BANK OF ENGLAND

Staff Working Paper No. 625

The levels of application of prudential requirements: a comparative perspective

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October 2016

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The levels of application of prudential requirements: a comparative perspective

Samuel McPhilemy[(1)] and Rory Vaughan[(2)]

Abstract

International standards for banking regulation leave individual countries with discretion to determine how the separate legal entities within a banking group should be brought together for the purposes of prudential regulation and supervision. This paper documents differences in the levels of application of prudential requirements drawing on a survey of national rules and regulations in eight jurisdictions. Most jurisdictions apply prudential requirements on a consolidated basis, meaning that they require groups to meet standards for minimum capital and liquidity adequacy as if they constituted a single financial unit. However, consolidated requirements do not account for potential impediments to the transferability of financial resources within banking groups. Reflecting this, international banking standards suggest prudential requirements should be applied also at lower levels. The Basel Accord sets out two alternatives for applying prudential requirements beneath the consolidated level: solo application and sub-consolidation. Solo application involves applying prudential standards to individual operating banks within a group, as if those banks were separate standalone entities; sub-consolidation involves regulating sub-groupings of entities as if those sub-groupings were themselves a single financial unit. These approaches have differing implications with respect to the allocation of financial resources across the legal entities within banking groups. However, in practice different jurisdictions arrive at similar outcomes through their differentiated application of certain other regulations, notably restrictions on intragroup exposures. The final part of the paper considers how forthcoming standards on bank resolution affect the economic rationales for sub-consolidated and solo application of prudential requirements.

Key words: Banks, regulation, scope of regulatory consolidation, solo requirements, sub-consolidation, levels of application.

JEL classification: G21, G28, G38, K2.

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The authors wish to extend their thanks to Daryl Collins, Amit Baheti, Aaron Tsui, Julian Gray, Christine Balls, Adriana Fernandez, Mari-Elena Angeli, Jessica Redmond, Tom Markland and their international counterparts who kindly took the time to respond to the survey.

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ISSN 1749-9135 (on-line)

The levels of application of prudential requirements: a comparative perspective.

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1. Introduction

An important but sometimes overlooked feature of the landscape of international banking is that while large international banking groups are normally managed as unitary economic organisations, they typically comprise a large number of discrete, interconnected, legal entities (firms). In accordance with international banking standards, agreed by the Basel Committee on Banking Supervision (BCBS), most major economies practice 'consolidated' supervision, which means that they apply risk-based capital requirements and other prudential regulations to banks and their subsidiaries collectively, as if those entities constituted a single economic unit.[3] Consolidated requirements assume implicitly that a group's financial resources can absorb losses incurred by any legal entity within the consolidated group, no matter which legal entity those resources are located in. However, there are often potential barriers to the transferability of funds between the different legal entities in a group, especially across national borders. This means that an individual entity within a group could have insufficient loss-absorbing capacity, or be unable to meet its liabilities, even where its consolidated group was adequately capitalised and sufficiently liquid.

Reflecting this, BCBS standards indicate that in addition to applying requirements on a consolidated basis, national authorities should apply requirements at lower levels within a group (see BCBS 2006, p.7). The BCBS standards present two options for applying regulations beneath the consolidated level: 'sub-consolidation' and 'solo' application. Sub-consolidation involves applying prudential standards to two or more entities within a wider group on a consolidated basis, as if *those* entities were a single financial body. Solo application involves setting prudential requirements and supervising individual entities within the group as if each entity was an independent, 'standalone', financial institution.[4] The BCBS framework does not specify which of these approaches to applying regulations beneath the consolidated level national authorities should take. In light of this flexibility, different jurisdictions can and do take different approaches.

This paper sets out some of those approaches, drawing on a new dataset of national rules and regulations in eight jurisdictions. The dataset contains information on both the scope of prudential consolidation – including, for instance, which entities are required to be included within a consolidated banking group – and the levels of application of various regulatory metrics, such as risk-based capital requirements, leverage ratios and liquidity regulations. The dataset was compiled from a survey completed by central bankers and financial supervisors, together with a desk-based review of published laws, regulations and policy guidance.[5] The dataset is presented in full in **Annex 1**.

Building on this evidence, the paper compares the levels of application of prudential requirements in the United Kingdom, the United States and the euro area. The default approach of the UK Prudential Regulation Authority (PRA) is to apply prudential standards on both a consolidated and solo basis. This means that firms authorised by the PRA are required to meet prudential standards on the basis of their individual (solo) balance sheet, and in respect of the consolidated balance sheet of all entities

[3] In many jurisdictions, the scope of regulatory consolidation of a banking group is narrower than the scope of consolidation for accounting purposes, meaning that some entities that are included in the group's consolidated accounts would not be included in the consolidated regulatory requirements.

[4] Generally, solo requirements apply only to those entities in the group that are authorised or licenced to carry out regulated activities, such as taking retail deposits.

[5] Survey respondents participated in a personal capacity, on a 'best efforts' basis and not on behalf of their respective organisations.

in their consolidated group.[6] PRA-authorised firms that are themselves the subsidiaries of foreign banks meet prudential requirements on a solo basis and on a UK-consolidated basis – i.e. including their subsidiaries and, where applicable, their UK or EU-level holding company.

In the United States, requirements generally apply on a consolidated basis and a sub-consolidated basis. Bank holding companies (BHCs) and savings and loan holding companies (SLHCs) are authorised and supervised by the Federal Reserve Board. BHCs and SLHCs meet prudential requirements in respect of the consolidated balance sheet of all entities in their consolidated groups.[7] Beneath this top-level of consolidation, operating banks, which are typically regulated by the Office of the Comptroller of the Currency (OCC) or the Federal Deposit Insurance Corporation (FDIC), meet prudential requirements in respect of their own consolidated balance sheet. Foreign banking organisations over a certain size are required to establish intermediate holding companies (IHCs) in the United States, which are also required to meet prudential standards on a consolidated basis.

In the euro area, the European Central Bank (ECB) has recently taken over supervision of significant banks incorporated in jurisdictions participating in the Single Supervisory Mechanism (SSM). As in the UK, by default, the ECB requires these banks to meet requirements on both a solo and consolidated basis. However, the ECB has indicated that it is willing to waive the application of solo requirements under certain conditions. It has also indicated that in some circumstances, it may permit banks to comply with prudential regulations on a sub-consolidated basis.

The paper discusses the extent to which these different approaches affect banks' freedom to allocate financial resources within their groups. At first sight, the application of requirements on a solo basis is more prescriptive with respect to the location of financial resources within a banking group than the application of sub-consolidated requirements or relying only on requirements at the consolidated level. However, the prescriptiveness of solo requirements depends in practice on how certain other regulatory requirements are implemented, such as restrictions on exposures between entities in a group. For example, the UK solo approach is made less prescriptive via exemptions from the requirement for individual firms to fund their exposures to other entities in their consolidated group with their own funds (i.e. capital). Conversely, sub-consolidated requirements can be made more restrictive by limits on exposures between banks and other members of their groups. This is the case in the United States, where banks face restrictions on their ability to enter into transactions with their non-bank affiliates.

In the aftermath of the financial crisis, many new prudential standards have been agreed internationally. Regulators are still in the process of understanding how different standards will interact. One regulatory innovation with potentially significant consequences for regulators' preferences regarding the levels of application of prudential requirements is the emergence of new bank resolution regimes. International standards on bank resolution are requiring banking groups to 'pre-position' loss absorbing capacity - equity capital and debt that can be written down or converted into equity in the event of resolution – within their various subsidiaries. Resolution regimes also require banks to make plans for how they would recover from a severe financial shock or be wound down in an orderly fashion. This provides financial supervisors with more information about the transferability of financial resources between group entities under stressed conditions. The paper seeks to disentangle how these changes may affect regulators' risk-appetite with respect to banks' freedom to allocate resources between different entities in their groups.

As a caveat to the analysis which follows, the aim of this paper is to compare and contrast the economic implications of applying prudential requirements at different levels of consolidation. The

[6] Most UK banks subject to ring-fencing reforms will also be required to meet prudential requirements on a sub-consolidated basis in respect of entities 'inside' the ring-fence.
[7] Qualifying small BHCs and SLHCs, as well as certain grandfathered or predominantly insurance SLHCs, are not currently subject to consolidated capital requirements.

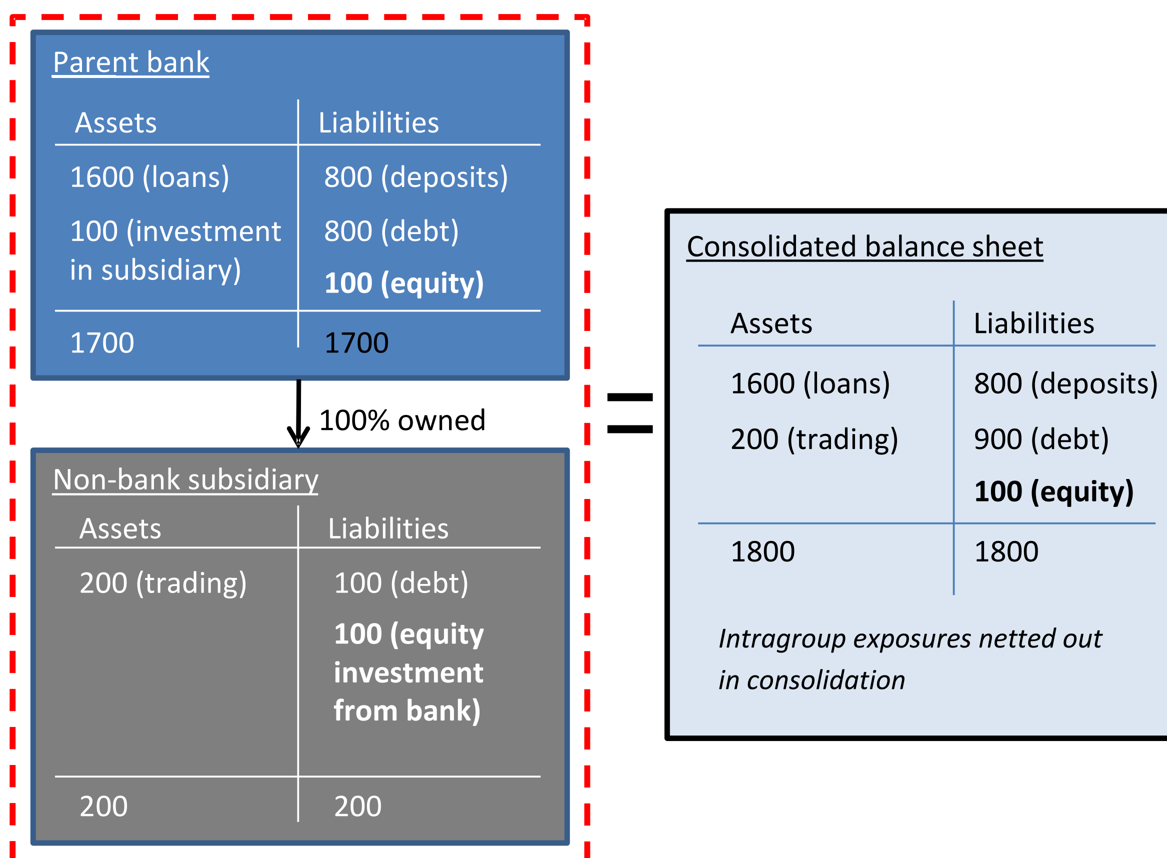
paper does not aim to explain *why* different jurisdictions adopt different approaches. National regulations and supervisory practices are grounded in the particular structures of local banking systems and the institutional legacies of past policy decisions. For instance, the application of solo requirements in the United Kingdom predates the advent of consolidated supervision in the 1970s, and is rooted in the legal responsibility of the regulator towards the individual firms that it authorises. The US sub-consolidated approach reflects the structure of US banking organisations, which are typically headed by a bank holding company. It also reflects US regulators' adherence to the principle that bank holding companies should act as a 'source of strength' to their subsidiary banks (Federal Reserve Board 1987; Federal Deposit Insurance Act, Section 38A). The ECB has placed a strong emphasis on ensuring consistent standards within the SSM. Nevertheless, its regulatory choices are inevitably tailored to the varied structures of the European banking groups that it supervises. These historic, institutional and legal differences would be worthy of study in their own right. However, they are not the primary focus of this article and so are not considered further here.

