Part I – The Concept of Ring-Fencing

I. Universal Banking Model

This chapter addresses the universal banking model. It examines its definition, taking into account the effect of ring-fencing and its dominance. It then discusses key arguments concerning the benefits and social costs that may result from the combination of both commercial banking and investment banking.

The following discussion of universal banking is considered important because ring-fencing rules structurally interfere with the universal banking model.[44] As discussed in the chapter, they aim at (i) maintaining universal banking, while (ii) averting its potential downsides.

A. Universal banking in Europe

The following paragraphs discuss the role of universal banking in Europe. They will (i) establish a definition, taking into account ring-fencing and (ii) present its dominance in the European banking landscape and within global systemically important banks.

a. Definition

1. "The entire range of financial services"

In continental Europe, the universal banking system has a long history. Banking legislation traditionally does not distinguish between commercial and investment banks, allowing institutions authorized to operate as a bank the provision of a wide selection of financial services.[45] In addition to

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44 See *Gambacorta/Van Rixtel* (2013) Structural Bank Regulation Initiatives, 1 (noting that bank structural reforms limit the universal banking model by segregating commercial and investment banking).

45 *Rime/Stiroh* (2003) Universal Banks, 2122–2123; see further *European Commission* (2014) Impact Assessment Part 2, 2 et seqq.

commercial banking and investment banking, many banks also provide insurance activities.[46]

Services banks typically provide include deposit-taking, lending, underwriting, brokerage, portfolio management and trading.[47] *Benston* therefore defines universal banks as *"financial institutions that may offer the entire range of financial services"*.[48]

They can also be defined negatively, namely as *institutes that are not restricted to specific banking operations due to internal or external organisational decisions, even when they do not conduct all banking operations.*[49] This definition excludes banks that only conduct certain activities, either due to internal organisational decisions (for instance a business strategy) or due to external organisational decisions (for example a prohibition to conduct proprietary trading).[50]

In Europe, external organisational decisions are uncommon. Universal banks are usually not restricted by law from providing certain financial services. Moreover, European banks traditionally do not have to establish particular legal structures to engage in universal banking.[51]

Universal banking in the United States, in contrast, requires certain legal structures because of historic reasons.[52] Reflecting this, one can define uni-

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46 See e.g. *Saunders/Walter* (1994) Universal Banking, 84 (defining universal banking as *"the conduct of a range of financial services comprising deposit-taking and lending, trading of financial instruments and foreign exchange (and their derivatives), underwriting of new debt and equity issues, brokerage, investment management and insurance"*).

47 *Rime/Stiroh* (2003) Universal Banks, 2122–2123; see further *European Commission* (2014) Impact Assessment Part 2, 2 et seqq.

48 *Benston* (1994) Universal Banking, 121.

49 This definition is based on *Grundmann* (2016) Bankvertragsrecht, 14. *Grundmann*'s definition is focused on banks in jurisdictions that do not restrict the universal banking model. The decision to conduct only certain banking operations is thus usually based on internal organisational decisions, e.g. business policy. The author has modified *Grundmann*'s definition to include jurisdictions that stipulate bank separation (see Chapter I.IV.C: Ring-fencing and full separation; Chapter I.IV.D: Ring-fencing and the activities ban) and in which as a result the decision to provide only selective banking operations is external.

50 A restriction to conduct certain activities, e.g. proprietary trading, is a strong interference with the universal banking model. Strictly speaking, banks that are prohibited from certain activities are no longer universal banks. This will be discussed in Chapter I.IV.C: Ring-fencing and full separation; Chapter I.IV.D: Ring-fencing and the activities ban.

51 *Vickers* thus refers to this system as *"[u]nstructured universal banking"*. See *Vickers* (2016) Banking Reform Presentation, 20.

52 See Chapter I.IV.C.a: Digression: The Glass-Steagall Act.

versal banks in the U.S. as *organisations that can engage, directly or indirectly through affiliates, in all respects of the banking, securities and insurance businesses*.[53]

In summary, it can be stated that all definitions of universal banking set out above highlight the ability of a banking group to provide unlimited financial services.[54]

2. Universal banking after ring-fencing

With the adoption of ring-fencing legislation in Europe, universal banking approximates the United States': The provision of unlimited financial services remains allowed, it, however, requires certain legal structures.[55]

Ring-fencing interferes with universal banking in a number of ways: banks may, for example, no longer use the same IT for the retail and the investment banks, they are furthermore limited in their ability to combine the earnings of these businesses segments.[56] By implementing these measures, ring-fencing aims to tackle specific problems associated with universal banking while maintaining its benefits.[57]

It, however, does not limit the freedom of banking groups to engage in all financial services, which has been identified above as the central characteristic of universal banking. In contrast to other structural reforms of banking, ring-fencing therefore does not limit universal banking.[58]

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53 This definition is based on *Wilmarth* (2002) U.S. Financial Services Industry, 223 Fn 23 (defining universal banks as *"a regime under which a single organization can engage, either directly or indirectly through affiliates, in all aspects of banking, securities, and life insurance business")* and *Saunders/Walter* (1994) Universal Banking, 84, 128–129, (adopting a similar definition). However, in contrast to *Wilmarth's* definition, and in line with his more recent work, universal banking is not limited to the business of life insurance. See *Wilmarth* (2005) Universal Banks, 559 (describing universal banks as *"diversified conglomerates that offer[] banking, securities and insurance services"*, while still referring in Fn 5 to the definition above).

54 They thereby differentiate it from a full separation, such as the one adopted with the Glass-Steagall Act or (to smaller extent) the Volcker Rule. See Chapter I.IV.C: Ring-fencing and full separation; Chapter I.IV.D: Ring-fencing and the activities ban.

55 *Vickers* therefore refers to it as "structured universal banking". *Vickers* (2016) Banking Reform Presentation, 20.

56 See *ICB* (2011) Vickers Report, 136.

57 See Chapter I.I.B: Benefits and costs of universal banking.

58 See *Vickers* (2016) Banking Reform Presentation, 24 (*"Go for structured universal banking, not ending universal banking -more robust than unstructured universal bank-*

After introducing ring-fencing, universal banks can thus be defined as *financial institutions that can engage, through ring-fenced and non-ring-fenced entities, in all respects of the banking, securities and insurance business.*[59]

b. Dominance

European banks are typically universal banks.[60] According to *Pagano et al.*, there are almost no pure investment banks in the EU and only a small number of banks that provide solely retail banking services. They demonstrate, in a comparison with the U.S., that in the EU most assets are held by universal banks.[61]

Examples for banks that specialize entirely in a certain service are the few special purpose banks in Germany[62] as well as building societies in the UK.[63] As there are no limitations for the business of banking in most European countries, the decision to concentrate on certain services is usually based on internal organisational decisions.[64]

On a global level, *Martel/Van Rixtel/Mota* paint a similar picture: in spite of very different business models between large international banking groups, they divide global systemically relevant banks (G-SIBs) into four groups: first, specialised commercial banks; second, specialised investment banks; third, investment-banking oriented universal banks; and fourth, commercial-banking oriented universal banks. They find that the majority of banks are either investment banking or commercial banking oriented

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ing"); *HLEG* (2012) Liikanen Report, 102 (*"The proposal addresses the core weaknesses in the banking sector, while retaining the key benefits of the universal banking model and allowing for business model diversity*"); See Chapter III.IV: What Activities Fall on Which Side of the Fence? (setting out that banking groups in the UK, Germany and Switzerland can continue to provide all sorts of banking activities). See also Chapter I.IV.C: Ring-fencing and full separation; Chapter I.IV.D: Ring-fencing and the activities ban.

59 This definition is based on the ones of *Benston (Benston* (1994) Universal Banking, 121) and *Wilmarth* (*Wilmarth* (2002) U.S. Financial Services Industry, 223 Fn 23), taking into account the specialties of ring-fencing.

60 *HLEG* (2012) Liikanen Report, 89; See also *Grundmann* (2016) Bankvertragsrecht, 14; *Schoenmaker* (2016) Euro-Area Banks, 4.

61 *Pagano et al.* (2014) Is Europe Overbanked?, 29.

62 See Chapter III.I.B.b: Number of banks and their nature.

63 See Chapter III.I.A.b: Number of banks and their nature.

64 For special purpose banks in Germany, see Chapter III.I.B.b: Number of banks and their nature.

universal banks. Moreover, all European banks listed as G-SIBs are universal banks.[65]

B. Benefits and costs of universal banking

Universal banking has many benefits, but can also result in social costs. The discussion about advantages and disadvantages of universal banking in comparison with a separation of commercial banking and investment banking dates back decades. This dissertation does not aim to answer this question as it would be far beyond its scope.

The following paragraphs, however, outline selected arguments for and against universal banking. This is considered valuable because, as will be discussed, ring-fencing aims at maintaining the advantages of universal banking while reducing its disadvantages. Interestingly, the disadvantages discussed decades ago, for example by *Saunders/Walter* in 1994,[66] are as relevant as can be today and correspond well with the goals of ring-fencing set out below.

a. Benefits

Proponents of universal banking regularly argue that the combination of commercial banking and retail banking allows for informational advantages. Both the bank and the clients can profit from them, e.g. through lower costs of credit or fees for emissions of securities.[67]

Furthermore, it is mostly argued that universal banking can achieve economies of scope, which could lead to cost saving: for example, information only needs to be gathered once and can then be used for various business segments. Operative costs can potentially be reduced, e.g. by a centralised IT. Economies of scope could also increase profits, as universal banks can offer clients a whole range of products and services. Diversified profits can also lead to more stability, so that universal banks may be better

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65 See *Martel/Van Rixtel/Mota* (2012) Business Models of International Banks, 102–102, 114, (taking into account G-SIB distribution by end-2010); See also *Gambacorta/Van Rixtel* (2013) Structural Bank Regulation Initiatives, 7.

66 *Saunders/Walter* (1994) Universal Banking, 125.

67 *Dombret/Liebig/Stein* (2014) Trennbankensystem, 53.

equipped to withstand shocks.[68] In the case of large banks, many proponents of universal banking also underscore the importance of economies of scale.[69]

However, as argued by *Gambacorta/Van Rixtel*, and *Dombret/Liebig/Stein*, economic assessments vary a great deal. Empirical academic studies usually have problems demonstrating remarkable economies of scale and particularly of scope.[70]

b. Costs

1. Access to the safety net: explicit and implicit subsidies

Universal banks provide deposit-taking and other services that are important for the real economy. They are therefore protected by having access to the safety net. The safety net for universal banks includes usually: (i) de-

68 See *Dombret/Liebig/Stein* (2014) Trennbankensystem, 53; See also *Gambacorta/Van Rixtel* (2013) Structural Bank Regulation Initiatives, 8–9.

69 *Gambacorta/Van Rixtel* (2013) Structural Bank Regulation Initiatives, 8–9. For an overview of studies concerning economies of scale and scope of universal banks, see *Laeven/Ratnovski/Tong* (2014) Systemic Risk, 24–25; *Gambacorta/Van Rixtel* (2013) Structural Bank Regulation Initiatives, 8–9. For an extensive analysis of the advantages and disadvantages of universal banks and specialised banks, see *Canals* (1997) Universal Banking, 83 et seqq.

70 *Gambacorta/Van Rixtel* (2013) Structural Bank Regulation Initiatives, 8–9 (giving an overview of a range of important studies); *Dombret/Liebig/Stein* (2014) Trennbankensystem, 53 (also pointing out that benefits are hard to prove empirically); cf. *Becalli/Anolli/Borello* (2015) Are European Banks too Big?, 234 (noting that a small body of research evidence has in recent years documented economies of scale); see also an article by *John Reid*, former chairman and chief executive of Citigroup, in which he notes: "*One [thing we were wrong about] was the belief that combining all types of finance into one institution would drive costs down — and the larger the institution the more efficient it would be. We now know that there are very few cost efficiencies that come from the merger of functions — indeed, there may be none at all. It is possible that combining so much in a single bank makes services more expensive than if they were instead offered by smaller, specialised players*". *Reid*, We were wrong about universal banking, Financial Times (November 11, 2015).

posit insurance[71] and (ii) lender of last resort facilities.[72] It also regularly comprises (iii) government bailout guarantees.[73]

While all these functions aim at preventing systemic crisis and contributing to financial stability, they can also have detrimental effects: creditors anticipate public support (through each of the functions above). They consider banks with access to the three functions safer and are therefore willing to lower their requested return. Banks under the public safety net can therefore be regarded as profiting from subsidies.[74]

The subsidies stemming from the public safety net functions are split up in two groups, depending on the way they are communicated: (i) subsidies from deposit insurance and lenders of last resort facilities are referred to as "explicit subsidies"; (ii) government bailout guarantees, which are mostly not communicated directly but rather expected by the market, on the other hand, are referred to as "implicit subsidies".[75]

These subsidies can give universal banks unfair advantages and impede competition.[76] Universal banks may use "*public subsidies notionally attached to their retail bank operations*" for their investment banking, potentially for their trading activity.[77] They furthermore have the potential to create moral hazard, as they may incentivise parties to alter their behaviour because they are not fully exposed to the consequences of its actions.[78]

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71 Deposit insurance is a foundation of banking in most banking systems. It shields small saver deposits from losses in case of a bank failure and prevents bank runs. (*Lambert/Noth/Schüwer* (2013) Insured Deposits, 1) Banks that accept deposits are by their very nature in danger of bank runs. Reason for that is their combination of illiquid assets and liquid liabilities. As deposits can be withdrawn at any given time, banks that are actually solvent, may need to sell illiquid longterm assets at loss, to match withdrawals (*European Commission* (2014) Impact Assessment Part 2, 56; see also *Diamond/Dybvig* (1983) Bank Runs, 402). Deposit insurance schemes move insolvency risk away from the bank, usually onto taxpayers. *Langfield/Pagano* (2015) Bank Bias, 19. See also *Carnell/Macey/Miller* (2017) Financial Institutions, 222–229.

72 See *Dobler et al.* (2016) Lender of Last Resort, 11–12; see *IMF* (1998) Financial Stability, 27–29; see also *Carnell/Macey/Miller* (2017) Financial Institutions, 220–221.

73 See *European Commission* (2014) Impact Assessment Part 2, 55–56.

74 See *European Commission* (2014) Impact Assessment Part 2, 55–56.

75 See *European Commission* (2014) Impact Assessment Part 2, 55–56. Implicit subsidies will be discussed in Chapter I.III.C: Implicit subsidies.

76 *Saunders/Walter* (1994) Universal Banking, 125.

77 See *Pagano et al.* (2014) Is Europe Overbanked?, 30–31.

78 *ICB* (2011) Vickers Report, 248. The recognition that parties are more diligent when they are exposed to the consequences of their actions is evident and has

2. Risk-taking, trading risks, culture and complexity

Saunders/Walter also list risk-taking as a controversy of universal banks, noting that they *"may use their powers to undertake securities and insurance activities in order to enhance their risk-taking (and thus risk exposure)"*.[79]

Social costs arise when universal banks accept large exposures and take excessive risks on securities markets and thereby increase links between asset price shocks and the supply of credit, and ultimately the real economy.[80] This can intensify systemic risk and as a result costs for society – particularly if universal banks are large and are exposed to correlated security risks.[81]

Another concern, often articulated in relation to universal banks is the contagion effect of high-risk investment banking culture on the traditional commercial banking activity[82] as well as conflicts of interest, for example regarding the responsibilities of a bank and its role as investment banker.[83]

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long been described in the context of personal liability. See e.g. *Eucken* (1990) Wirtschaftspolitik, 279 et seqq. (noting that the diligence in investments increases with personal liability); *Smith* (1976) Wealth of Nations, V.1.107 ("*The directors of such companies, however, being the managers rather of other people's money than their own, it cannot well be expected that they should watch over it with the same anxious vigilance with which the partners of a private copartnery frequently watch over their own*"); *Brändli/Rieder* (2009) Vertrauensbildung, 62–64. In the context above, diligence correlates not (necessarily) with personal liability, but with other factors, for example insolvency (in case of the bank) or job-loss (in the case of employees). The basic idea, however, remains the same: moral hazard can be prevented if parties face the consequences of their actions.

79 *Saunders/Walter* (1994) Universal Banking, 125.

80 When securities prices drop, universal banks may be negatively impacted on both the asset and the liability or funding side: in the case that they hold marketable securities, their own market value and thus the value of their equity is reduced. If they rely on the issuance of these securities to fund their activities, asset price drops increase their cost of capital. Universal banks may therefore have to deleverage and sell assets to comply with capital requirements. By doing so, they contribute to a further decrease of securities prices. *Pagano et al.* (2014) Is Europe Overbanked?, 31.

81 See further *Pagano et al.* (2014) Is Europe Overbanked?, 31.

82 See e.g. *Coates* (2015) Volcker Rule, 16–17; *Reid*, We were wrong about universal banking, Financial Times (November 11, 2015) (in which former chairman and CEO of Citigroup, *John Reid* emphasizes the importance of culture and the dangers of mixing incompatible cultures).

