

The key success factors for offshored functions are similar to those for outsourced ones: realistic expectations, clearly defined deliverables, regular monitoring, flexibility to add new products being brought into the market, ability to cope with regulatory change, competent personnel and a commitment to build long term relationships.[107]

Next to the key success factors offshoring in principle also offers the same challenges to European banks from a VAT perspective as outsourcing does. The fact that banks lack the right to deduct input VAT may have distortive effects when implementing an offshoring model. A decision to offshore services will be influenced by the related VAT costs, assuming that – as in many cases – no exemption applies. Decisions to offshore activities are therefore influenced by the related VAT costs. In principle, business decisions should not be influenced by tax reasons.

3.6.5. Shared Service Centres

Almost inseparable from outsourcing and offshoring of activities is the establishment of Shared Service Centres (SSC's), which function as in-house organizational units that provide supporting processes to banks beyond the demand of one single business unit and focus on the shared use of resources. A survey[108] shows that already 50% of customer care and payment services are or will soon be performed by SSC's. This survey also shows that there is a great attractiveness to shared financial core processes due to the significant cost benefits. This will result in migrating more core processes, finance and risk functions and common services into SSC's. As a result the (future) SSC's will provide more complex services, next to the traditional shared services, with a higher degree of automation/straight-through-processing and broader scope.

From a standpoint of fiscal neutrality VAT should, as much as possible, be a neutral, non-distortive factor. Due to the fact that banks lack the right to deduct input VAT the introduction of SSC's may, however, have distortive effects. For example, if a multinational bank were to set up a SSC, the question arises whether the services of the SSC provided to the various group companies of that bank are taxed. If the services are indeed taxed, the economic advantages of setting up a SSC will be diminished or even be exceeded by the VAT disadvantage. Although SSC's may make use of the so-called cost sharing exemption[109] in order to exempt their services to the banks, in practice the exemption is not widely used due to its strict conditions and different application by Member States. VAT could therefore be an important factor to decide whether or not to set-up a SSC. Case study shows that VAT has inhibited the development of SSC's and has influenced the range and/or volume of services provided from SSC's.[110] It even seems that SSC's are engaged primarily in the provision of

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[105] *Commercial Banking in the US*, IBISWorld Industry Report 52211, July 2011, *Operational Excellence in Retail Banking: How to become an All Star*, The Boston Consulting Group, February 2011.

[106] *Frontiers in Finance, Overcoming Uncertainty*, KPMG, September 2010, Ibis.

[107] *Outsourcing Opportunities and Strategies: Global Fund Manager Survey Report*, RCB Dexis, Accenture, February 2011.

[108] *Shared Services Industry Specifics and Trends in the European FS Market*, BearingPoint, Management & Technology Consultants, Survey 2010.

[109] Art. 132(1)(f) VAT Directive.

[110] Study to Increase the understanding of the Economic Effects of the VAT exemption for Financial and Insurance Services, Final Report to the European Commission, PricewaterhouseCoopers, 2 November 2006.

services which are (1) considered exempt from VAT in the country from which they are being supplied or where they are being received or (2) not liable to VAT as a result of being provided between branches or within a national or cross-border VAT group. Such tax reasons should not influence the business rationale to put in place a SSC, as taxation should seek to be neutral.[111]

3.6.6. Regulatory developments

The European financial sector faces an unprecedented number of current and future regulatory, tax and accounting changes. These changes impact many territories and are sometimes potentially conflicting. The implementation of the regulatory changes demands maximum flexibility of the financial industry regarding restructuring measures. Current business models as well as legal structures need to be reviewed and changed to maximise efficiency on the one hand and to adapt to the new environment on the other hand.

3.6.6.1. Overview of recent regulatory developments

As shown in Appendix 1, the European financial industry needs to consider a significant number of regulatory, tax and accounting changes in the next years. The most significant changes are likely to apply in regard of capital and liquidity requirements (Basel III); in addition, several bank levies have been or will be implemented across Europe[112].

With Basel III a new global regulatory standard on bank capital adequacy and liquidity was agreed by the members of the Basel Committee on Banking Supervision[113]. The new Basel regulation was introduced as a response to the deficiencies in financial regulation revealed by the global financial crisis. For this purpose Basel III introduced new regulatory requirements on capital, bank liquidity and bank leverage. Improving the quality and depth of capital and renewing the focus on liquidity management is intended to spur banks to improve their underlying risk-management capabilities[114].

In addition, as a reaction to the financial crisis, a number of European countries (e.g. Austria, France, Germany, Hungary, Portugal, Sweden and United Kingdom) have introduced levies on banks or are in the process of doing so. The purpose of the levies is generally to ensure that the banking sector contributes a fair amount to recoup the costs of the past financial crisis or to set aside funds for future crises. However, the nature and the scope of those levies differ from one country to another.

In some countries (e.g. Germany) the bank levy is structured as a mandatory fee which is levied by a Rescue Fund managed by the public sector and, therefore, does not qualify as a tax. In other countries (e.g. United Kingdom) the levy is structured as an additional tax. The countries that have introduced bank levies apply different criteria to levy these. One significant difference lies in the treatment of

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[111] See: OECD, Electronic Commerce: Taxation Framework Conditions, A Report by the Committee on Fiscal Affairs, 8 October 1998, p. 4.

[112] IMF: A fair and substantial contribution by the financial sector, final report for the G-20 dated June 2010 (http://www.imf.org/external/np/g20/pdf/062710b.pdf).

[113] Press release of Basel Committee on Banking Supervision of 12 September 2010 (Ref. no: 35/2010), IMF France press release Approved by European Department, 8 July 2011, pp. 44-58 (http://www.imf.org/external/pubs/ft/scr/2011/cr11212.pdf) and Macroprudential policy tools and frameworks, update to G 20 Finance Ministery and Central Bank Governors, 14 February 2011 (http://www.imf.org/external/np/g20/pdf/021411.pdf).

[114] Article: Basel III wants more capital from banks for more security (http://www.euinside.eu/en/news/basel-iii-requires-from-banks-more-capital-for-more-security), 22 September 2010 and Press release of Bank for International Settlements: Group of Governors and Heads of Supervision announces higher global minimum capital standards (http://www.bis.org/press/p100912.htm) Ref no: 35/2010, 12 September 2010.

branches and permanent establishments outside the head office country. These different treatments can lead to a double imposition for banks operating internationally. In particular in relation to banks operating in the three major European financial hubs UK, Germany and France the differences in the scope of bank levies might lead to a double charging. The dilemma of a multiple bank levy burden is well known in Europe and was frequently discussed in the national and international literature.[115] It was particularly discussed in the meeting of European Ministries of Finance leading to a recommendation that the EU needs *"to adopt a coordinated approach so as to avoid competitive distortions between national markets, overlaps and the multiple imposition of levies on banks that have cross-border activities."*[116]

Several countries facing the multiple application of bank levy have concluded or are in the process to conclude bilateral agreements to avoid multiple impositions. As long as there are no bilateral agreements between all EEA-countries or a coordinated approach the European financial institutions may need to adopt flexible company structures to avoid or mitigate double charges.

3.6.6.2. VAT - Neutrality on Restructuring

As described in Section 3.5.3, the VAT exemption for financial services, to a certain degree leads to the sector being 'input-taxed.' In the European Union, inter-branch transactions are not recognized as a supply for VAT purposes. From a VAT point of view, EU Member States generally agree that a single entity cannot contract with itself in order to make supplies. According to the European Court of Justice, "*a fixed establishment, which is not a legal entity distinct from the company of which it forms part, established in another Member State and to which the company supplies services, should not be treated as a taxable person by reason of the costs imputed to it in respect of those supplies*".[117]

The VAT treatment is different if a company provides services not to its legally dependent branch but to its subsidiary. A subsidiary is seen as independent legal entity being able to conclude a contractual agreement with its parent company. As the place where the service is supplied is deemed to be the place where the subsidiary has established its business (Art. 44 VAT Directive), then in case of cross-border services the reverse charge proceeding is applicable within the EU (Art. 196 VAT Directive).

However, the subsidiary will be able to recover the input VAT only to the extent that the received services are used for VATable output services. In case of financial institutions only a portion of the input VAT would be recoverable in accordance with the specific banks VAT recovery rate of the subsidiary. Thus a part of the input VAT will remain as a cost at the level of the subsidiary.

On the other hand the qualification of services provided by the parent company to its subsidiary as VATable may improve the VAT recovery rate at the level of the parent company.

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[115] European Commission: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the European Central Bank, Bank Resolution Funds, of 26 May 2010 COM(2010) 254; Article in EurActiv (http://www.euractiv.com/financial-services/eu-worries-about-distortions-national-bank-levies-news-497512).

[116] Press Release of Council of The European Union regarding the 3030th Council meeting as of 7 September 2010 (Ref. no: 13161/10).

[117] ECJ 23 March 2006, Case C-81/91, *Ministero dell'Economia e delle Finanze and Agenzia delle Entrate v FCE Bank plc.*, [2006] ECR I- 02803.

Similar to the situation in case of outsourcing (see Section 3.6.3) necessary restructuring measures resulting from Basel III or Bank Levy requirements may cause additional costs in the form of non-recoverable VAT and, therefore, have a distortive effect. Where banks, as an example, consider to mitigate double imposition of bank levies by converting local branches into subsidiaries, this could lead to a significant increase of cost on the services provided by the head office to its subsidiary and , hence exacerbate the economic cost resulting from the conversion. In practice, this means that banks will have to weigh which cost are higher, the cost of the additional bank levy or the cost of the additional non-recoverable VAT. However, the parameter of the bank levy and also the amount of intergroup services may differ from year to year. On the other hand the design of the structure is a long term decision and can hardly be changed every year.

In summary, the specific situation of the financial services industry resulting in at least partial non-deductibility of input-VAT may lead to an additional economic burden. The ability of the financial services industry to adjust their structures in accordance to the new regulatory developments and to avoid a disproportionate strain is in so far diminished by the current VAT system.

3.7. *Developments in EU VAT Case Law and Legislation*

Where the banking sector has rapidly changed over the past few decades, the current legal framework for the FS VAT exemptions is still the same as it was when the EU VAT system was introduced back in 1978. Over time, however, the application and interpretation of the exemptions have not remained the same. European and domestic case law have changed the landscape. Especially the European Court of Justice has tried to clarify the scope of the exemptions in its rulings.[118] Case law, however, quite often leads to new unanswered questions and uncertainties. Both the banking sector and tax administrations face this challenge. Moreover, administrative practices vary between Member States generating legal uncertainty and a lack of level playing field. Given that the FS VAT exemptions do not give right to deduct input VAT, the cost base of exempt financial services as a consequence is not always clear upfront. This is an important obstacle the banking sector is confronted with when doing business.

The developments in case law took place within the original legal framework of the EU VAT system. Partial modernization of the VAT system was achieved by the new place of supply rules, which entered into force as of 1 January 2010.[119] These rules brought VAT legislation more in line with the destination principle (taxation in the country of consumption). As a result, however, a wider range of services provided from non-EU countries give rise to non-deductible VAT in the banking sector. This reduces the positive (cost) effects of offshoring to non-EU countries and setting up non-EU SSC's. After some 40 years after the introduction of the EU VAT system, the European Commission by now feels the time has come to have a more fundamental and critical look at this system with a view to strengthening its coherence with the single market, its capacity as a revenue raiser by improving its economic efficiency and robustness, and its contribution to other policies whilst reducing the cost of compliance and of collection. In this respect the Commission has published its Green Paper on the

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[118] See landmark cases, such as ECJ 5 June 1997, Case C-2/95, *Sparekassernes Datacenter (SDC) v Skatteministeriet*, [1995] ECR I-03017 and ECJ 4 May 2006, Case C-169/04, *Abbey National plc, Inscape Investment Fund v Commissioners of Customs & Excise*, [2006] ECR I-04027.

[119] Council Directive 2008/8/EC of 12 February 2008 amending Directive 2006/112/EC as regards the place of supply of services.

future of VAT to trigger and encourage public debate on the future of the EU VAT system.[120] On the basis of the input received the European Commission by the end of 2011 will present a Communication identifying the priority areas in which further action at a EU level would be appropriate. The FS VAT exemptions are not specifically addressed as the European Commission already in 2007 presented proposals for reform of the FS VAT exemptions.[121] The objectives of the proposals are twofold. Firstly, legal certainty for economic operators and tax administrations should be achieved, reducing their administrative burden for correctly applying the rules for the VAT exemption for financial services. Secondly, the impact of hidden VAT in costs of financial services should be reduced. In respect of these proposals discussions are still going on between Member States. Both the banking sector and tax administrations would benefit from modernization of the FS VAT exemptions on short term.

3.8. EU VAT Treatment Banking Sector vs. Fully Taxed Business

The research question, whether the VAT exemptions for banks in the EU lead to a lower level of VAT revenues, compared to the position if banks were fully taxable and whether the current VAT exemptions system has any other benefit or cost for the banking sector, firstly requires that it is analysed if and to what extent there is a difference in the VAT treatment between both sectors and secondly whether any existing difference is in the advantage of the banking sector. Those two pillars of the research question need to be addressed from two different perspectives: a comparison at a taxable person level (banks vs. FTB) and at a transactional level (exempt financial services of banks vs. taxed transactions of FTB). Moreover, it is to be assessed whether the type of clients banks provide their financial services to (B2B or B2C) has an impact on the outcome of the comparison between (supplies of) banks and (supplies of) FTB.

3.8.1. Banks vs. Fully Taxed Business

As indicated in Section 3.3, the comparison between banks and FTB at the taxable person level is in itself imperfect. In the first place, FS VAT exemptions apply to *transactions* rather than to *businesses*. Secondly, since financial services are generally supplied by banks and financial services are – as exception to the main rule that VAT applies to all supplies of goods and services by taxable persons – exempt from VAT, it is evident that the VAT treatment of supplies by banks is different from the VAT treatment of most other supplies of goods and services in the EU.[122] Thirdly, such a comparison ignores the fact that from a legal perspective the financial services carried out by banks are VAT exempt for legitimate reasons (see Section 3.5.2) and the supplies provided by FTB are taxed for valid reasons. While the comparison may be imperfect, it is also clear that if the comparison is made, the VAT positions of the two sectors are different.

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[120] European Commission, Green Paper on the future of VAT, Towards a simpler, more robust and efficient VAT system, 1 December 2010, COM(2010)695 final.

[121] 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, 28 November 2007, COM(2007)747 final and 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, 28 November 2007, COM(2007)746 final.

[122] Here, it is left out of consideration, that in some Member States, banks have the option to tax their financial services (see section 3.5.1), because a comparison of (supplies by) banks and (supplies by) FTB is futile, if both the banks and FTB are to be considered making taxed supplies.

Legal Character

If the different VAT treatment of the two sectors is tested against the benchmark of the legal character of EU VAT, being that VAT is a general tax on consumption, it is safe to draw the conclusion that banks are not put in a favourable or even in a disadvantageous position if compared to FTB's Under a general tax on consumption both banks and FTB's should not be taxed, as such a tax is intended to tax end-consumers.

VAT as a Business Tax

If a bank is able to pass on to its customer the VAT the bank cannot deduct, the bank is neither put in a favourable nor disadvantageous position as compared to FTB. As demonstrated in Section 3.5.3, banks that cannot fully or partially pass on non-deductible VAT to their clients are confronted with lower profit margins. Consequently, under those circumstances, VAT becomes a business tax for banks, whereas VAT should be a tax on consumption, which is the case for FTB's who are in principle[123] completely relieved from the burden of VAT.[124] In its recent Green Paper on the future of VAT the European Commission explicitly states that VAT is intended as a consumption tax and not as a business tax.[125] The effect of VAT becoming a business tax holds true both in the situation of business customers (B2B) and in the situation of end-consumers (B2C), if banks are unable to pass on the incurred input VAT to customers. Due to the right to deduct input VAT FTB are in principle not in any way taxed. They collect the VAT, but this tax is in principle not a cost to them.[126] The VAT is ultimately paid by the end-consumers. From this perspective, the banking sector is treated less favourably than FTB.

However, in theory, VAT can also be a tax on FTB. Firstly, a FTB may not be able to recover the local VAT or the VAT of another Member State charged to it, because the right to recover has been explicitly precluded. Secondly, a FTB may not be able to recover VAT, if the VAT is charged to a group company that is not (fully) considered as a taxable person (e.g. a mere holding company or a holding company that actively manages its subsidiaries but does not charge fees for the management or for advisory services it supplies to the subsidiaries).[127] Under those circumstances, the VAT is effectively a tax on the group of companies. Thirdly, FTB's experience difficulties in reclaiming foreign VAT in

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[123] A FTB can recover the VAT due or paid in respect of supplies to it of goods or services, in so far as the goods and services are used for the purposes of the bank's taxed transactions or financial services carried out for non-EU customers (see Art. 169(c) VAT Directive). However, there are various exceptions to that main rule (see, for example, Art. 176 and Art. 177 VAT Directive) which may differ from Member State to Member State. In addition, FTB businesses may not be able to recover VAT, GST or any other type of consumption tax charged to them in non-EU countries ('non-EU VAT'). See: OECD, VAT/GST relief for foreign businesses: the state of play, A business and government survey, February 2010.

[124] PwC, Special Interest Paper, The Total Tax Contribution of UK Financial Services (Third Edition, 2010), Report prepared for the City of London Corporation, p. 8 shows that irrecoverable VAT is effectively a sector tax for financial services and a higher cost than for other industry sectors.

[125] In the Green Paper on the future of VAT, Towards a simpler, more robust and efficient VAT system, 1 December 2010, COM(2010) 695 final, p. 4.

[126] There may be costs connected to the administrative obligations that need to be fulfilled by FTB.

[127] See, for example: ECJ 14 November 2000, Case C-142/99, *Floridienne SA and Berginvest SA v Belgian State*, [2000] ECR I-09567, ECJ 12 July 2001, Case C-102/00, *Welthgrove BV v Staatssecretaris van Financiën*, [2001] ECR I-05679, ECJ 27 September 2001, Case C-16/00, *Cibo Participations SA v Directeur régional des impôts du Nord-Pas-de-Calais*, [2001] ECR I-06663, ECJ 29 April 2004, Case C-77/01, *Empresa de Desenvolvimento Mineiro SGPS SA (EDM) v Fazenda Pública*, [2004] ECR, I-04295 and ECJ 13 March 2008, Case C-437/06, *Securenta Göttinger Immobilienanlagen und Vermögensmanagement AG v Finanzamt Göttingen*, [2008] ECR I-1597.

other Member States. Were a FTB does not recover foreign VAT in other Member States, that VAT effectively becomes a tax for that FTB. Fourthly, a FTB may incur VAT, GST or any other type of consumption tax in a non-EU country and may be unable to recover that VAT. Fifthly, a FTB may not be able to include the VAT that is due on a supply in the price of that supply. For example, world-market prices may make it impossible to include VAT in the prices of the products sold. If the VAT on a supply cannot be included in (added to) the price of the goods or services, the VAT becomes wholly or partially a tax on that FTB. While in theory it may be that VAT can be a tax on FTB, in practice this will only be in exceptional situations. For, in the first place, the large majority of the restrictions to the right of recovery are connected to private use (consumption) of goods or services purchased by FTB ('non strictly business expenditures').[128] If the right of recovery is denied in order to safeguard the taxation of private consumption, the VAT is not a tax on the FTB, but rather on the private person consuming goods and services that were in first instance purchased by the FTB. In the second place, as regards the non-deductible VAT for non-taxable or partially taxable group companies, in practice there are various solutions to the problem that certain group companies cannot deduct input VAT (e.g. charging management fees, on-charging the costs). Even though these solutions need to be tailored to the group of companies in question, it appears that such non-recoverable VAT is often prevented. Thirdly, with respect to the difficulties FTB experience when reclaiming foreign VAT, it must be acknowledged that the amounts involved are usually relatively small in comparison with the overall charge of VAT to such FTB. Moreover, the process of recovering foreign VAT has been simplified through implementation of Directive 2008/9/EC.[129] It cannot be argued that the current difficulties for FTB to recover foreign VAT are still so substantial that they outweigh the fact that banks cannot deduct input VAT at all. As regards the fourth consideration, that FTB may incur 'non-EU VAT' which they cannot recover, that causes the non-EU VAT to become a tax on such FTB operating in non-EU countries. Due to globalisation (see Section 3.6.1), the effect of FTB being unable to recover 'non-EU' VAT has increased. However, it must be realised that in itself, that does not necessarily mean that the FTB is brought in a less favourable position than a bank, because a bank operating in that same non-EU country may incur the same amount of non-EU VAT which it cannot recover. Concerning the fifth cause for VAT becoming a tax on FTB, it is important to acknowledge that if the FTB makes a supply to another FTB (a B2B supply), adding VAT to the supply will cause no difficulties for either the supplier or the customer. For both parties, the VAT charged to them will be deductible. However, if the customer does not have a full right of recovery (e.g. in B2C supplies), the VAT charged on the supply will actually be a cost for the customer. It seems that supplies in which the VAT is a cost for the customer and in which the market dictates that VAT is not passed-on to the customer only account for a minor, if not insignificant part of the amount of supplies in the economy.

Even though generally, the VAT rates increased over the years and globalisation is likely to have caused more (foreign) VAT to become irrecoverable and thus the effect of VAT becoming a tax on FTB gained weight, it is all in all fair to draw the conclusion that even though there may be situations in which VAT is in effect a tax on FTB, such is only the case in a limited number of situations. Moreover, the transactions that cause the effect of VAT becoming a tax on FTB only represent a very minor part of all transactions carried out. After all, banks cannot deduct input VAT at all, where FTB's can at the very least recover a substantial part of the VAT on their inputs. Therefore, from a conceptual point of

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[128] Apparently, the possible exclusion of the recovery of input VAT for cyclical economic reasons (Art. 177 VAT Directive) was only applied by Italy to the purchase or importation of certain motor vehicles, fuels and lubricants until 1987. See: Terra/Kajus, *A Guide to the European VAT Directives*, IBFD (password restricted online website), Part 3.1, Chapter 10.4.3.

[129] Council Directive 2008/9/EC of 12 February 2008 laying down detailed rules for the refund of value added tax, provided for in Directive 2006/112/EC, to taxable persons not established in the Member State of refund but established in another Member State.

view and tested against the benchmark of the legal character of EU VAT, the conclusion that banks are put in a disadvantageous position if compared to FTB's is valid.