The remainder of this paper proceeds as follows. Section 2 explains the purpose of consolidated requirements and sets out the rationale for applying requirements also at lower levels within a group. Section 3 discusses the flexibility that international prudential standards provide to national financial authorities with respect to the application of requirements beneath the consolidated group level. Section 4 presents the aforementioned survey of rules and approaches in eight jurisdictions, highlighting the considerable variation between them. Section 5 compares the US, UK and euro-area regimes, focusing, in particular, on the prescriptiveness of each jurisdiction with respect to the allocation of financial resources within banking groups. Section 6 discusses the implications of new standards for bank resolution for the economic rationales underpinning solo and sub-consolidated application of prudential requirements. Section 7 concludes.

2. Consolidated requirements

Applying requirements and supervising groups on a consolidated basis enables supervisory authorities to evaluate the financial soundness of the entire banking group. Banking groups subject to consolidated requirements are required to submit regulatory reports to their relevant supervisory authorities that reflect the financial position of all the entities within the scope of regulatory consolidation, as if those entities constituted a single firm. In producing consolidated regulatory information, banking groups combine the various items on the balance sheets of the individual legal entities within their group. They also eliminate any intragroup assets and liabilities of the different entities within group, including the investments of parent companies in the equity of their subsidiaries (see Figure 1).

Figure 1: Consolidation shows 'external' equity in the group.



In the example above, the aggregate of the solo equity in the parent bank and its non-bank subsidiary is 200. However, the consolidated group's equity – i.e the 'external' equity in the group – is 100. Both the non-bank subsidiary's equity and the bank's investment in the non-bank subsidiary are netted out in the process of consolidation.

There are four key arguments for applying prudential requirements and supervising banking groups on a consolidated basis:

I. Consolidated requirements capture risks incurred by unregulated entities within the scope of a bank's regulatory consolidation. Banks often carry on some of their activities through subsidiaries and affiliated companies, not all of which are authorised or supervised by the regulatory authorities. There is a danger that activity taking place within unregulated subsidiaries or affiliates could undermine the financial position of the regulated bank, either through direct exposure to loss, or as a result of reputational damage if an unregulated entity were to get into financial difficulty. Consolidated supervision ensures that risks incurred by any entity within the consolidated group will be subject to capital requirements and other prudential measures, even if the entity incurring the risk is not itself directly authorised or supervised by the regulatory authority.

II. Consolidated requirements avoid the risk of 'double counting' capital (as shown in Figure 1). When a parent company invests in the equity of a subsidiary, it 'creates' capital in the subsidiary. If supervisors examined a group by looking only at the financial position of the individual regulated entities in the group, they could gain a misleading impression of the group's capacity to absorb losses.[8] This is because some of the capital of subsidiaries within

[8] This risk is mitigated if solo entities are required to deduct in full their equity investments in their subsidiaries.

the group will be composed of shareholder equity owned by the subsidiaries' parent companies. This 'internal' capital is eliminated in the consolidated balance sheet, enabling regulators and investors to understand the amount of 'external' capital (such as retained earnings and paid-up shareholder equity in the ultimate parent company) the group actually has.[9]

III. Consolidated requirements enable groups to recognise certain benefits of size. For example, a consolidated group is likely to have more diversified exposures (whether geographically or sectorally) than the individual entities in the group. Other things being equal, the consolidated group would therefore be required to have less capital to mitigate geographic or sectoral concentrations of risk than its constituent entities would be in aggregate. As long as resources are freely transferrable between entities within a group, such that a loss in one entity can ultimately be supported by a surplus in another entity, there is little reason to require the consolidated group to meet capital requirements as if it constituted a collection of individual legal entities.

IV. Finally, consolidated requirements reflect the reality that banking groups are typically managed, to all intents and purposes, as a single financial body. For instance, most banking groups have centralised risk-assessment and control functions. It is therefore logical that most requirements relating to governance, management and risk controls also apply at the consolidated level.

Notwithstanding these benefits, consolidated requirements are unlikely to be sufficient on their own to ensure every entity within the group will be capable of absorbing losses or meeting liabilities as they fall due. In practice, there are always some impediments to the transferability of financial resources within a group, particularly under stressed financial conditions. Such impediments are typically augmented if the entities have separate boards, or if they operate in multiple jurisdictions:

- Boards and directors of individual legal entities are normally under a fiduciary duty to act solely in the interests of their shareholders.[10] At the same time, the limited liability of shareholders means that from a contractual perspective, the failure of a subsidiary would cause a parent company to lose only its investment in the subsidiary's equity, assuming it did not have other exposures to that subsidiary. Given these corporate law principles, it is conceivable that under certain conditions, especially during financial stress, directors of an individual entity may determine that the financial costs of supporting another group entity would outweigh the reputational damage of allowing the other entity to fail.

- Prudential regulation is itself an important impediment to the transferability of resources within banking groups, especially across international borders. International banking groups often operate through subsidiaries incorporated in overseas jurisdictions.[11] 'Host' regulatory authorities typically require locally-incorporated subsidiaries to meet prudential regulations as if that subsidiary constituted a standalone bank.[12] Host authorities would generally prevent a local subsidiary from paying dividends to its overseas parent company, if such a payment would cause the local subsidiary to breach its minimum risk-based capital requirements. Indeed, BCBS standards for capital and liquidity adequacy (Basel III) may be regarded as a

[9] Where the aggregate amount of internal capital exceeds the amount of external capital in the group, the group is said to have employed 'double leverage'.

[10] This duty may be imposed by virtue of formal written law, as in the United Kingdom, or by common law principles as in the United States.

[11] Where international banking groups establish branches in overseas jurisdictions, host country regulators typically impose only a limited range of prudential requirements, such as for liquidity and disclosure.

[12] Where a locally incorporated subsidiary of an overseas bank has its own subsidiaries, host authorities will typically regulate that those entities on a locally consolidated basis.

'baseline' constraint on the transferability of financial resources within international banking groups since these requirements represent the internationally-agreed minima that host authorities impose on the subsidiaries of international banks. Host authorities may also go beyond these internationally agreed minima. For instance, host authorities may choose to 'ring-fence' certain assets within their jurisdictions to protect local creditors or the stability of their domestic financial system (see D'Hulster and Ötker-Robe 2014 for a discussion of so-called 'geographic ring-fencing').

3. Flexibility in the international framework

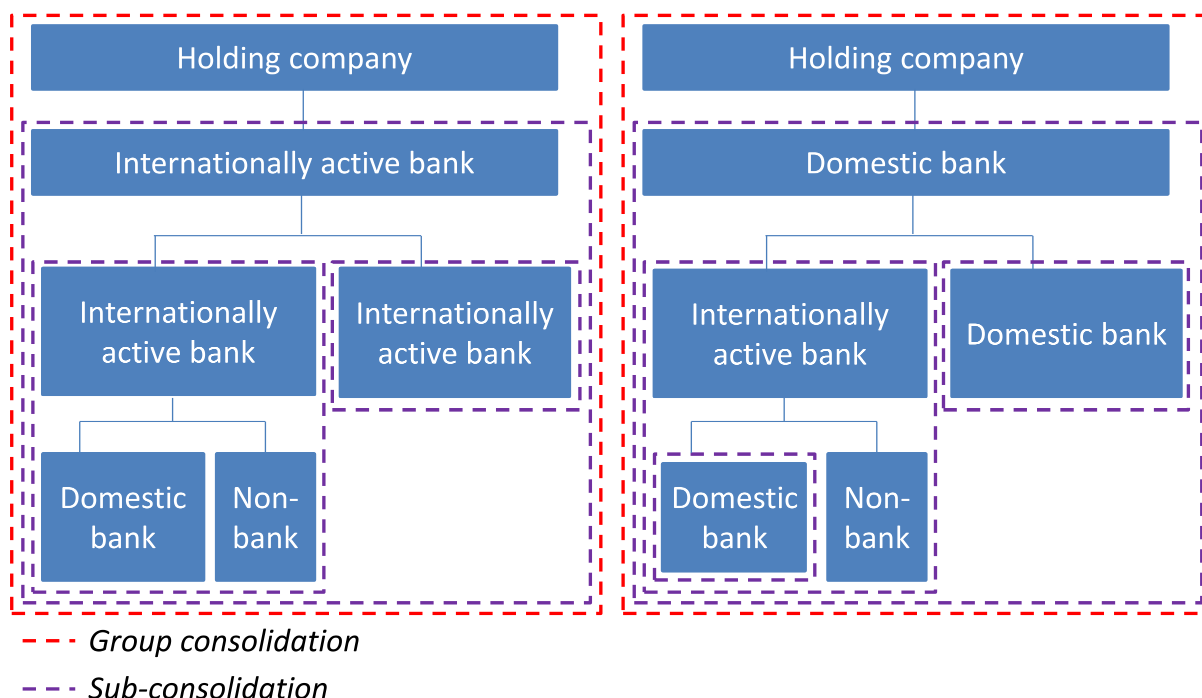
The BCBS standards recognise that financial resources are not perfectly fungible across the different legal entities within banking groups. Accordingly, they recommend that national authorities apply prudential regulations both on a consolidated basis and at lower levels within the group. However, there is considerable flexibility as to how requirements should be applied beneath the consolidated level.

