

Summary: Analysis & Evidence

Policy Option 1

Description: The Government does not implement any of the measures in the Financial Services (Banking Reform) Bill. This is the baseline used for measuring the impact of Policy Option 2.

FULL ECONOMIC ASSESSMENT

Price Base Year	PV Base Year	Time Period Years 30	Net Benefit (Present Value (PV)) (£m)		
			Low: 0	High: 0	Best Estimate: 0

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	0	0	0
High	0	0	0
Best Estimate	0	0	0

Description and scale of key monetised costs by 'main affected groups'

Zero as the Government not implementing the measures in the Banking Reform Bill will impose no additional costs incremental to regulations currently in train.

Other key non-monetised costs by 'main affected groups'

Zero for the reason given above.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	0	0	0
High	0	0	0
Best Estimate	0	0	0

Description and scale of key monetised benefits by 'main affected groups'

Zero as the Government not implementing the measures in the Banking Reform Bill will produce no additional benefits incremental to regulations currently in train

Other key non-monetised benefits by 'main affected groups'

Zero, for the reasons given above.

Key assumptions/sensitivities/risks	Discount rate (%)
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BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:	In scope of OIOO?	Measure qualifies as
Costs: N/A	No	NA
Benefits: N/A		
Net: N/A		

Summary: Analysis & Evidence

Policy Option 2

Description: Proceed with measures in the Financial Services (Banking Reform) Bill

FULL ECONOMIC ASSESSMENT

Price Base Year 2013	PV Base Year 2019	Time Period Years 30	Net Benefit (Present Value (PV)) (£m)		
			Low: SEE TEXT	High: SEE TEXT	Best Estimate: 114,300

COSTS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	500	420	7,900
High	1,750	1,950	37,100
Best Estimate	3,000	1,100	20,900

Description and scale of key monetised costs by 'main affected groups'

Direct private costs to UK banks: £1.7bn - £4.4bn p.a. Direct costs to regulator: £20m (up-front), £2m p.a. Indirect cost to GDP from banks passing increased private costs to economy: reduction in long-run GDP level of 0.04% - 0.16% (equivalent to average annual GDP cost of £0.4bn - £1.9bn p.a.) Indirect Exchequer impact: reduction in tax receipts of £150m - £690m p.a. and reduction of value of HMG shareholdings in RBS and Lloyds Banking Group of £1.6bn - £4.5bn, relative to 'do nothing' baseline.

Other key non-monetised costs by 'main affected groups'

Indirect cost to bank customers through changes in lending and saving rates. Direct cost to large UK banks of ensuring that ring-fenced banks are not liable for the pension liabilities of other members of their banking groups.

BENEFITS (£m)	Total Transition (Constant Price) Years	Average Annual (excl. Transition) (Constant Price)	Total Benefit (Present Value)
Low	SEE TEXT	SEE TEXT	SEE TEXT
High	SEE TEXT	SEE TEXT	SEE TEXT
Best Estimate	SEE TEXT	7,100	135,200

Description and scale of key monetised benefits by 'main affected groups'

Greater financial stability leading to fewer and less severe financial crises in the future, leading to higher levels of GDP in the future. This is a benefit to the UK economy as a whole. Illustrative calculation shows that reducing probability of future crises by 10% and severity of future crises by 15% would produce an annual benefit equivalent to 0.47% of GDP (£7.1bn in 2011-12 terms).

Other key non-monetised benefits by 'main affected groups'

Reduced government, and therefore taxpayer, support in a crisis as they become less frequent and severe. Resolution authorities will be better able to resolve banks and at a lower cost. There will be welfare benefits independent of GDP level, from greater financial and economic stability due to a reduction in the probability and severity of financial crises for the UK economy. Reducing implicit subsidies will also yield an efficiency gain from eliminating the distortion implicit subsidies represent.

Key assumptions/sensitivities/risks	Discount rate (%)	3.5
The reduction in the future probability and severity of financial crises that the policy will bring. The extent to which banks pass through the cost of the policy to consumers, and the subsequent impact on GDP.		

BUSINESS ASSESSMENT (Option 2)

Direct impact on business (Equivalent Annual) £m:			In scope of OIOO?	Measure qualifies as
Costs: N/A	Benefits: N/A	Net: N/A	No	NA

Evidence Base

Introduction

1. This Impact Assessment (IA) is an updated version of the IA published at the introduction to Parliament of the Financial Services (Banking Reform) Bill ('the Bill') on 4 February 2013. It is being republished for the introduction of the Bill, as amended by the House of Commons, into the House of Lords and to accompany the publication for consultation of draft secondary legislation made under the powers in the Bill.
2. The financial crisis of 2007-09 revealed the urgent need to reform the UK banking system to improve the resilience of both individual banks and the system as a whole. In response to the crisis, as well as embarking on the radical reform of the UK regulatory architecture through the Financial Services Act 2012, the Government has committed to implementing structural reforms to UK banks, following the recommendations of the Independent Commission on Banking (ICB), chaired by Sir John Vickers.
3. As the ICB argued, banks that are large, systemic and too complex to be resolved in the event of failure benefit from a perceived implicit government guarantee, as market participants presume that, faced with the failure of such a bank, the Government would have no choice but to rescue it, if necessary using public funds. As well as creating moral hazard, this perceived guarantee represents an anti-competitive subsidy to large, complex banks and a contingent liability on the taxpayer. Along with other G20 members, the Government has committed to curtailing perceived implicit guarantees to the UK banking sector. The Banking Reform Bill contains key measures to give effect to that commitment.
4. The Bill will implement the ring-fencing of retail and SME deposits from wholesale and investment banking recommended by the ICB. Ring-fencing, and the requirement that ring-fenced banks be separately capitalised and economically independent of their wider corporate groups, will insulate retail banking services from shocks originating elsewhere in the global financial system and will make both individual banks and the UK banking system as a whole more resilient. By requiring that retail banking services whose continuous provision is essential to households and SMEs are placed in separate legal entities, ring-fencing will help ensure that the continuity of those services can be maintained in the event that a ring-fenced bank, or its wider group, fails and needs to be resolved by the authorities.
5. The Bill will also make deposits eligible for protection under the Financial Services Compensation Scheme (FSCS) preferred debts in insolvency: preferring FSCS-protected deposits will help the authorities to ensure that in the event of bank failure, banks' wholesale creditors will be exposed to losses ahead of retail depositors and the FSCS that protects them. These creditors will now have a greater incentive to curb excessive risk taking by banks. Some elements of the ICB's recommendations are not included in the Bill, for example the introduction of a bail-in tool, which the Government expects to deliver through transposition of forthcoming European legislation. These measures are therefore outside the scope of this IA.
6. The measures in the Bill will serve to curtail the perceived implicit government guarantee to banks seen as 'too big to fail'. The Bill is the latest stage of a process of policy development to meet this objective that began with the establishment of the ICB in the summer of 2010. Over the course of its deliberations, the ICB considered, and rejected, a range of alternative policy options, including full separation of retail and investment banking, full reserve banking and narrow banking, before forming its recommendations on ring-fencing and depositor preference. The Government has accepted those recommendations, and since the ICB's final report in September 2011 has explored a range of possible calibrations for ring-fencing and depositor preference. Having examined these alternatives, the Government has now developed its lead option, which will be implemented via the Bill. This IA sets out the estimated economic impact of the measures in the Bill.

Scope of this IA

Measures included in this IA

7. This IA covers the Government's implementation of the following ICB recommendations, which will be delivered through the Bill:
- **Ring-fencing** of 'core' deposits - that is individuals and SME deposits - from 'excluded' wholesale banking activities.
 - **Preferring deposits** eligible for protection under the FSCS ('depositor preference').
 - Setting the **framework for the imposition of debt requirements** by the regulator on banks.

Measures not included in this IA

ICB recommendations not included in the Banking Reform Bill

8. The Bill will implement key elements of the ICB's recommendations, as set out above. However, some of the ICB's recommendations have been accepted by the Government but are being implemented by other means (including by other domestic or EU legislation), and so are not included in the Bill. As they do not feature in the Bill, the impact of these measures is not included in this IA:
- A **bail-in tool**: the Government expects bail-in to be implemented in the UK through transposition of the EU Recovery and Resolution Directive (RRD). The Government continues to work closely with EU partners to ensure that a credible and consistent bail-in tool is delivered.
 - **ICB competition recommendations**: the ICB made various recommendations to increase competition in the banking sector. The recommendations have been accepted by the Government, but are not included in the Bill (and so are not covered in this IA) as they are either already implemented (Financial Conduct Authority competition objective); industry-led (Lloyds Banking Group 'Verde' divestment; account switching service); or will not result in immediate regulatory changes (possible future market investigation by competition authorities).
9. As a result of the exclusion of these measures from this IA, the figures given here for the total impact of the measures in the Bill will not be the same as those for the total cost of the entire ICB package given in the Banking Reform White Paper IA. This is because the White Paper IA included the impact of measures that are not covered by this IA.¹

Non-ICB policy measures in the Banking Reform Bill

10. In addition to the recommendations of the ICB listed above, the Banking Reform Bill will also impose new statutory duties on the FSCS and make provision for the statutory appointment of the Chief Executive of FSCS as an Accounting Officer. This measure does not require an impact assessment to be published as the only body affected by this is defined by the Office of National Statistics (ONS) as central Government.
11. In addition, the Bill gives HM Treasury power to direct the regulator by secondary legislation to impose fees to pay for the costs of the Government's participation in international financial stability fora. As the proposed fees fall within the classification of a tax, this provision is outside the scope of the regulatory impact assessment process.

