Part III – Legal Comparative Analysis

While the fate of the European Union's regulation has long been uncertain, a number of countries in Europe already adopted structural reform legislation, with some of them even having applied it already. This part of the dissertation comparatively analyses and discusses national legislation of the jurisdictions of Europe's most important financial centres, namely the United Kingdom, Germany and Switzerland.

The conducted aspect-to-aspect comparative analysis will outline the major differences of the national approaches.[613] It thus provides an understanding of each nation's plan for structural reform while ensuring that the dissertation does not lose its perspective of the bigger picture. The legal comparative analysis is conducted as a micro comparison as described by *Zweigert/Kötz*.[614]

The unique approach of Switzerland makes it necessary for the comparative analysis to refer in some areas to the separation process of its largest banks, *UBS* and *Credit Suisse*. As G-SIBs, they fall in the particular research focus of this dissertation. While Switzerland's organisational measures apply to several banks, these two banks considerably shaped the legislation and were the first ones to implement it. They moreover are exemplary for the primary target group of structural reform measures, as they are large globally active universal banks that provide the whole range of banking services (including substantial investment banking services). As will be discussed, Swiss regulation has a different impact on them than on their domestically oriented competitors.

This part of the dissertation further examines whether the jurisdictions fulfil or defer from the definition and concept of ring-fencing established in the first part, and if so, what method of ring-fencing was chosen. This is especially important with regard to the unique Swiss approach, whose similarity is not consistently acknowledged.

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613 The aspects used, (e.g. the height of the fence, what activities fall on which side of the fence), are in line with the general practice. See e.g. *ICB* (2011) Vickers Report, 35, 36, 62; *Brown* (2014) With this Ring, I Thee Fence, 1047, 1049, 1053; *Hofer* (2014) Structural Reforms, 477, 479, 488.

614 *Zweigert/Kötz* (1996) Rechtsvergleichung, 4, 42; See also *Zweigert/Kötz* (1998) Comparative Law, 5, 43–44.

I. Banking Landscape

This chapter explores the characteristics of the three financial centres of interest. It sets the factual foundation for the legal analysis in subsequent chapters. The chapter first explores the importance of the financial centre and financial services to the respective home country. Subsequently the banking sectors' composition and nature is illustrated. Finally, the countries' G-SIBs are put on the map with a short view to particularities in their coping with the global financial crisis.

A. United Kingdom

a. Importance of the financial centre

The United Kingdom as a financial centre has since the end of the 18th century been of worldwide importance.[615] It is a global financial hub with significant international relations, which is underscored by it having the largest global share of cross-border bank lending and foreign exchange trading.[616] The UK financial centre is also the European headquarters for a great many of the world's financial firms.[617]

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615 *Carney* (2017) High Road, 2; For a short summary of the emergence of the UK's financial centre, see *Djankov* (2017) City of London, 3–4.

616 *Carney* (2017) High Road, 2 (in which *Carney* emphasizes the UK's international orientation also by pointing out that it is has the second largest asset management industry and fourth largest insurance industry in the world). It is interesting that the particularly large share of international activity can be traced back to banks from outside the UK, which have affiliates in the country. *Koch* illustrates that the cross-border business of banks with a location in the UK is "*notably bigger*" than the cross-border business of banks that have their headquaters in the UK. See *Koch* (2016) United Kingdom, 30–31.

617 See *HM Treasury,* EU referendum: 6 reasons why the EU is good for financial services jobs (Archived), (May 12, 2016), https://www.gov.uk/government/news/eu-referendum-6-reasons-why-the-eu-is-good-for-financial-services-jobs; *Hill*, Speech at Chatham House, the Royal Institute of International Affairs, Speech by Commissioner Hill, (June 9, 2016) https://ec.europa.eu/commission/commissioners/2014-2019/hill/announcements/commissioner-hills-speech-chatham-house-royal-institute-international-affairs_en (in which Commissioner *Hill* stressed the importance of the UK financial centre noting that *„[h]alf the world's financial firms have chosen to base their European headquarters in the UK. At the moment, one quarter of financial services income in the EU is generated in the UK"); See also Euro-*

The *Global Financial Centres Index* currently ranks London as the number one financial centre in the world, leading in all of its categories.[618] It is undoubtedly the leading financial centre of the European Union with a large percentage of the EU's financial market activities located in the UK.[619] The UK financial services sector contributes 7% to the country's GDP.[620] Another way of estimating the importance of financial services to the national economy is to take into account its share of gross value added (GVA):[621] the financial sector has contributed 6.6% GVA. Financial services alone accounted for 4.1% GVA.[622] Within the financial centre, banking services generate by far the highest revenues.[623]

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pean Parliament (2016) Brexit, 1; *IMF* (2016) Financial Stability Assessment: United Kingdom, 9.

618 *Z/Yen Group/China Development Institute* (2017) GFCI Nr. 22, 4 (these categories include (i) business environment (ii) human capital (iii) infrastructure (iv) financial sector development and (v) reputation).

619 This was emphasized by Bank of England Governor *Mark Carney* during a press conference, when he stressed that *"[i]t is important to recognise that the United Kingdom is effectively the investment banker for Europe."* *Reuters*, Highlights – Bank of England's Carney speaks on UK banking risks (November 30, 2016). For the UK share of the EU's various financial market activities, see *TheCityUK* (2016) International Financial Centre, 9.

620 *Norton Rose Fulbright/Association of Foreign Banks* (2017) Brexit survey, 4; *Bank of England* (2017) Authorisation and Supervision of International Banks, 1; Other sources note a contribution of 7.2% in 2016, see *SIF* (2017) Swiss financial Centre: Key figures; *EIU* (2017) Financial Services: United Kingdom, 2.

621 Gross value added refers to the value of all services and goods produced in an economy. Key difference to GDP is that it does not take into account taxes and subsidies on products.

622 Own calculation based on *Office for National Statistics* (2017) Gross Value Added. The Office for National Statistics estimated the total GVA of all sectors in 2016 1747.647 billion £, the GVA of financial and insurance activities (the financial centre) 115.280 billion £, and the GVA of financial services alone 72.204 billion £. See *Office for National Statistics* (2017) Gross Value Added; Cf. *Tyler* (2017) Financial Services, 5 (indicating a GVA of 7.2%). The author's result is matched by Eurostat, which mentions 6.7% financial centre contribution. See *Eurostat,* Gross value added and income by A*10 industry breakdowns, (January 31, 2018), http://appsso.eurostat.ec.europa.eu/nui/show.do?query=BOOKMARK_DS-406765_QID_-4FCE2BB0_UID_-3F171EB0&layout=NACE_R2,B,X,0;TIME,C,X,1;GEO,L,Y,0;UNIT,L,Z,0;NA_ITEM,L,Z,1;INDICATORS,C,Z,2;&zSelection=DS-406765NA_ITEM,B1G;DS-406765UNIT,PC_TOT;DS-406765INDICATORS,OBS_FLAG;&rankName1=UNIT_1_2_-1_2&rankName2=INDICATORS_1_2_-1_2&rankName3=NA-ITEM_1_2_-1_2&rankName4=NACE-R2_1_2_0_0&rankName5=TIME_1_0_1_0&rankName6=GEO_1_2_0_1&rStp=&cStp=&rDCh=&cDCh=&rDM=true&cDM=true&footnes=false&empty=false&wai=false&

At the end of 2016, the financial services and insurance industry employed 1.1 million people, equalling 3.1% of the total workforce.[623] Regarding the tax receipts of the financial sector, calculations range from 24.4 billion £[624] to 71.4 billion £, equalling 11.5% of total tax receipts.[625]

b. Number of banks their nature

The number of banks in the UK has declined considerably due to consolidation in the domestic retail bank market and foreign banking groups acquiring UK entities.[626] The ECB lists 390 monetary financial institutions at the end of 2016[627] (down from 393 in December 2015).[628]

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time_mode=NONE&time_most_recent=false&lang=EN&cfo=%23%23%23%2C%23%23%23.%23%23%23.

623 *Tyler* (2017) Financial Services, 8. The percentage of UK workforce employed by the financial centre corresponds to Eurostat, which assumes 3.2%. See *Eurostat*, Employment by A*10 industry breakdowns, (January 31, 2018), http://appsso.eurostat.ec.europa.eu/nui/show.do?query=BOOKMARK_DS-406759_QID_-48796ABF_UID_-3F171EB0&layout=NACE_R2,B,X,0;TIME,C,X,1;GEO,L,Y,0;UNIT,L,Z,0;NA_ITEM,L,Z,1;INDICATORS,C,Z,2;&zSelection=DS-406759NA_ITEM,EMP_DC;DS-406759UNIT,PC_TOT_PER;DS-406759INDICATORS,OBS_FLAG;&rankName1=UNIT_1_2_-1_2&rankName2=INDICATORS_1_2_-1_2&rankName3=NA-ITEM_1_2_-1_2&rankName4=NACE-R2_1_2_0_0&rankName5=TIME_1_0_1_0&rankName6=GEO_1_2_0_1&rStp=&cStp=&rDCh=&cDCh=&rDM=true&cDM=true&footnes=false&empty=false&wai=false&time_mode=NONE&time_most_recent=false&lang=EN&cfo=%23%23%23%2C%23%23%23.%23%23%23.

624 *HM Revenue & Customs* (2016) Tax Receipts Banking Sector, 2; See also *Tyler* (2017) Financial Services, 10.

625 *PwC* (2016) Tax Contribution of UK Financial Services, 5; See also *Tyler* (2017) Financial Services, 10.

626 *Casu/Gall* (2016) Building Societies, 8.

627 The term monetary financial institutions (MFI) is defined in Art. 1 of ECB Regulation 1071/2013 of 24 September, 2013 concerning the balance sheet of the monetary financial institutions sector (ECB/2013/33). MFIs comprise (i) central banks, (ii) deposit-taking corporations and (iii) money market funds. The number above excludes the Bank of England as the UK central bank and is drawn from ECB statistics. See *ECB*, Number of monetary financial institutions (MFIs) in the non-participating Member States: December 2016, https://www.ecb.europa.eu/stats/ecb_statistics/escb/html/table.en.html?id=JDF_MFI_MFI_LIST_NEA&period=2016-12.

628 *ECB*, Number of monetary financial institutions (MFIs) in the non-participating Member States: December 2015, https://www.ecb.europa.eu/stats/ecb_statistics/e

The UK banking sector is highly concentrated, with the seven largest banks being responsible for over 75% of total assets.[629] The big, long-established institutes are often referred to as "high street banks"[630] Four particularly large banks, namely *Barclays*, *Lloyds*, *HSBC* and *RBS*, lead the UK's commercial banking segment and are followed by a second tier of smaller institutes, that comprises the UK subsidiary of *Santander*, *Standard Chartered* and *Nationwide Building Society*.[631]

In 2015, the country's three largest commercial banks' assets amounted to 48.4% of total assets. Since the financial crisis, this number has considerably decreased (from 60.3% in 2007).[632] The 5-bank asset concentration rate, which measures assets of the five biggest banks as a share of total commercial banking assets, was 71.4% in 2015 (down from 76.7% in 2007).[633]

High street banks can be differentiated from so called "challenger banks",[634] smaller institutes which mostly focus on specific segments and in particular on retail banking, and which increasingly demand their share of the market.[635] As of now, this share continues to be small[636] with only 5% of the lending market share,[637] however, challenger banks are constantly growing their lending book.[638]

Another group of banks includes large retailers such as *Tesco* or *Sainsbury's* which provide relatively simple services, such as unsecured products

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scb/html/table.en.html?id=JDF_MFI_MFI_LIST_NEA&period=2015-12 (excluding the Bank of England as the UK central bank, in line with the above).

629 *IMF* (2016) Financial Stability Assessment: United Kingdom, 10.

630 *Casu/Gall* (2016) Building Societies, 8 (also noting that another term frequently used is "Major British Banking Groups" or "MBBG").

631 *EIU* (2017) Financial Services: United Kingdom, 4; *KPMG* lists the UK subsidiary of *Santander* as part of the big banks and thusly refers to them as "the big five". *KPMG* (2016) New Landscape, 1.

632 See *Worldbank* (2017) Global Financial Development Database.

633 See *Worldbank* (2017) Global Financial Development Database.

634 These challenger banks are often contrasted with the long-established big banks, see e.g. *Molyneux* (2016) Banking in the UK, 517. They can be subdivided into large and smaller challengers, see *KPMG* (2016) New Landscape, 1. The term "challenger bank" derives from the fact that they compete in a market that is dominated by few very long-established banks. *Casu/Gall* (2016) Building Societies, 2.

635 See *EIU* (2017) Financial Services: United Kingdom, 4; *IMF* (2016) Financial Stability Assessment: United Kingdom, 10.

636 *EIU* (2017) Financial Services: United Kingdom, 4.

637 *IMF* (2016) Financial Stability Assessment: United Kingdom, 10.

638 *KPMG* (2016) New Landscape, 4 (pointing out that challenger banks increased lending in 2014–2015 by 31.5% while the "big five" reduced theirs by 4.9%).

and savings accounts. Some of them have extended their offer to mortgages and current accounts, thus competing with big banks.[639]

One can also distinguish banks according to the location of their head offices. As mentioned above, the UK is home to a large number of foreign banks. This is illustrated by the fact that of 313 authorized banking institutions in 2015, only 155 were incorporated in the UK (which is less than half). Of the 158 institutions incorporated abroad, 77 were incorporated within the European Economic Area.[640] These banks are also in charge of a significant share of the banking sector's total assets.[641]

Another UK specialty are building societies,[642] i.e. mutual financial institutions which can be described as *"specialist financial institutions that are owned by their customers"*.[643] They may only be established if their purpose is making loans which are secured on residential property and are funded substantially by its members.[644] By November 2017, the Bank of England listed 45 building societies authorized in the UK.[645]

c. HSBC, Barclays, RBS, Standard Chartered

The UK is currently home to four G-SIBs, namely *HSBC*, *Barclays*, *Royal Bank of Scotland* and *Standard Chartered*. While the last two are allocated in the first bucket of the GSIB framework, *Barclays* is in the second and *HSBC* even in the third.[646]

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639 See *KPMG* (2016) New Landscape, 1. See also *Casu/Gall* (2016) Building Societies, 15; *Molyneux* (2016) Banking in the UK, 518.

640 *Casu/Gall* (2016) Building Societies, 8. These numbers are supported by *Claessens/Van Horen* who suggest a rate of 58% of foreign banks among all banks for 2013. See *Claessens/Van Horen* (2015) Global Financial Crisis, 909; See also *Worldbank* (2017) Global Financial Development Database.

641 For 2013, *Claessens/Van Horen* suggest a rate of 14% of total assets held by foreign owned banks. See *Claessens/Van Horen* (2015) Global Financial Crisis, 913; *Worldbank* (2017) Global Financial Development Database.

642 Building societies are governed by the Building Societies Act 1986, c. 53.

643 *Casu/Gall* (2016) Building Societies, 23, 59.

644 Sec. 5(1) Building Societies Act 1986.

645 *Bank of England* (2017) List of Building Societies: November, 1.

646 *FSB* (2017) Global Systemically Important Banks, 3. Banks of the first bucket are subject to the comparatively "light" capital buffer of 1.0%. Banks of the second bucket are subject to 1.5% and banks of the third bucket of 2.0% capital buffer. *FSB* (2017) Global Systemically Important Banks, 3; Apart from *Standard Chartered,* UK G-SIBs have continuously been included in the G-SIB assessment. See *FSB* (2011) Systemically Important Financial Institutions, 4.

The global financial crisis caused severe stress for UK banks and forced authorities to intervene unprecedentedly to maintain stability in the banking system.[647] These actions related not just to small banks but to many of the country's biggest institutions.[648]

Among the most prominent measures was the recapitalization of the *Royal Bank of Scotland*, one of UK's G-SIBs, and of *Lloyd's Banking Group*, a major commercial bank, through a series of transactions which led to HM Treasury acquiring large percentages of both banks. Other well-known measures were the nationalising of *Bradford & Bingley* and of *Northern Rock* to ensure the protection of depositors and an orderly unwinding of obligations and HM Treasury's guarantees.[649]

Other G-SIBs managed better to overcome the crisis and joined the global efforts of balance sheet repair. However, in its 2016 *Financial Sector Assessment Program* on Germany, the IMF found that *HSBC* was the second biggest contributor to systemic risks in the global banking system.[650] In late 2017, the Bank of England proclaimed that for the first time since the beginning of its stress testing, no participating bank (all G-SIBs and *Lloyds Banking Group*, *Nationwide* and *Santander UK*) needed to improve its capital position.[651]

In 2016, the G-SIBs' balance sheets still equalled high percentages of UK's GDP: Total assets of *HSBC* equalled 90%,[652] *Barclays* 62%[653], *Royal*

647 The estimate of public funds committed to the financial sector in 2008 and 2009 accounted for about 60% of UK GDP. See *Schildbach* (2010) Financial Crisis, 2; *Krahnen/Noth/Schüwer* (2016) Structural Reforms, 12.

648 *EIU* (2017) Financial Services: United Kingdom, 4.

649 *HM Treasury* (2010) Maintaining the Financial Stability of UK Banks, 4.

650 See *IMF* (2016) Stress Testing, 42.

651 *Bank of England* (2017) Stress Testing, 5.

652 Own calculation based on *HSBC* (2017) Annual Report 2016 (At the end of 2016, *HSBC* had assets of 2375 billion $ on its balance sheet); *Worldbank*, GDP (current US$), https://data.worldbank.org/indicator/NY.GDP.MKTP.CD (UK's 2016 GDP was 2648 billion $).

653 Own calculation based on *Barclays* (2017) Annual Report 2016, 242 (In 2016 *Barclays*' balance sheet size was 1213 billion £); *Office for National Statistics* (2017) Gross Domestic Product (In 2016, UK's GDP was 1963 billion £).

Bank of Scotland 41%[654] and *Standard Chartered* 33% of UK GDP.[655] The balance sheets of all UK G-SIBs together equalled almost 2.3 times UK GDP.[656]

B. Germany

a. Importance of the financial centre

Frankfurt, Germany's banking hub, is consistently ranked in the top 20 financial centres.[657] It has *"broad and deep financial services activities"* and is connected to most other financial centres.[658] It is widely seen as one of the main profiteers of Brexit and will likely become the leading financial centre within the EU after the UK's exit from the Union.[659]

According to DESTATIS, Germany's financial centre (consisting of financial services and insurance services) contributed around 3.9% of GDP in 2016.[660] With regard to GVA, the financial centre contributed 3.9%.[661]

654 Own calculation based on *Royal Bank of Scotland* (2017) Annual Report 2016, 242 (In 2016 *RBS's* balance sheet size was 799 billion £); *Office for National Statistics* (2017) Gross Domestic Product (In 2016, UK's GDP was 1963 billion £).

655 Own calculation based on *Standard Chartered* (2017) Annual Report 2016, 242 (In 2016 *Standard Chartered's* balance sheet size was 647 billion £); *Office for National Statistics* (2017) Gross Domestic Product (In 2016, UK's GDP was 1963 billion £).

656 Own calculation based on the above.

657 *Z/Yen Group/China Development Institute* (2017) GFCI Nr. 22, 4 (in which Frankfurt ranked 11th); see also former GFCI Reports, e.g. and *Z/Yen Group/China Development Institute* (2008) GFCI Nr. 8, 9, (rank 11).

658 *Z/Yen Group/China Development Institute* (2017) GFCI Nr. 22, 13; *Z/Yen Group/China Development Institute* (2008) GFCI Nr. 8, 6–7.

659 While at this point no final conclusion is to be drawn, there is a recognisable trend of internationally active banks to strengthen their presence in EU financial centres, in particular in Frankfurt. *Sester* (2018) EU-Finanzmarktrecht, 52.

660 See *DESTATIS* (2017) Bruttoinlandsprodukt, 11 (To be precise, *Destatis* does not take into account subsidies and taxes in its "GDP ratio". It therefore incorrectly refers to the GVA ratio as GDP. This is also the reason why the result equals the GVA ratio below); *SIF* (2017) Swiss financial Centre: Key figures.

661 Own calculation, based on *DESTATIS* (2017) Bruttowertschöpfung. In 2016, the gross value added by the financial centre equalled 111.469 billion € in current prices, the total GVA of all economic sectors equalled 2831.942 billion €, see *DESTATIS* (2017) Bruttowertschöpfung. The results are matched by the ones of Eurostat. See *Eurostat*, Gross value added and income by A*10 industry break-

The contribution of financial services alone can be estimated around 2.5% of the total GVA.[662] This makes the financial centre a relatively small but important pillar of the German economy.[663]

The German banking sector, however, should not be underestimated: in absolute terms it is – alongside the French one – the largest in the Eurozone,[664] with 7.8 trillion € total assets at the end of 2016.[665] German banks employed 609.100 people in 2016.[666] According to Eurostat, the financial centre employs 2.7% of the total German workforce.[667]

downs, (January 31, 2018), http://appsso.eurostat.ec.europa.eu/nui/show.do?query=BOOKMARK_DS-406765_QID_-4FCE2BB0_UID_-3F171EB0&layout=NACE_R2,B,X,0;TIME,C,X,1;GEO,L,Y,0;UNIT,L,Z,0;NA_ITEM,L,Z,1;INDICATORS,C,Z,2;&zSelection=DS-406765NA_ITEM,B1G;DS-406765UNIT,PC_TOT;DS-406765INDICATORS,OBS_FLAG;&rankName1=UNIT_1_2_-1_2&rankName2=INDICATORS_1_2_-1_2&rankName3=NA-ITEM_1_2_-1_2&rankName4=NACE-R2_1_2_0_0&rankName5=TIME_1_0_1_0&rankName6=GEO_1_2_0_1&rStp=&cStp=&rDCh=&cDCh=&rDM=true&cDM=true&footnes=false&empty=false&wai=false&time_mode=NONE&time_most_recent=false&lang=EN&cfo=%23%23%23%2C%23%23%23.%23%23%23.

662 Own calculation, based on *DESTATIS* (2017) Bruttowertschöpfung. Numbers for the 2016 gross value added of financial services sector have not been published yet. In the previous years, however, the contribution remained relatively stable. Gross value added is therefore estimated based on 2015 numbers: the gross value added by the financial services sector alone equalled 69.567 billion € in current prices, the total of all economic sectors equalled 2740.226 billion €.

663 See *EIU* (2017) Financial Services: Germany, 6.

664 *European Central Bank* (2017) Financial Structures, 24. See also *Mersch* (2016) German Banking Market, 2–3.

665 *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24.

666 *AGV Banken* (2017) Bericht 2016, 91; *Bankenverband* (2017) Kreditwirtschaft, 7.

667 See *Eurostat*, Employment by A*10 industry breakdowns, (January 31, 2018), http://appsso.eurostat.ec.europa.eu/nui/show.do?query=BOOKMARK_DS-406759_QID_-48796ABF_UID_-3F171EB0&layout=NACE_R2,B,X,0;TIME,C,X,1;GEO,L,Y,0;UNIT,L,Z,0;NA_ITEM,L,Z,1;INDICATORS,C,Z,2;&zSelection=DS-406759NA_ITEM,EMP_DC;DS-406759UNIT,PC_TOT_PER;DS-406759INDICATORS,OBS_FLAG;&rankName1=UNIT_1_2_-1_2&rankName2=INDICATORS_1_2_-1_2&rankName3=NA-ITEM_1_2_-1_2&rankName4=NACE-R2_1_2_0_0&rankName5=TIME_1_0_1_0&rankName6=GEO_1_2_0_1&rStp=&cStp=&rDCh=&cDCh=&rDM=true&cDM=true&footnes=false&empty=false&wai=false&time_mode=NONE&time_most_recent=false&lang=EN&cfo=%23%23%23%2C%23%23%23.%23%23%23.

b. Number of banks and their nature

Consolidation in the German banking sector continued in 2016. At the end of the year, the Bundesbank kept a count of 1711 banks[668] (down from 1775 in December 2015).[669] There is high concentration in the German banking sector. In 2015, the country's three largest commercial banks' assets have amounted to 74.8% of total assets. Since the financial crisis, this number has increased (from 72.4% in 2007).[670] The 5-bank asset concentration rate is 83.8% in 2015 (down from 85.4% in 2007).[671]

Banks in Germany are usually categorised into three groups: (i) private banks, (ii) publicly owned savings banks and (iii) cooperative banks. In addition, there are a few special purpose banks[672] that specialise in certain banking services[673] and are not universal banks.[674] This system, which in its basic structure dates back to the 19th century, is often referred to as "Three-Pillar-System".[675]

668 See *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24.

669 *Deutsche Bundesbank* (2016) Monthly Report February, Statistical Section 24.

670 See *Worldbank* (2017) Global Financial Development Database.

671 See *Worldbank* (2017) Global Financial Development Database.

672 Special purpose banks comprise (i) mortgage banks, (ii) buildings and loan associations and (iii) banks that offer funding to encourage investments in specific sectors of the economy. The latter include *Deutsche Industrie Bank (IKB)* (*Detzer et al.* (2017) German Financial System, 65), which became one of the first victims of the global financial crisis in Germany and which was bailed out and privatized later on (see *Goldstein/Veron* (2011) Too Big To Fail, 7; For a description of *IKB*'s involvement in mortgage-related securities and the financial crisis, see *Financial Crisis Inquiry Commission* (2011) Financial Crisis, 246–248; *Bobek et al.* (2011) Ökonomische Analyse, 6–8); The organisational decision to provide only limited services as a special purpose bank is made internally, either as a business strategy or to profit from special laws, e.g. Bau-SparkG, that entitle to the use of a specific designation, e.g. "Bausparkasse". Special purpose banks are often subsidiaries of universal banks and parts of larger banking groups. *Grundmann* (2016) Bankvertragsrecht, 14–15.

673 *Detzer et al.* (2017) German Financial System, 56; See also *Grundmann* (2016) Bankvertragsrecht, 14–15; *Deutsche Bundesbank* (2015) Monatsbericht April, 34.

674 *Detzer et al.* (2017) German Financial System, 56; *Hackethal* (2004) German Banks, 73; See also *Grundmann* (2016) Bankvertragsrecht, 14–15; *Deutsche Bundesbank* (2015) Monatsbericht April, 34.

675 *Behr/Schmidt* (2015) German Banking System, 2–3, *Deutsche Bundesbank* (2015) Monatsbericht April, 34.

Regarding the first group, the Bundesbank currently totals up 266 private banks,[676] which it subdivides into "big banks", "regional and other commercial banks" and "branches of foreign banks".[677]

There are four banks that qualify as "big banks", namely *Deutsche Bank AG*, *Commerzbank AG*, *UniCredit Bank AG* and *Deutsche Postbank AG.*[678] Big banks' business operations and funding models have a strong international focus and emphasize capital markets.[679] They provide the full range of banking activities, including retail corporate and investment banking.[680] At the end of 2016, the balance sheets of these banks in sum amounted to 1.8 trillion €,[681] equalling 23% of all assets held by banks.[682]

While the category "regional and other commercial banks" consists of "*an extremely heterogenous set*" of banks,[683] most of them are considerably smaller and have a regional focus.[684] They provide specific business services, in particular mortgage loans, financing of specific industries and wealth management,[685] and generally focus on loans to non-financial corporations and households.[686] At the end of 2016, the Bundesbank totalled up 156 banks of this category. Their total assets amounted to 962.8 billion €,[687] equalling 12.3% of all assets in the German banking sector.[688]

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676 *Deutsche Bundesbank* (2017) Monthly Report: October, Statistical Section 24; The Bundesbank refers to private banks in its public statistics as "commercial banks". *Detzer et al.* (2017) German Financial System, 56.

677 *Deutsche Bundesbank* (2017) Monthly Report: October, Statistical Section 25 Fn 7.

678 *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24.

679 *Deutsche Bundesbank* (2015) Monthly Report April, 36; see also *IMF* (2016) Germany, 11.

680 *IMF* (2016) Germany, 11.

681 *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24.

682 Own calculation based on *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24 (Ratio between the banks' assets amounting to 1819.7 billion € and total assets of all banks amounting to 7836.2 billion €).

683 *Deutsche Bundesbank* (2015) Monthly Report April, 36 Fn 5 (underscoring that the group comprises also central counterparties and Germany-based subsidiaries of international banks); Banks in this group are either smaller joint stock banks or privately-owned banks, often with a long history. *Detzer et al.* (2017) German Financial System, 61.

684 *Deutsche Bundesbank* (2015) Monthly Report April, 36.

685 *IMF* (2016) Germany, 12.

686 *Deutsche Bundesbank* (2015) Monthly Report April, 36–37.

687 *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24.

688 Own calculation based on *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24 (Ratio between the banks' assets amounting to 962.8 billion € and total assets of all banks amounting to 7836.2 billion €).

The second pillar of the German banking sector comprises of the publicly owned savings banks[689] consisting of (i) savings banks, also called "Sparkassen", (ii) "Landesbanken" and the (iii) *DekaBank*.[690]

Sparkassen, which are incorporated as institutions under public law, have regional operations and are not primarily focused on profits. Tasked with supporting regional economic development, they mainly serve the needs of retail customers and small- and medium-sized businesses.[691] The total assets of 408 Sparkassen amounted to 1172.9 billion € at the end of 2016,[692] equalling 15.0% of all assets held by banks.[693]

Landesbanken, which are either incorporated as corporations or public law institutions,[694] can be regarded as central institutions of Sparkassen.[695] They benefited for a long time from state-guarantees[696] and have become *"major players in the wholesale banking and capital market business, where they go head to head with […] the big banks"*.[697] Due to various crises over the past decades, many Landesbanken were merged,[698] so that at the end of

689 *IMF* (2016) Germany, 12; see also *Detzer et al.* (2017) German Financial System, 56; *Behr/Schmidt* (2015) German Banking System, 9.

690 *Detzer et al.* (2017) German Financial System, 62.

691 *IMF* (2016) Germany, 12.

692 *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24.

693 Own calculation based on *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24 (Ratio between the banks' assets amounting to 1172.9 billion € and total assets of all banks amounting to 7836.2 billion €).

694 *Behr/Schmidt* (2015) German Banking System, 11.

695 See *Deutsche Bundesbank* (2015) Monthly Report April, 37; Ownership of Landesbanken is divided to a various extent between state governments Sparkassen. *IMF* (2016) Germany, 12; Traditionally, Landesbanken acted as (i) clearing banks for local Sparkassen of the region, (ii) principal relationship banks for the state(s) and made available services the local Sparkassen were to small to provide. *Behr/Schmidt* (2015) German Banking System, 11.

696 See *Detzer et al.* (2017) German Financial System, 63; see also *IMF* (2011) Germany, 22.

697 *Deutsche Bundesbank* (2015) Monthly Report April, 37 (also noting that Landesbanken provide services that Sparkassen cannot provide, due to their small size and regional focus, in particular investment and wholesale banking activities); see also *IMF* (2011) Germany, 22 (underscoring that the termination of government guarantees did not lead to downsizing but to continued wholesale funding and investment in risky overseas securities, which led to severe problems during the crisis.). Indeed, after the termination of government guarantees in 2005, Landesbanken increased their investments in foreign securities dramatically. See *IMF* (2011) Banking Sector Structure: Germany, 6–8 (in particular the chart on page 8).

698 *Behr/Schmidt* (2015) German Banking System, 12.

2016 only 9 remain, with total assets of 879.1 billion €,[699] equalling 11.2% of all assets.[700]

Cooperative banks constitute the third pillar of the German banking sector.[701] They outnumber all other pillars with a number of 976 at the end of 2016,[702] but are (together with Sparkassen) under the most severe consolidation pressure.[703] Cooperative banks mainly have local or regional operations[704] and are mostly small to medium-sized. Their business model is raising local deposits and lending to households and SMEs. They do not maximize profits but support business activities of their members.[705] With 850.3 billion €[706] cooperative banks held 10.9% of all assets in the German banking sector.[707]

At the end of 2016, there were 138 foreign owned banks in Germany. With 1088.8 billion €[708] they were in charge of 13.9% of total assets.[709]

699 *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24.

700 Own calculation based on *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24 (Ratio between the banks' assets amounting to 879.1 billion € and total assets of all banks amounting to 7836.2 billion €).

701 *IMF* (2016) Germany, 12.

702 *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24.

703 *Deutsche Bundesbank* (2015) Monthly Report April, 37.

704 *IMF* (2016) Germany, 12.

705 *Behr/Schmidt* (2015) German Banking System, 12. Among the cooperative banks, *DZ Bank*, a large institute, provides asset management, clearing services and liquidity funding for the others. *IMF* (2016) Germany, 13; It merged with the second provider in 2016, thus, became the "*joint central institution of the local cooperative banks*". *DZ Bank* (2017) Annual Report 2016, 14.

706 *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24.

707 Own calculation based on *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24 (Ratio between the banks' assets amounting to 850.3 billion € and total assets of all banks amounting to 7836.2 billion €).

708 *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24.

709 Own calculation based on *Deutsche Bundesbank* (2017) Monthly Report February, Statistical Section 24 (Ratio between the banks' assets amounting to 1088.8 billion € and total assets of all banks amounting to 7836.2 billion €). See also *Claessens/Van Horen* (2015) Global Financial Crisis, 909, 912.

c. Deutsche Bank

*Deutsche Ba*nk is by far Germany's largest financial institute[710] and its only G-SIB. It is currently allocated to the third bucket of the G-SIB-framework.[711] Since the global financial crisis, *Deutsche Bank* has faced rough headwinds – on the one hand caused by external factors such as subdued economic growth, negative interest rates and rigorous regulation, on the other hand caused by internal factors, including mismanagement and legacies from the crisis. These factors in particular put pressure on *Deutsche Bank*'s investment bank unit, making necessary severe cuts of workforce and the balance-sheet, but also led to a generally depressed profitability of the bank.[712]

Uneased market sentiment peaked after U.S. authorities announced looming fines amounting to 14 billion $ with regard to *Deutsche Bank*'s pre-crisis mortgage backed securities business.[713] As this amount threatened the existence of the institute,[714] *Deutsche Bank*'s share prices hit a historic low.[715] In its 2016 *Financial Sector Assessment Program*, the IMF found that *Deutsche Bank* was not just one of the largest contributors of interconnectedness and systemic risks in the German banking and insurance sector, but that it also appeared to be "*the most important net contributor to systemic risks in the global banking system*".[716]

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710 In 2016 *Deutsche Bank* was, with assets of 1590 billion €, more than three times bigger than Germany's second largest bank, *DZ Bank*. See *Kuck* (2017) Deutsche Kreditwirtschaft, 14; see also *Deutsche Bank* (2017) Annual Report 2016, 38.

711 See *FSB* (2017) Global Systemically Important Banks, 3. Banks of the third bucket are subject to a capital buffer of 2% (*FSB* (2017) Global Systemically Important Banks, 3); *Deutsche Bank* has continuously been considered G-SIBs since the first G-SIB assessment. See *FSB* (2011) Systemically Important Financial Institutions, 4.

712 *EIU* (2017) Financial Services: Germany, 6.

713 See *EIU* (2017) Financial Services: Germany, 6–7; *Financial Times*, Deutsche Bank and Credit Suisse pay billions to settle US probe (December 23, 2016); *Schultz,* US Regierung gegen Deutsche Bank: Der 14 Milliarden-Schock, Der Spiegel (September 16, 2016); The highly tense situation was resolved after a settlement between *Deutsche Bank* and U.S. authorities that was assessed by the majority as favourable to *Deutsche Bank* compared to the intial claims. *EIU* (2017) Financial Services: Germany, 7.

714 On the post-crisis situation, in particular the credible threat of a failure of *Deutsche Bank*, see exemplarily *Burghof* (2016) Deutsche Bank, 784–785.

715 *Financial Times*, Deutsche Bank and Credit Suisse pay billions to settle US probe (December 23, 2016).

716 *IMF* (2016) Stress Testing, 41–42.

In 2016, *Deutsche Bank* had assets of 1591 billion € on its balance sheet.[717] Set in relation to Germany's 2016 GDP of 3144 billion €,[718] its assets thus amount to approximately half of the German GDP.

C. Switzerland

a. Importance of the financial centre

Over the course of history, banking has been one of the key Swiss industries and has played an important role for Switzerland's economy and reputation in the world. Switzerland's financial system is highly developed and its institutions conduct business globally as well as domestically.[719]

The *Global Financial Centres Index* continuously lists both Zurich and Geneva in the top 20 of global financial centres.[720] The Swiss financial centre (consisting of financial services and insurance services) contributed a considerable 9.1% to the country's GDP in 2016, of which financial services made up 4.6%.[721] However, the contribution of the sector has declined since before the global financial crisis, when in 2007 financial ser-

717 See *Deutsche Bank* (2017) Annual Report 2016, 73.

718 See DESTATIS (2018) Deutsche Wirtschaft 2017, 3.

719 *EIU* (2017) Financial Services: Switzerland, 2.

720 *Z/Yen Group/China Development Institute* (2017) GFCI Nr. 22, 4 (in which Zurich was ranked 9th and Geneva 15th); See also former GFCI Reports, e.g. *Z/Yen Group/China Development Institute* (2014) GFCI Nr. 16, 5 (ranking Zurich 7th and Geneva 13th); and *Z/Yen Group/China Development Institute* (2008) GFCI Nr. 8, 9, (ranking Zurich 8th and Geneva 9th).

721 See *SIF* (2017) Swiss financial Centre: Key figures; Other calculations produce even higher results: in contrast to the FSO, *UBS* finds the contribution of the financial sector in 2015 at around 12% of GDP, taking not just into account direct added value, but also indirect added value *"in other sectors through orders to industry and the purchasing of services"*. (*UBS* (2017) Switzerland and UBS, 9; See also *BAKBASEL* (2016) Schweizer Finanzsektor, 22–23). The author's own calculation based on (*FSO* (2017) Industries production account) comes to a similar result: in 2016, the gross value added by the financial services sector equalled 30.261 billion CHF in current prices, the gross value added by the insurance sector was at 29.541 billion CHF, the total of all economic sectors after adjustments (subsidies and taxes, which allow for it to correspond to the GDP) equalled 658.978 billion CHF. There nevertheless needs to be a caveat: this can only be regarded as a rough illustration, as neither the author's calculation nor, as it seems, the *SIF's* calculation take into account the actual share of subsidies and taxes belonging to the financial services sector).

vices alone accounted for 8.2% of Swiss GDP.[722] The Swiss financial centre contributed 9.4% to the total GVA. Financial services alone accounted for 4.7%.[723]

Swiss banks employed 120.843 people[724] in 2016, of which 101.382 were employed in the country and 19.461 abroad.[725] According to Eurostat, the financial centre employs 4.7% of the total Swiss workforce.[726] Despite the elimination of tax secrecy for international clients,[727] Switzerland remains

722 Own calculation based on *FSO* (2017) Industries production account (for a description of the calculation, see Fn above).

723 Own calculation based on *FSO* (2017) Industries production account. The calculation resembles the one of Fn above. However, it uses the gross value added of all economic sectors *before* adjustments, which amounts to 638.981 billion CHF. The result of the calculation is matched by the one of Eurostat. See *Eurostat*, Gross value added and income by A*10 industry breakdowns, (January 31, 2018), http://appsso.eurostat.ec.europa.eu/nui/show.do?query=BOOKMARK_DS-406765_QID_-4FCE2BB0_UID_-3F171EB0&layout=NACE_R2,B,X,0;TIME,C,X,1;GEO,L,Y,0;UNIT,L,Z,0;NA_ITEM,L,Z,1;INDICATORS,C,Z,2;&zSelection=DS-406765NA_ITEM,B1G;DS-406765UNIT,PC_TOT;DS-406765INDICATORS,OBS_FLAG;&rankName1=UNIT_1_2_-1_2&rankName2=INDICATORS_1_2_-1_2&rankName3=NA-ITEM_1_2_-1_2&rankName4=NACE-R2_1_2_0_0&rankName5=TIME_1_0_1_0&rankName6=GEO_1_2_0_1&rStp=&cStp=&rDCh=&cDCh=&rDM=true&cDM=true&footnes=false&empty=false&wai=false&time_mode=NONE&time_most_recent=false&lang=EN&cfo=%23%23%23%2C%23%23%23.%23%23%23.

724 Measured in full time equivalents.

725 *SNB* (2017) Banks in Switzerland, 28. Also with regard to employment, there are much bolder calculations, e.g. *BAKBASEL* (2016) Schweizer Finanzsektor, 23–24 (expecting an employment multiplicator of 2.0, due to significant indirect employment effects of the banking sector); *UBS* (2017) Switzerland and UBS, 10–11.