Over time and due to the developments in the banking sector (see Section 3.6) and due to the globalization of and increased competition in the banking sector, the unequal treatment of banks if compared to FTB's has become more problematic.

Developments in VAT Law

Developments in VAT law, such as the steady increase in the VAT rates applied in the Member States contributed to a rise in VAT costs for the banking sector. It is foreseen that in some Member States, the standard VAT rate will exceed the current maximum of 25%.[130] Larger amounts of non-deductible VAT are currently at stake then at the time the EU VAT system was introduced. Recent changes to EU VAT legislation (the so-called 'VAT-package') even further contributed to the rise in VAT costs for the banking sector and thus to the further widening of the gap between the VAT-treatment of banks on the one hand and FTB's on the other hand. Due to the new place of supply rules, which came into force on 1 January 2010[131], a wider range of services provided from non-EU countries give rise to non-deductible VAT. Although these changes bring the place of supply rules more in line with the destination principle (taxation in the country of consumption), this legislative development negatively impacts offshoring by European banks to non-EU countries and setting up non-EU SSC's. FTB's are not affected by these developments, because they can fully recover input VAT. Hence, these developments also contribute to the widening of the gap between the VAT position of banks and FTB's in the disadvantage of banks. The VAT package also entails a disadvantage for FTB's that banks do not have. For, FTB's are required to file recapitulative statements ('EC Sales list') with respect to their taxed intra-Community B2B services, whereas banks that carry out only exempt intra-Community B2B services do not have such an obligation.

Developments in the Banking Sector

The developments in the banking sector described in Section 3.6, amongst which the globalization, developments in technology (automation), outsourcing, offshoring, SSC's and regulatory developments have caused that the banking sector is confronted with increasing amounts of non-deductible VAT. Even though the FTB sector has seen some of these developments, the VAT consequences of those developments are not as severe for FTB as they are for banks, due to the fact that FTB can recover (the largest part of) the VAT on their inputs, while banks cannot. Consequently, since the European VAT system was introduced, the position of banks compared to FTB's has increasingly become less favourable.

Non-EU Competition

There is also a difference between the banking sector and FTB as regards the international competitive position of EU businesses on the one hand and non-EU business on the other. From a VAT perspective, there is a level playing field between FTB established in the EU and their non-EU

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[130] Hungary, for example, proposed an increase of the standard VAT rate to 27% in 2012. See: http://www.kormany.hu/hu/miniszterelnokseg/hirek/koltsegvetes-2012-750-milliardos-allamhaztartasi-egyenleg-javitas.

[131] Council Directive 2008/8/EC of 12 February 2008 amending Directive 2006/112/EC as regards the place of supply of services.

competitors. Non-EU business will normally not be charged with VAT. Due to the right to deduct input VAT, EU businesses will also not carry the burden of VAT. Consequently, VAT does not negatively impact the cost basis of the products of fully taxed EU business in comparison with fully taxed non-EU businesses. Therefore, VAT does not distort competition between 'FTB's in- and outside the EU. By contrast, a level playing field does not exist between the EU and non-EU banking sectors.

> *For the purpose of this Chapter, "non-EU" stands for countries that do not have a VAT system with a similar impact on EU banks, for example countries that do not have a VAT system (e.g. US), territories that grant some right of input VAT recovery (e.g. Australia, Singapore) and countries where the VAT impact is significantly lower caused by a lower VAT rate (e.g. Switzerland).*

EU banks are confronted with additional costs due to fact that they cannot deduct the VAT charged to them. Typically, on supplies to non-EU banks there will be no VAT. Consequently, EU banks are in a disadvantageous position compared to non-EU banks.[132] Even though the VAT Directive contains a measure to mitigate this competitive disadvantage, the disadvantage is not completely removed.[133] Non-EU banks, for example, still have a lower cost basis in comparison with EU banks when providing financial services to EU clients. The EU banking sector therefore is treated adversely compared to fully taxed EU business when looking at their international competitive position in relation to their non-EU counterparts. This is illustrated in Diagram 3.11 below.[134]

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[132] See, *for example*: H. Huizinga, *A European VAT on Financial Services?,* Economic Policy 2002, p. 499.

[133] Art. 169(c) VAT Directive allows banks to deduct input VAT directly relating to exempt financial services they provide to clients established outside the EU. This neutralizes the competitive disadvantage for EU banks when supplying services to non-EU customers.

[134] The example abstracts from the fact that on goods supplied by non-EU FTB's to EU customers, customs duties may be due upon importation of those goods in the EU. Therefore, the comparison between banks and FTB's should be restricted to supplies of services (the 'importation' of services into the EU will not in any case attract customs duties).

Business → 100 (no VAT) → **non-EU Bank** (Value added = 100) → 200 (no VAT) → **Consumer**

No recovery ✗

Taxed Business → 100 + **20 VAT** → **EU Bank** (Value added = 100) → 220 + 0 VAT → **Consumer**

Effective cost =
200 from non-EU Bank
220 from EU Bank
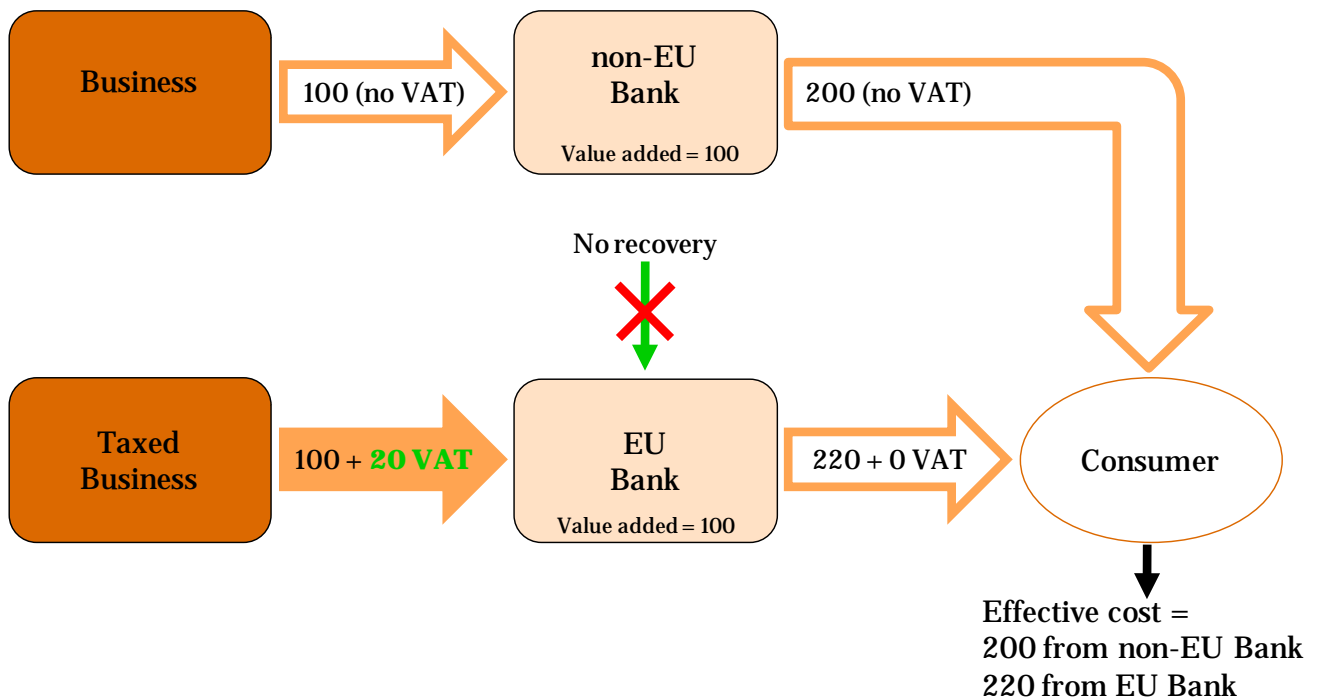
Diagram 3.11

A business supplies goods or services to a Bank in a country without a VAT system ("non-EU bank"). The value (price) of the supply is 100. It is assumed that the non-EU bank adds 100 value to the goods or services he purchased, bringing the total value of the financial services the non-EU bank provides to 200. The non-EU bank does not have to add VAT on his invoice to the EU end-consumer. This end-consumer pays a price of 200.

Assume that an EU bank purchases similar goods or services from a supplier. The value (price) of the supply is 100. The VAT rate is assumed to be 20%. As the supply is a taxed supply, 20 VAT is added to the price of the goods or services. The EU bank, who is fully exempt, cannot recover this VAT. Therefore, this input VAT is a cost for him. It is assumed that the EU bank adds 100 value to the goods or services he purchased, bringing the total value of the financial services the bank provides to 200. In this example it is assumed that the EU bank passes on the irrecoverable VAT (20) to his customer, an end-consumer that has no right to deduct input VAT (includes the irrecoverable VAT in the prices of his exempt financial services). Since the EU bank carries out exempt financial services, he is not allowed to add VAT on his invoice to the end-consumer. The end-consumer, who has no right to deduct input VAT, pays a price which includes an amount of 20 of irrecoverable VAT. Therefore, this VAT becomes also a cost for him. The total cost of the financial services is 20 higher in case of an EU bank compared to a non-EU bank.

Relevance of Business Structures

Globalization and increased competition have led to an expansion of businesses into various countries and various activities. For commercial and legal reasons, businesses have set up separate legal entities, creating multinational groups. Characteristic to multinational groups is the supply of intercompany services. In a like manner, such developments took place within the banking sector and in FTB. However, if this development is assessed in a VAT context, there is a noticeable difference on the impact of this development. Whereas intercompany services, such as management,

administrative, IT services and the like do not lead to VAT costs in a FTB environment due to the right to fully deduct input VAT, they do lead to VAT costs in the banking sector. Hence the banking sector is treated less favourable than FTB, when operating in a multinational group with numerous separate legal entities.[135] This is illustrated in Diagrams 3.12 and 3.13 below.
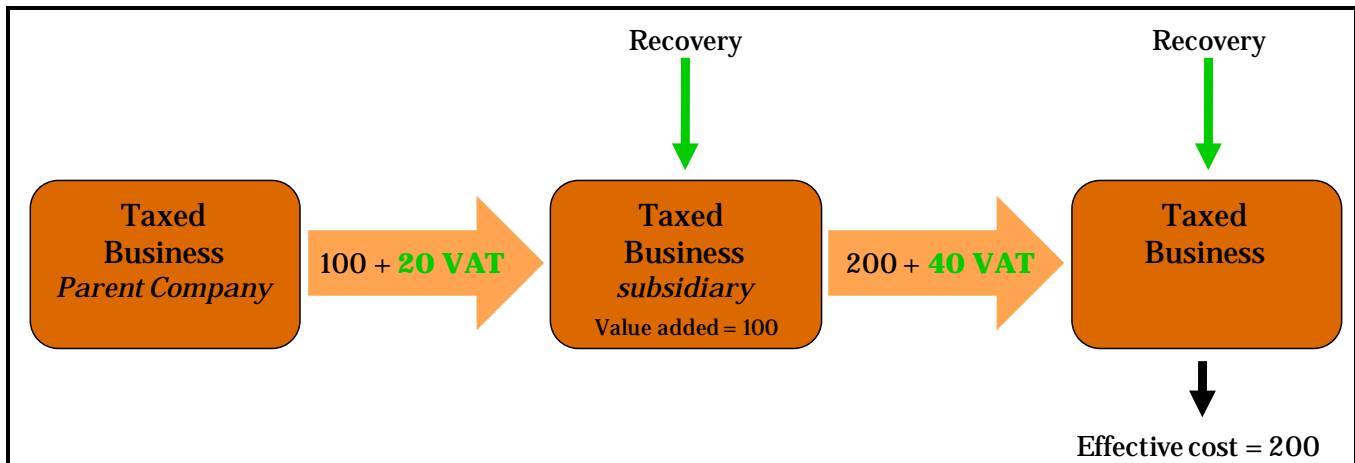
Diagram 3.12

A fully taxed parent company supplies IT services to a fully taxed subsidiary. The value (price) of the IT services is 100. The VAT rate is assumed to be 20%. As the supply is a taxed supply, 20 VAT is added to the price of the IT services.[136] The subsidiary, who is also a FTB, can fully recover this VAT. Therefore, this input VAT is not a cost for him. It is assumed that the subsidiary adds 100 value to the IT services he purchased, bringing the total value of services he supplies to 200. Since the subsidiary carries out taxed supplies, he is required to add 40 VAT on his invoice to the third (last) customer in this production and distribution chain. The third customer, who is also a FTB, can fully recover this VAT. Therefore, the VAT is not a cost for him either.

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[135] Although VAT grouping (Art. 11 VAT Directive) and the cost sharing exemption (Art. 132(1)(f) VAT Directive) can mitigate this, these solutions prove to be difficult if not impossible to implement in cross-border situations.

[136] The possibility in some Member States to form VAT groups is disregarded in this example. On the basis of Art. 11 VAT Directive Member States may introduce a VAT grouping regime. In case of VAT grouping between the parent company and its subsidiary, the supply of the IT services would be outside the scope of VAT as a VAT group is regarded as a single taxable person for VAT purposes.

No recovery

Bank
Parent Company
(IT-department) → 100 + **20 VAT** → Bank
Subsidiary

Value added = 100 → 220 + 0 VAT → Taxed
Business

Effective cost = 220
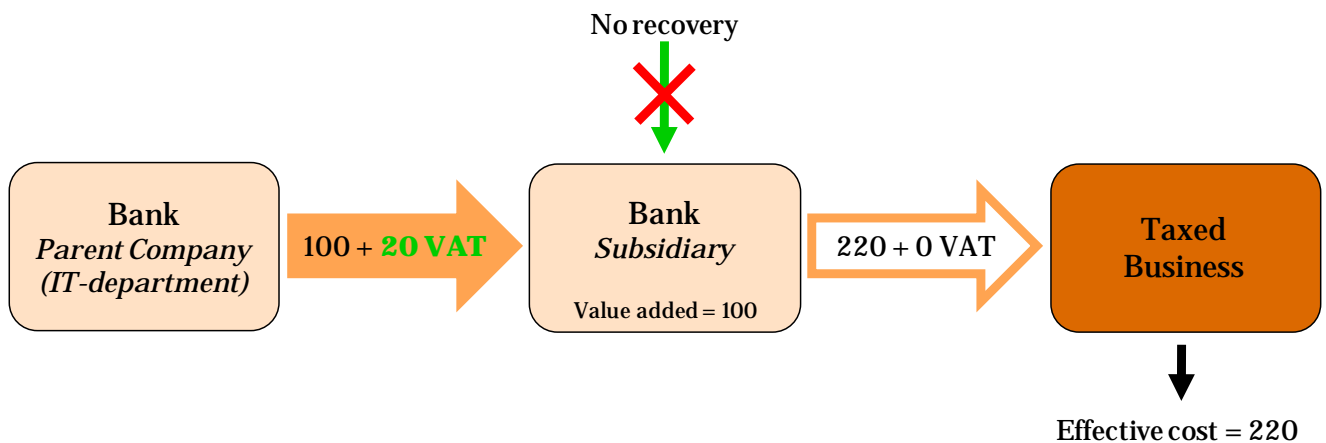
Diagram 3.13

A parent company in the banking sector supplies IT services to a fully exempt banking subsidiary. The value (price) of the IT services is 100. The VAT rate is assumed to be 20%. As the supply is a taxed supply, the parent company adds 20 VAT to the price of the IT services.[137] The subsidiary, who is a fully exempt bank, cannot recover this VAT. Therefore, this input VAT is a cost for him. It is assumed that the banking subsidiary adds 100 value to the IT services he purchased, bringing the total value of services he supplies to 200. that the banking subsidiary passes on the irrecoverable VAT (20) to his business customer (includes the irrecoverable VAT in the prices of his exempt financial services). Since the banking subsidiary carries out exempt financial services, he is not allowed to add VAT on his invoice to his business customer. The business customer, who has a right to fully deduct input VAT, pays a price which includes an amount of 20 of irrecoverable VAT. Therefore, this VAT becomes also a cost for him. Compared to FTB (see Diagram 3.8) intercompany services lead to an increase in costs for business customers of banking subsidiaries that supply exempt financial services.

Sticking VAT on intercompany services in the banking sector can be avoided if a bank changes its business model from a legal entity based structure (parent company – subsidiary) into a single legal entity based structure (head office – branch).[138] In principle, services between a head office and its branch are outside the scope of VAT. Then, a bank comes into a similar position as a FTB.

Regulatory Developments and Banking Levies

The mere fact that some banks are willing to change their business model just to save the VAT on their intercompany services, shows that EU VAT is disadvantageous for the banking sector in comparison to FTB. Changes in the regulatory environment and banking levies require banks to reassess their structural decisions to set-up branches instead of subsidiaries (see Section 3.6.6). Where regulations require banks to set-up subsidiaries, VAT on intercompany services will become a

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[137] The possibility of VAT grouping is disregarded in this example. On the basis of Art. 11 VAT Directive Member States may introduce a VAT grouping regime. In case of VAT grouping between the banking parent company and its banking subsidiary, the supply of the IT services would be outside the scope of VAT as a VAT group is regarded as a single taxable person for VAT purposes.

[138] ECJ 23 March 2006, Case C-81/91, *Ministero dell'Economia e delle Finanze and Agenzia delle Entrate v FCE Bank plc.*, [2006] ECR I- 02803. It should, however, be noted that some Member States do not in full accept the concept laid down in this judgment. Moreover, some Member States have taken specific measures to tax services in certain head office – branch configurations.

unavoidable additional cost for banks, forcing them into a disadvantageous position compared to FTB.

Liability for VAT and Systems Configurations

Even though VAT is in principle not a cost for FTB's, VAT does pose a substantial risks for FTB's. For, a FTB will be held liable for VAT that has not been accounted for correctly. It is in no way guaranteed that VAT, which is retroactively assessed by the tax authorities can be passed on to customers. Moreover, any fines or interests will form additional costs for a FTB. A bank does not charge VAT on its supplies. In so far, the VAT risk of a bank is smaller than that of a FTB, bringing FTB's in a less favourable position than banks. Due to developments such as the increases over time in the VAT rates, the risks of FTB's even got bigger, whereas the risks for banks remained the same. Due to ongoing automation of business processes, relatively small mistakes in the configuration of the (ERP) systems, may lead to serious VAT risks to materialize.

Cash flow

There is also a difference between the banking sector and FTB in terms of VAT cash flow costs. FTB may have VAT cash flow costs. This is for example the case, if a customer only pays for the goods or services supplied to him after the supplier had to pay the VAT on that supply to the tax authorities.[139] Such a VAT cash flow disadvantage will not incur if a bank carries out an exempt supply, for the simple reason that there will be no VAT on that supply. This puts banks in a more advantageous position. However, it must be realized that FTB can also obtain VAT cash flow *advantages* by careful timing the date of supply, the date of invoice, the tax point, the date of payment and / or the moment on which the VAT return is filed. Due to the total or almost entire lack of output VAT and the impossibility to deduct input VAT, the banking sector does not avail of the possibility cash flow optimization. The fact that banks do not have the possibility to use input and/or output VAT to obtain VAT cash flow advantages whilst FTB have such possibilities can also be considered as a *disadvantage* for banks.

Administrative and Compliance Costs

Both the banking sector and FTB have to deal with administrative and compliance obligations and therefore incur compliance costs. VAT compliance costs are a major administrative burden for EU business.[140] Moreover, compliance costs may attract VAT, if compliance tasks are outsourced or if external costs are made in order to automate the compliance processes. In the latter situation, banks have the disadvantage that they cannot recover the VAT on those costs.

The administrative and compliance obligations in themselves also cause differences between FTB's and banks. In this respect, foreign VAT registration requirements are likely to be a major disadvantage for FTB's. Since banks carry out exempt supplies, in theory, they will be less likely be required to register for VAT in a foreign country. However, if a bank uses local subsidiaries or branches that are to be considered as fixed establishments for VAT, VAT registration of either the

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[139] To get a full picture of the FTB's VAT cash flow position, ideally the recoverable VAT on the inputs should also be taken into account. If the invoice for the purchases is paid for before the VAT on the outputs is offset / reclaimed, there will be a VAT cash flow cost arising from the purchases of a FTB.
[140] European Commission, Green Paper on the future of VAT, Towards a simpler, more robust and efficient VAT system, 1 December 2010, COM(2010) 695 final, p. 4.

subsidiaries or the fixed establishments in the various countries will normally be required. Therefore, it appears that the disadvantages of having to register for VAT in other countries count for both FTB's and banks. What *does* cause a difference is that FTB's carry out taxed supplies, but that the VAT rates differ from country to country. Consequently, FTB's that operate in various countries, have the disadvantage of having to deal with differences in the VAT rates. There are not only differences in the VAT rates between the various countries, but the products that benefit from a low(er) VAT rate also differ from country to country. Banks do not have to deal with these differences. However, they have to deal with the differences in the application of the VAT exemptions. Not only are the exemptions *de facto* different from country to country, there may also be differences in the interpretation, hence in the application of exemptions that appear to be identical (see Section 3.7). Clearly, that is a disadvantage for banks. Focussing on the EU environment, the costs of compliance are also caused by the compliance requirements regarding VAT returns and EC Sales Listings for intra-Community supplies of goods and services.[141] Member States may have discharged businesses from their VAT reporting obligations. This may, for example, be done by introducing a threshold for VAT registration[142] or a waiver from filing VAT returns.[143] Although these measures are generic by nature, they are likely to benefit VAT exempt businesses, including banks, rather than FTB. However, administrative simplification measures are generally intended for smaller businesses and usually only apply to them. Small businesses are not very common in the banking sector nor do they represent the large majority of FTB. Since the introduction of the VAT package per 1 January 2010[144], EC Sales Listings not only have to be filed for taxed intra-Community supplies of goods but also for taxed intra-Community supplies of services. Given the fact that FTB are engaged in taxed supplies, it may be generally assumed that they have to report a larger number of supplies in their EC Sales Listings compared to the banking sector. However, in view of legal uncertainty regarding the application and interpretation of the FS VAT exemptions and the differences between Member States (see Section 3.7), the complexity of filing EC Sales Listings is more burdensome for the banking sector, even though the number of transactions that banks have to report is presumably smaller. The aforementioned legal uncertainty and the different VAT treatment of financial services in the various Member States also give rise to additional compliance costs for the banking sector.

