HM Treasury

RBS and the case for a bad bank:

the Government's Review

November 2013

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Executive summary

The Royal Bank of Scotland (RBS) has announced a new direction today that will enable the bank to focus on its core job of supporting the British economy and lending to British businesses. The new direction is supported wholeheartedly by the management and Board of RBS, the Bank of England, UK Financial Investments (UKFI) and the Government.

RBS's new direction will deliver a bank that is a boost to the British economy, with an ambitious goal to become the best bank in Britain for business customers, and from which – in time – the British taxpayer can start getting its money back.

Alongside RBS's announcement on its new direction, the Government is publishing in this document its Review into the case for an RBS bad bank, announced by the Chancellor at Mansion House in June 2013, which has assessed the case for creating a taxpayer-funded external bad bank against the Government's three objectives for its shareholding in RBS:

1. accelerating its return to the private sector;
2. supporting the British economy; and
3. getting best value for the taxpayer.

The Review was conducted by the Treasury – using external expert advisers – and sets out the challenges facing RBS today, and how RBS's new direction tackles each of these challenges, including tackling the legacy of its 'high-risk' and poorly-performing assets.

Through RBS's new direction, a bad bank will be created – but instead of an 'external' bad bank that would require taxpayers' money, an 'internal' bad bank funded by RBS will enable management to focus on new lending.

In order to become a bank that is a boost to the British economy, rather than a burden, RBS has announced comprehensive measures including:

- accelerating exit from Citizens in the US, as part of a plan to raise capital equivalent to adding two percentage points to its capital ratio by 2015, in order to strengthen its balance sheet and focus on lending in the UK;
- embracing a new commitment to being the number one small business bank as judged by customers, measured by a newly-created survey to be run by the Federation of Small Businesses (FSB) and British Chambers of Commerce (BCC);
- continuing to shrink its investment banking arm with the results of a review of the Markets division to be published in February 2014; and
- aggressively tackling its cost base to improve the performance of its 'core' businesses.

With the retirement of the Dividend Access Share (DAS) – on which the Treasury and RBS are in advanced negotiations with the European Commission – this will also over time make RBS shares more attractive to external investors and accelerate the bank's return to the private sector.

As a result of RBS's new direction, the Bank of England has also confirmed that the taxpayers' exposure to the banking system can be further reduced by removing the £8 billion Contingent Capital Facility one year early.

Following a comprehensive assessment of the case for a taxpayer-funded external bad bank, the Review demonstrates that RBS's new direction will help deliver against the Government's objectives to a much greater extent than would be possible through establishing an external bad bank alone.

The Bank of England will play a continuing role in overseeing the implementation of RBS's plan as part of its ongoing supervision of the firm. The shareholder value implications of the plan have been reviewed by UKFI. UKFI support the plan and will engage closely with the Board and management to oversee its development and implementation, in line with their mandate to act commercially and in the best interests of the taxpayer as shareholder.

The challenges facing RBS today

Nearly five years after RBS required several successive bailouts from the then Government, RBS remains weighed down by the legacy of its pre-crisis actions – not just its poorly-performing legacy assets but also by weak returns in its 'core' businesses and a lack of strategic coherence.

While RBS has made huge progress since its rescue in the depths of the crisis, challenges remain in securing its recovery.

There remains an ongoing debate about the bank's future and role in the British economy, most recently articulated in the Parliamentary Commission on Banking Standards (PCBS) report in June 2013.

The Government believes that the bank is still not in an appropriate shape for reprivatisation and that none of the three objectives for its shareholding of RBS is met under the status quo.

RBS must overcome a number of challenges if this is to change and these are set out below.

Balance sheet strength and strategic coherence

Before the financial crisis, the RBS Group operated with relatively low levels of capital. A five year plan to de-risk the bank led to a subsequent strengthening of the Group's capital position. As at the end of June 2013, the Group had exited the Asset Protection Scheme (APS) and its Core Tier 1 ratio had increased from 6.1 per cent as at the end of 2008 to 11.1 per cent.

These improvements have been primarily achieved through the reduction of the Group's balance sheet via a combination of whole-business disposals, run-off, asset sales and write-downs as opposed to capital raisings or earnings retention. The Group has made substantial losses over the five years since the crisis, meaning that it has been unable to generate new capital internally.

Against this background, the Bank of England (in its role as RBS's prudential regulator) – and following an assessment of capital 'headwinds' – concluded that RBS had a shortfall of £13.6 billion. However, taking into account capital actions in RBS's capital forecast, the Bank of England assessed the shortfall to be £3.2 billion at 31 December 2013. Furthermore, regulatory standards continue to evolve and, in addition, RBS needs to be able to accommodate any additional headwinds which may adversely affect their capital resources, for example future costs of conduct redress.

The significant reduction in the scope of RBS's activities and the size of its balance sheet over recent years has also meant that the remaining business appears to some investors as having lost strategic coherence. In particular, Citizens and parts of the Markets division are perceived as lacking connectivity with the rest of the business, which is becoming increasingly focussed on UK retail and commercial banking.

Lending to the British economy

Since the financial crisis, overall bank lending to small and medium sized enterprises (SMEs) has declined by nearly a quarter. In part, this is because banks lent too much before the crisis, particularly in Commercial Real Estate (CRE). Nevertheless, a healthy supply of credit is essential for stimulating business investment and facilitating the entry of new businesses.

RBS represents around a third of the SME market with a self-reported market share of some 25 to 30 per cent of SME customer relationships. Yet data suggests that RBS sits among the group of banks that have been reducing their lending, especially to businesses. The concern is that this is translating into weaker lending conditions for SMEs, impairing entry of new firms, and that this will continue in future.

An independent review commissioned by RBS from Sir Andrew Large and published today has examined RBS's support to SMEs and decisions on SME lending. It found that RBS has substantially underperformed the market and its previous market position in generating new lending, despite planning to increase SME lending as part of the new direction it outlined in 2008, for a range of reasons both generic to the small business lending market and specific to RBS.

Performance of the 'core' bank

Rothschild's analysis undertaken for the Government's Review of the case for an RBS bad bank has shown that many of the issues affecting RBS as an investment proposition relate to the ongoing 'core' business, rather than to its poor-performing legacy assets. Returns, even excluding the Non-Core run-down division, are below both RBS's cost of equity and the returns generated by the majority of comparable European banks, in large part as a result of low returns in a number of substantial RBS businesses.

This underperformance results in large part from continuing impairment losses, particularly those in "Core Ulster", which is not expected by market analysts to break even until 2015 at the earliest, and at this point to generate single-digit returns. In the US, Citizens continues to generate returns below the majority of its peers, with RBS acknowledging the need to address both revenue and cost underperformance ahead of the intended IPO. The Markets division (i.e. RBS's investment banking arm) has generated disappointing returns for several years now and will face considerable challenges, and may need to undergo further restructuring, if it is to compete effectively in future.

The relative underperformance of RBS is also in part attributable to costs, with a cost-to-income ratio (again excluding Non-Core) above the average of comparable European banks and other large UK banks.

In time, improved operating profitability at RBS will accelerate the path to the resumption of dividends. However, completing this journey will require the removal of a remaining obstacle to its making distributions to shareholders: the DAS.

New direction

On 1 October 2013, Ross McEwan and Nathan Bostock took over as RBS's Chief Executive and Chief Financial Officer, respectively. This change in management, coinciding with the Government's Review of an RBS bad bank, has provided RBS with a significant opportunity to re-focus on what it should be doing – lending to British businesses and households – and chart a course towards a better-capitalised bank in better shape for re-privatisation.

The RBS Board, led by the new executive management team, has today announced a new direction for RBS. The Board has determined that the decisions announced are in the best interests of its shareholders and other stakeholders. These decisions are laid out in this document, and will form the backdrop to the new RBS strategy being developed for early next year.

Based on the findings of the Review on the case for an RBS bad bank, the Government wholeheartedly supports the new direction announced today by RBS. The Bank of England, as the prudential supervisor of RBS, also welcomes the development of a more focussed plan from RBS, and commitments made by the RBS Board to bolster its capital position.

Strategic coherence and boosting capital – divesting Citizens and boosting capital

RBS has announced a number of actions and measures that will contribute towards boosting its capital levels and re-focusing RBS on its core British businesses. While it is not the only factor, there is robust evidence to support the role of capital in bank lending.

RBS has significantly bolstered its capital position since 2008, but there remain challenges ahead. To help manage these challenges and to support delivery of the rest of its new plan, RBS has announced a commitment to take actions by 2015 that will raise capital equivalent to adding two per cent to its capital ratio, including through a complete exit from Citizens, its US business, within two to three years.

RBS will also continue to shrink its investment banking arm, looking to leverage strong UK large corporate relationships further, with a review of its Markets division to be published in February 2014.

Following these actions, RBS will be re-focused on its core role as a British retail and commercial lender.

Lending to the British economy – becoming the best bank in Britain for business customers

RBS has the largest share of SME lending of any bank, and SMEs are typically less likely to switch banks than retail customers. Therefore, RBS is hugely important for the British economy and its lending behaviour can have a material impact on productivity and GDP.

RBS has today confirmed its commitment to becoming the bank of choice for UK small and medium sized businesses, including by:

- becoming the number one bank for SMEs judged by customer experience – measured by a newly-created survey to be run jointly by the Federation of Small Businesses (FSB) and the British Chambers of Commerce (BCC); and
- accepting the recommendations of the independent 'Large Review' into RBS's lending practices, commissioned by RBS in July and which is published in summary today.