¹ The White Paper IA estimated the total private cost to UK banks of the whole ICB package as falling in the range £4bn-£7bn per year and the GDP cost in the range £0.6bn-£1.4bn per year. The electronic version of the Banking Reform White Paper and accompanying IA can be found at <https://www.gov.uk/government/publications/banking-reform-delivering-sustainability-and-supporting-a-sustainable-economy>

Description of options considered

Option 1: Baseline (“Do nothing”)

12. It is important to isolate the incremental impact of the measures in the Bill from that of other regulatory changes related to financial services that are proceeding independently of the Bill. The Government has therefore constructed for this IA a ‘do nothing’ option in which none of the measures in the Bill are implemented, but in which wider regulatory changes go ahead, including:

- Implementation of the Basel III Accord (through the EU Capital Requirements Directive (CRD IV)/ Capital Requirements Regulation (CRR)), including higher capital requirements for banks and tighter definitions of capital;
- Introduction of a Globally Systemically Important Banks (G-SIB) capital surcharge to impose additional capital requirements on the largest and most systemically important banks;
- Liquidity requirements imposed by the Prudential Regulation Authority (PRA); and
- Reform of the UK regulatory architecture through the Financial Services Act.²

13. This option will serve as a baseline for assessing the incremental impact of the measures in the Bill. For the purposes of this IA, the baseline option has zero costs and zero benefits relative to itself.

Option 2: Implement Banking Reform measures

14. The Government’s lead option is to proceed with the measures in the Banking Reform Bill and consequent secondary legislation. These are:

- **Ring-fencing:** the Bill implements the ICB’s ring-fencing recommendation by creating ‘core activities’ (equivalent to ‘mandated’ activities in the ICB’s terminology) and ‘excluded activities’ (equivalent to ‘prohibited’ activities in the ICB’s terminology). The Bill provides that core activities may only be undertaken by ring-fenced banks (or by banks exempt from ring-fencing), and that ring-fenced banks may not carry on excluded activities.

Core activities will be accepting deposits, apart from the deposits of large organisations and high-net-worth individual private banking customers, which may be held outside the ring-fence. Excluded or prohibited activities will be dealing in investments as principal, transacting with financial institutions and carrying on business outside the EEA, with exceptions to allow ring-fenced banks to manage their own risks prudently.³

Ring-fencing will thus require that retail deposits are separated from wholesale/investment banking activities (except in banks below the *de minimis* exemption threshold). Ring-fenced banks will have to meet regulatory requirements (including on capital and liquidity) on a standalone basis, and be legally, economically and operationally independent of the rest of the wider corporate group. This will insulate core activities against shocks originating elsewhere in the global financial system and make it easier to preserve the continuity of those activities, while managing the failure of financial institutions in an orderly way, without injecting taxpayer funds.

² More details on these regulatory reforms can be found at the following links:

Basel III Capital Requirements, Globally Systemically Important Banks (G-SIB) Surcharge and Counter-Cyclical Buffer -

<http://www.bis.org/publ/bcbs189.pdf> and <http://www.bis.org/publ/bcbs207.pdf>

PRA Liquidity Regulations - http://www.fsa.gov.uk/pages/library/policy/policy/2009/09_16.shtml

FPC Macroprudential Powers – <http://www.bankofengland.co.uk/financialstability/Pages/fpc/default.aspx>

The Financial Services Act – <https://www.gov.uk/government/policies/improving-regulation-of-the-financial-sector-to-protect-customers-and-the-economy>

³ For further details of the legislative mechanics of the Banking Reform Bill, see the Explanatory Notes published alongside the Bill. See Annex A below for more information on the regulatory assumptions made for the purposes of this IA.

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The Bill will give the Treasury the power to make regulations requiring UK banks to separate their pension scheme liabilities such that a ring-fenced bank is not liable for the pension liabilities relating to other members of its group.

In line with the recommendation of the Parliamentary Commission on Banking Standards (PCBS), the Government has brought forward amendments to the Bill to provide for a reserve power to require an individual banking group to separate completely, including by divesting itself of its ring-fenced bank. Subject to approval by the Treasury, the regulator will be able to require full separation of an individual group if it is of the opinion that this is necessary to ensure the independence of the ring-fenced bank or the objectives of the ring-fence.

- **Preferring deposits** eligible for protection under the FSCS (**'depositor preference'**): The Bill will provide that all deposits which are eligible for compensation under the FSCS ('insured deposits') are preferential debts, so that, in the event of the insolvency of a bank, they will rank ahead of the claims of other unsecured creditors. Since the FSCS will take on the claims of insured depositors, the effect will be to increase the amount which the FSCS is able to recover in the event of bank failure, reducing the amount required from surviving banks and consequently limiting the threat of contagion or contingent taxpayer liability.
- Setting the **framework for the imposition of debt requirements** by the regulator on banks. The Bill gives the Treasury a power to make an order regulating the way in which the regulator may exercise its powers under the Financial Services and Market Act 2000 to impose debt requirements on banks (including ring-fenced banks). The Government considers that it will be possible to use this power to implement loss absorbency requirements in line with the ICB's recommendations.

Banks should be required to hold sufficient loss-absorbing capacity to ensure that they are more resilient against failure and that, if they do fail, losses can be borne by their shareholders and uninsured unsecured creditors rather than falling on the taxpayer.

Enabling nature of the Banking Reform Bill

15. The Bill is to some extent an enabling Bill, giving powers to HM Treasury to impose requirements on UK banks (for example specifying what activities may not be conducted by ring-fenced banks) by secondary legislation. The Government is publishing draft secondary legislation for consultation in July 2013. As the provisions of primary and secondary legislation and regulatory rules are interdependent, it is only possible to assess the impact of primary and secondary legislation as a single package.
16. This IA therefore applies both to the Banking Reform Bill for its introduction to the House of Lords, and to the draft secondary legislation being published for consultation. The IA assumes that the draft secondary legislation that is published for consultation is introduced in its current form (the Bill having received Royal Assent as introduced to the House of Lords). See Annex A below for detailed assumptions given to the major UK banks for modelling purposes.
17. The Bill also requires the regulators to make rules, for example establishing the restrictions on financial relationships between ring-fenced and non-ring-fenced banks necessary to achieve the degree of independence for ring-fenced banks specified in the Bill. For the purposes of estimating the costs and benefits of the Banking Reform measures, this IA assumes that the necessary rules are in place. When making rules, the regulators are required to publish rules in draft, with accompanying cost-benefit analysis.

Costs and benefits

Summary of the costs and benefits of each policy option

Option 1: Do nothing (Baseline)
The baseline policy option has zero incremental costs and benefits.
Option 2: Implement Banking Reform measures
<p><u>Monetised costs (gross):</u> Annual total private cost to UK banks: £1.7bn – £4.4bn; <u>Reduction in long-run GDP level: 0.04% – 0.16%;</u> (equivalent to average annual GDP cost of £0.4bn – £1.9bn); Present Value GDP cost: £7.9bn – £37.1bn; Reduction in annual tax receipts: £150m – £690m; Reduction in value Government shareholdings in Royal Bank of Scotland (RBS) and Lloyds Banking Group: £1.6bn - £4.5bn.</p> <p><u>Monetised benefits (gross):</u> <u>Illustrative increase in long-run GDP level from greater financial stability: 0.47%;</u> (equivalent to annual GDP increase of £7.1bn in 2011-12 terms); Illustrative Present Value GDP benefit: £135bn.</p> <p><u>Non-monetised benefits:</u> Improved resilience and resolvability of UK banks will, by curtailing perceived implicit government guarantees, reduce moral hazard and thus incentives for banks to take excessive risks. Greater financial stability will support greater economic stability. Curtailing the perceived implicit government guarantee will reducing the Government’s contingent liabilities to the banking sector, supporting lower Government borrowing costs.</p>

18. All estimates in the table above are incremental to the ‘Do nothing’ baseline option described in paragraphs 12-13 above (which has zero costs and benefits relative to itself). The sections below discuss the costs and benefits of proceeding with the Bill measures.

Costs of option 2: Implement Banking Reform measures

19. The Government's estimates of the costs of implementing the ring-fencing and depositor preference measures in the Banking Reform Bill, are set out in the following sections:

- Overview: how costs arise;
- Private cost to UK banks;
- Social cost (cost to GDP); and
- Cost to the Exchequer.

Overview: how costs arise

20. The first round cost impact of implementing the Banking Reform measures will be through an increase in the private costs of UK banks. The second round impact will be the impact on first GDP and then the Exchequer as a result of the increase in private costs to banks.

Private cost to UK banks

Curtailment of the perceived implicit government guarantee

21. The principal economic cost to UK banks of implementing the Banking Reform measures will arise from the curtailment of the perceived implicit government guarantee enjoyed by banks seen as 'too big to fail'. To the extent that investors believe that the Government would not be willing to see a bank fail, that bank enjoys a perceived implicit guarantee, which acts to lower the bank's cost of funding as well as the level of capital that the market would require it to hold. Academic estimates of the value of this perceived implicit guarantee range from £6bn to £100bn per annum.⁴

22. Some progress has been made in curtailing the perceived implicit guarantee; it can be argued that the implementation of the Special Resolution Regime (SRR)⁵ has already sent a strong signal to the market that banks cannot expect to benefit from taxpayer-funded bail-outs to the same degree as previously. But there is no consensus on the extent to which this has already been priced in by the market. Implementation of the measures in the Banking Reform Bill will curtail the perceived implicit government guarantee, by making banks more resilient and resolvable.