83 *Saunders/Walter* (1994) Universal Banking, 124; Conflicts of interest were one of the main arguments for the introduction of a full separation of commercial and investment banking in the United States in 1933. See Chapter IV.C.a: Digression:

Another controversy listed by *Saunders/Walter* and many others, which is as up-to-date as can be, is that universal banks are regularly complex and heterogeneous and thusly may be more difficult to regulate.[84] This is discussed today by the term “too-complex-to-fail”,[85] in reference to the complex resolution of banks, especially when they are large and internationally active.[86]

II. Changes in the Realm of International Banking

This chapter discusses two important developments in the realm of international banking before the global economic crisis. The first one is the substantial change in banks’ business models, which took place when banks started focussing on activities new to the banking sector. Special attention will be given to the illustration of proprietary trading and market making. The second one is the transformation of large financial institutions, becoming bigger in size and scope, more complex and more interconnected.[87]

Structural reform measures aim to be a response to the two developments. They all (i) address trading activities in some way, but differ in their strictness and focus depending on the respective jurisdiction. They furthermore (ii) strive to limit the complexity and interconnectedness of financial institutions.

The Glass-Steagall Act; For example, during the financial crisis, *Goldman Sachs* was accused of speculating against their own clients. See e.g. *Macalister*, Revealed: Goldman Sachs 'made fortune betting against clients', The Guardian (April 25, 2010).

84 *Saunders/Walter* (1994) Universal Banking, 125; The complexity may not just be an impediment for regulators but also for the management itself; see *Canals* (1997) Universal Banking, 82 (noting that the “*chief problem is the tremendous complexity that universal banks must deal with*“ and that the most important challenge for commercial banks “*is that of increasing management complexity*”); see also *Dombret/Liebig/Stein* (2014) Trennbankensystem, 53 (underscoring that universal banks are typically more complex).

85 See Chapter I.III.B: Bailout decision and too-big-to-fail.

86 See e.g. *Gordon/Ringe* (2015) Bank Resolution, 8–9 (arguing that the complex organizational structure of European banks impedes effective resolution).

87 See *HLEG* (2012) Liikanen Report, 11 et seqq., 88.

A. Change of banks' business models

The following paragraphs discuss changes in the operating environment of banks and set out their adjustment of focus from traditional relationship-based banking to market-based banking.

a. Environment

In the years before the economic crisis, the setting in which financial institutions operated changed substantially. The trend of an increased internalisation of the banking industry persisted, with cross-border capital flows and cross-border entry into banking sectors intensifying.[88] Liberalization, deregulation[89] and advances in information technology[90] reconfigured the financial services sector as they led to increased competition between financial players: banks competed vigorously, not just among themselves but also faced growing rivalry from non-bank financial institutions and the markets.[91]

b. Relationship-based banking

In response to the enhanced competition, banks' activities moved increasingly away from their traditional role,[92] namely commercial banking – accepting deposits and making loans to businesses and individuals – as well

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88 *Martel/Van Rixtel/Mota* (2012) Business Models of International Banks, 99.

89 A prime example of deregulation is the Gramm-Leach-Bliley Act which repealed the full separation requirement of the Glass-Steagall Act and, therefore, allowed for the return of universal banking in the United States. Similar deregulation efforts also took place in the United Kingdom and the European Union. This can be regarded as a global trend towards deregulation in the mid- and late-1990's. See *Laeven/Ratnovski/Tong* (2014) Systemic Risk, 7.

90 About technological change spurring financial innovations see *Frame/White* (2014) Technological Change. See also *Armour et al.* (2016) Financial Regulation, 5.

91 *Boot* (2011) Banking, 1; Competition increased not only between banks, but also between banks and non-bank financial institutions, and the financial markets. *Boot* (2011) Banking, 1.

92 See *Armour et al.* (2016) Financial Regulation, 6–7; *Brunnermeier/Dong/Palia* (2012) Banks' Non-Interest Income, 1; *Boot* (2011) Banking, 1.

as investment banking – providing underwriting and advisory services.[93] Both traditional activities are characterized by repeated business with long-term clients and can therefore be referred to as "relationship-based banking".[94]

c. Market-based banking

Services new to the banking sector became of increasing interest.[95] These operations include: proprietary trading, market-marking, the origination and/or holding of securitized debt, security dealing and custodian services. They further comprise a variety of financial market services, from advisory to hedging, to customers.[96] These operations are usually attributed to the investment banking side of banks.

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93 *HLEG* (2012) Liikanen Report, 13.

94 *Boot/Ratnovski* (2012) Banking and Trading, 4; Traditional investment banking services, such as underwriting and advisory are considered relationship-based banking by *Boot/Ratnovski: "Underwriting, insofar as it requires hard and codified information that is to be transmitted to the markets, may have a lower relationship intensity that commercial bank lending based on soft information. Nevertheless, at its core, underwriting remains a relationship-based activity." Boot/Ratnovski* (2012) Banking and Trading, 4 Fn 2; See also *European Commission* (2014) Impact Assessment Part 1, 46 (emphasizing the relationship-based nature of underwriting).

95 Prior to the crisis, banks earned an increasingly higher proportion of profits from non-interest income, such as trading and securitization, instead of traditional deposit-taking and lending (*Brunnermeier/Dong/Palia* (2012) Banks' Non-Interest Income, 1). *Blundell-Wignall/Wehinger/Slovik,* for example, compare banks at the time to highly-leveraged hedge funds: they note that while some banks may have the *"structure of a "bank" as it is thought of by politicians and the public at large, i.e. an institution that funds itself mainly via deposits and longer-term borrowing and lends to households and to companies for investment and consumption, this is not the case of Citigroup or Deutsche Bank, whose balance sheet structure is similar to that of many large European and UK banks. On a consolidated basis these latter institutions look much more like large highly-leveraged hedge funds – though we can hardly imagine any hedge fund running these sorts of structured products would risk of having a leverage ratio of almost 50 (assets versus equity), as is the case of Deutsche Bank". Blundell-Wignall/Wehinger/Slovik* (2010) The Elephant in the Room, 16–17.

96 *Laeven/Ratnovski/Tong* (2014) Systemic Risk, 8; See also *Martel/Van Rixtel/Mota* (2012) Business Models of International Banks, 101; *Armour et al.* (2016) Financial Regulation, 7 (*Armour et al.* emphasize market making, proprietary trading but also an increase in underwriting).

Boot/Ratnakovski refer to the activities as “trading”.[97] *Hardie/Macartney* argue that *“[t]he dichotomy between banking and financial markets was replaced by a system where the two were deeply intertwined”*. In combination with increased financing on the wholesale markets on the funding side, they refer to it as “market-based banking”.[98]

“Trading” or “market-based banking” activities are characterised by being short-term, individual and transaction-based. They can be contrasted with the aforementioned relationship-based banking. Unlike the latter, trading activities are capital-constrained, scalable and profit from spare capital available in the bank. Banks that engage in relationship-based banking may therefore expand into trading to make use of their spare capital. They thereby, however, run the risk of overexposing themselves to trading.[99]

B. Proprietary trading and market making

The following paragraphs discuss two of the trading activities mentioned above that are of special relevance regarding structural reform: proprietary trading and market making. The former in particular has attracted a lot of criticism and has been targeted by structural reforms in both Europe and the United States.

a. Proprietary trading

Proprietary trading can best be understood as the *“purchase and sale of financial instruments with the intent to profit from the difference between the purchase price and the sale price”*.[100] This simply means that a bank uses its own money to invest in financial instruments: it puts its own money at risk to profit from its investments.

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97 See *Boot/Ratnovski* (2012) Banking and Trading, 3–5.
98 *Hardie/Macartney* (2016) EU Ring-Fencing, 507. See also *Hardie/Howarth* (2013) Market-Based Banking, 25–32; Another expression frequently used is “capital markets banking”. See *Blundell-Wignall/Atkinson* (2012) Capital Markets Banking, 41.
99 *Boot/Ratnovski* (2012) Banking and Trading, 3–4.
100 *Duffie* (2012) Market Making, 2; See also, almost identically, *European Commission* (2014) Impact Assessment Part 3, 56.

As shown above, banks started to increasingly engage in proprietary trading before the financial crisis. They did that generally through "Prop Desks", i.e. units of the banks whose only task was proprietary trading; by single traders, who also performed other investment banking activities, such as market making or underwriting, or through their own in-house hedge funds. For long-term speculation in non-listed stock, banks used their own private equity funds.[101]

The description of proprietary trading above already implies its key issue: if a bank puts its own money at stake, it has, on the one hand, the chance of making profits which it does not have to share with anyone. On the other hand, if investments go wrong, it has to bear the losses on its own. In other words, banks engaged in proprietary trading assume the *"full risks and rewards of […] their speculation"*.[102]

The literature on the risks associated with proprietary trading is controversial. While a causal link to the financial crisis is difficult to establish, many authors are of the opinion that it at least intensified the crisis.[103]

However, there are numerous obvious dangers connected to it: as indicated above, proprietary trading causes large open positions and counterparty risk. If a counterparty to an investment fails, a bank may get into serious trouble. These exposures also add to interconnectedness between financial institutions. Proprietary trading is furthermore a complex activity by itself, as its nature makes it hard for supervisors and even for the bank's management to properly understand the risks. Moreover, it is prone to cause moral hazard as financial institutions profit from their trading operations, while eventual losses may be shifted to the public through government assistance. Proprietary trading may also give rise to conflicts of interest.[104]

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101 *Elliott/Rauch* (2014) Volcker Rule, 3.

102 *Elliott/Rauch* (2014) Volcker Rule, 3.

103 *Dombalagian* (2013) Proprietary Trading, 392–393; See *Duffie* (2012) Market Making, 25; *Chow/Surti* find that there is a *"[p]ositive association […] between susceptibility to distress and the importance of trading income as a revenue generator for U.S. and European banks."*. However, they also note that *"[r]isk could emanate from losses attributed to non-proprietary trading activities such as market-making, investment banking and hedging"*. *Chow/Surti* (2011) Making Banks Safer; *Dombalagian* (2013) Proprietary Trading, 393 Fn 37.

104 See *European Commission* (2014) Impact Assessment Part 3, 56–58; see also, extensively, *Dombalagian* (2013) Proprietary Trading, 393–399; see also the critique and the recommendation for a prohibition of proprietary trading of the *Group of Thirty* (2009) Financial Reform, 27–28; *Dombalagian* also portrays in detail the dangers of possible conflicts of interests that only played a minor role

From a legal and in particular from a law-making point of view there is another, very practical problem: proprietary trading has the remarkable characteristic of being easy to explain and easy to understand, even easy to define for purpose of explanation (see above), but also of being very difficult to define for the purpose of regulation. This problem is encountered particularly if the concept has to be distinguished from other related trading activities, such as market making or hedging.[105]

Since the financial crisis, proprietary trading decreased considerably, due to capital requirements, capital pressures and commercial performance. *PwC* found in a study for the interest group *AFME* that almost 90% of studied banks have announced decreases in proprietary trading, with over half completely ceasing the activity.[106]

b. Market making

Market making is a trading activity that can be described as the purchasing and selling of financial instruments by standing ready to trade for own account whenever an order arrives.[107]

A market maker could be characterised as a central counterparty which buys financial instruments for a certain price and sells them for another. A buyer may buy financial instruments at the market makers ask price, while

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in the European debate, see *Dombalagian* (2013) Proprietary Trading, 395; they were much more emphasized in the U.S. debate, Senator *Volcker,* for example wrote of "*virtually insolvable conflicts of interest with customer relationships*". *Volcker,* How to Reform Our Financial System, The New York Times (January 30, 2010).

105 This problem pervades all structural reforms that aim for a special treatment of proprietary trading (see Chapter I.IV.D.a: Digression: The Volcker Rule; Chapter II.II.C: Separation of proprietary trading; Chapter II.III.C: Separation of proprietary trading). A good example of how difficult it can be to differentiate proprietary trading from hedging is the famous London whale incident of JP Morgan. See in particular the argumentation of the bank's CEO *Jamie Dimon, Fontevecchia*, Dimon's Volcker Rule Contradiction: On Hedging, Prop Trading, And The London Whale, Forbes (June 13, 2012). See also *Baisch* (2014) Risikogewichtete Aktiva, 85–90.

106 *PwC* (2014) AFME: Bank Structural Reform Study, 7.

107 See the description of *O'Hara/Oldfield* (1986) Market Making, 361; See also *Kumpan* (2014) Verbot von Eigengeschäften, 208.

a seller may sell financial instruments at the market makers bid price. Market makers are usually compensated by the bid-ask-spread.[108]

Through this, the market maker provides so-called "immediacy" to clients, i.e. "*the ability to immediately absorb a client's demand or supply of an asset into its own inventory*":[109] it allows them to buy or sell immediately. If, for example, an investor is concerned about a certain financial instrument such as a bond, and wants to get rid of it, he may turn to a market maker and rely on its ability to buy it for itself immediately. The same goes for an investor wanting to buy that bond immediately.[110]

In contrast to proprietary trading, market making is generally considered beneficial for the market and its functioning.[111] Market making, by providing immediacy, can ensure market liquidity and has the potential to absorb temporary supply or demand shocks.[112] It can, therefore, ensure investor confidence in the functioning of the financial markets.[113]

At the same time however, market making is very similar to proprietary trading. *Duffie* even describes it as "*proprietary trading that is designed to provide immediacy to investors*" and argues that it is "*inherently a form of proprietary trading*": The goal of a market maker is indeed to "buy low and sell high" and it depends on its expectation of the future development of market prices.[114] Various jurisdictions apply different methods to identify it, including complex metrics and historical data. Differentiations beyond doubt, however, are hard to achieve.[115]

108 See *O'Hara/Oldfield* (1986) Market Making, 361; While voluntary market makers act on own initiative and profit from the bid-ask-spread, designated market makers are contractually required to offer the best bid or ask price for each market order transaction for a specified period of the trading day. They regularly profit from reduced trading fees, monthly payments and a share of net trading revenue by exchanges. See further on the different types of market makers, *European Commission* (2014) Impact Assessment Part 3, 59 Fn 61.

109 *Duffie* (2012) Market Making, 7.

110 See *Duffie* (2012) Market Making, 2.

111 *Kumpan* (2014) Verbot von Eigengeschäften, 208.

112 See *Committee on the Global Financial System* (2014) Market-making, 5.

113 *European Commission* (2014) Impact Assessment Part 3, 59.

114 See further *Duffie* (2012) Market Making, 2, 3–4; see also *Whitehead* (2011) Volcker Rule, 40 Fn 4, regarding market making (among other permitted activities of the Volcker Rule) as a proprietary trading activity; See with regard to the Volcker Rule Chapter I.IV.D.a: Digression: The Volcker Rule.

115 See *Kumpan* (2014) Verbot von Eigengeschäften, 208–209.

According to *PwC,* multiple banks have announced departures from market making since the financial crisis.[116] However, it remains an important business for many banks.[117]

Summarizing, two conclusions can be drawn: (i) On the one hand, market making is generally acknowledged as an important trading activity that is beneficial to society and is, therefore, to be preserved. (ii) On the other hand, it is very difficult to differentiate it from proprietary trading. These two conclusions pervade the chapters presenting various structural reform proposals.

C. Bigger, more complex, more interconnected

Corresponding with the expansion of investment banking activity, in particular with the expansion of market-based banking described in the chapter above, was the transformation of large banks, becoming bigger in size, more complex and more interconnected.[118]

a. Bigger banks

The changes in the financial system, characterised by increased market-based operations, affected all banks. Large banks, however, were particularly prone to this behaviour. Their business models *"became clearly distinct from that of small or medium-sized banks"*. As *Laeven/Ratnovski/Tong* demonstrate, large banks (i) became disproportionately more involved in market-based activities, (ii) held less capital than small banks, (iii) relied on less stable funding than small banks, and (iv) became more organizationally complex.[119]

116 *PwC* (2014) AFME: Bank Structural Reform Study, 7.
117 This can be derived from only few banks exiting market making since the financial crisis. That market making remains a profitable business segment is indicated by industry data. *JP Morgan,* for instance, noted an increase of market making revenues of 21% from 2014 to 2016, amounting to 12.0 billion $. *JP Morgan Chase & Co* (2017) Corporate & Investment Bank, 12.
118 *HLEG* (2012) Liikanen Report, 90.
119 See *Laeven/Ratnovski/Tong* (2014) Systemic Risk, 8.

As engaging in market-based activities requires huge inventories of securities that are subject to price volatility and counterparty risk,[120] balance sheets of large banks grew significantly bigger[121] and less stable.

Europe nowadays has by far the world's largest banking system. Total assets of banks in the EU alone[122] amounted to 42 trillion € corresponding to 334 % of EU GDP in 2013. Between 1996 and 2015 its size almost doubled, corresponding solely with the expansion of the 20 largest European banks.[123] Large banks have also increased their market shares within their home markets, with the three largest banks in Germany, Switzerland and the United Kingdom in charge of two-thirds to three-quarters of total deposits from 1990 to 2007.[124]

b. Complexity and interconnectedness

The complexity of large banks also increased considerably. This happened on the one hand through trading and the sheer size and scope of banking activities:[125] financial innovations that augment marketability led to increased interconnectedness between the various market participants and to a much higher speed of transaction;[126] on the other hand, through opaque legal structures with little relation to the actual business:[127] Banks were not required or incentivised to align their structure with the activities they provide.[128]

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120 See *Blundell-Wignall/Atkinson/Roulet* (2013) Bank Business Models, 76.

121 Cf. *Krahnen/Noth/Schüwer* (2016) Structural Reforms, 6 (noting that the high leverage of "*stock monsters*" is the "*almost accidental by-product of their market making function*" rather than high-risk strategies).

122 A similar situation can be seen in Switzerland, where the balance sheets of the two largest banks, *Credit Suisse* and *UBS*, despite significant deleveraging, amounted in 2014 to about 230% of the countries GDP. See e.g. *IMF* (2014) Switzerland, 6, 13. For an assessment of the current situation regarding bank size in the UK, Germany and Switzerland, see Chapter III.I: Banking Landscape.