When comparing the banking sector and FTB from the perspective of compliance related to input VAT deduction, at first sight, it appears that FTB are treated less favourable compared to the banking sector. After all, FTB have to record and reclaim input VAT, whereas banks only making VAT exempt supplies do not. Moreover, as research of the OECD shows, FTB are often confronted with difficulties in receiving refunds of foreign VAT.[145] These difficulties lead to additional costs for FTB's and may even lead to actual VAT costs, if the refund in the end is not received. Banks only providing VAT exempt financial services do not face these difficulties. However, the fact that in practise not all financial services of banks are VAT exempt leaves them with compliance issues regarding the deduction of input VAT.[146] In principle input VAT directly attributable to taxed financial services is fully deductible, input VAT directly attributable to exempt financial services is not deductible and

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[141] Art. 262 VAT Directive.
[142] In the United Kingdom, for example, a registration threshold applies.
[143] In the Netherlands, for example, businesses only making VAT exempt supplies are not obliged to file VAT returns.
[144] Council Directive 2008/8/EC of 12 February 2008 amending Directive 2006/112/EC as regards the place of supply of services.
[145] OECD, VAT/GST relief for foreign businesses: the state of play, A business and government survey, February 2010.
[146] Mirrlees Review, Tax by Design, Chapter 7, Implementation of VAT, p. 174-175.

residual input VAT is deductible on the basis of a recovery ratio.[147] FTB, however, can deduct all input VAT, which requires less administration and control measures. On balance, it appears that from a compliance cost perspective, the banking sector is not put in a favourable or maybe even in a disadvantageous VAT position compared to FTB. However, a quantification of VAT related compliance costs of the banking sector in comparison with VAT related compliance costs of FTB requires further empirical research. That research is outside the scope of this phase of the Study.

3.8.2. *Financial Services vs. Transactions in Fully Taxed Business*

When answering the research question from a transactional perspective, in fact the following question should be answered: are VAT exempt financial *services* provided by banks treated favourably compared to *supplies of goods or services* carried out by FTB? By definition, a supply of goods or services that is exempt from VAT is taxed less than a similar supply that is taxed at a normal VAT rate. Hence, the VAT treatment of supplies of financial services by banks is treated different from the VAT treatment of supplies of goods or services by FTB. If a VAT exempt supply of financial services by a bank on a standalone basis were to be compared with a taxed supply of a FTB on a standalone basis, without taking any other factors into consideration, the conclusion is that the (VAT exempt) supplies by banks are treated favourably compared to taxed supplies by FTB.

This conclusion can only be drawn if VAT exempt financial services provided by banks and taxed supplies by FTB are analysed in isolation. Such an analysis does not adhere to economic and legal reality. To find out whether VAT exempt financial services provided by banks are treated favourably compared to taxed transactions of FTB, first of all the consequence of the denial of input VAT deduction resulting from the VAT exemption must be taken into consideration. Generally, no deduction of input VAT exists for VAT exempt financial services.[148] By contrast, taxed transactions give rise to deduction of VAT incurred on goods and services purchased which directly relate to these transactions. The effective VAT rate - being the amount of 'true' VAT on taxed supplies or the amount of irrecoverable input VAT passed through in the price of VAT exempt supplies - of VAT exempt transactions will always be below the standard VAT rate. [149] As demonstrated in Section 3.5.3, the (im)possibility to pass on irrecoverable VAT by including it in the prices of VAT exempt financial services, affects the effective VAT rate. If a bank is able to fully pass on the amount of irrecoverable VAT it incurs, the difference between the effective VAT rate of its financial services and taxed supplies of a FTB depends on the amount of incurred irrecoverable input VAT and the possibility for the bank to pass on this sticking VAT in the prices of its financial services. If a bank is not at all able to pass on the irrecoverable VAT, the difference in effective VAT rate is in fact equal to the VAT rate applied to taxed supplies of a FTB. Moreover, the profit margin of the bank is negatively impacted if it cannot pass on the irrecoverable VAT to its customers. In conclusion, at a transactional level VAT exempt financial services are still treated favourably compared to taxed supplies, even if the denial of input VAT deduction is taken into account. The effective VAT rate of VAT exempt financial services is lower than the effective VAT rate of taxed supplies even though a taxed business can deduct the VAT on its input, but a bank cannot.

Still, this conclusion needs further differentiation, because the level of the effective VAT rate does not show the effect of the VAT exemption to the effective cost price for the customer purchasing the goods

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[147] Art. 168 and 173 VAT Directive.

[148] Art. 169(c) VAT Directive allows banks to deduct input VAT directly relating to exempt financial services they provide to clients established outside the EU.

[149] Mirrlees Review, Tax by Design, Chapter 7, Implementation of VAT, p. 174.

or services. For this reason, a VAT exemption is not always more generous than taxation, as the Mirrlees Review report Tax by Design correctly states.[150] Comparing the effective VAT rates between VAT exempt financial services and taxed supplies only entails a comparison between the total cost prices of the two types of supplies for the customer without addressing the *customer's* right to deduct input VAT (or lack thereof). If the variable of the customer's right of deduction is put into the comparison it immediately becomes clear that the VAT treatment and the actual cost price for customers is different for exempt B2B and B2C supplies by banks on the one hand and taxed B2B and B2C supplies of FTB on the one hand. If a FTB charges VAT to a B2B customer, the VAT on the supply will neither be a cost for the supplier and the customer. If a FTB charges VAT to a B2C customer, that VAT will be a cost for the customer, since he cannot deduct that VAT as input VAT. If a bank carries out an exempt financial service for a B2B client, the bank will either have to pass on the irrecoverable VAT on his inputs or settle for a smaller profit margin. In case the bank chooses to pass on (part of) the irrecoverable VAT in its prices, the B2B client will pay the VAT that is hidden in those prices. The B2B customer cannot recover such hidden VAT. A comparison between B2B supplies by FTB and B2B by banks shows that the banks are effectively in a less favourable VAT position. However, a similar analysis with respect to B2C supplies shows that banks are in a favourable VAT position. The diagrams included in Section 3.5.3, illustrates the differentiation to the type of customers.

In conclusion, a basic comparison at a transactional level shows that VAT exempt financial services of banks are treated favourably compared to taxed supplies of FTB. The effective VAT rate of these financial services will be lower than the effective VAT rate of taxed supplies, even when the possibility to pass on irrecoverable input VAT on to customers is considered. The actual difference in effective VAT rate between the two, however, depends on the amount of irrecoverable input VAT a bank incurs as well as on the amount the bank can in fact pass through to its customer. However, a balanced comparison of the VAT treatment at a transactional level of supplies of banks and FTB, requires that the actual cost price of VAT exempt financial services and taxed supplies for the customer is also taken into account. That comparison shows that B2B financial services are treated less favourable than taxed supplies, whereas B2C financial services are treated favourably compared to taxed supplies.[151] The extend to which the banking sector as a whole is treated less favourable (B2B) and more favourable (B2C) requires statistical research, such evidence is provided for in Chapter 4.

The foregoing analysis focuses at a part of the production and distribution chains in which banks and FTB's operate. The analysis does not extent to stages of the production and distribution chain where the customers of banks are located. However, if the customer is a business, the production and distribution chain does not end at that stage. For, a FTB will make taxed supplies to the next customer in the chain. If at some stage in the production and distribution chain, a bank incurs VAT which it cannot deduct and passes on this non-recoverable VAT as part of the cost price of its services to a FTB (B2B supply), the result is not only that the B2B customer pays the hidden VAT, but also that the hidden VAT becomes a part of the prices of the FTB' prices to customers. Since a FTB carries out taxed supplies, VAT will (also) be calculated over the hidden VAT which is included in the prices. VAT will be cascading in the production and distribution chain. Therefore, when looking at the production and distribution chain as a whole, the prices of goods and services in a chain in which a bank was involved are lower than those in a production and distribution chain in which only FTB

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[150] Mirrlees Review, Tax by Design, Chapter 7, Implementation of VAT, p. 174.
[151] Also see, for example, M. Keen, *Rethinking the taxation of the financial sector*, CESifo Economic Studies, Vol. 57, 1/2011, p. 4.

operate, to the extent that the bank fully passes on the non-recoverable input VAT. In so far, transactions carried out by banks are treated less favourable than transactions carried out by FTB.

The above analysis also focuses on the mathematical side of the comparison between VAT exempt financial services provided by banks and taxed supplies provided by FTB. It cannot be overlooked that in addition to the mathematical side of the comparison, there are other relevant factors . An important element in this respect is legal certainty. As indicated in Section 3.7, the (outdated) FS VAT exemptions and case law have led to legal uncertainty for both the banking sector and tax administrations. As a result, banks encounter difficulties in determining the VAT treatment of both their own financial services and services they receive. Although FTB may very well face questions regarding the VAT treatment of their supplies (e.g. what VAT rate applies, is a zero-rate applicable to a the cross-border supply of goods?), on balance it appears that the difficulties of the banking sector in this context are more fundamental. These difficulties cause additional costs for banks, which FTB do not incur. Hence, from this viewpoint, banks are treated less favourably than FTB.

3.8.3. Relevance of B2B and B2C Banking

In Section 3.8.1 and Section 3.8.2 the research question (whether the VAT exemptions for banks in the EU lead to a lower level of VAT revenues, compared to the position if banks were fully taxable and whether the current VAT exemptions system has any other benefit or cost for the banking sector) is addressed from both a taxable person perspective and from a transactional perspective. In answering the research question from a conceptual point of view, the relevance of the type of banking activities requires further analysis. The answer to the comparison of B2B banking with FTB may very well be different than the comparison of B2C banking with FTB. Moreover, most banks tend to have both B2B and B2C business. The mix of the two appear to be also relevant when answering the research question.

From Section 3.8.1 it follows that the VAT exemption of financial services does not automatically lead to the conclusion that banks are in a favourable VAT position as compared to FTB. However, from a taxable person perspective there is no relevant difference between B2B and B2C banking when comparing those with FTB. As demonstrated in Section 3.8.2, this distinction is only relevant from a transactional perspective. From that viewpoint VAT exempt financial services provided by banks to business customers, which have a full right to recover input VAT (B2B) are treated less favourable than taxed supplies of FTB to these very same business customers, On the other hand, exempt financial services provided by banks to end-consumers, which have no right to recover input VAT (B2C) are treated favourably compared to taxed supplies of FTB to these very same end-consumers.

Therefore on the basis of an analysis at the taxable person level and at the transactional level alone, no general answer can be provided to the question whether the banking sector is treated favourably if compared to FTB, due to the VAT exemption for financial services. Moreover, from a transactional perspective, 100% corporate banks (B2B) are treated less favourable compared to FTB, whereas 100% retail banks (B2C) are treated more favourable. Whether the banking sector as a whole is treated favourably compared to FTB therefore depends on the balance of the disadvantage of B2B banking and the advantage of B2C banking. This balance should not only be made up for the banking sector as a whole, but also for individual banks. After all, most banks are generally engaged in both corporate banking (B2B) and retail banking (B2C). In order to provide a valid answer to the research question quantification of both the B2B disadvantage and the B2C advantage is required. In Chapter 4 of this report we will quantify the two on the basis of empirical research.

3.9. Conclusion

This Chapter analyses from a conceptual point of view whether the VAT exemption for banks in the EU leads to a lower level of taxation, and generally to a more favourable VAT position for banks, when compared to fully taxed business sectors (as banks would be under a full taxation regime). It is safe to draw the overall conclusion that the case is not made that the VAT exemption for financial services leads to a lower taxation level and more generally a more favourable VAT position for the banking sector.

A VAT exemption for financial services immediately evokes the image that banks are treated favourably as compared to FTB's. After all, the outputs of FTB's are subject to VAT, but the outputs of banks are not taxed with VAT. However, that image does not show that there are other critical factors to consider when comparing banks and FTB's. In essence, these other factors are 1) the fact that banks cannot deduct input VAT whereas FTB's can, and 2) the fact that banks are confronted with a set of negative side-effects of the VAT exemption for financial services.

The fact that banks cannot deduct input VAT whereas FTB's can, erodes the idea that the VAT exemption for financial services cause banks to be taxed at a lower level than FTB's. For, VAT becomes a tax on banks rather than a tax on consumption (as it is from the viewpoint of the legal character of VAT as well as from the viewpoint of FTB's) if non-deductible input VAT is wholly or partially not passed through to the customers. Since EU VAT was introduced, the aspect of non deductible input VAT dramatically gained importance. Developments in the banking sector (e.g. globalization, increased competition, automation, outsourcing, SSC's and regulatory developments) and changes in VAT legislation (e.g. increase of VAT rates, changes in VAT law as per 1 January 2010) led to higher levels of non-deductible input VAT. The conceptual analysis shows that non-deductible input VAT with banks ultimately means that VAT exempt B2B financial services are treated less favourably than taxed supplies, but that VAT exempt B2C financial services are treated favourably compared to taxed supplies. Whether the banking sector as a whole is treated favourably compared to FTB depends on the mix of B2B banking activities (where the VAT exemption means disadvantages) and B2C banking activities (where the VAT exemption means advantages). This mix should not only be established for the banking sector as a whole, but also for individual banks. The extent to which banks and / or the sector as a whole are treated less favourable (B2B) and more favourable (B2C) requires empirical research. That research is provided for in Chapter 4. However, it is safe to conclude that without further differentiation, the VAT exemption for financial services in itself cannot be considered as leading to a lower level of taxation of banks.

Moreover, the fact that on the one hand VAT exempt financial services have negative side-effects and on the other hand taxed transactions have (different) negative side-effects, causes that banks are put in a VAT position different from that of FTB's. Negative side-effects, such as the fact that banks need to take the charge of VAT on inter-company transactions into account when choosing a business model that fits their needs from an economic, regulatory (e.g. Basel III) and tax (e.g. bank levies) perspective, the legal uncertainty connected to the different application of the VAT exemption of financial services in the various Member States and the various administrative requirements applicable to banks (e.g. pro-rata calculations) detract from the suggestion that banks are put in a favourable VAT position due to the application of a VAT exemption for financial services. A quantification of the related negative side-effects of the VAT exemption for financial services in comparison with negative side-effects of the full taxation of transactions carried out by FTB requires empirical research. Such research is outside the scope of this phase of the Study. However, a high

level comparison of the differences between the negative side-effects of the VAT exemption for financial services and the negative side-effects of taxed transactions seems to indicate that the negative side-effects of the exemption outweigh the negative side-effects of fully taxed transactions.

In the next chapter of this report, the validity of the finding in this part of the research that the case is not made that the VAT exemption for financial services leads to a lower taxation level and more generally a more favourable VAT position for the banking sector, is further investigated from a statistical perspective. In particular, the question is addressed whether a statistical analysis shows that the VAT exemption of banks in the EU leads to a lower level of taxation, when compared to fully taxed businesses (as banks would be under a full taxation regime).

4. Economic Effects of VAT Exemptions

4.1. EU impact of VAT exemption based on national income accounts

4.1.1. Introduction

In this chapter we analyse from a statistical point of view whether the VAT exemptions for banks in the EU lead to a lower level of VAT revenues, compared to the position if banks were fully taxable. To this end it is analysed what the impact on VAT revenues would be if the core financial intermediation services of banks were fully subject to VAT. Using national income accounts data for the years 2000 to 2007, this section of the report provides estimates of the impact that exemption of core financial intermediation services has on the VAT revenues of EU Member States.

An earlier study by Huizinga[152] estimated the revenue impact of VAT exemption for 13 EU Member States based on 1998 national income accounting data. This report updates, extends, and refines Huizinga's work as follows:

1. national income accounting data are used for the years 2000 to 2007;

2. results are calculated for 26 of the 27 EU Member States (data is not available for Cyprus); and

3. several methodological refinements are made, including accounting for zero-rating of extra-Community exports[153], and taking into account bank purchases from other exempt sectors of the economy.

On 28 September 2011 the European Commission presented a proposal for a FTT in the 27 Member States of the EU.[154] The Commission, while caveating its findings, calculated that the financial sector enjoys a tax advantage of approximately € 18 bn (based on 2009 figures) because of the VAT exemption on financial services. In Section 4.1.4. and 4.1.5. we compare our Study with the Huizinga study (2002) and the Commission's study (2011).

Conclusions in this report are based on a separate paper by Professor Lockwood of the University of Warwick (attached as Appendix 2). The paper shows the sensitivity of the results discussed below to alternative assumptions.

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[152] H. Huizinga, "Financial Services—VAT in Europe?" *Economic Policy*, October 2002, 499-534.
[153] From the separate paper of Professor Lockwood we take that as far as he can reconcile, Huizinga did not take exports into account in his study.
[154] Proposal for a Council Directive on a common system of financial transaction tax and amending Directive 2008/7/EC, 28 September 2011, COM (2011) 594 final.

4.1.2. Conceptual Framework – Static Case

EU Member States are required to adopt VAT legislation that exempts domestic supplies of specified financial services, including most core financial services.[155] A zero rate of tax (with input VAT recovery[156]) is applied to exports of these financial services to customers outside of the EU.

VAT is not collected on exempt services provided by banks and VAT incurred on purchases related to the provision of exempt services is not recovered by banks. By contrast, in the case of extra-Community exports, although VAT is not collected on exports, VAT on purchases related to the provision of these exports is recoverable (so-called "zero rating").

In this Section, the revenue effect of exempting financial intermediation services as compared to full taxation is calculated allowing price to change but assuming that the volume of services supplied is unaffected. This is referred to as a "static" analysis. To account for volume changes, a second round analysis also is performed. Combining the results of the first and second round analyses provides a "dynamic" assessment of the impact of full VAT taxation of financial intermediation services on revenues.

4.1.2.1.   A theoretical framework

Our theoretical framework is summarized and simplified in Diagram 4.1 and Box 4.1 below. In the absence of a VAT system, the price of financial intermediation services, PZ, would be same as if these services were zero rated, because imposing VAT at a zero rate is equivalent to repealing VAT. Under the exemption system, however, the price of financial intermediation services, PE, will be higher to the extent the bank passes through the cost of irrecoverable input VAT.

Full taxation of financial intermediation services can be thought of in two steps: first allowing VAT input recovery and then imposing a tax on the value of financial intermediation output. We follow Huizinga in assuming that banks would pass through the benefit of VAT recovery. Then, the after-tax price of financial intermediation services in a full-VAT environment, PT, is PZ*(1+t), where t is the VAT rate (see Diagram 4.1).

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[155] See, Art. 135 Council Directive 2006/112/EC of 28 November 2006 on the common system of value-added tax (VAT Directive). Pursuant to Art. 137 VAT Directive, Member States, in domestic legislation, may provide an option to elect taxation of these services, other than insurance and reinsurance.

[156] VAT exempt financial services to customers established outside the EU give right to recovery of related input VAT. This is often referred to as 'zero rating'.

Diagram 4.1: Impact of Financial Intermediation VAT exemption on Consumers, Business Customers, and Extra Community Exports

Note: PT=PZ*(1+t)

PT —

PE —

PZ —

A

B

D = t*C

C

E

F

G

Q_C Q_B Q_X

Implicit price of financial intermediation services

Volume of Financial Intermediation Services
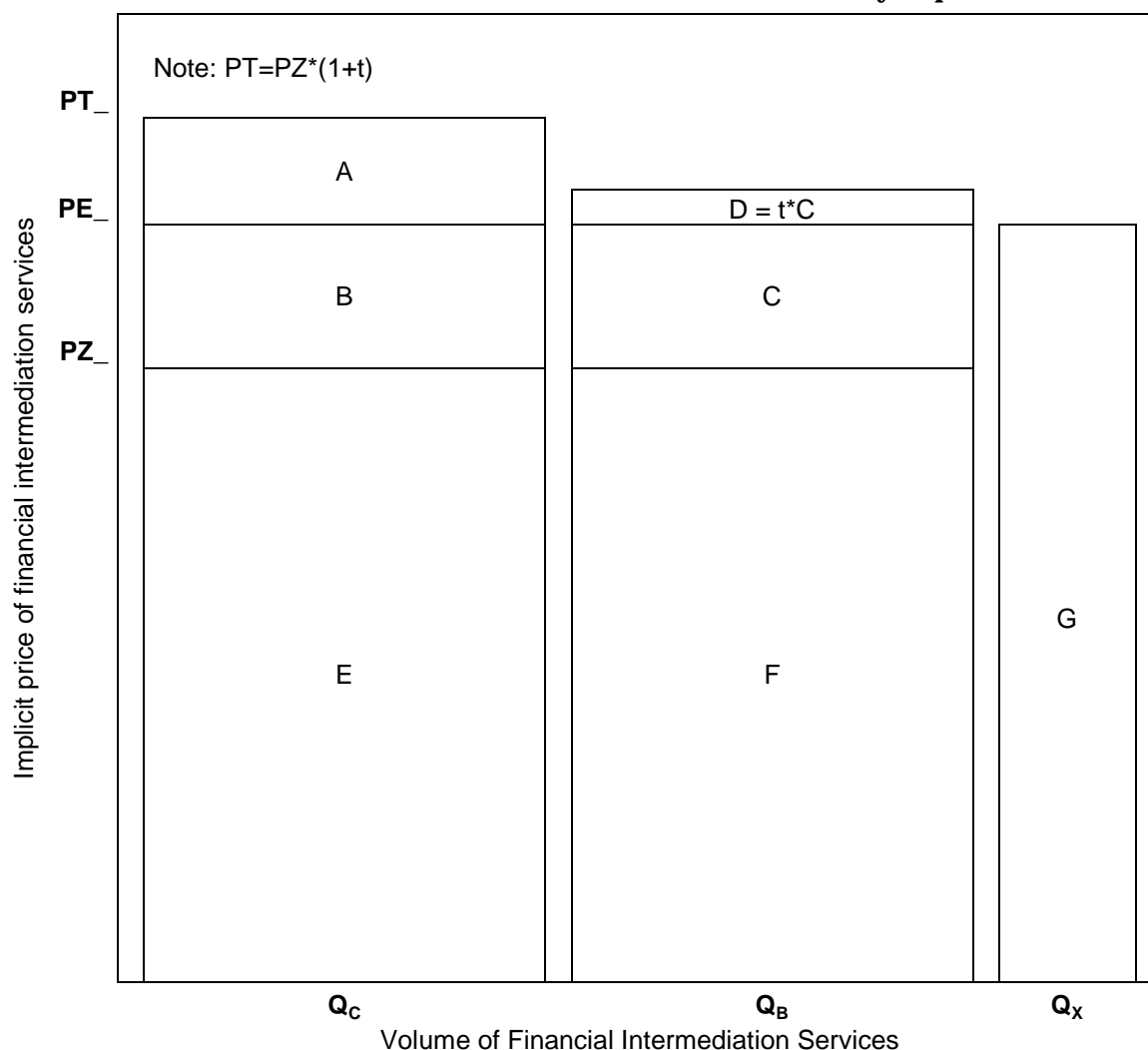
Box 4.1: Variable Definitions in Diagram 4.1

PZ: price of financial intermediation services without a VAT system

$PE = PZ(1+\gamma t)$: price of financial intermediation services when they are exempt

$PT = PZ(1+t)$: price to final consumers of financial intermediation services when they are subject to VAT

t = standard rate of VAT

γ = value of intermediate inputs required to produce one Euro of financial intermediation services

Q_C = demand for financial intermediation services by non-VAT-registered consumers

Q_B = demand for financial intermediation services by VAT-registered business consumers within the EU

Q_X = demand for financial intermediation services by consumers outside the EU

There are three effects of the exemption on VAT revenue. First, VAT will be collected on sales to unregistered consumers[157]. These revenues are equal to the tax rate, t, times the base of the tax, area "E" or $PZ*Q_C$. So, revenues collected by the output VAT (i.e. the *revenue gain*) are equal to $(PT-PZ)*Q_C$, or area "A+B" in Diagram 4.1.