Operational cost of structural separation

23. There will be some costs to banks from a reduction in the diversification of their activities, and thus a reduction in their ability to cross-subsidise or cross-sell services that end up on different sides of the ring-fence. The value of the benefit universal banks currently receive from diversification is, however, debated and the ICB struggled to quantify it. In addition to the cost of this loss of diversity, banks will face ongoing administrative costs of operating additional legal entities (such as the costs of operating separate IT platforms), and upfront costs of restructuring (such as the costs of establishing new subsidiaries).

Total cost to GDP (social cost)

24. In the first instance, an increase in banks' costs will have little or no impact on GDP as these costs to banks create benefits to other agents in the UK economy. For example, a rise in the cost of wholesale funding will represent an increase in a cost to banks, but also an increase in income to bank creditors. If there were no change in behaviour from this re-pricing of bank wholesale funding, there would be no change in GDP.

25. The impact on GDP materialises as banks, individuals and businesses change their behaviour in response to this transfer of costs. Faced with higher private costs, banks may pass through costs on to customers by increasing the price of credit they extend to individuals and businesses. This would act to increase the cost

⁴ 'The Implicit Subsidy to Banks', Financial Stability Paper 15, Bank of England, May 2012.

⁵ For more details on the SRR see: http://www.bankofengland.co.uk/financialstability/Pages/role/risk_reduction/srr/default.aspx

NO SECURITY LABEL

of servicing debt for households and the cost of capital for business, impacting household consumption and business investment, and hence GDP. Alternatively, banks may pass a portion of the cost onto shareholders (in lower returns) or employees (in lower pay). This could have an impact on GDP should the change in shareholder or employee income lead to a change in their consumption and investment behaviour.

26. The social cost is the most important cost for the purposes of the Government's cost/benefit analysis. This is because the benefits of greater financial stability (the objective of the policy) will be to the economy as a whole. For a discussion of the benefits of the measures in the Banking Reform Bill, see paragraphs 83-94 below. The appropriate comparison for cost/benefit analysis is therefore between the GDP cost and the GDP benefit of the Bill measures.

Cost to the Exchequer

27. The cost to the Exchequer is in two components: the impact on annual tax receipts, and the impact on the value of Government shareholdings in partially publicly-owned banks such as RBS and Lloyds Banking Group.
28. The impact on tax receipts flows from the cost to GDP. In the long run, the principal determinant of tax receipts is GDP, so all else being equal a lower level of GDP will result in lower annual tax receipts for the Exchequer. Higher private costs to banks that are partially publicly owned (such as RBS and Lloyds Banking Group) could also impact on their share prices, and thus the value of the Government's shareholdings.

Gross costs

29. It is important to note that the costs described here are gross costs, i.e. they take no account of the benefits to society, GDP or the Exchequer of greater financial stability as a result of implementing the measures in the Banking Reform Bill. The benefits of the policy option are discussed at paragraphs 83-94 below.

Private cost to UK banks

A. Summary of private cost to UK banks

30. The Government estimates that the total private cost to UK banks of the ring-fencing and depositor preference measures in the Bill will be in the range **£1.7bn - £4.4bn per year**, with one-off transitional costs in the range £0.5bn-£3bn. Establishing a framework for the imposition of debt requirements by the regulator will not in itself create any additional costs to UK banks.
31. The following sections set out the Government's estimates of the private costs to UK banks of the measures in the Bill, discussing in turn the costs of:
- Ring-fencing;
 - Depositor preference; and
 - Framework for imposition of debt requirements by the regulator.

B. Ring-fencing

I. Summary of private cost

32. The Government estimates that the aggregate private cost of ring-fencing to UK banks will be in the range £1.5bn-£4bn per year, with one-off transitional costs in the range £0.5bn-£3bn. This is slightly lower than the estimate included in the previous IA, as a result of banks' remodelling of the impact of Banking Reform measures on their businesses. See paragraphs 43-45 below.

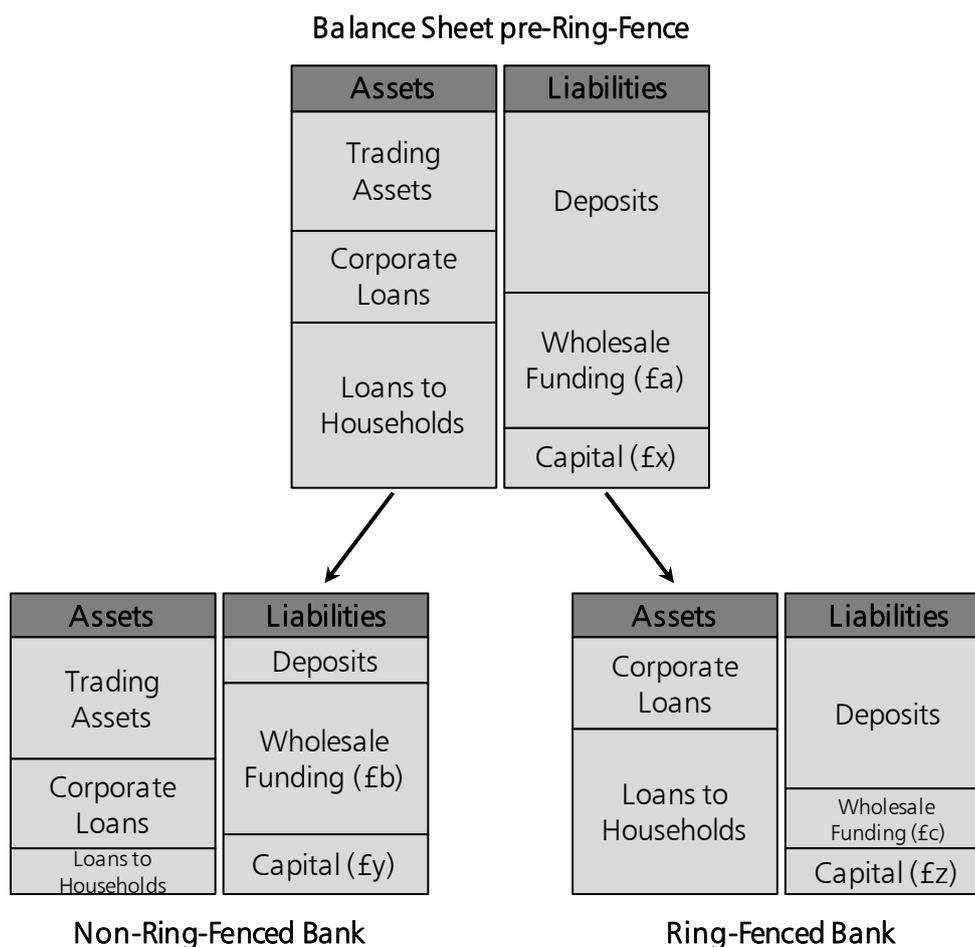
II. Modelling the cost to UK banks of ring-fencing

33. The costs to banks of ring-fencing have been modelled in four components:
- **Capital Costs:** to meet separate capital requirements for ring-fenced and non-ring-fenced banks, banking groups may need to issue more capital in aggregate than in the baseline scenario, generating a gross ongoing cost (which may to some extent be offset by changes in funding cost).
 - **Funding Costs:** following ring-fencing, the ongoing cost of wholesale funding for non-ring-fenced banks may rise, as deposits are separated into the ring-fence and if investors perceive non-ring-fenced banks as riskier and more volatile. Conversely, however, the funding cost of ring-fenced banks may fall, if investors see them as better capitalised and less volatile. There may also be a quantity effect on banks' funding requirements as higher levels of capital displace some wholesale debt on the liabilities side of their balance sheets.
 - **Operational Costs:** banks may incur additional ongoing operating costs from ring-fencing, for example through needing to operate separate administrative systems for ring-fenced and non-ring-fenced entities.
 - **Transitional Costs:** restructuring in order to meet ring-fencing requirements may involve one-off costs in creating new legal entities and administrative structure, transferring business units etc.
34. The **capital and funding costs** of ring-fencing were estimated by drawing on the results of extensive scenario modelling commissioned from the major affected UK banks, simulating the effects of ring-fencing. The banks were asked to model their future balance sheets first under the regulatory conditions set out for the baseline scenario (Option 1), and then in a scenario in which ring-fencing was in force (according to the regulatory assumptions described in paragraphs 46-47 below). To reflect the flexible nature of the ring-fence, banks were left free to decide whether permitted activities (for example household and corporate lending, large corporate deposits) were to be placed in their ring-fenced or non-ring-fenced entities, according to their own preferred commercial strategies. Since the publication of the previous IA, the Government asked the banks to refresh their modelling: this has resulted in some changes to the modelled impact: see paragraphs 43-45 below.

35. On the basis of the banks' modelling, the Government calculated the aggregate additional capital required by all the affected banks: multiplying this by an assumed range for the cost of capital gave the incremental annual capital cost. The banks also modelled the incremental impact on their costs of funding of the Banking Reform measures, and estimated the transitional and ongoing operational costs. See Box 1 below for further explanation of the calculation of capital and funding costs.