The Basel Capital Accord, which was first agreed in 1988 and is now in its third iteration, specifies that in addition to applying requirements on a consolidated basis, the framework applies *"to all internationally active banks at every tier within a banking group, also on a fully consolidated basis"*.[13] There is some ambiguity as to how this statement should be interpreted.[14] One interpretation is that where a group contains an international bank, that international bank should comply with prudential requirements on behalf of itself and all of its subsidiaries (left-hand panel in Figure 2). An alternative interpretation is that any group which contains an international bank must meet prudential requirements at every tier within the banking group (right-hand panel in Figure 2). Whichever interpretation one takes, this statement implies that the BCBS framework should be applied on a *sub-consolidated* basis in addition to the consolidated basis.

[13] The relevant text as regards levels of application appeared in the 2006 'International Convergence of Capital Measurement Revised Framework' (Basel II). This text was not superseded in Basel III.

[14] Regulators are aware of this ambiguity. For instance, the BCBS's Regulatory Consistency Assessment Programme (RCAP) for Brazil concluded that Brazil did not apply requirements on either a sub-consolidated or standalone basis. However, the RCAP could not judge the materiality of this finding without further clarification of the meaning of the BCBS text.

Figure 2 – Sub-consolidation: alternative interpretations of the BCBS framework*



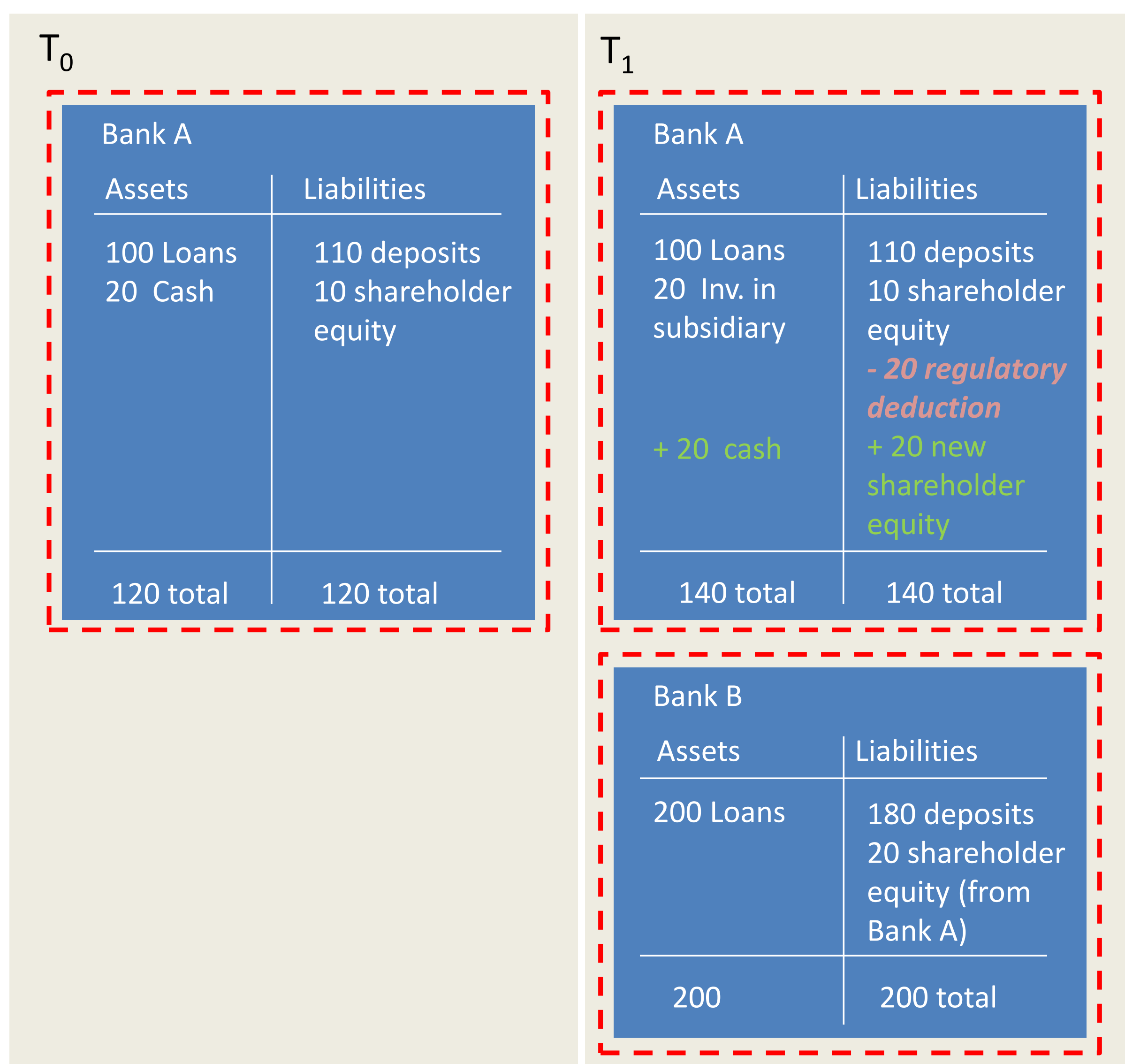
The left hand panel reproduces an illustration in the Basel Accord. Here, every internationally active bank in the group complies on a consolidated basis. The right-hand panel is an interpretation of the statement in Accord that "the Framework will also apply to all internationally active banks at every tier within a banking group, also on a fully consolidated basis". Here, where a group contains at least one internationally bank, regulations apply on a consolidated basis at every tier in the group, including tiers which contain only domestic banks.

The Accord also sets out an alternative to sub-consolidation. It states *"the application of this Framework to the stand-alone bank (i.e. on a basis that does not consolidate the assets or liabilities of subsidiaries) would achieve the same objective, providing the full book value of any investments in subsidiaries and significant minority-owned stakes is deducted from the bank's capital"*.[15] This suggests that if regulators choose not to apply a sub-consolidated approach, they should require each individual bank within a banking group to meet capital requirements in respect of its own standalone (solo) balance sheet.

The requirement for solo banks to deduct the full book value of any investments in subsidiaries and significant minority-owned interests from their capital prevents solo banks in a group from artificially inflating their capital position through debt-funded cross-holdings of each other's equity (see Figure 3). The effect is to ensure that each solo regulated bank has adequate capacity to absorb losses incurred on its own balance sheet, without needing to rely on resources that have been invested in subsidiaries. This is not necessary under a sub-consolidated approach, since the focus is on the prudential soundness of the sub-group of entities, and all intragroup transactions between entities in the sub-group are netted out.

[15] See 'International Convergence of Capital Measurement Revised Framework' (Basel II)

Figure 3: Deduction of material holdings in subsidiaries



In the example above, Bank A is required to fund 10% of its loans with capital. At T_0, it is meeting this requirement: It has assets of 120 (100 loans, 20 cash), which it has funded with 10 of equity and 110 of deposits. At T_1, it invests its 20 cash in the shares of a subsidiary. Its regulator requires it to deduct 20 from its capital. This would leave it 20 short of meeting its 10% capital-to-loans requirement so it therefore raises an additional 20 of shareholder equity (shown in green). This leaves Bank A with total capital of 30 (10 to support losses arising on its loans, and 20 to fund its investment in the equity of its subsidiary). The total external equity is 30, supporting total loans of 300.

In addition to the Accord, the Basel Core Principles for Effective Banking Supervision further elaborate on the requirements for the application of prudential standards beneath the consolidated level. Core Principle 12 states: "in addition to supervising on a consolidated basis, the responsible supervisor […] supervises each bank on a stand-alone basis and understands its relationship with other members of the group" (BCBS 2012, p.37). The Core Principles also give national authorities the option to comply with an 'additional' criterion that: "the supervisor requires adequate distribution of capital within different entities of a banking group according to the allocation of risks". As Tucker (2013) suggests, the optional nature of this latter criterion means that a jurisdiction can be judged to be in compliance with the BCBS Core Principles without applying requirements on the distribution of capital or other resources across the different entities in a group.

In summary, consolidated requirements take no account of potential barriers to the transferability of capital. Reflecting this, the BCBS standards contain certain provisions that aim to ensure financial resources are adequately allocated across the different entities within a group. The Basel Accord states that in addition to applying prudential requirements on a consolidated basis, regulators should apply requirements on either a sub-consolidated or solo-basis. Where regulators choose to apply requirements on a solo basis, the solo entities should deduct the full book value of their investments in subsidiaries from their own funds, thereby ensuring that each solo entity has the necessary capital to mitigate the risks it has incurred. If regulators choose instead to apply prudential requirements on a sub-consolidated basis, there are no 'mandatory' additional requirements with respect to the allocation of resources amongst entities in the sub-consolidated group.

4. Levels of application in different countries

In light of the flexibility in the BCBS standards, it is unsurprising that we find different jurisdictions take different approaches to the application of prudential requirements beneath the consolidated level. To gain a better understanding of the key differences between jurisdictions in this area, this section presents a new database of national (and regional) policies pertaining to the application of prudential requirements in the context of groups. In contrast to existing databases of national banking regulations and supervisory practices, the new database focuses specifically on matters concerning regulatory consolidation and the levels of application of prudential requirements.[16]

The database was compiled from a survey that was completed by central bankers and financial supervisors in eight jurisdictions (the United Kingdom, the United States, the euro area, China, Japan, Hong Kong, Spain and France).[17] The respondents to the survey participated in an individual capacity on a 'best efforts' basis and not on behalf of their respective organisations. The information gathered from the survey participants is mostly available in the public domain and has been cross-checked with publically available documentation, where available.[18]

The survey contained 55 questions, which covered the following specific policy areas:

(1) the application of minimum risk-based capital requirements on a consolidated basis;
(2) rules governing the combination of banking and non-banking activities within financial groups;
(3) the regulation of holding companies;
(4) methods of consolidation of non-subsidiaries, joint ventures and insurance undertakings;
(5) the application of minimum risk based capital requirements beneath the consolidated level;
(6) the level of application of additional risk-based capital requirements ('Pillar 2') and capital buffers;
(7) the level of application of other regulatory standards (including leverage, liquidity and large exposures requirements).

The full database is presented in **Annex 1**. Here we consider some key findings regarding the levels of application of risk-based capital requirements.

[16] The most comprehensive existing databases of national banking laws and regulations have been compiled by the World Bank (see World Bank 2003, 2007, 2012). The 2012 World Bank survey covers 14 distinct banking policy areas, but contains only a single question on regulatory consolidation.

[17] Spain and France are participants in the euro area Single Supervisory Mechanism (SSM). The ECB has taken significant steps to increase the level of harmonisation of banking rules and supervisory practices amongst participating countries since the SSM became operational in November 2014.