123 *Langfield/Pagano* (2015) Bank Bias, 3, 18.

124 *Haldane* (2012) The Right Size, 2.

125 See *Herring/Carmassi* (2014) Complexity, 77–80.

126 See *Boot* (2014) Financial Sector, 131.

127 See *Herring/Carmassi* (2014) Complexity, 77–80.

128 In this regard, considerable efforts have been undertaken. See e.g. *FSB* (2014) Key Attributes, 16; Chapter III.V.C.a.2: Resolvability incentives; Chapter II.IV.C.c: Existing regimes.

Trading activities contributed to the growth of interconnectedness between large banks, as they enhanced links between banks and increased their exposure to counterparty risks.[129] The resulting "*more intertwined nature of banks and financial markets has exposed banks to the boom and bust nature of financial markets and augmented instability*".[130]

Complexity and interconnectedness of large universal banks are an almost insurmountable obstacle in the way of resolution in times of distress, especially at short notice.[131]

c. Post-crisis response

Since the financial crisis, a multitude of reforms have been launched and enormous efforts have been undertaken to revise the regulatory and institutional framework for financial institutions and markets.[132] A thorough reform of the Basel rules for capital adequacy and liquidity standards and regulatory reforms relating to recovery and resolution have had an impact

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129 *HLEG* (2012) Liikanen Report, 90.

130 See *Boot* (2014) Financial Sector, 131.

131 *Krahnen/Noth/Schüwer* (2016) Structural Reforms, 4. See also *Herring/Carmassi* (2014), Complexity, 3.

132 Among the variety of post-crisis regulatory reforms, there are many whose similarities or overlaps with ring-fencing are interesting to explore. One of them is the regulation of central securities depositories, central counterparties and their participants (mostly internationally active banks) (on central counterparties and their emergence, see Brändli (2011) Zentrale Gegenpartei, 3 et seqq.), in particular with a view to their provisions on "segregation": Such institutions are obliged to separate the accounts comprising their own assets and positions from the ones of their clients (see, inter alia, Art. 54, 59, 69 Bundesgesetz über die Finanzmarktinfrastrukturen und das Marktverhalten im Effekten- und Derivatehandel, June 19, 2015, SR 958.1 (Financial Market Infrastructure Act); Art. 39 Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories, L 201/1 (EMIR)), which is meant "*as a means of client asset protection*" (AFME (2016) Client Asset Protection, 2; see Bundesrat (2014) Botschaft Finanzmarktinfrastrukturgesetz, 7544; cf. Chapter I.V: The Basic Rationale and Goals of Ring-fencing). However, given the limitations in scope and the research focus of the dissertation, emphasis is placed on bank structural reforms, in particular those often associated with ring-fencing. See Chapter I.IV: Structural Reform and Ring-fencing.

on banks' business models as well as their size, complexity and interconnectedness.[133]

Many banks have considerably decreased their size since the global financial crisis.[134] This goes hand in hand with the decrease of trading activities and many banks paying more attention to retail services:[135] According to the Bank of England, trading assets of large global banks have halved since the global financial crisis.[136]

III. Bailouts and Too-Big-to-Fail

This chapter enlarges on the too-big-to-fail problem and on governments' decisions to bail out banks in the wake of the global economic crisis. Global systemically important banks and current developments regarding bank size shall be set out.

Structural reforms of banking aim to respond to these problems. Their objectives contribute to a mitigation of the too-big-to-fail problem, for example through enhanced resolvability and a reduction of implicit subsidies.[137]

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133 *Krahnen/Noth/Schüwer* (2016) Structural Reforms, 2. Since the crisis, capital requirements have been sharpened and increased. Large banks are now required to hold *ten* times more capital than before the crisis. In addition, the introduction of a leverage ratio is regarded as an important backstop against unreliability and riskiness inherent in risk weights and models. *Bank of England* (2017) Financial Crisis 10 Years On, 1.; *IMF* (2017) Global Financial Stability Report, 2 (underscoring that G-SIBs "*have become more resilient since the crisis, with stronger capital and liquidity*").

134 For example, *UBS* reduced the size of its balance sheet by 35%, Barclays by 27% and Royal Bank of Scotland by 40%, between 2008 and 2010. (*Martel/Van Rixtel/Mota* (2012) Business Models of International Banks, 107); From 2008 to 2014 *UBS* deleveraged by more than 40% and *Credit Suisse* by 21%, however, their balance sheets still amount to about 230% of Switzerland's GDP. *IMF* (2014) Switzerland, 13. See further Chapter III.I: Banking Landscape.

135 *European Central Bank* (2016) Financial Stability Review, 12.

136 *Bank of England* (2017) Financial Crisis 10 Years On, 1; The findings of *PwC's* study for *AFME* regarding proprietary trading and market making point to a similar direction. See *PwC* (2014) AFME: Bank Structural Reform Study, 7; see Chapter I.II.B: Proprietary trading and market making.

137 See Chapter I.V: The Basic Rationale and Goals of Ring-Fencing; *FSB* (2014) Structural Banking Reforms, 3.

A. Bailouts

The global economic crisis was followed by an unprecedented wave of bailouts both in the United States and in Europe. Taxpayer money was used to rescue banks that had run into difficulties due to tremendous losses suffered because of speculation with complex financial products.[138] In particular the U.S., Switzerland, the United Kingdom and Germany had to keep many banks alive through vast packages of aid, including direct capital injections, asset purchases, loans and guarantees.[139]

Between 2008 and 2016, the EU member states alone spent 653.8 billion € on capital-like aid instruments and 1.3 trillion € on liquidity aid instruments. In 2016, state aid was at its lowest since the beginning of the financial crisis. It was also the first year in which no recapitalisations were needed.[140]

B. Bailout decision and too-big-to-fail

Governments that decide to bail out banks typically do not have much choice. Banks play a crucial role in modern day life, in particular by financing the real economy. In Europe, financing of companies and households is traditionally performed by banks rather than by the capital markets. In corporate finance, banks are especially important for small-and-medium enterprises, but thus also for the large corporations contracting with them.[141] Furthermore, banks accept deposits. Letting banks fail al-

138 *Lehmann* (2014) Ring-Fencing, 2–3.

139 *Blundell-Wignall/Wehinger/Slovik* (2010) The Elephant in the Room, 15. These four countries are also dominating the world's investment banking landscape. *Blundell-Wignall/Wehinger/Slovik* (2010) The Elephant in the Room, 15.

140 *European Commission*, State Aid Scoreboard 2017, http://ec.europa.eu/competition/state_aid/scoreboard/index_en.html; see also *European Parliament* (2013) Report on Structural Reform, 4.

141 *HLEG* (2012) Liikanen Report, 88.

ways carries the risk of a bank run,[142] which can create a domino effect due to direct contagion or indirect reputational or informational contagion.[143]

When assessing the necessity of a bailout, governments usually consider the costs of a failure. If the failure of a bank would lead to systemic implications, governments will do almost anything to avert it. These systemic implications are given if the failure of the bank would either (i) affect the country by disrupting financial intermediation to a degree that the economy and therefore other financial firms would suffer significantly; or if it would (ii) affect the stability of other financial firms connected in counterparty transactions so that financial intermediation would be impacted.[144]

Banks that have evolved in a manner that their failure would result in such systemic implications are considered "too-big-to-fail" (TBTF).[145] It is, however, important to emphasize that not just size but also other qualities, notably complexity and interconnectedness can lead to systemic implications.[146]

142 *Lehmann* (2014) Ring-Fencing, 2; Banks that accept deposits are by their very nature in danger of bank runs. Reason for that is their combination of illiquid assets and liquid liabilities. As deposits can be withdrawn at any given time, banks that are actually solvent may need to sell illiquid longterm assets at loss, to match withdrawals. *European Commission* (2014) Impact Assessment Part 2, 56; See also *Diamond/Dybvig* (1983) Bank Runs, 402; *Carnell/Macey/Miller* (2017) Financial Institutions, 200–203.

143 *European Commission* (2014) Impact Assessment Part 2, 56.

144 *Blundell-Wignall/Wehinger/Slovik* (2010) The Elephant in the Room, 22. Furthermore, as history has shown particularly since the financial crisis, politicians "*have proven unable to resist the temptation of 'bailouts'*". *Sester* (2010) Bank Restructuring Law, 515; This willingness to bail out banks has been examined in a number of studies, for a good overview of factors influencing government's bailout decision, see Hofer (2014) Structural Reforms, 114 et seqq.

145 *Blundell-Wignall/Wehinger/Slovik* (2010) The Elephant in the Room, 22. For a compact discussion of the too-big-to-fail problem, see e.g. *Morrison* (2011) Systemic Risks, 500–508, *White* (2013) Too-Big-to-Fail, 25–28.

146 "Too-big-to-fail" is a rather imprecise term, as it refers only to the size of a financial institution. As has been set out, size alone is not the only reason for governments to intervene. Other terms in use are, *inter alia*, "too-complex-to-fail" or "too-interconnected-to-fail". See e.g. *Goldstein/Veron* (2011) Too Big To Fail, 2 Fn 1; *Hofer* (2014) Structural Reforms, 113.

C. Implicit subsidies

Banks can arguably have an interest in being considered TBTF,[147] as the qualification entails an important subsidy: market participants anticipate that banks considered TBTF will be bailed out in case of distress and are therefore willing to fund them at lower returns that do not reflect the actual risks. This implicit subsidy[148] stems from the government, hence from taxpayers, and distorts competition.[149]

Moreover, the subsidy creates moral hazard.[150] Moral hazard arises when a party is incentivised to alter its behaviour because it is not fully exposed to the consequences of its actions.[151] The implicit subsidy is an incentive for banks to increasingly engage in risky activities, because funding costs do not correspond with their actual level of risk. Banks that are not considered TBTF may furthermore be tempted to achieve the status via an increase of size or other qualities. Another important aspect is that TBTF subsidies distort competition.[152]

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147 *Moenninghoff/Ongena/Wieandt, for example,* quote a number of instances in which executives of G-SIBs allegedly underscored the importance of being considered systemically important. See *Moenninghoff/Ongena/Wieandt* (2015) Too-Big-to-Fail, 222 Fn 7.

148 For an explanation of explicit and implicit subsidies, see Chapter I.A.B.b: Costs.

149 *Siegert/Willison* (2015), The “Too Big to Fail“ Problem, 4–5.

150 *Siegert/Willison* (2015), The “Too Big to Fail“ Problem, 4–5.

151 *ICB* (2011) Vickers Report, 248. The recognition that parties are more diligent when they are exposed to the consequences of their actions is evident and has long been described in the context of personal liability. See e.g. *Eucken* (1990) Wirtschaftspolitik, 279 et seqq. (noting that the diligence in investments increases with personal liability); *Smith* (1976) Wealth of Nations, V.1.107 (“*The directors of such companies, however, being the managers rather of other people's money than their own, it cannot well be expected that they should watch over it with the same anxious vigilance with which the partners of a private copartnery frequently watch over their own*”); *Brändli/Rieder* (2009) Vertrauensbildung, 62–64. In the context above, diligence correlates not (necessarily) with personal liability, but with other factors; for example insolvency (in case of the bank) or job-loss (in the case of employees). The basic idea, however, remains the same: moral hazard can be prevented if parties face the consequences of their actions.

152 *Siegert/Willison* (2015), The “Too Big to Fail“ Problem, 4–5; The distortion of competition can materialize between larger and smaller banks, because larger banks have the advantage of low-priced funding. It can also materialize between banks headquartered in different countries depending on the state of their public finances, hence the potential of government support. Furthermore, a distortion can arise between the financial sector and other sectors, making the finan-

Implicit subsidies are difficult to calculate but are likely of material size: according to *Haldane*, implicit subsidies for the 29 largest banks amounted to 70 billion $ per year between 2002 and 2007, equalling *"roughly 50% of the average post-tax profits of these banks over the period"*.[153] The *OECD Survey on Implicit Guarantees* found that annual implicit subsidies range between 0.5 and 12 billion $ in countries with smaller banking sectors to close to even 100 billion $ in countries with large banking sectors.[154]

D. Global systemically important banks (G-SIBs)

After the economic crisis, the Basel Committee on Banking Supervision (BCBS)[155] established criteria to identify "global systemically important banks" (G-SIBs),[156] i.e. global banks that are considered too-systemically-relevant to fail.[157] The BCBS uses an indicator-based measurement approach, taking into account banks' size, interconnectedness, global activity, complexity and the lack of readily available substitutes or financial institution infrastructure that would take on services provided by the bank.[158] The specific identification of the banks is then performed by the FSB:[159] Currently the FSB lists 30 G-SIBs; the list is renewed annually.[160]

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cial sector more profit-making, therefore drawing away resources from other sectors. *European Commission* (2014) Impact Assessment Part 2, 55, 60.

153 *Haldane* (2012) On Being the Right Size, 3; *Bundesrat* (2015) Bericht Too Big to Fail, 1934.

154 *Schich/Aydin* (2014) OECD Survey Results, 13–14.

155 https://www.bis.org/bcbs/.

156 G-SIBs can be regarded as a subcategory of global systemically important financial institutions (G-SIFIs). The latter also comprise non-bank financial intermediaries, for example insurance companies. *Moenninghoff/Ongena/Wieandt* (2015) Too-Big-to-Fail, 221. SIFIs are defined as *"financial institutions whose distress or disorderly failure [...] would cause significant disruption to the wider financial system and economic activity"*. *FSB* (2011) Systemically Important Financial Institutions, 1.

157 *Moenninghoff/Ongena/Wieandt* (2015) Too-Big-to-Fail, 221.

158 *Basel Committee on Banking Supervision* (2013) Global Systemically Important Banks, 5.

159 http://www.fsb.org/.

160 *FSB* (2017) Global Systemically Important Banks, 1; The list comprising all banks considered G-SIBs was published for the first time in 2011 (see *FSB* (2011) Systemically Important Financial Institutions); Banks listed as G-SIB carry the burden of increased supervision, capital surcharges and the establishment of resolution regimes. However, some authors criticise the official designation of

As there are many banks that are not significant from an international perspective but could, in case of distress or failure, have major adverse effects on their domestic financial system and economy, a category of "domestic systemically important banks" (D-SIBs) was created.[161]

E. Bank Size and TBTF

While many banks considerably deleveraged since the financial crisis, decreased their financial trading activities and increased capital a great deal,[162] the too-big-to-fail problem seems to be far from being solved: The Worldbank recently investigated trends in bank size in its *Global Financial Development Report.* It found a "*dramatic increase in bank size*": in spite of regulatory efforts to tackle TBTF, total assets of the world's largest banks increased by more than staggering 40% from 2005 to 2014. The largest banks are the ones most active internationally.[163]

IV. Structural Reform and Ring-fencing

Among the post-crisis reform measures, one of the most controversial is structural reform. This chapter defines the term bank structural reform and puts it into relation with ring-fencing. Ring-fencing is then delimited from two important structural reforms that are related to it.

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banks as being G-SIB, because that may strengthen existing TBTF perceptions and increase moral hazard. *Moenninghoff/Ongena/Wieandt* (2015) Too-Big-to-Fail, 222 et seqq.; See also relating to SIFIs *Elliott/Litan* (2011) Systemically Important Financial Institutions, 10–14.

161 *Basel Committee on Banking Supervision* (2012) Domestic Systemically Important Banks, 1; BCBS only adopted a framework comprising a minimal set of principles, so that local authorities have appropriate discretion. *Basel Committee on Banking Supervision* (2012) Domestic Systemically Important Banks, 1–2.

162 See Chapter I.II.C.c: Post crisis response.

163 See *Worldbank* (2018) Global Financial Developments Report, 10 (This trend has continued since the beginning of the economic crisis and can be observed globally. Only in high-income OECD countries bank size has decreased relatively to GDP since 2008; however, bank size is still exceeding substantially 2005 values); See also with regard to the global increase in bank size, *White/Mehmood* (2017) 10 years on; *Martel/Van Rixtel/Mota* (2012) Business Models of International Banks, 116 (noting a long-term trend towards bigger international banking groups and higher concentration).

A. Structural reform as an umbrella term

Structural reform is a broad term that is applied in many fields of expertise.[164] In banking, it can be understood as an umbrella term for a variety of regulations that intervene with the organisation of banks.[165] As there is no limitation inherent in the term, all substantial requirements for banks to adapt a certain organisation, or to refrain from a certain organisation can be considered “structural reform”.

For the purpose of this dissertation, bank structural reform is defined as *any regulatory reform that substantially affects the legal entity structure, the size, the management organization or the ability to provide activities.*[166]

In practice, certain organisational requirements are most prominent and therefore most widely associated with the term: for instance, the FSB conducted a survey in 2014, in which jurisdictions were asked to consider certain structural banking reforms. It included but was not limited, *inter alia*, to ring-fencing, activity restrictions, incentives or requirements for banks to operate in certain structures (e.g. subsidiaries instead of branches).[167]

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164 The main use of the term “structural reform” outside banking is for changes to a country’s economy to enhance *inter alia* growth, competitiveness, productivity and stability. (See e.g. *The Economist*, What structural reform is and why it is important (December 9, 2014) (discussing structural reform for governments); *OECD* (2015) Structural Reforms in Europe, 3–4 (quantifying the impact of structural reforms on Portugal, France and Italy)); The term is furthermore used in other fields such as education (e.g. *Elmore* (1995) Structural Reform and Educational Practice) or law (e.g. *Gilles* (2000) Reinventing Structural Reform Litigation).