Box 1: An illustration of the method for calculating the capital and funding costs

The Government asked the major affected banks to model their future balance sheets, first under a 'baseline' scenario, and then after a separation into ring-fenced and non-ring-fenced banks. This separation of assets and liabilities can be represented in the schematic diagram below:



(Diagram NOT drawn to scale)

Incremental capital cost

The incremental capital cost is calculated in two stages:

$$\text{Change in quantity} = (\text{£}y + \text{£}z) - \text{£}x$$

$$\text{Capital cost} = \text{Change in quantity} \times \text{cost of capital}$$

The assumptions for the cost of capital are given in paragraph 48 below.

Incremental funding cost

The incremental wholesale funding cost can be conceived using the following equations:

$$\text{Wholesale (w/s) funding cost} = ((\text{£}b \times \text{cost of w/s funding}_b) + (\text{£}c \times \text{cost of w/s funding}_c)) - (\text{£}a \times \text{cost of w/s funding}_a)$$

Where:

$$\text{Cost of w/s funding}_b = \text{cost of w/s funding}_a + (\text{Non-ring-fenced bank spread})$$

$$\text{Cost of w/s funding}_c = \text{cost of w/s funding}_a + (\text{Ring-fenced bank spread})$$

These equations take account of both the impact on overall funding costs of changes in the quantity and changes in the price of different classes of wholesale funding (including subordinated, senior unsecured and senior secured debt). Some banks modelled these two impacts sequentially, calculating first the quantity effect, based on changes to their balance sheets, and then the price effect, using a range of assumptions for the change in price, as discussed at paragraph 52 below.

36. Separately, the major affected banks were asked to provide estimates of the incremental **operational and transitional costs**. From these estimates, the Government drew ranges for the costs per bank, and calculated aggregate cost ranges across all affected banks.
37. According to this modelling approach, the breakdown of private costs of **ring-fencing** into capital, funding, operational and transitional costs is as summarised in the table below:

Ongoing Costs, per year	LOW	HIGH
Capital	£1.3bn	£2.6bn
Funding	£70m	£890m
Operational	£150m	£530m
TOTAL ONGOING COST, per year	£1.5bn	£4bn
Transitional Cost (one-off)	£0.5bn	£3bn

III. Restructuring of bank pension schemes

38. To ensure the ring-fence is effective in curtailing the perceived implicit government guarantee of large UK banks, it is important to ensure the ring-fenced bank is economically independent of other entities in its banking group. In line with the ICB's recommendation and the Banking Reform White Paper, the Government will require large UK banks to ensure that a ring-fenced bank is not liable for the pension liabilities relating to other members of its group. The Bill will give the Treasury the power to make regulations requiring UK banks to separate their pension scheme liabilities such that a ring-fenced bank is not liable for the pension liabilities of other members of its banking group.

39. It is important to note that the large UK banks affected are currently running deficits both on a “buyout” basis⁶ and an ongoing funding “technical provisions” basis⁷ which pre-date and are independent of the Government’s ring-fencing proposals.

i. Options for restructuring of pension schemes

40. While requiring that ring-fenced banks should not be liable for the pension liabilities of other entities in its banking group, the Government intends to give as much flexibility to banks and their trustees to undertake this restructuring. The Government expects the banks and their trustees to determine the optimal solution for their respective schemes and to ensure that their pension scheme is restructured in a way that ensures the ring-fenced bank’s economic independence. Given this flexibility, the details of the final outcome of how each scheme will be restructured cannot be predicted by the Government.

41. The two options the Government considers most likely to be undertaken by the banks to achieve this necessary restructuring are:

- **“Splitting”** a scheme - under this scenario, a second pension scheme is established with one or more employers having assets and liabilities transferred to it from the existing scheme in a way that extinguishes their liability to the existing scheme. This would remove the potential for liabilities of the non-ring-fenced bank to fall on the ring-fenced bank and vice versa.
- **Segregation** of a scheme - this is where a pension scheme is divided into two or more separate sections that cannot be used to cross-subsidise each other. Each employer will have liability only to a particular section of the scheme that has clearly identifiable assets and liabilities.

ii. Cost of separation

42. The Government believes there will be three principal costs of removing a ring-fenced bank’s liability for the pension liabilities of other entities in its banking group:

- **Initial separation cost** - an employer withdrawing from a pension scheme, or a section of a scheme, is required to pay into the scheme compensation for giving up its previous liabilities to the scheme – known as the section 75 (s. 75) debt.⁸ But if the departing employer takes with it some or all of its previous liabilities (into a new scheme or section), its s. 75 debt may be reduced by a ‘relevant transfer deduction’. If the departing employer took its full share of the existing scheme’s liabilities, the s. 75 payment is likely to be nominal. However, the exact level of the s. 75 payment would depend on details of how each pension scheme was restructured, and the resulting negotiation between banks and their trustees on the value of any payment required. Given the uncertainties involved, it is not possible for the Government to quantify the initial separation cost, so this cost has not been monetised in this IA.
- **Ongoing impact on pension scheme covenant** - the “employer covenant” is a term used to describe an employer’s legal obligation to a pension scheme (or a section of a pension scheme) and its ability to fund the pension scheme now and in the future. The employer covenant is assessed by each scheme’s trustees. The stronger the employer covenant, the more optimistic the trustees may be about the assumptions they make for future investment income from the assets of the scheme. A stronger covenant may therefore result in a lower scheme deficit to be funded by the employer.

It is anticipated that employer covenants for each of ring-fenced and non-ring-fenced bank are likely to weaken after the corporate restructuring to separate the ring-fenced and the non-ring-fenced bank as each scheme, or section of a scheme, is now backed by fewer employers. In addition, the covenant may weaken as the claims on an insolvent bank of the bank’s pension scheme to settle any s. 75 pension debts triggered by the bank’s insolvency, become subordinated to FSCS-protected deposits (or to the FSCS standing in their place) in insolvency (see paragraphs

⁶ The amount required to buyout a pension scheme’s liabilities with an insurer

⁷ The amount required to ensure that the scheme will be able to pay its liabilities over the longer term assuming returns on scheme assets.

⁸ <http://www.thepensionsregulator.gov.uk/guidance/multi-employer-schemes-and-employer-departures.aspx>

59-62 below for the impact of depositor preference). To some extent these effects are likely to be offset by the improved resilience of the banks following implementation of the Banking Reform measures. For example, ring-fenced banks will be better capitalised and insulated against global market shocks: this should reduce the probability of their becoming insolvent, which (all else equal) would increase the strength of the employer covenant.

How far the covenant is affected will however depend on the exact details of how each scheme is restructured, which cannot be predicted in advance. In addition, the extent to which a weakening of the covenant will lead to higher costs to banks is dependent upon the negotiation between banks and their trustees, which is uncertain. Given this uncertainty, it is not possible for the Government to model these costs and so they have not been monetised in this IA.

- **Administrative cost** - there will be one-off costs associated with the segregating or splitting of the liabilities to the pension scheme, including costs such as legal, actuarial and administration fees. Estimates provided by the large UK banks and the trustees of their pension schemes suggest this impact would be no greater than £50m across all the affected banks in relation to the ring-fencing of the pension liabilities.

IV. Assumptions, risks and sensitivities: Ring-fencing

i. Refresh of banks' modelling

43. Since the publication of the previous Banking Reform IA on 4 February 2013, the Government asked the major UK banks to refresh their modelling of the impact of the Banking Reform measures on their businesses. This has allowed the banks to update their cost estimates in the light of more recent assumptions about the macroeconomy and their wider business strategy, and of further detail on the calibration of regulatory requirements, for example from the publication of the Banking Reform Bill itself.
44. This refresh of banks' modelling has yielded an estimated aggregate private cost of the Banking Reform measures that is slightly lower than that included in the previous IA, though still of a comparable scale overall.
45. The reduction in banks' estimates of the cost to their businesses may be the result of a number of factors. To some extent changes in market conditions (for example a reduction in wholesale funding market stress since 2012) or in the macroeconomy will have affected banks' modelling of both baseline and post-Banking Reform scenarios. Changes in banks' business strategies may also have had an impact. For example, some banks have announced a greater focus on their core retail and commercial businesses or a reduced reliance on wholesale funding: such changes could reduce the modelled incremental cost of implementing ring-fencing and depositor preference. Where these changes in business models were primarily anticipating implementation of the Banking Reform measures, banks' modelling may understate the private costs of those measures (as some costs will have been crystallised in banks' baselines). However, if business model changes were driven by other factors, such as wider market conditions, the impact of other regulatory reforms or different strategic choices made by bank managements, then these other factors will have mitigated the incremental costs of Banking Reform.

ii. Ring-fencing requirements determined by secondary legislation and regulatory rules

46. As noted above (paragraphs 15-17), this IA assumes that secondary legislation will be made in line with the draft secondary legislation published for consultation in July 2013. For the purposes of their modelling, the banks needed to make certain assumptions about the content of that secondary legislation before drafts were available. To make this possible, the Government supplied the banks with a set of assumptions about the provisions of the secondary legislation: these assumptions are listed at Annex A below. In some cases, banks were unable to use prescribed assumptions (for example because banks do not currently collect the data necessary to measure their compliance with some provisions of the secondary legislation), so had to use their own assumptions or definitions. However, the Government believes that the banks' modelling assumptions broadly reflect the intentions of the secondary legislation, and that the effect on modelling results of applying the exact provisions of the draft secondary legislation instead would be relatively minor.