[18] The survey contains limited information on the rules and supervisory approaches practiced by the ECB-SSM and in France. Data for these jurisdictions were compiled from publically available information only.

Table 1: Levels of application of prudential requirements in different jurisdictions (shows 'default' approach)[19]

	United Kingdom	United States	Euro area	Spain	France	Hong Kong	Japan	China
Consolidated	✓	✓	✓	✓	✓	✓	✓	✓
Solo	✓		✓	✓		✓	✓	✓
Sub-consolidated		✓			✓		✓	✓

Application on a consolidated basis

In line with the Basel Accord, all eight of the jurisdictions included in the survey apply risk-based capital requirements on a consolidated basis. While the Basel Accord specifies that consolidated requirements should apply to internationally active banks, most of the jurisdictions apply consolidated requirements to wider populations of firms:

- The four EU authorities in the sample (the PRA, the ECB, the Banco de Espana (BdE) and the Autorité de Contrôle Prudentiel et de Résolution (ACPR)) each apply consolidated requirements to all regulated institutions that are either the parents of other entities or the subsidiaries of other entities. This is in accordance with harmonised EU legislation, in particular, the Capital Requirements Directive and Capital Requirements Regulation (CRD-IV/CRR).
- In the US, consolidated requirements apply to bank holding companies (BHCs), savings and loan holding companies (SLHCs)[20], some other Insured Depositary Institutions (IDIs)[21], and intermediate holding companies of foreign banking organizations (IHCs).
- The Hong Kong Monetary Authority (HKMA) applies consolidated requirements to all 'Authorised Institutions' incorporated in Hong Kong.
- The China Banking Regulatory Commission (CRBC) applies consolidated requirements to a wide range of cooperative and commercial banks and lending companies.
- The Japanese Financial Services Authority (JFSA) comes closest to the letter of the Basel framework by applying consolidated supervision to internationally active banks. However, Japan also applies consolidated supervision to two securities firms.

Application of requirements at lower levels

Beneath the consolidated level, six of the eight authorities normally apply risk-based capital requirements on a solo basis. These are the PRA, the ECB, BdE, HKMA, JFSA and CRBC. All of these authorities also require solo entities to deduct their investments in subsidiaries, in accordance with the BCBS framework.[22] Four of these authorities – JFSA, CRBC, ECB and PRA – also apply (or intend to apply) prudential requirements on a sub-consolidated basis. For instance, in Japan, the levels of application are derived from the Japanese Generally Agreed Accounting Principles (J-GAAP). This means that wherever a bank is required to produce sub-consolidated financial accounts, it is also required to meet prudential standards on a sub-consolidated basis.

[19] Table shows the 'default' position in each jurisdiction, excluding exceptions for specific categories of banking group or specific parts of the regulatory framework. For example, as discussed below, in the UK and euro area, the CRR specifies that requirements apply on a solo and consolidated basis. However, both the PRA and the ECB will apply sub-consolidated requirements under specific circumstances.
[20] See footnote 6.
[21] IDIs are deposit-taking entities insured by the Federal Deposit Insurance Corporation.
[22] Under harmonised EU regulations, the European authorities - BoE, ECB and BdE – require such deductions only where the firms' investments exceed certain thresholds.

Both the PRA and the ECB have indicated that they expect to apply sub-consolidation in the specific circumstances of groups subject to structural (ring-fencing) reforms.[23] Under the PRA's proposed approach, ring-fenced banks and certain other entities within groups subject to ring-fencing will be required to meet prudential requirements on a sub-consolidated basis. In other words, all entities that are 'inside' the ring-fence will be required to form a sub-consolidated group within the wider consolidated group.[24] Likewise, the ECB has stated that it would consider applying sub-consolidated requirements where member states have passed national structural reform legislation. However, the ECB has also indicated that it would be sensible to apply sub-consolidated requirements in other circumstances, notably where the "specific nature of the risks or the capital structure of a credit institution" warrants it (ECB 2016). In addition, the ECB has stated that subject to certain conditions being met, it is willing to waive solo requirements for parent and subsidiary banks within the same consolidation group using an option to do so under Article 7 of the CRR (ECB 2016).

Two jurisdictions in the sample – France and the United States – have not normally applied solo requirements. Prior to the establishment of the SSM, France generally waived the application of prudential requirements on a solo basis, using the aforementioned option provided under Article 7 of the CRR, and instead applied requirements on a sub-consolidated basis. The ACPR explained the rationale for this approach as a means of giving "priority to a consolidated approach for groups so as to (i) reflect the economic and organisational reality of the groups, and (ii) ensure the consistency of supervisory measures (Pillar 2) within the same group" (European Banking Authority (EBA) 2016).[25] Responsibility for supervising significant French banks now lies with the ECB. However, as discussed above, the ECB has retained the flexibility to apply a sub-consolidated approach where it considers it to be appropriate.

In the United States, prudential regulations normally apply to banking organisations on a sub-consolidated basis. This means that in addition to applying consolidated requirements to BHCs/SLHCs, U.S. regulatory capital rules are applicable at the consolidated bank level. However, it is worth noting that both France and the United States do apply prudential requirements on a solo basis under certain circumstances. In France, entities that belong to a group, but which do not have any subsidiaries that are supervised by the ACPR, are supervised on a solo basis, albeit taking into consideration the influence of the group to which they belong (EBA 2016). In the United States, some state-level banking regulations may apply to particular operating subsidiaries of wider groups on a solo basis.

5. UK, US and euro area approaches in comparison

Sub-consolidated and solo requirements have differing effects on banks' freedom to allocate financial resources across the different legal entities within their consolidated groups, and they are premised on different considerations about the relationships between individual entities within a group. This section discusses these different approaches in greater detail through a comparison of the levels of application of prudential requirements in the United Kingdom, United States and euro area.

5.1. Solo application in the United Kingdom

UK regulatory authorities define their responsibilities primarily in terms of ensuring the safety and soundness of the individual regulated institutions which they are responsible for overseeing. This is the primary consideration in requiring individual UK-regulated banks within wider consolidated banking groups to meet minimum risk-based capital requirements, certain capital buffers, leverage requirements and liquidity standards in respect of their individual (solo) balance sheets. Transactions

[23] For instance the UK does not make use of the option to waive solo requirements under CRR Article 7.

[24] The CRR contains a specific option to apply sub-consolidated requirements under Article 11(5).

[25] Pillar 2 refers to risks which are not adequately captured under maximally harmonised EU risk-based minimum capital requirements (Pillar 1). The amount of capital required under Pillar 2 is a product of the Supervisory Risk and Evaluation Process.

with other entities in the group, by default, are treated as if they were transactions with any other third party. This means such transactions are subject to capital requirements and large exposures restrictions (although, as discussed below, certain exemptions are permitted).

In accordance with the Basel framework (see above), individual banks are also required to deduct their investments in the equity of their subsidiaries and affiliates from their own funds, subject to certain thresholds. The PRA has justified the requirement for solo banks to deduct their investments in subsidiaries on the grounds that: 1) resources are unlikely to be transferable between entities in a group 'when it matters most'; 2) financial resources should be located in the same regulated entities that incur risks; and 3) in the event of a resolution or firm failure, creditors and counterparties' claims will be on specific regulated entities, rather than the group as a whole (see PRA 2016, p. 43). This is a conservative set of assumptions which imply that a bank should place no reliance on resources that have been invested in the capital of other entities in its group.

On a first inspection, then, the UK solo regime is highly prescriptive with respect to the allocation of resources within groups. It seeks to ensure that each regulated entity in the group has the loss-absorbing capacity necessary to mitigate the risks that it is taking, without needing support from other entities within its group. However, the United Kingdom also applies a number of regulatory mechanisms that reduce the prescriptiveness of its solo regime. For example, the PRA grants permissions for solo banks to treat certain subsidiaries as if they were integrated parts of the standalone business.[26] This permission, known as 'solo consolidation'[27], is effectively a form of sub-consolidation, since the bank and its solo consolidated entities are treated as if they constituted a single solo bank within a wider consolidation group.[28]

A second means by which the UK limits the prescriptiveness of its solo regime is by allowing solo entities to apply more lenient regulatory treatment to their exposures to other members of their groups. For example, solo banks can apply for a 'Core UK Group' (CUG) permission, under which they can assign a 0% risk-weight to exposures to other group entities incorporated in the UK, using an option contained within the CRR (Article 113(6)). Exposures to entities in a CUG are also fully exempted from the large exposures restrictions.[29] The outcome of this concession is that solo banks face no regulatory disincentive to having unlimited exposures to other entities in their Core UK Groups.

In some scenarios, the economic consequences of the CUG permission could be similar to the consequences of the formation of a sub-consolidated group, since a bank could shift risks to other entities within its CUG, without the other entity needing to have capital to mitigate that risk. For instance, where a bank guarantees the third party exposures of an unregulated entity within its CUG, neither it, nor the unregulated entity, would be required to maintain capital against those exposures. Such exposures would, of course, be captured within the consolidated group's requirements. Hence, while the consolidated group would have sufficient loss-absorbing capacity, that loss-absorbing capacity would not necessarily be located in the same entities where risks are incurred.[30]

A third means by which the UK limits the prescriptiveness of its solo regime is by refraining from applying certain parts of the capital framework on a solo basis. For instance, the PRA sets 'individual

[26] Only subsidiaries whose material exposures or material liabilities are to the parent bank may qualify for this permission.

[27] Under the CRR Article 9, solo consolidation is known as 'individual consolidation'.

[28] Such permissions are permitted only where the PRA is granted assurances that the entities involved are effectively divisions of the applicant bank. There must be no impediments to the transferability of funds between the subsidiaries and the parent bank, and the material liabilities or material assets of the subsidiaries must be to the parent bank (see Bank of England 2013a).

[29] Banks can also apply for a 'Non-Core Large Exposure Group' permission to partially exempt exposures to other, non-UK-incorporated, entities in their consolidation groups from the large exposures regime.

[30] The PRA grants CUG permissions only under strict conditions. In particular, when considering applications from a bank to form a CUG with an unregulated entity, the PRA expects the bank and the unregulated entity to enter into a formal legal agreement that the latter would transfer capital to the former promptly on demand by the bank should the bank require additional capital in order to meet its regulatory requirements (see PRA 2016, p.3).

capital guidance' (ICG) for banks, which in effect requires them to have additional capital to mitigate risks that are not adequately captured under harmonised 'Pillar 1' requirements (this is known as 'Pillar 2A' in the United Kingdom). The PRA sets ICG at the consolidated level, but it has stated that it may decide not to set it at the solo level where firms are able to demonstrate that capital has been adequately allocated across the individual entities within the group (Bank of England 2013b). To the extent that consolidated Pillar 2A requirements are proportionately lower than they would be for solo banks – for instance because of the greater diversification of the consolidated group – this approach represents a concession in the solo regime. Similarly, the PRA carries out its programme of stress testing on a consolidated basis, but not generally at lower levels. Where a consolidated group is required to have additional equity capital as a result of its stress tests, this is applied as a capital buffer at the consolidated level (known as the PRA Buffer). Solo entities are not typically set a PRA Buffer, and there are no specific requirements about where in the banking group capital meeting the consolidated group's PRA Buffer should be located.

