



Future Issues in Bank Taxation

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Abstract

The purpose of this article is to provide an overview of the current and future issues related to bank taxation. The basic claim of this paper is that bank taxation schemes are increasingly important as a regulatory tool to augment other forms of bank regulation. Furthermore, such tax schemes can provide an important source of government revenue, internalise the costs of financial crises and contain excessive risk-taking by banks. Understanding the effects and possible unintended consequences of bank taxation schemes is of relevance to government agencies tasked with regulating and supervising the financial services industry.

1. Introduction

The financial crisis that erupted in 2008 necessitated wide scale taxpayer funded state intervention. For countries affected by the financial crisis, public debt increased on average to 24 percent of GDP (Laeven & Valencia, 2010). This has prompted regulatory reforms that aim to reduce risk-taking activities of banks. In the United States and Europe new legislation has been enacted in order to reduce the probability of taxpayer bailouts of banks by limiting activities in volatile and risky areas. Reforms of international regulations require banks to hold more capital and liquidity, while structural reforms have forced banks to separate higher risk investment banking from lower risk retail banking. Capital market reforms have also impacted banks as over-the-counter derivatives move onto organised exchanges.

In addition to these aforementioned regulatory reforms, the taxation of financial institutions has attracted the considerable interest of academics and policy makers (Keen, 2011). Many countries have introduced tax schemes that are specifically designed to the financial sector. The motivation for such tax schemes is a need for governments (often with large fiscal deficits) to recoup some of the costs incurred from bailing out banks.

Aside from representing an important source of government revenue, taxes may also serve other purposes. In the financial sector, taxes are increasingly used as a way to change or correct the behaviour of financial market participants. The majority of the newly introduced taxes (discussed below) aim to internalise the costs of financial crises and contain excessive risk-taking by making socially unwanted behaviour relatively more expensive.

Academic and regulatory impact studies of the effects of taxes on bank behaviour are still relatively scarce. Findings from evidence presented via various empirical studies

suggest that there are positive and negative effects associated with taxing financial institutions. Specifically, taxes (on liabilities) appear to alter the capital structure causing banks to hold proportionately less debt and more equity thereby improving capital ratios and overall financial stability. However, recent evidence also suggests that banks are able to shift much of their respective tax burdens onto customers via higher loan rates to borrowers, and / or lower deposit rates for depositors. There is also evidence that larger banks with extensive geographic spread shift reported profits from high to low tax jurisdictions in order to minimise exposure to taxes. The rest of this short paper is structured as follows. Section 2 of this report reviews and discusses the various new tax schemes that have been introduced since the onset of the financial crisis in 2008. In Section 3 we review the scarce academic literature that assesses the impact of taxation on bank behaviour. Section 4 speculates how tax related issues might play out in the future.

2. Types of Taxes

Schemes used for taxing banks can be organised into two categories. The first advocates the removal of tax exemptions enjoyed by the banking sector and contends that the taxation of banks should not be any different to the taxation of non-financial firms (Gottlieb et al. 2012). The second contends that banks should be taxed differently to non-financial counterparts, given the special role banks play in the economy (Claessens et al. 2010). Recent debates on how to reform and design the taxation of the financial sector have led to the emergence of three preferred mechanisms. These can broadly be classified into risk-, transaction-, and margin-based tax schemes. The following paragraphs briefly introduce these tax schemes and discuss their purposes and recent applications.

Risk-based tax schemes

Risk-based tax schemes (or so-called bank levies) aim to discourage excessive risk-taking in the financial sector. Due to their role as corrective instruments, these tax schemes are regarded as a complementary approach to bank regulation. Risk-based tax schemes are linked typically to a resolution mechanism and fall directly on bank liabilities, which are seen to contribute to systemic risk and potential instability in the banking industry. This form of tax scheme is also thought to correct distortions caused by existing corporate taxation schemes that treat gains and losses asymmetrically. In 2010, a report produced by the International Monetary Fund suggested a levy to be paid by all financial institutions at a rate that reflects the individual institutions riskiness and contribution to system risk (Claessens et al. 2010).