47. The banks also needed to make assumptions about the content of regulatory rules. Here, the Government asked them to assume that rules were made such as to ensure the outcomes prescribed in the Bill, for example on the degree of independence of a ring-fenced bank from the rest of its corporate group.

iii. Equity capital assumptions

48. For the annual cost of equity capital, an assumed range of 8 per cent – 16 per cent has been used, a range based around a long-run historical average cost of equity⁹ to banks of 11.5 per cent, calculated by the Prudential Regulation Authority (PRA).¹⁰

49. It has also been assumed that the additional capital required to comply with ring-fencing is available to banks. The Government estimates that the total amount of extra equity required by UK banks is approximately £16.4bn. Banks have a range of options for increasing their equity levels, including raising capital externally (for example by issuing new shares) and generating equity internally through retained earnings. With several years until the final deadline for compliance, the Government is confident that banks will be able to raise the additional equity required.

50. To reflect the likelihood that bank managements would in practice operate a little above regulatory minimum capital requirements, the Government asked the banks to assume a management buffer of 1% of risk-weight assets (RWAs) above the regulatory minimum core equity (CET1) requirement, and a management buffer of 2% of RWAs above their regulatory minimum Primary Loss-Absorbing Capacity (PLAC) requirement.

iv. Wholesale funding cost assumptions

51. The impact of ring-fencing on banks' funding costs is difficult to forecast precisely. The reduction in the perceived implicit government guarantee should result in an increase in the price of bank funding. Among banks, as discussed in paragraph 33 above, it is likely that ring-fencing will increase the cost of funding for non-ring-fenced banks, to reflect their greater revenue volatility, while both ring-fenced and non-ring-fenced banks may see a further increase in funding costs as a result of reduced revenue diversification. Changes in banks' balance sheet structures may also affect the annual cost of funding by changing the amount of wholesale funding that different banks require: a reduction in banks' wholesale funding requirements (for example as a result of increasing their capital levels) would to some extent offset the impact of higher funding prices.

52. For their modelling of the impact of ring-fencing, the banks typically assumed that the price of debt issued by ring-fenced banks would remain the same, and used a range of assumptions about the change in the price of different classes of debt issued by non-ring-fenced banks. The Government drew on these to produce high and low assumptions for the impact on banks' costs of wholesale debt, summarised in the table below. The Government applied the highest and lowest of these assumptions to each bank to estimate the aggregate incremental funding cost.

Class of Funding	Change in price, bps	
	LOW	HIGH
Subordinated Debt	+75bps	+150bps
Long-Term Senior Unsecured Debt	+25bps	+100bps

53. It is important to note that these estimated impacts on banks' funding costs do not include the impact of bail-in. This is because the Bill does not include provision for a bail-in tool: as noted in paragraph 8 above, it is expected that bail-in will be implemented via transposition of the European RRD. This is one area of

⁹ Rather than the opportunity cost of equity over debt.

¹⁰ Formerly the Financial Services Authority (FSA). 'Strengthening Capital Standards 3 - further consultation on CRD3', FSA consultation paper CP11/09

difference between the cost estimates in this IA and those in the IA accompanying the Banking Reform White Paper, which covered the full ICB package, including bail-in.¹¹

v. Reserve power to require full separation

54. In line with the recommendation of the PCBS, the Government has amended the Bill in the House of Commons to provide for a reserve power for the regulator, with the consent of the Treasury, to require an individual banking group to separate completely its retail and wholesale activities, if this is necessary to ensure the independence of the ring-fenced bank.
55. Imposing a requirement for complete separation would carry substantial costs for the individual group concerned, both in the short term from executing the separation and in the longer term from the restrictions on the group's business model that complete separation would involve. The Government expects that the prospect of these costs would provide a powerful incentive for groups to ensure that their ring-fenced banks are independent of the wider group and that they do not engage in conduct likely to undermine the continuity of core services in the UK. Thus even if no group is actually required to separate, the reserve power will serve to reinforce the ring-fence. For the purposes of this IA, banks were asked to assume a robust ring-fence, with ring-fenced banks independent of the rest of their groups in accordance with the principles set out in the Bill. The banks' modelling thus already captures the ongoing deterrent effect of the reserve power, so the addition of the reserve power does not generate an additional cost.

vi. Operational costs and tax implications

56. Based on estimates supplied by banks, the Government has assumed that operational costs for the large UK banks of complying with ring-fencing range from £30m - £105m per bank per year. Costs are likely to vary depending on banks' business models, including their choices over the location of the ring-fence and of operational services such as data centres and other IT infrastructure.
57. The Government has identified potential tax implications of implementing the ring-fence, including how banks use their trading losses to offset profits in future years (as ring-fenced banks will be separate entities from non-ring-fenced banks) and the impact of removing ring-fenced banks from their VAT groups. The Government is continuing to consult with industry on options to mitigate the potential costs of these tax implications, and expects to bring forward measures in a future Finance Bill. The costs arising from tax policy are out of scope of this IA any case, as this assesses only the costs and benefits of regulation not tax.

vii. Transitional costs

58. Some restructuring will be required in order for banks to comply with the ring-fence. This will involve some up-front cost, though it should be noted that banks may already be required to carry out some restructuring in order to meet the requirements of resolution plans drawn up by the resolution authorities. The incremental costs of restructuring to comply with ring-fencing will vary from bank to bank. On the basis of estimates provided by the banks, the Government has assumed a restructuring cost per bank in the range of £100m-£600m.

C. Depositor preference

I. Summary of private cost

59. The Government estimates that the aggregate private cost of depositor preference to UK banks will be in the range £200m-£380m per year.

II. Modelling the private cost of depositor preference

60. Preferring FSCS-protected deposits (and thus the FSCS standing in their place) in the event of a bank becoming insolvent will likely reduce the expected recovery of the bank's other (current) senior unsecured

¹¹ The White Paper IA estimated the total private cost to UK banks of the whole ICB package as falling in the range £4bn-£7bn per year and the GDP cost in the range £0.6bn-£1.4bn per year. The electronic version of the Banking Reform White Paper and accompanying IA can be found at <https://www.gov.uk/government/publications/banking-reform-delivering-sustainability-and-supporting-a-sustainable-economy>

creditors, who will likely demand a higher price to compensate them for the increased risk in lending to the bank. Thus the cost of wholesale funding for the bank will likely rise to reflect the higher expected loss for senior unsecured creditors in the event of a bank failing.

61. The Government asked the major UK banks to include preference for FSCS-protected deposits in their modelling of the impact of the Banking Reform measures. The banks produced a range of estimates for the impact of the higher expected loss on the price of wholesale funding, up to an increase of 100bps in the cost of senior unsecured debt. The banks noted, however, that this higher expected loss would be the result not just of depositor preference, but also of other measures to ensure that losses can fall on banks' wholesale creditors in the event of failure, in particular bail-in. As noted above, the Bill does not include bail-in, which the Government expects will be delivered through European legislation (the EU Recovery and Resolution Directive (RRD)): the costs and benefits of bail-in are therefore outside the scope of this IA.
62. Although isolating the funding cost impact of depositor preference from that of bail-in is difficult, it is therefore likely that the banks' estimates overstate the impact of depositor preference. For the purposes of this IA, the Government has therefore used an assumed range for the impact of depositor preference on the cost of wholesale funding, of 25bps to 50bps.

D. Framework for imposition of debt requirements

I. Summary of private cost

63. The ICB recommended that large banks be required to maintain Primary Loss-Absorbing Capacity (PLAC) of at least 17 per cent of RWAs, consisting of regulatory capital plus debt that is clearly subject to bail-in.¹² Minimum regulatory capital requirements will be set in EU law (CRD IV/CRR, which will implement the Basel III minimum capital requirements in the EU). It is expected that the European RRD will also require member states to impose requirements on banks to hold minimum levels of loss-absorbing instruments: the Government expects that this will be the means by which the ICB's recommendation on PLAC will be delivered.
64. The Bill will give HM Treasury power to establish the framework for the regulator to impose minimum debt requirements, subject to the final form of the RRD. Establishing a framework for regulatory action is not expected of itself to impose any additional costs on UK banks (and when exercising its powers, the regulator will need to consider the costs and benefits of any potential course of action).

II. Assumptions, risks and sensitivities: Framework for debt requirements

i. Regulatory assumptions on loss-absorbency

65. To be able to model their balance sheets in a ring-fencing scenario, it was necessary for banks to make assumptions about the minimum requirements for regulatory capital and PLAC, imposed under European legislation (CRD IV, CRR, RRD). For the purposes of this modelling, therefore, the Government asked all the major UK banks to assume minimum loss-absorbency requirements equal to the Basel III minima for capital and 19 per cent of RWAs for total PLAC (equal to a regulatory minimum of 17 per cent plus a 2 per cent 'management buffer' above this minimum). More detail on the assumptions for loss-absorbency is included in Annex A below.

E. General assumptions for modelling private cost to banks

Static modelling of bank balance sheets

66. The modelling of banks' balance sheets for the purposes of this IA was static, i.e. it took no account of potential behavioural responses by either bank management or bank customers. So the only changes to banks' balance sheets were those required to comply with ICB requirements or to meet perceived market expectations (for example sufficient capital to ensure a bank could attain a high enough credit rating in

¹² Provided they satisfied minimum regulatory capital requirements, banks would have the choice to meet any shortfall between these capital requirements and their PLAC requirement through holding additional regulatory capital or eligible debt instruments.

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order to operate effectively in the market: in both baseline and ring-fence scenarios, some banks assumed that market pressures would require them to hold capital above regulatory minima).