5.1. Sub-consolidation in the United States

The United States generally applies capital requirements both on a consolidated basis and on a sub-consolidated basis. Consolidated requirements generally apply at the BHC/SLHC level, and all majority owned subsidiaries are usually captured in the scope of consolidation. Sub-consolidation is the default treatment that applies to (operating) banks, such as national banks, state member banks, insured state non-member banks and savings associations. The method of consolidation follows US Generally Accepted Accounting Principles (US GAAP), which means that all significant majority-owned subsidiaries of these banks are required to be consolidated with the parent bank.[31] Accordingly, a sub-consolidated group will generally include, *inter alia*, the bank's head office and branches and all of its majority-owned significant subsidiaries, whether foreign or domestic.[32]

At a given level of sub-consolidation, the US sub-consolidated approach does not, by default, restrict the allocation of financial resources amongst a parent bank and its subsidiaries. However, if a bank were to be the subsidiary of another bank, each would be subject to requirements on a sub-consolidated basis. Hence, the prescriptiveness of the sub-consolidated approach depends on the structure of the group in question, including the number of tiers in the group that contain a bank subject to sub-consolidated requirements, and the numbers of non-bank majority-owned subsidiaries each bank in the group owns.

Additionally, the United States imposes a variety of mechanisms to ensure that individual banks within a sub-consolidated group are adequately capitalised for their risks. This includes on-site examination, reporting and disclosure requirements and, in some cases, the application of prudential requirements also on a solo basis. The precise nature of these requirements depends on the bank's charter and which federal regulatory agency is responsible for overseeing it. In addition, each US state has its own banking regulatory agency, which regulates banks chartered in that state.

There is also a specific body of rules that constrains the freedom of sub-consolidated groups to allocate financial resources as they so choose. Individual banks and their subsidiaries are required to

[31] A subsidiary is deemed 'significant' if it meets any of the following criteria: (1) the parent bank's direct and indirect investment in, and advances to, the subsidiary equals five percent or more of the total equity capital of the parent bank; (2) the parent bank's proportional share (based on equity ownership) of the subsidiary's gross operating income or revenue amounts to five percent or more of the gross operating income or revenue of the consolidated parent bank; (3) the subsidiary's income or loss before income taxes amounts to five percent or more of the parent bank's income or loss before income taxes; (4) the subsidiary is, in turn, the parent of one or more subsidiaries which, when consolidated with the subsidiary, constitute a significant subsidiary as defined in one or more of the above tests (see FFIEC 2016, A.77).

[32] It also includes non-significant majority-owned subsidiaries it has elected to consolidate as well as 'variable interest entities', in which the bank, or a consolidated subsidiary of the bank, has a controlling financial interest and is the primary beneficiary. There are also some exceptions, such as subsidiaries over which the parent bank does not exercise 'control' (see FFIEC 2016, p. 8).

comply with Sections 23A and 23B of the Federal Reserve Act, which impose quantitative limits and other restrictions on their ability to provide funding to their non-bank affiliates.[33] First enacted in 1933 as part of the regulatory response to the Great Depression, Section 23A was most recently reformed as part of the 2010 Dodd Frank Act. Implemented by the Federal Reserve through 'Regulation W', it specifies that a bank cannot enter into 'covered transactions' with affiliates where the size of the transaction exceeds 10% of the bank's capital stock and surplus; and it provides that the aggregate of a bank's covered transactions with all affiliates cannot exceed 20% of its capital stock and surplus. "Covered transactions" include purchases of assets by a bank from an affiliate and extensions of credit by a bank to an affiliate, as well as the credit exposure to an affiliate from derivative transactions. Section 23A also sets in place strict collateral requirements for a bank's credit transactions with affiliates and prohibits banks from purchasing low quality assets from their affiliates, including, for instance, assets which are more than thirty days in arrears. Section 23B requires that covered transactions be entered into on 'market terms and conditions' (see FRB 2003). In effect, this means that covered transactions cannot be conducted on terms more favourable to affiliates than the bank would offer to non-affiliated companies.

To the extent that these rules restrict the allocation of financial resources within a sub-consolidated group, their economic effects are similar to the imposition of solo requirements in the United Kingdom. However, the covered transactions rules have subtly different objectives. Section 23A aims to protect federally-insured banks from incurring losses due to excessive credit exposure to their non-bank affiliates, and to prevent banks from passing on government subsidies (in the form of deposit insurance and access to central bank liquidity) to uninsured entities (Omarova 2011). By contrast, the UK solo regime is designed primarily to ensure capital is located close to where the risks are being incurred. Underlining this difference, Regulation W exempts transactions between a bank and other insured depository institutions in the same consolidation group (so-called 'sister banks') from the quantitative limits and other restrictions.[34]

One factor which supports US banking groups being afforded comparatively greater freedom with respect to the allocation resources across legal entities is the US authorities' long-standing adherence to the so-called 'source of strength' doctrine (for a detailed discussion of this doctrine see Lee 2012). Formally established as part of Regulation Y in 1984, the source of strength doctrine was given a stronger statutory footing under the 2010 Dodd-Frank Act, which created a new 'Section 38A' in the Federal Deposit Insurance Act. Section 38A requires the 'appropriate' federal banking agencies to require BHCs, SLHCs or any company that directly or indirectly controls an insured depository institution to act as a source of strength to that institution. In other words, parent companies are required to provide financial assistance to their banking subsidiaries in the event of the financial distress of those subsidiaries.

5.2. Euro area: waivers from solo requirements

Like the PRA, the ECB operates within the framework of European banking legislation (CRD-IV/CRR). Therefore, as in the United Kingdom, prudential requirements in the SSM apply, by default, on a solo and consolidated basis. However, the ECB has indicated that it will consider applications by parent or subsidiary banks seeking permission under Article 7 of the CRR not to apply prudential regulations on a solo basis.[35] Where the ECB grants such a waiver, it may choose to impose requirements on a sub-consolidated basis. However, sub-consolidation would not be specifically required under the EU legislative framework in such cases, meaning that firms with such a permission may be required to comply with requirements on a consolidated basis only.

[33] For Section 23A purposes, a company is a subsidiary of a bank if the bank owns, controls, or has power to vote 25 percent of the company's voting shares or the bank controls the election of the majority of the directors.
[34] There are numerous other exemptions from Section 23A and 23B.
[35] As discussed in Section 4, the ECB may apply requirements at a sub-consolidated level both for the purposes of structural reforms and where the specific circumstances of particular groups warrant such treatment. The ECB has stated that it intends to further develop its policy on sub-consolidation once an EU-level framework for banking structural reform is in place.

The CRR specifies that waivers from solo requirements may be granted available only where both the subsidiary and the parent bank are authorised and supervised in the same Member State. A key effect of this permission, then, is to remove regulatory barriers to the transferability of resources between locally-incorporated entities in the group, even if group entities regulated in overseas jurisdictions would remain subject to regulation by their host authorities. This permission is premised on the assumption the locally-incorporated entities concerned are, to all intents and purposes, a single financial unit.

Waiving solo requirements in favour of either a sub-consolidated approach or the application of regulations only at the consolidated group level clearly affords banking groups greater freedom to allocate financial resources as they so choose. However, financial institutions seeking to be granted this waiver must comply with strict criteria regarding the transferability of financial resources between the entities concerned. Under the CRR, applicant firms must be able to demonstrate that "there is no current or foreseen material practical or legal impediment to the prompt transfer of own funds or repayment of liabilities" between parent and subsidiary banks, and the parent undertaking is required to guarantee the commitments of the subsidiaries (CRR Article 7).

The ECB has published detailed guidance on how it will assess whether firms are compliant with these criteria. Amongst other things, firms must be able to demonstrate that the structure of their shareholdings does not hamper the transferability of own funds between group entities; that there are clear decision-making procedures for making transfers of own funds; that there are no third party interests, by-laws or other agreements that could prevent funds being transferred between group entities; and that the permission would not compromise the group's recovery and resolution plans (ECB 2016). In addition, the ECB has stated that it expects firms with permission not to meet requirements on a solo basis to provide information regarding their contribution to the consolidated group's risks and financial resources.

The *ex ante* burden of demonstrating compliance with the CRR's criteria for waiving solo requirements suggests that such a policy is not necessarily less prudent than always applying regulations on a solo basis. Nevertheless, implicit in this approach is a willingness of regulators to accept that mutual support arrangements and other mechanisms for guaranteeing the transferability of financial resources can remain in place and be operationalised even during a period of financial stress.

6. Implications of the new resolution framework

One of the key regulatory innovations since the financial crisis is the effort to end the problem of banks seen as 'too-big-to-fail' through the establishment of new policy frameworks for resolving large banking groups in an orderly fashion. A key part of the new resolution framework is the final standard for total loss-absorbing capacity (TLAC) for recapitalising failing globally systemic banking groups, which was issued by the Financial Stability Board (FSB) in 2015 (FSB 2015a). When implemented by national authorities, this standard is likely to result in banking groups having part of their funding in the form of debt that can easily be written down or converted into equity ('bailed-in') if the group enters into resolution. The purpose of these requirements is to ensure that a group which enters resolution would have sufficient financial resources to enable it to meet capital requirements as a 'going concern' after it has been bailed-in, providing a stable position for wider restructuring. In turn, this should obviate the need for public funds to be used to bail out banks that are considered 'too-big-to-fail'.

In contrast to the BCBS standards, the FSB's TLAC standard explicitly considers the allocation of loss-absorbing resources within banking groups, including across international borders. The TLAC standard requires banking groups to 'pre-position' loss-absorbing capacity in 'material sub-groups' of

entities, which will normally comprise entities established in a single jurisdiction.[36] Pre-positioning involves a 'resolution entity' (typically a top-level parent bank or holding company) investing in the equity and loss-absorbing debt ('internal TLAC') of its subsidiaries. Each material sub-group will be required to issue 75%-90% of the total loss-absorbing resources that it would need were it a resolution entity itself. Internal TLAC is intended to ensure that losses and the costs of recapitalising operating subsidiaries (whether banks or other regulated institutions) will be passed upwards to the resolution entity through the write down or conversion of the resolution entity's holdings of internal TLAC. This should enable the operating subsidiaries to continue functioning while the resolution entity is resolved (Gracie 2016).