726 See *Eurostat*, Employment by A*10 industry breakdowns, (January 31, 2018), http://appsso.eurostat.ec.europa.eu/nui/show.do?query=BOOKMARK_DS-406759_QID_-48796ABF_UID_-3F171EB0&layout=NACE_R2,B,X,0;TIME,C,X,1;GEO,L,Y,0;UNIT,L,Z,0;NA_ITEM,L,Z,1;INDICATORS,C,Z,2;&zSelection=DS-406759NA_ITEM,EMP_DC;DS-406759UNIT,PC_TOT_PER;DS-406759INDICATORS,OBS_FLAG;&rankName1=UNIT_1_2_-1_2&rankName2=INDICATORS_1_2_-1_2&rankName3=NA-ITEM_1_2_-1_2&rankName4=NACE-R2_1_2_0_0&rankName5=TIME_1_0_1_0&rankName6=GEO_1_2_0_1&rStp=&cStp=&rDCh=&cDCh=&rDM=true&cDM=true&footnes=false&empty=false&wai=false&time_mode=NONE&time_most_recent=false&lang=EN&cfo=%23%23%23%2C%23%23%23.%23%23%23.

727 *Nobel/Brändli* (2017) Can Banks Still Keep a Secret?, 308. For a compact description of the process of the removal of tax secrecy in an international context, the reasons for it the and the specialities in Swiss law that gave rise to controversies,

world leader in global cross-border private banking with a market share of 24.0%.[728]

b. Number of banks and their nature

In 2016, the trend of bank consolidation continued. At the end of the year, the SNB counted 261 banks (down from 266 in 2015) which it divides in groups such as "cantonal banks", "regional banks and savings banks", "Raiffeisen banks" and "big banks".[729]

The Swiss banking sector is highly concentrated: Assets of the country's three largest commercial banks amounted to 79.7% of total assets in 2015. Before the financial crisis, numbers were even higher with them in charge of 91.8% of total assets.[730] In 2015, the five biggest banks had an asset share of 89.2% (down from 93.7% in 2007).[731]

Currently the SNB qualifies four banks as "big banks",[732] namely (i) *UBS AG*, (ii) *UBS Switzerland AG*, (iii) *Credit Suisse AG* and (iv) *Credit Suisse (Switzerland) AG*. These are "*economically important*" banks that are active in all business areas and engage "*in particular [in] investment banking*". They are part of financial groups, namely *UBS* and *Credit Suisse*, that have a global network of branches and subsidiaries.[733]

Cantonalbanks are part of a "*large, respected second tier of domestic banks*".[734] Most of them are institutions under public law with their own legal personality[735] and are owned wholly or in part by the cantons.[736] Although a cantonal guarantee is not a constitutive feature anymore,[737] the

in particular with the United States, in the first place, see *Nobel/Brändli* (2017) Can Banks Still Keep a Secret?, 308–336.

728 *SwissBanking* (2017) Banking Barometer, 8.

729 *SNB* (2017) Banks in Switzerland, 5–6.

730 See *Worldbank* (2017) Global Financial Development Database.

731 See *Worldbank* (2017) Global Financial Development Database.

732 *SNB* (2017) Banks in Switzerland, 5–6.

733 *SNB*, Notes on the Banking Statistics, (September 28, 2017), https://data.snb.ch/en/topics/banken#!/doc/explanations_banken.

734 *EIU* (2017) Financial Services: Switzerland, 6.

735 *SNB*, Notes on the Banking Statistics, (September 28, 2017), https://data.snb.ch/en/topics/banken#!/doc/explanations_banken.

736 *EIU* (2017) Financial Services: Switzerland, 6.

737 The constitutive features of a cantonalbank are set down in Art. 3a Swiss Banking Act and include that the bank is (i) an establishment or limited-liability company on the basis of a Cantonal legal ordinance and that the (ii) Canton

majority of cantonalbanks retain one.[738] Even though most of them focus particularly on savings and mortgage business, they provide a range of banking services, including in some cases asset management for domestic clients. Most cantonalbanks focus on their own canton.[739] In 2016 the balance sheets of the 24 cantonalbanks accounted for 17.8% of Swiss banks' total assets.[740]

Raiffeisen banks, which together form the *Raiffeisen Switzerland Cooperative*,[741] account of 6.9% of total assets.[742] In addition, there are 62 regional and savings banks, which account for 3.7% of total assets.[743] For the most part, both groups concentrate on traditional banking services, such as mortgages and corporate loans,[744] and can, together with the cantonalbanks be characterised as *"domestic retail banks"*. All three have in common that they only have limited diversification and are largely dependent on the domestic mortgage market.[745]

81 foreign controlled banks,[746] some of which specialise in asset management and investment banking, are internationally active[747] and made up 8.0% of total assets in 2016.[748]

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must hold more than one third of the capital and more than one third of the voting rights.

738 22 of 24 cantonalbanks retain a full Cantonal guarantee. In case of an insolvency the respective Canton is fully liable and bails out the bank. *Verband Schweizer Kantonalbanken*, Die Kantonalbanken, https://www.kantonalbank.ch/getmedia/ca3e1371-6405-432e-b9fa-37ccd9935325/Portrait_KB_Gruppe_2016_d.pdf.

739 *SNB*, Notes on the Banking Statistics, (September 28, 2017), https://data.snb.ch/en/topics/banken#!/doc/explanations_banken.

740 *SNB* (2017) Banks in Switzerland, 6, 9.

741 *SNB*, Notes on the Banking Statistics, (September 28, 2017), https://data.snb.ch/en/topics/banken#!/doc/explanations_banken.

742 *SNB* (2017) Banks in Switzerland, 9.

743 *SNB* (2017) Banks in Switzerland, 6, 9.

744 *SNB*, Notes on the Banking Statistics, (September 28, 2017), https://data.snb.ch/en/topics/banken#!/doc/explanations_banken; *Schiltknecht* (2013) Stabilität und Instabilität, 463.

745 *Schiltknecht* (2013) Stabilität und Instabilität, 463.

746 *SNB* (2017) Banks in Switzerland, 6.

747 *SNB*, Notes on the Banking Statistics, (September 28, 2017), https://data.snb.ch/en/topics/banken#!/doc/explanations_banken.

748 *SNB* (2017) Banks in Switzerland, 9.

c. UBS and Credit Suisse

UBS and *Credit Suisse* (*CS*) are the main players in the Swiss banking sector. In 2016, the balance sheets of *UBS* and *CS* accounted for 46.9% of Switzerland's balance sheet total, with 1.45 trillion CHF total assets.[749] Mainly due to regulatory pressure however, they have reduced their sizes considerably since the global financial crisis, when their balance sheets of 2.2 trillion CHF[750] accounted for a staggering 68.8% of Swiss banks' total assets.[751] *CS* and *UBS* are Switzerland's two G-SIBs and are currently part of the first bucket of the G-SIB framework.[752]

Both banks were heavily hit by the global financial crisis and incurred massive losses, which, in case of *UBS*, resulted in government intervention.[753] After two capital increases involving private investors,[754] which were followed by significant losses for these new shareholders,[755] Swiss authorities stepped in and bailed out the bank.[756] This was achieved by (i) the SNB financing the transfer of illiquid assets to a special purpose vehicle for

749 *SNB* (2017) Banks in Switzerland, 6, 9.

750 *SNB*, Data portal, https://data.snb.ch/en/topics/banken#!/doc/.

751 Own calculation based on *SNB*, Data portal, https://data.snb.ch/en/topics/banken#!/doc/ (In 2006, assets of the two banks amounted to 2.2 trillion CHF, all banks' assets amounted to 3.19 trillion CHF). See also *EIU* (2017) Financial Services: Switzerland, 5–6.

752 *FSB* (2017) Global Systemically Important Banks, 3; Banks of the first bucket subject to the comparatively "light" capital buffer of 1% (*FSB* (2017) Global Systemically Important Banks, 3); *UBS* and *CS* have continuously been considered G-SIBs since the first G-SIB assessment. See *FSB* (2011) Systemically Important Financial Institutions, 4.

753 *EIU* (2017) Financial Services: Switzerland, 6.

754 *Schiltknecht* (2010) "Too Big to Fail", 436.

755 *Bundesrat* (2008) Botschaft Massnahmenpaket schweizerisches Finanzsystem, 8955.

756 *Schiltknecht* (2010) "Too Big to Fail", 436; *EIU* (2017) Financial Services: Switzerland, 6. Interestingly, in its dispatch on the package of measures to strengthen Switzerland's financial system to Parliament, the Federal Council notes that the "*existence*" of *UBS* was, at the time of the adoption of the measures, "*not immediately threatened*". However, because of its vulnerability and the difficult environment, Swiss authorities could not rule out an exacerbation of the confidence crisis, which would have had a massive impact on the Swiss financial system and economy (*Bundesrat* (2008) Botschaft Massnahmenpaket schweizerisches Finanzsystem, 8955). This assessment is largely shared in academic literature (see e.g. *Sethe* (2011) Finanzmarktkrise und Steuerstreit, 108; *Jordan* (2010) SNB-Stabfund, 823). Drawing from the remarks on the vast size of *UBS* (especially at that time) and its importance for the Swiss economy above, it is evident that

a maximum amount of 60 billion \$.[757] Furthermore, (ii) direct financial aid was provided in the form of mandatory convertible notes amounting to 6 billion CHF, which were purchased by the Swiss Confederation.[758] *CS*, on the other hand, made it through the global financial crisis much less affected and avoided direct government support.[759] However, in its 2016 *Financial Sector Assessment Program* on Germany, the IMF found that *CS* was the third biggest contributor to systemic risks in the global banking system.[760]

In 2016, *UBS* had total assets of 935 billion CHF on its balance sheet,[761] *CS* had 820 billion CHF.[762] Compared with Switzerland's 2016 GDP of 659 billion CHF,[763] the balance sheet of *UBS* is thus 1.4 times the Swiss GDP, *CS*'s balance sheet 1.2 times, together accounting for 2.6 of Switzerland's GDP.[764]

D. Results

a. Importance of the financial centre

As a first step, it makes sense to compare the financial centres of interest according to their global importance. Undoubtedly, the United Kingdom, Switzerland and Germany are Europe's biggest and most important financial capitals. To reflect this, the author referred in the respective chapters to the *Global Financial Centres Index*,[765] which lists all the countries' finan-

Swiss authorities took the right decision and there was little room for alternatives.

757 *Bundesrat* (2008) Botschaft Massnahmenpaket schweizerisches Finanzsystem, 8945; *SNB*, Chronicle of monetary events 1848–2017, https://www.snb.ch/en/iabout/snb/hist/id/hist_wpc#t14.

758 *Bundesrat* (2008) Botschaft Massnahmenpaket schweizerisches Finanzsystem, 8945; *Bundesrat,* Federal Council takes decision on measures to strengthen Switzerland's financial system (October 16, 2008), https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-22019.html.

759 *EIU* (2017) Financial Services: Switzerland, 6.

760 See *IMF* (2016) Stress Testing, 42.

761 See *UBS* (2017) Annual Report 2016, 169.

762 See *Creditsuisse* (2017) Annual Report 2016, 173.

763 See *FSO* (2017) Gross domestic product.

764 Own calculations based on *UBS* (2017) Annual Report 2016, 169; *UBS* (2017) Annual Report 2016, 169; *FSO* (2017) Gross domestic product.

765 *Z/Yen Group/China Development Institute* (2017) GFCI Nr. 22.

cial centres within the global top 20. Apart from Luxembourg,[766] the next European country whose financial centre is listed is France, with Paris at rank 26. It can thus be concluded that London, Zurich and Frankfurt are by far the leading financial centres in Europe.

Assessing their positions however, it quickly becomes clear that there are considerable differences in their global rank: the United Kingdom currently leads the entire ranking and is thus far ahead of all other European financial centres. The next financial centre is Zurich (9th place), followed closely by Frankfurt (11th place).[767]

External factors influence the importance of financial centres. Interestingly, London remained on the first place with minimal losses in spite of the ongoing Brexit negotiations. While Zurich and Geneva fell in the ratings, Frankfurt rose, which is attributed to it being considered one of the main profiteers of Brexit.[768] It is also remarkable that Switzerland is represented by both Zurich and Geneva among the world's leading 20 financial centres. Summarizing, it can be stated that while London leads the ranking in the distance, Frankfurt is in the process of catching up to Zurich in the run for Europe's second place.

In a second step, it is considered useful to compare the financial centres importance from a national perspective. Which of the financial centres of interest is most important for the respective nation? As an indicator, the author used the GDP and GVA ratio of the financial services sector as well as the number of employees and tax contribution. Because of discrepancies in the contribution of the financial centres to GDP, the GVA ratio is considered best suited for a comparison.

Looking at the GVA contribution of the various financial centres, Switzerland's has by far the highest rate with 9.4%.[769] Luxembourg aside, this is the highest rate in Europe.[770] Switzerland's economy thus relies

766 Luxembourg is at rank 14, followed by Geneva at rank 15. *Z/Yen Group/China Development Institute* (2017) GFCI Nr. 22, 4.

767 See *Z/Yen Group/China Development Institute* (2017) GFCI Nr. 22, 4.

768 See *Z/Yen Group/China Development Institute* (2017) GFCI Nr. 22, 2, 4; see also *Sester* (2018) EU-Finanzmarktrecht, 52 (pointing out the recognisable trend of internationally active banks strengthening their presence in EU-financial centres, in particular Frankfurt, and not expanding operations in Switzerland).

769 See Chapter III.I.C.a: Importance of the financial centre.

770 *Eurostat*, Employment by A*10 industry breakdowns, (January 31, 2018), http://appsso.eurostat.ec.europa.eu/nui/show.do?query=BOOKMARK_DS-406759_QID_-48796ABF_UID_-3F171EB0&layout=NACE_R2,B,X,0;TIME,C,X,1;GEO,L,Y

heavily on financial and insurance services. The UK follows with 6.6% and Germany with 3.9%.[771]

Focussing on financial services alone, Switzerland is still ahead with financial services adding 4.7% of gross value. The UK, however, follows closer with considerable 4.1%. The reduced gap is due to Switzerland's strong insurance sector, which contributes strongly to the financial centre. In Germany, financial services contribute only 2.5% to the total GVA.[772] Both in Switzerland and the UK, financial services thus contribute a great deal and to a comparable degree to the economy. The gross added value of financial services in Germany is significantly smaller.

Comparing employment rates, Switzerland is again in the lead with 4.7% of the total workforce employed by the financial centre. It is followed by the UK with 3.1% and Germany with 2.7% of the total workforce.[773] With regard to employment, the financial centres of the UK and Germany thus employ similar percentages of the workforce, whereas in Switzerland financial services employ by far the most people of the respective countries.

b. Number of banks and their nature

There is considerable consolidation in the banking markets of all three countries of interest, which is reflected by the constant decline in the number of banks since the global financial crisis. In absolute numbers, Germany has by far the most banks, followed by the UK, which has noticeably

,0;UNIT,L,Z,0;NA_ITEM,L,Z,1;INDICATORS,C,Z,2;&zSelection=DS-406759NA_ITEM,EMP_DC;DS-406759UNIT,PC_TOT_PER;DS-406759INDICATORS,OBS_FLAG;&rankName1=UNIT_1_2_-1_2&rankName2=INDICATORS_1_2_-1_2&rankName3=NA-ITEM_1_2_-1_2&rankName4=NACE-R2_1_2_0_0&rankName5=TIME_1_0_1_0&rankName6=GEO_1_2_0_1&rStp=&cStp=&rDCh=&cDCh=&rDM=true&cDM=true&footnes=false&empty=false&wai=false&time_mode=NONE&time_most_recent=false&lang=EN&cfo=%23%23%23%2C%23%23%23.%23%23%23.

771 See Chapter III.I.A.a: Importance of the financial centre (and the corresponding chapters of Germany and Switzerland).

772 See Chapter III.I.A.a: Importance of the financial centre (and the corresponding chapters of Germany and Switzerland).

773 See Chapter III.I.A.a: Importance of the financial centre (and the corresponding chapters of Germany and Switzerland).

fewer banks relative to its size (roughly less than double the number of banks in Switzerland).[774]

Comparing bank concentration, the three largest commercial banks' share of total assets were in 2015 the highest in Switzerland (79.7%), followed by Germany (74.8%). In the UK the share was only 48.4%.[775] With regard to the 5-bank-asset concentration rate, Switzerland is still ahead with 89.3%, followed by Germany with 83.8% and the UK with 71.4%.[776] The order thus remains the same. In the UK the concentration share increases the most compared to the previous concentration rate (more than 20%), but is still comparatively low, which can be attributed to a higher number of large banks, namely the "high street banks".

In a 2013 dataset comparing the number of foreign banks among total banks, the UK leads with striking 58%. In Switzerland the share is 20% and in Germany only 14%.[777]

c. G-SIBs

Comparing the countries' G-SIBs, one finds that Switzerland is the most exposed to its biggest banks' balance sheets: total assets of its two G-SIBs alone amount to 2.6 times the nation's GDP. The UK is closely following with total assets amounting to 2.3 times the GDP, but with the important difference that it takes four banks to put this vast number together. While *Deutsche Bank* is considerably bigger than the Swiss banks, it equals only half of the German GDP.[778] Germany can therefore be regarded as the least exposed.

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774 See Chapter III.I.A.b: Number of banks and their nature (and the corresponding chapters of Germany and Switzerland).

775 See *Worldbank* (2017) Global Financial Development Database; see also Chapter III.I.A.b: Number of banks and their nature (and the corresponding chapters of Germany and Switzerland).

776 See *Worldbank* (2017) Global Financial Development Database; see also See Chapter III.I.A.b: Number of banks and their nature (and the corresponding chapters of Germany and Switzerland).

777 See *Claessens/Van Horen* (2015) Global Financial Crisis, 909; *Worldbank* (2017) Global Financial Development Database; see also Chapter III.I.A.b: Number of banks and their nature (and the corresponding chapters of Germany and Switzerland).

778 See Chapter III.I.A.c: HSBC, Barclays, RBS, Standard Chartered (and the corresponding chapters on G-SIBs of Germany and Switzerland).

Looking at the G-SIBs individually, one finds that *HSBC* is undisputedly the biggest bank, followed by *Deutsche Bank* and *Barclays.* The differences between the banks' balance sheets are noteworthy. Take *Credit Suisse* as an example: although *Credit Suisse* is a huge bank in itself with an enormous importance for Switzerland, its total assets amount to only around a third of *HSBC's*.[779] Together, the countries are home to Europe's largest banks.[780]

During the global financial crisis, none of the countries was spared the distress of witnessing at least one of its G-SIBs face an existential threat. Considering the vast sizes of these banks and their systemic importance both nationally and globally, a failure would have caused massive disruption and could have posed an existential threat to both the countries[781] and the international community.

II. Preparatory Work and Legal Sources

This chapter traces the evolution of the structural reform models of the respective countries: it presents the preparatory work and the final product deriving from it. This is important, because (i) it shows that structural reform is a process and not just the final legislation. Structural reform evolves over time. The final legislative outcome is often very different from the initial idea. This is particularly visible regarding the Swiss organisational measures.[782] It also (ii) highlights issues of the final product. Most of them already exist in the preparatory works. It is thus interesting to see how, and if, they are addressed in the course of the legislative process. The chapter furthermore (iii) sets the scene for the subsequent examination by

779 Own calculation based on *HSBC* (2017) Annual Report 2016 (At the end of 2016, *HSBC* had assets of 2375 billion $ on its balance sheet); *Creditsuisse* (2017) Annual Report 2016, 173 (At the end of 2016, *Credit Suisse* had a balance sheet of 820 billion CHF, equalling around 805 billion $ in December 2016). However, one has to mind fluctuations due to changes in the exchange rate.

780 *Deutsche Bank* and *HSBC* are Europe's only third bucket G-SIBs. *FSB* (2017) Global Systemically Important Banks, 3.

781 *Waibel*, for example, discusses bank insolvency as an important channel linking the balance sheets of banks and countries and notes that "*[t]he largest ticking bomb for public balance sheets is the debt of the banking sector*". *Waibel* (2011) Bank Insolvency, para 13.03.

782 See Chapter III.IV.D.e: Relation to expert commission recommendations. The intensity of transformation can also be observed in the various stages of the EU's structural reform. See Part II: Legal Developments on EU Level.

introducing the various sources of law. This facilitates the understanding of the legal design of the respective structural reform.

Switzerland's path to structural reform requires particular attention, as it reveals the discomfort of the Swiss legislator and authorities with clear ring-fencing rules on the one hand, and the awareness that stringent organisational requirements are necessary on the other hand. In the author's opinion highlighting this tension is vital to grasp the uniqueness of the Swiss approach.

A. United Kingdom

Following the UK Government's unprecedented intervention to stabilise the financial system described in the chapter above, an expert commission was formed to *"consider structural and related non-structural reforms to the UK banking sector to promote financial stability and competition"*.[783] The commission, which was headed by *Sir John Vickers*, was soon referred to as the "Vickers Commission", its final report as the "Vickers Report".[784] This report gained global prominence and considerably contributed to the discussion in many other countries.[785]

The Vickers Commission found that *"a package of measures"* was needed to (i) improve the loss-absorbing ability of banks, to (ii) facilitate the resolution of banks that still got into difficulties and to (iii) keep in check incentives for excessive risk taking. It recommended that this package should consist on the one hand of capital measures and measures to prop up the loss-absorbing ability and on the other hand of structural reform.[786]

783 *ICB* (2011) Vickers Report, 19. The commission was formed on June 16, 2010. See *ICB* (2011) Interim Report, 11. This was remarkable, as historically banking regulation in the UK was largely non-structural. See *Korotana* (2016) Banking Reform Act, 197–198.

784 See e.g. *Binder* (2015) Ring-Fencing, 98; *Chambers-Jones* (2011) Vickers Report, 280; *Dombalagian* (2012) Proprietary Trading, 394 Fn 41; *Elliott/Rauch* (2014) Volcker Rule, 1; *Gambacorta/Van Rixtel* (2013) Structural Bank Regulation Initiatives, 23; *Krahnen/Noth/Schüwer* (2016) Structural Reforms, 1.

785 See e.g. *Blundell-Wignall* (2011) Necessity, 298; Boot (2011) Banking, 29–30; *Chow/Surti* (2011) Making Banks Safer, 22–23; *Brandi/Gieseler* (2013) Entwurf des Trennbankengesetzes, 741; *European Commission* (2014) Impact Assessment Part 2, 2; *ZEW* (2013) Trennbanken, 10 et seqq.

786 *ICB* (2011) Vickers Report, 8.

The UK Government welcomed the Vickers Report, vowing to "*remain[] strongly committed to implementing these proposals*"[787] and accepted the majority of the proposed measures,[788] which became part of UK law with the adoption of the Financial Services (Banking Reform) Act 2013.[789] The Banking Reform Act 2013 amends a number of provisions of the Financial Services and Markets Act 2000[790] and more importantly adds a new Part 9B with the title "ring-fencing".[791] It is complemented by four pieces of secondary legislation, adopted by HM Treasury,[792] which make use of the generously delegated powers. In addition, supervisory material by the regulator sets out details and expectations.[793]

B. Germany

In Germany, legislative efforts to adopt ring-fencing rules are part of the post-crisis regulatory regime[794] and can be understood as a reaction to the EU's Liikanen Proposal.[795] According to *Hardie/Macartney,* the German Government pushed for such measures both for international and domestic political reasons, namely (i) to avoid the application of a more stringent

787 *HM Treasury* (2012) Banking Reform, 7.

788 See *Britton et al.* (2016) Ring-fencing, 166; see also *HM Treasury* (2012) Banking Reform, 15–33.

789 Financial Services (Banking Reform) Act 2013, c. 33.

790 Financial Services and Markets Act 2000, c. 8 (FSMA 2000).

791 See Banking Reform Act 2013, Sec. 4.

792 See *Britton et al.* (2016) Ring-fencing, 166; This includes FSMA 2014 Order No. 1960, FSMA 2014 Order No. 2080, FSMA 2015 Regulations No. 547; FSMA 2016 Order No. 1032.

793 Supervisory material includes in particular the PRA's Supervisory Statement on ring-fenced bodies and the PRA Rulebook. See *PRA* (2017) Ring-fenced Bodies; *PRA* (2016) PRA Rulebook: Ring Fenced Bodies; see also *Thomson Reuters Practical Law,* PRA Rulebook, supervisory statements and other supervisory material, https://uk.practicallaw.thomsonreuters.com/5-573-3805?__lrTS=20171230004551129&transitionType=Default&contextData=(sc.Default)&firstPage=true&bhcp=1.

794 See *Braun* (2016) Geschäftsorganisation, para 1; *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 2.

795 *Schwennicke* (2016) Verbotene Geschäfte, 196. For a discussion of the Liikanen Report, see Chapter II.I: Liikanen Report.

EU approach and (ii) to forestall demands of the main challenger party in the run-up of the federal elections.[796]

The provisions of the draft bill[797] were adopted by the German parliament as part of a law[798] that was soon referred to as "Trennbankengesetz".[799] Its name, however, is rather misleading, as it falsely suggests it would stipulate a full separation for banks.[800] In the author's opinion, the term "Abschirmungsgesetz" that is also used by BaFin[801] is more suitable, because in contrast to "Trennbankengesetz", (i) it derives from the official title of the law and (ii) does not overstate the content of the German provisions. It furthermore (iii) relates to the English term "ring-fencing", which is to some extent used by BaFin in English translations.[802] It would be desirable if German authorities and the academic discourse would use the term "Abschirmungsgesetz" and, if necessary, the term "Ring-fencing Act" in English translations.

The law entered into force on August 13, 2013.[803] The German Ring-fencing Act amends and adds provisions to the German Banking Act, in particular § 3 and § 25f.[804] It is complemented by an Interpretative Guid-

796 See *Hardie/Macartney* (2016) EU Ring-Fencing, 505–506, 512–513. This was also to some exent argued by the opposition parties SPD and Bündnis 90/Die Grünen, see *Deutscher Bundestag* (2013) Bericht Finanzausschuss, 3 (noting that the German Ring-fencing Act is of limited scope compared to the Liikanen Report); *Deutscher Bundestag* (2013) Stenografischer Bericht, 28615–28616 (in which *Joachim Poß* of the SPD accuses the Government of adopting the Act only to forestall demands of the SPD).

797 See *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz.

798 Gesetz zur Abschirmung von Risiken und zur Planung der Sanierung und Abwicklung von Kreditinstituten und Finanzgruppen, August 7, 2013, Bundesgesetzblatt Part I, 3090 (German Ring-fencing Act).

799 The term "Trennbankengesetz" was used by the German Government itself (see *Deutsches Bundesministerium für Finanzen* (2013) Trennbankengesetz) and has since been used by most authors. See e.g. *Brandi/Gieseler* (2013) Entwurf des Trennbankengesetzes. *Schelo/Steck* (2013) Trennbankengesetz;; *Schaffelhuber/Kunschke* (2015) Trennbankengesetz.

800 BaFin uses the term "Bank Separation Act" in the English version of its Interpretative Guidance. See e.g. *BaFin* (2016) Interpretative Guidance, 1.

801 See e.g. *BaFin* (2016) Auslegungshilfe, 1.

802 See e.g. *BaFin* (2016) Interpretative Guidance, 1.

803 *Deutscher Bundestag*, Gesetz zur Abschirmung von Risiken und zur Planung der Sanierung und Abwicklung von Kreditinstituten und Finanzgruppen, http://dipbt.bundestag.de/extrakt/ba/WP17/508/50871.html. See also the considerations regarding the application of the law, Chapter III.VI.B: Germany.

804 Gesetz über das Kreditwesen, July 10, 1961, Bundesgesetzblatt Part I, 2776 (German Banking Act).

ance of BaFin and Deutsche Bundesbank that was published in late 2016.[805]

C. Switzerland

In Switzerland structural reform became a topic of interest after the bailout of *UBS*[806] and the subsequent discussion of too-big-to-fail.[807] In 2009, the Federal Council set up an expert commission on the topic, which was chaired by *Peter Siegenthaler*[808] and which published its final report in late 2010.[809]

a. Decision against structural reforms

In its report, the expert commission explicitly decided against certain measures that were discussed globally, among them size caps, the full dismantling of large banks, i.e. cutting up large banks into several smaller institutes, and the prohibition of proprietary trading.[810] Regarding the latter, the expert commission pointed out the difficulties of defining such activities and the risk of their shifting into the shadow banking sector.[811]

Interestingly, it also rejected other structural requirements for banks: first it mentioned as an example the requirement to form a holding struc-

805 See *BaFin* (2016) Auslegungshilfe.

806 For the government intervention for the benefit of *UBS*, see Chapter III.I.C.c: UBS and Credit Suisse.

807 See e.g. *Hofer* (2014) Structural Reforms, 294; *Bahar/Peyer* (2013) Systemrelevante Banken, 378; see also *Achermann* (2018) Organisation, 272–273.

808 *EFD* (2009) Expertenkommission Medienmitteilung, 1.

809 See *Expertenkommission* (2010) Schlussbericht. References in this dissertation relate to the German version of the expert commission's report, because (i) the English translation stipulates that the German original prevails in case of discrepancies (*Expertenkommission* (2010) Final Report, 1), (ii) there are indeed discrepancies leading to slight deviations of the meaning. However, in some cases it may be appropriate to refer to the English version (when there is no deviation) or simultaneously point out the referenced parts of the English version.

810 For an explanation of proprietary trading, see Chapter I.II.B.a: Proprietary trading.

811 See *Expertenkommission* (2010) Schlussbericht, 49. The expert commission rightly identified the issue of drawing the line between proprietary trading and other desired trading activities. For the problem of an effective delimitation, see e.g. Chapter I.IV.D.a: Digression: The Volcker Rule.

ture and emphasized that such a structure would neither limit corporate group liability,[812] nor improve crisis management, nor facilitate the recovery[813] of an institute.[814]

The report then argued that a holding structure would only limit corporate group liability if there was a complete operative, legal separation of the various group entities that also included the workforce.[815] This is remarkable as it relatively well describes the end result of the Swiss regulation, as will be demonstrated in the following chapters.

According to the expert commission, (i) such requirements, however, would mostly eliminate economies of scope of a globally active banking group. In addition, it emphasized that in case of a crisis, (ii) it would be probable that Switzerland would be pressured into rescuing foreign based subsidiaries of Swiss banks by countries negatively affected by their bankruptcy.[816]

In the annex to the final report, the expert commission furthermore noted, with a view to a holding structure with subsidiaries for each country of business operations, that such an organization would be beneficial to the separation of systemically important functions. However, they argued that such requirements would come close to the full dismantling of banks described above and then pointed out that the main issue of such requirements would be "*a very extreme form of intervention to meet the criterion C2 [i.e. simplified resolution and restructuring of systemically important banks], which in turn makes it hardly justifiable with respect to criteria C3 [i.e. func-*

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812 Corporate group liability is a special feature of Swiss law: Entities of a banking group are liable for each others' debt under certain conditions. The liability can be based on a contract, say a guarantee, which could be referred to in English as "legal corporate group liability". Moreover, there is a concept which could be referred to as "factual corporate group liability", that mandates that entities are liable for each other's debt if there is interdependence with regard to personnel or finances or if the entities use the same name or appear together on the market. Corporate group liability is set out in Art. 3c Swiss Banking Act and Art. 21(2) Swiss Banking Ordinance. For a more detailed explanation, see *Maurenbrecher/Kramer* (2013) Geschäftsbetrieb, 144–145.

813 In the English version "Sanierbarkeit" is mistakenly translated as "resolvability". *Expertenkommission* (2010) Schlussbericht, 48; *Expertenkommission* (2010) Final Report, 46.

814 *Expertenkommission* (2010) Schlussbericht, 48, 121.

815 See *Expertenkommission* (2010) Schlussbericht, 48–49. For further explanation of these arguments, see *Hofer* (2014) Structural Reforms, 411–412.

816 See *Expertenkommission* (2010) Schlussbericht, 48–49. For further explanation of these arguments, see *Hofer* (2014) Structural Reforms, 411–412.

tioning and efficiency of the financial system] and C4 [i.e. competitive neutrality]."[817]

b. Policy mix and core measure organization

Instead of the direct structural requirements described in the chapter above, the expert commission decided to propose a policy mix consisting of four "*core measures*", namely (i) capital, (ii) liquidity, (iii) risk diversification, and (iv) organisation.[818] Collectively, these measures constituted the expert commission's proposals to effectively tackle too-big-to-fail.[819]

1. Organisational measures

i. Emergency plan

The expert commission found that organisational measures were necessary to protect the continuation of systemically important functions (*inter alia* domestic lending and deposit-taking, as well as payment transactions) in case of an insolvency of a bank. It recommended for banks not to be required to implement a specific organisation but that they be tasked solely with demonstrating that a continuation of these activities was ensured.[820]

Banks could in principle do this by coming up with a credible emergency plan, i.e. a plan that would show how – in case of its activation – it was ensured that, within a short period of time – this typically means a weekend – the functions could be continued. However, the expert commission already hinted that certain changes to the organisation of the affected institutes would possibly be necessary to ensure the credibility of the emergency plan.[821]

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817 *Expertenkommission* (2010) Final report, 109, 118; see also *Expertenkommission* (2010) Schlussbericht, 112, 121.

818 *Expertenkommission* (2010) Schlussbericht, 2; *Expertenkommission* (2010) Final report, 2.

819 *Expertenkommission* (2010) Schlussbericht, 5; *Expertenkommission* (2010) Final report, 5 (noting that the implementation of all the core measures is necessary "*if the TBTF problem is to be tackled effectively*").

820 *Expertenkommission* (2010) Schlussbericht, 37–38, 40.

821 See *Expertenkommission* (2010) Schlussbericht, 40–41. The expert commission, for instance, noted that the "*emergency plan must be designed in such a way that it*

ii. Organisational measures to improve general resolvability

In addition to the emergency plan, organisational measures to improve the general resolvability were to *"boost the resolvability of systemically important banks and thereby reduce the repercussions of insolvency"*. These organisational precautions that exceed the minimum requirements of the emergency plan were also considered to have a positive effect on ensuring the continuation of the systemically important functions.[822] To reward banks for such measures, capital rebates were to be awarded.[823]

2. Subsidiarity principle

Organisational measures are highly invasive regarding fundamental rights, international competitiveness and competition in general. The expert group recommended the solution outlined above, because it considered it the least invasive. It intended to ensure this by introducing a *"rigorous subsidiarity principle"*: it is based on the thought that functional requirements are less invasive than specific requirements:[824]

Banks are required to organise themselves in a way that makes certain that the functional goal of the continuation of systemically important functions can be ensured in the case of insolvency. Finma can only impose specific organisational measures if the bank fails to prove this with its emergency plan. Banks should thus have a considerable range of choices regarding the organisational measures.[825]

The expert commission furthermore decided to recommend only to require the minimum goal and not to mandate additional measures that would be in the interest of the country and third countries. The implemen-

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can be implemented within a very short space of time in the face of a crisis. The timing at which implementation would need to begin, as well as the question of what further organisational measures would need to be taken in addition to the emergency plan itself and even before its implementation, depend on the existing organisation of the bank, the specific emergency plan in question, and the remaining capital cover." *Expertenkommission* (2010) Final report, 39; see also *Expertenkommission* (2010) Schlussbericht, 40.

822 *Expertenkommission* (2010) Final report, 36–37.

823 See *Expertenkommission* (2010) Schlussbericht, 43–44.

824 See *Expertenkommission* (2010) Schlussbericht, 39; *Expertenkommission* (2010) Final report, 38; For a discussion of this claim, see Chapter III.II.D.e: Invasiveness.

825 See *Expertenkommission* (2010) Schlussbericht, 38, 40.

tation of organisational measures that enhance the general resolvability is to be incentivised by capital rebates.[826]

3. TBTF evaluation

In 2015, the Federal Council met the obligation set down in Art. 52 Swiss Banking Act, by publishing its first evaluation of the TBTF package[827] based on the work of an expert commission under the lead of *Aymo Brunetti.*[828] It generally approved the Swiss TBTF package, in particular its organisational measures, and recommended a number of smaller changes,[829] including introducing the requirement for ex ante separated banks that provide systemically important functions to comply with capital requirements on a standalone basis.[830] In 2017, the Federal Council published its second evaluation, which did not find the need for any changes regarding the organisation requirements.[831]

c. Legal sources

1. Banking Act and Banking Ordinance

The Federal Council submitted the final draft of the Swiss too-big-to-fail package, which took the form of a partial revision of the Banking Act, to

826 See *Expertenkommission* (2010) Schlussbericht, 38.
827 See *Bundesrat* (2015) Bericht Too Big to Fail.
828 See *Expertenkommission* (2014) Schlussbericht; 39–40.
829 See *Bundesrat* (2015) Bericht Too Big to Fail, 1932. The recommendation of the expert group to include a deadline for the implementation of emergency planning (*Expertenkommission* (2014) Schlussbericht, 47–48) was followed and implemented by the Federal Council. See *Bundesrat* (2016) Änderung Bankenverordnung, 1738–1739.
830 See *Expertenkommission* (2014) Schlussbericht, 47; *Bundesrat* (2015) Bericht Too Big to Fail, 1939; Chapter III.V.C.b: Capital and Liquidity].
831 *Bundesrat* (2017) Bericht systemrelevante Banken.

parliament in April 2011.[832] It was approved in September[833] and entered into force in March 2012.[834]

As the adopted TBTF package is based on the expert commission's final report, it is strongly shaped by its recommendations.[835] The legal foundation for organisational measures was set in the fifth section of the Banking Act, which concerns systemically important banks.[836] As the provisions of the Swiss Banking Act can be considered *"relatively vague and open"*,[837] they are complemented by amendments[838] to the Swiss Banking Ordinance.[839] The seventh chapter of the Swiss Banking Ordinance in its current form[840] comprises the relevant provisions for systemically important banks.[841]

2. Finma emergency plan assessment

There is, however, another source not in the form of legislation, whose importance should nevertheless not be underestimated. The Swiss Banking Act and Swiss Banking Ordinance stipulate that affected banks have to prove that their emergency plans are workable[842] and that they took all necessary measures to protect systemically important functions.[843] Finma

832 *Bundesrat* (2011) Botschaft TBTF; *Bundesrat* (2011) Entwurf Bankengesetz.
833 *Bundesversammlung* (2011) Änderung BankG, 1. *Bundesrat* (2012) TBTF Press Release.
834 *Bundesrat* (2012) TBTF Press Release. For a detailed description of the legislative process, see *Hofer* (2014) Structural Reforms, 297.
835 See *EFD* (2012) Kommentar Bankenverordnung, 5; *Bahar/Peyer* (2013) Systemrelevante Banken, 378–379, 390, 418, 429–430; *Hofer* (2014) Structural Reforms, 297.
836 Art. 7–10a Swiss Banking Act. See also *Bundesversammlung* (2011) Änderung BankG.
837 *Hofer* (2014) Structural Reforms, 297.
838 See *Bundesrat* (2012) Botschaft Bankenverordnung; *EFD* (2012) Kommentar Bankenverordnung; *Bundesversammlung* (2012) Genehmigung Bankenverordnung.
839 Verordnung über die Banken und Sparkassen, May 17, 1972 SR 952.02.
840 Verordnung über die Banken und Sparkassen, April 30, 2014, SR 952.02 (Swiss Banking Ordinance).
841 Art. 60–66 Swiss Banking Ordinance.
842 Art. 9(2)(d) Swiss Banking Act; Art. 60(1) Swiss Banking Ordinance.
843 Art. 60(1) Swiss Banking Ordinance.

is tasked to verify this[844] and to mandate all necessary measures, in case they are not.[845]

Even before the first approval of an emergency plan, there is thus a close cooperation between Finma and the affected bank during the assessment of the current status of the emergency plan.[846] While this informal exchange does not necessarily qualify as a legal act on its own, it has to be identified as a source of information of utmost importance for banks regarding the question of how to design their new structure.[847]

Broken down, the process is the following: a bank subject to the TBTF requirement delivers its draft emergency plan to Finma. Finma then assesses the plan and highlights what has to be improved. This happened for the first time in 2015, when *UBS* delivered its emergency plan to Finma*.* *Credit Suisse* delivered its plan in early 2016. In both cases, Finma found the need for amendments due to *"strong operational and financial dependence of the Swiss subsidiaries on their parent companies"*.[848] When assessing, it pays a lot of attention to FSB Guidances.[849] The bank then applies the changes, and reflects them in the new the emergency plan. This process involves a close dialogue.[850]

The process may also result in changes to the structure of the bank: In the case of one affected institute, for instance, the first emergency plan was originally based on a bridge bank concept. Due to multiple reasons, in particular the capital rebate, and after a number of discussions within the

844 Art. 61(1) Swiss Banking Ordinance.

845 Art. 10(2) Swiss Banking Act.

846 Expert Interview, Affected Bank, September 28, 2017. The closeness of cooperation with *UBS* and *Credit Suisse* with regard to the ex ante separation of systemically important functions is also emphasized by Finma in its annual report. See *Finma* (2017) Jahresbericht 2016, 32.