165 See e.g. the use of the term “structural reform” in *Gordon/Ringe* (2015) Bank Resolution, 19.

166 This definition is based on *Hofer*’s, but includes activity restrictions, such as the Volcker Rule and full separation (see *Hofer* (2014) Structural Reforms, 218 (defining structural reform as “*any regulatory reform substantially affecting either the legal entity structure, the size or management organization of [large and complex financial institutions]*”). *Hofer* excludes activity restrictions, such as the Volcker Rule from his concept of structural reform but includes full separation (*Hofer* (2014) Structural Reforms, 251–257). This is inconsistent, as activity bans are to be seen as a subcategory of full separation. See Chapter I.IV.D: Ring-fencing and the activities ban. Cf. *Armour et al.* (2016) Financial Regulation, 505 (describing structural reform as “*measures designed to limit the range of activities that may be carried on by a banking firm*”).

167 *FSB* (2014) Structural Banking Reforms, 3 (The fact that there is no specific limitation to the term “structural reform” can be seen in the non-conclusive nature of the request of the FSB to consider certain measures but also others than the ones explicitly asked for).

To illustrate the variety of measures that can be attributed to structural reform, *Hofer's* categorization of bank structural reforms according to their strictness is briefly laid out: *Hofer* distinguishes between soft structural reforms, intermediate structural reforms and strict structural reforms. According to him, soft structural reforms "*do not compellingly force [banks] to restructure*". They include indirect incentives such as capital surcharges, insurance or tax solutions and rebate systems and recovery and resolution planning.[168] As intermediate structural reforms, he considers requirements that "*aim at some form of corporate separateness, while the different entities are still allowed to be under the same roof*". He attributes to that group ring-fencing, the requirement to establish a service company, and geographical subsidiarization. Strict structural reforms majorly impact banks' structures. They include the full separation of banks and the introduction of size caps.[169] One could add to the last group the concept of narrow banking.[170]

Hofer's by far non-exhaustive categorisation illustrates how many different structural reforms have been discussed. While his assessment contributes to the categorisation of bank structural reforms, one should keep in mind that it is an isolated consideration of each measure. In practice, these measures often interact and are intertwined. As will be demonstrated in Part III of the dissertation for example, ring-fencing as the functional separation of commercial and investment banking can also be achieved through a combination of incentives and emergency planning.[171]

In summary, one can establish that structural reform in banking is an umbrella term that describes a variety of regulations that substantially in-

168 *Hofer* also mentions Swiss emergency planning as a soft, i.e. not compelling, structural reform. See *Hofer* (2014) Structural Reforms, 218.

169 See *Hofer* (2014) Structural Reforms, 214–252. Differentiating between structural reforms by considering their strictness is not unusual. See *Vickers* (2016) Banking Reform Presentation, 17.

170 Narrow banking can be understood as a severe restriction of a bank's business model with regard to deposit-taking. Goal is to reach a total or at least very high matching of maturities between deposits and loans. Expertenkommission (2010) Final Report, 116. For a comprehensive explanation, see e.g. *Chow/Surti* (2011) Making Banks Safer, 9–11; see also *Wilmarth* (2014) Narrow Banking, 7–10; *Alexander/Lorez* (2010) Universal Banks, 465–468. *Carnell/Macey/Miller* (2017) Financial Institutions, 234–235. This structural reform has been overwhelmingly discarded. *Hofer* discusses it as non-structural, but related reform. See *Hofer* (2014) Structural Reforms, 254–257.

171 See Part III: Legal Comparative Analysis. See also the example of the service company in the chapter below, (Chapter I.IV.B: Ring-fencing as a structural reform).

tervene with the organisation of banks. Certain measures are more prominently associated with the term "bank structural reform" than others. Due to the broad scope of the term, it includes measures of very diverse nature, which is reflected by the differences in their strictness.

B. Ring-fencing as a structural reform: the concept of ring-fencing

Ring-fencing constitutes one of the structural reform measures set out above. The line between the terms "ring-fencing" and "structural reform" is somewhat blurred as they are often used synonymously.[172] In the EU for example, the ring-fencing agenda is pursued under the name "bank structural reform".[173]

Ring-fencing should, however, be regarded as its own concept as it can be clearly delimited from other structural reforms. This dissertation establishes three core characteristics that identify ring-fencing as a concept of structural reform on its own, and that are used to delimit it against other structural reforms of banking:

Core characteristics of ring-fencing are (i) the fact that it separates commercial banking activities from investment banking activities: ring-fencing rules all segregate certain activities attributed to commercial banking from certain activities attributed to investment banking.[174] (ii) that it at the same time seeks to maintain universal banking:[175] banking groups must

172 For the use of "structural reform" instead of "ring-fencing", see e.g. *HM Treasury* (2012) Banking Reform, 7; *Gambacorta/Van Rixtel* (2013) Structural Bank Regulation Initiatives.

173 *European Commission* (2014) Proposal for a Regulation, 2.

174 See *ICB* (2011) Vickers Report, 54; *HLEG* (2012) Liikanen Report, 101; See Chapter III.IV: What Activities Fall on Which Side of the Fence? (setting out the separation in the UK, Germany and Switzerland).

175 See *Vickers* (2016) Banking Reform Presentation, 24 ("*Go for structured universal banking, not ending universal banking -more robust than unstructured universal banking*"); See also *HLEG* (2012) Liikanen Report, iii ("*The long-standing universal banking model in Europe would remain, however, untouched, since the separated activities would be carried out in the same banking group. Hence, banks' ability to provide a wide range of financial services to their customers would be maintained*"); *HLEG* (2012) Liikanen Report, 102 ("*The proposal addresses the core weaknesses in the banking sector, while retaining the key benefits of the universal banking model and allowing for business model diversity*"); See Chapter III.IV: What Activities Fall on Which Side of the Fence? (setting out that banking groups in the UK, Germany and Switzerland can continue to provide all sorts of banking activities).

apply a certain structure to continue providing all sorts of activities. There are, however, no limitations for providing activities, whereby the universal banking model remains unimpeded;[176] and (iii) that the separation of activities is protected by a fence, i.e. provisions that aim to ensure that the separated activities can be provided independently from each other.[177]

These three core characteristics of ring-fencing will be an essential part of the following chapters and will be reflected in the established definition of ring-fencing. While there are no objections to the synonymous use of the terms, it should be kept in mind that the term "ring-fencing" is narrower than the term "structural reform".

Ring-fencing selectively makes use of parts of structural reform measures that *Hofer* differentiates from it:[178] For example, ring-fencing rules regularly include the requirement to establish a service company or set down rules how services between the ring-fenced and the non-ring-fenced entities can be provided.[179] Ring-fencing describes a certain structure banking groups have to implement. It does not necessarily need to be stipulated by one law, but can theoretically also be reached by a combination of other structural reforms, for example by combining minimum requirements with additional incentives.[180]

C. Ring-fencing and full separation

Ring-fencing needs to be contrasted against another form of structural reform: the full separation of commercial banking and investment banking. It is most prominently featured by the Glass-Steagall Act (GSA). A short digression on the GSA and a subsequent delimitation of ring-fencing is considered important at this point, because the GSA (i) considerably influenced ring-fencing initiatives and because it (ii) is sometimes associated with ring-fencing.

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176 See Chapter I.I.A.a.2: Universal banking after ring-fencing.
177 See *ICB* (2011) Vickers Report, 62 et seqq.; *HLEG* (2012) Liikanen Report, 102; See also Chapter III.V: Height of the Fence (setting out provisions governing the strength of separation).
178 See the Chapter above (Chapter I.IV.A: Structural reform as an umbrella term).
179 See Chapter III.V.A.e: Continuity of services (and the respective chapters on Germany and Switzerland).
180 This will be discussed in the context of the Swiss solution. See, *inter alia*, Chapter III.II.b: Policy mix and core measure organization.

a. Digression: The Glass-Steagall Act

1. Reasons for the adoption of the Glass-Steagall Act

The GSA was adopted in 1933 during the Roosevelt administration's New Deal.[181] After liberalising bank activities past 1910, banks started to significantly increase their financing of business firms and consumers. Banks allowed their customers to run up considerable debt, which they used to make risky investments.[182] During the 1920s, banks broadly entered the securities-underwriting business, evolving into universal banks.[183] In the summer of 1929, a recession began that was intensified by the stock market crash in October and that turned these investments unviable by a large scale.[184] The recession later became known as the Great Depression.[185]

The GSA was adopted because (i) the direct involvement of commercial banks with corporate securities was considered harmful to the financial system and because (ii) proponents argued that universal banking led to a considerable conflict of interest.[186] Large banks were criticised for motivating reckless speculation in two respects: firstly, they were accused of making excessive loans on securities as well as investments in securities with their own funds. Secondly, they were accused of convincing retail investors and small correspondent banks of converting deposits and safe investments into risky investments underwritten by their securities affiliates.[187]

The Pecora Hearings in 1933 shed a light on *"terrible abuses of trust and conflicts of interest"* by the *National City Bank*, the most important bank engaged in securities activities, and its securities affiliate. They caused public outrage and set the political environment for the adoption of such a strict law as the GSA.[188]

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181 *Carpenter/Murphy* (2010) Permissible Securities Activities, 2.
182 *Wilmarth* (2005) Universal Banks, 560–561.
183 *Wilmarth* (2016) Glass-Steagall, 1291.
184 *Wilmarth* (2005) Universal Banks, 560–561.
185 *Carnell/Macey/Miller* (2017) Financial Institutions, 19.
186 *Kroszner/Rajan* (1994) Glass-Steagall Act, 810.
187 See *Wilmarth* (2005) Universal Banks, 565, citing remarks of certain proponents of the GSA.
188 *Benston* (1994) Universal Banking, 122. For a detailed discussion of abusive practices of the National City Bank, see also *Wilmarth* (2016) Glass-Steagall, 1301–1327 (*Wilmarth* sets out in detail how*"National City and Chase encouraged unsophisticated investors to purchase risky securities through highpressure sales techniques and misleading prospectuses. Both banks used stock pools and other manipulative techniques to promote the sale and boost the price of their own stocks as well as*

2. Full separation

The GSA's four provisions[189] established the separation of commercial and investment banking that left its mark on the United States banking landscape up until today.[190]

The separation is accomplished through provisions that on the one hand prohibit an affiliation of banks with securities firms,[191] and on the other hand the sharing of personnel with securities firms.[192] The GSA further restricts banks from underwriting and dealing with securities and purchasing them for their own account. There is, however, an exception for certain government securities, such as United States obligations.[193] Vis-à-vis,

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stocks of favored clients. Both banks incurred large losses after making hazardous loans and investments to support the activities of their securities affiliates. Senior executives at both banks reaped extraordinary personal gains by exploiting their managerial positions").

189 Most authors consider the Glass-Steagall Act to refer to Sects. 16, 20, 21, 32 of the Banking Act of 1933, (e.g. *Masciandaro/Suardi* (2014) Public Interest and Lobbies, 308; *Pace* (2012) Business of Banking, 12; *Manasfi* (2013) Systemic Risk, 185 Fn 9); *Wilmarth* also includes Sec. 5(c) (*Wilmarth* (2005) Universal Banks, 564 Fn 8). This provision extends the securities limitations for national banks on state-chartered banks (see *Carpenter/Murphy* (2010) Permissible Securities Activities, 5 Fn 27). For a detailed discussion of the provisions, see e.g. *Felsenfeld/Glass* (2011) Banking Regulation, 307 et seqq.

190 See *Carpenter/Murphy* (2010) Permissible Securities Activities, 2. The full separation of the GSA was finally abolished by the Gramm-Leach-Bliley Act (Gramm-Leach-Bliley Act, Publ. L. No. 106–102, 113 Stat. 1338 (1999) (GLBA)). It repeals two provisions of the GSA, namely the prohibition for banks to affiliate with securities firms and the prohibition on the sharing of personnel (Sec. 101, Gramm-Leach-Bliley Act). However, it leaves the other provisions of the GSA intact, thereby maintaining the prohibition for banks from offering the entire spectrum of securities, and the prohibition for securities firms from accepting deposits (*Carpenter/Murphy* (2010) Permissible Securities Activities, 15, The GLBA does not repeal Sec. 16 and Sec. 21 of the GSA). The GLBA therefore permits a new category of holding company, the "financial holding company". It is allowed to own subsidiaries that engage in (i) banking, (ii) securities activities, (iii) insurance activities. *Barth/Brumbaugh/Wilcox* (2000) Glass-Steagall, 193; see also *Carpenter/Murphy* (2010) Permissible Securities Activities, 16.

191 Sec. 20, Glass-Steagall Act.

192 Sec. 32, Glass-Steagall Act.

193 Sec. 16, Glass-Steagall Act. Similar provisions can be found in modern-day structural reforms, e.g. the European Commission's draft regulation (Chapter II.II.C.a: Prohibitions) or the Volcker Rule (Chapter I.IV.D.a: Digression: The Volcker Rule).

the GSA prohibits securities firms from engaging in the deposit-taking business.[194]

The GSA is enforced and interpreted by regulating authorities via regulations, guidelines and orders.[195] This leeway for enforcement led to its demise when regulators *"adopted creative statutory interpretations"*.[196]

The GSA's full separation prohibits banking groups from affiliating with securities firms and investment banking activities. It thereby limits universal banking. Full separation can thus, for the purpose of this dissertation, be defined as *a bank structural reform that prohibits a broad set of investment banking activities, which are considered high-risk, for the whole banking group, thereby limiting universal banking.*

3. Criticism and impact of the Glass-Steagall Act

Among the modern-day criticism, *Wilmarth* highlights three arguments commonly brought forward: firstly, it is often said that the GSA was "interest group legislation", in that it shielded traditional investment banks from competition with commercial banks.[197] Secondly, it is argued that universal banks were indeed less risky and that they did not jeopardize the financial system.[198] Thirdly, the basis for the belief of lawmakers that universal banking led to severe conflicts of interest is contested.[199]

The GSA nevertheless had a massive impact on the United States' banking landscape, as the mandated separation of commercial and investment banking was in principle maintained for most of the 20th century.[200] The resulting differentiation of regulation for securities firms on the one hand

194 Sec. 21, Glass-Steagall Act.
195 *Carpenter/Murphy* (2010) Permissible Securities Activities, 8.
196 See e.g. *Wilmarth* (2016) Glass-Steagall, 445, 456 et seqq.
197 This is, for example, argued by *Shughart* (1988) Public Choice Perspective, 103–104.
198 One of the main advocates of this argument is e.g. *White* (1986) Glass-Steagall Act, 51–52; *Wilmarth*, however, criticises *White's* data and conclusions, see *Wilmarth* (2005) Universal Banks, 591–592.
199 *Wilmarth* (2005) Universal Banks, 585 et seqq.; see also *Barth/Brumbaugh/Wilcox* (2000) Glass-Steagall, 192 (discussing reasons for the repeal of the Glass-Steagall Act).
200 *European Commission* (2014) Impact Assessment Part 2, 5; *Akhigbe/Whyte* (2004) Gramm Leach-Bliley Act, 435.

and banks on the other hand emanated from the U.S. and influenced regulation around the world.[201]

Since the global economic crisis in 2008, the GSA has again attracted attention in politics and academics. In search of a solution for the structural problems of the financial system, many voices called for a reinstallation of full separation.[202] This became particularly visible during the 2016 presidential election, in which the GSA was a central part of various candidates' campaigns.[203] What contributed to the almost legendary status of the Act and what is indeed remarkable, is that during the long reign of the GSA, there was no major crisis in the United States; and that, although it had before been watered down considerably, the global economic crisis hit only shortly after its full repeal.[204]

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201 See *Carpenter/Murphy* (2010) Permissible Securities Activities, 2. On the significant influence of the regulatory divide between securities law and banking regulation, that also left its traces on the European Union, see *Armour et al.* (2016) Financial Regulation, 3–5.

202 See e.g. *Johnson*, Resurrecting Glass-Steagall, Project Syndicate: The World's Opinion Page (October 25, 2015); It is interesting to see that the GSA to this day has considerable significance to the American people, as observable in the political discussion. It is also visible in the recognisable orientation of the VR along the GSA, (see Chapter I.IV.D.a: Digression: The Volcker Rule). There may be a number of possible reasons for that: (i) a regulation, which governs an important sector like the banking business for such a long time has the potential of leaving marks on society; (ii) The GSA is based on a concept that is simple, radical and easy to grasp; (iii) the full repeal of the GSA was only 8 years before the economic crisis, a possible linkage (regardless of whether true or false) is therefore easy to establish for the general public.

203 Especially *Bernie Sanders* was promoting a new form of GSA and made it a central part of his campaign during the 2016 US presidential elections (see *Escow*, 5 Reasons Glass-Steagall Matters, (November 16, 2015) https://berniesanders.com/yes-glass-steagall-matters-here-are-5-reasons-why/; *The Economist*, Bernie Sanders's obsession with Glass-Steagall is misplaced (February 18, 2016)). *Donald Trump* also spoke out for a new form of the GSA during the elections. See *Reuters,* Trump calls for '21st century' Glass-Steagall banking law (October 26, 2016).