The implications of resolution frameworks for other parts of the regulatory framework remain uncertain. Nevertheless, it seems likely that resolution frameworks will affect the transferability of financial resources between individual entities in a group, not only in resolution but also as a going concern. This suggests that resolution frameworks could alter the rationales for solo and sub-consolidated application of prudential requirements, in particular by:

1. providing regulators with more information, via recovery and resolution plans (or 'living wills'), about how groups are likely to behave under situations of financial stress;

2. altering the incentives for directors of individual entities in a group to provide financial support to other group entities; and

3. affecting the incentives for regulators in different jurisdictions to allow international banking groups to transfer resources across borders.

Resolution frameworks will furnish regulators with additional information about how banks might behave in a situation of financial stress. The FSB Key Attributes of Effective Resolution Regimes for Financial Institutions specifies that national authorities put in place credible arrangements for recovery and resolution planning (FSB 2011). Such plans typically include detailed information on which group entities could be sold in the event of a severe financial stress to release funds for other group entities. In the EU, the Bank Recovery and Resolution Directive requires that firms maintain up-to-date recovery plans detailing proposed actions to restore their financial position in the event that they enter into a period of severe economic stress. The BRRD also specifies that resolution authorities maintain a credible resolution plan setting out how the firm would be resolved if it was to reach the point of non-viability. Similar requirements are in place in the United States, where Dodd-Frank Act requires large BHCs and systemically-important non-bank financial companies to submit resolution plans to the Federal Reserve and the FDIC.

Information contained within a recovery or resolution plan could either strengthen or weaken the case for certain entities to be regulated collectively on a sub-consolidated basis:

- If a resolution plan indicates that the nature of two or more entities' business models is such that they could not operate independently of each other, the case for regulating them on a sub-consolidated basis – as if they constituted a single financial entity – would be strengthened.

- Where an entity could operate as a standalone entity, and the recovery or resolution plan indicates that the parent or holding company would look to sell that entity in the event of a severe stress, the case for requiring that entity to meet requirements as if it constituted a standalone institution would be enhanced.

[36] Material subgroups may contain entities located in more than one jurisdiction by agreement of home and host authorities in international Crisis Management Groups (see FSB 2015a).

- Likewise, if an entity would be sold in resolution, there would be more grounds for regulatory authorities to prevent other group entities from having exposures towards that entity in excess of the normal limits for exposures to third parties.

Regulatory authorities will need to adopt a high level of caution in taking information contained in recovery or resolution plans into account in any decisions with respect to the levels of application of going concern capital requirements. By its nature, such information is forward looking and subject to considerable uncertainty. For example, while a recovery plan may indicate that an entity would be sold to release capital for the rest of a group, in practice it may be very difficult to sell that entity, particularly in the event of a systemic crisis, or where the particular circumstances of the group's difficulties may make the sale infeasible.

A second way the resolution framework could affect the rationales for applying requirements on a solo or sub-consolidated basis is by altering the incentives for the directors of parent or holding companies within a group to provide support to their subsidiaries in the event of a financial stress. Internal TLAC may be considered a form of contractually pre-committed intra-group financial support. This support becomes available to a subsidiary (or a material sub-group) in the event of the group's resolution, when debt issued by subsidiaries and held by resolution entities may be written down or converted into equity.[37] However, the very possibility of debt-to-equity conversion could increase the incentive of a parent or holding company to provide financial support to the entity in a pre-resolution scenario. By requiring holding companies to have more 'skin in the game' in the form of internal TLAC, resolution frameworks could make it less likely for a holding company to refuse to provide support a troubled subsidiary in a going concern (pre-resolution) stress scenario.

Other things being equal, this would suggest that necessity of applying prudential requirements on a solo basis may be diminished, since more reliance could be placed on parent or holding companies to act as a source of strength for the group. In practice, however, the impact of resolution on the incentives of directors of parent or holding companies may be minimal. It is already very rare for a parent or holding company to refuse to support an entity if it has the financial means to do so. Parent companies face strong incentives to provide financial support to their subsidiaries because the reputational costs of allowing a subsidiary to fail would typically be extremely damaging for the rest of the group, leading, for instance, to a potential inability to access funding.

A third means by which the advent of the resolution framework could alter the case for either solo or sub-consolidated requirements is by altering the incentives for host authorities to prevent the subsidiaries of overseas banks from transferring resources to their parent companies. Pre-positioned internal TLAC should engender greater trust between the authorities of different jurisdictions. In particular, host authorities should take comfort that the creditors of subsidiaries of foreign banks operating in their jurisdictions will be protected in the event of the resolution of the group. More broadly, by establishing clearly defined procedures for international cooperation in crisis management, resolution frameworks should keep the operating subsidiaries of foreign banks out of resolution, thereby helping to safeguard local financial stability. To the extent that this leads to fewer, or less stringent, regulatory controls on international banks' ability to transfer surplus capital resources across borders, this could augment the case for applying going concern requirements on a sub-consolidated basis. Individual entities within a group would be able to rely more on support from other entities in their groups, without necessarily needing to be individually capitalised at all times for the risks incurred on a solo basis.

[37] The decision to convert internal TLAC-eligible loss-absorbing debt into equity is expected to be taken jointly between 'home' and 'host' authorities in Crisis Management Groups. It is therefore not expected that internal TLAC would be converted where a group as a whole has not entered resolution.

However, again a word of caution is in order. Resolution frameworks remain prospective and it is by no means certain that the imposition of requirements for internal TLAC will have this effect. Any recalibration of the levels of application of going concern requirements to reflect altered regulatory incentives under new resolution frameworks would be warranted only if concrete evidence of looser regulatory controls on international banks' ability to transfer capital across borders emerges.

Conclusion

As this paper has shown, there is considerable variation in how national (and regional) regulatory authorities apply prudential regulations within the context of groups. In accordance with the Basel Accord, all of the jurisdictions considered in this paper apply prudential requirements at the consolidated level. However, the existence of impediments to the transferability of financial resources within groups motivates them also to apply prudential requirements at lower levels. International banking standards offer two 'ideal-type' approaches to the application of prudential requirements beneath the consolidated level: solo-application and sub-consolidation. Solo application aims to ensure that capital is located in the financial subsidiaries where risks are incurred. Sub-consolidation recognises the economic reality that some entities in a group behave, to all intents and purposes, as if they constituted a single financial unit.

As illustrated in Figure 4, other things being equal, solo and consolidated requirements can be viewed as representing opposite ends of a spectrum: a 'pure' solo approach would be highly prescriptive with respect to the allocation of financial resources within a group since each regulated entity is ostensibly required to have loss-absorbing capacity commensurate with the risks it has incurred; conversely, application of prudential requirements only on a consolidated basis is an inherently less prescriptive approach, since individual entities are not required to meet requirements in respect of their individual exposures. In abstract, the sub-consolidated approach lies somewhere between these two extremes; on any given level of sub-consolidation, there are no default restrictions on the allocation of resources. However, since regulated banks at every tier in the group must comply on a sub-consolidated basis, capital is at least required to be allocated between sub-consolidated groups.

Figure 4: Prescriptiveness of solo and (sub-)consolidated approaches

Location of capital within a banking group
More prescriptive
Less prescriptive
Consolidated & 'pure' solo
Consolidated & solo with concessions
Consolidated & sub-consolidated with restrictions
Consolidated &'pure' sub-consolidated
Consolidated only

However, the comparison of regulations in the United Kingdom, United States and the euro area demonstrated that in practice national (regional) approaches defy easy classification. Using a variety of concessions and exemptions, the UK authorities limit the prescriptiveness of the solo regime, giving it some of the characteristics of sub-consolidated regime. Conversely, US regulations on how banks within sub-consolidated groups transact with their affiliates effectively creates a 'firewall' between insured depositary institutions and non-bank affiliates, creating a significant constraint on the transferability of resources within sub-consolidated groups. ECB-regulated banks that are granted waivers from solo requirements have inherently more freedom to allocate capital within their consolidated (or sub-consolidated) groups than banks subject to solo requirements. However, as discussed above, waivers from solo requirements are conditional on banks providing the ECB with a high level of assurance regarding the transferability of resources between group entities. This suggests that such an approach is not necessarily more liberal or prudent than the application of requirements also on a solo or sub-consolidated basis. Rather, the prudence of this approach is

contingent upon the credibility of the *ex ante* group support arrangements and mutual guarantees that the ECB requires entities requesting such a waiver to have in place.

As noted in the introduction, the different approaches adopted by each jurisdiction are rooted in different legal traditions and the institutional legacies of past policy choices. This does not rule out the possibility of jurisdictions adapting their approaches over time. The decision of the PRA to apply sub-consolidated requirements to ring-fenced banks demonstrates that national authorities are willing to adapt their approaches where new rules alter the structure of banking groups and the nature of interconnections between their constituent entities.[38] The final part of the paper highlighted how the advent of new policy frameworks for bank resolution has potential to drive further change in the levels of application of prudential requirements. Resolution frameworks will provide regulators with *ex ante* information about how groups will behave under conditions of financial stress. Resolution frameworks could also alter the incentives for parent companies to provide support to one another and may also prompt national regulatory authorities to impose fewer or less stringent controls on international banking groups' ability to transfer resources across borders. Optimising for resolution frameworks could see regulators begin to apply prudential requirements at multiple levels, combining solo and sub-consolidated requirements for particular entities or subgroups within the same overall consolidation group. The potential for resolution frameworks to spur reform of the BCBS standards concerning the levels of application of going concern requirements also cannot be discounted.

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Annex 1: Scope of consolidation and levels of application survey.[39, 40]

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
1. To which groups, where you have responsibility as home consolidating supervisor, do you apply the full prudential requirements agreed by the Basel Committee on a consolidated basis? a. All banking groups b. Internationally-active banking groups only c. Internationally-active banking groups plus some others [please specify]	a	a	a	a	c	c	a	a
2. Which entity or entities within a consolidated group are usually responsible for complying with consolidated requirements? a. The parent holding company (or ultimate parent bank if no parent holding company); b. A specific operating company; c. All regulated companies within your jurisdiction that are in the consolidation group; d. Other.	c	a*[42]	a or c	a[43]	a	a, c	c	c

[39] Entries marked with an asterisk have been altered from the original survey response. This may because the survey response was missing or because it required interpretation or correction in light of follow-up discussions with survey participants and desk-based research.

[40] There is a high level of congruence between the responses for the EU jurisdictions covered in the survey (UK, ES, FR, ECB). This owes to the applicability of harmonised EU banking legislation throughout the EU. The level of harmonisation is greater still within the euro area Single Supervisory Mechanism (SSM), where the ECB directly supervises significant banking groups. Where EU banking legislation explicitly grant options for Member States, the ECB applies national legislation exercising those options. The ECB has set out a unified approach concerning the exercise of options and discretions granted to competent authorities under EU banking legislation (see ECB 2016). Entries for France and Spain that differ from the entries for the ECB generally relate to options exercised under national law, or approaches previously adopted in those jurisdictions that continue to apply to less significant institutions. Entries for the ECB generally refer to the 'default' approach and may not capture specific exceptions.