The second effect is that banks will now be able to recover VAT on their inputs to production of sales to unregistered consumers (amount Q_C) and to domestic registered consumers (amount Q_B). i.e. input VAT that was initially irrecoverable . In terms of our diagram, the initially irrecoverable input VAT can be calculated as follows. Initially, the price PE includes the value of irrecoverable input VAT, and after the reform, the price PZ does not include this amount. So, revenue collected under the present law with respect to unregistered customers is to $(PE-PZ)*Q_c$, or area "B" in Diagram 4.1., and with respect to registered customers is equal to $(PE-PZ)*Q_B$, or area "C" in Diagram 4.1. So, overall, irrecoverable input VAT (i.e. the *revenue loss*) is area "B+C" in Diagram 4.1.

Finally, a third effect is the so-called tax cascading effect. We have just argued that assuming that banks currently pass through irrecoverable input VAT in their pricing, revenue collected under the present law with respect to registered customers is equal to $(PE-PZ)*Q_B$, or area "C" in Diagram 4.1. If bank customers pass through the cost of irrecoverable VAT to *their* registered customers (and these customers pass on the cost to their customers, and so on) the *additional revenue loss* from tax cascading is, t multiplied by area "C" , which is area "D" in Diagram 4.1.[158].

Combining these three impacts, the net revenue effect of full VAT taxation using the nomenclature in Diagram 4.1 is:

(2)   Revenue Effect of Full VAT Taxation = (A+B) - (B+C) - D

where:

> A + B = VAT that would be collected on sales to unregistered customers under full taxation (i.e. the *revenue gain*)
>
> B + C = Irrecoverable VAT allocable to sales to registered and unregistered customers under the current exemption system (i.e. the *revenue loss*)
>
> D = VAT collected on sales by banks' registered customers (and their customers) due to pass through of irrecoverable VAT (i.e., tax on tax) under the current exemption system (i.e. the *additional revenue loss*).

So, in theory, full VAT taxation of financial intermediation services could result in a revenue gain or loss within the EU. A revenue gain is more likely the larger is the volume of B2C relative to B2B

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[157] Taxing financial intermediation services provided to registered customers would not result in any net output VAT because these customers are entitled to a credit or refund for their input VAT.

[158] To the extent that some unregistered customers are small businesses, full taxation of financial intermediation services purchased by these customers would increase their irrecoverable VAT and, if passed through, would result in higher taxes on their customers. This tax cascading effect is not taken into account here (or by Huizinga) as only the very smallest businesses may not be obligated to register for VAT. Also, in our empirical calculations, we only calculate the tax cascading loss relating to sales by domestic firms, as this is the only part of tax cascading that affects domestic tax revenues. For simplicity, this refinement is not shown in the diagram – it is fully described in Appendix 2.

business and the smaller is the amount of irrecoverable VAT. The actual impact of exemption is an empirical question that can be addressed using national income accounting data.

4.1.2.2. From the Revenue Formula to the National Accounts

The problem now is that <u>none of the values</u> A+B, B+C, D in (2) can be directly computed from the national accounts. So, we proceed as follows.

First, consider VAT that would be collected on sales to unregistered customers under full taxation (area "A+B" in Diagram 4.1). We will calculate this in terms of area B+E because only this latter value, i.e. the initial value of sales of financial services to households, is observable in the national accounts. Using the nomenclature of Diagram 4.1, it is possible to calculate that[159]

$$B \quad = \quad [t\gamma/(1+t\gamma)]*(B+E)$$

Where B+E is the value of B2C services before the hypothetical tax reform, and thus is calculable from the national income accounts. So, A+B can be calculated as follows:

$$(3) \quad A+B \quad = \quad t*(B+E)-t*B =(B+E)*(1- t\gamma/(1+t\gamma))*t=t*(B+E)/(1+ t\gamma)$$

Next, we turn to the calculation of B+C from the national accounts. Let V be the value of all purchases of intermediate inputs, excluding any input VAT; this can be computed directly from the Use tables of the national accounts, as described below. Now, by definition, V is equal to B+C minus the value of inputs used to produce exports to the rest of the world, Q_X, as under current EU law, these inputs can be recovered even in the exempt situation[160]. To make this adjustment, we can estimate the value of these inputs as follows. By the definition of γ in box 4.1, the value of inputs used to produce exports to the rest of world can be computed as $\gamma * PZ* Q_X$. Moreover, simple manipulation gives

$$\gamma * PZ* Q_X= \gamma * (PZ/PE) *PE*QX= \gamma * (PZ/PE)*G= \gamma * G/(1+t* \gamma)$$

So, area B+C is just equal to t times the value of the remaining inputs i.e.

$$(4) \quad B+C=t*(V-t\gamma* G/(1+t \gamma))$$

Finally, to compute D, we need to calculate C from the national accounts. Using the nomenclature of Diagram 4.1, C, the irrecoverable VAT attributable to B2B services can be computed[161] as a fraction of the value of B2B services at the initial price PE before the reform, C+F. We proceed in this way because only C+F is observable in the national accounts. Specifically,

$$C \quad = \quad [t\gamma/(1+t\gamma)]*(C+F) ,$$

So, the "tax on tax" effect (area "D" in Diagram 4.1) is just

$$(5) \quad t*C=t^2 \gamma *(C+F)/ (1+t\gamma)$$

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[159] Specifically, from Diagram 4.1, B=(PE-PZ)*Qc, B+E=PE*Qc. Eliminating Qc from these two relationships gives B=(PE-PZ)*(B+E)/PE. Then, using the definitions of PE and PZ in Box 4.1 gives B = [t\gamma/(1+t\gamma)]*(B+E).

[160] In theory, none of the input VAT incurred by banks with respect to the provision of exempt services is recoverable. In practice, some VAT recovery may occur, for example by using the possibility to attribute some of the input VAT to VAT taxable output. We refer to Section 4.1.5.

[161] Specifically, from Diagram 4.1, C=(PE-PZ)*Q_B, C+F=PE*Q_B. Eliminating Q_B from these two relationships gives C=(PE-PZ)*(C+F)/PE. Then, using the definitions of PE and PZ in Box 4.1 gives C = [t\gamma/(1+t\gamma)]*(C+F).

So, finally, from Equations 2-5, the total revenue effect of imposing VAT on core financial intermediation services can be determined for each Member State as:

(6) $(A+B) - (B+C) - D = t*(B+E)*/(1+t\gamma) - t*(V - \gamma*G/(1+t\gamma)) - t^2\gamma*(C+F)*/(1+t\gamma)$

This quantity on the right-hand size of equation 6 can now be calculated using the national accounts.

4.1.2.3. Implementation Using National Accounts

From (6), the data required from the national income accounts are: (1) V, the value of purchases of intermediate inputs[162]; (2) the ratio γ; (3) the value of sales of financial intermediation services to final consumers (areas "B" plus "E"), (4) the value of sales of financial intermediation services to business customers and intra-Community exports (areas "C" plus "F"), and (5) the value of sales of extra-Community exports (area "G"). As a first step, it is useful to review how financial intermediation services are measured in the national accounts.

4.1.2.4. Financial Intermediation Services in National Income Accounts: The Concept of FISIM

EU Member States are required to measure the output of their financial services sector and to allocate this among final consumption, intermediate demand, and exports.[163] In the national income accounts, the output of financial intermediation services includes services for which explicit fees and commissions are charged as well as financial intermediate services indirectly measures (FISIM), for which explicit fees are not charged. For core financial services, FISIM is measured as:

FISIM = FISIM on Loans + FISIM on Deposits = $(r_L - r) * L + (r - r_D) * D$

where:

L=   Loans balance

D=   Deposit balance

r_L=   Interest rate on loans

r_D=   Interest rate on deposits

r=   Reference interest rate

FISIM on loans and FISIM on deposits are allocated between final consumption, intermediate demand, and exports (both within and outside the EU) based on loan balances and deposit balances, respectively.

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[162] Some Member States have reduced rates for certain sectors. This is not likely to be material for inputs purchase by the financial services sector and is disregarded by Huizinga and also in this analysis.

[163] See, *Council Regulation (EC) No 448/98 of 16 February 1998* completing and amending Regulation (EC) No 2223/96 with respect to the allocation of financial intermediation services indirectly measured (FISIM) within the European system of national and regional accounts (ESA); and *Commission Regulation (EC) No 1889/2002 of 23 October 2002* on the implementation of Council Regulation (EC) No 448/98 completing and amending Regulation (EC) No 2223/96 with respect to the allocation of financial intermediation services indirectly measured (FISIM) within the European System of national and regional Accounts (ESA).

The reference rate for domestic loans and deposits typically is measured as an inter-bank lending rate, such as LIBOR, or a short-term government bond rate. In practice, use of financial market reference rates can result in negative or volatile measures of FISIM. Consequently, an alternative method is to use the mid-point between the average deposit rate and the average borrowing rate.[164]

4.1.2.5. Use table data vs. Sectoral accounts

There are two sources of data within the national accounts that we can use, Use tables, which are input-output tables augmented by disaggregation of the total supply of products into total sales categories (intermediate demand, final demand, exports etc.), and the Sectoral national accounts, which give the national accounting framework in considerable detail by elaborating the accounts both with respect to the institutional sector and the type of transaction[165]

While links between use table and sector accounts are strong, it is not always easy in statistical practice to transform industry data into sectoral data and vice versa. It is particularly difficult to trace back inconsistencies in sectoral accounts to specific industries in the use table data.[166]

While the European Commission has focussed on sectoral accounts to measure VAT on output services, we have in addition also looked at the result emerging from the use of Use table data.

It is obvious that both approaches have their merits but also deficiencies. As we explain in more detail in Section 4.1.2.6., we have assumed that the data taken from the sectoral accounts should form the base case scenario of our Study.

4.1.2.6. Calculation of the value of inputs to financial intermediation and the ratio γ

To compute V and γ, we draw on the Use tables of the national accounts. The Use tables of the national accounts give inputs and outputs of various sectors of the economy, based on the industrial classification system used by Eurostat, known as NACE (Nomenclature statistique des activités économiques dans la Communauté européenne). Section J of version 1 of NACE covers financial intermediation services and is subdivided into three parts:

1.   financial intermediation except insurance and pension funding (NACE 65);

2.   insurance and pension funding except compulsory social security (NACE 66); and

3.   activities auxiliary to financial intermediation (NACE 67).

The main problem with these data is that the national accounting activity classification does not clearly divide the financial services sector into a subsector subject to VAT, and subsector exempt from VAT. Specifically, the classification used is NACE 1, and data is only available at the 2-digit level i.e. for activities 65, 66 and 67. The definitions of these activities are given in Table A.1 in Appendix 2 to this document.

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[164] See, OECD Secretariat, *FISIM,* Joint OECD/ESCAP Meeting on National Accounts, Bangkok, 4-8 May 1998.
[165] See the Blue Book, Office for National Statistics, UK, 2010.
[166] Eurostat, Eurostat Manual of Supply, Use and Input-Output Tables, 2008 edition, ISSN 1977-0375.

It is then a matter of judgement whether the activities in 65, 66 and 67 are primarily margin-based and thus exempt from VAT, or not. We proceed as follows. First, our focus in this Study is on core banking activities, excluding insurance. So, we excluded activity 66 from the analysis.

Second, we can reasonably take most, of the activities in 65 as both exempt, and related to core banking activities. The exception is financial leasing, which is subject to VAT in some EU countries (Monacelli and Maria Grazia Pazienza (2007), Table 2).

The problem is with activity 67; activities in this heading are a mix of margin based activities not subject to tax and fee-based activities subject to tax, and thus activity 67 is hard to classify on the exempt-non-exempt dimension. So, we will take a conservative approach in this Study, and interpret 'core financial services' as corresponding to sector 65. In this, we follow the European Commission, who also use activity 65 to calculate the value of irrecoverable VAT in their baseline approach.

Given this, a crude measure of V is given by the item "intermediate consumption" for activity 65 in the Use tables. We refine this in two ways. First, not all intermediate inputs to the production of financial intermediation bear VAT. The details of exemption vary across countries[167] but the VAT Directive does establish some common exemptions for broad sectors, notably education, medical care, and public administration, which are represented in the national income accounts as:

- NACE 75: public administration

- NACE 80: primary, secondary, and university education

- NACE 85: hospital, medical and dental services

Last but not least, financial intermediation is a major input to the activity of financial intermediation itself; for example, in Ireland, the ratio of the value of financial intermediation inputs relative to financial intermediation output is about 33% in 2007. So, we refine V by stripping out the value of inputs from Sections 65, 75, 80, 85 from V.[168]

The second refinement is that we divide intermediate consumption (net of the deductions just made) through one by plus the standard VAT rate, to take account of the fact that in the Use tables, intermediate consumption is calculated at purchaser prices, which include non-deductible VAT.

To calculate γ, we combine the values of V that we have estimated with the total value of output of activity 65, also obtainable from the Use tables. The ratio of the first to the second gives γ. This is shown in Table 4.2 below.

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[167] See European Commission(2008), DOC/2412/2008.
[168] Other activities may also include VAT exempt activities. These activities have not been taken into account. By taking into account activities 65, 75, 80 and 85 we believe to have considered the most important VAT exempt categories.

Table 4.2: γ, share of inputs in value of output, excluding inputs from exempt sectors												
	AT	**BE**	**BG**	**CZ**	**DK**	**EE**	**FI**	**FR**	**DE**	**GR**	**HU**	**IE**	**IT**
2000	0.20	0.36	0.24	0.40	0.28	0.28	0.28	0.27	0.35	0.18	0.35	0.17	0.26
2001	0.28	0.37	0.21	0.43	0.26	0.29	0.27	0.29	0.37	0.21	0.34	0.30	0.29
2002	0.28	0.35	0.19	0.44	0.26	0.26	0.31	0.29	0.34	0.22	0.35	0.31	0.30
2003	0.28	0.37	0.22	0.40	0.25	0.26	0.33	0.29	0.33	0.23	0.36	0.25	0.30
2004	0.27	0.36	0.26	0.36	0.25	0.27	0.34	0.30	0.31	0.18	0.34	0.24	0.31
2005	0.29	0.38	0.20	0.43	0.25	0.33	0.32	0.30	0.33	0.19	0.32	0.24	0.32
2006	0.29	0.39	0.20	0.46	0.26	0.33	0.29	0.31	0.34	0.20	0.33	0.17	0.33
2007	0.28	0.41	0.20	0.39	0.27	0.35	0.30	0.31	0.38	0.19	0.34	0.16	0.31
	LV	**LT**	**LU**	**MT**	**NL**	**PL**	**PT**	**RO**	**SK**	**SI**	**ES**	**SE**	**UK**
2000	0.25	0.19	0.59	0.31	0.33	0.21	0.28	0.31	0.43	0.23	0.19	0.29	0.56
2001	0.25	0.17	0.61	0.08	0.29	0.23	0.26	0.30	0.36	0.24	0.18	0.28	0.56
2002	0.25	0.20	0.60	0.08	0.25	0.25	0.27	0.30	0.31	0.25	0.18	0.29	0.46
2003	0.25	0.25	0.64	0.08	0.24	0.25	0.26	0.30	0.34	0.25	0.18	0.27	0.46
2004	0.25	0.26	0.65	0.08	0.23	0.26	0.28	0.27	0.30	0.23	0.18	0.26	0.33
2005	0.25	0.22	0.68	0.08	0.24	0.27	0.30	0.30	0.27	0.24	0.18	0.26	0.33
2006	0.25	0.18	0.69	0.08	0.29	0.29	0.30	0.36	0.27	0.24	0.18	0.29	0.33
2007	0.25	0.20	0.69	0.08	0.33	0.26	0.30	0.43	0.30	0.25	0.17	0.30	0.33

4.1.2.7. Calculation of the Components of the Value of Sales of Financial Intermediation

It remains to use the national accounts to calculate (a) the value of sales of financial intermediation services to final consumers (areas "B" plus "E"), (b) the value of sales of financial intermediation services to domestic business customers (areas "C" plus "F"), and (c) the value of sales of extra-Community exports (area "G").

To do this, we can use the Eurostat Use tables, or the Sectoral national Accounts. The Use tables give us intermediate domestic sales, final domestic sales, and export sales to non-EU countries. These measure B+E, C+F, and G respectively. The main drawback of these measures is that as already remarked, we cannot be sure that all activities in sector 65 are VAT exempt in all Member States (e.g. financial leasing).

The Sectoral tables give us intermediate domestic sales, final domestic sales, and export sales to non-EU countries. For our purposes, we use data for three sectors:

- Households; non-profit institutions serving households (S14, S15)

- General government (S13)

- Non-financial Corporations (S12)

The consumption of FISIM by sectors S13, S14, S15 gives us a measure of area B+E above, the value of B2C services. The consumption of FISIM by sector S12 gives us a measure of area C+F above, the value of B2B services.

There are two advantages of the Sectoral data over the Use data. First, it measures only FISIM. Second, the European Commission also use Sectoral data in their study, and so using it facilitates comparison with their results. The disadvantages are twofold. First, due to missing data, we cannot use the Sectoral data to the value of sales of extra-Community exports (area "G"). Second, the Sectoral output data are not necessarily consistent with our calculation with V, which is obtained from the Use tables.

For reasons of space, we do not show the value of sales data for these sectors using Use and Sectoral national accounts - this data is available on request.

Finally, standard VAT rates of VAT are used for measurement of t. If the standard rate changed within a year, we calculate a weighted average of the two rates, weighted by the proportions of the year for which the two rates were in force. This data is shown in Table 4.3 below.

Table 4.3: Standard Rates of VAT									
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**Years in which VAT rate changed**
Austria	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	
Belgium	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	
Bulgaria	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	
Czech Republic	0.22	0.22	0.22	0.22	0.2	0.190	0.190	0.19	5/1/2004
Denmark	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
Estonia	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	
Finland	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	
France	0.1985	0.196	0.196	0.196	0.196	0.196	0.196	0.196	4/1/2000
Germany	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.19	1/1/2007
Greece	0.18	0.18	0.18	0.18	0.18	0.1875	0.19	0.19	4/1/2005
Hungary	0.25	0.25	0.25	0.25	0.25	0.25	0.2	0.20	1/1/2006
Ireland	0.21	0.2	0.208	0.21	0.21	0.21	0.21	0.21	1/1/2001;3/1/2002
Italy	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.20	
Latvia	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	
Lithuania	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	
Luxembourg	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	
Malta	0.15	0.15	0.15	0.15	0.18	0.18	0.18	0.18	1/1/2004
Netherlands	0.175	0.19	0.19	0.19	0.19	0.19	0.19	0.19	1/1/2001
Poland	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	
Portugal	0.17	0.17	0.18	0.19	0.19	0.2	0.21	0.21	6/5/2002;7/1/2005
Romania	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	
Slovakia	0.23	0.23	0.23	0.2	0.19	0.19	0.19	0.19	1/1/2003;1/1/2004
Slovenia	0.19	0.19	0.2	0.2	0.2	0.2	0.2	0.20	1/1/2002
Spain	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	
Sweden	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
United Kingdom	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	

Source: European Commission (2008)

4.1.2.8. Results: Static Analysis

Using equation (6), we can now calculate the revenue effect of ending VAT exemption for financial intermediation services. These calculations are reported in Table 4.4 below. We consider results for both Sectoral Accounts and Use tables, and taking into account tax cascading (area "D") and ignoring it. Based on our methodology, the EU revenue impact of full VAT taxation of core financial services for the years 2000 to 2007 is shown in Table 4.5.

Table 4.4: Revenue Change, Sectoral Accounts		
	No tax cascading	**Tax cascading**
2000	1,141	360
2001	698	-145
2002	1,47	626
2003	2,93	2,083
2004	5,954	5,135
2005	4,614	3,752
2006	2,88	2,037
2007	1,181	224
Average	2,608	1,759

All figures million euros

Table 4.5: Revenue Change, Use Tables		
	No tax cascading	**Tax cascading**
2000	-6,267	-10,211
2001	-5,553	-9,623
2002	-6,409	-10,579
2003	-6,615	-10,854
2004	583	-3,096
2005	357	-3,603
2006	1,661	-2,485
2007	3,262	-1,23
Average	-2,373	-6,460

All figures million euros

We focus first on the results with the Sectoral data, which are, as explained in Section 4.1 above, our baseline estimates. For the EU as a whole (excluding Cyprus), the revenue effect of full VAT taxation of core banking services varies with the year, between a gain of about €5 bn in 2004, to a loss of € 145 mio in 2001.