67. In practice there may be more extensive behavioural responses both from customers (switching between banks, or between ring-fenced and non-ring-fenced banks) and from banks (adjusting their business lines in response to market dynamics and the actions of competitors). These behavioural responses are inherently uncertain, and so difficult to quantify with confidence. No account has therefore been taken of these behavioural responses in modelling for this IA.

Crisis response and stress

68. For the purposes of this IA, modelling has focussed exclusively on the long-run costs of the measures in the Bill in a 'steady state', i.e. when markets are functioning normally. It is not possible to model with any precision the impact of these measures in a stress scenario, as defining what constitutes a stress scenario, and determining the extent to which such a scenario has an effect on different banks in the market, are subjective and highly sensitive to assumptions. The impact of these measures in a stress scenario will also likely vary significantly from bank to bank.
69. In theory, curtailing the perceived implicit government guarantee should exaggerate the movement of funds in a stress from banks perceived by market participants as high risk to those perceived as less risky. Such movement could be seen as encouraging more efficient pricing of funds in a stress, and could lower the cost of funds for low-risk banks. At the same time, ring-fencing should make individual banks and the system as a whole more resilient to stress, as a result of higher capital levels and reduced channels of contagion between banks. This should reduce the extent to which funding costs would rise in a stress scenario. There are, however, too many uncertainties involved for meaningful modelling of these different effects, which are therefore excluded from this IA.

Social cost (cost to GDP)

Summary of GDP cost

70. On the basis of banks' refreshed modelling of the impact of the Banking Reform measures on their businesses, the increase in private costs is estimated to produce a gross¹³ **reduction in the long-run level of GDP in the range 0.04% to 0.16%**, equivalent to an average¹⁴ annual cost to GDP of **£0.4bn - £1.9bn** relative to the 'regulatory environment' baseline scenario. The present value cost to GDP is estimated at £7.9bn - £37.1bn. There is an increase in uncertainty in the estimate with a somewhat higher bound compared with that included in the previous IA. The range has broadened due to the particularities of the model used among other factors including interactions between changes to different elements of the overall cost within banks' refreshed balance sheet modelling. As discussed in paragraphs 43-45 above, changes in banks' refreshed balance sheet modelling may reflect both changes in external market conditions, and changes in banks' own commercial strategies.

Modelling the cost to GDP

71. Having estimated the aggregate private cost to UK banks of implementing the measures in the Bill, the Government then estimated the impact of these costs on GDP from modelling by the PRA using the NiGEM model. NiGEM is an empirically-based econometric model that estimates the impact on economic output as a result of changes to banks' minimum capital ratios, funding and operational costs. The model uses long-run historical data that capture the various channels (e.g. changes in the consumption behaviour of economic agents such as bank customers or bank shareholders) through which changes to bank private costs transmit to changes in GDP. Paragraphs 24-26 above describe how the GDP cost arises in more detail.

Assumptions, risks and sensitivities

NiGEM modelling of long-run GDP cost

72. NiGEM calculates the GDP cost on the assumption that banks pass on to consumers near to 100% of the additional private costs to banks, reflecting the historical data that underpins the model. This suggests that little, if any, private costs will directly transmit to banks' profits.¹⁵ The Government recognises that using historical evidence may not truly reflect future trends, and so the pass through in the future may not be the same. Also, how banks pass on any increase in their private costs is a commercial decision and so cannot be forecast with certainty.

73. The key inputs to the NiGEM model are the changes in banks' capital ratios and incremental funding, operational and transitional costs. NiGEM models the impact of changes to these variables on a forecast GDP path: for these purposes, the following assumptions were made about the timescales over which the different bank costs were incurred:

- capital ratios increase steadily year on year until reaching the point at which banks hold sufficient capital to meet the policy requirements by the deadline for compliance in 2019. From this point, capital ratios remain constant;
- funding costs increase steadily year on year over the transition period until 2019, after which they are constant year on year;
- transitional costs are incurred in the first two years of the transition period of the policy; and
- operational ongoing costs are zero in the first two years, but are then constant each year thereafter.

¹³ i.e. not taking account of the benefits to GDP of the measures in the Bill.

¹⁴ Over a 30-year forecast period: see 'Calculating present value of GDP cost' section.

¹⁵ Though there could be a second-round indirect impact on bank profits to the extent that higher prices reduce demand for banks' products.

Calculating present value of GDP cost

74. The NiGEM modelling estimates the impact on the long-run level of GDP of the Banking Reform measures, and the average annual GDP cost. This average annual cost has then been used to calculate the present value cost to GDP for the purposes of this IA. The Government's intention is for the measures in the Bill to constitute a permanent reform to the banking sector. For the purpose of calculating the present value GDP cost and benefit, the annual GDP costs and benefits have been assumed to persist for 30 years, discounted according to HM Treasury Green Book guidance. The Government recognises that the present value costs and benefits of the policy will extend (albeit at diminishing levels) beyond the 30-year policy period chosen.

Short-run GDP impact

75. In the long run, by making UK banks more resilient and resolvable and thus curtailing the perceived implicit government guarantee, implementing the measures in the Bill are expected to support more efficient supply of credit to the economy. There is a risk that in the short term however, banks could respond to the new regulations, in particular higher capital requirements, by shrinking their balance sheets and cutting back lending to the real economy to meet the capital requirements. External estimates suggest that there can be a cost to GDP when banks are required to increase capital requirements in a short period of time.¹⁶

76. The Government has established 2019 as the final deadline for compliance with ring-fencing, in line with the ICB's recommendations. This will give UK banks several years in which to raise the additional capital required (as well as to implement the necessary restructuring). As noted in paragraph 49 above, UK banks will have a range of options for raising additional capital. The Government therefore believes that the extended timetable for compliance proposed by the ICB will mitigate the risks of banks deleveraging significantly in the short term in response to the new regulations.

¹⁶ For example, "Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements", Basel Committee on Banking Supervision, December 2010.

Cost to the Exchequer

Summary of Exchequer cost

77. Implementing the measures in the Bill is estimated to produce a gross **reduction in tax receipts of £150m-£690m per year** and a **reduction in the value of the Government's shareholdings in partially publicly-owned banks of £1.6bn - £4.5bn**, relative to the 'do nothing' baseline. The range for the estimated reduction tax receipts has broadened with a higher upper bound since the previous IA, reflecting the increase in range for the estimated GDP cost. The impact on the value of Government shareholdings has slightly decreased: see paragraphs 80-82 below.

Tax receipts

78. In the long run, the main driver of the level of annual tax receipts is the level of GDP: all else being equal, lower GDP would therefore result in lower tax receipts for the Exchequer. Having estimated the impact on GDP of the measures in the Bill as described above, the Government estimated the impact on tax receipts by applying the long-run average tax:GDP ratio (35.2 per cent over the last 20 years). This gives a reduction in tax receipts of £150m-£690m per year.

79. This approach assumes that banks pass on 100 per cent of the additional costs to customers (as assumed for the NiGEM modelling), and that the impact on tax receipts is all therefore felt through the impact on GDP. It is possible, however, that banks may choose to internalise some of the additional costs, pushing down their profits, or to pass them on to employees instead, pushing down their pay. These possible effects could push down receipts from corporation tax and income tax/NICs respectively. The extent to which banks do internalise costs (or pass them on to employees) will be a commercial decision for managements, which the Government cannot forecast with certainty. However, it is not clear that there would be a marked difference in total tax receipts if some of the additional costs were to be passed through to bank profits or bankers' remuneration, as in these circumstances the pass-through of costs to customers (and thence to GDP and wider tax receipts) would be reduced, which may offset any reduction in tax receipts specifically from banks or their employees.

Government shareholdings in RBS and Lloyds Banking Group

80. The additional costs of the measures in the Bill are likely to impact on the value of the Government's stakes in RBS and Lloyds Banking Group, although this effect may be to some extent mitigated if equity investors perceive them to be less risky following the reforms. To the extent that proceeding with the Bill reduces the eventual proceeds from selling the Government's shareholdings, there will be an additional cost to the public finances, which will crystallise when the shareholdings are sold. However, with markets already anticipating that the Banking Reform measures will be implemented, it is likely that the impact is already largely or entirely factored into the two banks' current market share prices.

81. On the basis of the impact modelling supplied by the two banks, UK Financial Investments Ltd (UKFI) applied standard bank valuation methods to estimate the potential loss to the value of the Government's shareholding in RBS and Lloyds from proceeding with the Banking Reform measures. These estimates are not of the value impact relative to today's prices: rather, they compare the projected value of the Government shareholdings with a counterfactual future scenario in which none of the Banking Reform measures are implemented. Key inputs to this modelling are the impact on the banks' return on equity (based on the banks' own modelling and estimates of changes to their funding and operating costs) and the assumed cost of equity. As with the other cost estimates for this IA, no account was taken of behavioural responses, and the impact of bail-in was not included. Unlike the modelling of GDP impact for this IA, however, these value impact estimates do not assume any pass-through of banks' costs to customers: this may lead to some double-counting of costs. Given these caveats, the UKFI estimates should be viewed as broadly indicative of the maximum extent of shareholder costs, rather than precise forecasts.