[41] Some data missing as entries compiled from publicly available information only.

[42] Foreign banking organisations in the United States over certain size are required to form an intermediate holding company, which complies with prudential requirements on a consolidated basis.

[43] In Hong Kong, where a locally incorporated authorised institution is part of a wider group and neither the ultimate holding company nor the intermediate holding company (if any) is itself an authorised institution, a locally-incorporated IHC is generally required to be established. This IHC is required to comply with prudential standards on a consolidated basis.

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
3a. The Basel Committee's scope of application includes banks, securities entities that are subject to similar regulation to banks, holding companies that are a parent entity within a banking group and other financial entities. Do you include all of these entities within the regulatory scope of application of banking groups? a. Yes b. No	a	a	a	b	a	a	a	a
3b. Do you include any other entities within the scope of consolidation? a. Yes b. No	b	Not answered[44]	b	a	b	b	b	b
4. Is your regulatory scope of consolidation based directly on the accounting scope of consolidation (i.e. do your rules make a direct link between the two, albeit excluding some exposures that are not within the BCBS framework, such as insurance)? a. Yes b. No	b[45]	a	b See footnote 42	b	a	b	b	b
5a. Can you permit any entities, other than insurers or non-financial entities, not to be consolidated? a. Yes b. No	a	b	b[46]	a	b	a	a	a

[44] US regulatory capital rules follow the scope of consolidation under US Generally Accepted Accounting Principles.
[45] Regulatory scope of consolidation built on CRR definitions (although CRR does cross-refer back to EU accounting directives).
[46] Other than insurers or non-financial entities, any controlled subsidiary has to be consolidated.

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
5b. If so, is it for the following reasons? [please indicate all which apply]: a. Holdings are only temporary [for example, potentially arise due to debt for equity swaps?]; b. Holdings are subject to different regulation; c. Non-consolidation is required by law; d. Holding is small and subject to a de minimis threshold [please indicate the de minimis threshold]; e. Holding is in a jurisdiction where there are legal impediments to the transfer of information; f. Undertaking concerned is of negligible interest to the objectives of monitoring the banking group; g. Consolidation would be inappropriate or misleading as far as the objectives of supervising a banking group is concerned; h. Other [please specify].	d, e, f, g	n/a	n/a	e, f, g	n/a	a, h, f	d, e, f, g	d, e, f, g
6. If a majority-owned or controlled securities entity or other financial entity is not consolidated, which of the following apply [please indicate all which apply] : a. Information required from bank; b. Information required or sought from another supervisor; c. Holdings in the non-consolidated entity are deducted from CET1 or another tier of capital on a corresponding deduction basis [please specify]; d. Assets and liabilities and third-party capital investments are removed from the bank's balance sheet; e. Entity's compliance with regulatory capital requirements is monitored and any shortfall is deducted from capital; f. Other.	a, c	c	n/a	a, c, e	n/a	c, e	a, c	a, c

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
Section 2: Financial and non-financial conglomerates								
7. Can a banking group own 'operating' non-financial companies? a. Yes b. No	a	a, subject to limits	a	a, subject to limits[47]	b	b	a	
8. Can a commercial, non-financial group (e.g. supermarket retailer) own a banking or financial group? a. Yes b. No	a	b[48]	a	a	a	a	a	
9. Does the regulatory scope of the group include both the financial and non-financial operating entities? a. Yes b. No	b	* See footnote 42.	b	b*	b	b	b	b

[47] For instance, a non-financial firm wishing to acquire an authorised institution may be required to establish an IHC over the authorised institution.

[48] Certain grandfathered savings and loan holding companies can engage in commercial activities. See 12 USC 1467a(c)(9)(C). Grandfathered SLHCs with substantial commercial activities are not currently subject to consolidated capital regulation.

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
10. If non-financial 'operating' entities are not included within the scope of the group, how are they treated? a. Individual investments up to 15% of eligible capital or aggregate investments up to 60% of eligible capital are risk-weighted and excess over that amount is deducted from CET1 (i.e. the treatment in the Basel 'qualifying holdings' rules); b. Investments in the non-financial entities are subject to some other risk-weighting treatment; c. Investments are permitted only up to an eligible capital limit (e.g. 15% for individual investments and 60% in aggregate); d. Other e. Individual investments up to 15% of eligible capital or aggregate investments up to 60% of eligible capital are risk-weighted and excess over that amount is subject to a 1250% risk-weight (i.e. the treatment in the Basel 'qualifying holdings' rules)	e	b	a	d[49]	n/a	b	a	a, e or d
Section 3: Regulation of holding companies								
11. Are the ultimate parents of banks usually holding companies in your jurisdiction? a. Yes b. No	a	a	b	a	b	b	b	b
12. Do you authorise holding companies that are the parents of banks within your regulatory framework where they do not carry out regulated financial activities? a. Yes b. No	b	a	b	b	a	b	b	

[49] Individual investments up to 15% of eligible capital are risk-weighted and excess over that amount is either assigned a 1250% risk weight, or deducted from CET1 in the case of connected companies.

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
13. Are there any aspects of your national law that could prevent you from giving directions to parent holding companies of banks? a. Company law restrictions b. Directors' fiduciary duties c. Limited liability d. Other e. none	e	Not answered	e	e	e	d		
Section 4: Methods of consolidation: non-subsidiary relationships, joint ventures and insurance								
14. Where a banking group owns 20%-50% of an entity and its influence is limited to the amount of its stake, but where that entity is not regarded as a subsidiary, which method of consolidation do you use? a. Proportional consolidation; b. Equity method; c. Other.	a	b	b[50]	b	b	c[51]	b	a
15. How do you decide the method of consolidation (and, where appropriate, the proportion to be consolidated) under question 14? a. Determined automatically by supervisory rules; b. Determined by supervisors on a case-by-case basis. c. Other.	a	a* See footnote 42.	a	c[52]	c[53]	c	a	a

[50] Where an entity is jointly controlled by another party, proportional consolidation would apply. Where the banking group does not exercise significant influence, the entity would be regarded as a participation.
[51] Entity would be excluded from the scope of consolidation.
[52] In Hong Kong, methods of consolidation typically follow accounting standards.
[53] In most of the cases, a bank will automatically apply the equity method, but banks may choose the equity method or proportionate consolidation in very specific situations.

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
16. Where a banking group owns 20%-50% of an entity and its influence is more than the amount of its stake (e.g. because it can appoint members of the board), but where that entity is not regarded as a subsidiary, which method of consolidation do you use? a. Full consolidation; b. Proportional consolidation; c. Equity method; d. Other.	a	c	c or d[54]	a or c	d[55]	a[56]	b	b
17. How do you decide the method of consolidation (and, where appropriate, the proportion to be consolidated) under question 16? a. Determined automatically by supervisory rules; b. Determined by supervisors on a case-by-case basis. c. Other.	a	a* See footnote 42.	a	c	c	a	a	a
18a. Which method of consolidation do you use where a bank or an entity within a banking group and another entity share common management due to a contract or a provision in their Articles of Association? a. Full consolidation; b. Proportional consolidation; c. Equity method; d. None; e. Other.	b	d[57]	a	a or c	c	e See footnote 53.	c	

[54] Where group exercises significant influence over the entity, the equity method would be used.
[55] The key factor in determining whether an entity is consolidated is whether the parent exercises control over it.
[56] According to China's 'Capital Rules for Commercial Banks', if a parent bank has 'de facto' control over an entity it would be required to be consolidated.
[57] Consolidation is determined by applying accounting rules under U.S. GAAP. The first step is to evaluate whether an entity is a variable interest entity (Does the entity lack sufficient equity to finance its activities? Do the equity holders, as a group, lack the characteristics of a controlling financial interest? Is the legal entity structured with non-substantive voting rights (i.e., anti-abuse clause)? If the answers to these questions are yes, the variable interest model is used. If not, the voting rights model is used. Under the voting rights model, consolidation is generally required for ownership over 50%. The criterion in the question (an entity within a banking group shares common management) is not a primary driver of consolidation.

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
18b. Which method of consolidation do you use where a bank or an entity within a banking group and another entity share common management where the firms have the same management in control during the year? a. Full consolidation; b. Proportional consolidation; c. Equity method; d. None; e. Other.	b	See footnote 54	a	a or c	c	e. See footnote 53	c	
18c. Which method of consolidation do you use where a bank or an entity within a banking group and another entity share common management without a provision in their Articles of Association or subject to a contract? a. Full consolidation; b. Proportional consolidation; c. Equity method; d. None; e. Other.	b	See footnote 54	d	a or c	c	e. See footnote 53	c	a
19. Where a banking group does not fully own or have an ownership stake in an entity, but it has significant influence over that entity, which method of consolidation do you use? a. Full consolidation; b. Proportional consolidation; c. Equity method; d. None; e. Other.	b	d. See footnote 54	c	a or c	e[58]	a, d. See footnote 53	c	c

[58] If the entity is controlled by parent bank, full consolidation would apply. Otherwise either equity method or in some circumstances proportional consolidation would apply.

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
20. How do you decide the method of consolidation (and, where appropriate, the proportion to be consolidated) under question 19? a. Determined automatically by supervisory rules; b. Determined by supervisors on a case-by-case basis. c. Other.	c	c. See footnote 42	a	c	a	a	b	b
21. Would a bank be permitted not to fully consolidate an entity that is accounted for as a subsidiary (e.g. perhaps where it is a 'true' joint venture/joint arrangement)? (In this example we mean an entity that is accounted for as a subsidiary, but where there is a formal legal agreement with a partner or partners about the liabilities for providing further financial support in the future and that is limited to the proportion that the bank currently owns.) a. Yes b. No	a	Not answered.	b	n/a	b	b	a	b
22. If you do permit non-full consolidation of a joint venture, what is the treatment you require? a. Proportional consolidation; b. Use of the equity method; c. Other.	a	Not answered.	n/a	n/a	n/a	n/a	b	n/a
23. If you do permit non-full consolidation of a joint venture, how do you decide the method of consolidation (and, where appropriate, the proportion to be consolidated)? a. Determined automatically by supervisory rules; b. Determined by supervisors on a case-by-case basis (i.e. firms may need to apply for a waiver of the existing rule?).	b	Not answered.	n/a	n/a	n/a	n/a	a	n/a

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
24. What is your treatment of insurance entities owned by banks? a. Risk-weighting; b. Consolidation; c. Deduction; d. Other.	c, d[59]	b	c, d	c	a, c[60]	c	a	c, d
Section 5: Level of application								
25. Beneath the level of the consolidated group, at which level do you apply prudential rules (excluding specific exceptions): a. At the sub-consolidated level; b. The level of the standalone bank to all banks within a banking group (the 'solo' level).	b (a for RFBs)	a	b	b*[61]	a, b	a, b	a[62]	a, b
Section 6: Sub-consolidation								
26. Where you apply sub-consolidation, is this treatment: a. The default treatment that applies to all banking groups; b. A treatment that banking groups can choose; or c. A treatment that is agreed between the supervisor and the firm on a case-by-case basis.	n/a	a	n/a	n/a*	a	a	c	

[59] According to the CRR, Institutions are required to deduct from their capital holdings in financial sector entities, where they have a "significant investment" in those entities. A significant investment is defined as more than 10% of the common equity tier 1 (CET1) of the entity. Competent authorities in the EEA may permit institutions not to deduct their investments in insurance undertakings where the insurance undertaking is included in the same supplementary supervision under Directive 2002/87/EC (the Financial Conglomerates Directive) as the institution.

