Title: Financial Services (Banking Reform) Bill **IA No:** HMT1302 **Lead department or agency:** HM Treasury **Other departments or agencies:** Department for Business, Innovation and Skills	**Impact Assessment (IA)** **Date:** 09/01/2013 **Stage:** Final **Source of intervention:** Domestic **Type of measure:** Primary legislation **Contact for enquiries:** Banking.commission@hmtreasury.gsi.gov.uk

Summary: Intervention and Options

RPC Opinion: GREEN

Cost of Preferred (or more likely) Option				
Total Net Present Value	**Business Net Present Value**	**Net cost to business per year** (EANCB on 2009 prices)	**In scope of One-In, One-Out?**	**Measure qualifies as**
£117,600m	£m	£m	No	NA

What is the problem under consideration? Why is government intervention necessary?

Structural reform of UK banks is required to tackle the 'too big to fail' problem: banks that are large, systemic and too complex for their failure to be safely managed without serious economic consequences or recourse to public funds are perceived to benefit from an implicit government guarantee. This represents an anti-competitive subsidy to large banks, creates moral hazard and places a contingent liability on the taxpayer. The UK Government, along with G20 partners, has committed to removing any implicit guarantees to the banking system.

What are the policy objectives and the intended effects?

The policy objective is to curtail the perceived implicit government guarantee enjoyed by banks seen as 'too big to fail' and make UK banks more resilient to shocks and more resolvable in the event of failure by:
- requiring the ring-fencing of retail deposit-taking from wholesale/investment banking, to insulate essential retail banking services from shocks originating elsewhere in the financial system, and to ensure that the continuity of these services can be maintained in the event of bank failure; and
- preferring retail deposits in insolvency and setting a framework for the imposition of debt requirements by regulators, to ensure that in the event of failure losses fall on bank creditors not depositors or taxpayers.

What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

The Banking Reform Bill is the latest step in a process of policy development that began with the establishment of the Independent Commission on Banking (ICB) in June 2010. The ICB examined a range of alternative structural and non-structural reform options to tackle the 'too big to fail' problem, including full separation of retail from investment banking and narrow banking. In its final report in September 2011, the ICB rejected these alternatives in favour of ring-fencing, depositor preference and other loss-absorbency reforms. The Government accepted the ICB's recommendations and has explored different options for the precise calibration of ring-fencing and depositor preference, and published a White Paper consulting on these alternatives in June 2012. Following this process, the Government has now formed its lead option, to proceed with the measures in the Banking Reform Bill. The Government believes that this option represents the best balance between benefits to financial stability and costs to UK banks and the economy.

Will the policy be reviewed? It will not be reviewed. **If applicable, set review date:** Month/Year

Does implementation go beyond minimum EU requirements?			No		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	**Micro** No	**< 20** No	**Small** No	**Medium** Yes	**Large** Yes
What is the CO_2 equivalent change in greenhouse gas emissions? (Million tonnes CO_2 equivalent)			**Traded:** N/A	**Non-traded:** N/A	

I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) that the benefits justify the costs.

Signed by the responsible Minister: Greg Clark Date: 09/01/2013

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 (%)**

BUSINESS ASSESSMENT (Option 1)

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

Summary: Analysis & Evidence — Policy Option 2

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

FULL ECONOMIC ASSESSMENT

Price Base Year 2012	PV Base Year 2019	Time Period Years 30	Net Benefit (Present Value (PV)) (£m)		
			Low: SEE TEXT	**High:** SEE TEXT	**Best Estimate:** 117,600

COSTS (£m)	Total Transition (Constant Price)	Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value)
Low	1,500	2	400	**7,600**
High	2,500		1,120	**20,900**
Best Estimate	2,000		720	**13,700**

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

Direct private costs to UK banks: £2bn - £5bn 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% - 0.1% (equivalent to average annual GDP cost of £0.4bn - £1.1bn p.a.)
Indirect Exchequer impact: reduction in tax receipts of £150m - £400m p.a. and reduction of value of HMG shareholdings in RBS and Lloyds Banking Group of £2bn - £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		6,900	**131,300**

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 (£6.9bn in 2010-11 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.