If we look instead at the Use data, the revenue effect of full VAT taxation of core banking services is often negative, even when tax cascading is not taken into account. When tax cascading is taken into account, the effect is consistently negative, with an average revenue loss over 2000-2007 of €6.4 bn. Thus, based on these national income account data, for the years 2000 to 2007, core financial services are, on average, over-taxed as a result of VAT exemption within the EU.

These results differ from Huizinga, who found that full VAT taxation of the core financial services (based on a static analysis) would result in an aggregate revenue gain of €15 bn in 1998. It also differs

from the EU 2011 study, which found an average €15.5 bn revenue gain in over the period 2000-2007.[169] These contrasting results are explained as follows.

First, both the Huizinga and the Commission study use Sectoral data only to estimate sales of core financial services, so their results should be compared with Table 4.4. In the case of the Huizinga study, the only conceptual difference is that our Study has a more detailed (and we believe, more accurate) estimate of the loss of irrecoverable VAT (area "A+B" above). The differences are partly due to data coverage – we study 26 EU countries, whereas Huizinga studied only 13. In the case of the Commission's study, by contrast, there are a number of conceptual differences (see Section 4.1.4 and 4.1.5 for further details).

It is interesting to ask what the amount of irrecoverable VAT is on B2B transactions. In Table 5.1 of the Appendix, we estimate total irrecoverable VAT to be about 33 billion in 2007. From the Use tables, B2B sales comprise 56% of the total in 2007, implying a figure for irrecoverable VAT associated with B2B transactions of approximately 18 billion.

4.1.3. Dynamic Analysis

In Section 4.1.2, the revenue effect of full VAT taxation of core financial services was estimated allowing the price of financial services to change but holding the volume of services (e.g., loans and deposits) constant. In this Section, the second round effect is determined allowing prices to vary. Combining the results of the static analysis and the second round effects results in a dynamic revenue estimate.

4.1.3.1. Theory

As described above, the first round effect of full VAT taxation of core financial services would be to increase the after-tax price of B2C services from PE to PT. By contrast, full VAT taxation would lower the after-tax price of B2B services from PE to PZ. These price changes would be expected to reduce sales of B2C services and increase sales of B2B services.

The percentage change in the demand for service that occurs in response to a one percent increase in prices is referred to as the elasticity of demand, denoted ε. If there is a single elasticity of demand for business customers, ε_B, and for households, ε_C, and taking this elasticity to be the absolute value, the second round effects on VAT revenues can be written as:

(7)   Second round revenue effect for B2C services = $-t^*\varepsilon_C * A^*E/(B+E) < 0$.

(8)   Second round revenue effect for B2B services = $t^*\varepsilon_B * C.F/(C+F) > 0$.

If there are different demand elasticities for loans and deposits, then the second round effects must be calculated for each service separately.

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[169] Commission Staff Working Paper – Impact Assessment accompanying the document Proposal for a Council Directive on a common system of financial transaction tax and amending Directive 2008/7/EC, SEC(2011) 1102 final, final Vol. 6 (Annex 5). These figures are for their estimation 1, which the European Commission considers the most reliable.

4.1.3.2. Implementation

The economics literature does not contain estimates of the demand elasticities set forth in the preceding section, so it is not possible to estimate the second round effects in the form specified by Equations 7 and 8 based directly empirical evidence. There are, however, estimates of the consumer elasticity of demand for loans and deposits, which relate the amount of these services demanded to the interest rates on loans and deposits, rather than to the implicit price of financial intermediation services embedded in loan rate and subtracted from the deposit rate.

Assuming that half of implicit price of financial intermediation services relates to loans and half to deposits, the second round effect for B2C services can be re-written as:

(9) $\varepsilon_{CD} * (1/2) * [A/(B+E)] * \theta_D * E * t + \varepsilon_{CL} * (1/2) * [A/(B+E)] * \theta_L * E * t$

where:

$\varepsilon_{CD} =$ Elasticity of consumer demand for deposits

$\varepsilon_{CL} =$ Elasticity of consumer demand for loans

$\theta_D =$ Spread between lending and deposit rates divided by deposit rate

$\theta_L =$ Spread between lending and deposit rates divided by lending rate

Note that θ_D , θ_L are empirically considerably less than 1 (in our empirical work, described in more detail in the Appendix, they are about 0.3), and this reflects – or measures – the fact that the spread is only one factor in the "price" of loans and the total return on deposits, and indeed, not as important as the bank's cost of funds. This factor will tend to make our calculation of the second-round effect smaller than Huizinga's, who did not take this refinement into account[170].

We use formula (9) to compute the second-round effects. For reasons explained in more detail in Appendix 2, our view, based on the empirical literature, is that a range of values of ε_{CL} of between 0.5 and 1.5 is reasonable. We could not find reliable estimates of ε_{CD} , and so in the absence of better information, we set $\varepsilon_{CD} = \varepsilon_{CL} = \varepsilon$.

The demand by business customers for financial intermediation services is referred to as a derived demand; it is derived from the demand that the business customer faces for its output. Thus, the elasticity of business demand for financial intermediation services is ultimately derived from the elasticity of demand of final consumers at the end of the supply chain. This has two implications. First, a one percent change in the price of financial intermediation services will have a vanishingly small impact on the price to final consumers. Second, it is not feasible to measure the impact on prices and demand for all the final sales of goods and services that are produced using financial intermediation services as inputs. For these reasons, we do not attempt to measure the second-round effect for B2B services.

Our results are given in Tables 4.6 and 4.7. As expected, the inclusion of the second-round effect on consumer demand reduces the revenue collected in each Member State, compared to the static

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[170] Huizinga assumed that the total elasticity of B2B sales with respect to the spread could be -1 or -2 whereas we assume that the elasticity of the total price of the loan or deposit is -0.5, -1, or -1.5, giving a much smaller implied elasticity with respect to the spread.

analysis. However, the impact of the second-round effect is modest; even in the highest elasticity scenario of ε=1.5, the average estimated revenue falls by about €1.4 bn on average in the case of the Sectoral data, and by € 1.2 bn on average in the case of the Use data. These falls are smaller than those found by Huizinga, who finds that for an elasticity of -1, the fall in 1998 due to the second-round effect is € 2.8 bn, and is € 5.5 bn in the case of an elasticity of -2.

Table 4.6: Revenue Change, Sectoral Accounts				
Elasticity, ε	0	0.5	1	1.5
2000	360	113	-132	-374
2001	-145	-427	-706	-982
2002	626	300	-23	-342
2003	2,083	1,385	705	44
2004	5,135	4,45	3,783	3,131
2005	3,752	2,971	2,211	1,472
2006	2,037	1,568	1,107	652
2007	224	-142	-504	-862
Average	1,759	1,277	805	342

All figures million euros

Table 4.7: Revenue Change, Use Tables				
Elasticity, ε	0	0.5	1	1.5
2000	-10,211	-10,397	-10,581	-10,763
2001	-9,623	-9,849	-10,073	-10,294
2002	-10,579	-10,823	-11,063	-11,3
2003	-10,854	-11,345	-11,823	-12,288
2004	-3,096	-3,664	-4,218	-4,758
2005	-3,603	-4,282	-4,942	-5,584
2006	-2,485	-2,935	-3,379	-3,817
2007	-1,23	-1,614	-1,995	-2,371
Average	-6,460	-6,864	-7,259	-7,647

All figures million euros

4.1.4. *How does the current Study compare to the Huizinga study?*

The original Huizinga study conducted in 2002 concluded that the imposition of VAT on financial intermediation would raise € 15 bn in additional VAT revenues in 1998, falling to a central value of € 12.2 bn when second-round effects are taken into account. The study undertaken by Professor Lockwood indicates, for Sectoral data, which are comparable to the data used by Huizinga an average increase of VAT revenues of only about €1.7 bn over 2000-2007 in the static case. When second round effects are included, the average increase of VAT revenues with our central elasticity value of 1 of falls to only €0.8 bn over 2000-2007, with losses in four out of the eight years. A key question therefore is how can these apparently differing conclusions be reconciled? There are three principal reconciling features.

First, and most important, is that Professor Lockwood's study uses national income data for the years 2000 to 2007 from 26 EU Member States whereas the Huizinga study used national income data from 13 EU Member States dating from 1998 only.

A second factor is that Professor Lockwood's study has refined some of the assumptions used in the Huizinga study. These are set out in detail in Professor Lockwood's paper in Appendix 2 but include refinements to the treatment of cross border financial services and a more direct measure of irrecoverable input VAT.

A third difference is that as explained above, we have a more detailed measurement of the second-round effects, taking into account that the spread is only one component of the "price" of loans and deposits; this adjustment tends to reduce the size of the second-round effect.

4.1.5. How does the current Study compare to the 2011 Commission's study?

The approach used by Professor Lockwood differs from the approach taken by the European Commission in its 2011 study. The key differences between both studies are described below.

1. The European Commission made the assumption that either banks do not pass through the cost of irrecoverable VAT to their customers under the existing exemption regime or the VAT that becomes recoverable in a fully taxable situation is then not passed through to customers in the form of lower prices. Following Huizinga, Professor Lockwood assumes that irrecoverable VAT is initially passed through, and then in a fully taxable situation, the cost saving from recovered VAT is also passed through. In our view, this assumption is more plausible, especially in the long run. This assumption has two effects, both of which work to lower revenue. First, it lowers the amount of output VAT collected. This is because the Commission assume that following the reform, the price (not including output VAT) does not change, so in terms of diagram 4.1, output tax is t*(B+E), whereas Professor Lockwood calculates output VAT at t*E. Second, it means that there is a tax cascading effect (area "D" in the Diagram 4.1), which also works to lower revenue.

2. In Professor Lockwood's study, he takes into account second-round effects. This is appropriate because a second-round effect will occur following the tax change, and so it is better to try to estimate it – even though this is an imprecise science – rather than assume it is zero.

3. The method for calculating the irrecoverable VAT used by the European Commission varies from the approach taken by Professor Lockwood. The European Commission calculates the irrecoverable VAT from the same national income account statistics, but it adjusts its estimate of V by multiplying intermediate consumption of the banking sector by the so-called VAT revenue ratio (VRR), which measures the percentage difference between the VAT revenue actually collected, and what would theoretically be raised if VAT was applied at the standard rate to the entire potential tax base and all revenue was collected. Use of this rate implicitly assumes that the pattern of inputs used by banking is the same as the average pattern for the whole economy. By contrast, Professor Lockwood explicitly subtracts from intermediate consumption (a) the value of inputs from exempt sectors, and (b) inputs attributable to exports to the rest of the world.

4. The European Commission also multiplies V by one minus a recovery rate of 21%, where 21% is the assumed actual VAT recovery rate regarding inputs assumed by the Commission. The Commission has obtained this recovery rate from a 2006 report prepared by PwC. This recovery rate was a measure of input tax recovery for all financial services rather than the core banking industry which is the subject of both this and the Commission's study. The data provided in the PwC 2006 study stems from 22 case study companies, taken from all subsectors of the financial and insurance sector. From the 16 respondents to the question on VAT recovery, the average percentage VAT recovery rate was 19%. The European Commission has taken 21%, apparently having considered a "zero" as a "not applicable". However, the PwC 2006 study covered the financial and insurance sector, by that, including case study companies from a broad range of financial services sectors, like investment management and insurance companies. The average VAT recovery rate is influenced by financial service providers not being banks. In fact, the two highest scores (52% and 74%) in the source table (page 17, table 4 of the study) come from investment management companies which have, due to their partly taxable activities, in general much higher recovery rates, and typically much higher than banks. The Commission uses the sectoral tables to measure the output of FIS, which means that only interest income is included. It excludes other activities that banks would normally provide like: brokerage, trading on own account (e.g. commodity trading activities), asset management / investment management, insurance, custody activities and pension fund services. In many Member States, activities such as trading on own account (e.g. commodity trading activities), asset management / investment management, custody activities and pension fund services are (partially) taxed with VAT. It would be safe to assume that based on the scope of FIS, which only takes into account interest income, the VAT recovery rate is expected to be (close to) zero. That is, without taken into account a partial recovery relating to "zero-rated" non-EU exports. Professor Lockwood uses a different implied recovery rate, subtracting the value by inputs attributable to exports to the rest of the world, which works out to an implied recovery rate of 7% on average for so-called zero rated non-EU exports.[171]

4.1.6. Conclusion

In this Chapter we analysed from a statistical point of view whether the VAT exemption of financial services in the EU leads to a lower level of taxation for banks when compared to fully taxed businesses (as banks would be under a full VAT taxation regime). This part of the Study updates Huizinga's analysis for 26 EU Member States using national income accounting data for the years 2000 to 2007 and refines the methodology to take into account the zero rating treatment of extra-Community exports and the exempt treatment of certain inputs into the banking sector. Using more recent data, we find that imposition of full taxation of core banking services could result in very little change in VAT tax revenue, using the same data as the EU study. Using alternative data from the Use tables, which also have their merits, we estimate that imposition of full taxation leads to decrease in VAT revenues of € 6.4 bn on average, assuming no change in the volume of services. Taking into account volume changes, we estimate that the decrease would be moderately greater, up to a maximum of about of € 7.6 bn.

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[171] When using the alternative Eurostat data source to the one used by the European Commission which is not strictly limited to FIS interest only i.e. the Use tables, Professor Lockwood takes two scenarios into account, one assuming a VAT recovery rate of 5% and one assuming a 10% recovery rate. This is in addition to a recovery for non-EU exports. Even at these recovery rates, the revenue changes are negative in every year.

4.2. Empirical Analysis Based on Bank Survey

4.2.1. Introduction

This part of the empirical study contains the findings of a survey carried out amongst 20 large European banks ('The Network banks'). The survey aims at establishing an estimate of the impact of the VAT exemption for financial services on the Network banks by assessing the magnitude of the irrecoverable VAT borne by these banks. The survey builds upon earlier studies which have indicated that the financial sector is a significant payer of VAT.[172]

Studies performed by PwC in 2009[173] and 2010[174] for the City of London Corporation show that irrecoverable VAT amounts to 18.2% respectively 23.9% of the total taxes borne by the British financial services companies surveyed.

4.2.2. Background

In an effort to attain consistency with the national accounts data used for the statistical study[175] we requested the Network banks to provide us with the amount of irrecoverable VAT attributable to their core banking activities. To define the core banking activities we used the definitions as mentioned in Section 65 of the statistical classification of economic activities in the European Union.[176] This classification system, which is used by Eurostat, is referred to as NACE (Nomenclature statistique des activités économiques dans la Communauté européenne). Section 65 of Section J of version 1 of NACE includes the following financial intermediation services:

NACE-1, Section J, Financial Intermediation		
65		Financial intermediation, except insurance and pension
	65.1	*Monetary intermediation*
		65.11 Central banking
		65.12 Other monetary intermediation
	65.2	*Other intermediation*
		65.21 Financial leasing
		65.22 Other credit granting
		65.23 Other financial intermediation n.e.c.

As not all activities that are normally provided by banks fall within the classification provided for in Section 65, the banks were explicitly asked to provide the amount of irrecoverable VAT <u>excluding</u> the following activities:

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[172] 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, PricewaterhouseCoopers, 2 November 2006.
[173] PwC report for the City of London Corporation, December 2009, The Total Tax Contribution of UK Financial Services (second edition).
[174] PwC report for the City of London Corporation, December 2010, The Total Tax Contribution of UK Financial Services (third edition).
[175] We refer to section 4.1 of this report.
[176] Commission Regulation (EC) No. 29/2002 of 19 December 2001 amending Council Regulation (EEC) No. 3037/90 on the statistical classification of economic activities in the European Community.

- Brokerage;
- Trading on own account, like commodity trading activities;
- Asset Management / Investment Management;
- Insurance;
- Custody activities;
- Pension fund services.

The question on the amount of irrecoverable VAT was posed for the three most recent years: 2008, 2009 and 2010. The reasoning for this was to provide a sustainable and robust view of the irrecoverable VAT incurred by the participating banks based on recent data.

4.2.3. Survey results

From the answers to the survey we were able to collect the irrecoverable VAT incurred paid by the Network banks within the scope of Section 65 of Section J of version 1 of NACE. From the Network banks, 16 responded. These responses varied in extensiveness: some banks provided data for one Member State only, whereas one bank provided figures for 18 out of 27 EU Member States.

The data provided by the Network banks add up to following the total figures as shown in Table 4.8 below.

Total irrecoverable VAT incurred by respondents[177]	
2008	€ 7,179,857,875
2009	€ 7,039,015,628
2010	€ 6,649,991,755
Average 2008 - 2010	€ 6,956,288,419

Table 4.8

Table 4.8 shows that the total amount of irrecoverable VAT incurred by the 16 Network banks in the period 2008-2010 is substantial. The total annual amount of irrecoverable VAT appears relatively stable over the surveyed years. The slight decrease in irrecoverable VAT over the years could possibly be explained by cost reduction programmes started when the financial crisis started in 2008.

We emphasize that the amount of irrecoverable VAT only relates to the 16 Network Banks that responded to the survey and is only applicable to the core banking activities as described in Section 4.2.2. Moreover, we note that not all respondents were able to provide information for all years. The actual total amount of irrecoverable VAT for the Network Banks will definitely exceed the amounts provided and mentioned in Table 4.8.

In Table 4.9 below the highest and the lowest amount of irrecoverable VAT for the years 2008 to 2010 is displayed for the 16 Network Banks that provided data for the survey. In addition, the average amount of irrecoverable VAT per respondent bank is given.

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[177] Some Network banks only provided one annual figure. In that case the figure is also used for the other years as a best estimate.

Irrecoverable VAT per respondent			
	Highest	**Lowest**	**Average**
2008	€ 1,511,277,000	€ 51,678,705	€ 448,741,117
2009	€ 1,558,016,000	€ 53,716,250	€ 439,938,477
2010	€ 1,172,664,000	€ 57,235,583	€ 415,624,485

Table 4.9

Besides an overview of the total amount of irrecoverable VAT of the Network Banks for that period (see Table 4.8) it is interesting to assess what the impact is for these banks per jurisdiction, Thereto Table 4.10 shows the amount of irrecoverable VAT for the Network banks for the 27 EU Member States.

Irrecoverable VAT per country per year				
Country	# Responses	2008	2009	2010
Austria	3	€ 4,473,418	€ 4,266,632	€ 4,709,247
Belgium	4	€ 146,310,922	€ 194,181,575	€ 254,627,079
Bulgaria	2	€ 419,449	€ 414,663	€ 400,914
Cyprus	0	€ 0	€ 0	€ 0
Czech Republic	4	€ 2,757,794	€ 2,458,780	€ 2,924,429
Denmark	2	€ 60,001,000	€ 60,000,000	€ 60,003,000
Estonia	0	€ 0	€ 0	€ 0
Finland	3	€ 50,127,000	€ 50,236,000	€ 50,431,000
France	9	€ 3,280,280,089	€ 3,375,530,922	€ 2,310,191,306
Germany	8	€ 454,511,293	€ 539,642,884	€ 767,081,120
Greece	3	€ 17,598,000	€ 17,573,000	€ 17,677,000
Hungary	3	€ 724,083	€ 992,264	€ 1,158,542
Ireland	4	€ 38,024,495	€ 31,063,864	€ 28,065,601
Italy	8	€ 597,584,563	€ 612,489,314	€ 618,543,606
Latvia	0	€ 0	€ 0	€ 0
Lithuania	0	€ 0	€ 0	€ 0
Luxembourg	5	€ 21,755,176	€ 20,875,704	€ 14,881,707
Malta	0	€ 0	€ 0	€ 0
Netherlands	5	€ 482,026,359	€ 462,218,991	€ 272,668,000
Poland	4	€ 5,766,000	€ 8,460,000	€ 594,100
Portugal	2	€ 36,226,900	-€ 180,500[178]	€ 34,397,300
Romania	3	€ 16,749,014	€ 9,504,996	€ 9,692,389
Slovakia	3	€ 1,080,892	€ 804,877	€ 1,018,656
Slovenia	1	€ 0	€ 4,863	€ 0
Spain	5	€ 202,808,859	€ 192,344,000	€ 218,504,000
Sweden	4	€ 110,028,938	€ 110,029,000	€ 110,117,000
United Kingdom	10	€ 1,650,603,629	€ 1,346,103,800	€ 1,872,305,758

Table 4.10

The results in Table 4.10 show that there is significant difference in the amount of irrecoverable VAT per country. One of the reasons for this is the composition of the survey group. The Network Banks that provided data for the Study did not have presence in all EU Member States during the period 2008-2010. Furthermore, the market share of the 16 Network Banks that have provided input for this Study varies across the Member States. Also the VAT rates differ per country.

Not surprisingly the countries with the biggest financial markets, the United Kingdom, France, Italy, Germany and the Netherlands show the biggest amounts of irrecoverable VAT (see Diagram 4.11). Regarding France we note that the relatively high amount of irrecoverably VAT is, amongst others,

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[178] The data from one of the Network Banks indicated a refundable VAT amount in Portugal for the year 2009.

due to the fact that three large French banks and other banks that have a presence in France have responded to the survey. The fall in irrecoverable VAT in the United Kingdom for the year 2009 might be explained by the temporary reduction in the VAT rate from 17,5% to 15% applying between 1 December 2008 and 31 December 2009.