Risk-based tax schemes proved particularly popular among policy makers. The United Kingdom for example introduced a permanent bank tax in January 2011, comprising initially of a tax of 0.04% on risky bank liabilities. Besides the UK, we have witnessed the proliferation of bank levies in many other EU countries including Austria, Belgium, Cyprus, France, Germany, Hungary, Latvia, Netherlands, Portugal, Romania, Slovakia, Slovenia, Sweden (KPMG 2012). Table 1 provides a summary of the risk-based schemes introduced in various countries.

Table 1 Risk-based Tax Schemes

Country	Description	Effective Date:
Austria	Tax base: balance sheet € 1bn - € 20 bn = 0.055% € 20bn and over = 0.085% Proceeds accrue to treasury Objective: contribution towards the costs of the crisis	2011
Belgium	Tax base: total liabilities Tax rate: 0.035% Revenues accrue into special fund	2012
Cyprus	Tax base: total deposits Tax rate: 2011- 2012: 0.095% 2013 onwards: 0.11% Proceeds accrue to special fund	2011
France	Tax base: minimum equity requirement Tax rate: 2011-2012: 0.25% 2013: 0.5% Proceeds accrue to treasury	2011
Germany	Tax base: total liabilities Tax rate: ≤ €300mn = 0%, €300mn - €300bn = 0.02% - 0.05%, > 300bn = 0.06%	2011
Hungary	Tax base: balance sheet Tax rate: ≤ HUF 50bn = 0.15%, > HUF 50bn = 0.53% Proceeds accrue to revenue	2010
Latvia	Tax base: total liabilities Tax rate: 2011: 0.036%, 2012- present: 0.072% Policy objective: contribution towards the costs of the crisis	2011
Netherlands	Tax base: balance sheet Tax rate: long-term (> 1 year) non-secured liabilities: 0.022%, short-term (< 1 year) non-secured liabilities: 0.044% Proceeds accrue to treasury Objective: finance reduction in property transfer tax; contribution towards the costs of the crisis; countering excessive rewards	2012
Portugal	Tax base: liabilities Tax rate: 0.05% Proceeds accrue to treasury Policy objective: raise revenue	2011
Romania	Tax base: total liabilities Tax rate: 0.1%	2011
Slovakia	Tax base: total liabilities Tax rate: 0.4% Policy objective: contribution towards the costs of the crisis	2012
Slovenia	Tax base: total assets Tax rate: 0.1% Proceeds accrue to treasury	2011
Sweden	Tax base: Liabilities and provisions Tax rate: 2009-2010: 0.018% 2011 – present: 0.036% Proceeds accrue to a special fund	2009
UK	Tax base: total chargeable equity and liabilities Tax rate: gradual increase since 2011, Current rate: 0.09% (chargeable equity and long term liabilities), 0.18% (short term liabilities)	2011

Source: Adapted, KPMG (2012)

Transaction-based tax schemes

Transaction-based tax schemes share a similar rationale to risk-based tax schemes in that they aim to discourage high-risk, speculative activities which do not contribute to the efficiency of the financial system or real economy. Transaction-based tax schemes include taxes on trading volume, market liquidity and quotes volatility. Table 2 provides a brief summary of the transaction-based schemes introduced in various countries.

Table 2 Transaction-based Tax Schemes

Country	Description	Effective Date
France	Securities transaction tax Impact: rebalancing of portfolios by fund managers (Williams & Persoff 2014), significant reduction in turnover (Colliard & Hoffmann 2016) and volatility (Becchetti et al. 2014); inconclusive effects on liquidity (Becchetti et al. 2014).	2012
Italy	Securities transaction tax Impact: rebalancing of portfolios by fund managers following the introduction of FTTs (Williams & Persoff 2014).	2013
Austria	Average transaction volume of derivatives in banks' trading book, 0.013% on nominal values Policy objective: promote financial market stability	2011
EU	Proposed by European Commission in 2011. Participants: eleven EU members (Austria, Belgium, Estonia, France, Germany, Greece, Italy, Portugal, Slovakia, Slovenia, Spain)	Scheduled to be effective from mid 2016
Countries with financial transaction tax schemes implemented prior to the 2008 financial crisis include: Switzerland, Belgium, Hong Kong, Finland, Poland, Greece, Cyprus, Brazil, UK		

Source: Adapted, Chaudhry & Mullineux 2014.