847 The *"critical importance"* of the discussions between Finma and banks is identified by *Schöchli, as "due to the complexity of the matter in the details, neither a law nor an ordinance are able to provide more than a basic framework"*. Own translation from German original, *Schöchli,* Der lange Weg der Notfallplanung, NZZ (June 6, 2012); see also *Hofer* (2014) Structural Reforms, 332.

848 *Finma* (2017) Annual Report 2016, 33; *Finma* (2017) Jahresbericht 2016, 33.

849 Potential FSB Guidances Finma might possibly take into account are, e.g. *FSB* (2014) Key Attributes; *FSB* (2015) Obstacles to Resolvability; *FSB* (2016) Operational Continuity. For a summary of relevant *FSB* Guidances, see *Achermann* (2018) Organisation, 276–278; For a discussion of their legal character, see *Brändli* (2018) Internationale Standards, 47–50.

850 Expert Interview, Affected Bank, September 28, 2017.

bank and with Finma, the bank, however, decided to conduct an ex-ante separation.[851]

In the author's opinion, the powers of Finma in combination with the design of the process described above expectably lead to extensive steering capabilities for Finma. Even if it did not explicitly express its wishes, it would be able to significantly regulate banks' emergency plans and structures only by identifying selective needs for improvement. The assessment process should thus be considered a major source of information and regulation.

D. Results

a. Expert commissions

1. National focus

All three countries' legislation is based on the recommendations of expert commissions. Both the UK and Switzerland formed domestic expert commissions that drew up recommendations for the national banking sector. Germany, in contrast, based its legislation on the Liikanen Report,[852] which was formed on an EU level and whose recommendations were prepared with a view of a union-wide bank structural reform.

The German approach is somewhat peculiar: on the one hand (similarly to France)[853] it is based on a common EU expert commission and not on a tailor-made national commission focussing on the specialties of the German banking market. This could theoretically be argued for as having the advantage of a certain harmonisation of EU banking markets. On the other hand however, Germany did not await a common EU approach but decided for a solo run, considerably deviating from the EU recommendations.[854] Germany therefore neither profits from taking into account the

851 Expert Interview, Affected Bank, September 28, 2017.
852 For a detailled discussion of the Liikanen Report, see Chapter II.I: Liikanen Report.
853 For a short description of France's ring-fencing regime, see *Lehmann* (2014) Ring-Fencing, 8–10.
854 See also *Altvater/Von Schweinitz* (2013) Trennbankensystem, 633 (noting that national solo runs entail massive adverse competitive distortions within the internal market).

specialties of the German banking market, nor from a harmonisation due to common union-wide requirements.

2. Composition

The expert commissions themselves differ in their composition, in particular regarding the question whether or not banks are represented in the commissions. The UK expert group comprised five individuals from various fields of profession. While some of the members held senior positions in banking before joining the expert group, banks were not directly represented through group members.[855] The High Level Expert Group of the Liikanen Report consisted of 11 individuals from various fields. Banks were not directly included in the expert group.[856] The Swiss expert group, in contrast, comprised 14 members, of which two were direct representatives of banks.[857]

Including representatives of the affected banks has advantages and disadvantages: a key advantage is that such representatives provide up-to-date practical knowledge that is likely to benefit the resulting recommendations. They furthermore may be better suited to assess the feasibility of certain measures and to address questions that arise during implementation. In addition, it makes a good impression if measures agreed on are supported by the affected parties and not just imposed from above. At the same time, these members are subject to a considerable conflict of interest. As large banks have almost unlimited resources to support their members of the expert commission, including such members into the formal expert commission could shift a suboptimal amount of influence towards them. The question arises whether it is more expedient to place more weight on consultations than to include direct representatives in the expert commission.

855 For a short description of the members of the UK Vickers Commission, see *Gribben*, 'Wonderkid' and old girl form part of Sir John Vickers' Banking Commission team, The Telegraph (April 11, 2011); *ICB* (2011) Vickers Report, 19.

856 For a short descripition of the members of the High Level Expert Group, see *Bank of Finland* (2012) Expert Group; *HLEG* (2012) Liikanen Report.

857 See *Expertenkommission* (2010) Schlussbericht, 65–66 (they represented *UBS* and *Credit Suisse*).

b. Legal sources

1. Primary, secondary legislation, guidance

Comparing the legal sources, one can conclude that it seems to be hardly possible to address all relevant questions of ring-fencing in one legal act. The most extensive law was adopted in the UK. Part 9B of the FSMA 2000 on ring-fencing, which is included in the Banking Reform Act 2013, has almost 30 provisions.[858] The German Banking Act's main provisions on ring-fencing, in contrast, amount to two provisions.[859] In Switzerland primary legislation is rather short, comprising five provisions, of which only two relate to the emergency plan.[860]

While in both Switzerland and the UK secondary legislation is used to complement the respective acts, in Germany no secondary legislation has been adopted. The BaFin's Interpretative Guidance,[861] however, attempts to fill that gap, clarifying issues and ambiguities and in some instances forcefully reinterpreting provisions of the German Ring-fencing Act.[862]

Switzerland stands out, as it merely stipulates the functional goal of the continuation of systemically important activities and does not provide specific requirements on how to do so. This legislative technique, which is argued for with the strict subsidiarity principle, naturally requires much less detailed legislation. It, however, results in wide discretion of the regulator. For this reason, Switzerland's emergency plan assessment process[863] has to be underscored as an important legal source for banks.

2. Principle of legality

One major concern, with regard to the executive authority outlining key parts of the legal requirements, is the possible violation of the principle of

858 See Part 9B FSMA 2000.
859 See § 2, § 25f German Banking Act. The limited number of provisions, however, is offset by their length.
860 See Section 5 Swiss Banking Act; FSMA 2014 Order No. 1960, FSMA 2014 Order No. 2080, FSMA 2015 Regulations No. 547; FSMA 2016 Order No. 1032.
861 *BaFin* (2016) Auslegungshilfe; *BaFin* (2016) Interpretative Guidance.
862 A good example is the exemption of fully collateralised lending and guarantee business with hedge funds or AIFs from the excluded activities. See Chapter III.IV.B.a.1: Excluded activities.
863 See Chapter III.II.C.c.2: Finma emergency plan assessment.

legality.[864] It is beyond the scope of this dissertation to discuss the legal foundation of the principle in the respective countries and the question whether there are such violations. However, it is a fundamental understanding of a state under the rule of law, that administrative action should be based on and determined by the law. Once this basis or determination becomes questionable, a violation of the principle of legality is conceivable. The Swiss legislator tried to prevent such a violation with the need for parliamentary approval for the first sets of Ordinances specifying the Swiss Banking Act.[865] In the UK as well, secondary legislation was approved by Parliament.[866] Most problematic in this regard, however, remains Switzerland,[867] in particular due to the far-reaching powers of Finma,[868] and Germany, due to the vagueness of the German Ring-fencing Act[869] and missing secondary legislation.

3. Transparency

Another concern is the lack of transparency. Examining all three jurisdictions' legislation on ring-fencing as an outside party, one quickly learns that the easiest to grasp is the UK. This is because it uses the hierarchy of primary legislation, secondary legislation, interpretation guidance[870] most consequently. All these legal sources are publicly accessible and the goals articulated by the Vickers Report are pursued rather persistently. This has allowed for a public discussion of issues related to ring-fencing.

As discussed above, secondary legislation is missing in Germany. Only the Interpretative Guidance partially concretises the considerably vague provisions of the German Ring-fencing Act. What is important to understand regarding the Interpretative Guidance is that it was created in close

864 See *Hofer*'s critique of the Swiss solution regarding the principle of legality, *Hofer* (2014) Structural Reforms, 430–432.
865 Transitional provision of the amendment of September 30, 2011 Swiss Banking Act; see *Hofer* (2014) Structural Reforms, 298, 431.
866 See Sec. 142Z FSMA 2000.
867 See the critique of *Hofer*, *Hofer* (2014) Structural Reforms, 298, 430–432.
868 See Chapter Chapter III.II.C.c.2: Finma emergency plan assessment;.
869 A good example for the vagueness of the German Ring-fencing Act are the provisions on the independence of the financial trading entity. See Chapter III.V.B.a: Financial trading institution.
870 See Chapter III.II.A: United Kingdom.

cooperation with affected banks and interest groups.[871] Apart from a subsequent public consultation, these discussions are not publicly available. As the Interpretative Guidance by far does not address all questions arising from the German Ring-fencing Act,[872] transparency is not fully ensured.

The Swiss solution brings with it as well the burden of a considerable lack of transparency.[873] For an outside party, many obligations for affected banks are hard to grasp. This will be demonstrated in particular with regard to the question whether investment banking activities have to be separated from systemically important functions[874] and regarding the height of the fence:[875] In some areas, factual requirements for banks only derive from hints in the legislative materials or other sources of information.[876] To comprehend the Swiss solution, it does not suffice to take a look at the legislative provisions. An outside party has to dig into legislative materials and official statements, look at measures that affected banks implemented in response to TBTF, and to acquire information on the Finma's review process. The discussion of the structural reform measures thus takes place to a large extent between Finma and the affected banks and is therefore not easily available for outside parties.

c. Chronology

Comparing the preparatory work in the countries of interest one finds that, from a chronological point of view, the first country in which an ex-

871 This is explicitly stated by BaFin, see *BaFin* (2015) Begleitschreiben Konsultation Auslegungshilfe.
872 Among others, the Interpretative Guidance also does not comprehensively set out how the independence of the financial trading institution is to be ensured. See Chapter III.V.B.a: Financial trading institution.
873 See also *Hofer* (2014) Structural Reforms, 430–432, 450–452 (in particular his critique of (i) the risk of the introduction of more stringent requirements than recommended by the expert commission; and of (ii) the statements in legislative materials hinting the need for a separation of commercial banking and investment banking).
874 See Chapter III.IV.C.b: non-ring-fenced bodies.
875 See Chapter III.V.C: Switzerland.
876 See Chapter III.IV.C.a: Ring-fenced body; see also *Hofer* (2014) Structural Reforms, 431 (criticising the *"tendencies within official statements to aim at implementing some sort of a ring-fencing requirement"*).

pert commission was set up was Switzerland, in November 2009.[877] The Swiss expert commission already published its final report in September 2010.[878] This was just shortly after the UK Government had formed the Vickers Commission, in June 2010.[879] The Swiss expert commission's report thus only mentions the formation of the Vickers Commission as a marginal note.[880] The fact that Switzerland was that far ahead in tackling too-big-to-fail is an important detail in the comparison of the respective jurisdictions and considerably shaped the character of the Swiss solution.

The Vickers Commission published its interim report in April 2011[881] and the final report in September 2011.[882] This coincides with the adoption of the provisions on the emergency plan of the Swiss Banking Ordinance in Switzerland in June 2012.[883]

The EU's expert commission, on whose recommendations the German Ring-fencing Act is based, was set up February 2012[884] and published its final recommendations in October 2012.[885] The German Government introduced the draft bill in March 2013.[886]

In conclusion, it can be found that in the UK and Switzerland, motivation for structural reform of banking arose relatively shortly after the beginning of the global economic crisis. In Germany, it arose a great deal later. This is remarkable, as all three countries had to intervene massively through packages of aid for banks and had to witness the existence of national champions endangered.[887]

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877 See *EFD* (2009) Expertenkommission Medienmitteilung, 1; Chapter III.II.C: Switzerland.
878 *Expertenkommission* (2010) Schlussbericht, 1.
879 *ICB* (2011) Interim Report, 11; Chapter III.II.C: Switzerland.
880 *Expertenkommission* (2010) Schlussbericht, 100.
881 *ICB* (2011) Interim Report.
882 *ICB* (2011) Vickers Report.
883 See *Bundesrat* (2012) Botschaft Bankenverordnung, 6669.
884 *HLEG* (2012) Liikanen Report, I; see Part II: Legal Developments on EU Level.
885 *HLEG* (2012) Liikanen Report.
886 *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 1.
887 See *Blundell-Wignall/Wehinger/Slovik* (2010) The Elephant in the Room, 14–15 (noting that the UK, Germany and Switzerland together with the U.S. had to put together "*massive packages of aid […] on an unprecedented scale*" for too-big-to-fail banks in trouble).

d. Influence

The revision of the Swiss Banking Ordinance seems to be influenced by the emerging international discussions on bank separation, in particular by the recommendations of the Vickers Commission. This is hardly surprising, as the publication of the Vickers Commission's interim report in April 2011 was the focus of a lot of international attention.

The influence is especially visible in the legislative materials referring to the ex ante separation of systemically important functions as matching *"the example"*[888] of the UK Vickers Commission ring-fencing model.[889] The Swiss Banking Ordinance also seems to become significantly stricter, as it articulates explicitly the need to implement measures ex ante. This is insofar a first-time event, as the Swiss Banking Act referred only to planning.[890]

Another potential area in which Swiss legislation may have been influenced by international developments are the amendments following the Federal Council's first evaluation of the TBTF package in 2015.[891] The requirement for ex ante separated banks, which provide systemically important functions to comply with capital requirements on a standalone basis,[892] considerably assimilates Swiss organisational measures to other structural reform initiatives.

e. Invasiveness

Organisational requirements for banks are highly invasive and affect fundamental rights. In this regard it is interesting that there are considerable differences in the perception of the encroachment on fundamental rights and in the sympathy with the affected banks.

In the UK, a fundamental right encroachment is neither recognized by the Vickers Commission nor by the Government.[893] The German Government's proposal does not identify an encroachment on fundamental rights

888 Own translation from German original, see *EFD* (2012) Kommentar Bankenverordnung, 10 Fn 12.
889 *EFD* (2012) Kommentar Bankenverordnung, 10 Fn 12; see also *Hofer* (2014) Structural Reforms, 329.
890 This will be shown in Chapter III.IV.C.a.1: Ex ante separation.
891 See *Bundesrat* (2015) Bericht Too Big to Fail.
892 See *Expertenkommission* (2014) Schlussbericht, 47; *Bundesrat* (2015) Bericht Too Big to Fail, 1939; Chapter III.V.C.b: Capital and Liquidity.
893 See *HM Treasury* (2013) Impact Assessment, para 106.

either.[894] The Swiss expert commission and Government, in contrast, acknowledge the invasiveness of organisational measures. They stress the importance of the least invasive possible approach, emphasizing that structural measures therefore *"require particular justification"*.[895]

As set out in the chapter above, this is to be achieved through a subsidiarity principle and through requiring only a minimum goal.[896] The central idea is that *"functional requirements are significantly less of a burden than specific requirements"*. Finma may only impose structural requirements if a bank fails to prove it is *"appropriately organised"* and has reached the goal of maintaining systemically important functions.[897]

Exploring this central idea, one has to first ask why functional requirements are less burdensome than specific requirements. The idea is that the stipulation of a goal is less burdensome than to describe how an affected party has to reach it. This is because the party then can decide on its own how to do so.

This idea is certainly true, as long as (i) there is a variety of ways to reach a certain goal and as long as the goal (ii) can transparently be reached. Such a transparency can be assumed e.g. if a third party could without doubt consider a certain goal as reached. The idea, however, can be doubted once there are not many, or even just one certain way to reach a goal, or once it becomes non-transparent whether a goal is reached.

As will be demonstrated, the Swiss legal requirements do not allow for many ways of reaching the goal of the continuation of systemically important functions after all. There is, for example, hardly an alternative to an ex ante separation of systemically important functions.[898] It is furthermore hardly thinkable to include certain investment banking activities into such an entity.[899]

894 The legislative materials to the German Ring-fencing Act discuss the encroachment on fundamental rights with regard to other provisions (namely provisions on recovery and resolution) but not with regard to the ring-fencing provisions. From this follows that that the German Government acknowledges no human right violations with regard to § 3 and § 25f German Banking Act. See *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 36.

895 See *Expertenkommission* (2010) Final Report, 38. See also *Bundesrat* (2011) Botschaft TBTF, 4731.

896 See Chapter III.II.C.b.2: Subsidiarity principle.

897 *Expertenkommission* (2010) Final Report, 38.

898 See Chapter III.IV.C.a.1: Ex ante separatiion.

899 See Chapter III.IV.C.b: Non-ring-fenced body.

The transparency of the goal can also be called into question. The Swiss Banking Ordinance stipulates that an affected bank has to prove that the systemically important functions can be continued in case of imminent insolvency based on *"common experience"* and the *"current state of knowledge"*.[900] The legislative materials to the Swiss Banking Act note that the subject of evidence is (i) the prediction of the efficacy of the organisational measures of the emergency plan and (ii) the implementation of certain preventive organisational measures as required by the emergency plan.[901] Regarding the former, proof can be established if the affected bank can demonstrate that measures reach the goal *"with a high level of probability"* based on the *"current state of knowledge"*.[902] Regarding the latter, namely the ex ante implementation of necessary measures, a high standard of proof is required concerning whether the respective measures are implemented comprehensively.[903]

Even though the expert commission's final report and the legislative materials to both the Swiss Banking Act and the Swiss Banking Ordinance acknowledge the difficulties in establishing such a proof and attempt to solve this problem, there remains considerable uncertainty for affected banks regarding their ability to prove that the continuation of systemically important activities is ensured.

Drawing from the above, one finds that there are considerable differences in the acknowledgement of the invasiveness of structural requirements for banks. While in Germany and the UK there seems to be the tendency to ignore this problem, it is highlighted in the Swiss discussion which must be appreciated. At the same time, it has to be pointed out that the principle of subsidiarity and the functional requirements mitigate the invasiveness only if (i) there is more than one way to reach a goal and as (ii) this goal can transparently be reached. Both can be somewhat reasonably questioned. The advantage of functional requirements may therefore be smaller than originally planned, in particular when taking into account that other jurisdictions also allow for a degree of flexibility in the structure of an affected bank.[904]

900 Own translation from German orginal, see Art. 60(2) Swiss Banking Ordinance.

901 *Bundesrat* (2011) Botschaft TBTF, 4760.

902 Own translation from German original, see *Bundesrat* (2011) Botschaft TBTF, 4760; see also *Schiltknecht* (2010) "Too Big to Fail", 443; *EFD* (2012) Kommentar Bankenverordnung, 10; *Expertenkommission* (2010) Schlussbericht, 40, 82.

903 See *Bundesrat* (2011) Botschaft TBTF, 4760.

904 This is visible e.g. in activities that can be provided by both the ring-fenced entities and the non-ring-fenced entities (see Chapter III.IV.A.c: Summary; Chapter

III. Who Is Subject to the Fence?

This chapter addresses the question of who is subject to the fence, examining the scope of the jurisdictions' structural reforms. It first explores the personal scope, then turns to thresholds and exemptions and finally identifies affected banks.

A. United Kingdom

The scope of the UK's ring-fencing regime is centred around so called "core activities". All UK institutions that carry out these activities have to be ring-fenced and are thus called "ring-fenced bodies".[905]

a. Personal scope

The FSMA 2000 only identifies accepting deposits as a core activity but authorizes the Treasury (i) to add other activities or (ii) to exempt deposit taking under certain circumstances.[906]

The Treasury has not made use of the authorization to add other core activities. However, it specified deposit-taking, which is not a core activity and therefore does not require a ring-fence. It does so by introducing a negative delimitation: only the acceptance of "core deposits" is a core activity, all other forms of deposit-taking do not require a ring-fence. Core deposits are all deposits held by an UK deposit-taker,[907] i.e. a legal entity incorporated in the UK[908] in an EEA account,[909] i.e. an account opened at a branch in an EEA state.[910] That means that only banks based in the UK are affected. Branches of banks which are based outside the UK are not affect-

III.IV.IV.B.c: Summary); Banks in the UK, for instance, have also chosen very different models of ring-fencing, see Chapter III.IV.A.d: Affected banks.

905 See Sec. 142A(1) FSMA 2000.

906 Sec. 142B(2)-142B(5) FSMA 2000.

907 Art. 2 FSMA 2014 Order No. 1960.

908 See Art. 1 FSMA 2014 Order No. 1960; Art. 2(2)(d) FSMA 2016 Order No. 1032.

909 Art. 2(2) FSMA 2014 Order No. 1960.

910 Art. 2(3)(b) FSMA 2014 Order No. 1960.

ed.[911] This applies particularly to branches of EU-based banks.[912] Furthermore, it means that accounts opened with UK based banks in subsidiaries outside the EEA, say in Brazil, Switzerland[913] or South Africa, do not have to be included in a ring-fenced body.[914]

Exempted are accounts that are held by, among others, one or more relevant financial institutions, eligible individuals or qualifying organisations. They are not considered core deposits.[915] The Explanatory Notes to the Banking Reform Act 2013 mention high net-worth individuals and large corporate entities as examples for a possible exemption.[916] It is apparent that this provision aims at exempting parties that, on the one hand, can be regarded as sophisticated investors and that are not particularly in need of protection and that, on the other hand, possibly demand services that exceed the means of a ring-fenced body.[917]

It is important to underscore that these exemptions from the definition of “core deposits”, do not lead to the obligation to bank only with non-ring-fenced entities. On the contrary, these parties are allowed to bank outside the ring-fence, but can nevertheless choose to bank with a ring-fenced body.[918]

911 See Explanatory Note to the FSMA 2016 Order No. 1032, 9 (mentioning this as the goal of a modification of the original Order from 2014); see also *FSB* (2014) Structural Banking Reforms, 7.

912 Due to EU passporting they do not have to fulfil other requirements. See *FSB* (2014) Structural Banking Reforms, 8 (setting out requirements for non-EEA-based banks).

913 For branches of foreign banks in Switzerland, see *Finma*, Branches of Foreign Banks, https://www.finma.ch/en/authorisation/banks-and-securities-dealers/getting-licensed/branches-of-foreign-banks/.

914 See *FSB* (2014) Structural Banking Reforms, 7.

915 Art. 2(2) in conjunction with Art. 3–5, 8–10 FSMA 2014 Order No. 1960 as amended by Art. 2(3)-(6) FSMA 2016 Order No. 1032.

916 Explanatory Notes to the Banking Reform Act 2013, para 28.

917 This is also suggested in statements regarding high net-worth individuals and small and medium sized companies in the white paper of the UK Government, see *HM Treasury* (2012) Banking Reform, 16–17.

918 This is explained well in Explanatory Memorandum to FSMA 2014 Order Nr. 1960, Sec. 7.8 – 7.9.

b. Threshold and exemptions

As it is not the intention of the legislator to require all UK deposit-takers to implement a ring-fence,[919] he has authorized the Treasury to stipulate exemptions,[920] which most importantly take the form of thresholds for core deposits:[921] all banks with core deposits of less than 25 billion £ do not have to ring-fence. For banking groups, this is calculated by adding up the core deposits of each group entity.[922]

Another important reduction of scope is set down in Sec. 142A(2)(a) FSMA 2000. It exempts building societies[923] from the obligation to ring-fence. This is especially interesting, because (i) *Nationwide*, a building society, is among the UK's biggest lenders[924] and because (ii) the Vickers Report recommended to include building societies, due to the many similarities to banks and the majority of them being protected by deposit insurance.[925] The Explanatory Notes justify the exemption with the already "*significant restrictions*" for building societies based on the Building Societies Act 1986.[926] The Banking Reform Act 2013, however, authorises the

919 See Explanatory Notes to the Banking Reform Act 2013, para 27.

920 Sec. 142A(2)-(3) FSMA 2000.

921 Art. 11, 12 FSMA 2014 Order No. 1960; The introduction of a threshold is one of the main divergences from the Vickers Report. The Vickers Commission criticised the introduction of thresholds for several reasons, among them that complex small banks could still pose considerable difficulties with resolution and that risks from capital markets could still be transmitted to retail banking in case of a large number of banks operating below the thresholds. In addition, there was only a "minimal" impact of ring-fencing rules on small banks, as most of them do not provide excluded activities anyway. See *ICB* (2011) Vickers Report, 39; see also *De Vogelaere* (2016) Bank Structure Reforms, 22.

922 See Art. 11, 12 FSMA 2014 Order No. 1960.

923 For a short description of building societies, see Chapter III.I.A.b: Number of banks and their nature.

924 See Chapter III.I.C.b: Number of banks and their nature.

925 See *ICB* (2011) Vickers Report, 85, 109, 233.

926 See Explanatory Notes to the Banking Reform Act 2013, para 89. While the Explanatory Notes only mention restrictions based on the Building Societies Act 1986, the Vicker's report mentions restrictions of the Building Societies Act 1997 (Building Societies Act 1997, c. 32), namely restrictions on transactions involving derivatives (*ICB* (2011) Vickers Report, 60). These restrictions also contribute to the decision to exempt building societies from the ring-fencing regime.

Treasury to make provisions about ring-fencing for building societies, to align the principles of their regime with the one for ring-fenced bodies.[927]

Furthermore, the Treasury clarifies that UK deposit-takers are not ring-fenced bodies if they carry out the regulated activity of effecting or carrying out contracts of insurance as principal.[928]

c. Affected banks

In summary, it can be established that UK ring-fencing rules apply to all banks incorporated in the UK that accept core retail deposits in any EEA state exceeding 25 billion £ in total. According to the *Proudman*, this applies to the five largest UK banking groups,[929] namely *Barclays*, *HSBC*, *Lloyds*, *RBS* and *Santander UK*,[930] as well as some of their smaller competitors.[931] Due to the limited size of its UK retail banking operations, *Standard Chartered* does not fall within the scope of the rules.[932] It is thus the only UK G-SIB that does not have to establish ring-fence.

B. Germany

a. Personal scope

The scope of the German ring-fencing rule is set down in § 3(2) German Banking Act. Its addressees are twofold: it applies to all (i) CRR credit institutions and to all (ii) companies that belong to a group of institutions, a financial holding group or mixed financial holding group or a financial conglomerate to which a CRR credit institution belongs.[933]

CRR credit institutions are defined in § 1(3d) German Banking Act, which refers to Art. 4(1)(1) of the EU's Capital Requirements Regulation

927 See Sec. 7 Banking Reform Act 2013; Explanatory Notes to the Banking Reform Act 2013, para 89.
928 See Art. 11(1)(a) FSMA 2014 Order No. 1960.
929 See *Proudman* (2017) Putting Up a Fence, 3.
930 See *Binham/Dunkley,* Regulators get ready to authorise 'ringfenced' UK banks, Financial Times (August 19, 2017).
931 See *Proudman* (2017) Putting Up a Fence, 3.
932 *Nahmias* (2016) UK Banks, 5.
933 § 3(2) German Banking Act; See also *BaFin* (2016) Interpretative Guidance, 1–2.

(CRR).[934] CRR credit institutions can simply be understood as credit institutions that are active in both deposit-taking and lending.[935] This means that credit institutions that are active only in one of these businesses – say they only accept deposits or other repayable funds but do not grant credits for their own account – are not CRR credit institutions and thusly do not fall within the scope of German ring-fencing provisions.[936]

Companies of a group to which a CRR credit institution belongs are also within the scope. Included are (i) a group of institutions, (ii) a financial holding group or (iii) mixed financial holding group or (iv) a financial conglomerate.[937] The first three are defined in § 10a German Banking Act. According to *Möslein,* the purpose of the provision is simply to ensure that the whole group (of which a CRR credit institution is a part) is within the scope of the ring-fencing provisions.[938]

The interpretation of the financial conglomerate, however, is not as clear. For a definition of financial conglomerates, the German Banking Act refers to § 1(2) of the German Act on the Supervision of Financial Conglomerates.[939] A financial conglomerate according to § 1(2) German Act on the Supervision of Financial Conglomerates can best be understood as a group (or subgroup) whose companies both provide banking or investment services and insurance services.[940] *Möslein* legitimately concludes from the comprehensive definition of groups with a CRR credit institu-

934 Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, OJ L 176, 27.6.2013, p. 1–337; § 1(3d) German Banking Act in conjunction with Art. 4(1)(1) CRR.

935 See Art. 4(1)(1) CRR; see also *Schwennicke* (2016) Verbotene Geschäfte, 196; In greater detail *Schäfer* (2016) § 3 Verbotene Geschäfte, para 33. For a discussion of the differences between the definition of credit institutions in German and EU law, see *Schäfer* (2016) § 1 Begriffsbestimmungen, para 9–16.

936 See *Schäfer* (2016) § 1 Begriffsbestimmungen, para 14; See also *Möslein* (2013) Spartentrennung, 401; *Schwennicke* (2016) Verbotene Geschäfte, 196.

937 § 3(2) German Banking Act; See also *BaFin* (2016) Interpretative Guidance, 1–2.

938 *Möslein* (2013) Spartentrennung, 401. This is also indicated by the Explanatory Notes to the draft bill, which emphasize that the whole endeavour serves the intention of the legislator to ensure the solvency of CRR credit institutions. See *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 27–28.

939 § 1(20) German Banking Act in conjunction with § 1(2) Finanzkonglomerate-Aufsichtsgesetz, June 27, 2013, Bundesgesetzblatt Part I, 1862 (German Act on the Supervision of Financial Conglomerates).

940 See *BaFin*, Supervision of financial conglomerates and groups, (January 01, 2016), https://www.bafin.de/EN/Aufsicht/VersichererPensionsfonds/Finanzkon glomerateGruppen/gruppenaufsicht_artikel_en.html.

tion that ring-fencing provisions also apply to insurance companies whose groups include a CRR credit institution.[941]

The BaFin, in contrast, clarified in its Interpretative Guidance that, concerning insurance companies, it interprets § 3(2) German Banking Act restrictively. In line with the above, it argues that the provision is to be understood within the meaning of § 10a(1) German Banking Act. It, however, does not mention § 1(20) German Banking Act and the German Act on the Supervision of Financial Conglomerates, and particularly argues that "*it would mean a breach of the system*" to apply the ring-fencing provisions to "*a group of companies which are otherwise not subject to the requirements of banking supervision law*". Ring-fencing provisions therefore do "*not apply to insurance undertakings which belong to a financial conglomerate*".[942]

With regard to the geographic scope, the ring-fencing provisions include all CRR credit institutions that require a licence according to § 32(1) German Banking Act, due to their business activities in Germany. This includes CRR credit institutions domiciled outside the EEA, which operate in Germany via a branch, other physical presence or cross-border provision of services. In each case, however, this is limited to the German business.[943] For EEA- based CRR credit institutions that fall within the EU's passport regime, both the cross-border provision of services and operating a branch in Germany are excluded from the scope of the ring-fencing provisions.[944] Subsidiaries in Germany, in contrast, are subject to the rules.[945]

941 See *Möslein* (2013) Spartentrennung, 401; Approvingly also *Schwennicke* (2016) Verbotene Geschäfte, 196.
942 See *BaFin* (2016) Interpretative Guidance, 2–3. While the BaFin's interpretation of the scope of § 3(2) German Banking Act is understandable from a teleological and systematic point of view, it is a restrictive interpretation against the wording of the law.
943 See *BaFin* (2016) Interpretative Guidance, 3–4.
944 See *BaFin* (2016) Interpretative Guidance, 3–4. BaFin argues that § 3(2)-(4) are not mentioned in § 53b(3) sentence 1 no.1, a provision that ensures that branches of EEA institutions (that would otherwise be exempted due to the passporting regime) can be regulated with regard to certain provisions, to safeguard public interest. See *BaFin* (2016) Interpretative Guidance, 3–4. See also *Lehmann* (2014) Extraterritorial Effects, 307–308.
945 See *Lehmann* (2014) Extraterritorial Effects, 308.

b. Threshold

The addressees set out above are only subject to ring-fencing if they exceed certain thresholds. § 3(2) stipulates an (i) absolute threshold and a (ii) relative threshold.[946] The legislator set down the thresholds with a view to the Liikanen Report,[947] however, departed from it in a number of aspects.[948]

The absolute threshold takes into account the total trading portfolio and liquidity reserves of a firm on the balance sheet date of the previous business year. If they exceed 100 billion €, the addressee falls within the scope of the provisions.[949] This provision has been criticised by a number of authors, as the separation of certain risky activities then applies no matter what their proportion is in relation to the total trading activities, which do not have to be separated. It is indeed a major deviation from the Liikanen Report.[950]

This is particularly inadequate for reaching the objectives of the regulation, taking into account that the banks themselves do not determine the amount of liquidity reserves.[951] For example, a banking group that provides substantial market making services and holds large liquidity reserves due to regulatory requirements is potentially subject to ring-fencing, even though risky activities (that then have to be separated) only account for a small amount of trading activities.

The relative threshold is met (i) if the total trading portfolio and liquidity reserves exceed 20% of the institute's balance sheet (ii) and the respec-

946 *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 41.

947 See *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 41; *Van Kann/Rosak* (2013) Regierungsentwurf des Trennbankengesetzes, 1476; *Schwennicke* (2016) Verbotene Geschäfte, 196.

948 See *Schelo/Steck* (2013) Trennbankengesetz, 238 (emphasizing deviations in the relative threshold); *Schwennicke* (2016) Verbotene Geschäfte, 197; *Schaffelhuber/Kunschke* (2015) Trennbankengesetz, 394–395.

949 § 3(2) German Banking Act; *Stubbe* (2016) Trennbanken, 2.

950 See *Brandi/Gieseler* (2013) Entwurf des Trennbankengesetzes, 746 (criticising that, in contrast to the Liikanen Report, the draft bill does not stipulate assessment of the ratio of risky trading activities to total trading activities as a second step. Due to the focus on all trading activities, ring-fencing can thus become obligatory, even though an institute provides activities that have to be separated only on on limited scale.); *Schelo/Steck* (2013) Trennbankengesetz, 239; *Schaffelhuber/Kunschke* (2015) Trennbankengesetz, 394–395; *Schwennicke* (2016) Verbotene Geschäfte, 197.

951 See *BaFin* (2016) Interpretative Guidance, 6.

tive institute's balance sheet in total amounts to at least 90 billion € on the balance sheet date in the last three business years.[952]

c. Affected banks

In summary, banks and companies of a group which a bank is part of, fall within the scope of the ring-fencing provisions if they (i) have substantial trading operations of over 100 billion € or (ii) if their trading operations exceed 20% of a total balance sheet of at least 90 billion €.

In 2016, BaFin noted that approximately 11 banks fall within the scope of the German Ring-fencing Act.[953] This corresponds with the response of the German Government to the query of a member of the Bundestag.[954] Germany's only G-SIB, *Deutsche Bank,* is affected by the Act.[955]

C. Switzerland

The scope of Switzerland's organisational measures is shaped by the scope of the Swiss TBTF package: it addresses systemically important banks. The central provisions are therefore Art. 7 Swiss Banking Act, which clarifies the character of such institutes, and Art. 8 Swiss Banking Act, which sets down criteria for systemic importance and their determination.[956]

a. Personal scope

Art. 7(1) Swiss Banking Act defines systemically important banks as (i) banks, financial groups and bank-dominated financial conglomerates, (ii) whose failure would do considerable harm to the Swiss economy and the Swiss financial system.[957]

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952 See § 3(2) German Banking Act; *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 41; rather misleading *Stubbe* (2016) Trennbanken, 2.

953 *Stubbe* (2016) Trennbanken, 10.

954 *Deutscher Bundestag* (2016) Antworten der Bundesregierung, 42–43.

955 *Deutsche Bank* (2017) 2016 SEC Form 20-F, 25.

956 Art. 7 Swiss Banking Act.

957 Art. 7(1) Swiss Banking Act. The translation follows the English version of draft of the *Expertenkommission* (*Expertenkommission* (2010) Final Report, 65). The

The first condition for an entity to be considered systemically important is therefore that it is a bank, a financial group or a bank-dominated financial conglomerate within the meaning of the Swiss Banking Act.[958]

The assessment of systemic importance thus includes not just a single institute but the whole group. That allows for more flexibility because systemic importance can be determined not just for a single institute but also for a group of non-systemically important institutes that display systemic importance only as a group.[959]

While *Bahar/Peyer* rightly point out that the reduced scope excludes other financial intermediaries such as (pure) insurance companies, the exclusion of securities dealer is strictly speaking not so clear.[960] Furthermore, it can be assumed that in case of bank-dominated financial conglomerates, which can be understood as banking groups with significant insurance operations,[961] insurance operations may also influence the determination of systemic importance.[962]

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original German draft was transposed verbatim. See *Expertenkommission* (2014) Schlussbericht, 67; *Bahar/Peyer* (2013) Systemrelevante Banken, 397.

958 See Art. 1, Art. 3(c)(1)-(2) Swiss Banking Act.

959 See *Bundesrat* (2011) Botschaft TBTF, 4744; *Bahar/Peyer* (2013) Systemrelevante Banken, 372.

960 See *Bahar/Peyer* (2013) Systemrelevante Banken, 373. As mentioned above, Art. 7(1) includes financial groups, which are defined in Art. 3c(1). The provision, however, also applies to financial groups of which no bank but only a securities dealer is part of. A literal interpretation of Art. 7(1) thus also includes financial groups without a bank. Due to the focus on banking activities in the determination of systemic importance set down in Art. 8, a systematic interpretation and teleological interpretation may exclude financial groups without a bank. However, as securities dealer also hold protected deposits within the meaning of Art. 37h Swiss Banking Act, a financial group could in theory fulfil the criterion of Art. 8(2)(b). (See Art. 36a Bundesgesetz über die Börsen und den Effektenhandel, 954.1; *Bundesrat* (2002) Botschaft Bankengesetz, 8107; *Winzeler* (2013) Einlagensicherung, 758–759, 762–763). This will remain likely theoretical, with securities dealers only in charge of 0.04% of protected deposits in 2015. *Esisuisse* (2017) Jahresbericht 2016, 7.

961 See *Maurenbrecher/Kramer* (2013) Geschäftsbetrieb, 145–146.

962 This could happen via the criteria of Art. 8(2), namely the relationship of balance sheet and Swiss GDP (lit. c) and the risk profile (lit. d).

b. Threshold and exemptions

Art. 8(2) Swiss Banking Act stipulates the factors that determine whether a bank is of systemic importance, namely its (i) size, (ii) interconnectedness with the financial system and the economy, and the (iii) short-term substitutability of its services.[963] These three factors are not cumulative, but can each on their own determine a bank as systemically important.[964]

Art. 8(2) Swiss Banking Act has to be interpreted in conjunction with Art. 7(1) Swiss Banking Act, so that together with the satisfaction of one of the factors of Art. 8(2)(i)-(iii) Swiss Banking Act, it has to be assessed whether a failure of the bank would do considerable harm to the Swiss economy and the Swiss financial system.[965] To clarify the factors of Art. 8(2)(i)-(iii) Swiss Banking Act, Art. 8(2)(a)-(d) Swiss Banking Act set down list of criteria that indicate systemic importance. As the list is non-exhaustive, other non-specified criteria can as well be included in an assessment.

The first criterion is the market share of systemically important functions a specific bank is in charge of.[966] It refers to Art. 8(1) Swiss Banking Act that deems functions systemically important if they are indispensable for the Swiss economy and cannot be substituted in the short term. Art. 8(1) Swiss Banking Act underscores the domestic deposits and loans business and payment transactions,[967] but is non-exhaustive.[968]

According to *Bahar/Peyer*, a competent authority methodically has to assess every function of which the specific bank has a considerable market share, with regard to whether or not it has to be considered systemically important.[969]

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963 Art. 8(2) Swiss Banking Act. The translation follows the English version of the draft of the *Expertenkommission* (*Expertenkommission* (2010) Final Report, 65). The German version was transposed almost verbatim. See *Expertenkommission* (2014) Schlussbericht, 67.

964 See *Expertenkommission* (2014) Schlussbericht, 76; *Bundesrat* (2011) Botschaft TBTF, 4746; *Bahar/Peyer* (2013) Systemrelevante Banken, 384.

965 See *Bahar/Peyer* (2013) Systemrelevante Banken, 385.

966 See Art. 8(2)(a) Swiss Banking Act.

967 Art. 8(1) Swiss Banking Act. See also *Expertenkommission* (2010) Final Report, 65.

968 See *Bahar/Peyer* (2013) Systemrelevante Banken, 381.

969 See *Bahar/Peyer* (2013) Systemrelevante Banken, 385. However, it is also plausible for a competent authority to first establish a list of functions it deems systemically important and then check each bank's market share: *Bahar/Peyer*'s opinion reflects the understanding that every activity can potentially be systemi-

The second criterion is the amount of protected deposits within the meaning of Art. 37h(1) Swiss Banking Act, which supersedes the maximum amount of deposit insurance set down in Art. 37h(3)(b) Swiss Banking Act, which is 6 billion CHF.

To put that into perspective, it is worthwhile to take a look at the total amount of protected deposits: at the end of 2015, protected deposits amounted to 437 billion CHF. The share *UBS* and *CS* alone was 23.9% equalling 104.4 billion CHF.[970] This simple equation already suggests that the two banks easily fulfil the criterion.