These significant commitments will ensure that RBS will be held to account for improving its customer service and deploying its balance sheet to support the British economy.

A focus on the future and a return to private ownership

Performance of the 'core' bank – improving returns and clearing the path to a dividend

RBS has announced it will take actions to deliver a more profitable bank ready for re-privatisation and the return of taxpayers' money. RBS will:

- undertake a comprehensive review of Ulster Bank, to identify a viable and sustainable business model for supporting the Northern Irish and Irish economies, to report in February 2014. As part of this, RBS will run down circa £9 billion of 'high-risk' or non-performing Ulster Bank assets within the new internal bad bank; and
- accelerate Group cost reduction to improve returns in the 'core' bank, targeting a cost-income ratio in the mid 50s, down from its current level of 65 per cent. This cost-cutting will allow RBS to invest in its 'core' business and in servicing its customers better.

The Treasury and RBS are also in advanced negotiations with the European Commission over simplifying the bank's capital structure by retiring the DAS. Once retired, this will remove an effective block on RBS dividends and will represent a further step on the path to re-privatisation. Further details will be provided once agreement is reached.

As a result of RBS's new direction, the Bank of England has also confirmed that taxpayers' exposure to the banking system can be further reduced by removing the £8 billion Contingent Capital Facility one year early.

Credit quality and legacy assets – internal bad bank

Based on the work undertaken during the course of the Review, RBS has today announced that it will create an 'internal' bad bank to house its 'high-risk' assets and to remove them from its balance sheet quickly.

The RBS internal bad bank will hold £38 billion legacy assets – representing £116 billion in Risk-Weighted Assets – and will target wind-down within three years, with 55 to 70 per cent delivered within two years. This will rapidly and efficiently de-risk RBS's balance sheet, cementing the shift in RBS's focus from 'rescue' to 'recovery' and allowing RBS to focus on the future, rather than the past.

Assessing the case for a taxpayer-funded external bad bank

The Government considers that the way forward announced today by RBS offers a substantially better prospect for addressing its three objectives than the construction of an external bad bank, the case for which is thoroughly considered in Chapters 4 to 9 of this document.

As announced by the Chancellor in June, the Treasury – along with external expert advisers – has been assessing the merits of tackling RBS's legacy of risky assets through such an 'external', rather than an 'internal', bad bank. This Review comprehensively assessed the case for such a good bank/bad bank split against the Government's three objectives for its shareholding in RBS.

Summary of the case for a taxpayer-funded external bad bank

As the Chancellor has said, in retrospect, creating a taxpayer-funded external bad bank may well have been the right thing to do in 2008, or even in 2010. Between the start of 2010 and the

middle of this year, RBS reduced its Non-Core division by more than £150 billion. Although it faces some challenges, RBS now appears to be realistic over provisions and future losses on its worst loans – with the risk concentrated in a relatively small pool of assets – reflecting the huge deleveraging and increasingly prudent outlook adopted in recent years.

The Review's conclusion is that, while an external bad bank could deliver some benefits against the Government's three objectives, these effects are likely to be marginal as well as highly uncertain.

It could, in theory, modestly and temporarily boost the valuation of RBS, and would have a relatively small positive impact on RBS's capital position in a stress case, which might impact on the bank's willingness to lend in some circumstances. However, against these potential benefits must be weighed the very considerable practical, operational and financial challenges of executing a taxpayer-funded external bad bank; the extension of the taxpayers' exposure; and the inevitable distraction of RBS management.

Rothschild has advised the Government that:

- the creation of a taxpayer-funded external bad bank would do more harm than good to RBS, as it would not contribute to a capital improvement, would distract management and would involve significant implementation challenges. It would, therefore, detract from meeting the Government's objectives; and
- returning RBS to the private sector will be best helped by letting the new management focus on their UK strategy and not imposing further complex structural change on the bank.

The Review comprehensively addresses five aspects of the case for creating a taxpayer-funded external bad bank for RBS:

- why consider a bad bank and what assets might it include?
- would a taxpayer-funded external bad bank accelerate RBS's return to the private sector?
- would a taxpayer-funded external bad bank support the British economy?
- would a taxpayer-funded external bad bank provide best value for the taxpayer?
- the design and delivery of an external bad bank.

What is a bad bank and what assets would it include?

Bad banks have been used by a number of financial institutions and governments to address problems in their financial sectors, most recently in response to the financial crisis of 2007-08.

A "bad bank" separates viable and profitable elements of a bank from distressed and non-performing assets, allowing the viable entity to continue to generate new business and support the wider economy through new lending. 'External' bad banks involve taxpayer support, typically to reduce uncertainty over the valuation of its assets and improve future performance.

Understanding RBS's legacy and poorly-performing assets

The Review considered the whole of RBS's balance sheet – £843 billion in funded assets – and identified all the assets that either provide a poor return (due to high losses, low profitability or high capital intensity) or perform particularly badly in a stress scenario. While the financial crisis

left RBS with hundreds of billions of pounds in poorly-performing and non-strategic assets, the substantial progress made in shrinking its balance sheet since then means that the loans and securities that met either of these criteria have an overall balance of £104 billion (£89 billion after considering RBS's existing provisions). These assets are predominantly located in the existing Non-Core division, Ulster Bank, the Markets division, the RBS Global Restructuring Group (GRG) and in some other corporate lending and commercial real estate areas of the Group.

BlackRock Solutions then undertook a detailed analysis of the projected future performance of these assets, under conservative 'base case' and 'stress case' macroeconomic scenarios, as defined and published by the Bank of England.[1] BlackRock Solutions noted to the Review that it had undertaken a rigorous review of a wide range of balance sheet exposures across the bank; and its assessment of risk was largely aligned with RBS's internal view, including its assessment of potential future losses.

Specifically, BlackRock Solutions' analysis found that:

- RBS is now generally realistic in how it views the value of its assets and the future provisions it will need to take. RBS's existing provisions and projections of future losses appear realistic and broadly consistent with BlackRock Solutions' projections for asset performance in a 'base case', and indeed RBS view a 'stress case' even more severely than BlackRock Solutions' analysis suggests;
- most of the projected future losses on the assets are concentrated in a relatively focussed pool of £30 billion of high-risk assets (including Ulster loans and Commercial Real Estate lending), with the remainder typically high-credit quality (i.e. low projected losses) but low returning and/or capital-intensive; and
- the 'high-risk' pool of assets remains capital-intensive and has substantial tail-risks.

Rothschild and BlackRock Solutions' analysis shows that, given the concentration of the expected future losses and tail risks in this pool, focussing any bad bank on these assets would maximise its impact. Transferring lower-risk assets into the bad bank alongside would do little to improve the risk profile of RBS or its resilience to an adverse economic shock, and could even be counterproductive for the bank's overall capital position – a finding supported by Rothschild financial modelling (see below). It would also require greater use of taxpayers' funds to purchase a larger pool of assets.

The Review therefore considered the case for an external bad bank to tackle RBS's legacy assets based on this high-risk pool of assets, assessing it against the Government's three objectives.

Would a taxpayer-funded external bad bank accelerate return to the private sector?

In order to achieve the objective of accelerating RBS's return to the private sector, creating a taxpayer-funded external bad bank would need to improve prospects for dividend payments and the market's valuation of the bank.

Rothschild's financial modelling analysed the potential impact on RBS of creating an external bad bank for this £30 billion pool of assets, both in terms of capital levels and market valuation

[1] *Prudential Regulation Authority (PRA) UK anchor scenario H2 2013*, 28 June 2013; *PRA UK baseline*, 28 June 2013.

of the bank. To protect the interests of the taxpayer, it was assumed that the Government would pay RBS no more for the 'high-risk' bad bank assets than a price which would be expected to generate an acceptable return for the taxpayer in a 'base case'.

The analysis shows that transferring the assets into an external bad bank at a price the Government would be willing to pay would lead to modestly lower capital ratios for RBS than those in the status quo, reducing RBS's capital ratio in 2016 by around 0.5 percentage points.[2]

However, if a 'stress' scenario were to materialise, removing the 'high-risk' assets from RBS's balance sheet would mean its capital ratios fared better than without a good bank/bad bank split, as it would reduce the level of tail risk that RBS is exposed to.

The Rothschild analysis suggests some theoretical value uplift for RBS, due to improving the return on equity of the good bank. However, this initial improvement in returns quickly diminishes over time, reflecting the fact that many of the assets would be cured or pay back even without a good bank/bad bank split. Using the same analytical approach to assess the potential impact of a larger external bank – consisting of all of the assets initially identified as potentially suitable for a bad bank – shows that it has a larger negative impact on capital and a negative theoretical impact on valuation. This is primarily because most future losses are concentrated in the smaller 'high-risk' pool of assets, so the benefits of creating the external bad bank for the 'low-risk' assets are far smaller.

Moreover, this analysis takes limited account of the costs and uncertainties involved in creating an external bad bank, including the potential for EU State aid remedies.

This leads to the conclusion that, while there may be some benefit to the valuation of RBS from creating a taxpayer-funded external bad bank, and hence ease of exit for the Government's shareholding, any increase in RBS valuation is very uncertain and likely to be small.

Furthermore, Rothschild's analysis suggests that investors have already begun to price in the potential effect of improving asset performance for RBS, so it is not clear that the drag of the legacy assets is a material, and certainly not the main, impediment to the Government selling down its stake in the bank. Indeed, Rothschild has advised the Government that a much more substantial impact on achieving this objective could be secured through delivery of further improvements in the return on equity in the 'good' bank.