Financial Activities Taxes

A financial activities tax (FAT) is a tax on the sum of profits and remuneration of banks. FAT schemes are a family of taxes (not a single tax type) which serve a diverse set of purposes. These taxes aim typically to address the issue of excessive economic rents and are intended to alleviate long-standing imperfections in the tax treatment of the financial sector. A particular tax scheme belonging to the FAT tax family are the so-called margin-based taxes (Claessens et al. 2010). Margin-based taxes are placed directly on the value added by the banks' financial intermediation services. Their main purpose is to lift existing tax exemptions enjoyed by banks in most OECD countries. Table 3 provides a brief summary of countries where a margin-based tax is applied to banks (Note: these are not new tax schemes but have been in place before the financial crisis). Although the imposition of margin-based taxes on financial services is generally regarded as difficult (for a discussion see: Mirrlees et al. 2010; Chaudhry et al. 2015), potential routes to achieving an equivalent outcome have emerged recently. For instance, concerns have been expressed that the inclusion of the financial sector in Value-Added-Tax-schemes would lead to significant price changes. However, some warn that these *'should be seen as the correction to an existing distortion rather than a new distortion.'* (Chaudhry et al. 2015, p.6).

Table 3 Margin-based Taxes

Country	Description
Australia	GST (goods and services tax) Tax base: financial supplies (lending, deposit taking) Tax rate: 10%
New Zealand	GST (goods and services tax)
Argentina	Tax base: gross interest on loans Tax rate: loans 21%, debit card interest 16%, credit card interest 18%
Israel	Addition basis tax Tax base: taxable income for company income tax plus wages Tax rate: standard VAT rate Bank customers do not receive credit for tax paid on purchases
Canada (Quebec)	Addition basis tax Tax base: local wages and paid up capital Tax rate: below provincial tax rate
Italy	Regional tax on productive activities (both banking and other sectors) Tax base: accounting profits plus wages, interest expense not added back in Tax rate: 3.9% (as of 2010)

Source: Huizinga et al. 2002, De la Feria & Walpole 2009, Claessens et al. 2010, Schenk et al., 2016.

3. Literature Review

Compared to the literature on the impact of capital regulation and deposit insurance, evidence relating to the effect of taxation on bank behaviour is relatively scarce. Available evidence appears to suggest that bank taxation can change bank behaviour such that depositors and borrowers are affected as banks seek to shift any burden of additional costs. Furthermore, changes in the overall tax treatment of debt can have consequences for banks' capital structure and the extent of reported profitability and losses. The remainder of this section provides a brief review of available evidence.

Pass-through effects

With the introduction of new types of bank taxes, it is useful to understand who ultimately bears the burden of these new taxes. There is a growing number of studies that investigate if and to what extent banks pass through taxes onto customers and other stakeholders.

When a bank is taxed, the burden may not primarily fall on the financial institution or their owners, but instead on customers. How much customers are affected depends on the relative elasticities of supply and demand. If passed through, bank taxes can place a considerable extra burden on bank customers. For example, following the introduction of additional taxes banks may increase loan rates. Such an increase in the cost of capital could reduce firm's demand for capital and lead to significant distortionary effects to the economy as a whole.