The third criterion is the relationship between the bank's balance sheet and Switzerland's GDP and has the purpose of highlighting a bank's size.[971] While the academic value of a comparison of value added and bank size can be questioned,[972] it nevertheless allows for a rough illustration of a bank's size. It also allows for an illustration of whether or not the failure of the bank in question would considerably harm the Swiss economy and indicates whether such an event would exceed the country's capacity to rescue the institute.[973] As discussed above, the balance sheet total of *UBS* and *Credit Suisse* amounts to 2.6 times the Swiss GDP.[974]

The fourth criterion is the bank's risk profile, which is comprised of its (i) business model, (ii) balance sheet structure, (iii) quality of its assets, (iv) liquidity, and (v) leverage ratio.[975] According to the Federal Council, this provision takes into account that a higher risk profile leads to a higher probability of a failure and higher potential for damage.[976]

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cally relevant including investment banking activities. However, as will be discussed, this can, in the author's opinion, only be agreed to with a major caveat (see the discussion in Chapter III.IV.C.b: non-ring-fenced bodies). Drawing from the practical experience of affected banks, it seems that the focus is clearly set on the domestic deposits and loans business and on payment transactions. (See Chapter III.IV.C.c: Affected banks). Therefore, an authority can simply check each bank's market share of these functions.

970 *Esisuisse* (2017) Jahresbericht 2016, 7. See also *Winzeler* (2013) Einlagensicherung, 763 (noting that due to the maximum amount of 6 billion, only small and medium-sized insolvencies can be solved. *Winzeler* furthermore argues that it is uncontested that failures of systemic relevant institutes cannot be absorbed by a private sector deposit insurance).

971 See Art. 8(2)(c) Swiss Banking Act; *Bundesrat* (2011) Botschaft TBTF, 4745.

972 See the critique of *Bahar/Peyer* (2013) Systemrelevante Banken, 386.

973 See *Bundesrat* (2011) Botschaft TBTF, 4745; *Bahar/Peyer* (2013) Systemrelevante Banken, 386.

974 See Chapter III.I.C.c: UBS and Credit Suisse.

975 See Art. 8(2)(d) Swiss Banking Act.

976 See *Bundesrat* (2011) Botschaft TBTF, 4745.

Bahar/Peyer argue that this criterion does not influence the systemic importance of a bank. This is because the risk profile of a bank does not impact the effect of its failure. They reason that the failure of bank with a low risk profile could lead to exactly the same impact as one of a bank that is especially risky. In contrast to Art. 8(2)(a-c) Swiss Banking Act, a bank that is not deemed systemically important by other criteria, could not be attributed this feature solely based on this criterion.[977]

Bahar/Peyer therefore suggest that the assessment of a bank's risk profile would be better situated as part of the stipulation of special requirements for banks that are already deemed systemically important, set down in Art. 9 Swiss Banking Act and not as part of their identification.[978]

c. Affected banks

The assessment of systemic importance is conducted by the SNB and involves a consultation of Finma.[979] According to Art. 8(3) Swiss Banking Act, the SNB then determines by order which banks and which of their functions are systemically important.

In November 2012, the SNB determined *UBS AG* and *CS Group AG* to be systemically important.[980] One year later, it added *Zürcher Kantonalbank*.[981] In June 2014, it issued an order of the same kind to *Raiffeisen*[982] and in September 2015 to *Postfinance.*[983] Altogether, Switzerland is home to five banking groups that its authorities consider systemically important.[984]

977 See *Bahar/Peyer* (2013) Systemrelevante Banken, 386–387.
978 See *Bahar/Peyer* (2013) Systemrelevante Banken, 386–387.
979 See Art. 8(3) Swiss Banking Act.
980 *SNB* (2012) Verfügungen Systemrelevanz.
981 *SNB* (2013) Verfügung Systemrelevanz.
982 *SNB* (2014) Verfügung Systemrelevanz.
983 *SNB* (2015) Verfügung Systemrelevanz.
984 As will be discussed, the manifestation of Swiss organisational requirements differ according to whether affected banks are domestically oriented or globally oriented. See Chapter III.IV.C.a.1: Ex ante separation.

D. Results

a. Focus of the scope

In all three jurisdictions of interest, the legislator chose to limit the application of structural reform requirements to banks that have certain characteristics. He therefore decided against the idea that structural reform requirements should apply to all banks, regardless of specific features such as size or importance for the domestic economy.[985]

While structural requirements in the three countries all aim at ensuring similar goals, each legislator chose a different focus for the scope: in the UK, the focus is set on core deposits. Only banks that are in charge of a certain amount of these deposits are affected by the ring-fencing requirement.[986] The UK ring-fencing regime thus concentrates on one of the activities it strives to protect.[987]

The German legislator, on the contrary, set the focus on trading activities. All banks that exceed certain thresholds with their trading portfolios and liquidity reserves are subject to the prohibition or the separation.[988] This reflects that according to the ring-fencing method chosen by the German legislator, certain risky activities should be kept at bay.[989]

The Swiss legislator chose a different approach: authorities have to conduct a general assessment to identify systemically important banks whose failure would do considerable harm to the Swiss economy and the Swiss financial system. As part of the assessment, however, authorities inspect, among other things, similar elements as those in focus of the German and the UK approach. They also take into account the amount of deposits held by the bank;[990] and they likely also consider the share of the trading portfolio and the trading activities in general as part of the assessment of the bank's risk profile.[991] The Swiss approach reflects that (i) it defines the pro-

985 Such a drastic scope was recommended e.g. by the Vickers report. See *ICB* (2011) Vickers Report, 39; see also the considerations regarding thresholds of the Liikanen Report, *HLEG* (2012) Liikanen Report 94–95.
986 See Chapter III.III.A: United Kingdom.
987 See Chapter III.IV.A.a: Ring-fenced body.
988 See Chapter III.III.C: Germany.
989 See Chapter III.IV.D.c: Ring-fencing method.
990 See Art. 8(2)(b) Swiss Banking Act; Chapter III.III.C.b: Thresholds and exemptions.
991 See Art. 8(2)(d) Swiss Banking Act; Chapter III.III.C.b: Thresholds and exemptions.

cess for identifying systemically important banks in general; and (ii) systemically important banks do not only have to comply with organisational measures but with a whole policy mix (including, in particular increased capital requirements).

b. Personal scope

In the UK, the personal scope of the ring-fencing regime includes all domestic legal entities that accept core deposits in EEA accounts. Such entities have to be ring-fenced if a certain threshold is exceeded.

The German Ring-fencing Act, in contrast, refers to the concept of a credit institution introduced by the EU's CRR: it applies to all CRR credit institutions and to all companies that belong to a group of institutions, a financial holding group or mixed financial holding group or a financial conglomerate to which a CRR credit institution belongs.[992] As set out in the chapter above,[993] CRR credit institutions are characterised by being active in both deposit-taking and lending.[994] It thusly does not include institutes that are active only in one of these businesses.[995]

Switzerland defines systemically important banks as banks, financial groups and bank-dominated financial conglomerates whose failure would considerably harm the Swiss economy and the Swiss financial system.[996] Banks are not just undertakings that are active in deposit-taking and lending. Undertakings that provide financing services and do not accept deposits but instead finance themselves over banks also fall within the definition of banks.[997] A literal interpretation of the respective provision would

992 See Chapter III.III.B.a: Personal scope.

993 See Chapter III.III.B.a: Personal scope.

994 See Art. 4(1)(1) CRR; see also *Schwennicke* (2016) Verbotene Geschäfte, 196; In greater detail *Schäfer* (2016) § 3 Verbotene Geschäfte, para 33. For a discussion of the differences between the definition of credit institutions in German and EU law, see *Schäfer* (2016) § 1 Begriffsbestimmungen, para 9–16.

995 See *Schäfer* (2016) § 1 Begriffsbestimmungen, para 14; See also *Möslein* (2013) Spartentrennung, 401; *Schwennicke* (2016) Verbotene Geschäfte, 196.

996 Art. 7(1) Swiss Banking Act. The translation follows the English version of draft of the *Expertenkommission* (*Expertenkommission* (2010) Final Report, 65). The original German draft was transposed verbatim. See *Expertenkommission* (2014) Schlussbericht, 67; *Bahar/Peyer* (2013) Systemrelevante Banken, 397.

997 See Art. 2(1)(b) Swiss Banking Ordinance; *Bahar/Stupp* (2013) Geltungsbereich, 18, 25. Banks that do not refinance themselves over deposits are in practice,

theoretically even allow for the inclusion of financial groups, which no bank but only a securities dealer is part of.[998]

Comparing the definitions of banks, one therefore finds that the German approach has the narrowest scope: it revolves around the CRR credit institution that cumulatively takes deposits and is active in lending. Switzerland and the UK do not require the cumulative provision of these services.

c. Thresholds

1. Clear cut thresholds?

Comparing the different jurisdictions, one finds that Germany and the UK use clear cut thresholds: in the UK, banks with core deposits of less than 25 billion £ are not required to ring-fence. In Germany, there is an absolute threshold for banking groups with a trading portfolio and liquidity reserves of at least 100 billion €; and a relative threshold for banks whose total trading portfolio and liquidity reserves exceed 20% of the balance sheet, which in total amounts to at least 90 billion €. All banks below these thresholds are exempted from complying with the German ring-fencing regime.

In Switzerland, in contrast, organisational measures apply if an assessment of the SNB results in finding a bank systemically important. As set out in the previous chapter, the assessment also includes taking into account the amount of deposits and the risk profile of a bank.[999] It also takes into account the ratio between a bank's balance sheet and Switzerland's GDP, and the market share of systemically important functions.[1000]

These criteria are theoretically suited to be used as thresholds. Most of them can be easily calculated on the basis of existing information. Only the risk profile includes a more detailed qualitative assessment of, *inter alia,* the business model. The Swiss expert commission and Government, however, decided against identifying certain thresholds and thus delegated

however, rare. For a detailed discussion, see *Bahar/Stupp* (2013) Geltungsbereich, 27–28.

998 Art. 7(1) in conjunction with Art. 3c(1) Swiss Banking Act. For the theoretical discussion of the inclusion of financial groups of which no bank but only a securities dealer is part of, see Chapter III.III.C.a: Personal scope.

999 Chapter III.III.D.a: Focus of the scope.

1000 For a detailed discussion of the assessment Chapter III.III.C: Switzerland.

the decision to the authorities. While this approach avoids some of the problems discussed below, it can be questioned with regard to transparency and possibly the principle of legality.[1001]

2. Consolidated basis

In both the UK and Germany, the thresholds are calculated on a consolidated basis. This means that the calculation takes into account the thresholds, i.e. either core deposits or the trading portfolio, of the whole banking group.[1002] For Switzerland, the assessment is also conducted on a consolidated basis. The Swiss approach is nevertheless much more focused on the systemic importance of a bank for Switzerland, which is reflected in the assessment process.[1003]

3. Setting the threshold

As the focus of the scope differs between the different jurisdictions (core deposits in the UK, trading portfolio in Germany and general assessment in Switzerland), the thresholds cannot be meaningfully compared. However, a few general observations on thresholds can be made.

A key problem of thresholds is how to set them. If a threshold is set arbitrarily, it discriminates against the affected parties (in this case banks that are then required to ring-fence); by that it adversely affects their competitiveness. Other banks would be given an advantage and general competition in the market would be reduced. Setting a threshold is therefore a difficult decision which should be well justified.

In the UK, the Government transparently set out its reasoning for the threshold and acknowledged that it may adjust over time to fall in line with banking practice.[1004] The argumentation of the Liikanen Report, on

1001 For a discussion of transparency and the principle of legality, see Chapter III.II.D.b: Legal Sources.

1002 See *De Vogelaere* (2016) Bank Structure Reforms, 32; see also Chapter III.III.A.a: Personal scope; Chapter III.III.B.a: Personal scope.

1003 For example, the majority of the criteria set out in Art 8(2) Swiss Banking Act are focused on Switzerland. See Chapter III.III.C.b: Threshold and exemptions.

1004 The UK Government chose the size of deposits, because it "*is most likely to reflect the level of benefit derived from ring-fencing vital banking services in a particular firm relative to the costs*". With the threshold of 25 billion £, 90% of deposits which the German Ring-fencing Act is based, in contrast is less convincing.[1005] The German Ring-fencing Act does not provide any information on the threshold, except referring to the Liikanen Report.[1006] This is particularly remarkable, as the Act does not completely transpose the threshold recommended by the HLEG, only parts of it.[1007]

Another key problem of thresholds is the risk of regulatory arbitrage. Due to the regulatory burden connected to exceeding a threshold, banks are incentivized to artificially remain below it. This can lead to distortion of the functioning of the market,[1008] such as if banks e.g. were not to accept deposits anymore to remain below the threshold. Thresholds have to take this into account. It can, however, also be in the interest of the public to incentivize banks not to exceed certain thresholds. For example, not to exceed the level of trading activities considered optimal.

In summary, thresholds have to be set in a way that ensures their goal is reached, either by identifying banks for which the application of requirements makes sense or by incentivizing other banks not to exceed certain thresholds.

protected by deposit insurance were held by ring-fenced banks and building societies. *HM Treasury* (2012) Banking Reform, 31, 31 Fn 19.

1005 In the Liikanen report, the absolute threshold of 100 billion € is reasoned with financial stability. The relative threshold, which is the ratio of the trading portfolio to total assets, aims at exempting banks with conservative business models. (See *HLEG* (2012) Liikanen Report, v; For an explanation of the Liikanen Report's thresholds, see Chapter II.I.C.c: Final proposal). In the author's opinion, more detailed explanation of the HLEG, why it recommends an absolute threshold of a trading portfolio of 100 billion € and the relative threshold, would have been desirable.

1006 The legislative materials note that the relative threshold of a trading portfolio of 20% of total assets is in the middle of the range for a relative threshold recommended by the HLEG. See *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 28.

1007 See Chapter III.III.D.e: Relation to expert commission recommendations; This has been criticised by many authors, see Chapter III.III.B.b: Threshold and exemptions.

1008 See e.g. Explanatory Memorandum to FSMA 2014 Order Nr. 1960, Sec. 7.5.

d. Other exemptions

Comparing the exemptions, one finds that there are similarities. In all three jurisdictions there are certain exemptions for insurance undertakings.[1009] Ring-fencing requirements are applicable only to banks.

In addition, in the UK and Germany, there are exemptions due to EU passporting. In both countries, banking groups which are headquartered in other EU Member States and provide services through a branch or cross-border, are exempted from the ring-fencing requirements. In case of subsidiaries, the requirements apply. In Germany, this derives from the BaFin's Interpretative Guidance,[1010] in the UK from the scope, which applies to all UK deposit-takers,[1011] i.e. a legal entity incorporated in the UK.[1012] The Swiss Banking Act applies to both foreign-controlled banks as they are organised in accordance with Swiss law[1013] and branches of foreign banks.[1014]

e. Affected G-SIBs

Comparing the affected banks in the various jurisdictions, one finds that G-SIBs are comprehensively covered by the structural reform requirements. Only in the UK, *Standard Chartered* does not have to ring-fence its deposit-taking business as it remains below the thresholds.[1015] All other G-SIBs in the respective jurisdictions are covered by domestic requirements.

1009 See the respective Chapters of III.III: Who Is Subject to the Fence?.
1010 The interpretation of BaFin is explained in more detail in Chapter III.III.B.a: Personal scope.
1011 Art. 2 FSMA 2014 Order No. 1960.
1012 See Art. 1 FSMA 2014 Order No. 1960; Art. 2(2)(d) FSMA 2016 Order No. 1032.
1013 *SNB*, Notes on the Banking Statistics, (September 28, 2017), https://data.snb.ch/en/topics/banken#!/doc/explanations_banken; Foreign-controlled banks are defined in Art. 3bis(3) Swiss Banking Act; see also Chapter III.I.C.b: Number of banks and their nature.
1014 See Art. 2(1) Swiss Banking Act; see also *Chapuis* (2013) Geltungsbereich, 47–54.
1015 *Nahmias* (2016) UK Banks, 5; See Chapter III.III.A.c: Affected banks.

f. Relation to expert commission recommendations

There are some key differences between the expert commissions' recommendations and adopted legislation regarding the scope of the structural reform requirements. While Switzerland stuck very closely to the recommendations, often transposing them verbatim,[1016] Germany and the UK applied some important changes.

The German Ring-fencing Act deviates in an important aspect from the Liikanen Report. The latter recommends an absolute threshold of a trading portfolio of 100 billion €, and provides for a range of possible percentages as relative thresholds. Importantly, however, these two factors only constitute a first assessment. In a subsequent second assessment, the share of activities to be separated is assessed. If they exceed a certain share of total assets not specified by the Liikanen Report, they would have to be separated.[1017] The German Ring-fencing Act, in contrast, does not stipulate a second stage assessment of the share of the activities to be separated. Therefore, such activities would also be prohibited or needed to be separated if they only account for a very small part of the trading portfolio. This is criticised by the majority of commentators and is indeed not expedient and desirable.[1018]

In the UK, the main deviation from the recommendations of the Vickers Report regarding the scope concerns the number of affected banks.[1019] The Vickers Commission balanced arguments for an introduction of a *de minimis* exemption for smaller banks, but ultimately recommended to include all banks.[1020] The adopted legislation, however, set down that all banks with core deposits of less than 25 billion £ do not have to ring-fence.[1021] This reflects the idea that ring-fencing is a costly regulatory burden for affected banks and that unrestricted universal banking is riskier for larger banks, because *"the impact of a failure and thus the importance of resolution and of reducing contagion, is greater the more customers and creditors are affect-*

1016 See e.g. the footnote on Art. 7(1) Swiss Banking Act, Chapter III.III.C.a: Personal scope.
1017 See Chapter II.I.C.c: Final proposal.
1018 For the critique, see the footnote in Chapter III.III.B.b: Thresholds and exemptions.
1019 See Chapter III.III.A.b: Threshold and exemptions; see also *De Vogelaere* (2016) Bank Structure Reforms, 22.
1020 See Chapter III.III.A.b: Threshold and exemptions; *ICB* (2011) Vickers Report, 39.
1021 See Chapter III.III.A.b: Threshold and exemptions.

ed".[1022] The exemption applies to a great number of banks and brings with it the problems of setting an effective threshold discussed in the chapter above.[1023]

IV. What Activities Fall on Which Side of the Fence?

This chapter addresses the question of what activities fall on which side of the fence, setting out the location of the fence. To facilitate the comparative analysis, the chapters on Germany and Switzerland orientate towards the UK structure:[1024] they differ between activities that are to be provided by the ring-fenced body and the non-ring-fenced body.[1025] Subsequently, the findings are summarized and the practical implementation of affected banks is discussed.

The chapter is of great importance to the assessment of whether or not the countries of interest implement ring-fencing as defined in the first part of the dissertation, as it sets out two core characteristics: (i) that it separates commercial banking activities from investment banking activities and (ii) that it at the same time seeks to maintain universal banking.[1026] These two characteristics are also key for identifying the method of ring-fencing used.[1027]

A. United Kingdom

a. Ring-fenced body

1. Core activities

The FSMA 2000 stipulates core activities that have to be provided by a ring-fenced body. As set out in the chapter above, currently the only core

1022 See *ICB* (2011) Vickers Report, 39.
1023 For a discussion of the problems when setting a threshold, see Chapter III.III.D.c.3: Setting the threshold.
1024 To underscore similarities, they also employ a similar terminology.
1025 Due to the different method of ring-fencing chosen in Germany, a modified order (beginning with the non-ring-fenced body) is justified.
1026 See Chapter I.IV.B: Ring-fencing as a structural reform.
1027 See Chapter I.VI: Different Methods of Ring-Fencing.

activity is accepting core deposits,[1028] which can be summed up as accepting deposits of retail clients and small businesses from the UK and all other EEA countries.[1029]

Both the Vickers Commission and the legislator decided against mandating that loans to individuals and small and medium-sized companies – a function important to the domestic economy – were to be considered core activities and could thus only be provided by ring-fenced banks.[1030] This is mainly because such a requirement would possibly lead to a reduced supply of credit.[1031]

Both the Vickers Commission and the UK Government, however, expect that a large proportion of the credit supply would be "*naturally*" provided by the ring-fenced banks, as banks need to match their liabilities.[1032]

2. Core services

Core services are services that are connected to core activities. As only the acceptance of core deposits is a core activity, core services currently include (i) facilities for the accepting of deposits or other payments into an account which is provided in the course of the acceptance of core deposits; (ii) facilities for withdrawing money or making payments from such an account; (iii) overdraft facilities for such an account.[1033] The Explanatory Notes to the Banking Reform Act 2013 clarify that it is not necessary for ring-fenced bodies to provide all of the core services. Some banks may, for example, "*choose not to provide overdraft facilities*".[1034]

1028 See Chapter III.III.A.a: Personal scope.

1029 See *Britton et al.* (2016) Ring-fencing, 166. See also Chapter III.III.A.c: Affected banks.

1030 See *HM Treasury* (2012) Banking Reform, 16; *ICB* (2011) Vickers Report, 37–38.

1031 See *ICB* (2011) Vickers Report, 37–38.

1032 *ICB* (2011) Vickers Report, 37–38 ("*Naturally, if a large volume of deposits were placed within ring-fenced banks then a significant proportion of the credit supply would be expected to follow*"); *HM Treasury* (2012) Banking Reform, 16 ("*the Government's expectation is that where banks carry out other functions important to the domestic economy, such as the provision of domestic credit to households and SMEs […], these will as a matter of practice be undertaken by their ring-fenced entities*").

1033 Art. 142C FSMA 2000.

1034 Explanatory Notes to the Banking Reform Act 2013, para 32.

The continued provision of these core services by the ring-fenced body is protected by the regulators.[1035] They have the duty, when dealing with matters related to ring-fencing and in particular when making rules, to take the services into account and protect their uninterrupted provision.[1036]

3. Excluded activities and prohibitions

The FSMA 2000 and secondary legislation by the Treasury also identify (i) activities that are excluded and (ii) transactions that are prohibited for the ring-fenced bank.[1037] These activities must not be provided by the ring-fenced body.[1038] A violation results in disciplinary measures and penalties that can be imposed by the regulators on the basis of Part 14 of FSMA 2000.[1039] They can nevertheless be provided by other members of the group that the ring-fenced body belongs to.[1040]

b. Non-ring-fenced bodies

1. Excluded activities

The FSMA 2000 only mentions one excluded activity, namely dealing in investments as a principal,[1041] i.e. proprietary trading.[1042] It authorizes the

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1035 See e.g. Sec. 2B(3)(c) FSMA 2000; Sec. 1IA, 1EA FSMA 2000; *PRA* (2017) Ring-fenced Bodies, 7 ("*The PRA seeks to ensure the continuity of the provision of core services by an [ring-fenced body]*").
1036 *HM Treasury* (2012) Sound Banking, 7.
1037 See below.
1038 See Sec. 142G FSMA 2000.
1039 See Sec. 142G(1) FSMA 2000; Explanatory Notes to the Banking Reform Act 2013, para 39.
1040 This follows from (i) the fact that there is no prohibition for the ring-fenced body to be part of a group that includes non-ring-fenced members; and from (ii) Sec. 142H, which sets down rules that specify the relationship of a ring-fenced body to non-ring-fenced group members.
1041 Sec. 142D(2) FSMA 2000.
1042 See *Britton et al.* (2016) Ring-fencing, 166; see also Chapter I.II.B.a: Proprietary trading.

Treasury to both set down exemptions for it[1043] and add other excluded activities by order.[1044]

The Treasury made use of the delegated power by clarifying that proprietary trading is to be understood within the meaning of the Regulated Activities Order 2001.[1045] It is thusly broadly defined as *"buying, selling, subscribing for or underwriting securities or contractually based investments […] as principal"*.[1046] It, however, alters the definition by disallowing certain exemptions of that order,[1047] thus increasing the scope, as well as by introducing own exemptions,[1048] thus reducing the scope. The resulting broad definition *"excludes most derivatives and trading activity currently undertaken by wholesale and investment banks"*.[1049] It not just includes the trading of financial instruments, in particular market making, but also their underwriting.

The second activity excluded by the Treasury is the buying and selling of commodities as a principal, which can be understood as proprietary trading with commodities,[1050] for example oil or agricultural products.[1051] It may, however, be performed under certain circumstances, e.g. when commodities are required for the ring-fenced body's own consumption or use.[1052] Excluding commodities trading intends to shield the ring-fenced entity against unexpected changes in global commodities prices.[1053]

While the Explanatory Notes rightly point out that dealing with the ring-fenced body's own share is always permitted,[1054] the Order stipulates exceptions in which an activity is not considered excluded: among them is the management of risk for ring-fenced bodies, such as interest rate

1043 See Sec. 142D(2)-(3) FSMA 2000.

1044 See Sec. 142D(4)-(7) FSMA 2000.

1045 FSMA 2001 Order No. 544; see Art. 4 FSMA 2014 Order No. 2080.

1046 Art. 14 FSMA 2001 Order No. 544.

1047 Namely Art. 15, 19, 20 FSMA 2001 Order No. 544.

1048 See Art. 4 FSMA 2014 Order No. 2080.

1049 *HM Treasury* (2012) Sound Banking, 10; See also *Armour et al.* (2016) Financial Regulation, 517 (noting that it *"prevents [ring-fenced bodies] from engaging in almost all investment banking activities"*).

1050 See Art. 5 FSMA 2014 Order No. 2080.

1051 Another example for commodities would be precious metals, such as gold or silver. See Explanatory Memorandum to FSMA 2014 Order No. 2080, Sec. 7.4.

1052 See Art. 5 FSMA 2014 Order No. 2080.

1053 See Explanatory Memorandum to FSMA 2014 Order No. 2080, Sec. 7.4.

1054 This is due to to the exception of Art. 18A of FSMA 2001 exempting it from the scope of the proprietary trading definition. See Explanatory Note to the FSMA 2014 Order No. 2080, 19.

changes or exchange rate changes and the management of liquidity risk.[1055] This allows the ring-fenced body to hedge risks stemming from its principal business, the intermediation between savers and borrowers.[1056]

There is also an exception for transactions with a central bank,[1057] which ensures that a ring-fenced body can access central bank liquidity.[1058] In addition, there are provisions that regulate under which circumstances ring-fenced bodies can sell derivatives to their customers:[1059] they include quantitative limitations, for example limitations with regard to the ring-fenced body's own funds;[1060] and qualitative limitations such as specifications of the permissible financial products.[1061] Their intention is to allow for the provision of simple risk-management services business customers, including small businesses, often require.[1062]

In all these cases, activities that would otherwise qualify as proprietary trading and commodities trading are not considered excluded, and are thus permitted.

2. Prohibitions

The FSMA 2000 also delegates power to the Treasury to impose prohibitions on ring-fenced bodies via secondary legislation.[1063] This, of course, reminds of the excluded activities discussed above. The difference is, however, that the intention of the prohibitions is not to identify a specific activity a ring-fenced body must not engage in, but on "*captur[ing] transactions with specified counterparties or transactions in particular jurisdictions*".[1064]

To shield it against intra-financial contagion, the Order prohibits ring-fenced bodies from having exposures to other financial institutions, in-

1055 See Art. 6(1)-(2) FSMA 2014 Order No. 2080, see also Explanatory Note to the FSMA 2014 Order No. 2080, 19.
1056 Explanatory Memorandum to FSMA 2014 Order No. 2080, Sec. 7.5.
1057 See Art. 8 FSMA 2014 Order No. 2080.
1058 Explanatory Memorandum to FSMA 2014 Order No. 2080, Sec. 7.5.
1059 See Art. 9–12 FSMA 2014 Order No. 2080 in conjunction with Art. 3(6) FSMA 2016 Order No. 1032; Explanatory Note to the FSMA 2014 Order No. 2080, 20.
1060 See in particular Art. 12 FSMA 2014 Order No. 2080 in conjunction with Art. 3(6) FSMA 2016 Order No. 1032.
1061 See in particular Art. 10–11 FSMA 2014 Order No. 2080.
1062 Explanatory Memorandum to FSMA 2014 Order No. 2080, Sec. 7.5.
1063 Sec. 142E FSMA 2000.
1064 See *HM Treasury* (2012) Sound Banking, 11.

cluding banks, investment firms and global systemically important insurers. A ring-fenced body may, however, have exposures to building societies and other ring-fenced bodies.[1065] It may also have exposures to other (non-ring-fenced) members of its own group under certain conditions, e.g. if transactions are conducted at arm's length.[1066]

Certain exceptions from the prohibition provide for the necessary flexibility for doing business. These include the following: analogously to the excluded activities,[1067] there is a provision allowing a ring-fenced body to have exposures for managing its own risk.[1068] It is also allowed to have exposures in connection with trade finance services[1069] and from loans or guarantees given in connection with the financing of infrastructure projects.[1070]

Another prohibition restricts ring-fenced bodies from having branches and subsidiaries outside the EEA. It may only have a subsidiary that provides services that are not regulated activities under the FSMA 2000.[1071]

c. Summary

In summary, it can be found that in banking groups that contain a ring-fenced body, a distinction between ring-fenced bodies and non-ring-fenced entities has to be made. There are substantial legal requirements governing which activities have to be provided by which group of entities.

1065 See Art. 14(1) in conjuntion with Art. 2(1) in conjunction with Art. 1(4) FSMA 2014 Order No. 2080. Exposures to subsidiaries of global systemically important insurers are also prohibited. See Art. 3(2)(c) FMSA 2016 No. 1032.

1066 See Art. 14(4) in conjuntion with Art. 2(1) in conjunction with Art. 1(4) FSMA 2014 Order No. 2080.

1067 Explanatory Memorandum to FSMA 2014 Order No. 2080, Sec. 7.6.

1068 See Art. 14(2)-(3) FSMA 2014 Order No. 2080.

1069 See Art. 15 FSMA 2014 Order No. 2080. Bank intermediated trade finance comprises services provided by banks (and often insurers or non-bank institutions) that allow importers and exporters in international trade to shift the risk of non-performance or non-payment to banks. See e.g. *Asmundson et al.* (2011) Trade and Trade Finance, 5. The Explanatory Memorandum notes as an example that the exception allows ring-fenced bodies to confirm letters of credit issued by foreign banks for the benefit of UK exporters. Explanatory Memorandum to FSMA 2014 Order No. 2080, Sec. 7.6.

1070 Art. 19A FSMA 2014 Order No. 2080; Art. 3(10) FSMA 2016 Order No. 1032.

1071 Art. 20 FSMA 2014 Order No. 2080; Explanatory Note to the FSMA 2014 Order No. 2080, 20.

A good way of illustrating this is to form groups of key activities according to where they have to be provided.[1072] The first group consists of activities that have to be provided within the ring-fenced body. This group currently only comprises core activities, namely accepting deposits of retail and small business clients.[1073]

The second group is made up of activities that are either excluded or prohibited for ring fenced bodies and can thus only be provided by the non-ring-fenced entity.[1074] These include the buying and selling, i.e. proprietary trading, of (i) securities, (ii) commodities and (iii) derivatives. It also includes market making services. In addition, it includes the underwriting of securities and having exposures to financial institutions that are neither ring-fenced bodies nor building societies. Moreover, only the non-ring-fenced entity can have branches and subsidiaries outside the EEA.[1075]

The third group includes activities that can be provided by both the ring-fenced body and the non-ring-fenced entity. They consist of all activities within the scope of the exemptions discussed in the chapters above. This group in particular includes the taking of deposits from high net-worth individuals, larger companies and relevant financial institutions;[1076] furthermore, deposit-taking of ring-fenced bodies and building societies, lending to individuals and companies.[1077] The group also contains the activity of risk managing, namely the hedging of liquidity, interest rate, currency, commodity and credit risks. In addition, transactions with central banks and trade finance, payment services[1078] and dealing in simple derivatives to its account holders.[1079] All these activities can be provided by both a ring-fenced body and a non-ring-fenced entity.

1072 See the illustration of *Britton et al.* (2016) Ring-fencing, 167.
1073 See Chapter III.III.A.a: Personal scope; see also *Britton et al.* (2016) Ring-fencing, 167; *HM Treasury* (2012) Sound Banking, 8–9.
1074 See Chapter III.IV.A.b: non-ring-fenced bodies.
1075 See Chapter III.IV.A.b: non-ring-fenced bodies; see also *Britton et al.* (2016) Ring-fencing, 167; Explanatory Memorandum to FSMA 2014 Order No. 2080, Sec. 7.4.
1076 See Chapter III.III.A.a: Personal scope; see also *HM Treasury* (2012) Sound Banking, 9; Explanatory Memorandum to FSMA 2014 Order Nr. 1960, Sec. 7.8.
1077 See Chapter III.IV.A.a.1: Core activities; Chapter III.III.A.a: Personal scope; see also *Britton et al.* (2016) Ring-fencing, 167.
1078 See Chapter III.IV.A.b: non-ring-fenced bodies. See also *Britton et al.* (2016) Ring-fencing, 167.
1079 See Chapter III.IV.A.b: non-ring-fenced bodies. See also *Britton et al.* (2016) Ring-fencing, 167; Explanatory Note to FSMA 2014 Order No. 2080, 20.

d. Affected banks

Beyond the limitations of the requirements set out above, banking groups have a degree of flexibility in structuring their business. Mortgage lending, for instance, can be conducted either by a ring-fenced body or by a non-ring-fenced entity. A banking group may thus decide to provide such activities by a ring-fenced body, close by the retail deposit-taking; others may decide to provide them from outside the ring-fence.[1080] A banking group's business model, as well as the choice where to put the fence, is reflected in the division of assets.[1081]

Barclays decided to place in its domestic bank, *Barclays UK,* approximately 25% of its risk-weighted assets, namely UK retail banking, UK consumer credit cards, UK wealth and corporate banking for smaller businesses. Outside the ring-fence, *Barclays International* will in particular provide services related to corporate, investment, and private banking. Risk-weighted assets outside the UK ring-fence total to approximately 75%.[1082]

HSBC chose to place only approximately 9% of its risk-weighted assets inside its ring-fenced body,[1083] *HSBC UK Bank.* It includes in particular the UK retail banking and wealth management business and the UK commercial banking business. Furthermore, it includes the UK based global private banking business and *Mark & Spencer's Financial Services*.[1084] The remaining 91% of risk-weighted assets are outside the ring-fence and include the investment bank operations in continental Europe, Asia and the Americas.[1085]

1080 *Britton et al.* (2016) Ring-fencing, 166.

1081 Depending on where a banking group decides to put the fence, there can be a smaller ring-fenced body and larger parts of the bank outside the ring-fence, or a larger ring-fenced body and only small parts outside the ring-fence.

1082 *Binham/Dunkley,* Regulators get ready to authorise 'ringfenced' UK banks, Financial Times (August 19, 2017). For a short description of the various activities mentioned above and an impression of the vast number of customer accounts that have to be moved to another entity, see *Byers* (2017) Barclays Ring-fencing Transfer Scheme, 13, 16–18.

1083 *Binham/Dunkley,* Regulators get ready to authorise 'ringfenced' UK banks, Financial Times (August 19, 2017).

1084 *Huertas* (2018) Scheme Report: HSBC, 3.

1085 *Binham/Dunkley,* Regulators get ready to authorise 'ringfenced' UK banks, Financial Times (August 19, 2017). For a more detailed list of segments within and outside the ring-fence, see *Huertas* (2018) Scheme Report: HSBC, 21–22.

RBS went for a considerably bigger ring-fenced body, with approximately 80% of its risk-weighted assets within the ring-fence.[1086] The current *RBS* PLC transfers its retail and commercial banking business, consisting of *inter alia* deposits, personal mortgages, personal unsecured loans, credit cards, business and commercial loans and trade finance services into the ring-fenced body *NatWest Holdings Limited.* Through a number of name changes, customers will continue to deal with *RBS.*[1087] The remaining 20% of risk-weighted assets are outside the ring-fence and consist of *RBS's* corporate and investment banking.[1088]

As discussed before, *Standard Chartered* does not have to apply the ring-fencing law.

B. Germany

Due to differences in the method of ring-fencing pursued by Germany, it makes sense to apply a modified structure, starting with the activities that have to be provided by the non-ring-fenced body, the financial trading institution, and subsequently discussing the activities that have to be provided by the ring-fenced body.

a. Non-ring-fenced body

1. Excluded activities

The German Banking Act stipulates that banking groups falling into the personal scope and exceeding thresholds set out in the chapter above[1089] must not conduct certain activities.[1090] These activities are considered particularly dangerous by the legislator[1091] and are listed exhaustively in the

1086 *Binham/Dunkley,* Regulators get ready to authorise 'ringfenced' UK banks, Financial Times (August 19, 2017).
1087 *Grundy* (2017) Ring-Fencing Scheme Royal Bank of Scotland, 7–8.
1088 *Binham/Dunkley,* Regulators get ready to authorise 'ringfenced' UK banks, Financial Times (August 19, 2017).
1089 For the personal scope and thresholds, as well as exemptions, see Chapter III.III.B: Germany.
1090 § 3(2) sentence 1 German Banking Act.
1091 *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 41; *Schwennicke* (2016) Verbotene Geschäfte, 197.

Act.[1092] To simplify the comparison, they will be referred to as "excluded activities".[1093] They may be conducted by a financial trading institution,[1094] i.e. a trading entity, which is allowed to remain a part of the group, but to which certain requirements apply.[1095]

The German Banking Act mentions as excluded activities: (i) proprietary business, (ii) a certain form of proprietary trading and (iii) the lending and guarantee business with certain counterparts.[1096]

The German Banking Act differentiates between proprietary business and proprietary trading. Delimiting these two excluded activities requires special attention because of the use of the term "proprietary business" for an activity that would usually be referred to as proprietary trading.[1097]

Proprietary business is to be understood within the meaning of § 1(1a) sentence 3 German Banking Act,[1098] namely all purchasing and selling of financial instruments on own account that is not proprietary trading.[1099] According to the German Banking Act, most proprietary trading, as will be shown below, is characterised by its service character; proprietary business, in contrast, is a bank's own short-term investment activity. This is underscored by examples given by the BaFin which include the purchase and sale of securities, money market instruments or derivatives on own account without service character, usually to benefit from *"existing or expected short-term differences between purchase and sale prices or movements of market prices, market values or interest rates"*.[1100] Such activities are excluded and thus have to be terminated or conducted outside the ring-fence.

1092 § 3(2) sentence 2 German Banking Act.

1093 This responds well to their character and to the designation used in the UK.

1094 § 3(3)(2) German Banking Act.

1095 See § 25f German Banking Act; The requirements and the relation to the banking group are discussed in Chapter III.V.B: Germany.

1096 § 3(2) sentence 2 German Banking Act; see also *BaFin* (2016) Interpretative Guidance, 7, 11.

1097 See Chapter I.II.B.a: Proprietary trading. These designations are used by the Bundesbank and BaFin in the English Interpretative Guidance and the translation of the German Banking Act. See *BaFin* (2016) Interpretative Guidance, 7; *Deutsche Bundesbank* (2014) Banking Act, 2–3.

1098 See *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 41 *BaFin* (2016) Interpretative Guidance, 7.

1099 *BaFin* (2016) Interpretative Guidance, 7.

1100 *BaFin* (2016) Interpretative Guidance, 7. See also *BaFin* (2018) Merkblatt Eigenhandel und Eigengeschäft; *Schwennicke* (2016) Begriffsbestimmungen, 67.

The German Banking Act defines four different kinds of proprietary trading,[1101] among the market making business and the business of systematic internalisers.[1102] What they generally have in common is their service character, which is the key characteristic of proprietary trading within the meaning of the German Banking Act.[1103] The service character does not require a certain legal structure for a transaction or an acquired financial instrument to be identical to the sold financial instrument. It is assumed if a client order is received before a specific transaction is entered into;[1104] service character can nevertheless also be given, if transactions are entered in anticipation of client orders.[1105]

Of the different kinds of proprietary trading, the German legislator only deemed one dangerous enough to exclude it from the ring-fence: high-frequency trading.[1106] It is the only kind of proprietary trading within the meaning of the German Banking Act that does not require a service character.[1107] It is characterised by the buying and selling of financial instruments on own account via high-frequency algorithmic trading technique, which can be understood as trading that involves *inter alia* a certain infrastructure to minimise network latencies and the ability of the system to trade without human intervention.[1108] All other forms of proprietary trading can be conducted within the fence.