Would a taxpayer-funded external bad bank support the British economy?

In order to support the British economy, an external bad bank must improve the remaining good bank, freeing up capital to encourage the provision of more credit to the economy and be sufficient to make a material difference at the macroeconomic level.

The Review has undertaken a comprehensive assessment of the potential impact on the economy of creating an external bad bank for RBS.

Assessing the economic impact of a good bank/bad bank is complicated. The case depends on the economic context – the extent to which impaired credit supply is subduing growth – and the effectiveness of the intervention: the extent to which an external bad bank would improve RBS's ability and incentives to lend.

[2] Common Equity Tier 1 (CET1) capital ratio.

One channel through which this might operate is credit conditions. While credit conditions are improving as the economy recovers, it is crucial to make sure that a lack of lending does not hold back the recovery.

The question of whether credit conditions have been affected by lack of credit supply or lack of credit demand has been widely debated; inevitably it is likely that both effects have been present to some extent. While credit conditions appear to be improving for households and for larger businesses, smaller businesses are still both reluctant to borrow and sometimes unable to do so when they want to.

These impaired credit conditions can weigh on productivity growth, either because they prevent firms from undertaking investment and expanding, or because they impair the reallocation of resources from existing companies to new companies. Research by the Bank of England suggests that these effects could be quite large in the current recovery;[3] this implies a potentially large positive impact on the economy if this problem could be addressed.

SMEs are a crucial element in this. However, smaller companies are often reluctant to change bank. This has important implications: because RBS has such a large market share amongst SMEs, and because SMEs are reluctant to change bank, RBS's lending behaviour can materially affect the amount of lending in the economy.

Data suggests that RBS sits amongst the group of banks that have been reducing their lending, especially to businesses. The concern is that this is translating into weaker lending conditions for SMEs, impairing entry of new firms, and that this will continue into the future.

Assessing whether an intervention will be effective in supporting RBS lending depends on understanding what is driving this behaviour and whether a restructuring would support additional lending.

There is a considerable body of evidence which suggests that improving the capital position of a bank increases lending. Additional capital allows a bank to absorb potential losses, reducing the risk around the bank's debt and as a result allowing it to take on more risk through greater lending. Higher levels of capital have tended to be correlated with higher lending as well as lower funding costs.

Increasing capital is therefore the surest way to enable increased lending. However, creating an external bad bank is not expected to improve RBS's capital position, at least in a 'base case'.

It would be expected to improve RBS's capital position in a stress case, and reducing the risk around RBS's capital position could itself support additional lending, but this effect is less certain, as it depends on unquantifiable behavioural effects.

The Review's analysis of a range of potential scenarios suggests that there would be a marginal positive impact on the British economy if RBS's lending were affected by this reduced risk around its capital position. But this analysis also shows that this impact is small overall – due to the bad bank's limited impact on RBS's capital position – and is subject to large uncertainties. In the upper bound it might increase the average annual growth rate of GDP by 0.06 percentage points over the next five years, but the impact is likely to be lower and could be zero.

[3] *Inflation Report,* Bank of England, August 2013

It is clear from the analysis that a more fundamental improvement in the capital position of RBS than can be achieved through an external bad bank is required to have a significant impact on the economy.

Would a taxpayer-funded external bad bank get the best value for the taxpayer?

Accelerating RBS's return to the private sector and supporting the British economy are both crucial aspects of assessing whether a taxpayer-funded external bad bank for RBS's poorly-performing assets would secure the best value for the taxpayer.

However, the analysis undertaken for this Review has also demonstrated that there is a high risk of 'transferring value' to RBS shareholders, including to minority shareholders (e.g. if the Government 'over pays' for the assets despite the conservative approach taken to valuation) and to RBS creditors (by taking risk away from them and onto the public balance sheet).

Establishing the correct price for each of the assets transferred – and the substantial amount of legal and financial due diligence this would entail – would be a complex and lengthy process, and would cause considerable distraction for RBS management from its core objectives. This would not be in the interests of the taxpayer and mispricing of the assets could result in the Government not receiving adequate compensation for the risks it would be taking on. Furthermore, any subsequent under-performance of the assets versus the 'base case' would result in a loss to taxpayers.

Moreover, the considerable operational and delivery challenges in executing an external bad bank would expose the taxpayer to additional risks, and the complex set-up and operation of the external bad bank (see below) would lead to costs likely to run into the hundreds of millions of pounds, if not more.

The Review also expects that creating an external bad bank to house RBS's high-risk and legacy assets would lead to an increase in levels of public debt, and would likely result in a one-off increase in the deficit (although this would be for the ONS to establish if a good bank/bad bank split were pursued). That said, the Government does not believe that these fiscal effects, in themselves, are of sufficient magnitude to undermine the case for an external bad bank, if that case were otherwise considered to be strong.

Designing and delivering an external bad bank

The analysis of BlackRock Solutions and Rothschild, and the legal advice of Slaughter and May, has highlighted both the sheer complexity of RBS and the assets that would go into a bad bank, and the legal and operational challenges inherent in executing a good bank/bad bank split. While the Government is confident such a split is achievable, the risks of such a transaction would be significant and it would take an estimated 12 to 18 months to put in place.

In particular:

- transferring the assets from RBS into an external bad bank would, in many instances, involve substantial legal difficulties, not least the requirement for many borrowers to consent to their loans and derivatives being moved across; and
- the assets that would be transferred to an external bad bank are significantly more diverse – not just UK mortgages but large corporate loans, structured products and derivatives – and therefore much more complex and challenging to manage than

those of UK Asset Resolution (UKAR), the Government's existing bad bank for Northern Rock and Bradford & Bingley.

The requirements of European State aid rules also add another dimension of uncertainty to the creation of an external bad bank. It is highly likely that the European Commission would consider that aid had been provided to RBS. This could be expected to lead to pricing, restructuring or behavioural conditions inconsistent with the Government's objectives and which could weaken, rather than strengthen, the remaining 'good' RBS.

RBS bad bank – separating the good from the bad

Tackling RBS's legacy of 'high-risk' assets is a necessary (if not sufficient) part of getting a bank that is a boost, not a burden, to the British economy; and one which is a step closer to return to the private sector.

Therefore, the Government strongly supports RBS's new 'internal' bad bank. RBS has announced it will target wind-down of £38 billion 'high-risk' poorly-performing assets within three years, with 55 to 70 per cent delivered within two years. This will rapidly and efficiently de-risk RBS's balance sheet, cementing the shift in RBS's focus from 'rescue' to 'recovery' and allowing RBS to focus on the future, rather than the past. And it will do so without the extension of taxpayers' support – and the risks associated with legal and operational challenges – that creating a taxpayer-funded external bad bank would involve.

The RBS bad bank will build on the considerable success of running down its Non-Core division and represent a step-change in the focus that will be applied to dealing with troubled assets:

- be overseen by a committee of the Group Board comprising only non-executive directors, with the committee formally reporting on the bad bank's progress against, and compliance with, agreed asset management principles to the Group Board;
- disclose the bad bank's financial accounts separately in its quarterly and annual reporting, with this transparency demonstrating clearly to investors that the legacy assets are manageable and the bank has both a credible plan and evidence of delivery; and
- have a governance and reporting structure that will be at least as rigorous and transparent, and on some measures more so, as the bad bank set up by Citibank in 2009, Citi Holdings; making RBS's bad bank a best-in-class example of an internal bad bank.

BlackRock Solutions advised the Review that RBS has demonstrated a strong track record for effectively managing down its Non-Core assets; and that it believes that that these skills combined with RBS's plan for setting up an internal bad bank offer the most efficient route to resolving the identified assets.

RBS's new direction – conclusions

RBS's comprehensive plan will lead to a stronger, healthier bank clearly focused on lending to British businesses and households. The Bank of England, as the prudential regulator of RBS, also welcomes the development of a more focussed plan from RBS, and the commitments made by the RBS Board to bolster its capital position.

In addition to the internal bad bank – which will tackle the legacy risks to RBS's balance sheet but without resort to taxpayers' funds – the new direction will also deliver a better capitalised bank more focused and more able to lend to the British economy.

The scale of this increase in capital is such that RBS's new direction is expected to result in significantly greater benefits to the British economy than could ever be achieved by the creation of a taxpayer-funded external bad bank.

In summary, the strategy will deliver materially more, with greater certainty, than a taxpayer-funded external bad bank alone could do, in terms of all three objectives set out by the Chancellor at Mansion House:

1 accelerating return to the private sector: the internal bad bank will give investors confidence and clarity on how RBS is tackling its high-risk exposures, alongside a new coherent strategy for the 'core' bank, including aggressively tackling the cost base to improve returns – both of which should accelerate RBS's return to the private sector;

2 supporting the British economy: RBS will be boosting its capital position substantively through raising capital equivalent to increasing its capital ratio by two per cent by 2015, including a complete exit from Citizens, thereby increasing its focus on the UK. RBS has also committed to becoming the number one bank for customer experience and being the bank of choice for British businesses. Boosting capital is the surest way to enable RBS to increase lending, and so to achieve a substantial benefit for the British economy; and

3 getting best value for the taxpayer: neither the internal bad bank nor any of the other measures proposed by RBS requires the injection of public funds or the assumption by Government of additional fiscal risks. Moreover, by benefitting the economy more widely, this new direction generates better value to the taxpayer than an external bad bank could achieve.