[60] Investments in insurance entities are subject to CET1 deduction for the amount which exceeds 10 % of the CET1 of the parent bank. The amount below the 10% threshold is risk-weighted at 250% following Basel treatment.

[61] The HKMA requires all Hong Kong incorporated authorised institutions within the group to observe prudential standards and submit statutory returns and other relevant information on both solo and consolidated bases.

[62] France generally waives the application of prudential requirements on a solo basis using the option to do so under CRR Article 7. For entities that belong to a group but do not have any subsidiaries that are supervised by the ACPR, supervisory reviews are conducted on a solo basis, taking into consideration the influence of the group to which the entities belong.

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
27. If sub-consolidation is agreed on a case-by-case basis, what information does a banking group have to submit to you as the supervisor for you to assess whether sub-consolidation should be permitted? a. None; b. Information as requested by the supervisor on a case-by-case basis; c. A standard set of information, as set out by the supervisor in its rules.	n/a	n/a	n/a	n/a*	n/a	n/a	c	
28. Where you apply the prudential requirements on a sub-consolidated basis, how do you test that individual banks are adequately capitalised on a standalone basis? a. Application of prudential rules on a standalone ('individual entity') basis; b. On-site examination; c. Regulatory reporting; d. Public disclosure; e. Other.		a, b, c, d, e	n/a	n/a*	a	c	b, c	
Section 7: Solo application								
29. Where you require banks to meet risk-based requirements on a standalone ('solo') basis do you require them to deduct their significant investments in subsidiaries for risk-based capital purposes? a. Yes, they are deducted in full from the equivalent instrument; b. Yes, but subject to a threshold limit under which the investments are risk-weighted; c. Yes, but some exceptions are permitted; d. No, the investments are risk-weighted; e. Yes, other.	b	n/a*	b	a	b	b		c

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
30. Do you permit some entities to be consolidated with the standalone bank for risk-based capital purposes where it can be demonstrated that capital and liquidity can be transferred freely between them? a. Yes b. No	a	n/a*	b	a	a	b	Not answered	a
31. If you do permit some entities to be consolidated for risk-based capital purposes with the standalone bank does this include [Please indicate all that apply]: a. Other banks; b. Investment firms; c. Other regulated firms; d. Unregulated firms.	d	n/a*	n/a	a, b, c, d*[63]	c	n/a	Not answered	a, b, c, d
32. Where the consolidation of some entities with the standalone bank for risk-based capital purposes is permitted, how is this agreed/determined? a. Firms apply for an waiver to the rules that is based on specified criteria; b. Firms apply for a rule waiver based on information that they choose to provide and supervisors judge whether a waiver should be permitted; c. Other.	a	n/a*	n/a	b	a	n/a	Not answered	a
33. Do you have any rules or specific regulatory treatments relating to the situation where a cross-border branch of a domestic bank is subject to asset or liquidity requirements in jurisdictions which they branch into? a. Yes b. No	b	Not answered	a	Not answered.	b	b	b	

[63] There are no restrictions on the types of entities that can be consolidated with the standalone authorised institution.

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
34. Do you impose any requirements on branches of foreign banks in your jurisdiction? a. Yes b. No.	a	a*[64]	a	a[65]	b	a[66]	a	
35. Do you permit the parents of banks to downstream debt as equity to standalone banks (a process known as 'double leverage')? [Yes, No] If so, what level of double leverage do you permit? a. Up to 105% of capital requirement; b. Up to 110% of capital requirement; c. Up to 120% of capital requirement; d. No limit in rules, but one is set on a case-by-case basis; e. No limit. f. Other	e	f	Not permitted.	Not answered.	e	Not permitted.		
Section 8: Level of application of Pillar 2 and buffer requirements								
36. At which level do you require firms to undertake a Pillar 2 assessment? a. Consolidated level only; b. Consolidated and sub-consolidated level; c. Consolidated and solo level; d. Other [please specify].	a	b	a	a	c	c	a	
37. At which level do you undertake a supervisory review of a firm's Pillar 2 assessment? a. Consolidated level only; b. Consolidated and sub-consolidated level; c. Consolidated and solo level; d. Other.	c	b	c	c	c	c	c. See footnote 59.	

[64] The Federal Reserve's final rule for enhanced prudential standards for foreign banking organisations (FBOs) requires the formation of an IHC over the subsidiaries of foreign banking organisations with more than $50 billion in US non-branch assets. Branches of foreign banking organisations are subject to certain liquidity requirements.
[65] Hong Kong branches of foreign banks are subject to certain local liquidity requirements.
[66] In China, branches and subsidiaries of overseas banks can be subject prudential requirements including, but not limited to, capital and liquidity.

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
38. At which level or levels do you/will you set a requirement to hold a capital conservation buffer? [Please indicate all which apply] a. Consolidated group level b. Individual legal entity level; c. Sub-group level.	a, b	a, c	a, b	a, b*	a	a, b	a, c	a, b
39. At which level do you/will you set a requirement to hold countercyclical capital buffer? [Please indicate all which apply] a. Consolidated level; b. Individual legal entity level; c. Sub-group level.	a, b	a, c	a, b	a, b*	a	a, b	a, c	a, b
40. At which level do you/will you require your banking groups to hold their G-SIB buffer? a. Consolidated level; b. Individual legal entity level; c. Sub-group level	a	a*	a	a, b*	a	a, b	a	a
41. At which level do you/will you require your banking groups to hold their capital buffers D-SIB buffer? a. Parent holding company or parent operating company level (i.e. global consolidated level/top of the banking group) b. Local consolidated level; c. Individual legal entity level; d. Sub-group level.	d	n/a	c	a, b*	a	a, b	a	a, c, d
42. Where you set requirements on a consolidated basis or a sub-consolidated basis, do you have any further requirements that specify where in the group or the sub-group those resources must be located? a. Yes b. No	b	b	b	b	b	b	b	
Section 9: Large exposures exemptions								

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
43. Do you apply large exposures requirements on a standalone basis? a. Yes b. No	a	b*	a	a	a	a	b[67]	a, b See footnote 64.
44. Where you require banks to meet requirements on a standalone basis, do you permit them to exceed a 25% LE limit to any other entities within their consolidated group? a. Yes b. No	a	n/a*	a	a	b	b	b	a
45. If you do permit standalone banks to have large exposures above 25% to other entities within their consolidated group, do you apply any criteria to the entities that may be included within that limit? a. Yes; b. No.	a	n/a	a	b[68]	n/a	n/a	n/a	a
46. Where you permit standalone banks to have large exposures above 25% to entities within their group, what limit do you put on those exposures? a. No limit; b. Another limit.	a, b	n/a	a, b	a	n/a	n/a	n/a	a
Section 10: Leverage Ratio								
47. Do you currently apply a leverage ratio on banks in your jurisdiction, whether for reporting or disclosure purposes or as a prudential requirement? a. Yes b. No	a	a	a	a	a	a	a	a

[67] Under the CRR, if an entity is exempted from the requirement to meet prudential requirements it is not required to meet large exposure requirements on a consolidated basis.
[68] There are no explicit criteria stated in the law, but the HKMA considers granting the exemption based on the merits of each case. This includes, for example, the availability of risk mitigation arrangements.

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
48. If you apply your leverage ratio requirements on a consolidated level, does your leverage ratio have the same scope of consolidation as your risk-based capital requirements? a. Yes b. No	a	a	a	a	a	a	a	a
49a. Do you apply your leverage ratio at other levels within the banking group? a. Yes b. No	b (under review)	a	b	a	a	a	a	a
49b. If so, at which level do you apply requirements? a. Individual legal entity level; b. Sub-group level; c. Other	n/a	b*	n/a	a*	b[69]	a	b	a
50. If you impose a leverage ratio on a standalone or sub-group basis, either as a requirement or for reporting purposes, do you exempt intragroup exposures that have been granted a 0% risk weight under the risk-based framework from the calculation of the leverage exposure amount? a. Yes b. No c. No decision has been made to date. d. Other	c	b	n/a	b	Not answered.	b	c	d
Section 11: Liquidity								
51. Do you apply liquidity requirements on a consolidated level? a. Yes b. No	a	a	a	a	a	a	a	a

[69] Japan applies the leverage ratio at the holding company level on a consolidated basis and at the banking entity level on a consolidated basis. Hence, the leverage ratio applies on a consolidated and sub-consolidated basis.

Survey question	UK	US	ES	HK	JP	CN	FR	ECB[41]
52. Is the scope of liquidity consolidation the same as for risk-based capital requirements? a. Yes b. No	b	b	a, b[70]	b	a	a	b	b
53a. Do you apply liquidity requirements at other levels within the banking group? a. Yes [please specify which levels] b. No	a	a	a	a	a	a	a	a
53b. Which levels are liquidity requirements applied at? a. Sub-consolidated b. Solo	b	a	b	b[71]	a, b	b	a, b	b
54. Do you permit some entities to be consolidated with the standalone bank for liquidity purposes? a. Yes b. No	a	n/a*	a	b	b	b		
Supervisory ring-fencing								
55. Do you have powers within your rules to limit the activities that entities within banking groups can conduct, and the location where they can conduct them, where there is a significant risk of the entity in question failing to meet the conditions under which you have authorised it? a. Yes; b. No.	a	Not answered.	b[72]	a	a	a	a see footnote 69	

[70] Under some circumstances, the risk of outflows to certain unconsolidated vehicles can be taken into account in the consolidated liquidity requirements.
[71] For authorised institutions incorporated in Hong Kong, liquidity requirements apply on a consolidated basis, an unconsolidated basis and a Hong Kong Office basis.
[72] This power is now shared with the ECB for banks supervised as part of the SSM.