To ensure that market making activities that potentially fall into the scope of the definition of high-frequency trading are not affected by its prohibition, the German Banking Act stipulates that high-frequency trading constitutes an excluded activity as long as it is not market making.[1109]

1101 § 1(1a)(4)(a)-(d) German Banking Act.
1102 See *BaFin* (2018) Merkblatt Eigenhandel und Eigengeschäft, 2 (The main difference between market makers and systemic internalisers is that the former trades on organised markets, multilateral or organised trading systems; the latter trades outside such market places without itself being a multilateral trading system).
1103 *BaFin* (2016) Interpretative Guidance, 7–8.
1104 *BaFin* (2016) Interpretative Guidance, 8; *BaFin* (2016) Auslegungshilfe, 8; *BaFin* (2018) Merkblatt Eigenhandel und Eigengeschäft, 4.
1105 *Schwennicke* (2016) Begriffsbestimmungen, 56; *Schwennicke* (2016) Verbotene Geschäfte, 197–198; *BaFin* (2016) Interpretative Guidance, 9.
1106 § 3(2) sentence 2 (3), in conjunction with § 1(1a)(4)(d) German Banking Act.
1107 *Schwennicke* (2016) Begriffsbestimmungen, 54, 56.
1108 See § 1(1a)(4)(d) German Banking Act; See also *BaFin* (2018) Merkblatt Eigenhandel und Eigengeschäft, 4–5. For a more detailed explanation of high frequency trading, see e.g. *Aldridge* (2010) High-Frequency Trading, 1–6, 21 et seqq.
1109 See § 3(2) sentence 2(3) German Banking Act.

The third excluded activity is the lending and guarantee business with certain counterparts: banks must not engage in lending and guarantee activities with certain hedge funds and alternative investment funds.[1110] Most authors consider this prohibition to apply to transactions without taking into account their actual risk potential, risk-mitigating factors[1111] or collateral.[1112] The BaFin's Interpretative Guidance, however, set down a major exemption: fully collateralised lending and guarantee business with hedge funds and AIFs is not prohibited.[1113]

BaFin's argumentation for a teleological reduction is based on the purpose of the German Ring-fencing Act and includes a comparative law reference to France and the EU Commission's draft regulation.[1114] The exemption of fully collateralised transactions with hedge funds and AIFs is one of the most important reliefs for banks in practice and mitigates the prohibition of the German Ring-fencing Act considerably.

Besides the excluded activities just mentioned, the German legislator sets down powers for the regulator to prohibit additional activities (and allow them only to be conducted within a trading entity). These powers can be exerted even if a banking group does not exceed the threshold. The condition is that the solvency of either the CRR credit institution or its group is endangered,[1115] which has to be proved by BaFin on the basis of objective criteria.[1116] Activities that can be prohibited are (i) market making,[1117] and (ii) other transactions within the meaning of the excluded activities above[1118] and (iii) other transactions involving financial instruments which are comparable with market making and the excluded activities above and in terms of their risk.[1119] While (ii) enables the BaFin to mandate a separation of excluded activities in situations where thresholds are

1110 See § 3(2) sentence 2(2) German Banking Act.
1111 See *Schelo/Steck* (2013) Trennbankengesetz, 240; *Schwennicke* (2016) Verbotene Geschäfte, 198.
1112 See *Kumpan* (2014) Verbot von Eigengeschäften, 208; *Schwennicke* (2016) Verbotene Geschäfte, 198.
1113 *BaFin* (2016) Auslegungshilfe, 12.
1114 *BaFin* (2016) Auslegungshilfe, 12; For a discussion of the EU Commission's draft regulation, see Chapter II.II.E.a: Activities restrictions.
1115 See § 3(4) German Banking Act.
1116 *Schwennicke* (2016) Verbotene Geschäfte, 202.
1117 § 3(4) German Banking Act.
1118 § 3(4) in conjunction with § 3(2) sentence 2 German Banking Act.
1119 § 3(4) German Banking Act.

not exceeded,[1120] (iii) is rather unclear due to its vague wording.[1121] It constitutes a possibly far-reaching delegation of power to BaFin.

2. Exceptions

The legislator then stipulates a number of exceptions, in particular regarding the prohibition of proprietary business. This is because he acknowledges that some transactions are associated with client business or are necessary for treasury and risk management.[1122]

The first exception concerns hedging transactions for transactions with clients. The German Banking Act allows such transactions, as long as they are not conducted for transactions with hedge funds and alternative investment funds.[1123]

This provision is criticised because its wording not only excludes the hedging of prohibited transactions with hedge funds and AIFs, but also the hedging of all transaction with such counterparties, including permitted transactions; for example, the sale of a stock option to an AIF client following its order,[1124] which would not be within the scope of the prohibition due to its service character. As this would counteract the aim of the provision, *Kumpan* suggests to teleologically reduce it to the hedging of prohibited transactions.[1125] The BaFin seems to partly agree and clarifies that hedging is allowed with regard to all transactions with AIFs and hedge funds that are not prohibited.[1126]

According to *Schelo/Steck*, hedging of prohibited transactions would also be desired in the interest of stability.[1127] That would also include the hedging of credit and guarantee business with hedge funds and AIFs. BaFin did

1120 *Schwennicke* (2016) Verbotene Geschäfte, 202.
1121 See *Schelo/Steck* (2013) Trennbankengesetz, 241.
1122 *Schelo/Steck* (2013) Trennbankengesetz, 240; *Schwennicke* (2016) Verbotene Geschäfte, 198.
1123 See § 3(2) sentence 3(1) German Banking Act; *BaFin* (2016) Interpretative Guidance, 36.
1124 See *Schelo/Steck* (2013) Trennbankengesetz, 240; *Kumpan* (2014) Verbot von Eigengeschäften, 210.
1125 See *Kumpan* (2014) Verbot von Eigengeschäften, 210.
1126 See *BaFin* (2016) Interpretative Guidance, 36, 37.
1127 See *Schelo/Steck* (2013) Trennbankengesetz, 240; *Kumpan* (2014) Verbot von Eigengeschäften, 210 (approving of this thought).

not take this up and clarifies that the hedging of prohibited transactions is not excepted from the prohibition.[1128]

The second exception concerns the management of interest rate, foreign exchange, liquidity and credit risk of the banking group.[1129] While the legislator did not explicitly mention the management of price risk,[1130] it is included by BaFin through a conclusion by analogy.[1131]

The third exception concerns transactions connected with long-term investments: it includes transactions (i) with the purpose of purchasing and selling long-term participations[1132] and transactions (ii) that are not conducted with the aim of exploiting actual or expected short-term differences between buying and selling prices or other price or interest rate movements in order to generate profits.[1133] Most authors emphasize the importance and extent of this exception.[1134]

According to the wording of the third exception, its transactions are not limited to certain counterparts and – as long as they are long-term – to a specific activity. *Kumpan* argues that they could therefore also include credits to hedge funds.[1135] *Kumpan*, however, then goes on to argue that this would counteract the purpose of the prohibition and that the exception should be understood only with regard to the prohibition of proprietary business.[1136] This argumentation would, incidentally, also apply to credits to AIFs. In the author's opinion, *Kumpan's* conclusion already results from a systematic interpretation of the provision. The BaFin, however, clarifies in its Interpretative Guidance that the exception does not ap-

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1128 *BaFin* (2016) Auslegungshilfe, 38.

1129 See § 3(2) sentence 3(2) German Banking Act.

1130 *Möslein* identifies this rightly as an unintended gap in the legislation. See *Möslein* (2013) Spartentrennung, 403; *Schwennicke* (2016) Verbotene Geschäfte, 200.

1131 This is argued by the BaFin to close the unintended gap of banks not being able to manage price risks. See further *BaFin* (2016) Interpretative Guidance, 38.

1132 See § 3(2) sentence 2(3) German Banking Act; *Deutsche Bundesbank* (2014) Banking Act, 30.

1133 See § 3(2) sentence 2(3) German Banking Act; *Deutsche Bundesbank* (2014) Banking Act, 30; *BaFin* (2016) Interpretative Guidance, 38.

1134 See *Schwennicke* (2016) Verbotene Geschäfte, 200 (considering it the main exception of the Act); *Möslein* (2013) Spartentrennung, 403 (noting that the exception is particularly wide-ranging).

1135 *Kumpan* (2014) Verbot von Eigengeschäften, 210; *Schwennicke* (2016) Verbotene Geschäfte, 200.

1136 *Kumpan* (2014) Verbot von Eigengeschäften, 210; *Schwennicke* (2016) Verbotene Geschäfte, 200.

ply to lending and guarantee business with AIFs.[1137] It, however, does not mention hedge funds in the Interpretative Guidance, leaving room for further speculation.

b. Ring-fenced bodies

The German Ring-fencing Act does not explicitly mandate activities that have to be provided by the entities within the ring-fence.[1138] This relates to the method of ring-fencing pursued by the German legislator.[1139] It, however, derives from its scope that a CRR credit institution, i.e. a bank that provides both deposit-taking and lending, must remain within the ring-fence.[1140]

There are also activities that must not be provided by the financial trading institution. If a banking group chooses to provide such activities, it can thusly only provide them from within the ring-fence. These activities are either (i) listed explicitly by the German Ring-fencing Act, or (ii) derive from an interpretation of the law. The question what activities have to be provided by the ring-fenced entities is thus closely connected to the question what activities can and cannot be provided by a financial trading institution.

1. Explicit activity restrictions for the financial trading institution

Activities mentioned explicitly in the German Ring-fencing Act are payment services and e-money business. The financial trading institution is explicitly prohibited from providing such services.[1141] From a group perspective, payment services and e-money business can therefore only be provided from within the ring-fence.

1137 *BaFin* (2016) Interpretative Guidance, 38–39.

1138 In contrast to the UK ring-fencing model with one ring-fenced body (and potentially subgroups), the ring-fence of the German approach is much broader, comprising all entities except the non-ring-fenced financial trading institution. It is therefore appropriate to use the plural ("ring-fenced bodies" or "ring-fenced entities") regarding the German approach.

1139 See Chapter III.IV.D.c: Ring-fencing method.

1140 See Chapter III.III.B.a: Personal scope.

1141 § 25f(6) German Banking Act.

2. Other activity restrictions for the financial trading institution

Besides that, the German Banking Act is very unclear regarding what activities can and cannot be provided by the financial trading institution. *Möslein* notes that, unlike the Liikanen Report, the Act does not even stipulate a prohibition of deposit and credit business for the financial trading institution.[1142]

This is a remarkable flaw in the legal drafting of the Act. According to the wording of the Act, it would theoretically be conceivable that the trading entity would accept deposits.[1143] Moreover, as long as it would not provide loans and accept deposits cumulatively and would thusly be regarded as a CRR credit institution,[1144] it could accept retail deposits and provide banking services, such as guarantees and principal broking services.

It is obvious that it is not compatible with the purpose of the law that the trading entity accepts deposits and provides almost unlimited banking services. However, as also the BaFin's Interpretative Guidance does not set down clear rules, this unintended gap is to be closed by interpretation.

There are two starting points: (i) activities whose provision would be in conflict with the character of the financial trading institution, as indicated in the legislative materials; and (ii) activities whose provision would be in conflict with the purpose of the law.

i. First starting point: Financial service institution

The legislative materials to the German Ring-fencing Act characterise the financial trading institution as a financial service institution. This is also indicated by the German Banking Act.[1145]

1142 *Möslein* (2013) Spartentrennung, 405.
1143 See *Möslein* (2013) Spartentrennung, 405.
1144 This is also underscored by *Schaffelhuber/Kunschke* (2015) Trennbankengesetz, 400.
1145 *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 42; See *Auerbach/Schriever* (2016) CRR-Kreditinstitute, 849. The idea that the trading entity could be classified as a financial service institution is strengthened by § 1(1a) sentence 3 German Banking Act, which sets down that a trading entity that provides proprietary business is a financial service institution.

The German Banking Act traditionally[1146] differs between two categories of financial institutions: (i) the typical bank, which provides classic "banking services" and is referred to as "credit institution"; and (ii) a company that provides "financial services", which is referred to as "financial service institution".[1147]

A financial service institution within the meaning of § 1(1a) German Banking Act is defined as an *"undertaking[] which provide[s] financial services to others commercially or on a scale which requires commercially organised business operations, and which [is] not [a] credit institution[]"*.[1148] The financial services provided by a financial service institution comprise for example the operation of a multilateral trading facility, proprietary trading, proprietary business in the case of a financial trading institution.[1149]

A credit institution as defined in § 1(1) German Banking Act, in contrast, conducts *"banking business"* which comprises *inter alia* the deposit business, credit business, guarantee business and underwriting business.[1150] Credit institutions are not mandated to report financial services because of their full license,[1151] if an undertaking provides at least one service attributed to banking business, it is considered a credit institution.[1152] The relation of financial service institutions to credit institutions is implied in their definition: an undertaking may be a financial services institution if it "*[is] not [a] credit institution[]*",[1153] i.e. if it does not conduct banking business. Otherwise it is a credit institution.[1154]

ii. Deliberate decision or editorial error

The question arises whether this characterisation is an editorial error or a deliberate decision. If one considers it a deliberate decision, it follows that

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1146 In addition, the German Banking Act recognises the concept of CRR credit institutions, see below.

1147 See below.

1148 § 1(1a) German Banking Act; *Deutsche Bundesbank* (2014) Banking Act, 2.

1149 See § 1(1a) German Banking Act. Regarding the provision on proprietary business (§ 1(1a) sentence 3 German Banking Act), the BaFin explains that it was created solely to secure the prohibition of § 3(2) sentence 2 German Banking Act. See *BaFin* (2016) Interpretative Guidance, 49–50.

1150 See § 1(1) German Banking Act; *Deutsche Bundesbank* (2014) Banking Act, 1.

1151 *Schäfer* (2016) § 1 Begriffsbestimmungen, Sec. 34.

1152 *Schäfer* (2016) § 1 Begriffsbestimmungen, Sec. 13.

1153 § 1(1a) German Banking Act; *Deutsche Bundesbank* (2014) Banking Act, 2.

1154 See e.g. *Deutsche Bundesbank* (2016) Merkblatt Finanzdienstleistungen, 5–6.

the German legislator did not intend to allow the financial trading institution the provision of banking business within the meaning of § 1(1) German Banking Act.[1155] Such a conclusion is, on the one hand, conceivable, as the trading entity's activities would thus be limited to financial services within the meaning of § 1(1a) German Banking Act.[1156] Core banking services, such as deposit-taking or lending, could not be provided by the trading entity. The legislator would thus have addressed the open question of the competence of the trading entity.

This conclusion on the other hand, creates problems with regard to some of the excluded activities, namely (i) credit and guarantee business with hedge funds and AIFs;[1157] and with regard to (ii) activities that should be allowed to be provided by the trading entity, according to the purpose of the Act, but would not be allowed due to the classification of the trading entity as a "financial services institution".

While the excluded activity of proprietary business is a financial service within the meaning of § 1(1a) German Banking Act and can therefore be provided by a financial service institution, the provision of credit and guarantee business (even if it is with hedge funds and AIFs) are typical banking services within the meaning of § 1(1) German Banking Act.[1158] Conducting credit and guarantee business with such entities would thusly require the trading entity to be a credit institution.[1159]

It furthermore creates problems with regard to activities that should be allowed to be provided by the trading entity. If the trading entity was deliberately considered a financial services institution by the legislator, it could not even voluntarily provide banking services within the meaning of § 1(1) German Banking Act. This includes investment banking services that can be considered risky, such as underwriting.[1160] While underwriting may not be risky enough to be prohibited for the ring-fenced entities, banks should nevertheless be allowed to voluntarily shift such activities to the trading entity.

1155 § 1(1) German Banking Act.

1156 § 1(1a) German Banking Act.

1157 See Chapter III.IV.B.a.1: Excluded activities.

1158 See § 1(1) German Banking Act; see also e.g. *BaFin* (2009) Merkblatt Garantiegeschäft; *Möslein* (2013) Spartentrennung, 402–403.

1159 For a similar argumentation, see *Schaffelhuber/Kunschke* (2015) Trennbankengesetz, 399.

1160 See § 1(1)(10) German Banking Act. As will be discussed, a legal comparative analysis finds that other jurisdictions do not allow for underwriting to take place within the ring-fence.

It can therefore be assumed that the characterisation of the trading entity as financial services institution in the legislative materials to the German Ring-fencing Act is indeed an editorial error. Taking into account the history of the Act, being drafted hastily in the run-up of the federal elections,[1161] the occurrence of such an editorial error is plausible. An interpretation suggests that there is therefore no prohibition of providing banking services for the trading entity.[1162]

iii. Second starting point: Objectives of the Act

Once it is established that the characterisation of the trading entity as financial services institution is an editorial error, the question of what activities the trading entity can and cannot provide resurfaces: activities it cannot provide can only be conducted within the ring-fence.

Technically, the answer could be found in § 32(2) German Banking Act. It allows BaFin to award an authorisation to provide banking services within the meaning of § 1(1) German Banking Act and financial services within the meaning of § 1(1a) German Banking Act only with regard to a particular service or subject to conditions.[1163]

BaFin could thusly award the trading entity the necessary authorisation, depending on what activities are to be provided by the trading entity. If the trading entity, for instance, was supposed to provide only proprietary business, BaFin could award an authorisation only for the financial service of proprietary business. The trading entity would in such a case be a financial services institute.

If the trading entity was supposed to only provide loans and guarantee business with hedge funds and AIFs, BaFin could award the respective authorisation only for the two banking services. The trading entity would in this case be a credit institute that can provide a limited number of banking services. If the trading entity was supposed to provide all excluded activities, BaFin could award the respective authorisation only for the excluded

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1161 See *Hardie/Macartney* (2016) EU Ring-Fencing, 505–506, 512–513; *Deutscher Bundestag* (2013) Bericht Finanzausschuss, 3; Chapter III.II.B: Germany.

1162 This also seems to be suggested in the Annual Report of *Deutsche Bank. Deutsche Bank* (2018) 2017 SEC Form 20-F, 59 (noting that "*[t]he financial trading institution may be established in the form of an investment firm or a bank*").

1163 See § 32(2) German Banking Act.

activities. The trading entity would in such a case be a credit institute that can provide a limited number of banking and financial services.[1164]

iv. Limitations

The trading entity's activities should, however, not be limited to the excluded activities alone. A certain flexibility is necessary for economic reasons (also the trading entity needs to be self-sufficient), to mitigate the invasiveness of the law, and to ensure that activities that may be considered risky can voluntarily be transferred to the trading entity.

The latter is especially true for market making. While the German Ring-fencing Act does not stipulate a prohibition or separation of market making services, it does authorize BaFin to order a separation under certain conditions.[1165] By this, the legislator acknowledges that market making may be risky as well. However, there is no provision that sets out that market making can voluntarily be provided by the trading entity. Similar considerations apply to underwriting.

At the same time, there must be limitations. Allowing the trading entity to provide, for example, unlimited deposit-taking services, would counteract the objectives of the German Ring-fencing Act, namely the insulation of deposits from risky activities, a higher resolvability of the latter and the reduction of tax payer-funded bailouts.[1166] *Schaffelhuber/Kunschke* come to a similar conclusion. They furthermore rightly note that this should not apply to deposits of institutional investors.[1167]

1164 This also seems to be suggested in the Annual Report of *Deutsche Bank. Deutsche Bank* (2018) 2017 SEC Form 20-F, 59 (noting that "*[t]he financial trading institution may be established in the form of an investment firm or a bank*").

1165 This option is discussed in detail in Chapter III.IV.B.a.1: Excluded activities.

1166 For the objectives of the Trennbankengesetz, see *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 2, 27.

1167 *Schaffelhuber/Kunschke* (2015) Trennbankengesetz, 400; Institutional investors are not included in the German Banking Act's understanding of deposits. See *Schäfer* (2016) § 1 Begriffsbestimmungen, para 46; *BaFin* (2014) Merkblatt Einlagengeschäft, 2–3.

3. Conclusio

Drawing from the above, clearer rules setting out the legislator's and regulator's idea of both the trading entity's character and the scope of activities it can and cannot provide are desirable. Based on the historical interpretation, which was complemented by a systematic and teleological interpretation, it can be established that the qualification of the trading entity as a financial trading institution in the legislative materials is an editorial error. The trading entity is therefore not limited to financial services.

However, from a teleological and systematic interpretation it can be drawn that certain limitations are necessary and that the trading entity should not be allowed to accept deposits. All other banking services and financial services should be allowed to be provided by the trading entity.

Activities that have to be provided by the ring-fenced bodies are thus payment services and e-money business, as well as the acceptance of retail deposits.

c. Summary

Summing up the findings, it can be stated that in banking groups that contain a CRR-credit institution and that exceed the thresholds, a distinction between entities within the ring-fence and a non-ring-fenced trading entity, a so-called financial trading institution, has to be made. This is illustrated according to *Britton et al.*,[1168] who form groups of key activities according to where they have to be provided. Due to significant uncertainties regarding the character of the trading entity outlined above,[1169] the following paragraphs cautiously strive to distribute activities that can with sufficient certainty be classified.

The first group consists of activities that have to be provided within the ring-fence. Due to the scope of the rules[1170] and the reflections on the character of the trading entity,[1171] it seems to be beyond controversy that the cumulative activity of providing deposit-taking and lending services falls

1168 See the illustration of *Britton et al.* (2016) Ring-fencing, 167.
1169 See Chapter III.IV.b.2: Other activity restrictions for the financial trading institution.
1170 See Chapter III.III.B: Germany.
1171 See Chapter III.IV.b.2: Other activity restrictions for the financial trading institution.

into this group; furthermore, payment services and e-money business. From an interpretation of the German Ring-fencing Act it can be concluded that the activity of deposit-taking (except of institutional investors) can also only be provided by the ring-fenced entities.

The second group comprises activities that have to be provided outside the ring-fence by the financial trading institution. These excluded activities are (i) proprietary business, (ii) high frequency trading except for market making and (iii) lending and guarantee business with hedge funds and AIFs.[1172]

The third group are activities that can be provided by both the entities within the ring-fence and the non-ring-fenced trading entity. Due to the unclear character of the trading entity, this group is the hardest to identify. The interpretation of the German Ring-fencing Act conducted above suggests that the third group contains all banking services within the meaning of Art. 1(1) German Banking Act, except for deposit-taking and all financial services within the meaning of Art. 1(1a) German Banking Act, with the exception of the excluded activities. It comprises *inter alia* underwriting, market making, fully collateralised lending and guarantee business with hedge funds and AIFs and the general loans business.

d. Affected banks

It is remarkable that there is very little information available on the implementation efforts of affected banks.[1173] This is particularly odd, as the provisions of § 3(2)-(3) and § 25f are applicable since July 2015.[1174] Even when taking into account the identification and implementation periods of § 3(3) German Banking Act and extensions granted by BaFin, such as the

1172 See Chapter III.B.a: non-ring-fenced body.

1173 Additionally to extensive research, the author contacted both BaFin and the Association of German Banks. BaFin was not able to answer the query due to its duty of confidentiality according to § 8 German Banking Act. The Association of German Banks did not have any information on its members activity concerning the establishment of financial trading entities available. Also in the BaFin Journal of February 2016 (*Stubbe* (2016) Trennbanken, 10) and in the response of the German Government to a parliamentary question (*Deutscher Bundestag* (2016) Antworten der Bundesregierung, 42–43) there is no information on the establishment of a financial trading instition.

1174 § 64s(2) German Banking Act. For a detailed discussion of the application timeline, see Chapter III.VI.B: Germany.

one granted for *Deutsche Bank*,[1175] it is noticeable that there is hardly any reporting of restructuring efforts. In the BaFin *Journal* of February 2016, there is also no information on the establishment of a financial trading institution.[1176] As far as the author is concerned, it can thus be concluded that no financial trading institution has been established so far.

C. Switzerland

a. Ring-fenced body

1. Ex ante Separation

The Swiss Banking Act stipulates in Art. 9(2)(d) that banks which are determined systemically important by the SNB must fulfil various special requirements. One of them is that they have to provide an emergency plan regarding structure, infrastructure, management and controls, as well as internal liquidity and capital flows. The emergency plan must be immediately realizable and must ensure that systemically important functions can be continued in case of an imminent insolvency.[1177]

In addition to the emergency plan, the Swiss Banking Ordinance sets down a framework for a resolvability assessment, which aims at incentivising banks with capital rebates to enhance their general resolvability exceeding the minimum requirements of the emergency plan.[1178] This chapter focuses on the emergency plan, as it sets down mandatory minimum requirements.

While, according to Art. 9(2)(d) Swiss Banking Act, a credible plan would suffice to fulfil the special requirement, there is strong evidence for the assumption that the parties involved had *"very concrete expectations"* on

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1175 *Deutsche Bank* was granted an extension of the application of the German Ring-fencing Act until June 30, 2017. See *Deutsche Bank* (2017) 2016 SEC Form 20-F, 26.

1176 *Stubbe* (2016) Trennbanken, 10. See also the response of the German Government to a parliamentary question. *Deutscher Bundestag* (2016) Antworten der Bundesregierung, 42–43.

1177 See Art. 9 Swiss Banking Act.

1178 Art. 65, 66 Swiss Banking Ordinance. For a discussion of the relation between the emergency plan and measures to enhance general resolvability, see Chapter III.V.C.a: Legal sources.

certain concrete organisational measures that affected banks have to implement.[1179]

i. Caveat

In line with the research focus of the dissertation, the following review is focused on the organisational requirements for Switzerland's G-SIBs, *UBS* and *Credit Suisse.* As outlined above, a number of other banks have been considered systemically important by the SNB since 2013.[1180] Authorities differentiate quite prominently two groups of banks considered systemically important by the SNB*:* (i) globally active "big banks",[1181] and (ii) domestically oriented systemically important banks.[1182]

Domestically oriented systemically important banks are quite different to the globally active big banks. They are less complex and less interconnected with global markets. Furthermore, their investment banking activities are of less weight and their orientation is – as their name implies – mainly domestic.[1183] Therefore the Swiss organisational measures apply differently. It is likely that there is no need for an ex ante separation of systemically important activities, because these are to a large extent their core business.

This is also noted by the EFD, stating with regard to the implementation period for the emergency plan that *"based on today's state of knowledge"* domestically oriented systemically important banks, in contrast to the G-SIBs*"[…] do not plan larger organisational or structural changes"*.[1184] For do-

1179 See *Hofer* (2014) Structural Reforms, 325.
1180 See Chapter III.III.C.c: Affected banks.
1181 The term "big bank" corresponds to the SNB's category for banks it describes as *"economically important"*, active in all business areas, *"in particular [in] investment banking*". *SNB,* Notes on the Banking Statistics, (September 28, 2017), https://data.snb.ch/en/topics/banken#!/doc/explanations_banken; see Chapter III.I.C.b: Number of banks and their nature.
1182 The distinction can already be found in the TBTF Review of 2015. See *Bundesrat* (2015) Bericht Too Big to Fail, 1929, 1942; see also the provision of Art. 60 Swiss Banking Ordinance (stipulating a different implementation period for domestically oriented banks). While globally active systemically important banks are primarily determined by the FSB, Finma determines other, domestically oriented systemically important banks. See Art. 124a ERV; see also *Bundesrat* (2017) Bericht systemrelevante Banken, 4850.
1183 See *EFD* (2016) Erläuterungsbericht, 6.
1184 Own translation from German original, see *EFD* (2016) Erläuterungsbericht, 6.

mestically oriented systemically important banks, the emergency plan is therefore likely to remain a plan.

ii. Mere planning?

The expert commission had already hinted that certain changes to the organisation of the affected institutes would possibly be necessary to ensure the credibility of the emergency plan.[1185] This understanding deepened in the course of the legislative process. While the Swiss Banking Act is rather vague regarding the emergency plan[1186] and does not explicitly mention measures exceeding mere planning, a different tone is set in particular by the Swiss Banking Ordinance and its legislative materials.

The Swiss Banking Ordinance concretises the emergency plan and organisational measures. It first stipulates in Art. 60(1) that a systemically important bank has to ensure that its systemically important functions can – independently from the rest of the bank – be continuously provided in the case of imminent insolvency; and that the bank has to take the necessary measures for that.[1187]

While this provision reminds of Art. 9(2)(d) Swiss Banking Act, it rephrases it – the word emergency plan is missing; it is first used in the subsequent section,[1188] which stipulates that the bank has to describe the necessary measures (that have already been taken according to Art. 60(1) Swiss Banking Ordinance) in an emergency plan, in which it proves that it

1185 The expert commission, for instance, noted that the "*emergency plan must be designed in such a way that it can be implemented within a very short space of time in the face of a crisis. The timing at which implementation would need to begin, as well as the question of what further organisational measures would need to be taken in addition to the emergency plan itself and even before its implementation, depend on the existing organisation of the bank, the specific emergency plan in question, and the remaining capital cover.*" *Expertenkommission* (2010) Final report, 39; see also *Expertenkommission* (2010) Schlussbericht, 40; The expert commission also noted that "*[a]t a contents level, the banks must be able to show that they have put in place the prerequisites for the continuation of systemically important functions through specific organisational measures that go beyond the mere planning stage*". *Expertenkommission* (2010) Final report, 39; *Hofer* (2014) Structural Reforms, 326.

1186 See Art. 9(2)(d), 10(2) Swiss Banking Act.

1187 Art. 60(1) Swiss Banking Ordinance.

1188 Art. 60(2) Swiss Banking Ordinance.

is capable to ensure the continuation of the systemically important activities.

This slight difference in the wording already reveals the understanding that mere planning does not suffice. Measures have to be taken in advance to ensure the survival of systemically important activities. Compared to Art. 9(2)(d), these measures are now in the focus of attention, not a comprehensive plan.

Art. 60(3) Swiss Banking Ordinance is more forthright, as it stipulates explicitly that measures of the emergency plan have to be implemented ex ante, as far as the uninterrupted continuation of systemically important functions requires.[1189] While this understanding, as demonstrated, already existed in the expert commission's report, it emerges in an unprecedented clarity in the Swiss Banking Ordinance and its legislative materials.

iii. Three options?

The legislative materials to the Swiss Banking Ordinance outline three different options for affected banks in the context of the emergency plan: two of the options require transferring systemically important functions in the case of imminent insolvency. They differ with regard to the the counterparty, which can either be (i) an independent legal entity with a banking license that has to be created beforehand, or (ii) a third party which has agreed to a bankruptcy remote arrangement.[1190] Both options constitute an ex post separation.

The third option is the ex ante separation of systemically important functions onto a legal entity within the framework of the bank's business model.[1191] A remarkable detail in this context is that the EFD claims this option matches UK ring-fencing.[1192] As pointed out by *Hofer*, the legis-

1189 Art. 60(3) Swiss Banking Ordinance.

1190 *EFD* (2012) Kommentar Bankenverordnung, 10.

1191 *EFD* (2012) Kommentar Bankenverordnung, 10.

1192 The EFD mentions this in a footnote (*EFD* (2012) Kommentar Bankenverordnung, 10 Fn 12; see also *Hofer* (2014) Structural Reforms, 329). While it is discussed in greater detail below (see Chapter III.IV.c: Ring-fencing method; Chapter III.V.D.b.2: Ring-fencing in Switzerland), the importance of this detail has to be underscored. It can be regarded as another hint for the suggestion that regulators had a clear concept in mind.

lative materials hardly conceal that this option is the regulator's favourite.[1193]

This can be gathered from the legislative materials in two ways. Firstly, they underscore that an ex ante separation has the advantage that through the provision of systemically important functions during daily business, it can be assumed that their continuation would work out in the case of an emergency.[1194] Secondly, they note that it is doubtful whether the first option (transferring systemically important functions in the case of imminent insolvency onto an independent legal entity that has to be created beforehand) can be effective without implementation of additional measures of an emergency plan.[1195]

The viability of a transfer of systemically important functions to a third party on the basis of a bankruptcy remote arrangement can also be questioned on reasonable grounds. *Hofer* notes that this *"basically means that UBS could sell to CS and vice versa in the Swiss banking environment"*. This would create an even bigger bank and would further contribute to too-big-to-fail. There could moreover be a scenario in which both banks are affected by a crisis. According to *Hofer*, a bank would only agree to acquiring systemically important functions in a bankruptcy remote arrangement under the condition of government support.[1196] *Bahar/Peyer* note that bankruptcy remote arrangements can be regarded realistic only in limited business segments characterised by intensive cooperation, e.g. in the form of a joint ventures.[1197]

It is furthermore hard to imagine that this option would not also require some form of ex ante separation. Otherwise, the transferral of systemically

1193 *Hofer* (2014) Structural Reforms, 329.
1194 *EFD* (2012) Kommentar Bankenverordnung, 10.
1195 See *EFD* (2012) Kommentar Bankenverordnung, 10; see also *Nobel* (2012) Bank- und Kapitalmarktrecht, 10 (noting that big banks are recommended to ex ante separate systemically important functions, as an ex post bridge bank solution cannot be considered reliable); *Hofer* (2014) Structural Reforms, 329. For a discussion of limits of a bridge bank, see *Binder* (2017) Systemkrisenbewältigung durch Bankenabwicklung?, 62–64.
1196 See *Hofer* (2014) Structural Reforms, 331–332. *Roth* (2012) Too-Big-to-Fail, 291–292 (*Roth* calls into question the ability of a purchaser to continue providing systemically important functions in case of an emergency). For a discussion of the sale to a purchaser that is not a bridge bank, see *Binder* (2017) Systemkrisenbewältigung durch Bankenabwicklung?, 62–64.
1197 See *Bahar/Peyer* (2013) Systemrelevante Banken, 411.

important activities in a short time frame (over a weekend)[1198] in a way that keeps them uninterrupted is hardly thinkable.

Of the options suggested by the legislative materials to the Swiss Banking Ordinance, therefore only the ex ante separation remains. In its 2015 report on the Swiss too-big-to-fail package, the Federal Council seems to confirm this noting that *"[i]n Switzerland, the ex post separation of systemically important parts […] proved to be problematic"*.[1199] It then points out that both the Swiss G-SIBs decided for an ex ante separation.[1200]

It can thus be stated that while the authorities non-exhaustively mention three options of ex ante and ex post separation in the context of the emergency plan, affected big banks seem to have little choice than to implement an ex ante separation of systemically important functions.[1201]

2. Systemically important functions

Art. 8(1) Swiss Banking Act deems functions systemically important if they are indispensable for the Swiss economy and cannot be substituted in the short term. *Bahar/Peyer* point out that this definition derives from the FSB Guidance on identifying critical services.[1202] The FSB Guidance suggests that when determining the criticality of a service, it first has to be assessed whether a disruption of the service *"is likely to have a material negative impact on a significant number of third parties"*. In a second step, the market of the service has to be assessed. The lower the ability of the market to substitute a failing provider quickly, the more likely that a service is considered critical.[1203]

With regard to Art. 8(1) it can therefore be drawn that a specific function can be considered indispensable if its disruption would have a nega-

1198 The transferral has to be conducted in the course of a weekend. See *EFD* (2012) Kommentar Bankenverordnung, 10.

1199 *Bundesrat* (2015) Bericht Too Big to Fail, 1935 (Own translation from German original).

1200 *Bundesrat* (2015) Bericht Too Big to Fail, 1935; see also Chapter III.IV.C.c: Affected banks.

1201 While the assessment that the ex ante separation is more reliable than an ex post transfer of systemically important functions on bridge bank or third party is to be agreed to, the practice of listing potential options and simultaneously indicating that there is little choice to the ex ante separation is to be criticised.

1202 *FSB* (2013) Guidance Critical Functions; *Bahar/Peyer* (2013) Systemrelevante Banken, 381–382.

1203 See *FSB* (2013) Guidance Critical Functions, 8–9.

tive material impact on the Swiss economy; if it cannot be substituted in the short term, i.e. if other market participants cannot provide the function or a comparable service.[1204]

Art. 8(1) Swiss Banking Act emphasizes the domestic deposits and loans business and payment transactions, but is non-exhaustive.

The legislative materials to the Swiss Banking Act only slightly concretise these terms, mentioning in particular (i) all liabilities due to domestic customers, i.e. deposits, (ii) loans to businesses of the real economy and unused credit limits of businesses of the real economy, and (iii) domestic mortgage loans with a remaining term of under one year.[1205] They additionally identify operative services systemically important banks provide for other domestic banks as another potential systemically important function.[1206] The highlighted systemically important functions can be attributed to commercial banking.

A central requirement for the regulator to approve an emergency plan is furthermore that the entity is self-sufficient, i.e. that it constitutes a business unit that can survive on its own, independently from the rest of the bank.[1207] It can therefore be necessary to transfer other business units into the ring-fenced body, for example wealth management services.[1208] There are, however, no given requirements on how the bank has to ensure self-sufficiency.[1209]

b. Non-ring-fenced bodies

Bahar/Peyer note that the fact that the list of the systemically important functions in Art. 8(1) Swiss Banking Act is non-exhaustive implies that other activities than those specifically mentioned can be regarded systemically important. This is certainly true. However, they refer in this context to ac-

1204 See *Bahar/Peyer* (2013) Systemrelevante Banken, 381–382.
1205 See *Bundesrat* (2011) Botschaft TBTF, 4747.
1206 See *Bundesrat* (2011) Botschaft TBTF, 4747; *Bahar/Peyer* (2013) Systemrelevante Banken, 382.
1207 Expert Interview, Affected Bank, September 28, 2017; see also *FSB* (2014) Structural Banking Reforms, 10.
1208 Both *Credit Suisse* and *UBS* reinforced their national systemically important functions with wealth management functions. See Chapter III.IV.C.c: Affected banks.
1209 This can be regarded as a manifestation of the principle of subsidiarity. See Chapter III.II.C.b.2: Subsidiarity principle.

tivities attributed to investment banking. As an example, they give underwriting and market making, arguing that these services play an important role in the functioning of the capital market as alternative sources of finance for businesses of the real economy.[1210] This argumentation can be agreed to only with a major *caveat*.

According to the legislative materials to the Swiss Banking Ordinance, investment banking activities are explicitly not desired to be conducted within the entity that provides systemically important functions. The EFD indicates that the "*implementation of the emergency plan is to be granted considerably more weight if the systemically important functions are provided together with riskier operations such as investment banking under the roof of a universal bank*".[1211] The EFD adds that "*[e]ven though no (full) separation of business segments can be demanded in the context of the emergency plan, it is an important element of the concept of systemically important functions that no contagion can be spread from the remaining bank*".[1212]

Hofer rightly notes that this can be broken down to the message that even though no separation of retail banking and investment banking can be mandated, the regulator will make it considerably harder for banks to receive approval for their emergency plans if those business segments are kept together.[1213] *Bahar/Peyer* do not insinuate this, but simply derive that keeping systemically important functions within a universal bank would effect a more careful assessment of the emergency plan by Finma.[1214]

The aim of separating systemically important functions, which in themselves are largely attributable to commercial banking, from investment banking activities is also reflected in the EFD considering the ex ante separation (which, as established above, can be identified as the only viable option for affected banks) as matching "*the example*"[1215] of the UK Vickers Commission ring-fencing model.[1216] Similarly, Finma implies in its 2014

1210 See *Bahar/Peyer* (2013) Systemrelevante Banken, 384.
1211 Own translation from German original, see *EFD* (2012) Kommentar Bankenverordnung, 10–11; cf. *Hofer* (2014) Structural Reforms, 330.
1212 Own translation from German original, see *EFD* (2012) Kommentar Bankenverordnung, 11; cf. *Hofer* (2014) Structural Reforms, 330.
1213 See *Hofer* (2014) Structural Reforms, 330.
1214 See *Bahar/Peyer* (2013) Systemrelevante Banken, 425.
1215 Own translation from German original, see *EFD* (2012) Kommentar Bankenverordnung, 10 Fn 12.
1216 *EFD* (2012) Kommentar Bankenverordnung, 10 Fn 12; see also *Hofer* (2014) Structural Reforms, 329; While this is discussed in greater detail below (see

annual report that Swiss emergency planning leads to the functional separation of commercial banking and investment banking.[1217]

The intent to separate systemically important functions from investment banking and in particular proprietary trading is furthermore clearly articulated by the Federal Council in response to a parliamentary motion. The Federal Council noted that "*Finma will ensure with the emergency plan, which has to be constantly adjusted, that the continuation of systemically important functions is not endangered by other business segments in the event of a crisis. It is probable that these business segments that have to be delimited in the emergency plan will include investment banking as a whole or in parts and possibly proprietary trading*".[1218]

Time has shown that regulators in Switzerland indeed exerted pressure on affected banks to separate their retail banking activities considered systemically important from investment banking activities.[1219] This, however, is hardly surprising. It would indeed be counteracting against the key goal of ensuring the continuation of (domestic) systemically important functions if investment banking activities were allowed to be included. This particularly applies to high-risk trading activities and global investment banking activities. Only very limited investment banking activities can be thought to be conducted within the domestic entity, for instance domestic underwriting, M&A, or advisory services.

c. Affected banks

Because Swiss legislation only stipulates very few and rather vague provisions, special attention has to be paid to the implementation efforts of Swiss banks. In line with the research objective of the dissertation, the focus is set on G-SIBs, namely *UBS* and *Credit Suisse*. Both their Swiss entities that were established in the context of the ex ante separation of systemical-

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Chapter III.IV.D.c: Ring-fencing method; Chapter III.V.D.b.2: Ring-fencing in Switzerland), the importance of this detail has to be underscored. The Vickers Report and the following Banking Reform Act 2013 put the spotlight on the separation of retail from investment banking. Referring to this model as being exemplary indicates clearly that there is a concrete expectation of banks for a separation of retail and investment banking.