Rothschild has advised the Review that the new direction announced by RBS should, over time, address many of the bank's challenges and areas of investor concern, which in the longer term should be reflected in an improved valuation and improved prospects for an earlier return of RBS ownership to the private sector.

The Bank of England will play a continuing role in overseeing the implementation of RBS's plan as part of its ongoing supervision of the firm. The shareholder value implications of the plan have been reviewed by UKFI. UKFI support the plan and will engage closely with the Board and management to oversee its development and implementation, in line with their mandate to act commercially and in the best interests of the taxpayer as shareholder.

The new direction for RBS is supported wholeheartedly by the management and Board of RBS, the Bank of England, UKFI and the Government.

Part 1: Introduction

1 The challenges facing RBS today

1.1 This chapter, drawing substantially on advice provided by Rothschild to the Government's Review, sets out the various challenges that are facing RBS today.

1.2 In short, a viable RBS that is capable of meeting in full all of the Government's objectives for its shareholding will:

- have a coherent strategy that focuses on RBS's strengths and encompasses a portfolio of businesses that build on and reinforce these strengths;
- have a capital position that is substantially bolstered, giving RBS the strength to meet emerging future risks, to grow its core loan books and to invest in the operations of the core business to serve better its customers;
- generate attractive levels of ['core' growth] and profitability that would underpin a strong investment case;
- have completed the recovery of its balance sheet from its pre-crisis expansion through running down remaining risky and non-strategic assets; and
- provide clarity on the path to the future resumption of dividends to shareholders.

1.3 The challenges RBS faces in achieving these goals can be grouped into four categories: balance sheet strength and strategic coherence; lending to the British economy; performance of the 'core' bank; and tackling its legacy of risky assets.

Balance sheet strength and strategic coherence

Capital strength

1.4 Before the financial crisis of 2007-08, the RBS Group operated with relatively low levels of capital. This meant that the Group had inadequate capacity to absorb the material write-offs required following the subsequent economic downturn, forcing the UK Government to provide financial assistance in order to stabilise the bank and preserve financial stability.

1.5 A five year plan to de-risk the bank led to a subsequent strengthening of the Group's capital position. As at the end of June 2013, the Group had exited the APS and its Core Tier 1 ratio had increased from 6.1 percent as at the end of 2008 to 11.1 per cent.

1.6 These improvements have been primarily achieved through the reduction of the Group's balance sheet via a combination of whole-business disposals, run-off, asset sales and write-downs as opposed to capital raisings or earnings retention; at end-2012, balance sheet assets were 41 per cent lower than those at end-2008 and over the same period Group Risk-Weighted Assets have fallen by 20 per cent, despite various regulatory uplifts. The Group has made substantial losses over the five years since the crisis, meaning that it has been unable to internally generate new capital.

1.7 Against this background, the Financial Services Authority (FSA) and subsequently the Bank of England (in its role as prudential regulator) concluded its work in relation to the Financial Policy

Committee's recommendation that it assess UK banks' current capital adequacy after taking account of a number of 'headwinds,' as described in Chapter 1. At the end of 2012, the Bank of England assessed that RBS had a shortfall to this standard of £13.6 billion. However, taking into account capital actions in RBS's capital forecast, the Bank of England assessed the shortfall to be £3.2 billion at 31 December 2013.

1.8 Furthermore, regulatory standards continue to evolve – for example, and as noted in Chapter 1, the Bank of England is currently consulting on how it will implement the fourth Capital Requirement Directive in the UK. In addition, RBS needs to be able to accommodate any additional headwinds which may adversely affect their capital resources, for example future costs of conduct redress.

1.9 The capital raising actions will also provide RBS with the resources to invest in its 'core' business and to increase its lending to the UK economy.

Strategic coherence

1.10 RBS has a diverse portfolio of businesses that were built up prior to the crisis, when it had aspirations of being a global bank. While there has been strategic rationalisation to date – for example through the exit of retail banking in a number of countries where RBS had only limited presence, and the re-focussing of its Markets business – more needs to be done.

1.11 Citizens has limited connectivity with the rest of the RBS Group. It is a separate legal entity, and has its own capital and liquidity requirements imposed by local regulators. Accordingly, it is constrained in its ability to pay dividends to the Group, and RBS as a whole is only able to make very limited use of Citizens' excess deposits to fund the rest of its operations. Citizens is also largely separate from the rest of the Group from an operational perspective.

1.12 The Markets division is in a transitional phase, as RBS executes a multi-year plan to reduce its capital consumption and to reduce its cost base. The ultimate destination for the Markets division will be a business that is complementary to RBS's core corporate banking franchise, where it will enable RBS to serve its clients better.

1.13 In addition, while Ulster Bank fits well with RBS's strategic footprint and core capabilities, a sustainable operating model needs to be found for it so that it is a viable business in a normalising Irish economy. There is considerable connectivity between Ulster and the rest of RBS. It is the largest bank in Northern Ireland, and so is important to the health of the UK economy. UK businesses benefit from a bank which is active in both the UK and the Ireland, which remains one of the UK's largest export markets. And Ulster benefits from considerable synergies with the rest of the RBS Group; for example, it shares common systems with the Group's other UK banking operations.

Lending to the British economy

1.14 A successful UK retail and commercial lending business at RBS is a crucial element to full rehabilitation of RBS prior to return to the private sector, but it has in recent years struggled to deliver the kind of lending growth it has targeted and expected.

1.15 Since the financial crisis, overall bank lending to SMEs has declined by nearly a quarter. In part, this is because banks lent too much before the crisis, particularly to Commercial Real Estate (CRE), and some reduction in overall lending is therefore desirable.

1.16 The Government's Review has found that – as set out in more detail in Chapter 7 – while credit conditions are improving for larger firms, both credit supply and credit demand remain weak for small and medium sized companies. Furthermore, some of the weakness in demand is

a result of weak supply: some SMEs appear to not be applying for credit on the assumption that it is unavailable.

The Large Review

1.17 In this context, the Chairman of RBS commissioned an independent report by Sir Andrew Large, with the support of Oliver Wyman. This review had two broad objectives:

- to identify the steps RBS can take to enhance its support to SMEs and the economic recovery whilst maintaining safe and sound lending practices; and
- to promote a common understanding of the way in which RBS makes its judgments and decisions on SME lending.

1.18 The Large Review has found that RBS has substantially underperformed the market and its previous market position in generating new lending. In 2009, the first year for which data was available, RBS generated 40 per cent of gross new SME lending in the UK. In the first half of this year, it generated only one-quarter. This performance also compares to RBS's estimated market share of SME customers (rather than lending), which stands at 25 to 30 per cent, although the data are not necessarily directly comparable.

1.19 Sir Andrew found that RBS did in fact plan to increase SME lending as part of its new strategy outlined set in 2008, and set aside the funding and capital that would be needed to do this. RBS failed to meet its own objectives.

1.20 Sir Andrew identifies a range of causes for this underperformance. Its lending objectives lacked coherence with other agendas, in particular with making the bank safer and meeting increasing prudential requirements. There are a plethora of organisational difficulties which are impeding RBS's lending performance. RBS's strategy and business model make lending difficult. And RBS needs to invest further in its people and processes.

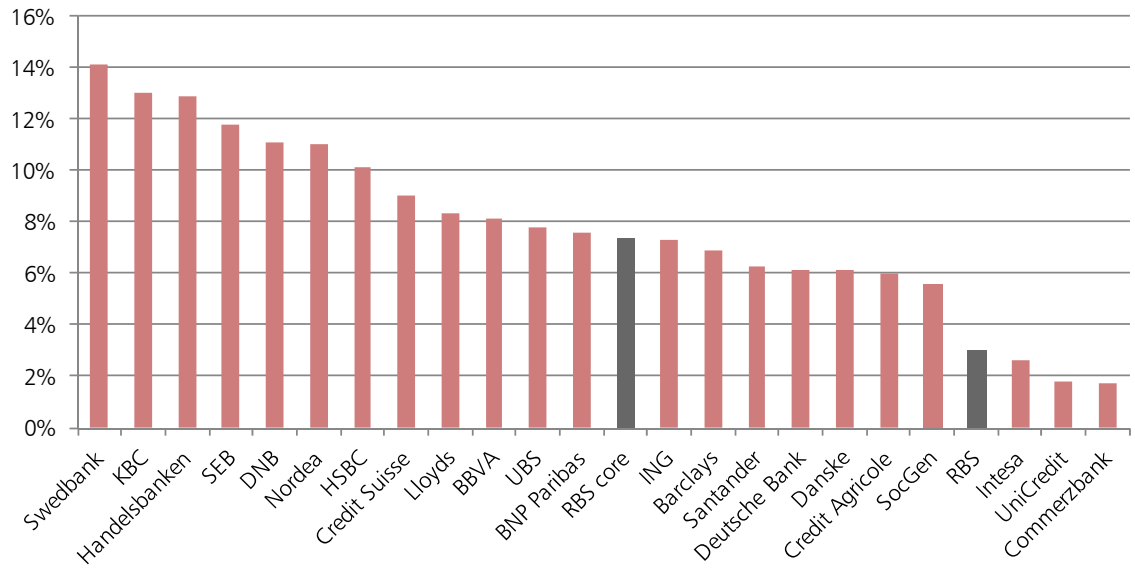
1.21 Sir Andrew has made a series of recommendations to RBS, which it has accepted.