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. 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.
2. 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 Financial Services (Banking Reform) Bill ('the Bill') contains key measures to give effect to that commitment.
3. 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.
4. 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 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 Impact Assessment (IA).
5. 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 loss absorbency. 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

6. 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

7. 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).

8. 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

9. 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.

10. In addition, the Bill gives HM Treasury power to direct the regulator 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 http://www.hm-treasury.gov.uk/fin_stability_regreform_icb.htm.

Description of options considered

Option 1: Baseline ('Do nothing')

11. 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 Financial Services Authority (FSA); and
    - Reform of the UK regulatory architecture through the Financial Services Act. [2]

12. 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 the measures in the Banking Reform Bill

13. <u>The Government's lead option is to proceed with the measures in the Banking Reform Bill</u>. 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.

      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.

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[2] More details on these regulatory reforms can be found at the following links:
<u>Basel III Capital Requirements, Globally Systemically Important Banks (G-SIB) Surcharge and Counter-Cyclical Buffer</u> - http://www.bis.org/publ/bcbs189.pdf and http://www.bis.org/publ/bcbs207.pdf.
<u>FSA Liquidity Regulations</u> - http://www.fsa.gov.uk/pages/library/policy/policy/2009/09_16.shtml .
<u>FPC Macroprudential Powers</u> – http://www.bankofengland.co.uk/financialstability/Pages/fpc/default.aspx.
<u>The Financial Services Act</u> – http://www.hm-treasury.gov.uk/fin_financial_services_bill.htm.

[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.

- **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

14. The Bill will largely be enabling in nature: it will give powers and/or duties to HM Treasury and the regulatory authorities to impose requirements on UK banks. The precise nature of those requirements will be determined by a combination of secondary legislation and rules made by the regulators. These will define the details of, for example, what activities may not be conducted within the ring-fence, and the financial relationships between ring-fenced and non-ring-fenced banks. The exact impact of the Banking Reform Bill will therefore depend on how these powers and duties are discharged.
15. For the purposes of this IA, assumptions have been made about the precise requirements that will be imposed by secondary legislation and/or regulatory rules. These are detailed in Annex A below. It has generally been assumed that secondary legislation and rules made under the powers conferred by the Bill will be in line with the policy set out in the June Banking Reform White Paper and in the Policy Document published alongside the draft Bill.[4]
16. When, following the passage of the Banking Reform Bill, secondary legislation is made it will be accompanied by further IAs covering the contents of that secondary legislation. The regulators are also required to publish rules in draft, with accompanying cost-benefit analysis.

[4] Exceptions are when banks were not able to model the impacts based on these policy assumptions, but had to use their own assumptions instead. This is not expected to make a significant difference to the total impact: see paragraphs 38-39 below.

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 measures in Banking Reform Bill
<u>Monetised costs (gross):</u> Annual total private cost to UK banks: £2bn – £5bn; <u>Reduction in long-run GDP level: 0.04% – 0.1%</u>; (equivalent to average annual GDP cost of £0.4bn – £1.1bn); **Present Value GDP cost**: £7bn – £20bn; Reduction in annual tax receipts: £150m – £400m; Reduction in value Government shareholdings in Royal Bank of Scotland (RBS) and Lloyds Banking Group: £2bn - £5bn. <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 £6.9bn in 2010-11 terms); **Illustrative Present Value GDP benefit**: £131.3bn. <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 reduce the Government's contingent liabilities to the banking sector, supporting lower Government borrowing costs.

17. All estimates in the table above are incremental to the 'Do nothing' baseline option described in paragraphs 11-12 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: Proceed with Banking Reform Bill

18. 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

19. The first round cost impact of implementing the measures in the Banking Reform Bill will be through an increase in the private costs of UK banks. The second round impact will be the impact on GDP and 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

20. The principal economic cost to UK banks of implementing the measures in the Bill 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.[5]

21. Some progress has been made in curtailing the perceived implicit guarantee; it can be argued that the implementation of the Special Resolution Regime (SRR)[6] 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

22. 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)

23. 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.

24. 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 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.

25. 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 80-92 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

26. 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.

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

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

27. 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

28. 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 in paragraphs 80-92 below.

Private cost to UK banks

Summary of private cost to UK banks

29. 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 **£2bn - £5bn per year**, with one-off transitional costs in the range £1.5bn-£2.5bn. Establishing a framework for the imposition of debt requirements by the regulator, will not in itself, create any additional costs to UK banks.