1217 See *Finma* (2015) Jahresbericht 2014, 25.

1218 Own translation from German Original, see *Schweizerische Bundesversammlung* (2011) Motion Leutenegger Oberholzer; *Hofer* (2014) Structural Reforms, 331.

1219 See Chapter III.IV.C.c: Affected banks.

ly important functions shall be examined. The acquired investment banking activities are of particular interest, as they indicate potential limitations set by regulators.

1. UBS

UBS Switzerland AG was established in 2014 as a fully-owned subsidiary of *UBS AG*.[1220] It remained largely inactive[1221] until 2015, when it acquired from its parent company all assets and liabilities of the business divisions "Retail & Corporate" and "Wealth Management", as far as the latter is booked in Switzerland.[1222] Personal and corporate banking and wealth management booked outside of Switzerland remained in *UBS AG*. It furthermore acquired select back office functions, access to the financial market infrastructure for the respective business, including payment and custody infrastructure[1223], as well as certain business from the investment bank.[1224]

The acquired activities from the investment bank include (i) market making on the SIX Swiss Exchange,[1225] (ii) bank notes business[1226] and (iii) secured financing transactions.[1227] The remaining investment bank and as-

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1220 See Commercial Register Entry, *UBS Switzerland AG*, (September 08, 2014), Public deed of the foundation of *UBS Epsilon AG*; Commercial Register Entry, *UBS Switzerland AG*, (October 29, 2014), Public deed regarding the resolutions of the extraordinary shareholders meeting of *UBS Epsilon AG*, (in which the company name was changed to *UBS Switzerland AG)*.

1221 *UBS* (2016) Annual Report 2015, 766.

1222 See *UBS* (2016) Annual Report 2015, 766; see also Commercial Register Entry, *UBS Switzerland AG*, (May 28, 2015), Report on Share Capital Increase, 2.

1223 For a good explanation of custody services, see *TheClearingHouse* (2016) Custody Services of Banks, ii-iv.

1224 *UBS* (2016) Annual Report 2015, 766.

1225 For a description of market making, see Chapter I.II.B.b: Market making.

1226 Banknotes business refers to the business of trading in physical banknotes.

1227 Securities financing transactions are transactions in which "*securities are used to borrow cash (or other higher investment-grade securities), or vice versa – this includes repurchase transactions, securities lending and sell/buy-back transactions*". *ESMA*, Securities Financing Transactions, https://www.esma.europa.eu/sections/securities-financing-transactions; see also *European Commission* (2017) Securities Financing Transactions, 2. For *UBS* transferred secured finance transactions include securities lending and borrowing, repo and reverse repo. Commercial Register Entry, *UBS AG*, (June 17, 2015), Public Deed of the Asset Transfer Agreement, 9.

set management functions were retained at *UBS AG.*[1228] Furthermore, *UBS* transferred the whole of its wealth management business, as far as it is booked in Switzerland, onto the Swiss entity. It is not limited to Swiss clients but also includes offshore clients.[1229] This is likely to strengthen the self-sufficiency of the bank containing the systemically important functions.[1230]

The asset transfer agreement specifically states that it was the intention of *UBS* to *"substantially improve the resolvability of the Group in response to Swiss 'too big to fail' requirements"* with the transfer.[1231] At the end of 2017, *UBS Switzerland AG* had assets of 290.3 billion CHF.[1232] This corresponds to 31.7% of the banking group's total assets.[1233]

2. Credit Suisse

Credit Suisse's Swiss entity, *Credit Suisse (Schweiz) AG* was established in 2015 as a fully-owned subsidiary of *Credit Suisse AG.*[1234] In November 2016, the bank acquired the universal bank business for Swiss customers from *Credit Suisse AG*, which includes a *"significant part of the Swiss Universal Bank Division and parts of the business area STS Trading"* and started its

1228 *UBS* (2016) Annual Report 2015, 766. However, according to *SIX Swiss Exchange*, market making services are provided by *UBS AG* (not *UBS Switzerland AG)* (see *SIX Swiss Exchange*, Liste der Market Maker, Passive ETFs, https://www.six-swiss-exchange.com/funds/etf/marketmaker_list_de.html; *SIX Swiss Exchange*, Liste der Market Maker, Aktive ETFs, https://www.six-swiss-exchange.com/funds/active_etf/marketmaker_list_de.html).

1229 This can be drawn from the scope of the transferred activities (see *UBS* (2016) Annual Report 2015, 766; Commercial Register Entry, *UBS AG*, (June 17, 2015), Public Deed of the Asset Transfer Agreement, 7); see also *Millischer/Heim*, Milliardenabflüsse bei der UBS Schweiz, Handelszeitung (March 31, 2016).

1230 See Chapter III.IV.C.a.2: Systemically important functions.

1231 Commercial Register Entry, *UBS AG,* (June 17, 2015), Public Deed of the Asset Transfer Agreement, 7.

1232 *UBS* (2018) Standalone financial statements UBS Switzerland AG, 2.

1233 Own calculation based on *UBS* (2018) Annual Report 2017, 317 (total assets of the banking group amounting to 915.6 billion CHF) and *UBS* (2018) Standalone financial statements UBS Switzerland AG, 2 (total assets of *UBS Switzerland AG* amounting to 290.3 billion CHF).

1234 See Commercial Register Entry, *Credit Suisse (Schweiz) AG*, (May 05, 2014), Public deed of the foundation of *Credit Suisse Switzerland AG.*

business operations. It was planned to conduct a partial IPO in late 2017.[1235] These plans, however, have been discarded so far.[1236]

Regarding the transfer of activities to *Credit Suisse (Schweiz) AG*, the Bulk Transfer Agreement of November 17, 2016, is of particular interest: It states that the transfer of the Swiss Universal Bank business intends to respond to the Swiss TBTF legislation, noting that *"with the transfer of the Swiss [Universal Bank] Business […] and [its] continuation […] substantial parts of the Swiss emergency plan of the group are implemented ex ante"*.[1237]

Concerning the transferred business two things in particular attract attention: firstly, the Swiss Universal Bank business includes, among other things, the business unit "Investment Banking Switzerland".[1238] It cannot be gathered from the annual report what activities it comprises in detail. From it being a part of the Swiss Universal bank business, one can, however, infer that it is limited to Swiss customers.[1239] Furthermore, some insights can be drawn from business that the bulk transfer agreement excludes from the transfer: among the excluded businesses is securities underwriting.[1240] The investment banking business transferred to the Swiss entity therefore is limited to Swiss clients and does not include securities underwriting.

Secondly, *Credit Suisse* not just transferred the Universal Bank business, but also parts of a trading business, so-called "STS Trading". It is divided in three groups: (i) STS Trading that is not transferred, but remains with *Credit Suisse AG*. It includes subareas of "Collateral Trading and Finance Solutions" and of trading with OTC derivatives; (ii) STS Trading, which was transferred and remains with the Swiss entity, among it is banknotes trading; and (iii) STS Trading that is transferred *"due to technical reasons for a transition period"*. *Credit Suisse "intends"* to transfer it back by the end of 2018. It includes, among other things, the subareas *"Fixed Income, Equity*

1235 *Credit Suisse (Schweiz) AG* (2017) Annual Report 2016, 9.

1236 See *Imwinkelried*, Doch kein Börsengang der Schweizer Einheit, NZZ (April 26, 2017).

1237 Commercial Register Entry, *Credit Suisse*, (November 23, 2016), Bulk Transfer Agreement, 5–7.

1238 Commercial Register Entry, *Credit Suisse*, (November 23, 2016), Bulk Transfer Agreement, 9.

1239 See Commercial Register Entry, *Credit Suisse*, (November 23, 2016), Bulk Transfer Agreement, 8–9.

1240 See Commercial Register Entry, *Credit Suisse*, (November 23, 2016), Bulk Transfer Agreement, 8–9; Commercial Register Entry, *Credit Suisse*, (November 23, 2016), Bulk Transfer Agreement, Annex 1, 1.

and Structured Products Trading, Investment Grade Capital Markets, […] Collateral Trading & Finance Solutions" and the business area *"STS Execution"* with corresponding accesses to the financial market infrastructure.[1241]

The fact that *Credit Suisse (Schweiz) AG* plans to transfer a considerable part of its trading business back to *Credit Suisse AG* until the end of 2018 is remarkable. It particularly appears unconventional to transfer an important business before the IPO intended at the time and transfer it back afterwards. Searching for an explanation, one finds that Finma seems to be responsible for this unusual arrangement: according to *Hässig, Credit Suisse* planned to raise the attractiveness of the Swiss entity for the intended IPO by adding the STS trading business. Finma, however, prevented such an organisation, allegedly to avoid burdening the Swiss entity with the risks of trading. *Credit Suisse* implied that Finma referenced the *UBS* ex ante separation, which also did not feature any trading business.[1242]

At the end of 2017, *Credit Suisse (Schweiz) AG* had assets of 246.3 billion CHF.[1243] This corresponds to 30.9% of the banking group's total assets.[1244]

3. Conclusio

Switzerland's G-SIBs both ex ante separated their systemically important functions. This occured to comply with the Swiss TBTF regime that requires (i) to ensure the continuity of systemically important functions with an emergency plan, (ii) if necessary, to implement measures for this goal ex ante, and (iii) to profit from capital rebates in case of *"reduc[ing] the resolvability risk beyond what is legally required"*.[1245]

Their systemically important functions seem to be in line with those explicitly mentioned in the Swiss Banking Act, namely the domestic deposits

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1241 See Commercial Register Entry, *Credit Suisse,* (November 23, 2016), Bulk Transfer Agreement, 7–8; Commercial Register Entry, *Credit Suisse,* (November 23, 2016), Bulk Transfer Agreement, Annex 1, 1.

1242 See *Hässig,* Finma stellt sich gegen CS-Pläne, Tages Anzeiger (May 11, 2016); with a similar conclusion, *Padevit,* CS: Schweizer Tochter wird am 20. November geboren, Finanz und Wirtschaft (October 7, 2016).

1243 *Credit Suisse (Schweiz) AG* (2018) Annual Report 2018, 9.

1244 Own calculation based on *Credit Suisse* (2018) Annual Report 2017, 57 (total assets of the banking group amounting to 796.3 billion CHF) and *Credit Suisse (Schweiz) AG* (2018) Annual Report 2018, 9 (total assets of *Credit Suisse (Schweiz) AG* amounting to 246.3 billion CHF).

1245 Commercial Register Entry, *UBS AG,* (June 17, 2015), Public Deed of the Asset Transfer Agreement, 7.

and loans business and payment transactions.[1246] To ensure the self-sufficiency and potentially to diversify activities, *UBS* and *Credit Suisse* chose to transfer all wealth management business booked in Switzerland to the Swiss entities.[1247] However, in contrast to *UBS*, *Credit Suisse* only transferred its wealth management business for domestic clients.[1248] Both banks also transferred their banknotes business, which was previously part of their investment banks. One can assume that this is due to its critical importance for the Swiss economy.

It is furthermore striking that both banks only transferred limited parts of their investment banking business: in particular the securities underwriting business and, more importantly, their trading businesses are not (or not permanently) transferred to the Swiss entity. The only exemption seems to be *UBS* transferring its market making activities on the SIX Swiss Exchange. In particular, the circumstances of the remarkable temporary transfer of parts of *Credit Suisse's* STS Trading business underscore that the Swiss regulator does not seem to allow for trading activities conducted in the Swiss entities and does not abstain from forceful interventions.

d. Summary

In summary, it can be found that globally active banks that are determined systemically important have to provide (i) an emergency plan, which sets out how the continuation of Swiss systemically important functions in a crisis scenario can be ensured, and take (ii) comprehensive organisational measures beforehand to ensure that the emergency plan is workable. These measures seem to necessarily include an ex ante separation of systemically

1246 Art. 8(1) Swiss Banking Act; see Chapter III.IV.C.a.2: Systemically important functions.

1247 Self-sufficiency of the ring-fenced entity, i.e. to create a self-sufficient business that can continue to work profitable on its own, is a key requirement of the emergency plan (Expert Interview, Affected Bank, September 28, 2017). It follows from the obligation to ensure the continuation of systemically important functions, set down in Art. 9 Swiss Banking Act and Art. 60 Swiss Banking Ordinance.

1248 This results from the scope of the transferred activities (see Commercial Register Entry, *Credit Suisse,* (November 23, 2016), Bulk Transfer Agreement, 8–9; see also the considerations regarding *UBS* in Chapter III.IV.C.c.1: UBS); The limited focus on Swiss clients is also stressed by *Credit Suisse.* See *Hässig,* Finma stellt sich gegen CS-Pläne, Tages Anzeiger (May 11, 2016) (emphasizing the motto "pure Swissness").

important activities into a separate legal entity and its operational and financial unbundling from the banking group. In addition, the entity has to be adequately equipped with capital and liquidity.[1249]

The emergency plan has thus undergone an evolution. At its start is the Swiss Banking Act, which stipulates that a plan has to describe the necessary measures to ensure the continuation of systemically important activities.[1250] The emergency plan then became the basis for the demand towards banks to put in place far reaching organisational requirements. Certain measures of the plan would have to be implemented ex ante, as without them the emergency plan would not work.[1251] In its last evolutionary step, the emergency plan becomes a plan again, describing measures to ensure the continuation of systemically important activities, which are now workable because considerable unbundling has already taken place.[1252]

The emergency plan is complemented by organisational measures to improve the general resolvability. While the former sets down mandatory minimum requirements, the latter incentivises further separation.[1253]

Illustrated according to *Britton et al.*,[1254] who form groups of key activities according to where they have to be provided, the emerging picture is clearer than the lack of clear publicly available requirements would allow to expect. This is particularly true once one reviews the factual separation that Switzerland's two G-SIBs have conducted and includes it in the consideration.

1249 See *Bundesrat* (2015) Bericht Too Big to Fail, 1935. The requirements regarding the independence of the Swiss entities (e.g. capital and liquidity requirements) will be discussed in Chapter III.V: Height of the Fence.

1250 See Art. 9(2)(d) Swiss Banking Act.

1251 See Chapter III.IV.C.a.1: Ex ante separation.

1252 This is reflected in the description of the Swiss organisational measures in the asset transfer agreement of *UBS*. It notes that *"Swiss 'too big to fail' requirements require systemically important banks […] to put viable emergency plans in place to preserve the operation of systemically important functions despite the failure of the institution, to the extent that such activities are not sufficiently separated in advance […]"*. See *UBS* (2015) Asset Transfer Agreement, 7. See e.g. governance requirements of the emergency plan, Chapter III.V.C.c: Governance.

1253 The exact attribution is sometimes hard to identify. From the above, it can nevertheless be concluded that there are considerable minimum requirements and that regulators do not refrain from intervening forcefully with regard to preventing the inclusion of trading activities into the separated entity. For a discussion of measures to enhance resolvability and their relation to the emergency plan, see Chapter III.V.C.a: Legal sources.

1254 See the illustration of *Britton et al.* (2016) Ring-fencing, 167.

The ring-fenced entity has to provide all functions that are considered systemically important. This includes the deposit-taking and loans business and payment transactions. It has to be emphasized that the requirements are limited to the Swiss domestic business.[1255] As the wording of Art. 8(1) Swiss Banking Act is non-exhaustive, other functions could be added. They would have to be identified by the SNB after consultation of Finma.[1256] Drawing from the ex ante separation of the two banks, banknotes trading seems to be a critical function that mandatorily is to be provided by the Swiss entities.

The second group comprises activities that have to be provided outside the ring-fenced entity, by entities of the remaining banking group. The Swiss TBTF package does not stipulate certain activities that must be excluded. It can, however, be derived from the legislative materials and other sources that certain activities attributed to investment banking are not to be included in the Swiss entity.[1257] As an assessment of the affected banks has shown, this particularly relates to investment banking and trading activities: securities underwriting as well as, for example, equities and structured products trading needs to be provided outside the ring-fence.

The third group consists of activities that can be provided by both the ring-fenced entity and the remaining banking group. Drawing from the purpose of the Swiss TBTF regime and the banks' changes to their structure, it can be established that the activities need to be comparatively low risk. As reflected by the organisational measures it includes, in particular, wealth management services, but is not limited to domestic clients.

D. Results

a. Activities within the ring-fence

Drawing from the focus of the Swiss Banking Act and from the organisational changes Swiss G-SIBs have conducted, one finds that Switzerland requires the most comprehensive activities to be provided within the Swiss entity. They include not just deposit-taking, but also part of the loans business and payment services. In addition, there are other activities important to the domestic economy, such as bank notes trading. Geographically,

1255 See Chapter III.IV.C.a.2: Systemically important functions.
1256 Art. 8(3) Swiss Banking Act.
1257 See Chapter III.IV.C.b: non-ring-fenced bodies.

however, the requirement is less comprehensive than the other jurisdictions, as it is limited to the domestic business.

Based on the scope of the German Ring-fencing Act, cumulative deposit-taking and loans business have to be provided by a ring-fenced entity. From the prohibition for the non-ring-fenced trading entity follows that also payment services and the e-money business can only be provided from inside the ring-fence. While a non-ring-fenced entity can also grant loans, the interpretation of the Act indicates that it should not be allowed to accept deposits (apart from institutional investors).[1258] Geographically, there are no limitations: once a banking group falls within the scope, all the activities have to be provided from within the fence (or to put differently, all of the trading activity has to be excluded).[1259]

In the UK, the focus is clearly set on core deposits. They have to be provided from within the ring-fence. It must be emphasised that not all deposits are core deposits, so that banks can accept large companies' or high net worth individuals' deposits with their non-ring-fenced entities. There is a geographic restriction: only deposits accepted in EEA account, i.e. an account opened at a branch in an EEA state, are core deposits.[1260] Regulators are obliged to protect core services of ring-fenced bodies, as they are connected to deposit-taking. They include overdraft facilities and payment services.[1261] With regard to other loans, no explicit legal requirements have been put down. It has, however, been concluded in the preparatory works that the loans business naturally follows deposit-taking.[1262]

In summary, it can be found that all jurisdictions, in one way or another, consider deposit-taking, parts of the loans business and payment services especially important and thus necessary to be protected from riskier activities in banking groups.

1258 See in detail Chapter III.IV.B.b.: Ring-fenced bodies.

1259 This is also highlighted by *Lehmann.* See *Lehmann* (2014) Extraterritorial Effects, 308.

1260 See Chapter III.III.A.a: Personal scope.

1261 See Chapter III.IV.A.a.2: Core services.

1262 This is discussed by the Vickers Commission and the UK Government, see Chapter III.IV.A.a.1: Core activities.

b. Excluded activities

1. Basis of the exclusion

In all three jurisdictions there are activities that are not allowed to be provided by the ring-fenced bank, but can be provided by non-ring-fenced banks. However, they strongly differ in how they articulate the exclusion.

Germany and the UK both clearly set out what activities are excluded for the then ring-fenced bodies: the German Ring-fencing Act strives to comprehensively define the excluded activities. However, in practice, a lot of weight is placed on BaFin*'s* Interpretative Guidance, which clarifies the authority's views and in some aspects considerably modifies the provisions of the Act.[1263] The UK seems to acknowledge the difficulties in comprehensively defining excluded activities in primary law and thus only outlines them, stipulating that "*[t]he regulated activity of dealing in investments as principal (whether carried on in the United Kingdom or elsewhere) is an excluded activity unless it is carried on in circumstances specified by the Treasury by order*". The Treasury is authorised under certain circumstances to add other excluded activities.[1264]

In Switzerland, in contrast, there are no general provisions on excluding certain activities from the Swiss entities. This is because there is not even a general requirement to establish such entities.[1265] The separation follows from Art. 60(1) Swiss Banking Ordinance, which stipulates that systemically important functions have to be continued "*independently from the rest of the bank*" in the case of imminent insolvency.[1266]

However, neither the Swiss Banking Act nor the Swiss Banking Ordinance comprehensively define the systemically important activities. While they indicate what activities are particularly worth considering, the final decision is made by the SNB.[1267] As argued by *Bahar/Peyer,* the wording would also allow for investment banking activities to be systemically important.[1268]

1263 See e.g. the exception for fully collateralised transactions with hedge funds and AIFs discussed in Chapter Chapter III.IV.B.a.1: Excluded activities.
1264 Art. 142D FSMA 2000; see Chater III.IV.A.b.1: Excluded activities.
1265 See Chapter III.IV.C.a.1: Ex ante separation.
1266 Own translation from German original, Art. 60(1) Swiss Banking Ordinance.
1267 See Chapter III.IV.C.a.2: Systemically important functions; Chapter III.III.B.c: Affected banks.
1268 As discussed, this is argued by *Bahar/Peyer* (2013) Systemrelevante Banken, 384. See Chapter III.IV.C.b: non-ring-fenced bodies.

The lack of a clear and general definition of systemically important functions leads to a lack of a clear and general definition of "the rest of the bank" and hence of a definition of excluded activities. As discussed above, the emergency plan sets down considerable minimum requirements and regulators do not hesitate to demonstrate the options available as well as their limits. This enforcement-based approach allows for a lot of flexibility and case-by-case decisions, but can be criticised for its lack of transparency[1269] and possibly from a constitutional perspective.[1270]

2. Activities

The three jurisdictions exclude activities from the ring-fenced bodies. They, however, differ with regard to the extent of excluded activities. This also reflects the method of ring-fencing chosen by the respective legislator.[1271]

In the UK, the exclusion is particularly comprehensive: It excludes proprietary trading using a considerably broad definition that includes not just the trading of financial instruments, in particular market making, but also underwriting them. Furthermore, the buying and selling of commodities is excluded.[1272] The comprehensive exclusion leads to a comparatively small ring-fenced body and a quite large non-ring-fenced body, with almost all investment banking, in particular proprietary trading, market making and underwriting in the latter.

As suggested by the legal separation conducted by the big banks and by events surrounding them, Switzerland's excluded activities are surprisingly similar to the UK's: they likely include all trading activity and also the underwriting of financial instruments, thus the main parts of investment banking. Only with regard to domestic market making does there seem to be a difference.[1273]

In contrast to the two jurisdictions above, the German Ring-fencing Act excludes only very few activities. They include proprietary business, i.e. proprietary trading that constitutes a bank's own short-term investment activity and is not a service for clients; high-frequency trading, i.e. the buying

1269 See Chapter III.II.D.b.3: Transparency.
1270 See Chapter III.II.D.b.2: Principle of legality.
1271 See Chapter III.IV.D.c: Ring-fencing method.
1272 See Chapter III.IV.A.b.1: Excluded activities.
1273 See Chapter III.IV.C: Switzerland.

and selling of financial instruments on own account via high-frequency algorithmic trading technique, with the exception of market making; and the lending and guarantee business with certain hedge funds and AIFs, with the important exception of fully collateralised transactions.[1274] The small scope of prohibited activities orientates less to the Liikanen Report than to the Volcker Rule. As it, however, entails only the ring-fencing of such activities and not the *activities ban* of full separation, it is referred to by *Vickers* as *"Volcker-lite"*.[1275]

3. Exceptions

There are considerable similarities regarding exceptions from excluded activities between Germany and the UK. As the Swiss TBTF package does not explicitly stipulate excluded activities, it thus also remains silent on exceptions. A legal comparative analysis of exceptions in Germany and the UK may therefore be of particular interest and result in findings that can also be applied in Switzerland. As the Swiss approach orientates towards the UK, it should be in the focus of the examination.

Among the UK's key exceptions to the excluded activities discussed above are the management of risk for ring-fenced bodies, such as interest rate changes or exchange rate changes and the management of liquidity risk. The German Ring-fencing Act, however, also allows ring-fenced bodies the management of interest rate, foreign exchange, liquidity, price, and credit risk for the whole banking group.[1276] From a legal comparison perspective, this suggests that such activities should also be excluded in Switzerland. Swiss banks that contain the systemically important functions also have the need to hedge risks stemming from the intermediation between savers and borrowers,[1277] as well as from other services they offer.

1274 See Chapter III.IV.B.a.1: Excluded activities.

1275 *Vickers* (2016) Banking Reform Presentation, 22. This is criticised, e.g. by *Schäfer* (2016) Trennbankengesetz (noting that the prohibition of proprietary trading is ineffective due to differences in differentiating it from market making). For this problem, see Chapter I.II.B: Proprietary trading and market making, and the criticism of the Volcker Rule, see Chapter I.IV.D: Ring-fencing and the activities ban.

1276 See *De Vogelaere* (2016) Bank Structure Reforms, 86; Chapter III.IV.A.b.1: Excluded activities; Chapter III.IV.B.a.2: Exceptions.

1277 See Chapter III.IV.A.b.1: Excluded activities.

In the UK, there is furthermore an exception for transactions with a central bank. Reason for the exception is that it ensures that a ring-fenced body can access central bank liquidity.[1278] Such transactions should also be allowed for the Swiss ring-fenced banks.

Another important exception that is stipulated in the UK is that ring-fenced bodies are allowed to provide their customers with simple derivative products to ensure they can hedge their own risk. A similar exception would make sense for Switzerland, as these needs are universal. It could be designed similarly to the UK with quantitative and qualitative limitations.[1279]

c. Ring-fencing method

1. Ring-fencing

In the chapters above, it was found that all of the three jurisdictions of interest differentiate between the value of certain activities attributed to commercial banking and certain activities attributed to investment banking. They all mandate the separation of certain activities attributed to commercial banking and certain activities attributed to investment banking, thereby constituting one of the core characteristics of ring-fencing.[1280]

Looking at the separation requirements for the affected banks it can, however, be established that none of the jurisdictions have decided for the *activities ban* of full separation as, for instance, the Volcker Rule and the EU Commission's draft regulation stipulate.[1281] This is remarkable, given the attention that the U.S. Volcker Rule and later the EU Commission's proposal has received. None of the jurisdictions have decided for full separation either.

In all three jurisdictions, it was considered better to allow for both groups of activities to be conducted under the same roof of a banking group. All three countries therefore allow universal banking, thereby constituting another core characteristic of ring-fencing.[1282] The third core

1278 See Chapter III.IV.A.b.1: Excluded activities.
1279 See Chapter III.IV.A.b.1: Excluded activities.
1280 See Chapter I.IV.B: Ring-fencing as a structural reform.
1281 See Chapter I.IV.D: Ring-fencing and the activities ban. For a review of the Volcker Rule, see Chapter I.IV.D.a: Digression: The Volcker Rule.
1282 See Chapter I.IV.B: Ring-fencing as a structural reform.

characterisation of ring-fencing, the fence, will be discussed in Chapter III.V.,[1283] and can for now be assumed.

2. Method of ring-fencing

The countries decided for different methods of ring-fencing. The UK's Banking Reform Act 2013 and the Swiss TBTF package in combination with the enforcement-based approach put into practice the *defensive method* of ring-fencing. This can be gathered from a number of indicators: first, they adopted provisions that are the basis for the separation of certain activities, namely of the desired activities as set out in Chapter I.VI.A,[1284] including deposit-taking, lending and payment services. Second, the separated entity may not provide the full spectrum of banking services, and is prohibited from engaging in activities considered risky, namely certain trading and investment banking activities.[1285]

For example, a banking group within the scope of the respective law faces in both countries the obligation to separate certain activities. In the UK, these activities are accepting core deposits and, in connection, core services, such as payment services and overdrafts. Retail and SME lending is expected to naturally follow the core deposits. In Switzerland, affected banks have to separate systemically important functions. As established in the chapters above, they include deposit-taking, parts of lending and payment services.[1286] In both countries, the desired activities are therefore separated from the rest of the banking group. In addition, the newly established entities face activities restrictions for certain trading and investment banking activities: in the UK, these restrictions comprise, in particular, proprietary trading, general trading activities, market making and underwriting. As established in the chapters above, similar restrictions apply in Switzerland, with the exception of domestic market making.

The German Ring-fencing Act, in contrast, puts into practice the *containment method* of ring-fencing. Again, this can be gathered from various indicators: first, the Act mandates the separation of certain activities. In contrast to the above, the activities to be separated are those considered particularly risky. Second, the separated entity may not provide the full

1283 See Chapter III.V: Height of the Fence.
1284 See Chapter I.VI.A: Underlying assumption.
1285 See Chapter I.VI.A: Underlying assumption.
1286 See Chapter III.IV.C.a.2: Systemically important functions.

spectrum of banking services – in contrast to the above, it is prohibited in some way or the other from engaging in the desired services.

For example, a banking group within the scope of the German Ring-fencing Act faces the obligation to separate certain activities. These are the activities considered high-risk by the German legislator, namely proprietary business, high-frequency algorithmic trading and the guarantee and loans business with hedge funds and AIFs. In Germany, the risky activities are therefore separated from the rest of the banking group. In addition, the newly established entity (the trading entity) faces activities restrictions for certain desired activities: in Germany, these restrictions comprise deposit-taking and payment services.

d. Flexibility

Another similarity between the jurisdictions is that the location of the ring-fence is not immovable. They all allow for a degree of flexibility. In Switzerland, this is achieved by the Swiss Banking Act, not conclusively stipulating which functions are systemically important. It mentions deposit-taking, loans and payment services only exemplarily. The SNB thus has some leeway in deciding what activities it finds systemically important.[1287] Even more flexibility is provided by the enforcement-based approach that delegates considerable power to Finma.[1288] In the UK, the FSMA 2000 empowers HM Treasury to provide for additional core activities and core services.[1289] The German Ring-fencing Act empowers BaFin to extend the prohibitions to additional activities (with the chance of being provided by the trading entity).[1290]

The adopted legislation does not strive to comprehensively stipulate the final rule. This can be traced back in particular to one reason: There seems to be a certain insecurity about the effects of ring-fencing. Far reaching structural requirements may entail consequences that are either not desired or unexpected. This is well reflected in the discussion on including

1287 See Explanatory Memorandum to FSMA 2014 Order No. 2080, Sec. 7.5; Chapter III.III.C.c: Affected banks.

1288 See Chapter III.II.C.c: Legal sources.

1289 See Art. 142B(5)-(6), Art. 142C(3)-(5) FSMA 2000. See Chapter III.III.A.a: Personal scope.

1290 See Chapter III.IV.B.b.1: Explicit activity restrictions for the financial trading institution.

retail credit as core activity in the UK. The Vickers Commission's *"expectations"* do not try to disguise that there is considerable uncertainty.[1291]

Another example is § 3(5) German Banking Act, which authorises BaFin to prohibit, *inter alia*, market making. This reflects that the legislator does not consider it risky enough to be separated in the first place, but does not rule out that it may be or become exactly that.[1292]

It can therefore be concluded that in a delicate matter such as ring-fencing, a degree of flexibility is considered appropriate by legislators internationally: they only outline the location of the fence and leave considerable leeway for specification to regulators. While this leeway differs between the examined jurisdictions, it can be generalised that regulators have considerable powers to shape the ring-fencing requirements for banks.

e. Relation to expert commission recommendations

There are some interesting observations when comparing the adopted legislation with the expert commissions' recommendations. While the UK Banking Reform Act 2013 and its secondary legislation stuck considerably close to the Vickers Report, in particuar Germany and Switzerland deviated considerably from the experts' recommendations.

In Germany, the key deviation from the recommendations of the Liikanen Report is that market making is allowed to be conducted within the ring fence (and does not have to be transferred to the trading entity).[1293] This, in combination with the far-reaching exceptions, considerably restricts the scope of activities that have to be transferred to the trading entity. However, it transposes the key problem of delimiting market making from proprietary trading,[1294] that *inter alia* the Volcker Rule faces,[1295] into

1291 *ICB* (2011) Vickers Report, 38 (*"If these expectations were not realised, and large portions of retail credit supply were provided by non-ring-fenced banks, this is an area which should be reviewed and activity restrictions tightened if appropriate"*); see also Chapter III.IV.A.a.1: Core activities.

1292 § 3(5) German Banking Act; *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz 27–28; see also Chapter III.IV.B.a.1: Excluded activities.

1293 See *HLEG* (2012) Liikanen Report, 101, 102; Chapter III.IV.B.a.1: Excluded activities.

1294 See Chapter I.II.B.a: Proprietary trading.

1295 See Chapter I.IV.D.a: Digression: The Volcker Rule.

German law. Because of this orientation towards the Volcker Rule, it can be referred to as *"Volcker-lite"*.[1296]

In Switzerland, the extent of the factual separation suggests that it exceeds the expectations of the expert commission. This is in particular because (i) mere planning was found not to suffice and because (ii) the ex ante separation of systemically important functions turned out to be the only viable option for globally active systemically important banks.[1297] In addition, (iii) the UK-oriented separation of commercial banking and investment banking[1298] presumably exceeds the expert commission's ideas.

V. Height of the Fence

This chapter addresses the height of the fence, i.e. the provisions that safeguard the legal, operational and economic independence of the separated entities. It takes on key measures with regard to capital and liquidity, governance, intragroup transactions and exposures, distributions and the continuity of services.

A. United Kingdom

The FSMA 2000 authorises the appropriate legislator, which is the PRA,[1299] to make general rules specifying the height of the fence. These rules (i) require a ring-fenced body to make arrangements to ensure that it can depend on services and facilities which it needs to carry out core activities,[1300] which currently only comprise deposit-taking.[1301] They also aim to (ii) ensure that the carrying on of deposit-taking is not negatively affected

1296 *Vickers* (2016) Banking Reform Presentation, 22.
1297 See Chapter III.IV.C.a.1: Ex ante separation.
1298 See Chapter III.IV.C.b: non-ring-fenced body.
1299 See *PRA* (2017) Ring-fenced Bodies, 5–6; Art. 142H(1)(a) in conjunction with 142H(8) FSMA 2000; The PRA is responsible for regulating banks, building societies credit unions, insurers and major investment firms. See *FCA*, About the FCA/PRA, https://register.fca.org.uk/; see also *PRA*, Which firms does the PRA regulate?, https://www.bankofengland.co.uk/prudential-regulation/authorisations/which-firms-does-the-pra-regulate. The legal basis for the PRA's duties is Part 1A Sec. 2B(5) FSMA 2000.
1300 Art. 142H(1)(a) FSMA 2000.
1301 See Chapter III.III.A.a: Personal scope.

by acts or omissions of other members of the banking group; that (iii) a ring-fenced body can take decisions independently and that (iii) it does not depend on resources of other members of the banking group, which could run dry in the case of their insolvency. They, in addition, aim to (iv) ensure that the ring-fenced body is able to carry on deposit-taking in the event of insolvency of other group members.[1302]

These rules therefore serve two important overall goals that are necessary for the stable provision of core activities: firstly, to ensure the independence of the ring-fenced body. Secondly, to protect it from insolvency of other members of the banking group. By putting up a fence, these rules distance the ring-fenced body from the rest of the bank. The FSMA 2000 roughly outlines some of them,[1303] but leaves considerable scope of action to the PRA. In the following sections, some of the particularly important rules are discussed.

a. Capital and liquidity

Ring-fenced bodies have to meet capital requirements of the CRR and related PRA rules on an individual basis. If a ring-fenced subgroup is formed, the ring-fenced body also needs to ensure that the requirements are met on the level of the subgroup.[1304]

Ring-fenced bodies have to put in place stress testing capabilities for themselves and, if applicable, the subgroup.[1305] They additionally have to conduct reverse stress testing that assesses the impact of a group entity's failure.[1306] Conducting SREP,[1307] the PRA considers exposures to other

1302 See Art. 142H(1)(b) in conjunction with Art. 142H(4) FSMA 2000.
1303 See Art. 142H(5) FSMA 2000.
1304 See *PRA* (2017) Ring-fenced Bodies, 13.
1305 See *PRA* (2017) Ring-fenced Bodies, 15.
1306 Reverse stress testing requires the ring-fenced entity to assess scenarios which would challenge its viability. By starting an assessment the other way around (namely with an unwanted scenario, such as the failure of the bank), hidden risks and overlooked interactions among risks can be identified (see *Basel Committee on Banking Supervision* (2009) Stress Testing, 14). In the reverse stress test the ring-fenced body has to include impacts on capital, liquidity funding, income, profitability and franchise value in the assessment. See *PRA* (2017) Ring-fenced Bodies, 16.
1307 SREP stands for Supervisory Review and Evaluation Process. It assesses credit institutions' risks, governance arrangements and their capital and liquidity situation. In addition to monitoring credit institutions' compliance with mini-

members of the banking group, which are not part of a subgroup, as if they were third parties. This may result in additional capital buffers in the context of Pillar 2A capital for concentration risk.[1308]

Ring-fenced bodies also have to meet liquidity requirements such as the Liquidity Coverage Ratio on an individual basis. If a ring-fenced subgroup is formed, the ring-fenced body also needs to ensure that the requirements are met on the level of the subgroup.[1309]

b. Governance

The independency of ring-fenced bodies is to be secured by a number of provisions that can be attributed to corporate governance. They can be divided into two groups: the first group includes general rules. They stipulate that ring-fenced bodies in managing their business have to make sure that they are able to take decisions independently from other banking group members. Furthermore, they have to take precautions to identify and manage conflicts of interest of their senior management. In addition, ring-fenced bodies have to identify and manage conflicts between their interests and those of other group members.[1310]

Specific rules form the second group. The PRA Rulebook stipulates, for example, how the board of a ring-fenced body has to be composed: at least half of its governing body's members have to be independent non-executive directors. The chairperson has to be an independent non- executive director. He additionally is not allowed to chair the governing body of any other member of the banking group, except a ring-fenced affiliate. Furthermore, a maximum of one-third of the members of the governing body can be employees or directors of other banking group members.[1311]

There are moreover specific requirements for important functions of the ring-fenced body, namely risk management, internal audit and human re-

mum capital requirements, the review may result in extra capital and liquidity buffers due to a credit institution's specific situation. See *European Central Bank* (2014) Banking Supervision, 23–25.

1308 See *PRA* (2017) Ring-fenced Bodies, 14.

1309 See *PRA* (2017) Ring-fenced Bodies, 17.

1310 *PRA* (2016) PRA Rulebook: Ring Fenced Bodies, Sec. 3(1)-(3).