82. Applying these assumptions and methods gives an estimated reduction in the value of the Government shareholdings of £1.6bn - £4.5bn. This is slightly lower than the estimated for previous

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IAs on the Banking Reform measures, and reflects the two banks' refreshed modelling of the private cost of the Banking Reform measures on their businesses. As discussed in paragraphs 43-45 above, to some extent the banks' lower estimates of the private cost may reflect changes in external market conditions. Lower estimated private costs may also be the result of changes in the banks' strategies, for example the increased focus by RBS on its core UK retail and commercial business that has been announced since early 2012. To the extent that such changes have been driven primarily by anticipation of the Banking Reform measures, some of the value impact may have been already crystallised in the banks' baseline projections. But where changes in business strategy have been driven by other factors, the response to these other factors will have mitigated the impact of the Banking Reform measures.

Benefits of option 2: Proceed with Banking Reform Bill

Economic benefits of increased financial stability

83. The aim of the Bill is to promote greater financial stability in the UK, by curtailing the perceived implicit government guarantee to banks. Curtailing the perceived implicit guarantee will reduce banks' incentives to take on excessive risks, tackling the moral hazard that the perception of a guarantee creates. Curtailing the perceived implicit guarantee should bring a benefit to the Government's borrowing costs, as sovereign debt investors perceive a reduction in the Government's contingent liability to the banking sector (that is, a reduced likelihood of the Government needing to use public funds to support failing banks in a future financial crisis).
84. The measures in the Bill will also make banks more resilient to shocks (reducing the likelihood of bank failure) and more easily resolvable in the event of failure (reducing the impact on the economy and the public finances of bank failure). This should therefore make banking crises less frequent and less costly to the economy in the future, resulting in a higher level of GDP in the long run (and as a consequence, all else equal, higher tax receipts). Independent of the level of GDP, there is likely to be a welfare benefit from a more stable path for GDP, as individuals and firms value stability of income as well as income levels. Greater stability of GDP could also increase confidence in the economy and provide a better environment for investment.

Challenges in quantifying the benefits of increased financial stability

85. The precise costs of financial instability (and hence the benefits of greater stability) are, however, inherently uncertain, as they depend on how often financial crises will occur in the future, and what form those crises will take, which cannot be known in advance. In its final report, the ICB quoted a survey of academic estimates of the annual GDP cost of financial crises compiled by the Basel Committee on Banking Supervision (BCBS). According to the figures in this academic literature, the maximum range for the annual GDP cost is very wide, from 0.58 to 15.7 per cent of GDP.¹⁷ It is, however, clear that systemic financial crises can be extremely costly when they do occur, both to GDP and to the public finances. Drawing average values from the academic literature surveyed by the BCBS, the ICB estimated the annual cost of financial crises at approximately 3 per cent of GDP, or around £40bn in 2010 terms.¹⁸
86. The experience of the 2008-09 financial crisis further illustrates how large the costs of financial instability can be. According to the Office for National Statistics (ONS), the crisis of 2008-09 led to a peak-to-trough fall in GDP of 7.2 per cent,¹⁹ and the Office for Budget Responsibility (OBR) forecast that potential output in 2017 will be 14.6 per cent below an extrapolation of its pre-crisis trend, with actual output a further 2.3 per cent below that.²⁰ During the crisis, as GDP, and with it tax receipts, fell sharply, public spending (based on the plans set out in the 2007 Comprehensive Spending Review) increased rapidly as a share of GDP, which caused a sharp deterioration in the public finances. In addition, the public finances faced the very substantial costs of direct support to the UK financial system, which at peak amounted to over £120bn in cash support and a further £1tn in guarantees and contingent liabilities.²¹

¹⁷ ICB *Final Report*, paragraph 5.8. The ICB quoted BCBS 2010, *An Assessment of the Long-term Economic Impact of Stronger Capital and Liquidity Requirements*. In the literature surveyed by the BCBS, estimates of the probability of a financial crisis occurring in a given year ranged from 3.6 to 5.2 per cent, and estimates of the net present value cost to GDP of a crisis occurring ranged from 16 to 302 per cent. Multiplying lowest by lowest and highest and highest gives a maximum range for the annual cost to GDP ranging from 0.58 to 15.7 per cent of GDP.

¹⁸ ICB *Final Report*, paragraph 5.8 and 5.67. From the literature surveyed by the BCBS, the ICB drew average values for the probability of crises in a given year (4.5 per cent) and the net present value output cost of a crisis occurring (63 per cent). Multiplying these gives an estimated annual cost of 2.8 per cent.

¹⁹ *Quarterly National Accounts, Q12013*, ONS June 2013.

²⁰ *Economic and Fiscal Outlook*, OBR March 2013.

²¹ *The Comptroller and Auditor General's Report on Accounts to the House of Commons: The Financial Stability Interventions*, National Audit Office, July 2011.

Illustrative calculations of benefits of improved financial stability

87. Given the uncertainties around the costs of future crises, meaningful modelling of the benefits of improved financial stability is not possible. It is, however, possible to give a sense of the scale of the benefits by means of illustrative calculations.
88. Using the ICB's method for quantifying the annual GDP cost of financial crises, it is possible to show the scale of the benefits to GDP that a reduced likelihood or output cost of financial crises (that is an increase in financial stability) would bring. An illustrative calculation of this sort was included in the IA accompanying the June 2012 Banking Reform White Paper.
89. This calculation began with the ICB's estimate of the annual cost of financial crises. It first assumed that wider regulatory reforms (such as those included in the 'do nothing' baseline option) would reduce this annual cost by 30 per cent. From this baseline, if implementing the ICB's recommendations further reduced the probability of future crises by 10 per cent (by making the banking system more resilient) and reduced the GDP impact of crises by 25 per cent (by making banks more resolvable in the event of failure), this would yield an incremental benefit to UK GDP of 0.64 per cent, which would be equivalent to £9.8bn in 2011-12 GDP terms.
90. This illustrative calculation can be adjusted to reflect the exclusion from this IA of those elements of the ICB's recommendations not included in the Bill (for example bail-in). Assuming the same baseline estimates for the starting GDP cost of financial crises and for the impact of baseline regulatory changes, if the measures in the Bill further reduced the probability of crises by 10 per cent and the GDP impact of crises by 15 per cent, this would yield an incremental benefit to UK GDP of 0.47 per cent, which would be equivalent to **£7.1bn** in 2011-12 GDP terms.

Sensitivity analysis for illustrative calculation

91. An illustrative calculation of this sort is naturally sensitive to the assumptions used. A particular sensitivity is to the value used in the starting estimate of the annual GDP cost of crises for the present value GDP cost of a crisis when one does occur. If, instead of the average value calculated by the ICB (63 per cent), the maximum value included in the academic literature (302 per cent) is used, the annual cost of crises calculated using the ICB's method rises to 14 per cent of GDP. If the cost of crises is higher, then so will be the benefit of greater stability: if this higher starting cost of crises is used as an input to the illustrative calculation described in paragraph 89 above, the incremental annual benefit of the measures in the Banking Reform Bill rises to 2.2 per cent of GDP, or £34bn in 2011-12 GDP terms.
92. Conversely, if the lowest value in the academic literature for the present value cost of a crisis (16 per cent of GDP) is used in the same illustrative calculation, the incremental annual benefit of the Bill measures falls to 0.12 per cent of GDP, or £1.8bn in 2011-12 GDP terms.
93. The illustrative calculation is also somewhat sensitive to the assumed reduction in the frequency and GDP impact of crises produced by the 'baseline' regulatory reforms and by the measures in the Bill. All else equal, each 1 percentage point increase in the assumed benefit of regulatory reforms in the baseline would reduce the incremental GDP benefit of the Bill measures by around 0.01 percentage points or £100m in 2011-12 GDP terms. If the baseline reforms assumption is held constant, then each 1 percentage point change in the impact of the Bill measures on the frequency and GDP impact of future crises would cause the incremental benefit to change by 0.017 percentage points and 0.018 percentage points (£260m and £270m in 2011-12 GDP terms), respectively.
94. Despite this sensitivity to assumptions, it is clear that given the very large scale of the costs to the economy of financial crises, even relatively modest increases in financial stability can yield significant benefits to GDP. To illustrate this further, it is possible to calculate the least impact on financial stability that the measures in the Banking Reform Bill need have for them still to yield a net benefit to GDP. Assuming the same starting cost of crises and impact of baseline regulatory reforms as used in paragraph 90 above, in order to produce an incremental benefit to GDP of 0.16 per cent (the upper end of the estimated range of GDP costs), the

measures in the Bill need only reduce the probability of future crises by 4 per cent and their GDP impact by 4 per cent.

Conclusion on costs and benefits of Banking Reform Bill

95. Given the measures in the Bill are intended to reduce the probability and severity of future financial crises, and that such crises are very costly to the UK economy, the Government concludes that the benefits of proceeding with the Bill outweigh the costs, and thus that proceeding with the Bill will generate net benefits relative to the baseline (option 1).

Rationale and evidence that justify the level of analysis in this IA

Proportionality

96. The measures included in the Banking Reform Bill are the product of extensive policy development and consultation by both the ICB and the Government over a period of more than 2 years. During this period, a wide range of alternative approaches have been considered, including alternative models for structural reform of banks (e.g. full separation of retail and investment banking, full reserve banking and narrow banking considered by the ICB) and different options for the calibration of the ring-fence and depositor preference (e.g. alternative calibrations considered for the Government's Banking Reform White Paper).
97. With these alternatives having been discarded at earlier stages, analysis for this IA has focussed exclusively on the impact of the measures included in the Bill, which have been compared to a 'Do Nothing' alternative.