30. 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.

Ring-fencing

Summary of private cost

31. The Government estimates that the aggregate private cost of ring-fencing to UK banks will be in the range £1.7bn-£4.4bn per year, with one-off transitional costs in the range £1.5bn-£2.5bn.

Modelling the cost to UK banks of ring-fencing

32. 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 hold more capital in aggregate than in the baseline scenario, generating an ongoing 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.

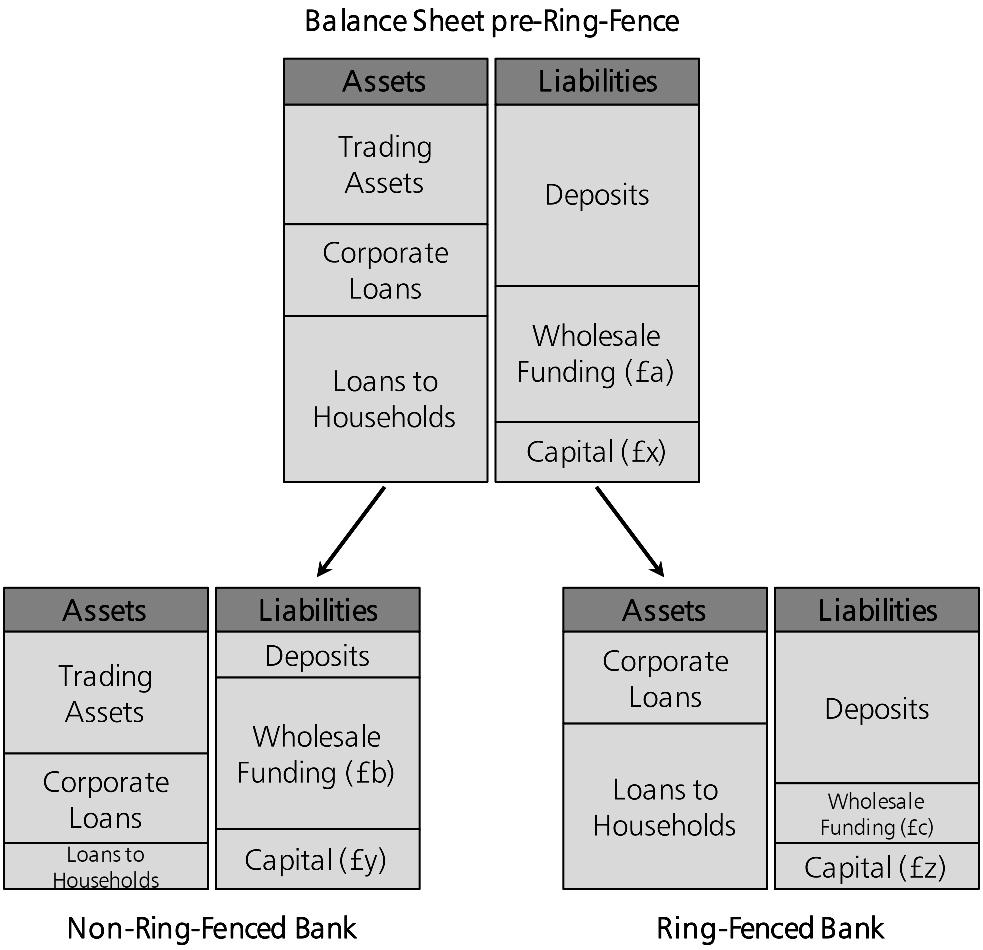
33. The **capital and funding costs** of ring-fencing were estimated by drawing on the results of extensive scenario modelling commissioned from the major affected UK banks, simulating the effects of ring-fencing. The banks were asked to model their future balance sheets first under the regulatory conditions 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 42-45 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.

34. On the basis of this scenario 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' balance sheet scenario modelling also gave the change in the quantity of wholesale funding required by the different banks relative to the baseline. Applying assumptions for the impact of ring-fencing on the cost of funding for ring-fenced and non-ring-fenced banks gave the incremental annual funding cost of ring-fencing. See Box 1 below for further details on how the Government calculated the 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:

Change in quantity = (£y + £z) - £x

Capital cost = Change in quantity x cost of capital

The assumptions for the cost of capital are given in paragraph 46 below.