1311 *PRA* (2016) PRA Rulebook: Ring Fenced Bodies, Sec. 4 in conjunction with Sec. 1(3).

sources, that strive to ensure that the person in charge is free of conflicts of interest.[1312]

c. Intragroup transactions and exposures

Also with regard to intragroup transactions and exposures, there are general rules and specific provisions. The general rule is that a ring-fenced body has to ensure, as far as reasonably practicable, that it applies the same standards to the management of its exposures and transactions to other banking group members (that are not ring-fenced affiliates) as it would to third parties.[1313] This rule should *"underpin a [ring-fenced body's] approach to all transactions arrangements and exposures with its wider group"*.[1314]

However, the PRA clarifies that the rule does not prohibit transactions solely because a ring-fenced body does not have identical transactions with a third party. It neither requires the ring-fenced body to *"apply precisely the same risk appetite, monitoring and oversight policies and procedures"*.[1315]

The general rule is reinforced by the specific requirement for ring-fenced bodies to enter into transactions with banking group members outside the fence *"only on arm's length terms"*. They have to put in place an effective policy and procedures to identify and assess intragroup transactions. The policy includes, for example, a description of how the pricing of a transaction is achieved, or mechanisms for dispute resolution between the parties. The procedures include, for instance, an at least annual assessment of the firm's policy and procedures by internal audit and the stipulation that the policy has to be approved and at least annually reviewed by the governing body.[1316]

The PRA, however, allows affected banks to use framework agreements for a number of transactions of similar character. Transactions with other entities within the ring-fence do not have to be on arm's length terms.[1317]

As already discussed in Chapter III.IV.A.b.2, prohibitions apply to certain transactions.[1318] The ring-fenced bank is only allowed to have expo-

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1312 See *PRA* (2016) PRA Rulebook: Ring Fenced Bodies, Sec. 4 in conjunction with Sec. 5, 6, 7.
1313 See *PRA* (2016) PRA Rulebook: Ring Fenced Bodies, Sec. 3(5).
1314 *PRA* (2017) Ring-fenced Bodies, 24.
1315 *PRA* (2017) Ring-fenced Bodies, 24.
1316 See *PRA* (2016) PRA Rulebook: Ring Fenced Bodies, Sec. 12.
1317 *PRA* (2017) Ring-fenced Bodies, 27.
1318 See Chapter III.IV.A.b.2: Prohibitions.

sures to other (non-ring-fenced) members of its own group under the condition that transactions are conducted at arm's length.[1319] Large exposure limits of the CRR apply.[1320] The PRA clarified it will even consider further measures such as the lowering of the rate.[1321]

Similar requirements are in place for the handling of collateral. Ring-fenced bodies have to manage collateral from other members of the banking group that are outside the ring-fence as if they had received it from third parties.[1322]

Another provision aiming to ensure that a ring-fenced body remains independent and able to withstand the failure of another group entity mandates that ring-fenced bodies are, as far as reasonably practicable, not allowed to become dependent on income generated from transactions with group members outside the fence, or with customers where it is likely contingent on services by group members.[1323] After identifying such a business, the ring-fenced body has to either reduce it or prepare credible plans for the recovery from its loss.[1324]

d. Distributions

Ring-fenced bodies are not allowed to make distributions to entities not within the ring-fence unless they notify the PRA of their intention to do so.[1325] Distribution is to be understood within the meaning of the Companies Act 2006,[1326] which refers to *"every description of distribution of a company's assets to its members, whether in cash or otherwise"*[1327] except certain capital management techniques.[1328] This includes in particular the payment of dividends.[1329] The notice has to include *inter alia* information

1319 See Art. 14(4) in conjunction with Art. 2(1) in conjunction with Art. 1(4) FSMA 2014 Order No. 2080.
1320 Art. 395(1) CRR; *PRA* (2017) Ring-fenced Bodies, 24.
1321 See *PRA* (2017) Ring-fenced Bodies, 24.
1322 See *PRA* (2017) Ring-fenced Bodies, 25.
1323 See *PRA* (2016) PRA Rulebook: Ring Fenced Bodies, Sec. 13.
1324 See *PRA* (2017) Ring-fenced Bodies, 26.
1325 *PRA* (2016) PRA Rulebook: Ring Fenced Bodies, Sec. 11 in conjunction with Sec. 1(2).
1326 Companies Act 2006, c. 46.
1327 Sec. 829 Companies Act 2006.
1328 For example, capital increases or capital reductions. See Sec. 829 Companies Act 2006.
1329 See *PRA* (2017) Ring-fenced Bodies, 23.

on the ring-fenced bodies capital ratios and the amount of the intended distribution.[1330] The PRA is prone to prevent such distributions if they have *"a significant adverse effect on the capital position of [a ring-fenced body] that could adversely affect the continuity of the provision of core services"*.[1331]

The permission to make distributions to entities outside the ring-fence, e.g. trough dividends, was understood as a concession to banks subject to ring-fencing.[1332] It is definitely a major relief for affected banks, as it allows for trading business to be subsidised by the commercial banking profits.

e. Continuity of services

A ring-fenced body may make use of services by other entities, for example services supporting IT processing or treasury back office activities.[1333] A ring-fenced body, however, is only allowed to receive services it requires regularly from another entity within the ring-fence or from a group service entity. The agreement governing the provision of services has to be designed in a way that it remains valid in the case of a change in financial circumstances of another entity in the banking group of the ring-fenced body.[1334]

B. Germany

The key provision, setting out the German ring-fencing model is § 25f German Banking Act. As the concept of a financial trading institution is created by the German Ring-fencing Act,[1335] § 25f alone specifies its character and its relationship towards the rest of the banking group.

Assessing § 25f German Banking Act, one has to keep in mind that the German ring-fencing model separates certain trading activities from the rest of the banking group and thus follows the *containment method* of ring-

1330 See *PRA* (2016) PRA Rulebook: Ring Fenced Bodies, Sec. 11(2).
1331 See *PRA* (2017) Ring-fenced Bodies, 22.
1332 See e.g. *Binham/Dunkley*, Banks win fresh concession on ringfencing rules, Financial Times (October 15, 2015).
1333 *Britton et al.* (2016) Ring-fencing, 169.
1334 See *PRA* (2016) PRA Rulebook: Ring Fenced Bodies, Sec. 9 in conjunction with Sec. 1(2).
1335 *Auerbach/Schriever* (2016) CRR-Kreditinstitute, 848.

fencing.[1336] The ring-fence is circled around a particularly broad part of the business, a trading entity is located outside the fence.[1337]

The provision of § 25f German Banking Act has two parts: in its first part – section one – it aims to define the financial trading institution. It then explains that the other sections are to be understood as additional requirements to the general requirements for a proper business organisation that apply to all financial institutions.[1338] In its second part, sections two to six, these additional requirements are set out.[1339]

a. Financial trading institution

Based on the legal wording, the financial trading organisation can be defined as *economically, organisationally and legally independent undertaking that provides activities within the meaning of § 3(2) and § 3(4) German Banking Act and is subject to additional requirements for proper business organisation.*[1340]

Central characteristic for the financial trading institution is that it is "*economically, organisationally and legally independent*".[1341] Because of the vague terminology, in particular the economic and organisational independence require further specification.[1342]

1. Proper business organisation

Based on the explanation of § 25f(1) that § 25f(2)-(6) are to be understood as *additional* requirements to the proper business organisation and based on the legislative materials to the German Ring-fencing Act, the financial

1336 See Chapter I.VI.B.b: The containment method.

1337 *Vickers* refers to the German Ring-fencing Act as "*Volcker-lite*", due to the limited scope of activities that are excluded from the ring-fence, thus resembling the U.S. Volcker Rule (however, not applying the *activities ban* of full separation). See *Vickers* (2016) Banking Reform Presentation, 22; See also *Krahnen/Kemmerer* (2013) Gesprächsreihe Strukturreformen, 16.

1338 § 25f(1) German Banking Act.

1339 § 25f(2)-(6) German Banking Act.

1340 See § 25(1) German Banking Act; see also *Deutsche Bundesbank* (2014) Banking Act, 123.

1341 *BaFin* (2016) Interpretative Guidance, 46; see § 25f(1) German Banking Act.

1342 See *Möslein* (2013) Spartentrennung, 404 (criticising the lack of detail concerning the organisation and independency of the financial trading institution).

trading institution has to adhere to § 25a, which sets out *general* requirements of proper business organisation.[1343]

The legislative materials note that, based on general and additional proper business organisation, both the trading entity and the ring-fenced rest of the banking group have to ensure the effective isolation of the risks of the former's speculative transactions.[1344]

This is important information, because it (i) identifies obligations the trading entity (general and additional requirements to proper business organisation) has to comply with, and specifies (ii) how to interpret them (with a view to ensuring the isolation of risks).

Examples for requirements that result from the obligation to comply with proper business organisation are ensuring appropriate staffing, an appropriate and effective risk management and a suitable and transparent remuneration system.[1345]

2. Regulatory requirements of the German Banking Act

According to the legislative materials to the German Ring-fencing Act, the financial trading institution has to comply with all regulatory requirements of the German Banking Act.[1346] While the legislative materials, as established in Chapter III.IV.B.b, mistakenly identify it as a financial service institution,[1347] it is certainly true that the trading entity requires its

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1343 *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 42; *Braun* (2016) Geschäftsorganisation, para 6; *Auerbach/Schriever* (2016) CRR-Kreditinstitute, 848; for a detailed discussion of the general requirements of proper business organisation, see *Braun* (2016) Organisatorische Pflichten, para 15 et seqq.

1344 *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz 42; *Braun* (2016) Geschäftsorganisation, para 6.

1345 § 25a(1) German Banking Act; *Deutsche Bundesbank* (2014) Banking Act 108–109.

1346 *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz 42; see also *Auerbach/Schriever* (2016) CRR-Kreditinstitute, 849; *Braun* (2016) Geschäftsorganisation, para 4.

1347 See Chapter III.IV.B.b: Ring-fenced bodies.

own license and is subject to the full supervision of the German Banking Act.[1348] This is reiterated by BaFin.[1349]

The need to comply with all regulatory requirements of the German Banking Act is an important message, because it identifies obligations the financial trading institution has to comply with, for example requirements on advertising.[1350]

b. Capital and liquidity

The financial trading institution has to meet capital and liquidity requirements of the CRR on an individual basis. This is due to the additional requirement of proper business organisation of § 25f(2) German Banking Act, which stipulates that the exceptions for group companies set out in § 2a German Banking Act do not apply. Financial trading institutions thus have to comply in particular with CRR requirements concerning own funds, large exposures, liquidity and disclosure on an individual basis.[1351]

c. Governance

According § 25f(5), management and supervisory bodies of both the financial trading institution and the ring-fenced entities have to inform themselves regularly and as required of the transactions and related risks of the financial trading entity. They also have to ensure that the general and additional requirements to the proper business administration are complied with.[1352]

1348 See *Auerbach/Schriever* (2016) CRR-Kreditinstitute, 849; *Braun* (2016) Geschäftsorganisation, para 4.

1349 BaFin answers the question whether the trading entity requires a licence that it *"does not agree that it would be possible for the financial trading institution for an appropriate transitional period to continue to use the licences granted to the CRR credit institution for transferred business"*. (*BaFin* (2016) Interpretative Guidance, 50).

1350 § 23 German Banking Act.

1351 § 2a German Banking Act in conjuction with Art. 7, 8 CRR in conjunction with Parts 2–6, 8 CRR; see *Schäfer* (2016) § 2a Ausnahmen, para 2–3; see also *Möslein* (2013) Spartentrennung, 405; *Schelo/Steck* (2013) Trennbankengesetz, 241–242.

1352 § 25f(5) German Banking Act.

Other governance requirements for the financial trading institution derive from the general requirements of proper business organisation and from the requirement to comply with the German Banking Act. BaFin specifically lists a number of requirements that are based on the German Banking Act:[1353] A financial trading institution has to have appropriate staffing.[1354] It must comply with the provisions of the German Banking Act on the number of managers,[1355] and concerning the management bodies and supervisory bodies.[1356]

In addition to these general rules, BaFin stipulates that – to avoid conflicts of interest – managers of the banking group must not at the same time be managers of the financial trading institution.[1357]

The legislative materials to the German Ring-fencing Act emphasize that, based on the proper business organisation, both the financial trading institution and the ring-fenced rest of the banking group have to particularly focus in their risk management on the risks of speculative transactions of the financial trading institution. This could be the basis for a number of other specific governance requirements, which take into account the specific risks of the trading institution.[1358]

d. Intragroup transactions and exposures

The German Ring-fencing Act stipulates that transactions between the trading entity and entities within the ring-fence have to be treated like third party transactions.[1359] *Möslein* notes that the wording of the provision does not explicitly state that transactions have to meet third party conditions. It could therefore be interpreted in a way that allows for the transaction not being based on actual third-party conditions but being treated like a third-party transaction from the perspective of risk management and financial supervision.[1360]

1353 See *BaFin* (2016) Interpretative Guidance, 46–47.
1354 This requirement derives from § 25c(4a)(4) German Banking Act.
1355 This requirement derives from § 25c German Banking Act.
1356 This requirement derives from § 25d German Banking Act.
1357 See *BaFin* (2016) Interpretative Guidance, 47.
1358 *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 42; see also *Braun* (2016) Geschäftsorganisation, para 4.
1359 § 25f(3) sentence 2 German Banking Act.
1360 See *Möslein* (2013) Spartentrennung, 405.

The Interpretative Guidance seems to suggest that transactions have to meet concrete third party conditions.[1361] In the interest of a far reaching and effective separation, the provision should be understood as an obligation to enter transactions only on arm's length basis. This would also be in line with the stringent requirement on the financing of the trading entity, discussed below.

Exposures of the ring-fenced banking group to the trading entity have to meet market conditions and thus have to be arm's length. Furthermore, large exposure requirements apply.[1362]

e. Distributions

§ 25f(3) German Banking Act stipulates that trading entities have to ensure that they independently refinance themselves. As suggested by *Möslein*, that per se does not exclude every form of credit transaction.[1363] BaFin clarified in its Interpretative Guidance that the provision does not prohibit the supply of funds by entities within the ring-fence. However, this supply of funds has to be in line with the arm's length principle. For example, a loan to the financial trading institution has to satisfy a third-party comparison and therefore has to exhibit terms adequate for risk and market conditions.[1364] The legislative materials furthermore state that refinancing over a capital increase is permitted as long as the viability of other members of the banking group is not endangered.[1365]

From this follows that distributions of the ring-fenced entities to the trading entity, such as a plain cash distribution, are not allowed. The other way around there are no specific limitations, so that dividends or cash distributions from the trading entity to the ring-fenced entities are conceivable.

1361 This is indicated with regard to ring-fenced entities operating as clearing member or security trustee for the financial trading institution (*BaFin* (2016) Interpretative Guidance, 47) and with regard to the supply of funds to the financial trading institution (*BaFin* (2016) Interpretative Guidance, 48).

1362 See Chapter III.V.B.b: Capital and liquidity.

1363 *Möslein* (2013) Spartentrennung, 405.

1364 See *BaFin* (2016) Interpretative Guidance, 48; see also *Schelo/Steck* (2013) Trennbankengesetz, 242 (noting that intragroup financing on arm's length is in line with the recommendations of the Liikanen Report); Chapter II.I.B: Avenue 1.

1365 *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 43.

f. Continuity of services

A financial trading institution is generally allowed to make use of the infrastructure and services provided by the ring-fenced banking group.[1366] This is, however, only the case insofar as (i) there is no operative risk and no reputation risk for the ring-fenced banking group and (ii) the outsourcing is in line with the provisions of the German Banking Act.[1367] The relevant provision in this regard is § 25b German Banking Act, which sets out the limits of the outsourcing of activities.[1368]

Whether or not the ring-fenced group entities can make use of infrastructure and services provided by the financial trading institution is not answered by the German Ring-fencing Act. The legislative materials to the Act, however, underscore that a participation in the financial trading entity must not entail substantial risk to the rest of the banking group. In particular regarding resolvability, the participation must neither entail operative risk nor reputational risk.[1369] Taking this into account, an interpretation therefore suggests that this would neither be the idea of the legislator nor be compatible with the aim of the Act.

C. Switzerland

As already established, there is hardly an alternative option for Swiss G-SIBs beside separating systemically important functions ex ante onto a separate legal entity.[1370] According to the Federal Council, banks have to ensure the operational and financial unbundling from the remaining

1366 *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 42; *Braun* (2016) Geschäftsorganisation, para 7; *BaFin* (2016) Interpretative Guidance, 46.

1367 See *BaFin* (2016) Interpretative Guidance, 46.

1368 According to the provision, an institution should avoid excessive risks by making appropriate arrangements depending on the nature, scope, complexity and risk of an outsourcing of functions that are necessary for their business (see § 25b(1) German Banking Act; see also *Deutsche Bundesbank* (2014) Banking Act, 111). It further clarifies that outsourcing does not shift the responsibility from the management board to the external provider (see § 25b(2) German Banking Act; see also *Deutsche Bundesbank* (2014) Banking Act, 112). Specific requirements by BaFin complement § 25b German Banking Act. (see e.g. BaFin's Circular on supervisory requirements for IT in financial institutions. *BaFin* (2017) Anforderungen IT).

1369 See *Deutscher Bundestag* (2013) Gesetzesentwurf Trennbankengesetz, 43.

1370 See Chapter III.IV.C.a.1.: Ex ante separation.

banking group. They have to equip the separated entity with appropriate capital and liquidity[1371] and ensure that it is able to "go live" without the rest of the banking group over a weekend.[1372]

There are two means to this end: firstly, the emergency plan. It specifies what measures are necessary to ensure continuation of the systemically important functions. Many of these measures will have to be implemented ex ante[1373] (first and foremost the transfer of systemically important functions onto the separate legal entity). Others will be implemented after triggering the emergency plan, and ensure the full separation of the separate legal entity from the rest of the banking group will be possible.

Secondly, measures that enhance resolvability. They aim at simplifying and unbundling structural, financial and operative interdependencies.[1374] As will be discussed below, these measures often overlap with measures of the emergency plan. Since 2016, the resolvability is furthermore part of the emergency plan's review, insofar as it is crucial for its implementation.[1375]

The separate legal entity has to be designed in a way that allows it – after triggering the emergency plan – to operate fully independently und self-sufficiently.[1376] Measures that serve the goal of reaching independence, self-sufficiency, and enhanced resolvability set up a fence around the separated entity.[1377]

1371 See *Bundesrat* (2015) Bericht Too Big to Fail, 1935.

1372 The timeframe is the course of a weekend. See *EFD* (2012) Kommentar Bankenverordnung, 10; see also Chapter III.IV.C.a.1: Ex ante separation.

1373 See Art. 60(3) Swiss Banking Ordinance; Chapter III.IV.C.a.1: Ex ante separation.

1374 See below (Chapter III.V.C: Switzerland).

1375 Art. 61(2) Swiss Banking Ordinance. This is considered necessary because "*the successful implementation of the emergency plan is to a large extent dependent on the global resolvability (e.g. by the creation of an ex ante separated Swiss entity)*". Own translation from German original, see *EFD* (2016) Erläuterungsbericht, 19.

1376 Expert Interview, Affected Bank, September 28, 2017; see also Chapter III.IV.C.a.2.: Systemically important functions.

1377 The intention to enclose the separated entity with a fence is already hinted in the legislative materials to the Swiss Banking Ordinance: The EFD considers the ex ante separation of systemically important functions as matching "*the example*" (own translation from German original, see *EFD* (2012) Kommentar Bankenverordnung, 10 Fn 12) of the UK Vickers Commission ring-fencing model. See *EFD* (2012) Kommentar Bankenverordnung, 10 Fn 12; see also *Hofer* (2014) Structural Reforms, 329.

a. Legal sources

1. Emergency plan assessment

The Swiss Banking Act provides only limited guidance with regard to independence and self-sufficiency.[1378] It is again the Swiss Banking Ordinance that sets out key aspects in its provisions on the emergency plan.[1379]

Central provision is Art. 61 Swiss Banking Ordinance, which stipulates that Finma reviews the measures of a bank's emergency plan regarding their effectiveness in case of imminent insolvency. Finma thereby takes into account how far in advance the measures have been implemented.[1380] The more measures are implemented in advance, the less measures have to be proven effective in the case of an emergency by the emergency plan. It follows that the more measures are implemented in advance, the less difficult it is to get Finma approval.[1381]

Finma reviews measures of the emergency plan with regard to a number of criteria, which should ensure the continuation of domestic systemically important functions:[1382] They outline areas which could impede this goal and establish desired results affected banks have to reach with their emergency planning. These criteria correspond well with key features of a ring-fence. They are therefore discussed with regard to the respective feature.

In 2016, it was furthermore clarified that also the global resolvability is part of the review, insofar as it is crucial for the implementation of the emergency plan.[1383]

1378 See Art. 9(2)(d) Swiss Banking Act.

1379 Art. 60 et seqq. Swiss Banking Ordinance. These articles are inspired by the FSB Key Attributes, see *Schiltknecht* (2015) Internationale Standards, 606. In contrast to "living wills", emergency plans do 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.

1380 See Art. 61(1) Swiss Banking Ordinance in conjunction with Art. 60(3) Swiss Banking Ordinance.

1381 See also *Bahar/Peyer* (2013) Systemrelevante Banken, 425; *Hofer* (2014) Structural Reforms, 330.

1382 See *EFD* (2012) Kommentar Bankenverordnung, 11.

1383 Art. 61(2) Swiss Banking Ordinance. This is considered necessary, because "*the successful implementation of the emergency plan is to a large extent dependent on the global resolvability (e.g. by the creation of an ex ante separated Swiss entity)*". Own translation from German original, see *EFD* (2016) Erläuterungsbericht, 19.

2. Resolvability incentives

In addition to the measures of the emergency plan, systemically important banks can be awarded capital rebates by Finma, if they improve their resolvability beyond the minimum requirements of the emergency plan. Finma takes into account how far in advance such measures are implemented.[1384] Art. 66 of the Swiss Banking Ordinance stipulates such measures exemplarily.[1385] The list orientates towards the FSB's Key Attributes of Effective Resolution,[1386] but, as noted by the EFD,[1387] it is also inspired by the recommendations of the expert commission.[1388]

3. Relation between emergency plan and resolvability incentives

While according to the expert commission, the emergency plan sets down minimal requirements and the resolvability incentives reward measures that exceed them,[1389] the legal relation of the provisions of the Swiss Banking Ordinance on the emergency plan and on the resolvability incentives is not fully clear.[1390]

This is particularly because, on the one hand, according to Art. 61(2) Swiss Banking Ordinance, the global resolvability is part of Finma*'s* emergency plan review.[1391] On the other hand, according to Art. 65(2) Swiss Banking Ordinance, no rebates are to be awarded for the emergency planning (the implementation of minimal requirements should not be rewarded, but is mandatory).[1392]

This results in odd inconsistencies: the ex ante separation of systemically important functions, for example, is discussed by the EFD as a measure of

1384 See Art. 65 Swiss Banking Ordinance.
1385 Art. 66 Swiss Banking Ordinance.
1386 *FSB* (2014) Key Attributes, 38–41; See *EFD* (2012) Kommentar Bankenverordnung, 16; *Schiltknecht* (2015) Internationale Standards, 603.
1387 *EFD* (2012) Kommentar Bankenverordnung, 16; Hofer (2014) Structural Reforms, 452.
1388 *Expertenkommission* (2010) Schlussbericht, 38–39.
1389 See *Expertenkommission* (2010) Schlussbericht, 38.
1390 The inconsistency between the two approaches is criticised by *Hofer*, see *Hofer* (2014) Structural Reforms, 452–453.
1391 Art. 61(2) Swiss Banking Ordinance.
1392 Art. 65(2) Swiss Banking Ordinance. See also *Hofer* (2014) Structural Reforms, 453.

the emergency plan.[1393] Being a measure of the emergency plan, Art. 65(2) Swiss Banking Ordinance would not allow for capital rebates. However, the EFD, at a different point, implies that it considers the ex ante separation a measure that improves the resolvability and that should thus be rewarded with capital rebates.[1394]

The unclear relation is also reflected in differences between explanations of the ex ante separation by the two G-SIBs: in its asset transfer agreement, *UBS* notes that the Swiss TBTF requirements *"require systemically important banks […] to put viable emergency plans in place to preserve the operation of systemically important functions […] to the extent that such activities are not sufficiently separated in advance"*[1395] and that it is the intention of *UBS* to *"substantially improve the resolvability of the Group in response to Swiss 'too big to fail' requirements"* with the transfer.[1396] This suggests the understanding that the ex ante separation in advance is based on resolvability incentives, which are complemented by an emergency plan.

Credit Suisse, in contrast, notes in its bulk transfer agreement that the Swiss TBTF requirements *"require systemically important banks to design an emergency plan. With the transfer of the [systemically important functions] to and the continuation of [their] operation, […], substantial parts of the Swiss emergency plan of the group are implemented ex ante"*.[1397] This suggests the understanding that the ex ante separation is part of the emergency plan.

As argued by *Hofer,* the provision of Art. 65(2) Swiss Banking Ordinance *"puts a strong emphasis on creating a distinction between to issues, which are not very distinct at all"*.[1398] The provision could therefore be interpreted to mean that for mere planning, no capital rebates are awarded. This would, for instance, apply for domestically oriented systemically important banks that do not intend to implement far reaching structural changes[1399] but nevertheless have to prepare an emergency plan. The ex ante implementa-

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1393 See *EFD* (2012) Kommentar Bankenverordnung, 10.
1394 *EFD* (2016) Erläuterungsbericht, 16–17. That the ex ante separation was thought as a measure to enhance resolvability was also noted by an interviewed expert. Expert Interview, Affected Bank, September 28, 2017.
1395 Commercial Register Entry, *UBS AG,* (June 17, 2015), Public Deed of the Asset Transfer Agreement, 7.
1396 Commercial Register Entry, *UBS AG,* (June 17, 2015), Public Deed of the Asset Transfer Agreement, 7.
1397 Commercial Register Entry, *Credit Suisse,* (November 23, 2016), Bulk Transfer Agreement, 7.
1398 *Hofer* (2014) Structural Reforms, 453.
1399 See Chapter III.IV.C.a.1: Ex ante separation.

tion of measures that enhance the resolvability, the self-sufficiency and the independence of the Swiss bank should, however, be rewarded with capital rebates. The inconsistent judgements of the EFD, discussed above, imply that it comes to a similar conclusion.

The relation between the emergency plan and the resolvability incentives can therefore be regarded as a "carrot-and-stick" approach: banks are incentivised to enhance their resolvability by simplifying and unbundling their structural, financial and operative interdependencies. The more the resolvability is improved, the more carrots in the form of capital rebates are awarded. The emergency plan constitutes the stick: it represents the minimum goals (that might, however, be quite far-reaching); if certain measures that obstruct the continuation of the systemically important functions are not implemented, Finma may reject the bank's emergency plan and may impose its own ideas on the bank.[1400]

b. Capital and liquidity

According to the Swiss Banking Ordinance, measures of the emergency plan have to ensure that there is sufficient capital and liquidity for the continuation of systemically important functions in the case of its triggering.[1401]

The legislative materials explain that there have to be sufficient own funds (i) to capitalise ex ante separated entities in charge of the systemically important functions. In addition, own funds must suffice (ii) to absorb the losses of the banking group during the implementation of the last stages of the emergency plan (after its triggering).[1402] When assessing the (iii) liquidity needs, it has to be taken into account that the ring-fenced bank and the remaining banking group are likely to experience a high outflow of funds and difficulties in refinancing.[1403]

1400 The Swiss Banking Ordinance stipulates that in case of a rejection of the emergency plan, Finma is empowered to take considerably invasive measures regarding the structure of the banking group. They include the separation of infrastructure and services necessary for the provision of systemically important functions, the modification of the legal and operative structure of the banking group. See Art. 62 Swiss Banking Ordinance.

1401 See Art. 61(1)(c) Swiss Banking Ordinance.

1402 See *EFD* (2012) Kommentar Bankenverordnung, 12.

1403 See *EFD* (2012) Kommentar Bankenverordnung, 12.

From these requirements it can be derived that the ex ante separated entity has to be equipped with considerable amounts of capital and liquidity.

The requirements of the Swiss Banking Ordinance are complemented by provisions of the Swiss Capital Adequacy Ordinance[1404] and the Swiss Liquidity Ordinance:[1405] (i) the Swiss Capital Adequacy Ordinance stipulates that capital requirements for systemically important banks are obligatory not just for the banking group, but also standalone for the ex ante separated entity, which contains the systemically important functions;[1406] (ii) the Swiss Liquidity Ordinance stipulates that liquidity requirements apply to systemically important banks both on group level and the level of the single institute.[1407]

Both *UBS Switzerland AG* and *Credit Suisse (Schweiz) AG* therefore have to comply with capital and liquidity requirements on a standalone basis.[1408]

c. Governance

Measures of the emergency plan have to ensure that there are sufficient personnel resources for the continuation of systemically important functions. Management and control functions are particularly emphasized.[1409] The legislative materials note that contracts should be prepared in a way that the triggering of the emergency plan cannot be used as grounds for termination.[1410]

1404 Verordnung über die Eigenmittel und Risikoverteilung für Banken und Effektenhändler, June 1, 2012, SR 952.03 (Swiss Capital Adequacy Ordinance). The respective provision was included by a revision of the Capital Adequacy Ordinance. The revision is based on the Federal Council's 2015 evaluation of the TBTF package. See Verordnung über die Eigenmittel und Risikoverteilung für Banken und Effektenhändler, Änderung vom 11. Mai 2016, AS 2016 1725.

1405 Verordnung über die Liquidität der Banken, November 30, 2012, SR 952.06 (Swiss Liquidity Ordinance).

1406 Art. 124(2) Swiss Capital Adequacity Ordinance; see also *EFD* (2016) Erläuterungsbericht, 4.

1407 See Art. 20 Swiss Liquidity Ordinance; *Bundesrat* (2012) Botschaft Liquiditätsverordnung, 9459; *Passardi/Jans* (2014) Neue Liquiditätsvorschriften, 296.

1408 See e.g. *UBS* (2017) Standalone financial statements UBS Switzerland AG, 20.

1409 See Art. 61(1)(e) Swiss Banking Ordinance.

1410 See *EFD* (2012) Kommentar Bankenverordnung, 12.

UBS and *Credit Suisse* ex ante transferred large numbers of personnel onto their separated entities.[1411] Important functions, for example the CFO or treasurer, are employed directly by the entity they are responsible for: the Swiss entity's treasurer thus needs to be employed by the Swiss entity.[1412]

This is arguably based on the awareness that the transfer of personnel and the related contractual changes cannot be conducted over a weekend. It is likely that these measures furthermore intend to ensure the independency of the Swiss entity and tackle conflicts of interest.

But it is not just important to adequately staff the ring-fenced bank, but also to address the question how it can be ensured that the management and control functions are ready for use in the case of the triggering of the emergency plan and do not face considerable conflicts of interest, in particular given their integration in the banking group during going concern.

This question is *inter alia* addressed by the implementation of so called "contingency organisations". They are organisational structures that change in the event of the triggering of the emergency plan.[1413] They can be understood as optional hierarchical structures that become effective in a certain a priori defined moment.

In the case of a crisis, for example, the Swiss entity's CFO would stop following the instructions of the banking group's CFO.[1414] This aims to ensure that conflicts of interest are avoided in case of the triggering of the emergency plan and management can act independently and in the sole interest of the separated entity.

In the example above, the Swiss entity's CFO would, however, continue to inform the banking group's CFO,[1415] which reflects that the contingency organisations are tailor made. They allow for flexible solutions in the interest of all affected parties.

1411 See e.g. *Millischer/Heim*, Milliardenabflüsse bei der UBS Schweiz, Handelszeitung (March 31, 2016), (noting that *UBS Switzerland's* personnel amounts to 11000 employees); *Padevit*, CS: Schweizer Tochter wird am 20. November geboren, Finanz und Wirtschaft (October 7, 2016), (noting that *Credit Suisse Schweiz*'s personnel amounts to 6600 employees).

1412 Expert Interview, Affected Bank, September 28, 2017.

1413 Expert Interview, Affected Bank, September 28, 2017.

1414 Expert Interview, Affected Bank, September 28, 2017.

1415 Expert Interview, Affected Bank, September 28, 2017.

There are comparable measures in place for the board of directors: Swiss entities have to demonstrate their autonomy with independent directors.[1416] Finma demands that at least a third of board members are independent.[1417] In case of the triggering of the emergency plan, independent directors would be able to constitute the majority in the board of directors. This would ensure that they make decisions in the favour of the entity, not the group.[1418]

Such measures are necessary in a global crisis scenario, in which group executives would possibly be incentivised to withdraw liquidity from the Swiss entity. The board of directors could prevent such actions.[1419]

While these findings are exemplary and do not allow for a comprehensive assessment of the Swiss governance requirements, they reflect that there are considerable efforts undertaken by the affected banks and Finma to address governance issues for the Swiss entity.

d. Intragroup transactions and exposures

Art. 61(1)(b) sets down that Finma reviews as part of the emergency plan, among other things, whether the legal and economic intragroup relations,

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1416 This was underscored by *Markus Ronner,* who is responsible for *UBS's* implementation of the Swiss emergency plan, in an interview. *Schöchli,* "Wir werden bis Ende 2018 bereit sein", NZZ (June 20, 2015).

1417 General compliance rules that are applicable to all banks stipulate that at least a third of a bank's board of directors have to be independent. Independency is not given if a number of exclusion criteria are fulfilled. See *Finma* (2017) Corporate Governance – Banken, 5. Whether or not these rules sufficiently ensure the independence of the Swiss entity has been critically discussed in connection with the IPO of *Credit Suisse (Schweiz) AG* which was planned at the time. See *Hegglin,* Die CS Schweiz in Halbgefangenschaft, Finanz und Wirtschaft (September 6, 2016). See also *Credit Suisse (Schweiz) AG* (2018) Annual Report 2018, 13.

1418 Expert Interview, Affected Bank, September 28, 2017. The triggering of the emergency plan is defined in Art. 63 Swiss Banking Ordinance and refers to Art. 25(1) Swiss Banking Act. It is triggered when Finma decides, based on reasonable concern, that the bank is insolvent, or has not complied with capital or liquidity requirements for a certain time (Art. 25(1) Swiss Banking Act). With activation of the bank's recovery plan, an "emergency plan task-force" is activated that monitors events in the banking group. The emergency plan is fully triggered over the resolution-weekend. Expert Interview, Affected Bank, September 28, 2017.

1419 Expert Interview, Affected Bank, September 28, 2017.

in particular intragroup financing and guarantees, are designed in a way that does not obstruct the continuation of systemically important functions.

According to an interviewed expert, there are no financial dependencies on the banking group. There are limits set by Finma concerning intragroup arrangements[1420] and exposures.[1421] These are also mostly collateralised.[1422] There are furthermore requirements in place to transact with the group on an arm's length basis.[1423] *Ronner* also emphasizes the importance of financial unbundling.[1424]

Affected banking groups can be awarded capital rebates if they unbundle their financial interdependences exceeding minimal requirements, in particular through limitations of unsecured loans and guarantees and the establishment of incentives for a intragroup financing that corresponds as much as possible with market conditions.[1425]

e. Distributions

Neither the Swiss Banking Act nor the Swiss Banking Ordinance set down requirements on how distributions, e.g. dividends, from the ring-fenced bank to the remaining banking group are to be handled. Drawing from the standalone financial statements of *UBS Switzerland AG*, for example, one finds that dividends are paid to *UBS AG* exceeding the total net profit of the period.[1426] This indicates that there is no general restriction on the payment of dividends to other group members.[1427]

From the obligation of the Swiss entity to comply with capital and liquidity requirements on a standalone basis follows, however, that there

1420 Expert Interview, Affected Bank, September 28, 2017.

1421 Expert Interview, Affected Bank, March 6, 2018. The limitation of direct exposure of the Swiss entities to the rest of the banking groups are also recognized by rating agencies: For example, a limited exposure of *UBS Switzerland AG* to *UBS AG* was expected by *Fitch* already in 2015, see *Reuters,* Fitch Assigns UBS Switzerland AG 'A' IDR; Affirms UBS AG at 'A' (June 15, 2015).

1422 Expert Interview, Affected Bank, September 28, 2017.

1423 Expert Interview, Affected Bank, March 6, 2018.

1424 *Schöchli,* "Wir werden bis Ende 2018 bereit sein", NZZ (June 20, 2015).

1425 Art. 66(b) Swiss Banking Ordinance.

1426 *UBS* (2018) Standalone financial statements UBS Switzerland AG, 4.

1427 *Fitch*, for example, *"expect[s] that UBS Switzerland AG will make material dividend payments to UBS AG". Reuters,* Fitch Assigns UBS Switzerland AG 'A' IDR; Affirms UBS AG at 'A' (June 15, 2015).

must be certain limitations on distributions paid to the non-ring-fenced entities.[1428] As a minimum, the Swiss entity must not fall short of the capital and liquidity requirements.

There are furthermore limitations for distributions stemming from general corporate and criminal law: for non-ring-fenced entities (which are in the current setup the full owners of the ring-fenced entities)[1429] the limitations of Art. 680 Swiss Code of Obligations apply, which stipulate that shareholders may not be obliged to give more than the price of a share.[1430] Corresponding limitations for the ring-fenced entities are the fiduciary duties and relating thereto the liability of the executive board, as executives have to act in the interest of the company they represent.[1431]

f. Continuity of services

Art. 61(1)(d) stipulates that measures of the emergency plan have to safeguard that there are appropriate processes and the necessary infrastructure in place for the operability of systemically important functions. Necessary resources need to be accessible at any time and independently from the rest of the banking group.[1432] According to the EFD, in particular the establishment of group service entities has implications for the emergency plan.[1433]

1428 This seems to be acknowledged in *UBS Group*'s annual report, noting that *"[i]n particular, UBS Group AG's direct and indirect subsidiaries, including UBS AG, UBS Switzerland AG, UBS Limited and UBS Americas Holding LLC, are subject to laws and regulations that restrict dividend payments, authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to UBS Group AG, or could impact their ability to repay any loans made to, or other investments in, such subsidiary by UBS Group AG or another member of the Group"*. *UBS* (2018) Annual Report 2017, 55.

1429 See Chapter III.IV.C.c: Affected banks.

1430 See Art. 680 Bundesgesetz betreffend die Ergänzung des Schweizerischen Zivilgesetzbuches (Fünfter Teil: Obligationenrecht), March 30, 1911, SR 220 (Swiss Code of Obligations).

1431 See Art. 717(1) Swiss Code of Obligations; Art. 754(1) Swiss Code of Obligations. While fiduciary duties can be restricted to a large extent in the interest of the banking group in the articles of incorporation, there are limitations, namely when their acts constitute the criminal offense of disloyal management. See Art. 158 Schweizerisches Strafgesetzbuch, December 21, 1937, SR 311.0 (Swiss Criminal Code).

1432 See Art. 61(1)(d) Swiss Banking Ordinance.

1433 See *EFD* (2016) Erläuterungsbericht, 6.

Systemically important banks can furthermore be awarded capital rebates if they exceed minimum requirements and unbundle their operations in a way that ensures their access to infrastructure, data and services.[1434]

For *UBS*, a major step to reach this goal is the establishment of an independent legal entity that provides services to around 130 *UBS* entities worldwide.[1435] *UBS Business Solutions AG* improves the banking group's resolvability by maintaining the *"operational continuity of critical services should a recovery or resolution event occur"*.[1436] It provides internal services such as IT, payment transactions, risk management, human resources and marketing and legal services.[1437] Similar plans are pursued by *Credit Suisse*,[1438] which is in the process of establishing a service company for Switzerland.[1439]

D. Results

a. Elements of the fence

1. Capital and liquidity

In all three countries of interest, the ring-fenced banks have to independently comply with capital and liquidity requirements.[1440] The most detailed considerations are found in the UK, where the PRA outlines the obligation of the ring-fenced bank to put in place stress testing capabilities[1441] and articulates that it considers exposures to other members of the banking group as if they were third parties during SREP.[1442]

Similar requirements are likely to apply to the ring-fenced entities in Germany, because the separation of certain activities onto a trading entity

1434 See Art. 66(a)(2) Swiss Banking Ordinance.
1435 See *Schöchli*, Das Drehbuch für die nächste Krise, NZZ (June 6, 2017).
1436 *UBS* (2017) 2016 SEC Form 20-F, 13, 448.
1437 See *Schöchli*, Das Drehbuch für die nächste Krise, NZZ (June 6, 2017).
1438 *Schöchli*, Das Drehbuch für die nächste Krise, NZZ (June 6, 2017).
1439 *Credit Suisse* (2017) Annual Report 2016, 14.
1440 See the respective chapters on capital and liquidity above.
1441 See *PRA* (2017) Ring-fenced Bodies, 15; Chapter III.V.A.a: Capital and liquidity.
1442 See *PRA* (2017) Ring-fenced Bodies, 14; Chapter III.V.A.a: Capital and liquidity.

does not affect already existent stress testing capabilities of the rest of the banking group (which then becomes "ring-fenced"). In addition, exposures to the trading entity have to be at market conditions and risk-adequate and large exposure requirements of the CRR are applicable.[1443] During SREP, it can therefore be assumed that exposures to the trading entity will be considered as if they were third parties, which would result in additional capital buffers for the ring-fenced group. As the Swiss entities also have to independently comply with capital and liquidity requirements, it is to assume that they will have to put in place stress testing capabilities as well.[1444]

2. Governance

With regard to governance, all three jurisdictions also put in place specific requirements that constitute a fence. They aim (i) to ensure that the separated entities are adequately staffed; (ii) to avoid conflicts of interest of the management; and (iii) to avoid conflicts of interest between the ring-fenced and the non-ring-fenced bank.

The UK sets out the most detailed and elaborate rules. A good example are its specifications on the independence of a director: they include a complex set of reasons for exclusion, including, for instance, family ties or employments by other members of the banking group reaching back five years.[1445] The notion of the BaFin's Interpretative Guidance that managers of the banking group must not at the same time be managers of the financial trading institution appears blunt in comparison.[1446]

1443 See Chapter III.V.B.d: Intragroup transactions and exposures; Chapter III.V.B.e: Distributions.

1444 While there are limits for exposures between the ring-fenced bank and the non-ring-fenced bank (see Chapter III.V.C.d: Intragroup transactions and exposures), it could not be established whether exposures to the rest of the banking group have to be considered as if they were third parties as well in Switzerland. It is, however, likely, given the orientation towards the UK and could, for example, be mandated by Finma order. It could also, for Swiss ring-fenced bodies, result in additional capital buffers.

1445 See *PRA* (2016) PRA Rulebook: Ring Fenced Bodies, Sec. 1(3)(2).

1446 See *BaFin* (2016) Interpretative Guidance, 47; Chapter III.V.B.c: Governance. The general rules on the independence of board members, which are set down in § 25d(2) German Banking Act, are not very elaborate either.

In Switzerland, it seems that Finma is satisfied if at least a third of board members are independent.[1447] This indicates that the Swiss entities are less independent from their respective banking group during going concern than in the UK, where at least half of the members of the board of directors need to be independent.[1448] However, as discussed above, in a crisis situation, independent directors would be able to constitute the majority on the board of directors.[1449]

A particularly interesting feature of the Swiss approach are the contingency organisations.[1450] They also reflect the idea that the interests of the Swiss entities and the rest of the banking group are generally aligned during going concern. A reporting line from the group's management to the Swiss entity's management is found acceptable under normal business circumstances.