Performance of the 'core' bank

The profitability of RBS's 'core' businesses

1.22 RBS Group's return on equity is significantly below both its cost of equity, which many market analysts estimate to be 10 to 12 per cent, and the returns generated by the majority of comparable European banks, as illustrated in Chart 1.A.

Chart 1.A: Selected European banks' forecast return on equity, 2013E



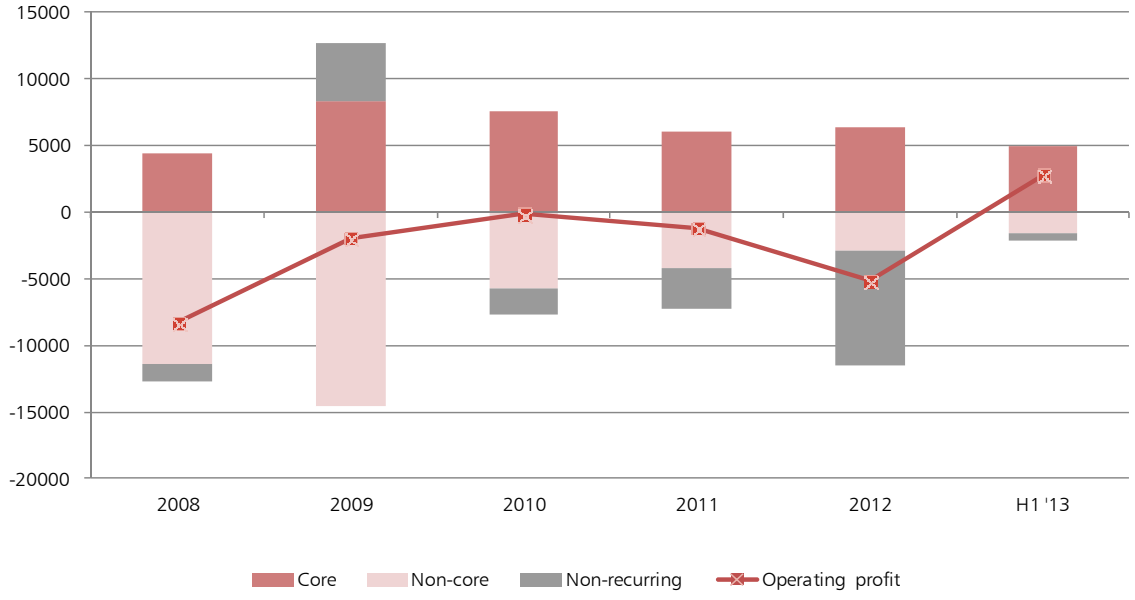
Source: Factset

1.23 This underperformance has a number of sources, as discussed below.

Non-core losses and non-recurring charges

1.24 While RBS's 'core' businesses, taken together, have remained profitable since the crisis, these profits have been more than outweighed by losses in Non-Core totalling more than £38 billion, and "non-recurring items" such as restructuring charges and on-going costs associated with the investigation and remediation of past conduct failures, totalling more than £14 billion.

Chart 1.B: RBS operating profitability, £ million



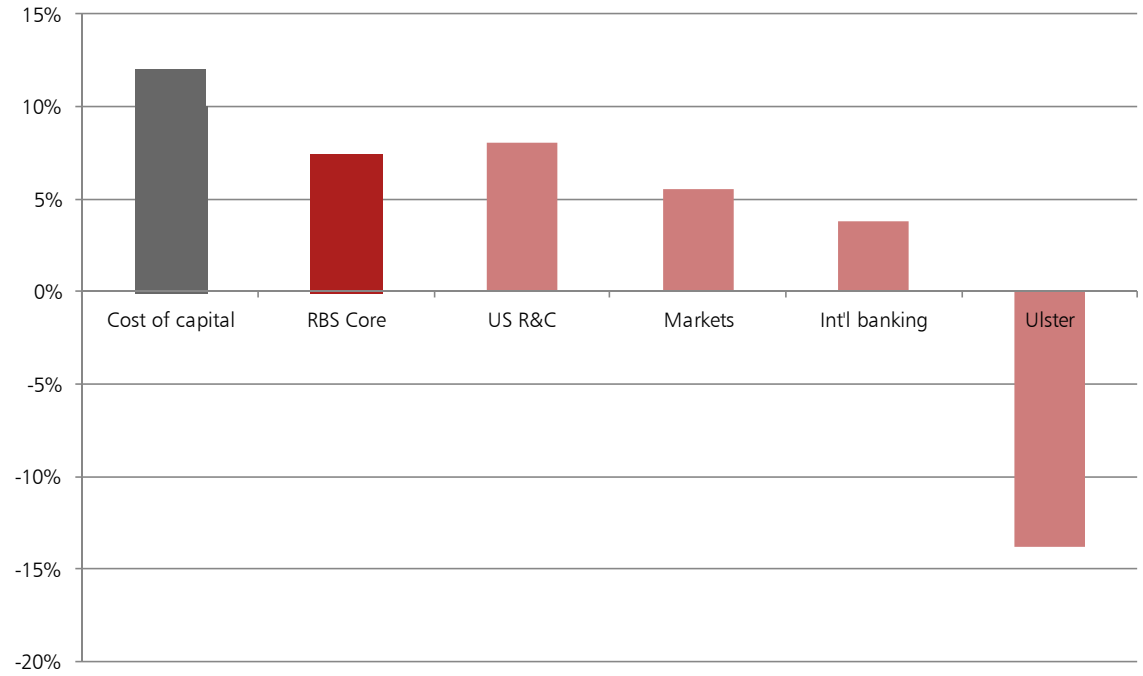
Source: HM Treasury, RBS reports. 2013 is H1 annualised

1.25 Even excluding Non-Core and non-recurring charges, RBS Group's return on equity would still be below most of its peers and its cost of equity.

Underperforming core businesses

1.26 Although ongoing losses in the Non-Core division explain part of the underperformance, it is also clear that RBS faces challenges in some of its 'core' businesses. With the exception of UK Retail, UK Corporate and Wealth, none of RBS's businesses earn an appropriate return on equity.

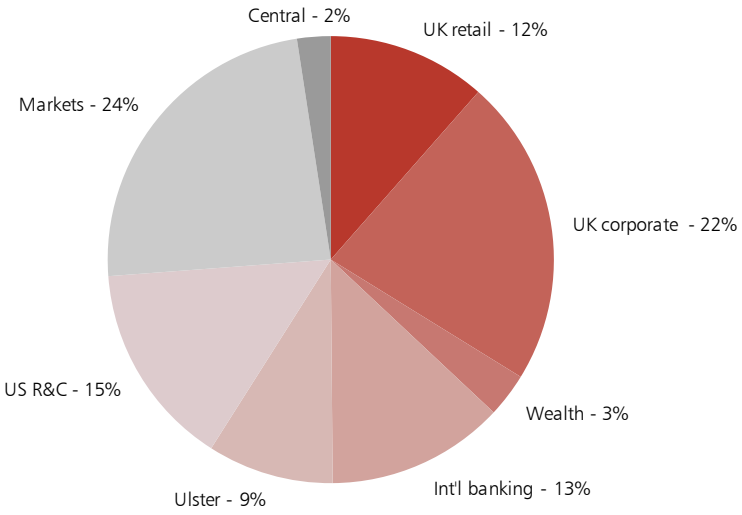
Chart 1.C: Return on equity for selected Core RBS divisions, H1 2013



Source: RBS company reports

1.27 The returns challenge is magnified as the businesses illustrated above account for approximately two-thirds of RBS risk-weighted assets, a proxy for capital deployed.

Chart 1.D: Core RBS' divisional RWA consumption, H1 2013



Source: HM Treasury, RBS company reports. Based on quarterly average RWA during the half

1.28 With the exception of Ulster, which faces considerable challenges arising from the collapse of the Irish property market and the ongoing difficulties in the Irish economy, much of this underperformance occurs in businesses which are not complementary to RBS's 'core' UK banking operations, and in which it has limited demonstrable competitive advantage:

- the returns in the US Retail and Commercial banking business – Citizens – have recovered but continue to be subdued. While in part this reflects the interest rate environment, there is a longer-term issue: Citizens' return on assets, an important measure of profitability, has been consistently below that of its peer group average for some time. In part this may reflect the limited economies of scale between Citizens and the broader RBS Group: only 6 per cent of its operating cost base is 'indirect' – that is, purchased from the Group's central operations infrastructure – compared to approximately 55 per cent and 45 per cent for UK retail and Ulster respectively. RBS acknowledges the need to improve both the revenue and cost performance of the business ahead of the intended IPO;

- management has been downsizing the Markets division as a response to developments in regulatory and market conditions and the Government – through UKFI – has been strongly supportive of these efforts. However, this division continues to face significant challenges, similar to other banks, and is expected to continue to consume significant capital and act as a drag on RBS Group returns. Having managed to achieve a double-digit return on equity in only one of the last ten quarters, the profitability of this division continues to be unsatisfactory; and

- similarly, returns in International Banking have deteriorated as the business is being reshaped. Revenues have fallen for nine of the last ten quarters, which, coupled with a deterioration in the credit quality of the loan portfolio, has led to significant declines in profitability, notwithstanding substantial cost reductions. Single-digit returns on equity increasingly appear to be the norm as the capital-intensity of the loan portfolio has increased substantially. While the division's prospects will improve as and when the interest rate environment turns and global economic activity recovers, it is likely to continue to face pressures, particularly within its low-margin lending business.