Incremental funding cost

The incremental wholesale funding cost is calculated using the following formula:

Wholesale (w/s) funding cost =

$[(\pounds b \times \text{cost of w/s funding}_b) + (\pounds c \times \text{cost of w/s funding}_c)] – (\pounds a \times \text{cost of w/s funding}_a)$

Where:

Cost of w/s funding_b = cost of w/s funding_a +(Non-ring-fenced bank spread)

Cost of w/s funding_c = cost of w/s funding_a + (Ring-fenced bank spread)

This equation is applied separately to each of subordinated, long-term senior unsecured and short-term senior unsecured debt. Details on the assumed changes in prices for each of these types of wholesale funding, for both the ring-fenced and non-ring-fenced banks, are given in paragraph 50 below.

35. 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.

36. 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	£1.5bn	£3bn
Funding	-£170m	£150m
Operational	£400m	£1.2bn
TOTAL ONGOING COST, per year	**£1.7bn**	**£4.4bn**
Transitional Cost (one-off)	£1.5bn	£2.5bn

Restructuring of bank pension schemes

37. 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.

38. It is important to note that the large UK banks affected are currently running deficits both on a "buyout" basis[7] and an ongoing funding "technical provisions" basis[8] which pre-date and are independent of the Government's ring-fencing proposals.

Options for restructuring of pension schemes

39. 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 as possible 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 pension schemes are 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.

40. 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.

Cost of separation

41. 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.[9] 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

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[7] The amount required to buyout a pension scheme's liabilities with an insurer.

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

[9] http://www.thepensionsregulator.gov.uk/guidance/multi-employer-schemes-and-employer-departures.aspx.

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 55-59 below for the impact of depositor preference).

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.

Assumptions, risks and sensitivities: Ring-fencing

Ring-fencing requirements determined by secondary legislation and regulatory rules

42. As noted above (paragraphs 14-16), the enabling nature of the Banking Reform Bill requires a number of assumptions to be made about the content of secondary legislation and regulatory rules in order to model the design and impact of the ring-fence. For the purposes of this IA, it was generally assumed that secondary legislation and rules would follow the policy set out in the Banking Reform White Paper.

43. Exceptions to this were the definitions used for SMEs and private banking customers (necessary to determine which deposits had to be placed within the ring-fence, and which could be placed either side), and the assumptions used to model the geographical scope of the ring-fence. For the definition of SMEs and private banking customers, the banks lacked the data needed to use Government-prescribed assumptions, so had to use proprietary definitions instead. The affected banks expressed a view, however, that the impact on the balance sheet scenarios of using these definitions instead of prescribed assumptions would be minimal.

44. As for the geographical scope of the ring-fence, as discussed in the Banking Reform White Paper, the Government proposes to implement the ICB's recommendation that ring-fenced banks should not serve customers outside the EEA by prohibiting them from establishing non-EEA branches or subsidiaries. To model the impact of this prohibition, given limitations on the data available to them, banks used the booking location of transactions to determine which assets and liabilities could be placed within the ring-fence and which had to be outside it.

45. A full list of the assumptions made about the content of secondary legislation and rules for the ring-fence modelling scenario is set out at Annex A below.

Equity capital assumptions

46. 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 equity[10] to banks of 11.5 per cent, used by the FSA.[11]

47. 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 £19bn. 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.

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[10] Rather than the opportunity cost of equity over debt.

[11] 'Strengthening Capital Standards 3 - further consultation on CRD3', FSA consultation paper CP11/09.

48. 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, and a management buffer of 2% of RWAs above their regulatory PLAC requirement.

Wholesale funding cost assumptions

49. The impact of ring-fencing on banks' funding costs is difficult to forecast precisely. As discussed in paragraph 32 above, it is likely that funding costs for ring-fenced banks will fall, while funding costs for non-ring-fenced banks will rise as a result of ring-fencing. Meanwhile, both ring-fenced and non-ring-fenced banks may experience a loss of diversification in their revenues, which may push funding costs up. 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.