204 This is, for instance, indicated by the *Financial Crisis Inquiry Commission* (2011) Financial Crisis, 52–56; *Lehmann* (2014) Ring-Fencing, 6; see also *Merkley/Levin* (2011) 518–520; *Armour et al.* (2016) Financial Regulation, 505; *Wilmarth* (2016) Glass-Steagall, 444 Fn 7 (pointing out multiple sources discussing the connection between the Glass-Steagall Act repeal and the economic crisis). See also e.g. *Reich,* Hillary Clinton's Glass-Steagall, (July 14, 2015) http://robertreich.org/post/124114229225 (*"To this day some Wall Street apologists argue Glass-Steagall wouldn't have prevented the 2008 crisis because the real culprits were nonbanks like Lehman Brothers and Bear Stearns. Baloney. These nonbanks got their funding from*

b. Differences between ring-fencing and full separation

Ring-fencing is influenced by the full separation of commercial banking and investment banking and its most prominent emanation, the Glass-Steagall Act. They both share the idea that certain commercial banking activities need to be separated from certain investment banking activities (one of ring-fencing's core characteristics).[205] This is likely the reason why it is sometimes associated with ring-fencing.

The following paragraphs first outline important differences between ring-fencing and full separation in general, taking the form of the other two core characteristics established above. Subsequently, differences between ring-fencing as a 21st century structural reform and the Glass-Steagall Act shall be discussed.

The first difference is ring-fencing's core characteristic of striking a balance between the separation on the one hand, and universal banking on the other hand. While full separation taking the form of the Glass-Steagall Act, to quote *Vickers,* virtually "*end[ed] universal banking*",[206] all methods of ring-fencing maintain the freedom of banks to offer unlimited financial services.[207]

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the big banks […] If the big banks hadn't provided them the money, the nonbanks wouldn't have got into trouble"); see also e.g. *Reid*, We were wrong about universal banking, Financial Times (November 11, 2015) (in which former chairman and CEO of Citigroup, *John Reid,* considers universal banking, as introduced with the repeal of the GSA "*inherently unstable and unworkable*"). The Glass-Steagall period is thus referred to by some as the "Quiet Period". See *Crawford* (2017) Glass-Steagall, 8.

205 See Chapter I.IV.B: Ring-fencing as a structural reform.

206 See *Vickers* (2016) Banking Reform Presentation, 20.

207 As an example for the attitude towards universal banking, see *ICB* (2011) Vickers Report, 138 ("*Leaving aside the diversification benefits, the proposed ring-fence would also preserve the other synergies which full separation would remove. Customers would be able to receive their banking services together in one place. The ring-fence would not require separation of the operational provision of all services to customers – rather it would require separation of the financial transactions to which these give rise. Further, the ring-fence itself would place no restriction on the sharing of information and expertise between ring-fenced banks and the rest of the banking group*"); see Chapter I.IV.B: Ring-fencing as a structural reform. As will be discussed, a literal interpretation of the word ring-fencing already produces that (i) a ring-fenced part and (ii) a part that may unwantedly influence the ring-fenced part need to be combined under the same roof (see Chapter I.VII.A: Origins of the term "ring-fencing"; Chapter I.VII.B: Ring-fencing outside banking regulation). This is also a pervasive element of all uses of ring-fencing outside banking regulation (see Chapter I.VII.B: Ring-fencing outside banking regulation).

The second difference is ring-fencing's core characteristic of establishing a fence: a prohibition cannot be equated with a system of provisions that aims to ensure legal, financial and operational independence of two entities within the same group.[208]

Regarding differences between ring-fencing as a 21st century structural reform and the Glass-Steagall Act, the following can be found: the goals of ring-fencing are not the same as the ones of Glass-Steagall. One could describe it as an evolution of the regulations' ambitions: Glass-Steagall aimed primarily to protect the individual depositor (i) from conflicts of interest within the bank which could occur due to the "*easy access to large numbers of unsophisticated depositors*" who could easily be defrauded by misrepresenting the quality of underwritten securities; and (ii) from the failure of a bank due to the risky nature of investment banking.[209] While unsound universal banks were thought of as "*undermining the safety of the banking system*" for their risk of causing bank runs,[210] it can be concluded that the protection of the individual has been the focus of attention.

As will be set out, modern-day ring-fencing rules aim much more at the protection of the system, namely the financial system and the real economy as a whole.[211] This is largely due to the developments in the banking sector, with banks growing in size, complexity and interconnectedness.[212] Ring-fencing rules aim at enhancing the resolvability and by that reducing implicit subsidies of large universal banks. Conflicts of interest are also addressed but play a much lesser role compared to Glass-Steagall's full separation. Ultimately, ring-fencing attempts to tackle the too-big-to-fail problem.[213]

In addition, it can be found that there is an altered threat situation. While the Glass-Steagall Act is characterised by a distrust towards "simple"

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208 See *ICB* (2011) Vickers Report, 63–66 (noting that "*the right approach is not to require full separation, but instead to impose through ring-fencing the degree of separation required to secure the benefits*").

209 See *Kroszner/Rajan* (1994) Glass-Steagall Act, 811, 814–815; see also *White* (1986) Glass-Steagall Act, 38; *Armour et al.* (2016) Financial Regulation, 512.

210 See *White* (1986) Glass-Steagall Act, 39; see also *Kroszner/Rajan* (1994) Glass-Steagall Act, 811. The stability of the banking system was furthermore backed up by the introduction of a federal deposit insurance to discourage "runs" on banks. See *Wilmarth* (2017) Glass-Steagall Repeal, 450.

211 *Armour et al.* (2016) Financial Regulation, 512; see Chapter I.V: The Basic Rationale and Goals of Ring-fencing.

212 See Chapter I.II: Changes in the Realm of International Banking; Chapter I.III: Bailouts and Too-Big-to-Fail.

213 See Chapter I.V: The Basic Rationale and Goals of Ring-fencing.

investment banking activities, in particular underwriting,[214] the focus of modern-day ring-fencing rules is on complex, international trading activities, with some even considering underwriting not risky enough to justify a separation from the retail entity.[215] This is, of course, also due to developments in the banking industry, which has become faster, more complex, more technologically advanced and more international.

D. Ring-fencing and the activities ban

Ring-fencing needs to be contrasted against another form of structural reform: the *activities ban* which is most prominently featured in the Volcker Rule (VR). A short digression is considered important because, as will be discussed, (i) the *activities ban* is sometimes attributed to ring-fencing. While it in some instances is (ii) applied together with ring-fencing, it is a different structural reform and should be identified as such. The VR is also a (iii) warning example for the difficulties in defining proprietary trading.

a. Digression: The Volcker Rule

1. Section 619 Dodd-Frank Act

The Dodd-Frank Act is a central part of the Obama administration's response to the economic crisis. Its aim is to make the financial system stronger and to limit risk-taking at banking entities.[216] Its 848 pages bring about important changes for the financial sector.[217]

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214 See Chapter I.IV.C.a: Digression: The Glass-Steagall Act.

215 This is typically the case in jurisdictions that the containment method (see Chapter I.VI: Different Methods of Ring-Fencing), for example Germany (see Chapter III.IV.B: Germany); according to the Liikanen Report, underwriting would also remain in the ring-fenced entity (see Chapter II.I.C: Avenue 2).

216 *Financial Stability Oversight Council* (2011) Proprietary Trading, 1. See also e.g. *Cooper,* Obama Signs Overhaul of Financial System, NY Times, (2010, July 21). It also aims at avoiding future tax money bailouts. This is emphasized by a "*prohibition of taxpayer funding*". See Sec. 214 Dodd-Frank Act; see also *Sester* (2010) Bank Restructuring Law, 515 Fn 11.

217 *Krawiec* (2013) Joe the Plummer, 54–55; *Doyle et al.* (2010) Volcker Rule, 692 (underscoring the Volcker Rule's "*significant effects*" on banking entities and FED-supervised firms).

"Volcker Rule" refers to Section 619 of the Dodd-Frank Act that added a new section to the Bank Holding Company Act of 1956.[218] Although the Dodd-Frank Act was adopted already in 2010, the final regulations, i.e. rules specifying the implementation of the VR, jointly released by the regulating authorities, were officially adopted as late as 2014.[219]

The VR's core elements are (i) a prohibition of certain relationships with hedge funds and private equity funds and (ii) a prohibition of proprietary trading.[220] These are realized by the stipulation that a "*banking entity*" is forbidden to (i)"*acquire or retain any equity, partnership, or other ownership interest in or sponsor a hedge fund or a private equity fund*" or to (ii) "*engage in proprietary trading*".[221]

The term "banking entity" is designed to cover not just a particular depository institution but the whole banking group.[222] The VR thereby takes a group perspective,[223] i.e. prohibited activities cannot be performed by any member of a group that includes a bank.

The VR defines proprietary trading as "*engaging as a principal for the trading account […] in any transaction to purchase or sell, or otherwise acquire or dispose of any [financial instrument]*".[224] Trading account means "*any account used for acquiring or taking positions in [financial instruments] principal-*

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218 Sec. 619 of the Dodd-Frank Act adds a new Sec. 13 to the Bank Holding Company Act of 1956, 12 U.S.C. 1851.

219 *U.S. Agencies* (2014) Final Rule. The Final Rule was already released in December 2013. See homepage of the U.S. Securities and Exchange Commission, https://www.sec.gov/rules/final/finalarchive/finalarchive2013.shtml.

220 See title of Sec. 619 Dodd-Frank Act.

221 Sec. 619(a)(1) Dodd-Frank Act.

222 It is defined as "*any insured depository institution [...], any company that controls an insured depository institution, or that is treated as a bank holding company [...], and any affiliate or subsidiary of any such entity*". Sec. 619(h)(1) Dodd-Frank Act.

223 See e.g. *Binder* (2015) Ring-Fencing, 109.

224 "*[E]ngaging as a principal for the trading account […] in any transaction to purchase or sell, or otherwise acquire or dispose of any security, any derivative, any contract of sale of a commodity for future delivery, any option on [any of the just mentioned] or any other security or financial instrument*" that a federal regulator determines. Sec. 619(h)(4) Dodd-Frank Act; Trading account is defined as "*any account used for acquiring or taking positions in securities and [financial] instruments […] principally for the purpose purpose of selling in the near term (or otherwise with the intent to resell in order to profit from short-term price movements)*" and any other accounts regulators may determine. Sec. 619(h)(6) Dodd-Frank Act.

ly for the purpose of selling in the near term (or otherwise with the intent to resell in order to profit from short-term price movements)".[225]

The VR's general prohibition therefore forbids banks from owning or running hedge funds and private equity funds[226] and from engaging in trading activities for own account with the purpose of (i) selling in the near term or to (ii) profiting from short-term price movements.[227]

In a second step, the VR stipulates a number of exemptions for activities related to proprietary trading[228] that are considered beneficial to society. Among these "permitted activities" are proprietary trading in government securities, market making, and risk-mitigating hedging activities.[229] Further exemptions are set down for proprietary trading outside the U.S.[230] and certain investments through insurance company affiliates.[231]

In a third step, the VR limits the permitted activities insofar as no activity is to profit from the exemptions, (i) that would result in a material conflict of interest between the bank and counterparties, (ii) that would result in a material exposure by the bank to high-risk assets or high-risk trading strategies, (iii) that would pose a threat to the safety and soundness of the

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225 "*[A]ny account used for acquiring or taking positions in [financial instruments] principally for the purpose of selling in the near term (or otherwise with the intent to resell in order to profit from short-term price movements)*" and any other accounts regulators may determine. Sec. 619(h)(6) Dodd-Frank Act.

226 *Elliott/Rauch* (2014) Volcker Rule, 4.

227 The terms "near term" and "short-term" have, for good reason, been criticised for their vagueness. See for a discussion *Whitehead* (2011) Volcker Rule, 48–49, 48 Fn 43; The Final Rules stipulate a rebuttable presumption that financial positions are presumed to be for the trading account, if a bank holds the financial instrument for less than 60 days, or if it substantially transfers the risk of the financial instrument within 60 days. This means that banks need to hold financial instruments for longer than 60 days to avoid qualification as proprietary trading (they can, however, demonstrate that they held a financial instrument for other purposes). See Final Rules, §_.3(b)(2).

228 For a discussion of the relation of market making to proprietary trading, see Chapter I.II.B: Proprietary trading and market making.

229 See Sec. 619(d)(1)(A)-(C).

230 See Sec. 619(d)(1)(H).

231 See Sec. 619(d)(1)(F); some of the exemptions were included during the final negotiations of the bill due to a campaign of the financial industry, which was "*lobbying vigorously to weaken the Volcker Rule*". *Cassidy*, The Volcker Rule: Obama's economic adviser and his battles over the financial-reform bill, The New Yorker (July 26, 2010); See further on the lobbying efforts and successes of the banking industry, *Wilmarth* (2011) Dodd-Frank Act, 1028.

bank, or (iv) that would pose a threat to the financial stability of the United States.[232]

2. Activities ban

The Volcker Rule introduces an outright ban on activities which are considered not compatible with the business of banking. By that, it "*reflects the Glass-Steagall philosophy that certain activities should not, for political or practical reasons, coexist in the same corporate structure*".[233] This ban prohibits the bank and, in case of a banking group, all entities from providing activities identified by it, thereby effecting a full separation from banking entities comparable to the one of the GSA.[234] This is rightly pointed out by the Vickers Report, noting that the Volcker Rule is "*a form of full separation*".[235]

Similarly to the Glass-Steagall Act, the *activities ban* therefore limits the universal banking model by fully separating certain activities from the whole banking group. In contrast to the full separation of the Glass-Steagall Act however, its restrictions aim only to separate certain specified activities and not securities activities as a whole: not all investment banking is prohibited for affected banks – only certain activities that are considered so high-risk that they should not be performed by banking groups at all.[236]

232 Sec. 619(d)(2)(A).

233 *Dombalagian* (2012) Proprietary Trading, 399.

234 See Chapter I.IV.C.a: Digression: The Glass-Steagall Act; *European Commission* (2014) Impact Assessment Part 2, 8 (noting that the "*Volcker Rule entails full ownership separation, thus the cease and divestment of the prohibited activities*"); The ostensible orientation towards Glass-Steagall is intentional and is portrayed by the policy essay of *Merkley/Levin,* who introduced the VR in Congress (see *Manasfi* (2013) Systemic Risk, 197), and characterized its goal as "*restor[ing] the spirit of regulations that followed the Great Depression*" (*Merkley/Levin* (2011) Dodd-Frank Act, 516). See also *Gary* (2012) Economic Crisis, 1341–1342, 1386 (underscoring the Glass-Steagall spirit of the Volcker Rule). The orientation towards the GSA has been criticised by *Whitehead* as "*a fixture of the past*" and has been called "*a financial Maginot Line*" (*Whitehead* (2011) Volcker Rule, 43) – outdated, inflexible and expensive.

235 *ICB* (2011) Vickers Report, 45.

236 The VR aims at preserving the "*synergistic benefits of bundling such services*", thereby "*striking a compromise*" between the GSA and the Gramm-Leach-Bliley Act. See *Dombalagian* (2012) Proprietary Trading, 388.

It can therefore be regarded as a subcategory of full separation.[237] The key difference to the Glass Steagall Act's full separation is the scope of the prohibition.

Being a subcategory of full separation justifies a generalized term. Volcker Rule-style activities restrictions are, for the purpose of this dissertation, referred to as *activities ban*. The *activities ban* is defined as *a bank structural reform that prohibits a limited set of investment banking activities, which are considered high-risk, for the whole banking group, thereby limiting universal banking.*[238]

3. Criticism

The VR can be regarded as a relatively unsuccessful banking regulation. It was ill-fated from the beginning and has attracted criticism from both proponents and opponents of strict banking regulation. The following paragraphs outline some of the key points of criticism that the author regards as most valuable for the discussion of European bank structural reforms.[239]

Especially with regard to the distinction of prohibited proprietary trading and the various exemptions, the provisions of the VR are, to speak with *Dombalagian*, *"frustratingly vague"*[240] and leave open a number of questions. This is mainly due to the difficulties in the separation of proprietary trading and related activities, market making and hedging in particular. The VR is not applicable by itself, but requires specification by regulators. Regarding that, regulators are given so much discretion that one could describe their duty rather as shaping the law.[241]

237 *ICB* (2011) Vickers Report, 45 (referring to the Volcker Rule as a *"form of full separation in that it prevents common ownership of banks and entities which conduct such activities"*).

238 Key difference to full separation is the limited scope of the *activities ban*, which is emphasized by the note that it only comprises the prohibition of *"a limited set"* of investment banking activities. To underscore that the *activities ban* is besides that a *"form of full separation"* (*ICB* (2011) Vickers Report, 45), the definition is aligned with the definition of full separation (see Chapter I.IV.C.a.2: Full separation). For a discussion of other differences, see *Möslein* (2013) Trennung, 360–362.