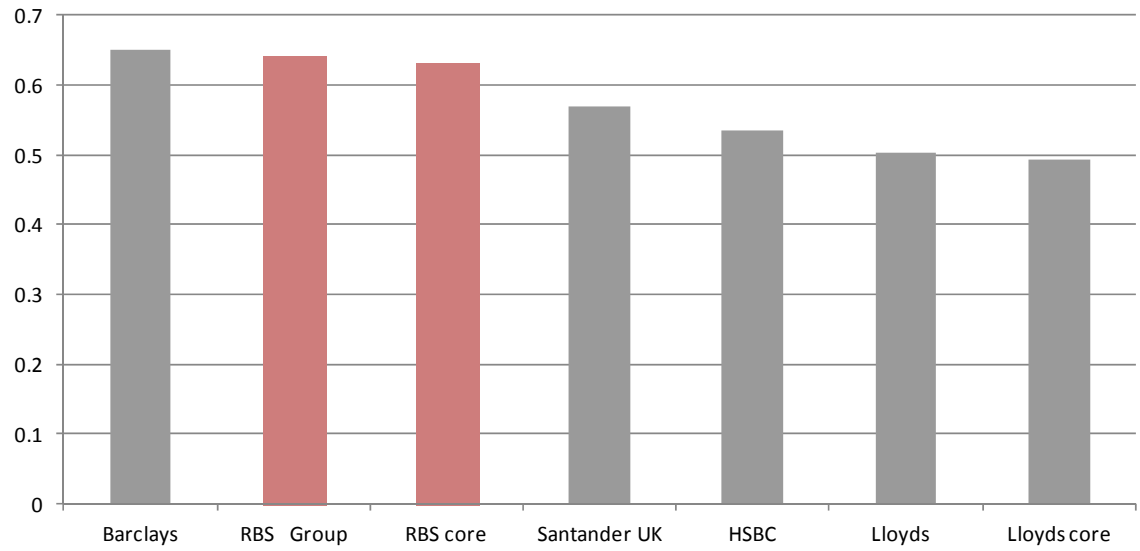
Costs

1.29 While some of RBS's profitability issues can be addressed through sharpening its strategic focus, it will also need to improve the operating performance of its 'core' businesses. In large part, this means that RBS will need to address a considerable challenge on costs.

1.30 RBS's cost-to-income ratio (with or without Non-Core) is above the average of comparable European banks and significantly above that of most of the major UK-listed banks, as shown in Chart 1.E.

1.31 Furthermore, Ulster's cost base will need substantial restructuring if the bank is to remain attractive. Its cost-to-income ratio was 61 per cent in the first half of 2013 and would have been higher still if the income from the circa £9 billion of loans being transferred to the internal bad bank had not been written in the first place. A viable Ulster Bank will need to match its costs to the income that can be generated from a smaller balance sheet, one that comprises only better quality lending in sustainable segments of the market.

Chart 1.E: Selected UK banks' cost-to-income ratio, H1 2013



Source: HM Treasury, company reports

1.32 While some of this comparative disadvantage is a function of business mix (for example, investment banking and wealth management tend to have higher cost-to-income ratios than, say, mortgage banking), RBS will need to invest in its core systems and maximise its operating efficiency if it is to remain competitive.

1.33 Many of RBS's competitors have ambitious cost reduction targets in place, and RBS will need to keep pace with these if it is to remain competitive. Both Barclays and HSBC are targeting a cost-to-income ratio in the mid-50s by 2015, while Santander UK is aiming for less than 50 per cent by the same year, assuming the interest rate environment has normalised, and Lloyds 44 per cent.

Failing to deliver for customers

1.34 RBS's UK corporate bank is currently generating a level of profitability in line with its peers (as measured by return on Risk-Weighted Assets).

1.35 However, over the past two and a half years, the core UK corporate bank's gross loan book has contracted by more than £9 billion, leading to significant pressure on the division's income.

While demand for corporate lending across the economy is subdued, RBS has underperformed other banks. For example, regulatory data shows that its net lending to SME non-financial corporations during 2011 and 2012 contracted more than that of any other major UK bank as discussed in more detail in Chapter 7.

1.36 While this in part reflects RBS's efforts to reduce its over-exposure to Commercial Real Estate (CRE) lending, it also appears that RBS's lending to sectors beyond CRE is falling and that RBS is failing to take the market share of new business that it could otherwise expect.

1.37 As noted earlier in this chapter, Sir Andrew Large's review into RBS's SME lending performance will also be published today. It reveals a number of operational and organisational weaknesses that have weakened RBS's ability to support its SME clients, as shown in Box 1.A.

Box 1.A: The Large review – operational complexity and SME lending

As detailed in Chapter 2, Sir Andrew's review has identified how RBS's operational complexity has contributed to RBS's approach to SME lending:

- organisational fragmentation means that there is no single point of responsibility for SME lending;
- the SME businesses do not have direct control over much of the operating infrastructure that they require;
- it can be difficult for business banking to obtain and deploy the resources and skills required to support customers;
- RBS needs to invest more in Relationship Managers' skills; and
- the credit approval process is time consuming and takes longer to complete than competitors'.

As a result of these and a wide range of other weaknesses identified by Sir Andrew, RBS converts less than one-quarter of SME loan enquiries into an actual new loan.

1.38 Not only is this failure to lend a material impediment to RBS's ability to support the UK economy, but it will increasingly frustrate the objectives of maximising value for the taxpayer and returning RBS to the private sector: returns in SME and corporate banking businesses will ultimately be materially harmed if RBS is not able to return the loan book to growth: there is a limit to how far costs can be reduced to keep pace with falling income.

1.39 The UK Retail bank's financial performance also compares well with its peers, in large part driven by cost reductions and a substantial fall in the impairment charge, and, without fundamental structural change, there is likely to be a limit as to how much further this can continue.

1.40 Growing income will require significant investment in the bank's processes and infrastructure to make RBS the bank of choice for its customers. At present, the business is extremely complex and relies on legacy systems. This results in mistakes, poor customer service, and cost inefficiency. As a result, RBS attracted 1.3 million customer complaints last year (excluding PPI). On a per account basis, it had the second highest number of complaints of the large UK banks in the first half of this year.

The path to a dividend

1.41 The Government owns 64 per cent of RBS's voting shares; a further 5.1 billion non-voting B-shares which take its overall stake to 80 per cent; and one Dividend Access Share (DAS) granting preferential rights. (See Box 3.B for further details).

1.42 In time, RBS's improved capital position, sharper operational focus and improved operating profitability will accelerate the path to the resumption of dividends. However, completing this journey will require the removal of the DAS, a remaining obstacle to its making distributions to shareholders.

1.43 At present, the DAS is a "dividend blocker" which complicates RBS's capital structure and which might stop RBS paying a dividend, even when it is able to do so. The DAS will need to be retired in due course to enable the market to better understand RBS's path to dividend payment, and therefore facilitate RBS's return over time to private sector ownership.

Credit quality and legacy assets

1.44 Although a substantial proportion of RBS's riskiest assets were transferred to the Non-Core division, loan losses in the Core bank accounted for more than half of the Group's impairment charge in the first half of 2013. While the banking business is fundamentally about taking risk, and any bank that is properly supporting its customers will inevitably make loan losses, there are a number of risk concentrations in the Core bank that are not representative of "ordinary course" losses and that are dragging down returns in the bank.

1.45 These asset pools are covered in significantly more detail later in Chapter 5 of this report. However, two examples stand out.

1.46 First, RBS is continuing to suffer elevated loan losses in the core Ulster Bank. Analysts do not expect Core Ulster to break-even until 2015 at the earliest, and even from this point to generate only single-digit returns. This has been driven by ongoing loan losses, notwithstanding the transfer of £18 billion of low-quality lending to RBS's Non-Core division. Core Ulster's impairment charge represented 3.1 per cent of gross assets, which is ten times the loss rate suffered in the UK Retail division and was substantially larger than Ulster's income.

1.47 Secondly, Core RBS retains significant exposures to lower quality commercial real estate lending in the UK and elsewhere. For example, lending to property companies accounted for almost one-quarter of the UK Corporate division's loan book at the half-year, but more than 40 per cent of first half losses. While RBS and other banks will rightly continue to lend to this sector, this will be with a much more conservative risk appetite than was the case prior to the crisis.

Part 2: A new direction for RBS

2 RBS's new direction – the best bank in Britain for business customers

2.1 As announced by the Chancellor at Mansion House in June 2013, the Treasury has been undertaking a Review into the case for a good bank/bad bank split for RBS. The key findings and detailed analysis from this Review are set out in Chapters 4 to 9. One significant conclusion from the Review is that tackling RBS's wider issues – as set out in the previous chapter – is as important for RBS and the economy's future as addressing the tail-risks remaining from RBS's legacy and poorly-performing assets.

2.2 This chapter discusses three key elements of RBS's new direction that will lead to a better bank focused on lending to its customers. These measures are summarised in Box 2.A.

Box 2.A: Summary – the best bank in Britain for business customers

To generate capital that will make the bank better able to support lending to the British economy, RBS will:

- exit Citizens Financial Corporation in full within two to three years, generating capital and releasing a significant amount of Risk-Weighted-Assets; and
- take asset or business disposal actions, including those relating to Citizens, to raise capital equivalent to adding 200bps to its current capital ratio.

RBS will also continue to shrink its investment banking arm, with a review of its Markets division to be published in February 2014.