Irrecoverable VAT Network Banks across the EU

- Rest of the EU 11%
- France 43%
- United Kingdom 23%
- Netherlands 6%
- Italy 9%
- Germany 8%
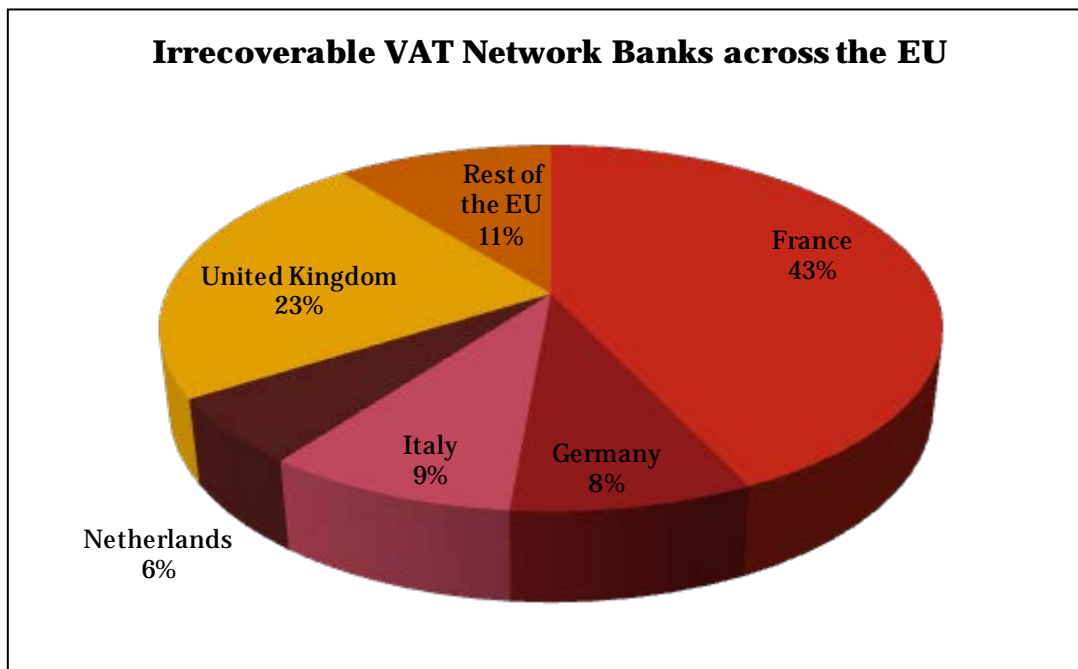
Diagram 4.11

4.2.4. *Irrecoverable VAT measured from national income accounts*

In Section 4.1 of this Study, we calculated the amount of irrecoverable VAT that would become recoverable if the core financial services in Section 65 of Section J of version 1 of NACE would be fully taxed. This amount of irrecoverable VAT for all EU Member States is calculated at approximately €33 bn. This figure should be seen as an estimation of the total irrecoverable VAT of the banking sector in the EU. Most likely this figure will be much higher because the statistical study only includes the core banking activities as mentioned in Section 65 are taken into account. Banking activities are, however, not limited to these core banking activities.

4.2.5. *Conclusion*

With this survey, to which 16 banks responded, the impact of the VAT exemption for financial services on these banks is estimated by assessing the magnitude of the irrecoverable VAT borne by these banks. The results of the survey show that the total amount of irrecoverable VAT incurred by the 16 banks in the period 2008-2010 is substantial – with an average of approximately € 7 bn per year. Due to the scoping of the survey, the actual total amount of irrecoverable VAT for the Network Banks will definitely exceed this amount. Calculations based on statistical data provide an estimation on the total irrecoverable VAT of approximately € 33 bn for the banking sector in the EU.

5.   Conclusion

Goal and research question

This Chapter contains the conclusions of our Study "How the EU VAT exemptions impact the Banking Sector" to assess whether banks enjoy a tax advantage as a result of the EU VAT exemption system. The goal of this study was to provide objective input into the debate as to whether the banking sector is under-taxed as a result of the VAT exemption for certain financial services.

We have researched the following questions:

a) whether the VAT exemptions for banks in the EU lead to a lower level of VAT revenues, compared to the position if banks were fully taxable (as other business sectors are), and

b) whether the current VAT exemptions system has any other benefit or cost for the banking sector.

We have answered these questions from the following perspectives:

- *Conceptual analysis* - an analysis of the mechanics of VAT exemption and its impact on the purchases and supplies made by banks, VAT compliance costs, and international competition in the banking sector.

- *Empirical analysis* - an estimate of the effect on VAT revenues of the exemptions for core banking services compared to a full VAT taxation system for banks, using national income account data for the period 2000 to 2007. In addition, a measure of irrecoverable VAT is obtained from a survey of The Network banks for the period 2008 to 2010.

Conceptual analysis

In order to carry out the conceptual analysis, we have compared the taxation of (the supplies of) banks with the taxation of (the supplies of) businesses that are subject to VAT. We have built the conceptual analysis upon two pillars. The first pillar is that the VAT treatment of (supplies of) banks is different from the VAT treatment of (supplies of) fully taxed businesses i.e. subject to VAT ('FTB's'). The second pillar is that banks might be treated favourably or less favourably in comparison to FTB's.

A VAT exemption for financial services may evoke the image that banks are treated favourably as compared to FTB's. In principle the outputs of FTB's are subject to VAT, whereas the outputs of banks are not. However, that image does not reflect that there are other critical factors to consider when comparing banks and FTB's. In essence, these other factors are:

- Banks cannot deduct input VAT whereas FTB's can; and

- Banks are confronted with a set of negative side-effects of the VAT exemption for financial services which adversely affect their ability to operate more efficiently.

The fact that banks cannot recover input VAT whereas FTB's can, erodes the idea that the VAT exemption for financial services means that banks must be taxed at a lower level than FTB's. In effect under the current system, VAT becomes actually a tax on banks rather than a tax on consumption if non-deductible input VAT is not fully passed through to customers.

Since the EU VAT was introduced, irrecoverable input VAT has become a much more significant cost for banks. Some of the reasons for this are:

– Developments in the banking sector (e.g. globalization, increased competition, automation, outsourcing, shared service centers, and regulatory developments) which have tended to increase the supplies to banks that bear VAT; and

– Changes in VAT legislation (e.g. increase of VAT rates, change of place of taxation of services in 2010) which have led to higher levels of non-deductible input VAT.

The conceptual analysis shows that, due to non-deductible input VAT, exempt financial services in the B2B domain are treated less favourably than taxed supplies, because B2B customers have no ability to recover any VAT costs borne by the banks. By contrast, B2C financial services are treated more favourably compared to taxed supplies. Whether the banking sector in total is treated favourably compared to FTB depends on the mix of B2B and B2C banking activities and on the level of irrecoverable VAT. In this respect we refer to our conclusions in the empirical part of the Study.

The VAT exemptions system for financial services also results in an economic "excess burden" such as:

– Banks need to take VAT costs into account on certain intercompany transactions and on outsourced services. This inhibits them from choosing a business model that most fits their needs from an economic, regulatory (e.g. Basel III) and tax (e.g. bank levies) perspective;

– The legal and administrative uncertainty connected to the different application of the VAT exemptions of financial services across the EU Member States; and

– Additional administrative requirements applicable (e.g. pro-rata recovery calculations).

These hidden costs of VAT exemption are borne by the banks or their customers to the extent that these costs are passed on.

Empirical Analysis

In the macroeconomic analysis performed in collaboration with Professor Lockwood we have analysed from a statistical point of view whether the VAT exemptions for banks in the EU Member States lead to a lower level of Governments' VAT revenues, compared to the position if banks were subject to VAT. To this end we have analysed what the impact on Governments' VAT revenues would be if the core financial intermediation services of banks would be fully subject to VAT. This is done using the following principle: the change in Governments' VAT revenues results from a VAT revenue gain due to VAT collections from B2C outputs, from a VAT revenue loss due to recovery of input VAT, and from an additional revenue loss as the tax-on-effects in B2B will disappear. In section 4.1, this principle is described in the following formula:

The change in Governments' VAT revenues is equal to (A+B) - (B+C) - D, where:

The revenue gain is: (A + B) =   VAT that would be collected on sales to non-VAT-registered customers under full taxation

The revenue loss is: (B + C) =   Currently irrecoverable VAT allocable to VAT exempt sales

Additional revenue loss: D =   VAT collected on sales by banks' VAT-registered customers (and their customers) due to pass through of irrecoverable VAT (i.e. tax on tax) under the current exemption system.

An earlier study by Huizinga estimated the revenue impact of VAT exemption for 13 EU Member States based on 1998 national income accounting data. We have updated, extended and refined Huizinga's work as follows:

- National income accounting data are used for the years 2000 to 2007;

- Results are calculated for 26 of the 27 EU Member States (data is not available for Cyprus); and

- Several methodological refinements are made, taking into account 'zero-rating' of extra-Community exports, and bank purchases from other exempt sectors of the economy.

The European Commission issued a report on 28 September 2011 ('the Commission's study') and uses some different assumptions and methods in comparison to Professor Lockwood's study. The principal differences are:

- The Commission's study assumes that banks either do not pass through the cost of irrecoverable VAT to their customers under the existing exemption regime or would not pass on the cost savings they would incur if banks became fully subject to VAT. If either of these were not correct the Commission's estimates of upward changing tax revenues would be overstated.

- The Commission's study does not include any estimates for the "second round effect". Second round effects broadly describe behavioral changes in consumption caused by the imposition of VAT on outputs. As an increase in consumer price would lower demand, the Commission's estimates of a gain in tax revenues may be overstated.

- The Commission's study adjusts the irrecoverable VAT on bank inputs by multiplying intermediate consumption of the banking sector by the so-called VAT revenue ratio (VRR), which measures the percentage difference between the VAT revenue actually collected, and what would theoretically be raised if VAT was applied at the standard rate to the entire potential tax base and all revenue was collected. Use of this rate implicitly assumes that the pattern of inputs used by banking is the same as the average pattern for the whole economy. By contrast, Professor Lockwood explicitly subtracts from intermediate consumption (a) the value of inputs from exempt sectors, and (b) inputs attributable to exports to the rest of the world. This would lead to a more accurate estimation of irrecoverable VAT, while the Commission's result may underestimate current irrecoverable VAT and therefore overestimate the revenue gain.

- The Commission's study uses an input tax recovery rate of 21 %. This recovery rate has obtained from a 2006 report prepared by PwC. This recovery rate was an average of input tax recovery based on a sample from financial services providers across the financial sector rather than just the core banking industry which is the subject of both this and the Commission's study. As an example, also asset managers were included in the 2006 PwC report which are (partly) subject to VAT and thus typically have a much higher recovery rate than the core banking industry. For this reason we do not believe that the 21% recovery rate is the most appropriate rate.

While there is considerable common ground between Professor Lockwood's study and the Commission's study, there are also significant differences in methodology. A full reconciliation of the differences in the two studies will require further analysis.

Our empirical analysis finds, under base case assumptions and using the same data source which the European Commission has used, that imposition of VAT on banking services might not lead to a material increase and could, in four out of eight years over the 2000-2007 period, lead to a loss in Government's overall VAT revenues. When Professor Lockwood uses an alternative Eurostat data source to the one used by the European Commission on financial intermediation services sales in the period 2000-2007, Professor Lockwood's conclusion is that imposition of full taxation leads to decrease in VAT revenues of € 6.4 bn on average, assuming no change in the volume of services. Taking into account volume changes, Professor Lockwood estimates that the decrease would be moderately greater, up to a maximum of about of € 7.6 bn.

CFO Network survey

Another part of the empirical study contains the findings of a survey carried out amongst 16 large European banks ('The Network banks'). The survey was held to establish an estimate of the impact of the VAT exemption for financial services on the Network banks by assessing the magnitude of the irrecoverable VAT borne by these banks. The results of the survey show that the total amount of irrecoverable VAT incurred by the 16 banks in the period 2008-2010 is substantial – with an average of approximately € 7 bn per year.

Due to the narrow scope of the survey (only core banking activities were included), the actual total amount of irrecoverable VAT for the Network Banks will definitely exceed this amount. Calculations by Professor Lockwood based on statistical data provide an estimation on the total irrecoverable VAT of approximately € 33 bn for the banking sector in the EU.

Overall conclusion

It is safe to draw the overall conclusion that the case is not made that the VAT exemptions for financial services lead to a lower taxation level and more generally to a more favourable VAT position for the banking sector.

Appendix 1 – How tax, regulations and accounting hit the banks

US SIFI Recovery & Resolution Plans

UK Independent Report on Structure of UK Banking System

Completion of OECD work on bank losses, bank intermediaries and code of conduct for banks?

Dodd Frank legislation

US Compensation proposals

Full implementation of CRD3

Phase in of deductions from Tier 1 Capital e.g. DTAs

BIII Bank-level disclosures for Leverage ratio begins

Full implementation of Basel III / CRD 4

AIFMD

Dodd-Frank rules

"Parallel run" period for BIII leverage ratio begins

Liquidity coverage ratio

Dodd-Frank minimum leverage & capital requirements take effect

EBA bank stress tests

Completion of UK corporate tax reform

CRD2

FSB measures for regulating SIFI's

| 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |

OECD changes to transfer pricing comparability; guidance on business restructuring

CRD4 proposals

IFRS 9 – Financial Instruments: - Classification & Measurement

Revenue recognition: - Changes in timing

EU: Financial Activities Tax Proposals US: Budget measures

Introduction of higher minimum capital charges

IFRS 9 – Financial Instruments impairment and hedging

Leases - More on balance sheet

Introduction of UK & German bank levies

End of bank levy First period

Asset & Liability Offsetting - Limited to unconditional rights of off-set

Contingencies

MiFID review proposals

Implementation of UCITS IV Directive in EU member states

OECD work on permanent establishment threshold and intangibles

Consolidation - Control implications

UK Bribery Act comes into force

EU: Derivatives market infrastructure legislation, Regs on short-selling/credit default swaps, CRD IV revisions, Market Abuse Directive

Financial statement presentation

Green Paper on the future of VAT – COM (2010) 695

FATCA first period

COM 2007 (747) amending the VAT treatment of insurance and financial services

Key:

| VAT |
| Regulation |
| Tax |
| Accounting |

Appendix 2 – Report of Professor Lockwood

Estimates from National Accounts Data of the Revenue Effect of Imposing VAT on Currently Exempt Sales of Financial Services Companies in the EU

Ben Lockwood[*]

This Version: 14 October 2011

1. Introduction

In this report, we examine, using national accounts data, the impact of the VAT exemption of banks in the EU on VAT revenues for 26 EU countries over the period 2000-2007. Specifically, we ask how VAT revenue collected from the financial sector, and from elsewhere in the economy, would change if VAT were imposed on all financial services, including financial intermediation services (FIS). We also compare our findings to the well-known work of Huizinga(2002) and the very recent estimates of the European Commission (Commission(2011)).

We make two main contributions in the report. First, we construct a conceptual framework that in our view, improves on both Huizinga's original work and the theoretical assumptions that have been made implicitly or explicitly, in the Commission's work.

Our conceptual framework is in fact, very close to Huizinga's . We differ from him in that we have a more sophisticated (and we believe) more accurate calculation of irrecoverable VAT, as explained in more detail in Section 2 below. Our conceptual framework differs from the Commission's in four main ways. First, rather than assuming an artificial recovery rate of 21% of input VAT in the initial situation, we explicitly calculate a natural recovery rate that arises due to the fact that VAT on inputs to non-EU exports can be recovered in the initial situation. This rate differs by country and year, but averages about 7%. Second, we have a different procedure for taking into account that full VAT may not be paid on all inputs to FIS. They use a blanket VAT recovery ratio for the whole economy, whereas we explicitly adjust for purchases from exempt sectors. Third, the Commission implicitly assume, unlike Huizinga, that the disappearance of irrecoverable input VAT from the banks' cost base is not passed on in the form of lower prices, ruling out a tax cascading effect. Fourth, again unlike Huizinga, the Commission do not allow for second-round effects.

Our second contribution is to calculate the revenue effects of ending VAT exemption, given this conceptual framework. Given this conceptual framework, our preferred estimates of the aggregate revenue impact include both tax cascading and second-round effects. Given this, the results depend crucially on the type of data used to measure final and intermediate demand for intermediation services. We use data from both the ESA Sectoral Accounts and Use Tables. With *Sectoral data*, the effects can be positive or negative, depending on the year, but are generally very small, and consistent with the position that the financial sector is neither overtaxed, nor undertaxed with respect to VAT. With *Use data*, the conclusion is, contrary to the findings of the Commission, that the sector is definitely undertaxed – imposing VAT would reduce VAT paid by the sector by an average per year over the period 2000-2007 of about € 7 bn.

A zero or negative number is not as paradoxical or implausible as it may seem at first sight. It is well-known that the revenue effect of bringing an exempt activity into VAT can increase or decrease VAT revenues, depending on where in the chain of supply the activity is predominantly located (Ebrill, Keen, Bodin and Summers(2001)). In particular, if a large part of the supply is B2B, either in the form of domestic business sales, or to businesses in the EU, then the revenue effect can be negative, first because the supplier can reclaim previously irrecoverable VAT on the inputs used to produce those sales, and secondly because removing exemption removes "tax cascading" i.e. lowers the price of downstream products that use the output of that activity as an input. These general principles apply to financial services as much as any other sector.

2. A conceptual Framework

a. An Overview

Consider the following simple set-up. A bank takes deposits from households and firms, and lends them on to other households and firms. In doing so, it provides financial intermediation services (FIS) to households, and to firms. Sales to firms in other countries within the EU are all treated the same for tax purposes, so are defined as domestic firms[179].

Figure 1
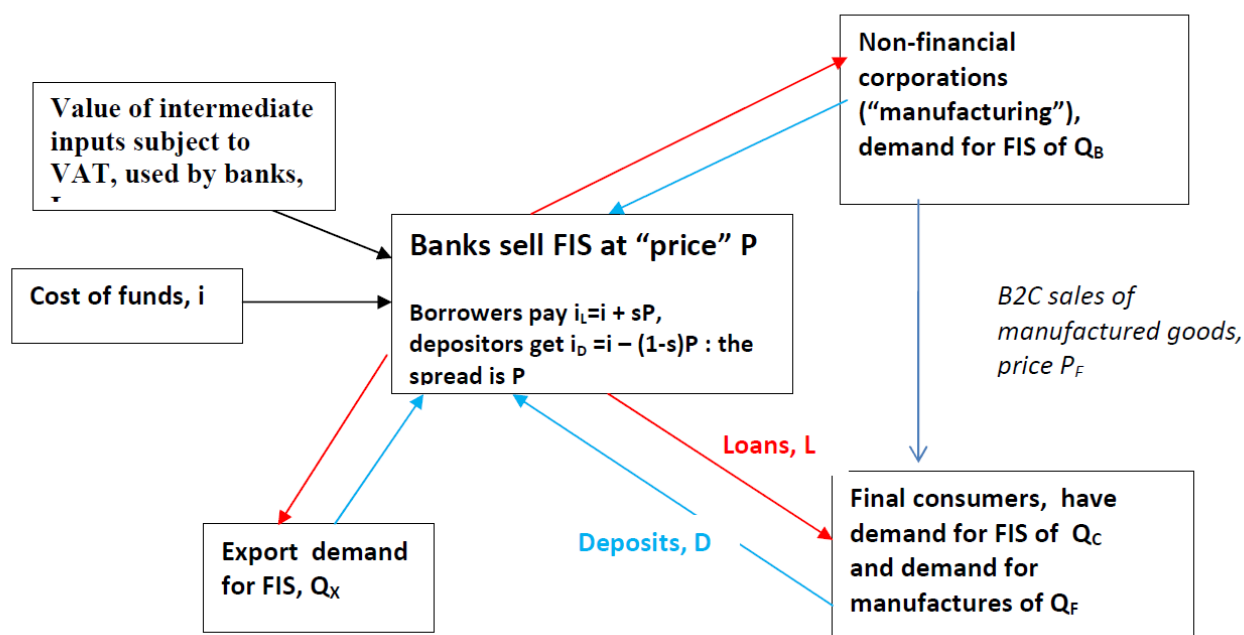
Finally, the bank also sells intermediation services to customers in the rest of the world; the volume of these sales is given by export demand.

How exactly are the quantities demanded (Q) and the price (P) of FIS defined? If the bank takes deposits D from a group of customers, and also makes loans L to that group, the net revenue from those transactions, taking into account the cost of funds, is:

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[179] All sales to other EU countries are assumed to be B2B; we think this is a reasonable approximation, and relaxing this assumption would be very difficult to deal with, given the available data.

$$\underbrace{iD - i_D D}_{revenue\ from\ deposit\ \mathrm{int}ermediation} + \underbrace{i_L L - iL}_{revenue\ from\ loan\ \mathrm{int}ermediation} = P.(sL + (1-s)D)$$

(1)

So, the quantity demanded of FIS is a weighted average of deposit supply and loan demand:

$$Q = sL + (1-s)D$$

The "price" P is the difference between the deposit rate of interest and the loan rate of interest. This is usually known as the *net interest margin* (e.g. Maudos and Fernandez de Guevara (2004)). In our framework, we abstract from uncertainty, but in practice, the net interest margin is adjusted for loan risk, by taking the actual loan interest paid, rather than the contracted amounts.

Finally, the value of FIS, P.Q, is calculated in practice using the formulae similar to that on the left-hand side of (1), using information on interest flows, deposits, and liabilities provided by banks. So, measures of P.Q are known as FIS indirectly measured, or FISIM. The procedure for calculating FISIM is further described in Section 4 of this report.

In the initial situation, no VAT is imposed on any sales of FIS, but the bank cannot claim back the VAT on its inputs. Prices and quantities in the initial situation are subscripted by "0". In the final situation, VAT is imposed on all sales of FIS, and the bank can claim back the VAT on its inputs. Prices and quantities in the new situation are subscripted by "1".

The total revenue effect of the tax reform can therefore be split into three parts:

$$\Delta R = \underbrace{tP_1 Q_{C,1}}_{G} - \underbrace{tI_0}_{L} + \underbrace{t.(P_{F,1}Q_{F,1} - P_{F,0}Q_{F,0})}_{TT}$$

(2)

G is the gain in VAT revenue from taxing the value of B2C transactions $P_1 Q_{C,1}$ after the reform

L is the revenue cost from no longer collecting irrecoverable input VAT before the reform

TT is the change in VAT revenue arising from the fact that the volume and price of other goods and services in the economy - viewed as a composite final good - will generally change after the reform, thus changing output VAT revenue

b. First-Round and Second-Round Effects

When a tax changes, there are two effects on tax revenue, first-round and second-round.

- First-round: effect on revenue due to change in the tax, holding the quantity constant
- Second-round: effect on revenue due to change in quantity purchased, holding the tax rate constant

For example, consider an increase in a specific excise tax on cigarettes. The first-round effect is to increase revenue, as more tax is collected per cigarette sold. The second-round effect is that the number of cigarettes sold falls. This second-round effect therefore offsets the first-round effect, and may even dominate it, leading to a fall in revenue.

The size of the second-round effect therefore depends on how much the quantity responds to the tax rate. This is measured by the <u>price elasticity</u>, which is the percentage decrease in quantity caused by a 1% increase in the price.