239 For a good overview of perceived costs and benefits of the VR, see *Elliott/Rauch* (2014) Volcker Rule, 5–8.

240 See *Dombalagian* (2012) Proprietary Trading, 403.

241 The reason why the Volcker Rule's 11 page idea turned into 489 page agency proposal is because it "*asks regulators to do something that is difficult in practice*": to

Furthermore, *Whitehead* criticises that the VR does not take into account today's connectedness of banks and the shadow banking sector. By causing proprietary trading to move from the former to the latter, it shifts it to a much less regulated industry. Due to the interconnectedness, banks remain exposed to the dangers of proprietary trading.[242]

Duffie predicts that the attempt to unravel activities with market making intent and proprietary trading would result in an overall reduction of market making activities by banks, leading to a loss of liquidity, higher costs of capital for corporations and eventually also for the government.[243] Indeed, *Dombalagian* claims that "*[e]ven as its full implementation remains incomplete, [the VR] has unquestionably had a dramatic impact on the market for financial services*" and that it appears to have adversely affected liquidity.[244] *Bao/O'Hara/Zhou* find that it has a detriment effect on liquidity in corporate bond markets, and that dealers subject to it "*become less willing to provide liquidity during stress times*" with illiquidity in stress periods "*now approaching levels seen during the financial crisis*".[245]

However, there are also proponents of the VR: *Coates*, for instance, defends it to be more than just a "*'watered down' version of the [GSA]*". He notes that it is tackling the "*casino-like speculative culture of banks*" and that the importance of such a change, for example by a change of remuneration policies, should not be underestimated.[246]

The future of the VR has considerably darkened with the election of President Trump, who attacked the Dodd-Frank Act during his campaign and promised to dismantle it. Besides a change of regulators' enforce-

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separate market making from proprietary trading. (*Schultz* (2013) Conclusions, 226). Moreover, even the extensive final rules, which set out the relation between proprietary trading and the exemptions, pose new issues. *Krawiec/Liu* (2015) Volcker Rule, 510–511.

242 *Whitehead* (2011) Volcker Rule, 44–46, 73; see also *Duffie* (2012) Market Making, 5–6. For a general discussion of the exposure of the banking sector to risks emanating from shadow banking, see *Hoeck* (2018) Schattenbanken, 334–341.

243 *Duffie* (2012) Market Making, 4–5.

244 *D ombalagian* (2015) Volcker Rule, 470.

245 *Bao/O'Hara/Zhou* (2016) Volcker Rule, 29–30.

246 *Coates* (2015) Volcker Rule, 15–17; See also *Reid*, We were wrong about universal banking, Financial Times (November 11, 2015) (in which former chairman and CEO of Citigroup *John Reid* emphasizes the importance of culture and the dangers of mixing incompatible cultures); *Richardson* (2012) Volcker Rule, 15–18; *Richardson/Smith/Walter* (2011) Large Banks, 207–208.

ment,[247] there are currently legislative efforts to amend the VR that start to gather bipartisan support.[248]

b. Differences between ring-fencing and the activities ban

Ring-fencing needs to be differentiated from the *activities ban*, which most prominently takes the form of the Volcker Rule.[249] The *activities ban* has since been discussed in many jurisdictions, often in connection with ring-fencing.[250] Despite the considerations above, some authors have characterised the *activities ban* as ring-fencing.[251]

This is likely due to three reasons: both ring-fencing and the *activities ban* (i) aim to distance risky activities from activities that are to be protected (thereby sharing the first core characteristic of ring-fencing);[252] (ii) the *activities ban* is often applied in combination with ring-fencing. This, for example, is the case for the European Commission's draft regulation; (iii) as discussed above, the *activities ban* only mandates full separation of selected activities and in this aspect differs from a Glass-Stagall Act full separation, which potentially blurs the awareness of it being a subcategory of full separation.

247 See *Hamilton,* Trump Watchdog Tells Banks He Really, Really Likes Them, Bloomberg (April 9, 2018); *Tracy/Carney,* How to Kill the Volcker Rule? Don't Enforce It, Wall Street Journal (November 28, 2016).

248 *Mont,* Push for Volcker Rule reforms gains momentum, Compliance Week (April 16, 2018); *Dexheimer*, Volcker Rule Change Backed in House Panel's Dodd-Frank Remedy, Bloomberg (March 21, 2018).

249 See Chapter I.IV.D: Ring-fencing and the activities ban; The European Commission's draft regulation also includes elements of this approach. See Chapter II.II.C: Separation of proprietary trading (The European Commission's draft regulation sets forth elements of the *containment method* of ring-fencing and the *activities ban* of full separation).

250 See e.g. *ICB* (2011) Vickers Report, 45–46; *HLEG* (2012) Liikanen Report, 84–85; *European Commission* (2014) Impact Assessment Part 2, 7–9; *Expertenkommission* (2010) Schlussbericht, 125–126.

251 See e.g. *Masciandaro/Suardi* (2014) Public Interest and Lobbies, 307, 318 (*Masciandaro/Suardi,* however, then consider the Volcker Rule a form of full separation); *Brown* (2014) With this Ring, I Thee Fence, 1043; *Schwarcz* (2013) Ring-Fencing, 80–81 (*Schwarcz* discusses both Glass-Steagall, the Volcker Rule and UK ring-fencing under the term "ring-fencing"); *Schwarcz* (2016) Systemic Risk, 57.

252 See Chapter I.IV.B: Ring-fencing as a structural reform.

However, as pointed out explicitly by both the Vickers and the Liikanen Report, the *activities ban* cannot be regarded as ring-fencing.[253] This is in particular because, similarly to full separation,[254] the *activities ban* lacks two core characteristics of ring-fencing:

Firstly, ring-fencing aims at maintaining universal banking.[255] While ring-fencing allows for all activities to be provided within the same banking group, the *activities ban* removes certain activities completely from the group, thus limiting a bank's ability to engage in all respects of the banking, securities and insurance business.[256]

As will be discussed below, a literal interpretation of the word ring-fencing indicates that (i) a ring-fenced part and (ii) a part that may unwantedly influence the ring-fenced part need to be combined under the same roof.[257] This is also a pervasive element of all uses of ring-fencing outside banking regulation.[258] As the *activities ban* effectively bans certain activities from the banking group, it cannot be properly subsumed under the term "ring-fencing".

Secondly, there is no fence: a prohibition cannot be equated with a system of provisions that aims to ensure legal, financial and operational independence of two entities within the same group. Arguing that there was a fence, only a much higher one taking the form of a prohibition, is in the author's opinion far-fetched. It would furthermore logically entail that also full separation, such as the Glass-Steagall Act (which also takes the form of a prohibition, however a broader one) would be ring-fencing.[259] This is ex-

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253 Both the Vickers Report and the Liikanen Report differ between their own structural recommendations and the *activities ban*. See *ICB* (2011) Vickers Report, 45 ("*The Volcker Rule is a form of full separation in that it prevents common ownership of banks and entities which conduct such activities. […] However, prohibiting only those activities caught by the Volcker Rule would not achieve all of the objectives of ring-fencing*"); *HLEG* (2012) Liikanen Report, 83 (The Liikanen Report attributes the Volcker Rule to a category of structural reforms it refers to as "*activities restrictions*").

254 See Chapter I.IV.C.b: Differences between ring-fencing and full separation.

255 See Chapter I.IV.B: Ring-fencing as a structural reform.

256 See Chapter I.IV.D.a.2: Activities ban; Chapter I.I.A.a: Definition.

257 See Chapter I.VII.A: Origins of the term "ring-fencing"; Chapter I.VII.B: Ring-fencing outside banking regulation.

258 See Chapter I.VII.B: Ring-fencing outside banking regulation.

259 *Schwarcz* seems to argue in this direction, including both Glass-Steagall and the Volcker Rule into his concept of ring-fencing. See *Schwarcz* (2013) Ring-Fencing, 79–80; *Schwarcz* (2016) Systemic Risk, 57.

plicitly disagreed with by e.g. the Vickers Report, which dedicates a whole chapter on the question *"why not full separation"*.[260]

V. The Basic Rationale and Goals of Ring-Fencing

This chapter addresses the basic rationale of ring-fencing and subsequently explains what objectives may also be reached by its implementation. This structure is considered useful as it highlights that the protection of systemically important activities, described in the first step, is an essential precondition for the achievement of the other objectives, expanded on as a second step.

A. The basic rationale of ring-fencing

As discussed in previous chapters, the global economic crisis brought with it a series of unprecedented bailouts and shed light on the fact that the banking sector had evolved in a direction that was far from socially optimal: banks had become so big, complex, interconnected and fragile that governments had little choice but to bail them out in times of stress to avert major damages to the real economy as well as bank runs.

The central problem that ring-fencing rules are trying to address is the danger that bank deposits and the provision of services considered vital to the real economy are jeopardized by risky activities.[261] The basic rationale of ring-fencing is therefore that banks shall be prevented from risking their deposits and their ability to provide these services to avert negative consequences for the financial system as a whole, and for the continuity of financial services.[262]

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260 See *ICB* (2011) Vickers Report, 63–66 (noting that *"the right approach is not to require full separation, but instead to impose through ring-fencing the degree of separation required to secure the benefits"*).

261 Cf. *Gambacorta/Van Rixtel* (2013) Structural Bank Regulation Initiatives, 1 (*Gambacorta/Van Rixtel* do not use the term "ring-fencing" but simply use the term "structural reform"; see Chapter I.IV.B: Ring-fencing as a structural reform.).

262 *Proctor* (2014) International Banking, 16; *Armour et al.* (2016) Financial Regulation, 507. In contrast to older structural reforms, the focus of ring-fencing is hence the protection of the system, namely of financial stability. See *Armour et*

The Liikanen Report explains this pointedly, noting that *"the key objective is […] to ensure a banking sector that is capable of financing the real economy and to persue its other functions that contribute to the prosperity of […] citizens and the economy"*.[263]

Ring-fencing aims to insulate these functions from others deemed riskier and less important. The various initiatives all put up a fence somewhere between commercial and investment banking. This segregation nevertheless maintains the universal banking model.[264]

The Vickers Report points this out clearly, noting that *"[t]he purpose of the […] ring-fence is to isolate those banking activities where continuous provision of service is vital to the economy and to a bank's customers in order to ensure, first, that this provision is not threatened as a result of activities which are incidental to it and, second, that such provision can be maintained in the event of the bank's failure without government solvency support"*.[265]

Some jurisdictions highlight more than others the protection of deposit-taking and services essential to the real economy as the basic rationale.

al. (2016) Financial Regulation, 512; see also the considerations in Chapter I.IV.C.b: Differences between ring-fencing and full separation.

263 See *HLEG* (2012) Liikanen Report, 88; See also e.g. *ICB* (2011) Vickers Report, 35 (emphasizing *"those activities where continuous provision of services is vital to the economy and to a bank's customers"*); *Expertenkommission* (2010) Schlussbericht, 38 (stressing the importance of the continuation of systemically important functions, namely the domestic deposit-taking, loans business and payment services, to avoid government bailouts); *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 2 (noting that customer business needs to be separated while putting particular focus on deposits); *European Commission* (2014) Impact Assessment Part 1 (noting that it is the *"key objective of structural reform […] to make banks that provide essential services to the real economy more resilient in the event of endogenous or exogenous shocks but also more resolvable in the event of a failure, thus reducing the severity of future financial crises"*).

264 Cf. *Gambacorta/Van Rixtel* (2013) Structural Bank Regulation Initiatives, 1 (discussing structural reforms, thus including the *activities ban* of full separation (see Chapter I.IV.D: Ring-fencing and the activities ban). See Chapter I.I.A.a.2: Universal banking after ring-fencing.

265 *ICB* (2011) Vickers Report, 35 (While the Vickers Report describes the "retail ring-fence", its description applies to all methods of ring-fencing (see Chapter I.VI: Different Methods of Ring-Fencing)).

Some point it out explicitly,[266] others tend to commingle it with the other goals that they argue can be reached by its implementation.[267]

B. Other benefits of ring-fencing

Proponents of ring-fencing claim that its implementation can tackle a number of problems in today's financial world. Some of these problems are inherent in the universal banking model and are laid out in Chapter I.I.B.[268] They have been discussed for decades, usually mentioning full separation as the alternative form of structure. Other problems ring-fencing aims to tackle are new and reflect recent developments of the financial sector.[269]

The benefits below are intertwined and influence each other. How much they materialize depends on the ring-fencing method and the strength of separation.[270] Altogether, they should reduce the probability of future tax payer bailouts and tackle systemic risk and the too-big-to-fail problem.[271]

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266 The Vickers Report points out the basic rationale very clearly. *ICB* (2011) Vickers Report, 35 (see above); On an EU level, the HLEG similarly notes: "*The central objectives of the separation are to make banking groups, especially their socially most vital parts mainly deposit-taking and providing financial services to the non-financial sectors in the economy), safer and less connected to high-risk trading activities and to limit the implicit or explicit stake of taxpayer in the trading parts of banking groups*". *HLEG* (2012) Liikanen Report, 100.

267 See, for instance, *European Commission* (2014) Proposal for a Regulation, 15 (noting that among other goals such as the reduction of competition distortions, "*[i]t also intends to shield institutions carrying out activities that deserve a public safety net from losses incurred as a result of other activities.*", omitting that this is a prerequisite for tackling competition distortions). However, in the impact assessment to the draft regulation, the European Commission underscores the importance of making banks that provide "essential services to the real economy" more resilient. See *European Commission* (2014) Impact Assessment Part 1, 26.

268 See Chapter I.I.B: Benefits and costs of universal banking.

269 See Chapter I.II: Changes in the Realm of International Banking; Chapter I.III: Bailouts and Too-Big-to-Fail.

270 See e.g. the European Commission's assessment of the impact of the various reforms on moral hazard, *European Commission* (2014) Impact Assessment Part 1, 47–48.

271 See *European Commission* (2014) Impact Assessment Part 1, 26; see also *FSB* (2014) Structural Banking Reforms, 3; *ICB* (2011) Vickers Report, 163; *Expertenkommission* (2010) Schlussbericht, 54.

a. Resolvability

Ring-fencing aims to enhance the resolvability of a banking group.[272] In resolution, it has to be decided what activities of a failing bank are continued and how. Resolution involves ex post structural action, such as transferring activities onto a bridge bank. To maintain an orderly procedure, contagion onto other banks and tax payer assistance have to be avoided. The continuation of vital banking services must be ensured.[273]

Ring-fencing is thought to facilitate a resolution, because vital banking services are separated ex ante.[274] A simpler group structure with a fence somewhere between commercial banking and investment banking should make the assessment and allocation of losses easier. Furthermore, the entities are smaller and more simply structured, so that regulators are provided with more options regarding resolving only parts of the banking group or the group as a whole. Trading activities are found to regularly impede a resolution due to their complexity and interconnectedness. Separating them, proprietary trading and complex forms of securisation and derivatives in particular, should facilitate a swift resolution.[275]

b. Subsidies and moral hazard

Ring-fencing aims to end the subsidisation of risky activities, in particular by implicit subsidies.[276] Separate funding requirements and restricted interconnections between the ring-fenced part and the non-ring-fenced part of the banking group are considered to *"impose a significant increase in market discipline"* on the non-ring-fenced trading entity. Due to legal, economic and governance requirements, intra group exposure limits and credible resolvability, trading activities are thought not to benefit from the im-

272 See *FSB* (2014) Structural Banking Reforms, 3.
273 *ICB* (2011) Vickers Report, 9.
274 *ICB* (2011) Vickers Report, 24.
275 See *European Commission* (2014) Impact Assessment Part 1, 44–45. Likewise, see *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 2, 42 (noting that the separation of trading activities and their provision by a financial trading institution facilitates their resolution); *Expertenkommission* (2010) Schlussbericht, 38–39 (The Swiss approach contains resolvability as an own category. It notes that the unbundling of financial, personnel, operational and structural interdependencies facilitates the resolution of the banking group).
276 For a discussion of implicit subsidies, see Chapter I.III.C: Implicit subsidies.

plicit public subsidies (to the same extent). Increasing funding costs for the trading entity would reflect riskiness of the activity. Readjusting the costs of risk-taking should decrease moral hazard in the respective areas of operation.[277]

The application of prudential requirements onto each entity, which are otherwise applied on consolidated group level, such as capital and liquidity buffers, is also believed to contribute to ending the cross-subsidy from deposits to trading. This is because the cost of regulation would be better aligned with the actual risk.[278] Depending on the strength of the separation, trading activities would furthermore be distanced from explicit subsidies deriving from public safety net coverage.[279]

c. Complexity and size

Ring-fencing aims to mitigate the complexity and potentially the size of banks, which should improve their manageability, transparency, and resolvability.[280] The separation of activities into different entities combined with further requirements is thought to considerably improve market discipline and to enhance the transparency of the stand-alone performance of the different entities of the banking group. Banks would no longer be allowed to unrestrictedly shift profits and losses within the group.[281] It should make banking groups simpler and more transparent, which again would facilitate supervision, recovery and resolution.[282]

277 See *European Commission* (2014) Impact Assessment Part 1, 47–48; See also *Gambacorta/Van Rixtel* (2013) Structural Bank Regulation Initiatives, 2; *ICB* (2011) Vickers Report, 20; *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 2; *Expertenkommission* (2010) Schlussbericht, 50.

278 See *European Commission* (2014) Impact Assessment Part 1, 48.

279 See *European Commission* (2014) Impact Assessment Part 1, 50; see also *Gambacorta/Van Rixtel* (2013) Structural Bank Regulation Initiatives, 2 (emphasizing explicit subsidies such as deposit guarantees and central bank lending); *HLEG* (2012) Liikanen Report, 94, 95 (emphasizing that the separation would curb the cross subsidy arising from explicit guarantees for deposits).

280 *Gambacorta/Van Rixtel* (2013) Structural Bank Regulation Initiatives, 2; see also *ICB* (2011) Vickers Report, 76–77.).