Wider impacts

98. There are a number of wider impacts that have been considered. These are detailed below.

Impact on competition in the UK banking sector

99. Reducing the perceived implicit government guarantee for large UK banks that are seen as 'too big to fail' should support competition in the UK banking sector, as the perceived implicit guarantee gives a competitive advantage to large banks over smaller competitors, who are not seen as benefiting from an implicit guarantee. Reducing the perceived implicit guarantee will thus reduce the competitive disadvantage for smaller banks and should support greater competition in the market.

Distribution of the impact in the market

100. The aggregate private costs to the banking industry are £1.7bn–£4.4bn. The cost to each bank in the industry as a result of the policy option will be different, as they have different business models. There is, however, some flexibility in how banks can adjust their businesses to the requirements of ring-fencing, which gives them scope to find an optimal business model. It is not possible to disaggregate the impact for each of the UK banks affected, as this is commercially sensitive data.

Impact on the labour market

101. Imposing additional costs on UK banks could have consequences for the labour market, to the extent that banks choose to pass higher costs on to their employees by reducing overall remuneration levels. However, it is not clear whether, or to what extent, banks will in fact pass costs on to employees: this would be a commercial decision for each bank, which it is not possible for the Government to forecast with any certainty.

Business borrowing distortions

102. An increase in banks' private costs may lead to an increase in lending rates. Larger businesses that are not reliant upon funding through these banks, and can access funds from alternative sources, would be less affected by the increase in bank lending costs than smaller businesses that may be more dependent on funding from banks. Whether and how banks choose to pass on additional costs to their customers is a commercial decision for each bank, which it is not possible for the Government to forecast with any certainty.

Impact on competitiveness of UK banking sector

103. The Government believes that the measures in the Banking Reform Bill will enhance competitiveness in the UK financial sector in the long run, through greater financial and macroeconomic stability. It is imperative

that such regulatory reform is introduced to make the UK banking sector more stable and intervention at the taxpayers' expense less likely in future.

Expected finance and resource impact on other Departments

104. Enforcing and policing the ring fence will incur costs to the Prudential Regulation Authority (PRA). The PRA has estimated that the upfront cost of implementing the ICB's recommendations to the regulator to be no more than **£20m**, with subsequent ongoing costs of around **£2m** per annum. The costs of enforcing just the elements of the ICB's recommendations included in the Bill will likely be somewhat lower.

Equality impact

105. The Government has considered its obligations under the Equalities Act 2010. The Government does not believe these measures will impact upon discrimination, equality of opportunity or good relations towards people who share relevant protected characteristics under that act.

106. The Government considers that the proposals are compatible with the Convention rights protected under the Human Rights Act 1998.

Exemption from One-in-One-out rule

107. The measures the Government is introducing through the Banking Reform Bill deal with the issue of financial systemic risk. As noted above in the 'Introduction', the measures in the Bill will make UK banks and the UK banking sector as whole more resilient to shocks (reducing the likelihood of bank failure) and more easily resolvable in the event of failure (reducing the impact on the financial sector, the public finances and thus the economy). The measures specifically intend to reduce systemic risk in the UK banking sector by increasing UK financial stability. There is an exemption for measures dealing with systemic financial risk from the Better Regulation Executive's One-in-One-Out Rule,²² so the measures in this IA are therefore out of scope of the rule.

EU Minimum Requirements

108. The Government considers that the ring-fencing and depositor preference policy measures do not go beyond minimum requirement of existing EU law as there is currently no EU legislation in force concerning the separation of retail from wholesale banking activities or legislation to prefer bank depositors in the case of bank insolvency. The Government does however recognise the current and ongoing discussions concerning these policy areas at an EU level, for example the recently published Liikanen report on structural reforms.

109. In addition, the Banking Reform Bill does not set out minimum requirements for banks' regulatory capital or PLAC. As outlined in Annex A, the Government has made modelling assumptions for minimum regulatory capital and PLAC requirements. In some cases however, the modelling assumptions used may go beyond the assumed EU minima.²³ The modelling assumptions have been made in line with Government policy that was set out in the Banking Reform White Paper, but are not measures included in the Banking Reform Bill.

Summary and implementation plan

Chosen policy option

110. The Government therefore proposes to implement the measures in the Bill (Option 2). The Government believes that implementing these measures will deliver net benefits relative to the baseline (Option 1).

²² <http://www.bis.gov.uk/assets/biscore/better-regulation/docs/o/11-671-one-in-one-out-methodology.pdf>

²³ CRDIV and RRD address these minimum requirements for the EU, which at the time of publication, had not been finalised.

Implementation plan

111. The Banking Reform Bill has now completed its passage through the House of Commons and has been introduced into the House of Lords. Once the Bill has received Royal Assent, secondary legislation can be introduced to Parliament and the regulators can begin making rules.

112. Further impact assessment will accompany the secondary legislation at its introduction. When making rules, the regulators are also required to publish rules in draft, with accompanying cost-benefit analysis.

Annex A

Assumptions on secondary legislation and regulatory rules

Listed below are the assumptions the Government gave to the major UK banks for the purpose of their modelling of the impact on their businesses of the Banking Reform measures. The assumptions below do not necessarily reflect the Government's final position in these areas. The Government will consult on secondary legislation, and the regulators are required to publish rules in draft.

Ring-fencing:

Issue	Modelling assumption for this IA
<i>De minimis</i> exemption from ring-fencing	Banks with core deposits of less than £25bn exempt from ring-fencing.
Core ('mandated') Services	Accepting deposits (except from non-SME organisations and high-net-worth individual (HNWI) private banking customers) is the only core activity (i.e. may only be carried out by Ring-fenced banks (RFBs) or banks exempt from ring-fencing).
Definition of SME	Banks to use own definitions
Definition of HNWI private banking customer	Banks to use own definitions
Excluded ('prohibited') Services	RFBs prohibited from dealing in investments as principal, entering into derivatives contracts, or underwriting securities issues. RFBs prohibited from having exposures to financial institutions, other than for the purposes of managing RFBs' own risks, provision of payments services or provision of trade finance. RFBs prohibited from having branches or subsidiaries outside the EEA.
Permitted Services	Permitted services are those that are not 'core' or 'excluded' as defined by the Bill, and may be undertaken by either ring-fenced or non-ring-fenced banks. RFBs may deal in investments as principal and enter into derivative contracts for the purposes of hedging risks arising from banking activities and/or for purposes of liquidity management. RFBs permitted to offer simple risk-management products (derivative) to customers. Banks to use own definitions for 'simple' derivatives.
Status of Crown Dependencies	Treat Crown Dependencies as if within the EEA for the purposes of permitted branches and subsidiaries.
Solo capital and liquidity requirements for RFB	RFB to meet regulatory capital and liquidity requirements on a solo basis.
Intra-group relationships	RFB to be economically and operationally independent of the rest of its group, in accordance with the principles set out in s.142H of the Banking Reform Bill. In particular, intra-group transactions to be conducted on a third-party basis; and RFBs to have independent governance, risk management, human resources and remuneration policies as required under s.142H of the Banking Reform Bill.
Intra-group exposure limits	Exposures between RFB and rest of group subject to standard large exposure limits i.e. may not exceed 25% of regulatory capital.

NO SECURITY LABEL

Loss-absorbency:

Issue	Modelling assumption for this IA
Regulatory capital and PLAC requirements: general	<p>RFBs to meet regulatory minimum capital and PLAC requirements on a solo basis.</p> <p>Banks free to meet capital or PLAC requirements using higher-quality instruments if they choose (e.g. meeting total capital requirement with CET1 only; meeting PLAC requirement using regulatory capital only).</p>
Regulatory capital requirements: RFBs	<p>Minimum Common Equity Tier 1 (CET1): 11% RWAs <i>(=4.5% Basel III minimum; plus 2.5% Basel III capital conservation buffer; plus 3% Ring-Fence Buffer; plus 1% management buffer)</i></p> <p>Minimum Tier 1: 12.5% RWAs <i>(=11% CET1 plus 1.5% Alternative Tier 1 (AT1) capital)</i></p> <p>Minimum Regulatory Capital: 14.5% RWAs <i>(=12.5% Tier 1 plus 2% Tier 2 capital)</i></p> <p>Minimum Tier 1 Leverage Ratio: 3% Total Exposures.</p>
Regulatory capital requirements: non-RFBs	<p>Minimum Common Equity Tier 1 (CET1): 10.5% RWAs <i>(=4.5% Basel III minimum; plus 2.5% Basel III capital conservation buffer; plus 2.5% G-SIB surcharge; plus 1% management buffer)</i></p> <p>Minimum Tier 1: 12% RWAs <i>(=10.5% CET1 plus 1.5% Alternative Tier 1 (AT1) capital)</i></p> <p>Minimum Regulatory Capital: 14% RWAs <i>(=12% Tier 1 plus 2% Tier 2 capital)</i></p> <p>Minimum Tier 1 Leverage Ratio: 3% Total Exposures.</p>
PLAC Requirement: RFBs and non-RFBs	<p>Minimum Primary Loss-Absorbing Capacity (PLAC): 19% RWAs <i>(=17% regulatory minimum; plus 2% management buffer)</i></p>
Instruments Eligible to meet PLAC requirement	<p>Regulatory Capital, plus long-term (=term greater than 1 year) senior unsecured bonds.</p>
Group-level PLAC for UK-headquartered G-SIBs	<p>Group-level PLAC requirement to apply to all group RWAs where groups assume a 'single point of entry' (SPE) resolution strategies.</p> <p>Group-level PLAC requirement excludes non-EEA entities where groups assume a credible 'multiple point of entry' (MPE) resolution strategies.</p>