As part of its commitment to being the bank of choice for UK SMEs, RBS will:

- become the number one small business bank as judged by customer experience, as determined by a newly-created survey to be run by the Federation of Small Businesses (FSB) and the British Chamber of Commerce (BCC); and
- accept the recommendations of the independent 'Large Review' into RBS's lending practices, published today.

Strategic coherence and boosting capital

2.3 RBS has committed to take actions by 2015 which will raise capital equivalent to adding 2 per cent to its capital ratio, in order to enable it to meet evolving regulatory requirements; to provide comfort that it can absorb costs of future conduct redress; and to invest in improving the performance of its business, including growing lending.

2.4 The Government, and the Bank of England in its role as RBS supervisor, are strongly supportive of these capital raising measures. As a whole, they will:

- enable RBS to substantively bolster its capital position;
- result in a considerably more focussed and coherent portfolio of mutually reinforcing banking businesses, centred largely on the UK; and

- release capital to invest in improving the efficiency of RBS's 'core' businesses.

2.5 Other actions that RBS is taking, including the continued shrinkage of the Markets business (discussed further below) will also release capital and improve the strategic coherence of the bank.

2.6 The economics work conducted for the Review (which is described in Chapter 7) underlines the importance of capital to building a bank that is better able to support the British economy. A bank's capital position is vital for its lending performance: the higher a bank's capital, the lower its funding costs and the higher the bank's capacity for lending. Furthermore, if a bank can be certain of its true capital position, it will be less inclined to take actions to build capital that may also reduce its lending.

2.7 As a result of the measures announced today, RBS will be able to redeploy capital from underperforming international operations into its more profitable, higher-returning UK business where it has genuine competitive advantage providing these businesses with the capital required to support further loan growth.

2.8 The investment case for RBS will also be improved. The bank will have a clear focus on serving UK retail and business customers, with the capabilities in place to deliver sophisticated products to the larger UK corporate clients that need them, through a refocused Markets business and with the benefit of International Banking's payments and trade finance capabilities. RBS's portfolio of businesses will be connected and mutually reinforcing, generating both revenue and efficiency businesses between them.

Continuing to shrink its Markets division

2.9 RBS has for some time been substantially restructuring its Markets business. Earlier aspirations to be a global investment bank – which would have been extremely challenging to achieve – have been abandoned. In its place, RBS has an established strategy to create a significantly leaner Markets business with a focus on areas where it has competitive advantage. RBS has made progress on its current plan to reduce the footprint of the Markets business but still has further to go.

2.10 The Markets business is focused on supporting the Group's leading position in UK corporate banking and financing our international trade. RBS have announced that it will publish a review of the Markets division in February 2014.

2.11 The Markets division has exited, and will continue to exit, products where it has little competitive advantage or is not a top tier, credible player. For example, its equities businesses have been sold or closed and it will continue to exit peripheral market making activities, retail structured products and equity derivatives.

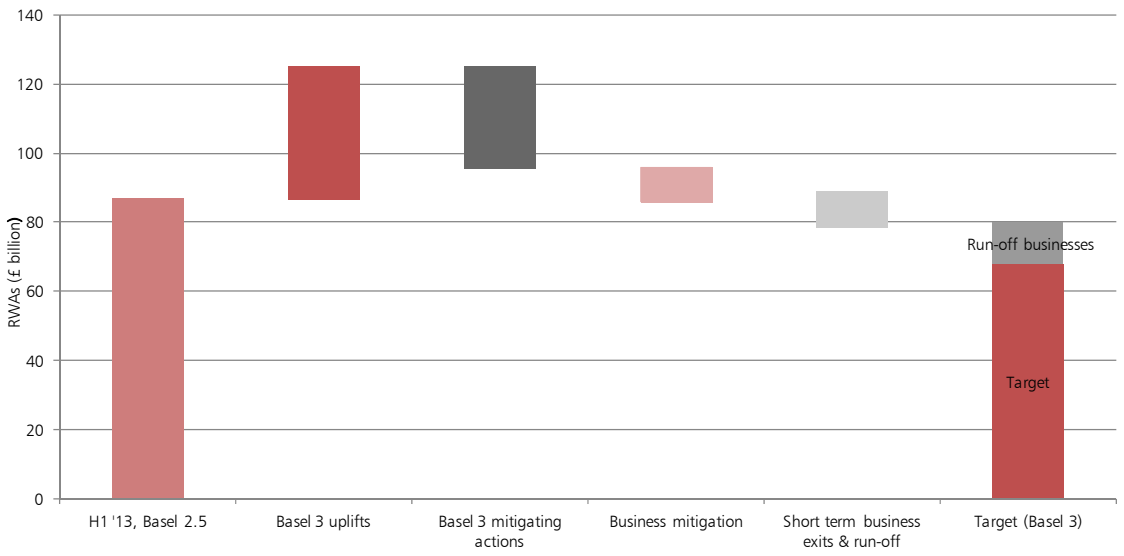
2.12 In line with this re-focussing, RBS will continue to reduce the operating cost base of the Markets division, with its stated ambition to reduce expenses by about one-quarter or more when compared to 2012.

2.13 The shrinkage of Markets will also release capital for redeployment in other areas of the bank, where it can be used to support the UK economy and where it should be able to generate better returns for shareholders. While risk-weighted assets in the business have fallen by more than two-thirds since their peak[1], they will be reduced further. Even after allowing for a 40 per cent uplift in RWAs as a result of regulatory change, RBS plans to reduce RWAs in the business

[1] Comparing Markets as at H1 2013 with the Global Banking and Markets division at December 2008

by a further 10 per cent from the current position, and by a further 15 per cent once run-off businesses have been taken account of. The internal bad bank will accelerate the release of capital from these run-off businesses.

Chart 2.A: RBS's planned movements in Markets Risk-Weighted Assets (RWAs)



Source: RBS

Being the bank of choice for UK SMEs

2.14 Ross McEwan, RBS's new Chief Executive, is committed to improving RBS's lending performance across the UK, and to making RBS the bank of choice for UK small and medium-sized enterprises (SMEs).

2.15 SMEs are a crucial element in supporting economic growth and increasing employment in the UK. However, smaller companies are often reluctant to change bank, as described in Chapter 7. This has important implications: because RBS has such a large market share amongst SMEs, and because SMEs are reluctant to change bank, RBS's lending behaviour can materially affect the amount of lending in the economy.

2.16 RBS represents around a third of the SME market, with a market share of 25 to 30 per cent of SME banking relationships. Yet data suggests that RBS sits among the group of banks that have been reducing their lending, especially to businesses. The concern is that this is translating into weaker lending conditions for SMEs, impairing entry of new firms, and that this will continue in future.

2.17 There is a considerable body of evidence, set out later in this Review, which suggests that improving the capital position of a bank is the surest way to enable increases in lending. Additional capital allows a bank to absorb potential losses, reducing the risk around the bank's debt and as a result allowing it to take on more risk. Higher levels of capital have tended to be correlated with greater lending, as well as lower funding costs.

2.18 However, of itself having more capital may not be sufficient to improve RBS's lending performance; RBS's capacity, appetite and ability to lend effectively to SMEs are also relevant.

2.19 As noted in Chapter 1, RBS commissioned Sir Andrew Large – a former Bank of England Deputy Governor – to "undertake an independent review of both its lending standards and the practices used to deploy them, for small and medium sized business lending".

2.20 RBS has today published the findings of the review and accepted its recommendations.

2.21 If successfully implemented, these recommendations should have three desirable outcomes: more lending to SMEs by RBS; an improved perception of RBS amongst customers and stakeholders; and a greater understanding of the issues surrounding the financing of the SME sector.

2.22 RBS has announced that it will aim to become the number one bank for SME customer experience, as measured by a newly-created survey to be run by the Federation of Small Businesses (FSB) and the British Chambers of Commerce (BCC).

2.23 RBS has also announced a series of actions to ensure it grows gross lending to SMEs and enhance its customer service:

- write to thousands more SMEs setting out clearly how much it is willing to lend to their business. RBS has already offered £4 billion of lending opportunities this way, and following the positive response to these letters RBS are now extending the programme;
- make all customers aware of the independent appeals process and work with the Independent Appeals Chair to improve the support it provides to customers from the appeals process. Where a loan is declined, RBS will signpost alternative sources of finance to every SME;
- treat customers in financial difficulty fairly and sympathetically by encouraging early identification and discussion of challenges customers may face, engaging with customers in difficulty and working with them to help identify and resolve issues;
- develop a dedicated website to show clearly what information RBS use to make a lending decision and set out simple, clear steps in its lending process;
- work to enable staff to make all but the most complex lending decisions in just five days of receipt of all necessary information – this process can currently take weeks and months in some instances;
- ensure two-thirds of its lending decisions are made locally and by sector specialists;
- continue to invest in building the capability of its people with at least 90 per cent of Relationship Managers and Credit Managers professionally qualified by the end of 2014; and
- be the most transparent bank in the UK by publically reporting on its progress in delivering against these commitments annually.

3 RBS's new direction – a focus on the future and a return to private ownership

3.1 The new direction announced by RBS will not only deliver a bank focused on its core British business customers, but will also enable it to break with the past and focus on its future, including putting itself on the path to eventual re-privatisation. This includes the creation of an internal bad bank, funded by RBS rather than by the taxpayer, and whose development was a direct result of the Review that the Government has undertaken since June.