281 See *European Commission* (2014) Impact Assessment Part 1, 47.

282 *HLEG* (2012) Liikanen Report, 100.

d. Culture and competition

Ring-fencing furthermore aims to distance the ring-fenced bank from the aggressive risk culture often associated with investment banking.[283] While the Vickers Report acknowledges that corporate culture cannot be directly mandated, ring-fencing *"should assist in building a separate, consumer-focused culture"*.[284]

As set out above, the improved resolvability should entail a decrease of implicit subsidies, which again is thought to entail a normalisation of competition. Bigger and more unsound institutions should not benefit from a competitive advantage anymore.[285] A level playing field between large and small institutions would be established.[286]

C. Differences to recovery and resolution

In their objectives, ring-fencing rules are similar and to a certain extent overlapping with certain tools of recovery and resolution initiatives such as the *Key Attributes of Effective Recovery and Resolution Regimes* and their national and transnational realisations, such as the BRRD and the SRMR: this is particularly the case where such rules authorise regulators to ex ante mandate certain changes to the structure of banks, notably Art. 17(5) BRRD and Art. 10(11) SRMR.[287] The Swiss emergency plan and the corresponding resolvability assessment are also based on the recovery and resolution framework.[288] *Binder* rightly notes that *"both developments are clearly*

283 See *FSB* (2014) Structural Banking Reforms, 3; see also *HLEG* (2012) Liikanen Report, 99; *ICB* (2011) Vickers Report, 76; *European Commission* (2014) Impact Assessment Part 1, 49.

284 *ICB* (2011) Vickers Report, 76.

285 See *ICB* (2011) Vickers Report, 160; see also *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz (noting that the risk premium will be restored to market conditions); *Expertenkommission* (2010) Schlussbericht, 54.

286 *European Commission* (2014) Impact Assessment Part 1, 51.

287 For a discussion of the ability of the provisions to constitute a basis for the introduction of ring-fencing, see Chapter II.IV.C.c: Existing regimes.

288 Expert Interview, Affected Bank, September 28, 2017; *Schiltknecht* (2013) Schweizerisches Bankeninsolvenzrecht, 67 (noting that the emergency plan is an important element of the global recovery and resolution planning); *Hofer* (2014) Structural Reforms, 347. See also *Schiltknecht* (2015) Internationale Standards, 606 (noting that both the emergency plan and the resolvability assessment are based on the FSB's key attributes). In contrast to "living wills", the

related from a functional perspective", arguing that "*one of the motives for structural reforms, in addition to the preservation of certain systemically relevant business functions has been to remove impediments to effective crisis resolution*".[289]

Due to the similarities, it is necessary to clarify the relationship between ring-fencing and recovery and resolution and to differentiate the former from the latter.

The central difference between the two regulatory initiatives is their nature: ring-fencing describes a certain structure banking groups have to implement. The requirements of ring-fencing are therefore static. Recovery and resolution in contrast, can be regarded as a process: This process involves *inter alia* recovery planning, resolution planning and, in case of an emergency, regulators' use of tools for orderly resolution. It aims at ensuring that a bank "*can be stabilised, restructured or removed from the marketplace in orderly fashion*".[290] The process is dependent on the actions of regulators for individual banks,[291] hence "enforcement-based". Once regulators make use of tools to ex ante influence the structure of banks, the two regulatory initiatives converge. Regulators' use of these tools may lead to a ring-fencing structure, however, it might not.[292]

Swiss emergency plan does not aim to enhance the resolvability of a bank, but to ensure the continuation of systemically important functions. *Von der Crone/ Beeler* (2012) Systemrelevante Finanzinstitute, 15.

289 *Binder* (2014) Resolution Planning, 4 (with a view to tools to tackle resolvability impediments).

290 *Finma*, Recovery and resolution planning for systemically important banks, https://www.finma.ch/en/supervision/banks-and-securities-dealers/supervisory-instruments/recovery-and-resolution-planning/.

291 See *European Commission* (2014) Impact Assessment Part 1, 21.

292 In this dissertation, the use of the term "enforcement-based" in connection with ring-fencing thus refers to an approach, in which powers are delegated to regulatory authorities that allow them to influence a banking group's structure and to ultimately establish a ring-fencing structure, for example Finma's assessment of the Swiss emergency plan (see Chapter III.IV.D.b.1: Basis of the exclusion) or the powers proposed by Liikanen's Avenue 1 (see Chapter II.I.B: Avenue 1). Such powers can differ in strength and authorities can have leeway of various extent in administering them: they may make use of these powers, pushing for the establishment of far reaching bank structural reform, they may, however, also accept more lenient forms of bank structural reform or even decide not to exert their powers at all (see e.g. the discussion of whether full ring-fencing can be established through the provisions of the BRRD and SRMR in Chapter II.IV.C.c: Existing regimes). While there may be certain overlaps, the term "enforcement-based" is to be distinguished from regulatory authorities' enforcement actions concerning breaches of financial market law, such as unauthorized

As far as recovery and resolution tools substantially affect a banking group's legal entity structure, its size, its management organization or its ability to provide activities, they can be regarded as a structural reform (that aims to improve resolvability).[293] Once its implementation fulfils the core characteristics of ring-fencing, namely (i) the separation of certain commercial banking activities from certain investment banking activities, (ii) the maintenance of universal banking and (iii) the stipulation of requirements that aim to ensure that the separated activities can be provided independently from each other, it can be regarded as ring-fencing.

Besides this theoretical discourse, it should be stressed that ring-fencing initiatives regularly set out their relation with recovery and resolution initiatives themselves, welcoming them as *"an essential part of the future regulatory structure"*.[294] The Vickers Report, for instance, notes that ring-fencing and recovery and resolution *"are complements, not substitutes"*[295] and that considering them as alternatives would be *"misleading"*.[296] Ring-fencing is generally emphasized to facilitate recovery and resolution.[297]

VI. Different Methods of Ring-Fencing

This chapter attempts to categorise the ring-fencing initiatives pursued in different jurisdictions according to the strategies they use. It aims at establishing key methods of ring-fencing and a uniform terminology. This will allow a better illustration of ring-fencing strategies in use and will set a framework to which potential future ring-fencing initiatives can be set in relation.

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business activities and market manipulation. See e.g. Finma, Enforcement division, https://www.finma.ch/en/finma/organisation/finma-s-divisions/enforcement-division/; PRA, Enforcement, (March 21, 2018) https://www.fca.org.uk/about/enforcement; For a description of Finma's enforcement, see also Wyss (2014) Finanzmarktenforcement, 83 et seqq.

293 See the definition of structural reform in Chapter I.IV.A: Structural reform as an umbrella term.

294 See *HLEG* (2012) Liikanen Report, iv (with regard to the BRRD).

295 *ICB* (2011) Vickers Report, 26.

296 *ICB* (2011) Vickers Report, 66.

297 See e.g. the considerations regarding their relation in *European Commission* (2014) Impact Assessment Part 1, 21–22; *HLEG* (2012) Liikanen Report, vii; *ICB* (2011) Vickers Report, 66; cf. *Armour et al.* (2016) Financial Regulation, 528.

As they are all based on the same underlying assumption, this will be outlined in a first step. Subsequently, the two different methods of ring-fencing will be explored one after the other.

A. Underlying assumption

All ring-fencing methods are based on the premise that, firstly, there are activities that are important for the real economy and are simultaneously less risky compared to other activities. Secondly, that some activities are severely risky and simultaneously less important for the real economy. Third, that there is a remaining quantity of other activities that may or may not carry any risks but are not especially important for the real economy.[298]

Universal banks of today provide a large variety of different services. They may be divided into three groups according to the standards mentioned above:[299] The first group, which can be referred to as "desired activities", usually comprises of commercial banking activities for ordinary customers and small and medium-sized enterprises, namely deposit-taking and lending, and the provision of payment services.[300] These services are considered the "*socially most vital*" parts of a banking group.[301]

The second group, which can be referred to as "risky activities", typically consists of certain activities that are attributed to investment banking, particularly trading.[302] What activities it comprises depends on where the fence is located: typical activities distrusted by legislators and authorities

298 See e.g. *ICB* (2011) Vickers Report, 36–38, 51–52, 54 (this is reflected in the Vickers Report's differentiation between mandated, prohibited and permitted services); *HLEG* (2012) Liikanen Report (emphasizing that "*it is necessary to require legal separation of certain particularly risky financial activities from deposit-taking banks within a banking group*"). *Armour et al.* criticise this understanding as "*naïve*". *Armour et al.* (2016) Financial Regulation, 507; cf. *Gordon/Ringe* (2015) Bank Resolution, 20 (noting that investment banking is not the major threat to the stability of banks).

299 *Britton et al.* choose a similar approach identifying three groups in their illustration of where activities have to be provided, according to the Banking Reform Act 2013 and secondary legislation. See *Britton et al.* (2016) Ring-fencing, 167.

300 See *ICB* (2011) Vickers Report, 11, 35 et seqq.; *HLEG* (2012) Liikanen Report, 100; *Expertenkommission* (2010) Schlussbericht, 12–13, 38; *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 2.

301 *HLEG* (2012) Liikanen Report, i.

302 See Chapter I.II.A.c: Market-based banking.

are proprietary trading and certain investments in hedge funds and private equity funds.[303] Market making and underwriting are exceptional cases, as the ring-fencing models of the various jurisdictions do not consistently attribute them to the group.[304]

The third group contains all other activities whose provision is neither considered *"vital to the economy and to a bank's customers"*[305] nor a "*high risk trading activity*".[306] It regularly includes activities such as wealth management[307] or corporate financing such as trade finance.[308]

The universal banking model allows these three groups of activities to be performed by a single banking group. Ring-fencing rules maintain this freedom, but mandate a certain structure for it.[309]

B. Two methods

In principle, the various ring-fencing models can be divided into two methods aiming to achieve the insulation of universal banks' desired activities from activities deemed risky: (i) separation of desired activities from the rest of the banking group, or (ii) separation of risky activities from the rest of the banking group.[310] Both methods require that the separation is executed and maintained ex ante and that sufficient independence of the two groups of activities is ensured.

A logical result of the different methods of ring-fencing is that banking groups – with a view to the banking activities they perform – end up somewhere between a large ring-fenced entity and a small trading entity, or, on the other end of the spectrum, a small ring-fenced entity and a large trad-

303 See e.g. *ICB* (2011) Vickers Report, 54; *HLEG* (2012) Liikanen Report, v; Chapter III.IV.A.b.1: Excluded activities.
304 See e.g. *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 41.
305 *ICB* (2011) Vickers Report, 4.
306 *European Commission* (2014) Proposal for a Regulation, 2.
307 See e.g. Chapter III.IV.C.c.3: Conclusio.
308 See e.g. Chapter III.IV.A.c: Summary.
309 See the considerations in Chapter I.I.A.a.2: Universal banking after ring-fencing.
310 This conceptual division is also pointed out by the European Commission in its assessment of national structural reforms in with the context of the adoption of its draft regulation. *European Commission* (2014) Impact Assessment Part 1, 28–30; It has also been identified by the academia, see e.g. *Binder*, who distinguishes between ring-fencing *"of core banking functions"* and ring-fencing *"of certain investment banking activities"*. *Binder* (2015) Ring-Fencing, 106, 108.

ing entity.[311] However, all ring-fencing rules give affected parties considerable leeway in their implementation of the fence.[312]

a. The defensive method

The first method focuses on the desired activities described above: it insulates them by separating them from the rest of the bank. After the separation, they can be conducted within a separate legal entity that can, however, remain part of the banking group. The separate legal entity must be legally, economically and operationally independent, i.e. able to sustain the failure of the rest of the group. A prohibition on risky activities completes the model and keeps these out of the now "ring-fenced" entity.

The United Kingdom pioneered this method with the Vickers Report and followed up on it with the Banking Reform Act in 2013. Although the Swiss Expert Commission explicitly decided against far-reaching structural requirements,[313] the organizational measures of the Swiss Too-Big-to-Fail Regime implement a similar form of ring-fencing.[314]

As this approach focuses on defending core banking activities by isolating them from the rest of the banking group, it will hereafter be referred to as the *defensive method* of ring-fencing. The *defensive method* fully maintains the universal banking model, but interferes with it by mandating a certain structure for the provision of activities.

b. The containment method

The second method focuses on risky activities. While it pursues the same basic rationale of ring-fencing identified in the chapter above,[315] it works the other way around by separating the risky activities from the rest of the

311 See *European Commission* (2014) Impact Assessment Part 1, 28.
312 See e.g. Chapter III.IV.A.d: Affected banks (in which it is set out, how differently affected banks in the UK chose to implement the ring-fence); Chapter III.IV.A.c: Summary (setting out activities that can be provided by both the ring-fenced entity and non-ring-fenced rest of the banking group).
313 See *Hofer* (2014) Structural Reforms, 351; see also *Expertenkommission* (2010) Schlussbericht, 48–49, 121.
314 This is discussed in detail in the third part of the dissertation. See Part III: Legal Comparative Analysis.
315 See Chapter I.V.A: The basic rationale of ring-fencing.

bank. This shall ensure that the rest of the banking group cannot be negatively affected by the activities.

Banks can be obliged to assign risky activities to a trading entity within a banking group. This entity must be legally, economically and operationally separate. All other activities can be performed by the now ring-fenced entity. Parallel to the defensive method, a prohibition on desired activities for the trading entity completes the model.

This method of ring-fencing has been proposed by the EU's Liikanen Commission[316] and has since been adopted in a diluted form by a number of EU member states.[317]

By stipulating this kind of separation, it is attempted to contain the risky activities in a trading entity. Therefore, it will hereafter be referred to as the *containment method* of ring-fencing. The *containment method* fully maintains the universal banking model. It only interferes with it by mandating a certain structure for the provision of activities.

VII. Attempt at a Definition

The term ring-fencing has been in use for a long time, its meaning, however, has not been static but has been used for a variety of contexts. Since the global economic crisis, ring-fencing has become a buzzword for structural reform measures across the globe.[318] Reviewing academic literature on ring-fencing, one finds that there is a scattered number of definitions shaped by the respective author's understanding of the term. Furthermore, there is ambiguity in the notation.[319]

This chapter will briefly introduce the origins of the term "ring-fencing" and some of the ideas that the term has referred to outside of banking regulation. Subsequently, the chapter will narrow down to definitions in

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316 See *HLEG* (2012) Liikanen Report, 100–103.

317 For Germany, see Chapter III.IV.B.a: Non-ring-fenced body.

318 See *Binder* (2015) Ring-Fencing, 98; *Binder* (2014) To ring-fence or not, and how?, 2.

319 While some authors spell it "ring-fencing" (see e.g. *Schwarcz* (2013) Ring-Fencing; *Hardie/Macartney* (2016) EU Ring-Fencing; *Zaring* (2014) Ring-Fencing; see also *European Commission* (2014) Impact Assessment Part 3, 89 Fn 81), others spell it "ring fencing" (see e.g. *Masciandaro/Suardi* (2014) Public Interest and Lobbies), or even "ringfencing" (see e.g. *Brown* (2014) With this Ring, I Thee Fence). This dissertation falls in line with the original spelling of the word described below, namely "ring-fencing".

the field of banking regulation. Ultimately, the chapter will try to establish its own definition reflecting the three core characteristics identified above.

A. Origins of the term "ring-fencing"

To better understand the term and learn about its character, the following paragraphs, as a starting point, explore the definition of ring-fencing outside financial and legal discussion.

The *Oxford Dictionary* defines ring-fencing as "*a fence completely enclosing a farm or piece of land*". It further refers to it as "*an effective or comprehensive barrier*".[320] A literal interpretation of the word therefore already suggests two important characteristics: first, there is a defensive element, in that a fence represents a barrier or an obstacle, second, there is a valuing element, in that something precious needs protection.

The *Cambridge Dictionary* already relates to its use in the financial discussion, defining it as "*something that protects a sum of money or area of spending so that it cannot be reduced or is kept separate from other amounts or areas*".[321] The two characteristics identified above have thus remained unchanged. What is more, as will be shown, they pervade all regulatory concepts that are referred to as ring-fencing.

The finding that there is both a defensive and a valuing element inherent in the word has important implications for the definition of ring-fencing: the literal sense of the word does not permit its use concerning, for instance, risky activities. The frequent use of the phrase "ring fencing of investment banking activities" in academic literature referring to the *containment method* of ring-fencing can therefore be regarded as inaccurate, as it ignores (if not contrasts) the valuing element: risky activities cannot be considered precious and in need of protection. Ring-fencing indeed aims at protecting deposit-taking and services essential to the real economy from risky activities.

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320 https://en.oxforddictionaries.com/definition/ring_fence; *Stevenson* (2010) Oxford Dictionary of English, 1532. This definition relates to the noun. As a verb, the *Oxford Dictionary* describes "to ring-fence" used with an object as (i) *"enclose (a piece of land) with a ring fence."* (ii) *"British: guarantee that (funds allocated for a particular purpose) will not be spent on anything else"* with the example sentence *"the government failed to ring-fence the money provided to schools". Stevenson* (2010) Oxford Dictionary of English, 1532.

321 http://dictionary.cambridge.org/dictionary/english/ring-fence.

Furthermore, the defensive and the valuing element suggest that a potential external influence needs to be fought off or hindered from entering something valuable:[322] This puts both the ring-fenced valuable and the imminent external influence on the map, only separated by a fence. It is inherent to the word “fence” that it can theoretically be breached or gotten over.[323]

Applied to the legal discussion, this indicates that it is inherent to the term “ring-fencing” to combine under the same roof (i) a ring-fenced part and (ii) a part that could unwantedly influence the ring-fenced part (the imminent external influence) if it was not for the fence. This can be used to contrast ring-fencing from full separation: there is no need for a fence, as the external influence is completely eliminated.[324] A literal interpretation of the term ring-fencing therefore suggests that the attribution of full separation or its sub-form, the *activities ban,* to “ring-fencing” is already in the literal sense inaccurate.