50. In modelling the impact of ring-fencing on funding costs, the Government has used estimates provided by the major UK banks of the likely effect on their funding costs, as well as drawing on external analysis. On the basis of this information, for the purposes of this IA the Government has used the following assumed ranges:

    - For ring-fenced banks: a change of between -10 basis points (bps) and 0bps in the cost of subordinated, long-term unsecured and short-term unsecured debt.
    - For non-ring-fenced banks: a change of between 0bps and 75bps in the cost of subordinated, long-term unsecured and short-term unsecured debt.

51. 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 7 above, it is expected that bail-in will be implemented via transposition of the European RRD. This is one area of 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.[12]

Operational costs and tax implications

52. 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 £100m - £300m per bank per year. Costs are likely to vary depending on banks' business models, including their choices over the location of the ring-fence.

53. 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.

Transitional costs

54. The costs of restructuring to comply with ring-fencing are likely to vary from bank to bank, depending on their chosen post-ring-fencing business model. The Government, using estimates provided by the large UK banks, has assumed a range of restructuring costs for the large UK banks of £50m-£500m per bank.

[12] 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 http://www.hm-treasury.gov.uk/fin_stability_regreform_icb.htm.

Depositor preference

Summary of private cost

55. The Government estimates that the aggregate private cost of depositor preference to UK banks will be in the range £0.3bn-£0.7bn per year.

Modelling the private cost of depositor preference

56. 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 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.

57. To model the cost of depositor preference, the Government asked the major UK banks to estimate the impact on the cost of short-term unsecured funding of preferring FSCS-insured deposits. From the estimates supplied, the Government drew a range for the basis point impact, from 25bps to 50bps. Applying this to the quantities of short-term funding included in each bank's modelled balance sheets gave the annual cost, which was then aggregated across all the major UK banks.

58. Depositor preference is, however, just one element of the ICB's recommendations on loss-absorbency that is expected to impact on banks' costs of wholesale funding. For example, a bail-in tool would also expose senior unsecured creditors to greater risks of loss, increasing banks' funding costs. To some extent, these additional costs may also be offset by the effects of behavioural responses by customers, for example if depositor preference made customers more willing to place deposits in banks at lower rates of interest, reducing the cost to banks of deposit funding. Such behavioural effects are, however, uncertain and difficult to forecast with any precision, so monetisation of these costs has not been attempted in this IA.

59. Isolating the impacts on banks' funding costs of different elements of the ICB's recommendations is difficult, and requires that assumptions be made about which portions of an increase in funding costs should be attributed to which particular measures. Given the overlapping impacts of the different policy measures, any assumption made would be to some extent subjective. For the purposes of this IA,[13] the costs were attributed by modelling the costs of a bail-in tool as falling on long-term senior unsecured debt,[14] and the costs of depositor preference as falling on short-term unsecured funding. As noted above, the Bill does not include a bail-in tool (which the Government intends to deliver via transposition of EU legislation), so the cost of bail-in is not included in this IA.

Framework for imposition of debt requirements

Summary of private cost

60. 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.[15] 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.

61. 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

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[13] As well as for the purposes of the Government's previous modelling of the costs of the entire ICB package, as set out in the IA accompanying the Banking Reform White Paper.

[14] 'Long-term' being defined as with a maturity of one year or more.

[15] 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.

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).

Assumptions, risks and sensitivities: Framework for debt requirements

Regulatory assumptions on loss-absorbency

62. 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. 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.

General assumptions for modelling private cost to banks

Static modelling of bank balance sheets

63. 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 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).

64. 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

65. 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.

66. 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

67. The increase in banks' private costs is estimated to produce a gross[16] **reduction in the long-run level of GDP in the range 0.04% to 0.1%**, equivalent to an average[17] annual cost to GDP of **£0.4bn - £1.1bn** relative to the 'regulatory environment' baseline scenario. The present value cost to GDP is estimated at £7bn - £20bn.

Modelling the cost to GDP

68. 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 FSA 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 23-24 above describe how the GDP cost arises in more detail.

Assumptions, risks and sensitivities

NiGEM modelling of long-run GDP cost

69. 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.[18] 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.

Calculating present value of GDP cost

70. The present-value GDP cost presented in this IA has been calculated using the annual GDP cost estimate in paragraph 67. The annual GDP cost is calculated using the following assumptions about when the different costs that banks face arise:

    - transitional costs are incurred in the first two years of the transition period of the policy;
    - operational ongoing costs are zero in the first two years, but are then constant each year thereafter;
    - capital costs 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, the capital costs are constant each year; and
    - funding costs increase steadily year on year over the transition period until 2019, after which they are constant year on year.