The results emanating from the literature on tax incidence are rather mixed. Early evidence suggests that taxes feed through to higher levels of bank profitability (Demirgüç-Kunt & Huizinga 2001). A high level of profitability in the presence of increased taxes implies that banks are able to pass through tax burdens onto customers. Huizinga et al. (2014) extend this analysis by accounting for international double taxation and find that these taxes are almost fully passed through to bank customers. Other evidence, for example, Albertazzi and Gambacorta (2010) and Chiorazzo and Milani (2011) for large samples of European banks, and Capelle-Blancard and Havrylchuk (2013) for Hungary also find that banks are able to shift most of their respective tax burdens onto customers, with borrowers bearing most of the tax burden via increased loan rates or a reduction in credit access. For a large sample of European banks, Kogler (2015) finds that bank taxes only lead to small

increases in net interest margins via increases in loan rates. Deposit rates paid to savers are unaffected. The level of competition and capitalization is found to affect the pass-through. Imai and Hull (2012) suggest that banks pass along taxes to customers who have the least access to alternative sources of funding. In a recent contribution, Banerji et al (2016) investigate the impact of taxes on the behaviour and performance of Japanese banks following an unexpected and significant introduction of a tax on the gross profits of large banks operating in Tokyo. The authors find that this tax caused affected banks to increase both net interest margins, and net interest and fee margins. Further analysis reveals that depositors were most affected by adjustments to interest and fee rates at banks following the imposition of the tax. Furthermore, the imposition of the Tokyo bank tax reduced the lending of affected banks relative to non-affected counterparts.

Contrary to the findings of the aforementioned studies, other studies find no evidence of a change in banks' loan or deposit rates following the introduction of taxes (Capelle-Blancard & Havrylchuk 2014; Buch et al. 2014). Instead the tax burden is absorbed by the banks.

Capital structure decisions

Tax incentives at the corporate level often lead banks to prefer borrowing over financing by equity. The deductibility against corporate income tax of interest on debt, but not on equity, creates a tax preference for debt over equity finance. There is strong evidence that this leads to higher leverage for non-financial companies (Claessens et al. 2010). Although it is understood that this tax bias alone did not trigger the recent financial

crisis, excessive leveraging of financial institutions has been identified as a key problem that contributed to the crisis.

In the recent past, we have witnessed an increasing number of proposals for tax schemes that aim to reduce the bias towards debt or to eliminate any distinction between debt and equity for tax purposes. de Mooij & Devereux (2011) for example propose the introduction of an Allowance for Corporate Equity (ACE). Such an ACE allows firms to deduct a notional interest rate on firm equity. Ideally, this should make firms indifferent in their choice between debt and equity. There is experience of such schemes: Brazil has adopted these features for many years, Belgium has recently adopted one (2006), and Austria, Croatia and Italy have all had these features in the past. Evidence suggests that such schemes have indeed reduced leverage (Claessens et al. 2010).

Keen and de Mooij (2016) address a large gap in the literature on firms and capital structure decisions which typically leaves out the financial sector. The authors specifically investigate the relationship between corporate income tax and banks' leverage decisions and find evidence for tax distortions to banks' financing decisions. Results point to a tax sensitivity of banks that is comparable to that of non-financial firms; favourable tax treatment of debt causes banks to be notably more highly leveraged. Luo and Tanna (2014) further investigate the relationship between the tax bias to debt finance and bank stability. The authors provide evidence that higher corporate income taxes are associated with higher credit and insolvency risk of banks. Supervisory power, stringent capital requirements, and restrictions on bank activities are found to mitigate some of the impact on bank risk.

Ricotti et al. (2016) also bring forward some evidence for a positive impact of lowering taxes on bank stability. Examining the tax burden of Italian banks between 2008

and 2012, the authors find that without certain tax rules, Italian banks would have had better capital ratios. Investigating if an elimination of the tax bias of debt can benefit financial stability, a study by Horvath (2013) suggests that there may not be the desired effects. In contrast, exploiting the introduction of a tax shield for equity in Belgium in 2006, Schepens (2016) provides evidence that suggests that tax shields on equity can have a significant impact on bank stability. A reduction in tax discrimination between debt and equity funding leads to better capitalized financial institutions. As a consequence, the removal of tax shields on debt or introduction of tax shields on debt may contribute to better bank capital regulation.¹