All studies of second-round effects therefore have to make some assumptions about the price elasticity. One way to do this is just to assume a range of values. The second, preferable approach is to use published econometric studies which estimate the price elasticity (or parameters related to it) to get a more accurate measure. This is what the UK government do, for example, in the case of cigarette excise taxes.

But, cigarette taxes are a simple case where the tax base and the consumer price are both very clearly defined. The case of FIS is the opposite; both the tax base and "price" have many components. The details of how we compute second-round effects are rather complex and are deferred until Section 6 below. Here, we just give the main ideas.

How can we interpret our basic formula for ΔR, equation (1), in terms of first-round and second-round effects?

First, **no change in the formula for L is required**, as the loss is calculated **at initial prices and quantities**, which are directly observable from the national income accounts.

Second, we can decompose G into first- and second-round effects:

$$G = \underbrace{t P_1 Q_{C,0}}_{G_1} + \underbrace{t P_1 (Q_{C,1} - Q_{C,0})}_{G_2}$$

In the same way, we can decompose TT into first- and second-round effects:

$$TT = \underbrace{t(P_{F,1} - P_{F,0})Q_{F,0}}_{TT_1} + \underbrace{t P_{F,1}(Q_{F,1} - Q_{F,0})}_{TT_2}$$

It is customary in the tax evaluation literature to first calculate first-round effects, and then add the second-round effect to get a total effect. We follow this procedure below.

c.   Our Approach

In this Section, we explain our approach to measuring ΔR, considering only the first-round effects of the tax change (the extension to second-round effects is given in Section 6 below). Recall that this is the effect on tax revenue, prices etc. of the tax assuming no behavioural response by firms or households i.e. holding all demands and supplies constant. So, $Q_{C,1} = Q_{C,0} = Q_C$ etc. Also, following Huizinga, we will assume that all of the change in burden of the tax is passed through to the purchaser via the change in the price.

P0 is determined as follows. First, we assume that FIS are produced with a so-called fixed coefficients technology where one unit of FIS is produced with 1 unit of an intermediate input subject to VAT (Huizinga calls this computer services), with price p*, and b units of a primary input, say labour, with price W. Moreover, we will assume that the FIS is priced competitively at unit cost. So, the initial unit cost of production of the FIS, and also the price consumer P0, is

$$P_0 = P*(1+t) + bW = P(1+\gamma t), \quad P = P^* + bW, \quad \gamma = \frac{P^*}{P^* + bW} = \frac{P^*}{P} \qquad (3)$$

where P is the price of FIS without any VAT at all, and γ is the share of the value of intermediate inputs in the value all inputs (See Huizinga(2002)). In other words, from (3), irrecoverable VAT raises the price of FIS to households and business.

So, the initial value of sales of FIS to households at producer prices, which is observable in the national accounts, is:

$$P_0 Q_C = P(1+\gamma t)Q_C$$

where QC is fixed consumer demand for FIS (this can be thought of as consumer demand for loans). Now, suppose that VAT is imposed on FIS output and full input VAT recovery is allowed. Then, from (1), the unit cost of FIS, falls by γtP to P, but at the same time, a tax t is imposed on B2C sales, raising the price by tP. So, the consumer price rises to

$$P_1 = P(1+t)$$

So, assuming no demand response, the gain in VAT revenue from taxing B2C transactions is

$$G = tpQ_C = \frac{tP_0 Q_c}{1 + \gamma t} \qquad (4)$$

Note that (4) is written in terms of observables i.e. $t, P_0 Q_C, \gamma$ and thus can be calculated.

We now develop a formula for L, loss in revenue from making input VAT recoverable, taking into account imports and exports. Let initial domestic production of FIS be denoted by Q.

Note first that, as one unit of output requires one unit of input, the value of intermediate inputs used in B2C and B2B is $P^* Q = V$. This can be directly measured from the use tables of the national accounts[180].

However, under current EU law, companies can claim back VAT on inputs purchased to produce FIS for export outside the EU i.e. these exports are effectively zero rated, even though FIS are exempt. So, even with exemption, the input VAT that is recoverable is $tp^* Q_X$ where Q_X denotes exports to the rest of the world outside the EU.

So, the **additional** input VAT that is recoverable when VAT is imposed on FIS is:

$$L = t.V - tP^* Q_X \qquad (5)$$

Now, $P^* Q_X$ is not directly observable in the national accounts, but can be inferred as follows: using (4), revenue loss from input VAT following the reform is:

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[180] This procedure is described in more detail in Section 4 below.

$$P^* Q_X = \frac{P^*}{P} p Q_X = \gamma \frac{P_0 Q_X}{1 + t\gamma} \qquad (6)$$

where $P_0 Q_X$ is usually available from the Use tables[181] . A final refinement is that in the empirical work, we will adjust V to allow for the fact that some input purchases by the FIS sector are themselves VAT-exempt, giving that value of intermediate inputs excluding those from exempt sectors, denoted VE. So, in the end from (5) and (6) we calculate L as

$$L = t.VE - \frac{t\gamma P_0 Q_X}{1 + t\gamma} \qquad (7)$$

Finally, we need to develop a formula for the tax on tax effect, TT. With no second-round effects, from (2):

$$TT = t(P_{F,1} - P_{F,0}) Q_F \qquad (8)$$

where $P_{F,1}, P_{F,0}$ are producer prices of the FIS before and after the VAT reform, and QF is fixed sales of FIS to final consumers.

Now we need to make some additional economic assumptions; Huizinga's assumptions will be a special case. Assume that the one unit of final product is produced from B units of another input[182] not subject to VAT, labour, with price W, and 1 unit of FIS. So, $Q_F = Q_B$ and the unit cost and price of the final good before the reform is:

$$P_{F,0} = p(1 + \gamma t) + BW \qquad (9)$$

Also, suppose that, consistently with the pass-through assumption on the consumer side, all of the fall in unit cost is passed through to the business customer by the FIS provider. In particular, from (1), the unit cost of FIS falls by γtp to p. Then, the new producer price is

$$P_0 - \gamma t P = P$$

Thus, assuming competitive pricing of the final good, the new price of the final good is

$$P_{F,1} = P + BW \qquad (10)$$

So, combining (8), (9) and (10), we get:

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[181] In the use tables, $P_0 Q_X$ is sometimes not available, and thus must be imputed. See Section 3 below.
[182] Huizinga assumed that B=0. In the case of inelastic demand (first-round effects), this assumption does not matter i.e. the same formula for TT is derived in the general case, as we show.

$$TT = -p\gamma t^2 Q_F = -t^2 \gamma p Q_B = -\frac{t^2 \gamma P_0 Q_B}{1+t\gamma}$$

So, the total effect on VAT revenue is

$$\Delta R = G - L + TT = \underbrace{\frac{tP_0 Q_c}{1+\gamma t}}_{G} - \underbrace{t.VE + \frac{t\gamma P_0 Q_X}{1+t\gamma}}_{L} - \underbrace{\frac{t^2 \gamma P_0 Q_B}{1+t\gamma}}_{TT} \qquad (11)$$

d.   Reconciliation with Huizinga(2002)

Huizinga(2002)'s approach to estimating the hypothetical revenue effects of imposing VAT on financial intermediation services (FIS) is the dominant one in the literature. While influential, it makes a number of strong assumptions, notably: (i) he ignores international trade; (iii) all intermediate inputs purchases by the FIS sector are assumed subject to VAT in the empirical calculations.

Finally, he has a rather unusual decomposition of the overall revenue effect of introducing VAT: he splits the total effect into that additional VAT paid by B2C customers on the one hand, and the reduction in VAT paid by B2B customers, on the other (by definition, in his set-up, FIS providers do not bear any of the burden of the VAT, because there is full cost-pass-through). This is not the same as the usual decomposition that is used, which is to divide the total revenue change into the gain from taxing final consumption, minus the loss in revenue from making input VAT recoverable.

However, we can reconcile our approach with Huizinga; his formula for the change in tax emerges from (11) when (i) is imposed in our framework. Specifically, Huizinga(2002) assumed no exports, so $L = tP^*Q$. Moreover, with no international trade, output Q equals the sum of intermediate and final demand i.e. $Q = Q_C + Q_B$. So, (6) becomes

$$L = tP.^*(Q_C + Q_B) = \frac{t\gamma P_0 (Q_C + Q_B)}{1+t\gamma} \qquad (12)$$

Now, substituting (12) in (11), we get:

$$\begin{aligned} \Delta R &= \frac{tP_0 Q_c}{1+\gamma t} - \frac{t\gamma P_0 (Q_C + Q_B)}{1+t\gamma} - \frac{t^2 \gamma P_0 Q_B}{1+t\gamma} \\ &= \frac{t(1-\gamma)}{1+\gamma t} P_0 Q_C - \frac{t(1+t)\gamma P_0 Q_B}{1+t\gamma} \\ &= \Delta R_C - \Delta R_B \end{aligned} \qquad (13)$$

where $\Delta R_C, \Delta R_B$ are the changes in VAT revenue from the tax reform paid by B2C and B2B customers, respectively. But now from (13):

- ΔR_B is just area 1 in Figure 1 of Huizinga (2002), and thus equal to column 1 in Table A2 of his web appendix[183]

- ΔR_C is just area 1 in Figure 2 of Huizinga (2002), and thus equal to column 2 in Table A2 of his web appendix[184]

So, alternatively, we can write Huizinga's measure of ΔR, using our decomposition, as

$$\Delta R_H = \underbrace{\frac{tP_0Q_c}{1+\gamma t}}_{G} - \underbrace{\frac{t\gamma P_0(Q_C + Q_B)}{1+t\gamma}}_{L} - \underbrace{\frac{t^2\gamma P_0Q_B}{1+t\gamma}}_{TT} \tag{14}$$

Comparing $\Delta R, \Delta R_H$ we see that even assuming full cost-pass-through, our estimates of ΔR will be generally lower than Huizinga's, because our estimate of L will be higher, because we allow for exports.

e.   Comparison with Huizinga(2002) and European Commission(2011)

From the Commission study, we can deduce[185] that in our notation, their formula for the revenue change is

$$\Delta R_C = \underbrace{tP_0Q_c}_{G} - \underbrace{t.(0.79).VRR.VII}_{L} \tag{15}$$

Here, the VRR is the so-called VAT revenue ratio , which measures the percentage difference between the VAT revenue actually collected, and what would theoretically be raised if VAT was applied at the standard rate to the entire potential tax base and all revenue was collected (European Commission(2011)). Also, 0.79=1-0.21, where 0.21 is the assumed actual VAT recovery rate on input VAT.

Remarks on VAT recovery rate

The European Commission acknowledges in its paper that there are no national estimates on the share of irrecoverable VAT. Moreover, for the EU Member States, no sufficiently reliable data is available on recovery rates relating to financial intermediation services (FIS). For this reason, the Commission uses a recovery rate of 21% which is taken from the PricewaterhouseCoopers (PwC) 2006 study as the best available proxy.

With respect to the application of this recovery rate, the following remarks can be made.

The data provided in the PwC 2006 study stems from 22 case study companies, taken from all subsectors of the financial and insurance sector. Sixteen companies responded to the question on VAT recovery. From

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[183] This is derived as follows. In our notation, area 1 in his Figure 1 is

$$Q_B(P(1+t)(1+\gamma t) - P(1+t)) = PQ_B\gamma(1+t)t = \frac{t\gamma(1+t)P_0Q_B}{1+t\gamma}$$

[184] This is derived as follows. In our notation, area 1 in his Figure 2 is $Q_C(P(1+t) - P(1+\gamma t)) = PQ_C(1-\gamma)t = \frac{t(1-\gamma)P_0Q_C}{1+t\gamma}$

[185] This formula has been verified via personal communication with the Commission. They in fact have three different calculations of the value of V; this formula is used in all three cases. The calculation of V in their baseline estimation, Estimation 1, starts with the value of intermediate consumption of inputs for activity 65, as we do

these 16 respondents, the average percentage VAT recovery rate was 19%. The Commission has taken 21%, apparently having considered a 'zero' as a 'not applicable'.

The PwC 2006 study covered the financial and insurance sector, by that, including case study companies from a broad range of financial services sectors, like investment management and insurance companies. The average VAT recovery rate is influenced by financial service providers not being banks. In fact, the two highest scores (52% and 74%) in the source table (page 17, table 4 of the study) come from investment management companies which have, due to their partly taxable activities, in general much higher recovery rates, and typically much higher than banks.

The Commission uses the sectoral tables to measure the output of FIS, which means that only interest income is included. It excludes other activities that banks would normally provide like: brokerage, trading on own account (e.g. commodity trading activities), asset management / investment management, insurance, custody activities and pension fund services. In many Member States, activities such as trading on own account (e.g. commodity trading activities), asset management / investment management, custody activities and pension fund services are (partially) taxed with VAT.

It would be safe to assume that based on the scope of FIS, which only takes into account interest income, the VAT recovery rate is expected to be close to zero. That is, without taken into account a partial recovery relating to "zero-rated" non-EU exports.

Also when an alternative Eurostat data source is used (use tables) to measure the output of FIS which includes some additional income next to interest, it would be safe to assume that a fair and reasonable VAT recovery rate is expected to be in the range between 0% and 10%.

The average VAT recovery rate from the PwC 2006 study (i.e. 19%) seems therefore not suitable to be used as an average recovery rate. As a result, the Commission's calculations appear to lead to an underestimation of irrecoverable VAT. This has a consequence, that the revenue gains might be overstated.

As there are no national estimates on the share of irrecoverable VAT and no sufficiently reliable data is available on VAT recovery rates relating to FIS, no final conclusions can be drawn on the recovery rates. For the alternative calculations based on the use tables, therefore two scenario's have been taken into account, one assuming a VAT recovery rate of 5% and one assuming a 10% recovery rate. This is in addition to a recovery for non-EU exports. We refer to section 7 of this paper.

So, we can identify the main differences[186] between our Study and the Commission study, and also to Huizinga, as follows:

	This Study	Commission Study	Huizinga Study
Table 2.1			
G	$\dfrac{tP_0Q_c}{1+\gamma t}$	tP_0Q_c	$\dfrac{tP_0Q_c}{1+\gamma t}$
L	$t.VIIE - \gamma t\dfrac{P_0Q_X}{1+t\gamma}$	$t.VII.(0.79).VRR$	$\dfrac{t\gamma P_0(Q_C + Q_B)}{1+t\gamma}$
TT	$-\gamma t^2\dfrac{P_0Q_B}{1+t\gamma}$	0	$-\gamma t^2\dfrac{P_0Q_B}{1+t\gamma}$
Second-round effects	YES	NO	YES

So, in our view, the key differences between our Study and Commission's are:

1. The Commission implicitly[187] assumes full pass-through of output VAT but no pass-through of reduction in cost due to recovery of input VAT. In contrast, we assume full pass-through of both taxes, following Huizinga. In our view, their approach overestimates final consumer price of FIS and thus G. The percentage overestimation is t*γ which is around 8% on average.

2. The Commission has a different (and generally smaller) estimate of L than ours because (i) it assumes a 21% recovery rate; (ii) it deflates L by the VRR.

3. The Commission ignores tax on tax/tax cascading effects, as a result of implicitly assuming no pass-through of the elimination of irrecoverable VAT in the form of a lower output price.

4. The Commission discusses second-round effects but does not calculate them.

Note also the similarities between our Study and Huizinga's. The only difference is that we use a more direct measure of L, whereas Huizinga uses an indirect measure of L, calculated as a fraction of total demand for FIS. Our measure is also adjusted for non-EU exports, and input purchases from exempt Sectors, as described above. We believe our measure of L is therefore more accurate.

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186 There may also be differences in the data, insofar as procedures for dealing with missing data may differ.
187 This is only implicit in their methodology: no explicit assumptions about pass-through are made in their document.

3. The Data

This Study attempts to estimate ΔR at the national level for the EU-26 (excluding Cyprus, for which no data is available) over the period 2000-2007. The end date is dictated by the fact that use tables are not available after 2007 except for a very few countries.

In order to calculate VII, the value of intermediate inputs used in production of FIS, and for calculation of γ, we use the Eurostat use tables, available from

http://epp.eurostat.ec.europa.eu/portal/page/portal/esa95_supply_use_input_tables/data/workbooks.

The main problem with these data is that the national accounting activity classification does not cleanly divide the financial services sector into a subsector subject to VAT, and subsector exempt from VAT. Specifically, the classification used is NACE 1, and data is only available at the 2-digit level i.e. for activities 65, 66, 67. The definitions of these activities are given in Table A.1 to this document.

It is then a matter of judgement whether the activities in 65, 66 and 67 are primarily margin-based and thus exempt from VAT, or not. We proceed as follows. First, our focus in this Study is on core banking activities, excluding insurance. So, we excluded activity 66 from the analysis.

Second, we can reasonably take most, of the activities in 65 as both exempt, and related to core banking activities. The exception is financial leasing, which is subject to VAT in some EU countries (Monacelli and Maria Grazia Pazienza (2007), Table 2).

The problem is with activity 67; activities in this heading are a mix of margin based activities not subject to tax (e.g. trading in securities on behalf of others) and fee-based activities subject to tax, and thus activity 67 is hard to classify on the exempt-non-exempt dimension. So, take a conservative approach, and focus only on activity 65.

The second kind of data we require are the sectoral demands for FIS by non-VAT registered bodies (households and government), non-financial corporations, and export demand, both intra-EU, and to the rest of the world.

These are available in two ways. The first is to use the estimates of FISIM from the Eurostat Sectoral national accounts. The Sectoral Accounts give consumption of FISIM by sector. For our purposes, we use data for three sectors:

- Households; non-profit institutions serving households (S14, S15)

- General government (S13)

- Non-financial Corporations (S12)

The total consumption of FISIM by sectors S13, S14, S15 gives us a measure of the value of B2C services, P_0QC, and the total consumption of FISIM by sector S12 gives us a measure of the value of B2B services, P_0QB. This measure for B2C has the advantages that (a) it only includes consumption that is not subject to VAT, and (b) it is the same measure that is used by the Commission to calculate the value of B2C services. It has the disadvantage that the inputs used in the supply of FISIM calculated in this way are not measured, and so we must use the input demand from the Use tables, which is imprecisely matched to it.

The alternative is to use the Use tables to construct measures of P_0QC, P_0QB. This has the advantage that the demands for output of FIS are measured consistently with the input demands; (ii) that data coverage is very good. It has the disadvantages (i) that as just discussed, activity 65 may include some taxable activities; (ii) intermediate demand for FIS is not disaggregated into demand by non-financial corporations i.e. P_0QB and other intermediate demand.

A final issue is that of measuring P_0QX, the value of exports to the rest of the world. Here, the Sectoral data are very poor, with many missing values, so the only alternative here is to use the Use Table data, which are complete enough to allow us to get estimates of P_0QX, with a certain amount of imputation (details available on request).

Finally, standard VAT rates are used for measurement of t. If the standard rate changed within a year, we calculate a weighted average of the two rates, weighted by the proportions of the year for which the two rates were in force. This data is shown in Table 3.1 below.

Table 3.1: Standard Rates of VAT									
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**Years in which VAT rate changed**
Austria	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	
Belgium	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	
Bulgaria	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	
Czech	0.22	0.22	0.22	0.22	0.2	0.190	0.190	0.19	05/01/2004
Denmark	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
Estonia	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	
Finland	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	
France	0.1985	0.196	0.196	0.196	0.196	0.196	0.196	0.196	04/01/2000
Germany	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.19	01/01/2007
Greece	0.18	0.18	0.18	0.18	0.18	0.1875	0.19	0.19	04/01/2005
Hungary	0.25	0.25	0.25	0.25	0.25	0.25	0.2	0.20	01/01/2006
Ireland	0.21	0.2	0.208	0.21	0.21	0.21	0.21	0.21	01/01/2001;03/01/2002
Italy	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.20	
Latvia	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	
Lithuania	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	
Luxembourg	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	
Malta	0.15	0.15	0.15	0.15	0.18	0.18	0.18	0.18	01/01/2004
Netherlands	0.175	0.19	0.19	0.19	0.19	0.19	0.19	0.19	01/01/2001
Poland	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	
Portugal	0.17	0.17	0.18	0.19	0.19	0.2	0.21	0.21	06/05/2002;07/01/2005
Romania	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	
Slovakia	0.23	0.23	0.23	0.2	0.19	0.19	0.19	0.19	01/01/2003; 01/01/2004
Slovenia	0.19	0.19	0.2	0.2	0.2	0.2	0.2	0.20	01/01/2002
Spain	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	
Sweden	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
UK	0.175	0.175	0.175	0.175	0.175	0.175	0.175	0.175	

Source: EuropeanCommission(2008)

4. Computing The Value of Intermediate Inputs, and the Share of Intermediate inputs in FIS Output

For any country and year, the Use tables give the total value of intermediate inputs to activity 65, i.e. V in out notation. We then refine this value in two ways. First, not all intermediate inputs to the production of financial intermediation bear VAT. The details of exemption vary across countries (as detailed in European Commission (2008), DOC/2412/2008), but the 6th VAT Directive does establish some common exemptions for broad sectors, notably education and medical care. In the national accounts, we identify these activities with:

– Activity 80, primary, secondary, and university education

– Activity 85, hospital, medical and dental services

Also, the services provided under the heading of public administration (Activity 75) are almost always[188] free at the point of delivery and so are not subject to VAT. Last but not least, financial intermediation is a major input to the activity of financial intermediation itself; for example, in Ireland, the ratio of the value of financial intermediation inputs to financial intermediation output is about 33% in 2007.

So, we calculate the value of inputs to activity 65, excluding inputs from sectors 65, 75, 80, 85. As already remarked, this is denoted by VE. A further advantage of this procedure is that it automatically takes account of VAT groups within the banking sector. Supplies within VAT groups are outside the scope of VAT. Supplies within VAT groups of banks will be within activity 65 and thus deducted from V. VAT groups are major way in which banks reduce their input VAT liability in practice.

A second adjustment is required because for any country and year, the total value of intermediate inputs to activity 65, is at purchaser prices i.e. inclusive of any non-deductible VAT paid on inputs should adjust for the fact that the figures in the second column include non-deductible VAT paid on inputs[189]. Assuming that all remaining inputs other than the ones just identified bear the standard rate of VAT and that VAT is not deductible, we divide the value of VE at purchaser prices, by the standard rate of VAT, to get our final figure for VE.[190]

We now turn to the computation of γ. This is defined empirically as VE divided by the total value of output of the FIS sector 65, also given in the use tables. This is shown by country and year in Table 4.1.