71. 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.

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[16] i.e. not taking account of the benefits to GDP of the measures in the Bill.

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

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

Short-run GDP impact

72. 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.[19]

73. 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 47 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.

Cost to the Exchequer

Summary of Exchequer cost

74. Implementing the measures in the Bill is estimated to produce a gross **reduction in tax receipts of £150m-£400m per year** and a **reduction in the value of the Government's shareholdings in partially publicly-owned banks of £2bn-£5bn**, relative to the 'do nothing' baseline.

Tax receipts

75. 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 to GDP ratio (35.2 per cent over the last 20 years). This gives a reduction in tax receipts of £150m-£400m per year.

76. 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

77. 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.

78. The Government has used estimates provided by UK Financial Investments Ltd (UKFI) to assess the potential loss to the value of its shareholdings arising from the measures in the Bill. These estimates are based on

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

standard bank valuation methodologies, using various assumptions about the potential impact on the banks' return on equity (which will be affected by changes to their funding and operating costs, amongst other factors), cost of equity and additional capital requirements. It is important to note that this loss is not relative to the current market value of the Government's shareholdings in RBS and Lloyds Banking Group. Rather, the estimated loss attributable to the Bill is relative to the counterfactual future scenario in which the Bill measures are not implemented (consistent with other cost and benefit estimates in this IA). With markets anticipating that the Government will implement the recommendations of the ICB (including the measures in the Bill), it is likely that the impact is already largely or entirely factored into the two banks' current market share prices.

79. UKFI's estimates of the value impact are subject to a range of caveats. First, in line with the rest of this IA, they do not take account of the costs to banks of bail-in, as this is not included in the Bill. Also consistent with the approach taken elsewhere in this IA, the modelling does not take account of any behavioural responses by bank management (e.g. reconfiguring business lines) or customers (e.g. switching banks), as such effects cannot be estimated with any confidence. It also assumes that there is no pass through of costs to customers: given that the Government's estimate of the impact on GDP of the Bill measures does assume that costs are passed through, there is therefore likely to be some double-counting of costs. Given these limitations, the UKFI estimates should be viewed as broadly indicative of the maximum extent of shareholder costs, rather than precise forecasts. On the basis of these assumptions, the Government estimates that the measures in the Bill could lead to a reduction in the value of the Government's shareholdings in RBS and Lloyds of around £2bn-£5bn.

Benefits of option 2: Proceed with Banking Reform Bill

Economic benefits of increased financial stability

80. 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).

81. 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 being 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

82. 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.[20] It is, however, clear that systemic financial

[20] 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.

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.[21]

83. The experience of the 2008-09 financial crisis further illustrates how large the costs of financial instability can be. According to the Office for Budget Responsibility (OBR), the crisis of 2008-09 led to a peak-to-trough fall in GDP of 7.1 per cent,[22] and the OBR forecast that potential output in 2016 will be 11 per cent below its extrapolated pre-crisis trend.[23] 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.[24]

Illustrative calculations of benefits of improved financial stability

84. 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.

85. 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.

86. 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 £9.5bn in 2010-11 GDP terms.[25]

87. 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 £6.9bn in 2010-11 GDP terms.

Sensitivity analysis for illustrative calculation

88. 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

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[21] 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.

[22] *Economic and Fiscal Outlook*, OBR November 2011.

[23] *Economic and Fiscal Outlook*, OBR March 2012.

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

[25] Banking Reform White Paper Impact Assessment, paragraph 91.

calculation described in paragraph 88 above, the incremental annual benefit of the measures in the Banking Reform Bill rises to 7.3 per cent of GDP, or £33bn in 2010-11 GDP terms.

89. 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 0.39 per cent of GDP, or £1.75bn in 2010-11 GDP terms. Note that even this lower value still results in a net benefit compared to the estimated annual GDP cost of the Bill measures.

90. 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 0.02 percentage points or £100m in 2010-11 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 (£250m and £260m in 2010-11 GDP terms), respectively.

91. 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 87 above, in order to produce an incremental benefit to GDP of 0.1 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 2 per cent and their GDP impact by 2 per cent.