Profit/loss shifting

The erosion of the tax base through aggressive tax planning and profit shifting from high tax to low tax jurisdictions within multinational corporations has been high on the agenda of the G20 governments (especially since the onset of the financial crisis in 2008). Coordinated action to curb movement of financial flows to tax havens and restrict profit shifting opportunities for multinationals has been undertaken by the OECD and G20 countries. The OECD estimates the magnitude of tax revenues lost due to tax-motivated income shifting is between \$100bn and \$240bn globally, or 4% to 10% of the global corporate income tax annually.

¹ Tax schemes aiming to reduce the debt bias are complemented by non-tax approaches. There is a growing number of advocates for substantially raising bank equity requirements so as to make banks more resilient to shocks (Admati et al. 2013).

The majority of the literature related to profit shifting concerns US multinationals and identifies two main channels on how taxes can lead to profit shifting. The first channel (which is also linked to the discussion in the section above), takes place through the design and/or changes in the capital structure of foreign affiliates. There is evidence suggesting that foreign affiliates located in high tax countries are typically financed by debt (in the form of loans granted from the parent company or other affiliates), whereas equity is preferred for affiliates in low tax countries (among others Hines & Hubbard 1990; Grubert, 1998). The second channel relates to the transfer prices used for cross-border intra-firm trade of goods and services. There is considerable evidence that multinational firms incorporated in the US and other industrialised countries reduce the prices charged by their affiliates in high-tax countries for goods and services offered to affiliates in low-tax countries (Collins et al., 1998; Bartelsman & Beetsma, 2003).

Evidence related to the profit shifting activities undertaken by financial institutions is rather limited. Demirgüç-Kunt and Huizinga (2001) provide evidence that profitability of foreign-owned banks increases by a small amount with the local corporate tax rate as opposed to their domestic-owned counterparts. They also report a negative relationship between taxes paid by foreign-owned banks and the statutory tax rate of a country. Overall, these findings point to foreign banks shifting profits from higher tax rate jurisdiction towards lower tax rate jurisdictions. This is in line with theoretical models showing that corporations (banks in this case) may morph into multinationals with the sole aim of creating subsequent international profit shifting (Bucovetsky & Haufler, 2008). Nevertheless, the existence of international double taxation on dividends could deter banks from entering

new markets and fully exploiting available international profit shifting opportunities (Huizinga et al., 2014).

Profit shifting opportunities do not arise only at the international level. Financial institutions can engage in tax planning where differences in tax rates exist across jurisdictions within the same country. There is evidence, for instance, that financial institutions in the US engage in such multi-state tax planning. For example, Beatty and Harris (2001a) find that multi-state bank holding companies report significantly fewer realised security gains in those states with higher tax rates. There is also evidence that banks, operating in states that tax US Government obligations hold (40%) less of these obligations. As a consequence, banks in these states hold riskier asset portfolios and more capital than counterparts operating in states that do not tax such US obligations (Beatty & Harris, 2001b). Petroni and Shackelford (1999) report evidence that insurers engaging in multi-state insurance policies allocate premiums (policy revenues) in states with lower tax rates in order to minimize their state tax burden. The results of this investigation also suggest that insurers could be shifting losses on multistate policies to those states that tax net income rather than premiums. Thus resulting in a lower tax burden (most states impose taxes only on premiums rather than on the net income of insurance companies). There is also evidence that variation in state tax rates influences insurers' choice of organizational form. Petroni and Shackelford (1995) find that insurers expand into low-tax states using subsidiaries whereas they opt for the licensing route when expanding into high-tax states instead. It is not surprising that taxes can be a determining factor in the choice of a firm's organizational form, given that its legal structure also determines how it is taxed by the authorities.² Nevertheless, a number

² Donohoe, Lisowsky and Mayberry (2015) provide an extensive analysis of the effects of taxes and competition on the choice of organisational form in the US banking industry.

of non-tax factors often dominate this important decision (MacKie-Mason and Gordon, 1997).