B. Ring-fencing outside banking regulation

Besides its use in banking regulation, ring-fencing has been used in a variety of contexts. Two particularly prominent applications of ring-fencing are public utility companies and securitisation arrangements. The following paragraphs briefly describe these, aiming to deepen the understanding of the term.

322 A fence completely enclosing a farm or piece of land may for instance hinder unwanted travellers from entering the piece of land. An effective or comprehensive barrier may protect against a flood. A sum of money is kept separately from other sums of money or from being reduced by an external influence.

323 Compared e.g. with a neutral word such as “separation“, which does not imply the possibility of a breach.

324 Taking up the dictionaries’ descriptions, there is no need for a fence completely enclosing a farm or piece of land if there are no unwanted travellers. There is no need for an effective or comprehensive barrier if there is no looming flood. There is no need for a sum of money to be kept separate if there are no other sums of money, or no need for it to be protected from being reduced by an external influence if there is none. This is also reflected by the neutral term “separation”, which, in contrast to “ring-fencing”, does not imply a possible breach.

a. From public utility companies to securitisations

As a regulatory concept, ring-fencing is often used in relation to public utility companies. Regulators regularly oblige public utility companies, i.e. private-sector companies that provide the public with essential utilities such as power, clean water and communication, to separate their risky assets and activities from the ones deemed necessary for society.[325]

It is further used in securitization and covered bonds transactions. If a firm is interested in raising financing, usually a special purpose entity is established which issues securities independently from the firm. This way, the special purpose entity and therefore the creditors are unimpaired by a bankruptcy of the associated firm, thus lowering funding costs and allocating risk better. In other words, the special purpose entity is ring-fenced from dangers emanating from the associated firm. Securities transactions usually realize ring-fencing contractually.[326] In covered bonds transactions, the same goal is pursued but is in most countries realized by laws stipulating ring-fencing.[327]

b. Results

The paragraphs above briefly mention two important contexts in which the term "ring-fencing" has been used outside of banking regulation. Drawing from this use, it can be found that (i) the use of the term is not limited to a certain field of activity. Public utility companies and securitisations are quite different areas of application.

There are, however, similarities: one finds that (ii) the valuing element (be it electricity, water or securities) and the defensive element (a separation of some sort to ward off a threat) are omnipresent. Additionally, in all cases, (iii) both the ring-fenced part and the non-ring-fenced part are in some way connected, but separated by a fence.

325 See *Schwarcz* (2013) Ring-Fencing, 71, 74; see also *Möslein* (2013) Trennung, 363.

326 *Schwarcz* (2013) Ring-Fencing, 74–75; See further about covered bonds *Schwarcz* (2011) Covered Bonds, 566–567.

327 *European Covered Bond Council* (2009) European Covered Bond Factbook, 97–98; See also *Schwarcz* (2011) Covered Bonds, 566–567; See also *Schwarcz* (2013) Ring-Fencing, 74–75.

C. Ring-fencing in banking regulation

The following paragraphs discuss the use of ring-fencing in banking regulation. They set out the concept of jurisdiction-oriented ring-fencing and *Binder's* activities-oriented ring-fencing.[328] Subsequently, they establish an own definition of ring-fencing taking into account the findings from the chapters above.

a. Jurisdiction-oriented ring-fencing

In the context of banking regulation, ring-fencing has been used to describe strategic actions of authorities during cross-border insolvency resolution. In case of insolvency of a transnational bank, local authorities may feel competent to shield local depositors and other local creditors of the bank from insolvency administration and liquidation of foreign authorities. For a foreign owned branch, ring-fencing is achieved by seizing all assets; for a foreign owned subsidiary, it is realized by separate insolvency proceedings and by obstructing foreign interference. The strategic actions consist of ex ante and ex post measures and can collectively be referred to as "jurisdiction-oriented ring-fencing".[329]

While the focus of this dissertation is on the functional separation of activities and not on jurisdiction-oriented ring-fencing, it must be mentioned that the former always entails elements of the latter: all of the ring-fencing rules examined in this dissertation bring with them certain territorial effects that shield local assets from foreign influence.[330]

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328 *Binder* (2015) Ring-Fencing, 98. See also *Binder* (2014) To ring-fence or not, and how?, 2–3.

329 See *Binder* (2015) Ring-Fencing, 98; Other terms in use are: "geographical ring-fencing", "territorial approaches", and "home bias", (see *D'Hulster* (2014) Ring-Fencing, 2; see also *D'Hulster/Oetker-Robe* (2014) Ring-Fencing, 1–2); "geographical perspective of ring-fencing" (see *Cerrutti/Schmieder* (2014) Ring Fencing, 1).

330 This is reflected in e.g. the prohibition for UK ring-fenced banks from having branches and subsidiaries outside the EEA (see Chapter III.IV.A.b.2: Prohibitions; *Armour et al.* (2016) Financial Regulation 518 (noting that such a geographic restriction does not reduce risk)) or the Swiss emphasis on domestic systemically important functions (see Chapter III.IV.C.a.2: Systemically important functions). The FSB discusses potential negative cross-border implications of structural reforms in *FSB* (2014) Structural Banking Reforms, 1–2.

b. Activities-oriented ring-fencing

The most accurate definition of ring-fencing within the focus of this dissertation is established by *Binder*. He summarizes bank structural reforms that aim at separating deposit-taking and other functions important to the economy from certain investment banking services under the term "activities-oriented ring-fencing".[331]

Binder describes it as *"the legal and commercial isolation of systemically important activities within a banking group, with a view to protecting such activities against the risks emanating from less economically important functions"*.[332] The creation of a summarizing term for ring-fencing that allows to delimit it from the older "jurisdiction-oriented" form is to be welcomed.[333]

For the purpose of this dissertation however, *Binder*'s description requires modification: this is mainly because his definition does not differentiate ring-fencing from the *activities ban* of full separation, taking the form of the Volcker Rule.[334] It thus does not reflect all of the three core characteristics of ring-fencing established above.

Other definitions are more detached from the functional separation of commercial and investment banking activities and aim to define ring-fencing as a general financial regulatory concept, comprising either uses outside banking regulation,[335] or a combination of jurisdiction-oriented and

331 *Binder* (2015) Ring-Fencing, 98. See also *Binder* (2014) To ring-fence or not, and how?, 2–3.

332 *Binder* (2015) Ring-Fencing, 98.

333 Another expression, parallel to activity-based ring-fencing, is "functional" ring-fencing. In an article about jurisdiction-based ring-fencing, *D'Hulster* differentiates it from functional ring-fencing and explains the latter noting that "*trading book assets need to be separated from retail assets*". See *D'Hulster* (2014) Ring-Fencing, 2 Fn 2. This dissertation's focus on functional separation of activities, however, falls in line with the consistent practice of using the general term "ring-fencing". (See e.g. *Gordon/Ringe* (2015) Bank Resolution, 20; *Schwarcz* (2013) Ring-Fencing; *Hardie/Macartney* (2016) EU Ring-Fencing; *Zaring* (2014) Ring-Fencing; *Masciandaro/Suardi* (2014) Public Interest and Lobbies *Brown* (2014) With this Ring, I Thee Fence). For a short discussion of its relation to "jurisdictional-oriented ring-fencing", see Chapter I.VII.C.a: Jurisdiction-oriented ring-fencing.

334 See *Binder* (2015) Ring-Fencing, 108. For a discussion of the character of the *activities ban* and its differences to ring-fencing, see Chapter I.IV.D: Ring-fencing and the activities ban.

335 *Schwarcz* defines ring-fencing in financial regulation by examining its core functions: he states that in financial regulation it frequently (i) has the purpose of making firms bankruptcy-remote, i.e. protecting a firm from liabilities and oth-

activities-oriented ring-fencing.[336] Both definitions are too comprehensive for the focus of this dissertation.[337]

c. Establishing a definition

To establish a definition of ring-fencing that delimits it against other structural reforms and reflects the three core characteristics established above, it is necessary to take stock of the findings regarding its character:

Regarding the literal use of the term "ring-fencing" outside of financial and legal discussion, it was found that it entails (i) a valuing and a defensive element. Ring-fencing therefore needs to specify activities that are to be protected (the valuing element) and that there is a fence of some sort (the defensive element). Furthermore, it has to indicate that risky activities

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er risks connected to a bankruptcy. It also (ii) aims at enabling firms to operate on a standalone basis – even if affiliated firms fail -, and (iii) at enabling them to protect their business and assets from being taken advantage of by associated firms. Ring-fencing also (iv) allows to limit a firm's risky activities and investments (see *Schwarcz* (2013) Ring-Fencing, 73–81). While the application of ring-fencing is voluntary in some contexts such as securitization and covered bond transactions, the regulatory application is required by government regulation (*Schwarcz* (2013) Ring-Fencing, 82–83). In conclusion, *Schwarcz* defines the financial regulatory concept of RF as *"legally deconstructing a firm in order to more optimally reallocate and reduce risk"*. *Schwarcz* (2013) Ring-Fencing, 108.

336 *Binder* uses *Schwarcz*'s definition as a starting point and develops a comprehensive definition of ring-fencing in banking regulation. It includes both jurisdiction-oriented ring-fencing, and ring-fencing which aims at protecting banks deposits and the provision of services deemed necessary to the real economy. He finds that, although they on the first sight have little in common, there are, in fact, common features and defines ring-fencing as *"a generic concept that involves the segregation of assets, liabilities and/or business activities from specific risks with a view to protecting markets and counterparties either directly or indirectly."* See *Binder* (2015) Ring-Fencing, 115; *Binder* (2014) To ring-fence or not, and how?, 32–34.

337 While ring-fencing of activities often features elements of jurisdiction-oriented ring-fencing, this dissertation clearly focuses on the separation of activities. This dissertation's definition should reflect this emphasis. In addition, *Binder*, as discussed, also includes the Volcker Rule in his definition (*Binder* (2015) Ring-Fencing, 108). In the author's opinion it should be attributed to full separation and should therefore not be considered activities-oriented ring-fencing. *Schwarcz's* definition is very broad, in that it includes both the Glass-Steagall Act and the Volcker Rule. (see *Schwarcz* (2013) Ring-Fencing, 79–80). It is furthermore detached from banking regulation in that it strives to include all uses as a financial regulatory concept. See *Schwarcz* (2013) Ring-Fencing, 72.

(the potential external influence) are allowed to be provided under the same roof.[338]

From the use of ring-fencing as a regulatory concept outside banking regulation it can be derived that (ii) a definition should clearly reflect ring-fencing as a concept of banking regulation. It should furthermore reflect that (iii) both desired and risky activities are permitted to be provided under the same roof.[339] "Structural reform" was found to be an (iv) umbrella term.[340] The definition of ring-fencing thus must delimit it from other structural reforms.

It derives from the underlying assumption of ring-fencing that its definition must reflect (v) the classification of activities as "desired", "risky" and not belonging to any of the two.[341] It was furthermore established that (vi) the basic rationale of all ring-fencing initiatives is protecting deposits and services essential for the functioning of the real economy.[342]

In summary, the three core characteristics comprising the concept of ring-fencing can be reiterated: (i) separation of commercial banking activities and certain investment banking activities, (ii) the establishment of a fence, (iii) allowing for universal banking to be fully maintained.[343]

Taking into account the findings and core characteristics above, as well as *Binder's* definition,[344] ring fencing can be defined as *a bank structural reform that aims to shield deposits and services essential for the functioning of the real economy from services deemed riskier and less socially important by ensuring they are provided legally, financially and operationally separately from each other within a banking group, thereby preserving universal banking.*

VIII. Results

The first part of the dissertation laid the foundation for the other parts. It addressed the first research question, namely what comprehensive concept of ring-fencing as a category of bank structural reform can be established

338 This was found in Chapter I.VII.A: Origins of the term "ring-fencing".
339 This was found in Chapter I.VII.B: Ring-fencing outside banking regulation.
340 This was found in Chapter I.IV.A: Structural reform as an umbrella term.
341 This was found in Chapter I.VI.A: Underlying assumption.
342 This was found in Chapter I.V.A: The basic rationale of ring-fencing.
343 These three core characteristics of ring-fencing as a structural reform are already set out in Chapter I.IV.B: Ring-fencing as a structural reform.
344 *Binder* (2015) Ring-Fencing, 98; Chapter I.VII.C.b: Activities-oriented ring-fencing.

and how its definition can be contributed to. The following paragraphs reiterate selected findings.

Examining a number of well-established definitions of universal banking, it was found that they all highlight the ability of a banking group to provide unlimited financial services. Ring-fencing interferes with the universal banking model as it mandates a certain structure. However, it maintains universal banking, as it does not restrict the ability of a banking group to provide unlimited financial services. The interference is reflected in the definition of universal banking: after introducing ring-fencing, universal banks can be defined as *financial institutions that can engage, through ring-fenced and non-ring-fenced entities, in all respects of the banking, securities and insurance business.*[345]

Bank structural reform is an umbrella term that refers to a variety of regulations that intervene with the organisation of banks. The broadness of the concept is reflected in the definition of bank structural reform for this dissertation as *any regulatory reform that substantially affects the legal entity structure, the size, the management organization or the ability to provide activities*.[346]

Ring-fencing is a structural reform. While its relation to "structural reform" is somewhat blurred due to the synonymous use, it should be regarded as its own concept, because it can be clearly delimited from other structural reforms. For the purpose of this dissertation, three core characteristics that identify ring-fencing as a structural reform on its own were established: (i) the separation of commercial banking activities from investment banking activities; (ii) the preservation of universal banking; and (iii) the establishment of a fence, i.e. provisions that aim to ensure that the separated activities can be provided independently from each other.

345 This definition is based on the ones of *Benston (Benston* (1994) Universal Banking, 121) and *Wilmarth* (*Wilmarth* (2002) U.S. Financial Services Industry, 223 Fn 23), taking into account the specifics of ring-fencing; see Chapter I.I.A.a: Definition.

346 This definition is based on *Hofer*'s, but includes activity restrictions, such as the Volcker Rule and full separation (see *Hofer* (2014) Structural Reforms, 218 (defining structural reform as "*any regulatory reform substantially affecting either the legal entity structure, the size or management organization of [large and complex financial institutions]*"). *Hofer* excludes activity restrictions, such as the Volcker Rule from his concept of structural reform but includes full separation (*Hofer* (2014) Structural Reforms, 251–257). This is inconsistent, as activity bans are to be seen as a subcategory of full separation. See Chapter I.IV.D: Ring-fencing and the activities ban.

Ring-fencing needs to be delimited against two related structural reforms that are sometimes associated with it: The first is full separation, featured in the Glass-Steagall Act, and its subcategory the *activities ban*, featured in the Volcker Rule. The latter differs from the former mainly by its limited scope: while the Glass-Steagall Act prohibited all securities activities for banking groups, the Volcker Rule only prohibits selected investment banking activities.[347] Both thus share the core characteristic of a separation of commercial banking activities from investment banking activities with ring fencing. They, however, lack the criteria of the preservation of universal banking and the establishment of the fence.

The basic rationale of ring-fencing is the protection of deposit-taking and services essential to the real economy. It precedes all other benefits and is inherent in all ring-fencing initiatives. Benefits of ring-fencing, such as enhanced resolvability and the tackling of complexity and size, are intertwined and influence each other. Together they aim to tackle systemic risk, TBTF and tax payer bailouts.

While in some respects *"clearly related from a functional perspective"*,[348] there is a key difference between ring-fencing and recovery and resolution initiatives. Ring-fencing is static: it mandates a certain structure, dictated by the core characteristics above. Recovery and resolution, in contrast, can be understood as an enforcement-based process. Where the process includes provisions that authorise regulators to extensively influence a banking group's structure, it has the potential to lead to a ring-fencing structure of a banking group. Once the implementation results in a structure that fulfils the core characteristics of ring-fencing established above, it can be considered as such.

Ring-fencing initiatives can be categorised according to strategies they use. Two methods of ring-fencing were established: the *defensive method* and the *containment method.* They both are based on the underlying assumption that there are activities that are important for the real economy and are simultaneously less risky (desired activities) than other activities, which are severely risky and simultaneously less important for the real economy (risky activities). The *defensive method* insulates desired activities by separating them from the rest of the bank. The *containment method* insu-

347 This is reflected in their definitions. See Chapter I.IV.C.a.2: Full separation; Chapter I.IV.D.a.2: Activities ban.

348 *Binder* (2014) Resolution Planning, 4 (with a view to tools to tackle resolvability impediments).

lates desired activities by separating the risky activities from the rest of the bank.

Taking into account the findings of the first part of the dissertation, ring-fencing can be defined as *a bank structural reform that aims to shield deposits and services essential for the functioning of the real economy from services deemed riskier and less socially important by ensuring they are provided legally, financially and operationally separately from each other within a banking group, thereby preserving universal banking.*[349]

349 This definition is based on *Binder's* description of activities-based ring-fencing as "*the legal and commercial isolation of systemically important activities within a banking group, with a view to protecting such activities against the risks emanating from less economically important functions*" (see *Binder* (2015) Ring-Fencing, 98). However, as he also includes the *activities ban* of full separation in his definition, it is modified. See *Binder* (2015) Ring-Fencing, 108. It furthermore reflects the findings obtained in the first part of the dissertation.