In the case of an emergency, however, the interests are likely to diverge. To avoid that actions are taken at the expense of the Swiss entity and to ensure the full independence, the reporting line is cut. The flow of information, however, remains ensured.[1451] The problematic questions of (i) who decides that the reporting line is cut; and (ii) when is the reporting line cut, are ex ante regulated by the automated entry into force by the triggering of the emergency plan.

The contingency organisations indicate that the Swiss entities are, for the moment, more integrated into their respective banking group than in the UK, where conflicts of interest have to be addressed already during going concern. They can also be considered a manifestation of the subsidiarity principle and the general tendency to avoid overly invasive requirements.[1452]

1447 See *Finma* (2017) Corporate Governance – Banken, 5. Whether or not these rules sufficiently ensure the independence of the Swiss entity has been critically discussed in connection with the IPO of *Credit Suisse (Schweiz) AG* which was planned at the time. See *Hegglin,* Die CS Schweiz in Halbgefangenschaft, Finanz und Wirtschaft (September 6, 2016).

1448 See Chapter III.V.A.b: Governance.

1449 Expert Interview, Affected Bank, September 28, 2017. See Chapter III.V.C.c: Governance.

1450 See Chapter III.V.C.c: Governance.

1451 See Chapter III.V.C.c: Governance.

1452 See Chapter III.II.C.b.2: Subsidiarity principle; Chapter III.II.D.e: Invasiveness.

3. Intragroup transactions and exposures

In all three jurisdictions requirements are in place that allow for intragroup transactions only to be conducted at arm's length.[1453] In Germany and the UK, intragroup exposures have to be at arm's length and large exposure limits of the CRR apply.[1454] In Switzerland there are limits set by Finma.[1455] Applying a legal comparative view, it can be assumed that also in Switzerland large exposure limits should apply between the ring-fenced entity and the non-ring-fenced entity.

The UK stipulation that the ring-fenced bank is not allowed to become dependent on income from transactions with group members outside the fence, or with customers where it is likely contingent on services by group members,[1456] finds its counterpart in the Swiss emphasis on the self-sufficiency of the entity:[1457] It also has to be structured in a way that allows for it to operate standing alone.

4. Distributions

Distributions include first and foremost dividends but can also include other contributions such as cash payments. All the jurisdictions have rules in place that regulate whether or not distributions can be made between the ring-fenced and non-ring-fenced entities.

In the UK, distributions between the entities are generally allowed. The PRA, however, established a regime to review distributions of the ring-fenced bank and to prevent them in case there is "*a significant adverse effect on the capital position of [the ring-fenced body] that could adversely affect the continuity of the provision of core services*".[1458] There are no requirements for distributions, from the non-ring-fenced bodies to the ring-fenced bodies.

1453 See the respective chapters above.

1454 See the respective chapters above.

1455 Expert Interview, Affected Bank, March 6, 2018. The limitation of direct exposure of the Swiss entities to the rest of the banking groups are also recognized by rating agencies: For example, a limited exposure of *UBS Switzerland AG* to *UBS AG* was expected by *Fitch* already in 2015, see *Reuters,* Fitch Assigns UBS Switzerland AG 'A' IDR; Affirms UBS AG at 'A' (June 15, 2015).

1456 See *PRA* (2016) PRA Rulebook: Ring Fenced Bodies, Sec. 13; Chapter III.V.A.b: Governance.

1457 See Chapter III.IV.C.a.2: Systemically important functions.

1458 See *PRA* (2017) Ring-fenced Bodies, 22; Chapter III.V.A.d: Distributions.

In Switzerland the handling of distributions is likely to be similar: distributions from the Swiss entity to the rest of the banking group are limited by the obligation of the Swiss entities to adhere to capital requirements on their own. Furthermore, there are limitations due to general corporate and criminal law.[1459] In contrast to the UK, a regime of Finma to review and prevent distributions is not explicitly outlined.

For Germany, distributions from the ring-fenced entities to the trading entity are prohibited. This derives from the obligation of the latter to refinance itself independently from the ring-fenced group.[1460] Comparing the regulation of distribution, the German rule is thus the most stringent. Trading activities of the financial trading institution cannot be subsidised by the ring-fenced entities. A legal comparative view suggests that this requirement is potentially overshooting, as trading entities are likely unprofitable and hence unpopular.

5. Continuity of services

The continuity of services is addressed in all jurisdictions. In the UK, the ring-fenced bank may only receive regular services from another ring-fenced body or a group service company.[1461] In Switzerland, banks that provide systemically important functions need to ensure as part of the emergency plan there are appropriate processes and the necessary infrastructure in place to operate them. Furthermore, the necessary resources need to be accessible at any time and independently from the rest of the banking group. As such measures improve the resolvability of the group, capital rebates may be awarded. Both Swiss G-SIBs are in the process of establishing group service companies.[1462]

In contrast to the above, in Germany the trading entity is generally allowed to make use of the infrastructure and services provided by the ring-fenced banking group: however, only if there is no operative risk and no reputational risk for the ring-fenced banking group. The ring-fenced banking group, on the other hand, is not allowed to make use of the infrastruc-

1459 See Chapter III.V.C.e: Distributions.
1460 See Chapter III.V.B.e: Distributions.
1461 See Chapter III.V.A.e: Continuity of services.
1462 See Chapter III.V.C.f: Continuity of services.

ture or of services of the trading entity. This derives from an interpretation of the German Ring-fencing Act.[1463]

b. Other findings

1. Character

Again, the most detailed, forthright and clearest rules are found in the UK. This is because, as already discussed, it uses the traditional hierarchy of legal sources most consequently and the goals articulated by the Vickers Report are pursued forthright.[1464]

In particular with regard to the height of the fence, the German Ring-fencing Act requires a lot of interpretation, which is only to some extent provided by BaFin. Clearer rules, setting out what is meant by the "*economically, organisationally and legally independent*" trading entity, would thus be desirable.

The Swiss approach faces a similar problem regarding the height of the fence as it faces with regard to the ex ante separation of systemically important function: there is no clear obligation of banks to implement measures ex ante. Affected banks are, on the one hand, forced to do so with the prospect that the emergency plan review by Finma would turn out negatively and are, on the other hand, incentivised by capital rebates. The necessary (but not necessarily ex ante implemented) measures of the emergency plan to a large extent overlap with measures to improve resolvability. This can be criticised, in particular, from the perspective of transparency and the principle of legality.[1465]

2. Ring-fencing in Switzerland

All the jurisdictions of interest put in place specific requirements for affected banks that constitute a fence. While for Germany and the UK this is hardly surprising as the intention to ring-fence is emphasized prominent-

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1463 See Chapter III.V.B.f: Continuity of services.
1464 See Chapter III.II.A: United Kingdom.
1465 For a discussion of transparency and the principle of legality, see Chapter III.II.D.b: Legal sources.

ly,[1466] for Switzerland it is an important finding. It is also surprising, as Swiss ring-fencing is mostly ignored in the international discourse. Based on the findings on the Swiss fence, the Swiss approach is therefore discussed in greater detail.

i. Generally unnoticed

Switzerland is generally not recognised for its adoption of structural reform rules. This becomes obvious when looking at the academic work exploring structural reform legislation comparatively:[1467] The Swiss organisational measures are seldom covered. The very few cases in which it is included or in which its relation to internationally recognized ring-fencing rules is underscored, are domestic sources.[1468] International recognition is scarce and mostly limited to a side note.[1469]

It seems odd that the second most important financial centre in Europe is not included in comparative analyses. This is likely due to a few special features of the Swiss approach that differ from the approach of other countries, notably Germany and the UK.

ii. Special features of the Swiss approach

The main difference is that there is no comprehensive act that sets down a requirement to ring-fence. The two main starting points are the emergency

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1466 This is reflected, e.g. by the choice of name in Germany and by the title of the new Part 9B of the FSMA 2000 in the UK.

1467 E.g. *Lehmann* (2014) Ring-Fencing; *De Vogelaere* (2016) Bank Structure Reforms; *Krahnen/Noth/Schüwer* (2016) Structural Reforms; *Kumpan* (2014) Verbot von Eigengeschäften; *Masciandaro/Suardi* (2014) Public Interest and Lobbies; *Pflock* (2014) Europäische Bankenregulierung; *ZEW* (2013) Trennbanken.

1468 This is in particular *Hofer* (2014) Structural Reforms and to some extent *Bahar/Peyer* (2013) Systemrelevante Banken, 377–378; see also *Achermann* (2018) Organisation, 278–280.

1469 *"By the start of 2019, Britain's largest lenders will need to put their retail banking units inside a heavily capitalised subsidiary, protecting them in case the group fails. […] Switzerland aside, no other country has introduced anything similar." Financial Times,* Ringfencing will help in the next banking crisis (January 10, 2017); *European Commission* (2014) Impact Assessment Part 2, 2; cf. *FSB* (2014) Structural Banking Reforms, 9–10.

plan and the improved resolvability.[1470] They are complemented by selective legislative measures, such as the requirement adopted in 2016 that stipulates that entities of globally active systemically important banks which contain the systemically important functions, have to comply with capital requirements on a standalone basis.[1471] The steering actions of the regulator furthermore play an important role in shaping factual requirements for affected banks.[1472]

Another special feature of the Swiss approach that potentially leads to less prominence in the international debate is that ring-fencing requirements apply only to a subset of large banks, namely the Swiss G-SIBs *UBS* and *Credit Suisse.* While other banks have also been designated systemically important status by the SNB, they are not expected to conduct "*larger organisational or structural changes*" due to differences in their business model and geographical orientation.[1473]

Another specialty is that, due to the difference in the approach, not all requirements become effective at the same time. It is to be understood rather as a process: a lot has changed since the expert commission's report was published in 2010, the requirements for the globally active systemically important banks have evolved.[1474] This is reflected in the structural changes that the two banks have implemented since then.

In addition, some parts of the Swiss ring-fence are on a contingent basis. This refers particularly to the governance measures, especially the contingency organisations. As changes in the reporting line are executed only in case of the triggering of the emergency plan, they are not noticeable during going concern.[1475] An important part of ring-fencing therefore lies dormant before the public.

iii. Considerable fence

Even if the Swiss approach is included in a comparison with the more prominent ring-fencing rules, the results are not convincing. *Hofer*, for in-

1470 See Chapter III.V.C.a: Legal sources.
1471 See Chapter III.V.C.b: Capital and liquidity.
1472 See Chapter III.II.C.c.2: Finma emergency plan assessment; Chapter III.IV.C: Switzerland.
1473 See Chapter III.IV.C.a: Systemically important functions.
1474 Steps in the evolutionary process are, e.g. the obligation to comply with capital requirements standalone. See Chapter III.V.C.b: Capital and liquidity.
1475 See Chapter III.V.C.c: Governance.

stance, comes to the conclusion that the creation of a fence "*is the most notable feature that completely lacks a match under Swiss law*". While he is right in pointing out that a "*compelling ex ante separation protected by a (more or less) clear framework regulating legal, operational, and economic interdependencies*" is missing in the Swiss approach,[1476] the findings of the chapters above reveal that considerable efforts have been undertaken to establish a (i) compelling ex ante separation for Switzerland's globally active banks (ii) that is protected by a fence.

A comparison of key features of the fence suggests that the Swiss ring-fence may not be as transparent as the one of the UK, but that it is for itself of considerable height. As an example, one can refer to the obligation of the ring-fenced bank to comply with capital requirements standalone.[1477] But also other examples such as the governance measures or the continuity of services indicate that the fence is higher than one would expect.

The fact that parts of the ring-fence, in particular the contingency organisations, lie dormant during going concern and are thusly not as noticeable to the public, should not conceal that there are measures in place to ensure the automated separation of the ring-fenced bank in case of an emergency.

The ex ante separation and the implemented governance measures may furthermore have the effect that decision-makers in the Swiss entities start to increasingly claim responsibility and independence from the rest of the banking group. This is in particular due to fiduciary duties and the corresponding liability.[1478] It is therefore thinkable that the fence is naturally heightened and is likely to assimilate to the UK's fence over time.

Furthermore, it should be noted that the most invasive step was the separation of the systemically important functions into a separate legal entity. Since that has been accomplished, the rest are minor changes that can be implemented over time.

3. Ring-fencing

In summary, it can be found that all three jurisdictions put in place requirements that govern the (i) legal, economic and operational indepen-

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1476 *Hofer* (2014) Structural Reforms, 329–330.
1477 See Chapter III.V.C.b: Capital and liquidity; Chapter III.II.C.b.3: TBTF evaluation.
1478 See Chapter III.V.C.e: Distributions.

dence of the separated entities and thereby constitute a fence. In combination with the other core characteristics of ring-fencing, namely (ii) the separation of activities, and (iii) maintaining universal banking, all three core characteristics are fulfilled.

It can therefore be concluded that all three jurisdictions of interest put in place bank structural reforms that aim 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.[1479]

4. Practical relevance

In practice, however, there seem to be considerable differences in the relevance of the respective provisions in the three jurisdictions.

This is reflected in the news reporting and in affected banks' own publications: in the UK and Switzerland, there is a constant flow of information provided by both news outlets and affected banks. This is, among other reasons, because the costs of ring-fencing are enormous. For example, *Lloyd's Banking Group* alone, which is one of the less impacted banks, estimate 500 million £ implementation costs.[1480] The ex ante separation of systemically important functions for *UBS* alone was estimated at one billion CHF.[1481] Another reason is that numerous customers are affected by the changes in structure, e.g. by a change of their account details.[1482]

As already discussed in Chapter III.IV.B.d,[1483] no comparable information is available from Germany. To the knowledge of the author, no financial trading institution has been established so far.[1484] It is indeed conceiv-

1479 See Chapter I.IV.B: Ring-fencing as a structural reform.

1480 *Binham/Dunkley,* Regulators get ready to authorise 'ringfenced' UK banks, Financial Times (August 19, 2017).

1481 *Baches,* Pionierprojekt einer Grossbank, NZZ (June 26, 2015).

1482 See e.g. *Britton et al.* (2016) Ring-fencing, 171.

1483 See Chapter III.IV.B.d: Affected banks.

1484 Apart from extensive research, the author contacted both BaFin and the Association of German Banks. BaFin was not able to answer the query due to its duty of confidentiality according to § 8 German Banking Act. The Association of German Banks did not have any information on its members activity concerning the establishment of financial trading entities available. Also in the BaFin Journal of February 2016 (*Stubbe* (2016) Trennbanken, 10) and in the response of the German Government to a parliamentary question (*Deutscher* able that the financial trading institution will remain a theoretical construct and that, in spite of the legal basis, ring-fencing is not going to be put in practice in Germany.

This may be because, in contrast to Switzerland and the UK, Germany decided to adopt the *containment method* of ring-fencing, excluding only very few activities from the ring-fenced entity, and set down far-reaching exemptions. This limited scope applies mainly to activities whose relevance has considerably decreased over the last decade.[1485] In addition, the stipulated fence is in some aspects more stringent than in the UK and Switzerland, in particular with regard to the requirement for trading entities to refinance themselves independently: while funds can be supplied by the ring-fenced entities, this supply has to comply with the arm's length principle. As such a supply at market conditions is costly, banks are strongly incentivized to avoid establishing a trading entity.[1486]

The view that the German Ring-fencing Act is not going to be of practical relevance is expressed frequently in the academic literature, however, typically regarding incoming EU structural reform legislation.[1487] With the withdrawal of the bank structural reform file, a comprehensive superses-

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Bundestag (2016) Antworten der Bundesregierung, 42–43) there is no information on the establishment of a financial trading institution.

1485 The provision of proprietary trading – proprietary business to be in line with the German Banking Act's diction – has decreased considerably since the global economic crisis. Many banks claim that they do not engage in it at all anymore. (See *PwC* (2014) AFME: Bank Structural Reform Study, 7 (noting that "*[a]lmost 90% of banks studied announced reductions in proprietary trading activities since the financial crisis, with over half exiting these businesses*")). For all banks that quit the provision of proprietary business, establishing a separate trading entity for this activity is therefore not necessary. In addition, the exception that allows for the loan and guarantee business with hedge funds and AIFs, if fully collateralised creates enough room for manoeuvre for affected banks, to make a trading entity dispensable. As market making is not prohibited, its provision does not require a ring-fence (see Chapter III.IV.B.a.1: Excluded activities). Long term investments are also covered by an exception, so that long-term speculation can be conducted by the banking groups (see Chapter III.IV.B.a.2: Exceptions).

1486 See Chapter III.V.B.e: Distributions.

1487 See e.g. *Schaffelhuber/Kunschke* (2015) Trennbankengesetz, 402 (expressing the opinion that the German Ring-fencing Act is not going to play an important role in practice due to its limited scope and less stringent legal consequences compared with European Union legislation); *Schäfer* (2016) § 3 Verbotene Geschäfte, para 3.

sion through European Union law has become considerably less probable.[1488]

If applied properly, it can be assumed that the provisions of the German Ring-fencing Act currently exert similar legal consequences as the *activities ban*, because no financial trading institution has been created yet in which excluded activities can be conducted. It will be interesting to see how the German Ring-fencing Act will evolve, in particular in a changing economic environment.

5. Switzerland as a role model for the EU?

As discussed in Chapter II.IV.C.c, provisions of the BRRD and the SRMR setting out far-reaching powers for regulators to address resolvability impediments are considered by some authors to be potential gateways for the introduction of an EU-wide ring-fencing regime.[1489]

Mandating ring-fencing via these provisions would resemble the Swiss approach to a certain extent. Before discussing the question whether Switzerland should be regarded as a role model for the EU, some similarities are pointed out.

In both cases (i) the legal basis would be within the setting of recovery and resolution and would be based (ii) on guidance of the FSB.[1490] In both cases the implementation of ring-fencing would be (iii) enforcement-based, i.e. to a great extent the responsibility of the respective regulators.[1491]

Switzerland's success in implementing ring-fencing for its largest banks can rightly be regarded as proof that an enforcement-based implementation of ring-fencing is possible. It demonstrates that it is not absolutely essential to adopt an act setting out every detail of ring-fencing, like the UK and Germany did. Such an approach has certain advantages: it allows, for example, for more flexibility, as a case by case assessment of banking

1488 See Chapter II.IV: Withdrawal of the File and Alternatives.
1489 See Chapter II.IV.C.c: Existing regimes.
1490 See, in particular, *FSB* (2014) Key Attributes, 37–43; see also *FSB* (2015) Obstacles to Resolvability, 12–18; *FSB* (2016) Operational Continuity, 9–15. For a summary of relevant *FSB* Guidances, see *Achermann* (2018) Organisation, 276–278. For a discussion of their legal character, see *Brändli* (2018) Internationale Standards, 47–50.
1491 See Chapter II.IV.C.c: Existing regimes; Chapter III.II.C.c: Legal sources.

groups is possible. It can furthermore be gradual, with not all requirements imposed at the same time.[1492]

However, in addition to the considerations on the EU's emphasis of proportionality set out in Chapter II.IV.C.c[1493] and concerns over transparency and the principle of legality, the factual differences of the banking sectors constitute, in the author's opinion, a major obstacle for a similar use of the resolvability assessment in the EU.

There are a number of factors that facilitate the success of an enforcement-based implementation of ring-fencing in Switzerland: (i) there are only two affected banks. It is easier to come to an agreement with two G-SIBs than to come to an agreement with 12 G-SIBs and all other banks affected by the rules.[1494] In Switzerland, (ii) affected banks have been included in the legislative process since the formation of the expert group.[1495] While there were select protests against measures demanded by Finma,[1496] generally it can be found that banks have been willing to implement the regulator's demands. Traditionally, there is an (iii) exceptionally close cooperation between regulators and banks that is likely not equalled in the European Union. In addition, (iv) a consistent and non-discriminatory application of the powers is facilitated by the limited number of affected banks in Switzerland. Furthermore, (v) Switzerland is particularly exposed to its G-SIBs, which is illustrated by the relation of size to the country's GDP,[1497] making necessary especially determined action by its regulators. The country's (vi) intervention on behalf of *UBS* moreover showed that the failure of large banks is a credible threat.

In the European Union the setting is naturally different: there is a large number of G-SIBs, there are interests of Member States to protect their na-

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1492 See also in this regard the considerations of the Liikanen Report's HLEG concerning advantages of Avenue 1, Chapter II.I.B.b: Costs and benefits.

1493 See Chapter II.IV.C.c: Existing regimes.

1494 There are currently 12 EU banks considered global systemically important by the FSB. See *FSB* (2017) Global Systemically Important Banks, 3. The EBA considers 35 banks potentially systemically relevant. See *EBA*, Large Institutions with a leverage ratio exposure measure above 200bn EUR, http://www.eba.europa.eu/risk-analysis-and-data/global-systemically-important-institutions/2017.

1495 See Chapter III.II.D.a: Expert commissions.

1496 For example with regard to *Credit Suisse*'s re-transfer of STS Trading. See *Hässig,* Finma stellt sich gegen CS-Pläne, Tages Anzeiger (May 11, 2016).

1497 *UBS*'s balance sheet is 1.4 times the Swiss GDP, *CS*'s balance sheet 1.2 times. Together they account for 2.6 of Switzerland's GDP. See Chapter III.I.C.c: UBS and Credit Suisse.

tional champions. Regulators and banks can by their very nature not engage in a comparable informal dialogue that takes into account the specialties of the bank. The risk of a non-consistent and discriminatory application is higher, due to the large number of very diverse banks. Drawing from the larger number of affected banks, one can also assume that there would be less reluctance in taking legal action against decisions or pressure of authorities.

In summary, it can be argued that the Swiss success in implementing ring-fencing via an enforcement-based approach cannot be simply assumed to be reached similarly in the European Union: the differences between a (i) small country with a culture of cooperation between regulators and (only two) affected banks and a (ii) supranational body, with a large number of affected banks, are simply too big.

Adopting ring-fencing via an enforcement-based approach requires, in the author's opinion, either exactly the Swiss environment: a discrete, informal process in which banks and regulators over time move towards fully realized ring-fencing, complemented by specific legislative action (e.g. the requirement for ring-fenced banks to comply with capital and liquidity requirements stand-alone); or a solid legal basis that allows for far-reaching legal actions that are hard to contest.

For a supranational body like the European Union, clear-cut, transparent rules, either setting down legislative or an enforcement-based ring-fencing, are therefore recommended. There needs to be a solid legal basis that allows for far-reaching legal actions that are hard to contest. In the author's opinion, the provisions of the BRRD and SRMR do not completely exhibit these characteristics. While they may be a potential gateway for union-wide ring-fencing, they are definitely not an ideal one.

VI. Timeline and Full Implementation

A. United Kingdom

In the UK, banks within the scope of the ring-fencing regime will have to have concluded their structural changes until January 1, 2019.[1498] This

1498 *PRA* (2016) PRA Rulebook: Ring Fenced Bodies, 1.

deadline can rightly be considered tight.[1499] Particularly in combination with Brexit, it presents a considerable challenge for banks. While regulators acknowledge a *"resource issue"* due to the combination of ring-fencing and Brexit, they accept no delay in the implementation.[1500]

UK banks are currently in the process of implementing ring-fencing: The first step was setting up the new structure, including creating new UK banking entities which require banking licenses, and equipping them with sufficient capital and liquidity; reviewing and amending governance, such as the setting up of new boards and the modification of reporting lines; and reviewing and modifying interactions of the entities to ensure independence, e.g. IT or operational support.[1501]

The second step is moving assets and liabilities between different entities to ensure activities and clients are located where they supposed to be. For example, core deposit-taking is moved to ring-fenced bodies, and investment banking activities to non-ring-fenced bodies. The Banking Reform Act 2013 sets down a special process for transferring assets and liabilities, which is referred to as "ring-fencing transfer scheme".[1502]

The ring-fencing transfer scheme involves an application to court. The application has to be accompanied by a "scheme report" produced by a skilled person,[1503] an independent expert acting on behalf of the court,[1504] who answers the question (i) whether persons other than the transferor concerned are likely to be adversely affected by the scheme and (ii) if so, whether the adverse effect is likely to be greater than is reasonably necessary in order to achieve ring-fencing.[1505] In addition, the PRA's consent is necessary for a bank's application to the court. The court then decides

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1499 See e.g. *Dunkley/Binham*, Banks risk missing 2019 ringfence deadline, Financial Times (January 8, 2017); *Martin*, Bank of England admits lenders face 'tight deadline' for ring-fencing, The Telegraph (June 16, 2017).

1500 *Binham/Dunkley,* Regulators get ready to authorise 'ringfenced' UK banks, Financial Times (August 19, 2017).

1501 *Britton et al.* (2016) Ring-fencing, 170.

1502 *Britton et al.* (2016) Ring-fencing, 171. This process is set down in Part 7 of the FSMA 2000 on business transfers, notably Sec. 106B and 109A FSMA 2000 and in Part 2B of Schedule 12 FSMA 2000.

1503 *PRA* (2016) Ring-Fencing Transfer Schemes, 7; See, for example, *Barclays's* scheme report, *Byers* (2017) Barclays Ring-fencing Transfer Scheme, 13–29.

1504 *Britton et al.* (2016) Ring-fencing, 171.

1505 *PRA* (2016) Ring-Fencing Transfer Schemes, 8; *Britton et al.* (2016) Ring-fencing, 171.

whether to sanction the ring-fencing transfer scheme and issue an order to effect it from a specified date.[1506]

Barclays was the first UK bank whose ring-fencing transfer scheme obtained High-Court approval, in spite of almost 100 pension scheme members expressing concerns in court hearings.[1507] Other banks are also in the process of having their ring-fencing transfer schemes examined by courts.[1508] The transfers are likely to be complete during 2018,[1509] ahead of the 2019 deadline.

B. Germany

The German Ring-fencing Act stipulates that its main provisions are applicable as of July 1, 2015.[1510] According to § 3(3) German Banking Act, banks that exceed the thresholds of the Act have 12 months to either stop providing excluded activities or to transfer them onto a trading entity. BaFin is authorised to extend this period on a case-by-case basis for 12 months.[1511] Such an extension was awarded to *Deutsche Bank*.[1512] Since July 1, 2017, however, the German Ring-fencing Act fully applies to the bank.[1513]

The German Ring-fencing Act does not provide for a special form of asset transfer.[1514] As discussed in Chapter III.V.D.b.4,[1515] no financial trading institution has been established thus far. Transferring assets and liabilities onto a trading entity, however, would in Germany entail a statutory joint

1506 *PRA* (2016) Ring-Fencing Transfer Schemes, 8–9.
1507 Concerns were raised about the responsability of the investment bank unit for the pension scheme. *Croff,* High Court approves Barclays ringfencing plan, Financial Times (March 9, 2018).
1508 *Croff,* High Court approves Barclays ringfencing plan, Financial Times (March 9, 2018).
1509 *Britton et al.* (2016) Ring-fencing, 171.
1510 § 64s(2) German Banking Act. An exemption exists for § 3(4), the authorisation of BaFin to exclude other activities than the ones excluded by the German Ring-fencing Act. The authorisation became applicable in July 1, 2016.
1511 § 3(3) German Banking Act.
1512 *Deutsche Bank* was granted an extension on the application of the German Ring-fencing Act until June 30, 2017. See *Deutsche Bank* (2017) 2016 SEC Form 20-F, 26.
1513 See *Deutsche Bank* (2018) 2017 SEC Form 20-F, 23.
1514 *Schelo/Steck* (2013) Trennbankengesetz, 242–243.
1515 Chapter III.V.D.b.4: Practical relevance.

and several liability of five years for both the transferor and the transferee.[1516] Depending on the individual case, a contractual joint and several liability exceeding the statutory five years may be necessary.

C. Switzerland

According to the Swiss Banking Ordinance, internationally oriented systemically important banks have to preparatively implement measures of the Swiss emergency plan until December 31, 2019.[1517] There is no final date for the implementation of measures to enhance the global resolvability, as it is considered a continuous process.[1518]

Domestically oriented systemically important banks are not expected to apply comparable changes to their structure and operations.[1519] Therefore, other deadlines apply to them: they have to complete their emergency planning three years after their determination as systemically important banks by the SNB.[1520]

There is no particular form of business transfer created for ring-fencing in Swiss law. The globally active systemically important banks, *UBS* and *Credit Suisse* therefore had to use general corporate law instruments to conduct their separation:

As discussed in Chapter III.IV.C.c,[1521] both banks first established entities with banking licenses and subsequently transferred assets and liabilities to them. For *UBS* this transfer took place in 2015, for *Credit Suisse* in 2016.[1522] Both banks transferred assets and liabilities through an asset transfer within the meaning of Art. 69 et seqq. Swiss Merger Act.[1523] Due

1516 See § 123(3), § 133 Umwandlungsgesetz, Oktober 28, 1994, Bundesgesetzblatt Part I, 3210 (German Transformation Act) (setting down a joint and several liability for both the transferor and the transferee for a period of 5 years). See e.g. *Schelo/Steck* (2013) Trennbankengesetz, 243; *Altvater/Von Schweinitz* (2013) Trennbankensystem, 630.

1517 Art. 69 Swiss Banking Ordinance.

1518 *EFD* (2016) Erläuterungsbericht, 6.

1519 See *EFD* (2016) Erläuterungsbericht, 6; see Chapter III.IV.C.1: Ex ante separation.

1520 Art. 60(3) Swiss Banking Ordinance.

1521 Chapter III.IV.C.c: Affected banks.

1522 *UBS* (2016) Annual Report 2015, 766; *Credit Suisse (Schweiz) AG* (2017) Annual Report 2016, 9; see further Chapter III.IV.C.c: Affected banks.

1523 Commercial Register Entry, *Credit Suisse,* (November 23, 2016), Bulk Transfer Agreement, 10–11; Commercial Register Entry, *UBS AG,* (June 17, 2015), Pubto Art. 75 Swiss Merger Act, the transferor is jointly and severally liable together with the transferee for a period of three years for all liabilities incurred before the transfer.[1524] Both banks also needed to address the problem that the asset transfer worsened the position of creditors of the transferor,[1525] which was dealt with by a contractual joint and several liability assumed by the transferees.[1526] In particular for *UBS*, the contractual joint and several liability of *UBS Switzerland AG* was of substantial size. However, since the asset transfer, the amount has been considerably reduced and is going to fade out over time: according to *UBS* the amount will be significantly lessened until 2020.[1527]

D. Results

The arguments stated above show that the UK will be the first of the countries of interest that, if all banks manage to implement the ring-fence in time, will have completed the separation of commercial banking activities from investment banking activities for large banks. With the ring-fencing

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lic Deed of the Asset Transfer Agreement, 18; Art. 69 et seqq. Bundesgesetz über Fusion, Spaltung, Umwandlung und Vermögensübertragung, October 3, 2003, SR 221.301 (Swiss Merger Act).

1524 Art. 75 Swiss Merger Act; Commercial Register Entry, *Credit Suisse*, (November 23, 2016), Bulk Transfer Agreement, 23–24; Commercial Register Entry, *UBS AG*, (June 17, 2015), Public Deed of the Asset Transfer Agreement, 40–41.

1525 See e.g. *Watter/Kägi* (2015) Haftung des übernehmenden Rechtsträgers, 287–288. This problem was pointed out by the Swiss expert commission in 2014. See *Expertenkommission* (2014) Schlussbericht, 44 (noting that the financial independence of the ex ante separated banks may be obstructed by guarantees to avoid the option of creditors' rights to termination). See also *Bertschinger* (2015) Finanzmarktaufsichtsrecht, 635.

1526 See *UBS* (2016) Annual Report 2015, 767; *Credit Suisse (Schweiz) AG* (2017) Annual Report 2016, 7; Commercial Register Entry, *Credit Suisse*, (November 23, 2016), Bulk Transfer Agreement, 15, Annex 4; Commercial Register Entry, *UBS AG*, (June 17, 2015), Public Deed of the Asset Transfer Agreement, 41–43. For a discussion of contractual joint and several liabilities, see *Watter/Kägi* (2015) Haftung des übernehmenden Rechtsträgers, 280 et seqq.

1527 See *Millischer/Heim*, Milliardenabflüsse bei der UBS Schweiz, Handelszeitung (March 31, 2016); *UBS* (2016) Annual Report 2015, 767. *Reuters*, *Fitch Upgrades UBS Group to 'A+'; UBS AG and UBS Switzerland to 'AA-'* (September 28, 2017). The contractual joint and several liability has already been reduced from 325 billion CHF in 2015 (*UBS* (2016) Annual Report 2015, 767) to 61 billion CHF as of December 2017 (*UBS* (2018) Standalone financial statements UBS Switzerland AG, 3).

transfer scheme, a way of asset transfer was created that allows for a swift and reliable transfer of assets and liabilities. Joint and several liabilities can be avoided. This is a major advantage over the other jurisdictions.

Switzerland's G-SIBs, however, are catching up one year later, with the emergency plans needing to be preparatively implemented in December 2019. However, due to the joint and several liabilities it will, in practice, take a bit longer for ring-fenced banks to be free from all financial linkages.

In Germany, the prohibitions apply since July 2017 the latest (taking into account the potential 12-month extension of BaFin). As already discussed in Chapter III.IV.B.d[1528] and Chapter III.V.D.b.4,[1529] none of the affected banks has opted to establish a trading entity. It can thus be assumed that since July 2017, the excluded activities are therefore not conducted anymore in banks exceeding the thresholds of the German Ring-fencing Act. A separation of trading activities onto a trading entity would under the current legal basis be subject to a joint and several liability that would extend the length of the process of gaining independence of ring-fenced banks and the trading entity.

VII. Results and Outlook

The third part of the dissertation addressed the question what structural differences can be found in a legal comparative analysis of structural reform legislation in Europe's three financial capitals: the United Kingdom, Germany and Switzerland. An aspect-to-aspect analysis was conducted, taking the form of a micro-comparison as described by *Zweigert/Kötz*.[1530] It also examined whether legal requirements in the three jurisdictions fulfil or defer from the concept and the definition of ring-fencing established in the first part. The following paragraphs reiterate selected findings and provide a short outlook.

The UK, Germany and Switzerland are by far Europe's biggest and most important financial centres. They are home to a large share of Europe's G-SIBs. In particular, Switzerland (2.6 times) and the UK (2.3 times) are exposed to balance sheets of G-SIBs in relation to national GDP. With the

1528 See Chapter III.IV.B.d: Affected banks.
1529 Chapter III.V.D.b.4: Practical relevance.
1530 *Zweigert/Kötz (1996) Rechtsvergleichung*, 4, 42; See also *Zweigert/Kötz* (1998) Comparative Law, 5, 43–44.

balance sheet of *Deutsche Bank*, Germany's only G-SIB, at only at 0.5 times national GDP, Germany is the least exposed.

In contrast to Germany and the UK, it is a particularity of the Swiss approach is that it is largely enforcement-based: legislation only specifies the minimum goal that the continuation of systemically important activities has to be ensured. There is only limited legislative guidance regarding how this goal should be reached. This is a result of the principle of subsidiarity. It is, however, balanced by Finma's emergency plan assessment, which becomes a source of information of utmost importance for banks regarding the question how to design their new structure:[1531] Finma has wide discretion and a very powerful position in the shaping of the banks' structure. The assessment process therefore has to be considered a major source of information and regulation, complementing the scarce legislation.

While the Swiss emphasis on an approach that is as little invasive as possible via minimum goals and the principle of subsidiarity is in contrast with Germany and the UK and is to be appreciated, one has to point out that invasiveness is only mitigated as far as (i) there is more than one way of reaching the goal and (ii) there is transparency in reaching it. Both can be somewhat reasonably questioned.[1532] The Swiss approach may therefore be more invasive than originally thought. Taking into account that the other jurisdictions also allow for a degree of flexibility in the structure of affected banks, the minimum goal and principle of subsidiarity may be less of an advantage for affected banks than initially planned.

Exploring the question of what activities can and cannot be provided by the German financial trading institution, it was found that its characterisation in the legislative materials as financial service institution within the meaning of the German Banking Act is to be considered an editorial error. The trading entity is thus not limited to "financial services", but should also be allowed to provide "banking services". There is, however, also the need for limitations: it seems to be commonly agreed that a trading entity should at the very least be prohibited from accepting deposits (except of institutional investors).[1533]

1531 The *"critical importance"* of the discussions between Finma and banks is rightly indicated by *Schöchli*. *Schöchli,* Der lange Weg der Notfallplanung, NZZ (June 6, 2012); see also *Hofer* (2014) Structural Reforms, 332.

1532 See Chapter III.II.D.e: Invasiveness.

1533 *Schaffelhuber/Kunschke* come to a similar conclusion. They argue, in addition, that this should not apply to deposits of institutional investors (*Schaffelhuber/Kunschke* (2015) Trennbankengesetz, 400) thereby correctly underscoring that institutional investors are not included in the German Banking Act's under-

While it has been recognized by some authors that the Swiss approach approximates towards other structural reform initiatives, notably in the UK, Germany and the EU,[1534] this dissertation reviewed in detail what activities were shifted to the Swiss entities of *UBS* and *Credit Suisse* and what remained with the rest of the banking group. It compared this separation with the ones required in Germany and the UK. The emerging picture is indeed surprising, as not just trading businesses (with the exception of domestic market making), but also traditional investment banking services, such as underwriting, are excluded from the Swiss entities. The scope of Switzerland's separation is therefore surprisingly similar to the UK's.

All three examined jurisdictions put in place specific requirements that constitute a fence. While for Germany and the UK this is hardly surprising as the intention to ring-fence is emphasized prominently, for Switzerland this is an important finding: a comparison of key features of the fence also suggests that while not as transparent as in other jurisdictions, the Swiss fence is of considerable height. In particular with regard to independent governance, the Swiss approach is unique.

In summary, it can be found that all three jurisdictions fulfil the concept of ring-fencing established in the first part of the dissertation: they (i) separate commercial banking activities from investment banking activities, (ii) at the same time maintain universal banking, and (iii) ensure the separation of activities with a fence. They are also well within the scope of the definition of ring-fencing set up in the first part. The question whether they fulfil the concept and definition of ring-fencing established in the first part can thus be answered in the affirmative.

The countries, however, chose different methods of ring-fencing. The UK and Switzerland put into practice the *defensive method* of ring-fencing, separating activities that are important to the real economy and are thus to be protected. Germany, in contrast, chose the *containment method* of ring-fencing, separating activities considered particularly risky from the rest of the banking group. None of the jurisdictions found the need for more stringent structural reforms such as an *activities ban* of full separation.

Regarding the question of whether the Swiss approach could be a role model for the EU, in particular with regard to provisions allowing for in-

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standing of deposits. (see *Schäfer* (2016) § 1 Begriffsbestimmungen, para 46; *BaFin* (2014) Merkblatt Einlagengeschäft, 2–3).

1534 See e.g. *Achermann* (2018) Organisation, 285; *Hofer* (2014) Structural Reforms, 5–6 (noting that there are many similarities between the UK's and Switzerland's structural reforms).

terferences with the structure of banks in the BRRD and SRMR, two conclusions can be drawn: (i) the Swiss approach can be regarded as an example for an enforcement-based implementation of ring-fencing. However, (ii) there are several factors that facilitate the success of the Swiss approach that are to be found in particularities of the Swiss banking market and that cannot be assumed to be the same for the EU. For a supranational body like the EU, clear-cut, transparent rules and a solid legal foundation, either setting down a legislative or an enforcement-based ring-fencing, are more suitable and are therefore to be recommended.

While in all three countries ring-fencing legislation is in place, there are considerable differences regarding its application in practice. Both in the UK and Switzerland, affected banks are currently taking on substantial efforts to restructure their business according to the ring-fencing requirements. In Germany, in contrast, it seems that no comparable efforts are being undertaken. There is no indication that *Deutsche Bank*, Germany's only G-SIB has established a financial trading institution yet. This leads to the situation that, if properly applied, the provisions of the German Ring-fencing Act exhibit similar legal consequences as an *activities ban*, as affected banks no longer provide excluded activities.

Regarding the implementation, the UK will likely be the first country to have completed the separation of commercial banking activities from investment banking activities for large banks with the deadline of January 1, 2019. In particular, the asset transfer via the ring-fencing-transfer-scheme can be considered a considerable advantage against the other jurisdictions. In Switzerland, the emergency plan must be preparatively implemented by globally active systemically important banks by December 31, 2019. While this will be a major step towards the independence of ring-fenced banks, it will be interesting to see whether the structure of the banking groups will further assimilate towards the UK's, based on the incentives to enhance resolvability and further updates of the emergency plan. It furthermore remains to be seen whether banks affected by the German Ring-fencing Act will establish trading entities.