4. Challenges for the future

There have been considerable developments in the taxation of banks in recent years. These developments are likely to generate a number of challenges for banks and regulators in future. As discussed above, various new tax schemes have been designed and imposed without much evidence on the long-term impact of these schemes, or the interaction with other regulatory changes. A major challenge for the future is to build a greater evidence base so that policy makers will be better informed when designing new taxes for banks. Moreover, countries have agreed to more cooperation to tackle aggressive tax avoidance schemes. The extent to which these new anti-avoidance programmes will be effective remains an open question. Finally, the recent UK referendum on the EU membership brought additional uncertainty with regard to the taxation of UK banks, EU banks and the many foreign banks that operate within the UK financial services industry. The remainder of this section provides a brief discussion of these key challenges.

Limited evidence

Prior to the financial crisis, the use of tax schemes has been largely ignored in academic and policy analyses. Alongside the recent introduction of new tax schemes in the financial sector, a growing number of studies that investigate the impact of tax on behaviour is now emerging.

One of the main obstacles to providing practical policy prescriptions that policy makers can immediately act upon is that research on the impact of these aforementioned new tax schemes on bank behaviour is still relatively scarce. Given the short period that many of the new tax schemes have been in place, assessing the long-term effects of taxes and their broader social implications, and making reliable forecasts about how these taxes will play out in the future is a challenge.

Furthermore, there is a paucity of studies that investigate potential cross-over effects of taxes with other regulatory measures (such as the net stable funding ratio, the liquidity coverage ratio, and risk-based capital requirements). As such by limiting any analysis to a specific tax policy change may fail to capture the full complexity of any inter-relationships between regulatory and tax measures.

Moreover, research on bank taxation faces considerable obstacles to uncovering the direct links between taxation and bank behaviour. The scarce evidence discussed in section 2 draws a somewhat ambiguous picture with regard to how banks respond to taxation. On the one hand, research suggests the existence of a direct and explicit link between taxes and bank behaviour. On the other hand, some studies produce results that suggest that banks are relatively unresponsive to taxation. Using taxation as a policy to induce changes in behaviour requires that banks are responsive to the incentives of taxation. Unfortunately, at the present time the paucity of evidence makes it difficult to establish any empirical regularities with any certainty in this regard.

Tax avoidance / aggressive tax planning

When taxes are used as a means to change bank behaviour and improve financial stability, tax avoidance or aggressive forms of tax planning are no longer just a concern for government agencies tasked with the enforcement of tax regulations. Tax avoidance and planning may jeopardise the intended effects of taxation. One approach to combat avoidance has focused on improving information gathering and information exchange between countries. As tax avoidance is often difficult to distinguish from tax mitigation, better access to information and standardised disclosure rules make it easier to identify tax avoidance behaviour. This has led to a drastic increase in disclosure rules for the financial sector (Bowler 2009). Another approach has been to increase the use of anti-avoidance measures and international cooperation of tax revenue bodies. Audits will continue to play a key role in the detection of aggressive tax planning as such inspections can help uncover transactions that are aimed solely at generating tax benefits. Commercial transactions, executed in a tax-efficient (but possibly artificial) manner, highlight the difficulty in deciding where a transaction moves from being one of tax mitigation to one of tax avoidance. However, if investors perceive any of these transactions as aggressive tax sheltering or risky tax positions their required rate of return increases and so does the firm's cost of capital (Wilson 2009; Hutchens and Rego, 2012).