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[188] Public administration, criminal justice, defence, etc.

[189] A caveat here is that it is not clear from the Eurostat ESA guidelines how non-deductible VAT paid on inputs should be calculated. According to the Eurostat Manual of Supply, Use and Input-Output Tables "some product items in the product classification applied might be heterogeneous with regard to the VAT tax rates. Thus, additional breakdowns of those product groups might be necessary. ...only a certain part of an industry might be VAT exempted and appropriate subdivisions might be helpful".

[190] In other words, in the Use tables, we have V=P(1+t)Q, where P,Q are the price and quantity of inputs. So, tPQ=tV/(1+t).

		Table 4.1: γ, share of inputs in value of output, excluding inputs from exempt sectors										
	AT	**BE**	**BG**	**CZ**	**DK**	**EE**	**FI**	**FR**	**DE**	**GR**	**HU**	**IE**	**IT**
2000	0.20	0.36	0.24	0.40	0.28	0.28	0.28	0.27	0.35	0.18	0.35	0.17	0.26
2001	0.28	0.37	0.21	0.43	0.26	0.29	0.27	0.29	0.37	0.21	0.34	0.30	0.29
2002	0.28	0.35	0.19	0.44	0.26	0.26	0.31	0.29	0.34	0.22	0.35	0.31	0.30
2003	0.28	0.37	0.22	0.40	0.25	0.26	0.33	0.29	0.33	0.23	0.36	0.25	0.30
2004	0.27	0.36	0.26	0.36	0.25	0.27	0.34	0.30	0.31	0.18	0.34	0.24	0.31
2005	0.29	0.38	0.20	0.43	0.25	0.33	0.32	0.30	0.33	0.19	0.32	0.24	0.32
2006	0.29	0.39	0.20	0.46	0.26	0.33	0.29	0.31	0.34	0.20	0.33	0.17	0.33
2007	0.28	0.41	0.20	0.39	0.27	0.35	0.30	0.31	0.38	0.19	0.34	0.16	0.31
	LV	**LT**	**LU**	**MT**	**NL**	**PL**	**PT**	**RO**	**SK**	**SI**	**ES**	**SE**	**UK**
2000	0.25	0.19	0.59	0.31	0.33	0.21	0.28	0.31	0.43	0.23	0.19	0.29	0.56
2001	0.25	0.17	0.61	0.08	0.29	0.23	0.26	0.30	0.36	0.24	0.18	0.28	0.56
2002	0.25	0.20	0.60	0.08	0.25	0.25	0.27	0.30	0.31	0.25	0.18	0.29	0.46
2003	0.25	0.25	0.64	0.08	0.24	0.25	0.26	0.30	0.34	0.25	0.18	0.27	0.46
2004	0.25	0.26	0.65	0.08	0.23	0.26	0.28	0.27	0.30	0.23	0.18	0.26	0.33
2005	0.25	0.22	0.68	0.08	0.24	0.27	0.30	0.30	0.27	0.24	0.18	0.26	0.33
2006	0.25	0.18	0.69	0.08	0.29	0.29	0.30	0.36	0.27	0.24	0.18	0.29	0.33
2007	0.25	0.20	0.69	0.08	0.33	0.26	0.30	0.43	0.30	0.25	0.17	0.30	0.33

5. Computation of ΔR

This is a two-stage procedure. First, we calculate the individual components L, G, and TT. Then, we calculate ΔR=G-L-TT.

First, we turn to the computation of L. From (7) this is t*VE minus a correction for exports to the rest of the world. To make this correction, we calculate P_0QX as described in Section 4 above, and then use values of t and estimated values of γ in Table 4.1. to calculate t. γ P_0QX/(1+t γ).

Finally, L can be compared to the crude figure for L that could be obtained by just multiplying V by t, shown as t*V in the last column. This shows that our refinements have a major impact on the calculation of L; it would be strongly upwardly biased in the absence of these refinements.

Table 5.1		
	L	**t.V***
2000	26,019	35,075
2001	27,235	38,365
2002	27,153	38,323
2003	27,485	38,022
2004	25,823	37,911
2005	28,344	41,731
2006	30,820	45,521
2007	33,326	49,929

All values million Euro

To compute G, we have two alternative ways of computing P_0QC, the initial demand for FIS. The first is to use the estimate of FISIM consumed by households in the sectoral accounts. The second is to use the sales of sector 65 to households from the use tables.

Table 5.2		
	G Sectoral	**G Use tables**
2000	27,159	19,751
2001	27,933	21,682
2002	28,622	20,744
2003	30,415	20,870
2004	31,777	26,407
2005	32,958	28,701
2006	33,700	32,481
2007	34,507	36,587

All values million Euro

Finally, to compute TT, we have two alternative ways of computing P_0QB, the initial B2B demand for FIS. The first is to use the estimate of FISIM consumed by non-financial corporations in the Sectoral accounts. The second is to use the value of intermediate sales of sector 65 to households from the Use tables. The second figure is much larger than the first, as it is an estimate of total intermediate demand for FISIM, including demand by banks and other financial corporations.

Table 5.3		
	TT,Sectoral Accounts	TT, Use tables
2000	781	3,943
2001	843	4,071
2002	843	4,171
2003	847	4,239
2004	819	3,680
2005	862	3,960
2006	843	4,145
2007	957	4,491

All values million Euro

We see that the additional of demand for FIS by banks and other financial corporations into the intermediate demand for FIS makes a very big difference to the size of the tax cascading effect. One concern is that the Use table measure which is not really consistent with the theoretical model, which assumed the tax cascading effect is generated by the fact that FIS is an input to production by non-financial corporations (i.e. "manufacturing" in Figure 1 above) . For completeness, we use both calculations of TT. But, our preferred measure on is based on Sectoral accounts.

We can now combine Tables 5.1-5.3 to get our estimates of the overall revenue change. There are two sets of estimates, based on Sectoral Accounts, and on Use Tables, and they are both shown in Table 5.4. The first and third columns show the first-round estimate, excluding TT i.e. no tax cascading. The second and fourth columns include TT.

Table 5.4: Revenue Change, Sectoral Accounts				
	Sectoral data		Use table data	
	no tax cascading G-L	tax cascading G-L-TT	no tax cascading G-L	tax cascading G-L-TT
2000	1,141	360	-6,267	-10,211
2001	698	-145	-5,553	-9,623
2002	1,470	626	-6,409	-10,579
2003	2,930	2,083	-6,615	-10,854
2004	5,954	5,135	583	-3,096
2005	4,614	3,752	357	-3,603
2006	2,880	2,037	1,661	-2,485
2007	1,181	224	3,262	-1,230
Average	2,608	1,759	-2,373	-6,460

All values million Euro

6. Second-Round Effects

a. Introduction

Second-round effects have already been discussed conceptually in Section 2(b). Here, we discuss how we quantify these. First, due to the timescale of the project, the estimates in the Section are very preliminary, and could be substantially refined and improved with further work. First, note that no change in the formula (6) for L is required, as the loss is calculated at initial prices and quantities, which are directly observable from the national income accounts. So, we focus on second-round effects on G and TT.

b. Second-Round Effects on TT

In the calculation of TT, second-round effects make the sign of TT theoretically ambiguous. Also, very strong assumptions have to be made to calibrate it empirically. Finally, for reasons explained below, it is likely to be small. So, we ignore the second-round effect on TT in our calculations.

Our detailed reasoning is as follows. Recall that from the second-round formulae in Section 1(b) above:

$$TT_2 = tP_{F,1}(Q_{F,1} - Q_{F,0})$$

Where the unit cost and price of the final good before and after the reform are:

$$P_{F,0} = P(1 + \gamma t) + BW \quad , \qquad P_{F,1} = P + BW$$

So as $P_{F,1} < P_{F,0}$, then $Q_{F,1} > Q_{F,0}$ and thus TT$_2$>0, so the second-round effect tends to make TT less negative. To get a sense of the size and importance of the second-round effect, note that we can rewrite the final prices as:

$$P_{F,0} = P_F(1+\gamma_F\gamma t), \ P_{F,1} = P_F ,$$

$$P_F = P + BW, \ \gamma_F = \frac{P}{P+BW}$$

where P$_F$ is the price of FIS with any VAT imposed at all and γF is the share of FIS in the cost of the composite manufactured good. Assuming an elasticity of demand θ for the final composite product, we can write

$$Q_{F,1} - Q_{F,0} \ \square \ -\theta(P_{F,1}-P_{F,0})Q_{F,0}/P_{F,0}$$

So, combining all these, we get

$$TT_2 = tP_{F,1}(Q_{F,1}-Q_{F,0}) \ \square \ \theta t^2 \gamma\gamma_F P_F \frac{P_{F,1}Q_{F,0}}{P_{F,0}}$$

Now note the following:

1. Relative to TT$_1$, the second-round effect is proportional to γ$_F$, the share of FIS in total cost of production of the other composite good. This will be small i.e. roughly proportional to the share of FIS in GDP, say 5%.

2. To compute the second-round effect, we need some estimate of γ$_F$, and some estimate of the elasticity of demand for the composite good , θ .

    (a) <u>Estimate of θ.</u> This is difficult, as in practice, many different goods are produced with FIS input, and they will have different elasticities of derived demand for FIS. It is not really meaningful to calibrate this empirically.

    (b) <u>Estimate of γ$_F$.</u> This is difficult, again as in practice, many different goods are produced with FIS input, and they will have different input shares i.e. different γ$_F$. It is not really meaningful to calibrate this empirically.

So, we do not attempt to make an estimate of TT$_2$ in this report.

c.   Second-Round Effects on G

Generally, $G = tP_1Q_{C,1}$ where Q$_{C,1}$ is the demand for FIS by households, Q$_C$ after the tax reform. From Section 2, we know that there are two components of this, demand for loans, and supply of deposits i.e.

$$Q_C = (1-s)D + sL \tag{16}$$

We will also assume that demand for loans, and supply of deposits are iso-elastic functions of the relative interest rates given in Figure 1, i.e.

$$D = A_D(i_D)^\delta, \quad L = A_L(i_L)^{-\varepsilon}, \quad i_D = i - (1-s)P, \quad i_L = i + sP \qquad (17)$$

where δ, ε are the elasticities of deposit supply and loan demand.

Now, let P0,P1 be prices of FIS before and after the reform, and let the corresponding quantities be D0,D1,L0,L1. Then combining (16) and (17):

$$D_1 / D_0 = \left(\frac{i - (1-s)P_1(1+t)}{i - (1-s)P_0} \right)^\delta, \qquad L_1 / L_0 = \left(\frac{i + sP_1(1+t)}{i + sP_0} \right)^{-\varepsilon}$$

So, G, the gain in VAT revenue from taxing B2C transactions is

$$G = t((1-s)P_1 D_1 + sP_1 L_1) = (1-s)tP_1 D_0 \left(\frac{i - (1-s)P_1(1+t)}{i - (1-s)P_0} \right)^\delta + stP_1 L_0 \left(\frac{i + sP_1(1+t)}{i + sP_0} \right)^{-\varepsilon}$$

$$= tP_1 Q_0 \left(\frac{(1-s)D_0\omega_D + sL_0\omega_L}{(1-s)D_0 + sL_0} \right), \quad \omega_D = \left(\frac{i - (1-s)P_1(1+t)}{i - (1-s)P_0} \right)^\delta, \quad \omega_L = \left(\frac{i + sP_1(1+t)}{i + sP_0} \right)^{-\varepsilon} \qquad (18)$$

So, comparing (18) and (4), the impact of the second-round effect is to scale down the gain by a factor

$$\left(\frac{(1-s)D_0\omega_D + sL_0\omega_L}{(1-s)D_0 + sL_0} \right) < 1 \qquad (19)$$

This reflects the fact that when VAT is imposed on B2C sales, demand for FIS will fall.

Finally, note that changes in the return on deposits and the cost of borrowing, respectively, can be rearranged as follows:

$$\frac{i - (1-s)P_1(1+t)}{i - (1-s)P_0} = \frac{i / P_0 - (1-s)(1+t)/(1+\gamma t)}{i / P_0 - (1-s)} \qquad (20)$$

$$\frac{i + sP_1(1+t)}{i + sP_0} = \frac{i / P_0 + s(1+t)/(1+\gamma t)}{i / P_0 + s} \qquad (21)$$

So, the right-hand sides of (20), (21) are in terms of observables, except for s, P_0, and i. So, to compute this scaling effect (19), we need, in addition to the data already used, estimates of s, δ,ε, $D_0/(D_0+L_0)$, i, P_0. Some of these can be calibrated, as described in Table 6.1 below.

Finally, we were not reasonably able to calibrate s and δ. In the absence of any other information, we set s=0.5. Given the time constraints, we could not find any estimates of δ in the literature,. There are some estimates of the demand elasticity for monetary aggregate M2 with respect to its own rate of interest, and bank deposits are a major component of M2. These estimates tend to be quite low i.e. lower than our range of values for ε. So, we set $\delta=\varepsilon$, and in view of the fact that possibly $\delta<\varepsilon$, our estimate of the adjustment factor is biased downwards, leading to an overestimate of the second-round effect, Given that our actual estimate of the second-round effect is quite small, this is not of great concern.

Table 6.1: Calibration		
Variable	**Calibration**	**Source**
$D_0/(D_0+L_0)$	Table A1	Eurostat consolidated bank balance sheet data
i	Euribor 12-month rate taken in June of each year 2000-2007	http://www.euribor-rates.eu/
P_0	1.5	Average value of the net interest margin for EU 1826 banks over 1993-2000, Maudos & Fernandez de Guevara(2004)
ε	0.5, 1, 1.5	Based on micro-study of approx. 24,000 credit card accounts in the US, Gross and Souleles(2002), who estimate interest elasticity of loan demand of 0.8-1.3

The estimates of the second-round adjustment to G, G2, and ΔR are shown in Tables 6.2 and 6.3 for the range of elasticities 0.5, 1.0, 1.5, and for both Sectoral and Use table data. Tax cascading effects are included. As expected, the bigger the elasticity, the larger the negative impact of the second-round effect, and so the lower (i.e. more negative) ΔR. But, the effect is not that large; at the highest elasticity, the revenue loss is only about € 1.4 bn for the Sectoral data, and about € 1.4 bn with the Use table data. Our preferred estimate is for $\varepsilon=1$, which is the mid-point of the range for the elasticity, and thus the estimates for $\varepsilon=1$ are shown in bold.

This is a smaller second-round effect than found in Huizinga(2002), where with an elasticity of 1, he reports a fall in revenue of € 15 bn to € 12.2 bn. With an elasticity of 2, this is further reduced to € 9.5 bn. The reason is that we explicitly take account of the fact that the spreads is only part of the "price" of a loan or deposit.

Table 6.2: Revenue Change, Sectoral Accounts				
Elasticity, ε	**0**	**0.5**	**1**	**1.5**
2000	360	113	**-132**	-374
2001	-145	-427	**-706**	-982
2002	626	300	**-23**	-342
2003	2,083	1,385	**705**	44
2004	5,135	4,450	**3,783**	3,131
2005	3,752	2,971	**2,211**	1,472
2006	2,037	1,568	**1,107**	652
2007	224	-142	**-504**	-862
Average	1,759	1,277	**805**	342

All values million Euro

Table 6.3: Revenue Change, Use Tables				
Elasticity, ε	**0**	**0.5**	**1**	**1.5**
2000	-10,211	-10,397	**-10,581**	-10,763
2001	-9,623	-9,849	**-10,073**	-10,294
2002	-10,579	-10,823	**-11,063**	-11,300
2003	-10,854	-11,345	**-11,823**	-12,288
2004	-3,096	-3,664	**-4,218**	-4,758
2005	-3,603	-4,282	**-4,942**	-5,584
2006	-2,485	-2,935	**-3,379**	-3,817
2007	-1,230	-1,614	**-1,995**	-2,371
Average	-6,460	-6,864	**-7,259**	-7,647

All values million Euro

7. Alternative Recovery Rates

So far, we have assumed that with exemption, banks can only recover input VAT on exports outside the EU. Suppose that the bank can now in fact recover some share r of the remaining input VAT, for example by using the possibility to attribute some of the input VAT to VAT taxable output. Generally, as r rises, the revenue impact of imposing VAT is more likely to be positive, as less irrecoverable VAT is lost under the reform.

We investigate the robustness of our results to different recovery rates i.e. different values of r. The analysis is modified as follows. Now, the cost of irrecoverable VAT per unit of FIS sold is $\gamma t(1-r)$ so the initial value of sales of FIS to households (B2C) at producer prices, which is observable in the national accounts, is now

$$P_0 Q_C = P(1 + \gamma t(1-r)) Q_C$$

Now, suppose that VAT is imposed on FIS output and full input VAT recovery is allowed i.e. r=1. Then, the unit cost of FIS falls by $\gamma t(1-r)p$ to p. Suppose that the bank passes on all of this fall as a lower price (full pass-through). Then, the new producer price of FIS is

$$P_1 = P_0 - \gamma t(1-r)P = P$$

So, assuming no demand response, the gain in VAT revenue from taxing B2C transactions is now

$$G = tP_1 Q_C = tpQ_C = \frac{tP_0 Q_C}{1 + \gamma t(1-r)}$$

Also, formula (7) for irrecoverable input VAT revenue is modified to

$$L = (1-r)\left(t.VE - tP^* Q_X\right)$$

Finally, with a recovery rate, the tax on tax effect is as modified as follows:

$$TT = -\frac{t^2 \gamma (1-r) P_0 Q_B}{1 + t\gamma}$$

So, the total effect on VAT revenue is

$$\Delta R = G - L - TT = \frac{tP_0 Q_C}{1 + \gamma t(1-r)} - (1-r)\left(t.VE - tP^* Q_X\right) - \frac{t^2 \gamma (1-r) P_0 Q_B}{1 + t\gamma}$$

The effects of different recovery rates calculated using this formula are shown in Table 7.1 for Use Table data. Tax cascading is included, but second-round effects are not included.

Table 7.1: Revenue Change, Alternative Recovery Rates, Use Table Data			
	r=0	**r=0.05**	**r=0.1**
2000	-10,211	-8,658	-7,105
2001	-9,623	-7,996	-6,368
2002	-10,579	-8,955	-7,331
2003	-10,854	-9,211	-7,567
2004	-3,096	-1,552	-8
2005	-3,603	-1,911	-219
2006	-2,485	-648	1,190
2007	-1,230	765	2,761
Average	**-6,460**	**-4,771**	**-3,081**

All values million Euro

8. Conclusions

This report has studied the effect of exemption of financial services on VAT revenues within the European Union, both conceptually and empirically. It has constructed a conceptual framework that in our view, improves on both Huizinga's original work and the theoretical assumptions that have been made implicitly or explicitly, in the Commission's work.

Given this conceptual framework, our preferred estimates of the aggregate revenue impact include both tax cascading and second-round effects. Given this, the results depend crucially on the type of data used to measure final and intermediate demand for intermediation services. With Sectoral data, the effects can be positive or negative, depending on the year, but are generally very small, and consistent with the position that the financial sector is neither overtaxed, nor undertaxed with respect to VAT. With use data, the conclusion is, contrary to the findings of the Commission that the sector is definitely undertaxed.

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Table A.1: NACE Definitions	
Section J	Financial Intermediation
65	Financial intermediation, except insurance and pension funding
65.1	*Monetary intermediation*
65.2	*Other intermediation e.g. financial leasing, swaps, options etc.*
66	Insurance and pension funding, except compulsory social security
66.1	*Life insurance*
66.2	*Pension funding*
66.3	*Non-life insurance*
67	Activities Auxiliary to Financial Intermediation
67.1	*Activities Auxiliary to Financial Intermediation, except insurance and pension funding e.g. fund management*
67.2	*Activities Auxiliary to insurance and pension funding*

Source: Eurostat (1996)

Million Euros, 2004

Table A.2: Deposit Shares			
	D_0, Total deposits of residents held at monetary financial institutions (consolidated)	L_0, Total loans to residents granted by monetary financial institutions (consolidated)	deposit share
Austria	216,049	259,193	0.45
Belgium	331,001	243,285	0.58
Bulgaria	10,447	7,953	0.57
Czech Republic	60,032	33,554	0.64
Denmark	114,125	315,055	0.27
Estonia	3,510	5,808	0.38
Finland	77,325	102,398	0.43
France	1,210,670	1,440,550	0.46
Germany	2,279,021	2,734,359	0.45
Greece	143,385	123,740	0.54
Hungary	35,467	40,539	0.47
Ireland	142,500	226,134	0.39
Italy	745,293	1,173,918	0.39
Latvia	3,519	5,452	0.39
Lithuania	5,598	5,392	0.51
Luxembourg	173,881	85,123	0.67
Malta	2,817	2,012	0.58
Netherlands	526,610	794,229	0.40
Poland	86,987	66,463	0.57
Portugal	139,705	191,304	0.42
Romania	16,056	10,681	0.60
Slovakia	653,183	336,392	0.66
Slovenia	3,668,765	2,964,510	0.55
Spain	793,100	993,250	0.44
Sweden*			0.49
UK	2,019,843	2,447,408	0.45

*Imputed as average of other countries

Source: Eurostat consolidated bank balance sheet data

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Your PwC Contacts

David Newton
Partner
Global Head Financial Services Tax
Tel.:   +44 20 78042039
Mobile: +44 7802918881
E-Mail: david.newton@uk.pwc.com

David leads our Financial Services Tax
network globally and has provided guidance on
the direction of the study and helped to convey
the results.

Frans Oomen
Partner
Global Leader FS VAT
Tel.:   +31 88 7925156
Mobile: +31 6 51178705
E-Mail: frans.oomen@nl.pwc.com

Frans leads our Global Financial Services VAT
network and has led the research on the
conceptual part of the study. He has also
contributed his practical experience with VAT
related advice in the FS industry

Peter Merrill
Principal
Tel.:   +1 202 414 1666
Mobile: +1 202 744 2917
E-Mail: peter.merrill@us.pwc.com

Peter leads our National Economic & Statistics
Department in Washington. He has led the
company survey included in the study and
made significant contributions to the macro-
economic part of the study.