Conclusion on costs and benefits of Banking Reform Bill

92. 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 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

93. 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).

94. 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

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

Impact on competition in the UK banking sector

96. 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

97. The aggregate private costs to the banking industry are £2bn–£5bn. 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

98. 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

99. 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

100. 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

101. Enforcing and policing the ring fence will incur costs to the Prudential Regulation Authority (PRA). The FSA 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

102. 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.

103. 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

104. 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, [26] so the measures in this IA are therefore out of scope of the rule.

EU Minimum Requirements

105. 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.

106. 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.[27] 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

107. 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).

Implementation plan

108. This IA reflects the ICB recommendations that the Government will be implementing through the Financial Services (Banking Reform) Bill, having been through a period of pre-legislative scrutiny by the Parliamentary Commission on Banking Standards.

109. As noted in paragraph 16 above, when secondary legislation under the Bill is brought forward for consultation later in 2013, this will also be accompanied by further IAs.

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[26] http://www.bis.gov.uk/assets/biscore/better-regulation/docs/o/11-671-one-in-one-out-methodology.pdf

[27] CRDIV and RRD address these minimum requirements for the EU, which at the time of publication, had not be finalised.

Annex A

Assumptions on secondary legislation and regulatory rules

Listed below are the assumptions the Government has made in its modelling for this IA of the requirements that will be imposed by secondary legislation and rules. The assumptions below do not necessarily reflect the Government's final position in these areas.

Ring-fencing:

Issue	Modelling assumption for this IA
De minimis 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 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 made own assumptions
Definition of private banking customer	Banks made own assumptions
Excluded ('prohibited') Services	RFBs prohibited from dealing in investments as principal, entering into derivatives contracts, or underwriting securities issues. RFBs prohibited from non-EEA business and transacting with financial institutions, other than for risk management and payments purposes.
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 to customers, subject to safeguards.[28]
Geographical scope of ring-fence	Booking location of transactions used as proxy for ban on RFBs establishing non-EEA branches/subsidiaries: no assets/liabilities booked outside EEA permitted in RFBs.
Status of Channel Islands	Channel Islands treated as within EEA for purposes of ring-fence geographical scope.
Restrictions on RFB exposure to financial institutions	RFBs prohibited from providing services to any financial institutions except those that are SMEs.
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.
Wholesale funding limit for RFBs	No more than 50% of RFB funding can be wholesale.

[28] This modelling assumption has been made in line with the policy set out in the June 2012 Banking Reform White Paper. At the publication of the draft Banking Reform Bill, the Chancellor wrote to the Parliamentary Commission on Banking Standards, to request their views on whether RFBs should be permitted to offer simple risk-management products to their customers. As discussed in the IA accompanying the June 2012 White Paper, the impact on *static* modelling of banks' balance sheets of prohibiting derivatives would be relatively small: the principal impact is likely to be behavioural, for example if business customers chose to move their other business to non-ring-fenced banks.

Loss-absorbency:

Issue	Modelling assumption for this IA
Regulatory capital requirements	Basel III minimum requirements: • Min Common Equity Tier 1 (CET1) ratio: 7% RWAs (=4.5% 'hard' minimum plus 2.5% Capital Conservation Buffer); • Min Tier1 ratio: 8.5% RWAs; • Min Total Capital ratio: 10.5% RWAs. G-SIB surcharge: • Min CET1 ratio increased by 2.5%. Ring-Fence Buffer (for UK RFBs): • Min CET1 ratio increased by 3%. (where a UK RFB is also a G-SIB, the higher of the two additional capital requirements will apply) Leverage Ratio: • Min Tier 1 Capital to Total Exposures: 3%.
PLAC requirement	Regulatory minimum PLAC (=regulatory capital plus best-quality loss-absorbing debt) ratio: 17% RWAs;
Assumed PLAC and capital 'management buffers'	In addition to the regulatory minimum PLAC level of 17%, banks hold a PLAC 'management buffer' of 2% RWAs. In addition to the regulatory capital requirements, banks hold a capital 'management buffer' of 1% RWAs.
PLAC requirement for UK-headquartered G-SIBs	Total PLAC requirement applies at Group level for UK G-SIBs, but with exemption for overseas RWAs where overseas operations do not threaten EEA financial stability.