Evidence suggests that country variations in tax rules may themselves create an incentive for tax planning and can lead to distortions of competition on account of tax arbitrage. This is of particular relevance for the banking sector which is traditionally particular prone to very aggressive forms of tax arbitrage due to highly mobile tax bases and a high tendency towards cost-driven relocation (Honohan 2003). Recent trends confirm a

diverging approach towards taxation in the US and Europe. While the 2010 Dodd-Frank Act focused on capital adequacy requirements instead of using taxation, many countries in the European Union have introduced taxes in order to reduce the possibility of financial instability. Such a variation in bank taxation potentially increases the opportunities for tax arbitrage. Moreover, the introduction of a common system of an EU-wide financial transaction tax has also proven difficult. Countries cannot find agreements or common ground, while other countries have even entirely dropped out of this tax scheme (Hemmelgarn et al. 2015). Often, it is the differences in administrative, legal, and cultural frameworks that make the alignment of tax schemes difficult. Given the difficulties in finding common ground with regard to taxation, this potentially provides banks with many opportunities to exploit differences between country rules through aggressive tax planning.

For example, *“... circumvention of loss carry-over rules is an area of potential compliance risk. Some loss-making banks may be trying to maximise the use of their commercial losses for tax purposes. Country variations in loss relief rules may themselves create an incentive for tax planning and a number of attempted loss-refreshing schemes have been seen. Many countries regard double or multiple claims for losses as particularly aggressive”* (OECD 2010, p.9). The accounting treatment of loan losses is likely to remain a central issue to discussions relating to the taxation of banks.

Brexit

In June 2016, a UK referendum resulted in voters deciding by a narrow majority (51.9% to 48.1%) that the UK should leave (brexit) the EU. A process of withdrawal is

initiated when the UK government triggers Article 50 of the Treaty of the European Union. A two-year period of negotiations between the UK and the other twenty-seven EU member states then takes place. Since the aforementioned referendum a new Prime Minister has created a ministerial function devoted to negotiating the terms of withdrawal.

Current EU law allows European banks to operate branches in the UK and non-EU banks to use their UK-based subsidiaries to sell services to clients across the EU. The future structure and location of banking and other financial services, both in the UK and elsewhere, will ultimately depend upon the UK's future relationship with the EU. UK banks' access to the single market could be terminated. A UK bank would require a separate licence in every EU member state in which it seeks to trade. This could result in a significant portion of banking business (which currently use London as a headquarters to access the single market) relocating from the UK to other major financial centres in Dublin, Paris, or Frankfurt. The prolonged period of uncertainty over the terms of Brexit is likely to complicate operational and strategic decision-making at banks currently located in the UK.

During the UK's membership of the EU, the UK tax system has seen relatively few tax directives being influenced directly by the European Commission. Control of direct taxation has remained mainly with the UK. However, the EU has indirectly influenced UK tax code because member states are obliged to conform with EU principles. Depending on the type of post-Brexit model, this obligation to conform with EU rules is likely to change. Until the withdrawal of the UK is over, the UK tax code continues to be subject to EU law. On the UK leaving the EU, reliance on terms of bilateral double tax treaties will be necessary.

5. Summary

This article provided an overview of the current and future issues related to bank taxation. We note that bank taxation schemes of various forms are increasingly important as a regulatory tool to augment capital, liquidity and other forms of regulation. Furthermore, such tax schemes can provide an important source of government revenue, internalise the costs of financial crises and contain excessive risk-taking by banks.

The effects of bank taxation are uncertain given the limited time that many have been in force. A paucity of academic evidence also makes it difficult at this stage to establish any consistent empirical relationships between taxation and bank behaviour and performance, or of the effects on stakeholders and the wider economy. The limited evidence produced to date however, suggests that taxes appear to alter capital structure causing banks to hold proportionately less debt and more equity, and by extension may lead to increased financial stability. However, recent evidence also suggests that banks shift much of their respective tax burdens onto customers via higher loan rates to borrowers and lower deposit rates for depositors. Furthermore, the overall effectiveness of taxes may be diminished in cases where banks seek to minimise overall tax exposures by manipulating reported earnings (by aggressive loan loss provisioning) or shift reported profits from high to low tax jurisdictions. As a consequence, further research is necessary to understand the effects and unintended consequences of bank taxation schemes, and the complex inter-relationships between taxes and other forms of regulations in the financial services industry.

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