3.2 These actions are summarised in Box 3.A.

Box 3.A: A focus on the future and a return to the private sector

RBS has announced that it will:

- create an 'internal' bad bank, which does not rely on taxpayer support, targeting rapid wind-down of £38 billion of its 'high-risk' assets
- put in place transparent disclosures and governance arrangements; and
- target the sale or wind-down of 55 to 70 per cent within two years and all the remainder within three years.

RBS has also announced that it will:

- undertake a comprehensive review of Ulster Bank, and its operating model. The review will identify a viable and sustainable business model for supporting the Northern Irish and Irish economies, and will report within six months; and
- wind-down circa £9 billion of Ulster Bank assets within its new internal bad bank.

In addition, RBS has announced it will launch a full review of its ongoing businesses that places the needs of customers at its centre. This will include identifying actions to invest in its 'core' bank, including by:

- accelerating Group cost reduction, in order to improve returns in the 'core' bank, targeting a cost-to-income ratio in the mid 50s, down from its current level of 65 per cent, with further detail to be provided in February 2014.

The Dividend Access Share (DAS) is an effective blocker to RBS paying a dividend. To clear a path to resumption of dividend payments:

- the Treasury and RBS are in advanced negotiations with the European Commission over retiring the DAS, in order to simplify RBS's capital structure and reduce uncertainty about its likely future dividend policy; and

Finally, as a result of RBS's new strategy:

- the Bank of England (as RBS's prudential regulator) has also confirmed that the taxpayers' exposure to the banking system can be further reduced by removing the £8 billion Contingent Capital Facility one year early.

Review to identify a sustainable business model for Ulster Bank

3.3 RBS's operations in Ireland (Ulster Bank) have been the source of significant losses for the Group. It is now clear that much of the business it did was unsustainable, having been built on the back of pre-crisis growth in Irish property values.

3.4 As a consequence, Ulster Bank's operating cost base grew to a position that significantly exceeded the volume of high quality, sustainable business that it is able to do.

3.5 RBS has announced it will undertake a comprehensive review of Ulster Bank, and its operating model. The review will identify a viable and sustainable business model for supporting the Northern Irish and Irish economies, and will report within six months.

3.6 In addition, RBS will also wind-down circa £9 billion of Ulster Bank assets within its new internal bad bank.

Investing in the 'core' bank

3.7 RBS has announced that it will conduct a fundamental review of the bank's operations and the way it serves customers. The full plan will be set out by the bank in February, and will cover three core areas:

- how RBS can better meet its customers' needs and be a better bank to do business with;
- how the bank's core systems and operations can be improved for the benefit of customers and of front-line customer-facing staff; and
- how RBS can work together as an organisation, to better serve customers and become greater than the sum of its parts.

3.8 RBS will target a cost-to-income ratio in the mid-50s, compared to its current level of 65 per cent.

Path to a dividend and cleaning up RBS's capital structure

Dividend Access Share (DAS)

3.9 To date, RBS has not made any payments to the DAS – the key terms of which are set out in Box 3.B – and has not resumed ordinary dividend payments. At the time of the 2009 intervention, it was anticipated that RBS would return to profit and resume dividend payments relatively quickly. However, circumstances have changed since then.

3.10 First, it emerged that the scale of problems at RBS were more extensive than had been appreciated, in part because of the onset of the euro area crisis.

3.11 Secondly, prudential capital requirements have been significantly tightened for banks, requiring them to conserve rather than distribute profits until capital levels reach an adequate level. As a consequence, RBS is still not at a point where it would be likely to pay dividends.

Box 3.B: Dividend Access Share (DAS) – key terms

The DAS entitles the Treasury to an enhanced dividend payment in every year RBS pays a dividend on ordinary and B shares.

This payment is the higher of 7 per cent on the notional outstanding amount of the B shares (i.e. £1.785 billion) or 250 per cent of the value of any cash dividend or bonus issue paid on the ordinaries multiplied by the number of 'B' shares issued to HMT.

Any payment made on the DAS is paid net of any dividends on the B shares.

The DAS dividend is payable at the discretion of the RBS Board, but dividends cannot be paid on ordinary shares unless a dividend is also paid on the DAS.

The DAS expires if the RBS share price equals or exceeds 650p for 20 out of any 30 consecutive trading days.

3.12 Improving the profitability and capital position of RBS means that it is more likely to return to a position where it will have the capacity to pay dividends. RBS resuming dividend payments would be an important step towards allowing the Government to sell its shares, by bringing RBS into line with most other large global banks, widening the field of potential investors, and providing a greater degree of clarity about the expected return from holding the shares.

3.13 It is therefore in the interest of RBS, its minority shareholders and the Government, as the majority shareholder, to agree a fair price to retire the DAS.

3.14 The Treasury and RBS are in advanced negotiations with the European Commission over retiring the DAS, in order to simplify RBS's capital structure and reduce uncertainty about its likely future dividend policy. Further details will be provided once agreement is reached.

Contingent Capital Facility

3.15 As noted in Chapter 1, the Contingent Capital Facility agreed with RBS in 2009 was put in place to protect RBS in the event of further stress, by committing the Government to inject further capital if the bank's Core Tier 1 ratio falls below five per cent. This leaves the Government with an £8 billion contingent liability to RBS.

3.16 The measures announced today and the new direction RBS is taking provides greater confidence in the strength of RBS's balance sheet and means that this protection is no longer necessary. The Bank of England has therefore confirmed that RBS can remove the Contingent Capital Facility one year early.

3.17 This will reduce the contingent liability associated with the facility, which means that the Government's total contingent exposures to the financial sector will finally reduce to zero from the high point of £551 billion in 2009.[1] Removal of the Contingent Capital Facility will also simplify RBS's capital structure and should provide greater confidence to investors, and so represents a further step on the path towards returning the bank to the private sector.

Creating an internal bad bank

3.18 The Government's Review of the case for a good bank/bad bank split for RBS has clearly highlighted that, despite the progress made by RBS since 2008, it retains a rump of 'high-risk' and poorly-performing legacy assets.

3.19 As set out in Part 3 of this Review, while RBS appears now to be both realistically provisioned and realistically projecting future losses on its worst loans, RBS's 'high-risk' assets remain capital-intensive and absorb management time and focus, and resolving this issue is an important (although not sufficient) part of any new RBS direction.

3.20 If the issue is not addressed, these 'high-risk' assets will continue to create uncertainty over RBS's capital position – and hence constrain its ability to expand lending to the UK economy – and act as a drag on returns, thereby delaying the bank's return to the private sector.

3.21 For these reasons, RBS is creating an 'internal' bad bank, which does not rely on taxpayer support. The RBS bad bank will rapidly wind-down £38 billion of its 'high-risk' assets, with transparent disclosures to the market and a target to sell or wind-down 55 to 70 per cent within two years, and all the remainder within three years.

3.22 As well as allowing the market to track RBS's performance in winding down these 'high-risk' assets, greater transparency – both as to its capital holdings against these assets and its performance in removing them from the balance sheet – will enable the market to make its own assessment of RBS's accounting and capital position with more of the data that is needed to do this. This will also generate greater certainty for investors as to the overall asset quality on RBS's balance sheet, as the assets identified as the riskiest are demonstrably wound-down or sold.

[1] ONS: Government Deficit and Debt under the Maastricht Treaty, September 2013, Table M9.

3.23 The new RBS bad bank was developed in light of the Review undertaken by the Government, with the help of external experts, into the case for a good bank/bad bank split.

3.24 Chapters 4 to 9 set out the findings of this Review, and RBS's new internal bad bank is discussed in more depth in Chapter 10. This includes an assessment of the benefits arising from an internal bad bank, compared to those that might be realised through a taxpayer-funded external bad bank.

3.25 Chapter 11 concludes this Review with an assessment of the overall new RBS direction and how it will help achieve the Government's objectives for its shareholding in RBS.

Part 3: Assessing the case for a taxpayer-funded external bad bank

4 Review of the case for a taxpayer-funded external bad bank

4.1 An internal bad bank was not the only route available to RBS and to the Government in dealing decisively with RBS's legacy and poorly-performing assets. As announced by the Chancellor at Mansion House in June 2013, the Government has been reviewing the case for an alternative bad bank that is funded by the taxpayer, known as an 'external bad bank'.

4.2 This chapter explains why and how the Government has undertaken this Review, and summarises its key conclusions. The following five chapters in Part 3 of this Review provide the detailed analysis that underpins these conclusions.

Parliamentary Commission on Banking Standards (PCBS)

4.3 In July 2012, following the LIBOR scandal, the Parliamentary Commission on Banking Standards (PCBS) was established, to conduct an inquiry into professional standards and culture in the UK banking sector and to make recommendations for legislative and other action.

4.4 The PCBS reported that "Banks perform an essential function in a modern economy. They act as financial intermediaries between lenders and borrowers, and have an essential role in sustaining capital markets. They enable entrepreneurs to start businesses and families to buy their homes". Ipsos Mori submitted to the PCBS that their research demonstrates that it appears "British attitudes towards banks are shaped by the 2008 financial crisis and the bailout of the financial institutions by taxpayers".

4.5 The PCBS noted that there were obstacles to ending state ownership of RBS, and considered whether "the current strategy adequately tackles the challenge of restoring RBS to the private sector in a way which can raise standards by contributing to a competitive and vibrant banking system and serving the country's wider economic interests."

4.6 The PCBS report, published on 19 June 2013, commented that:

> "The Royal Bank of Scotland Group is one of the UK's largest domestic banks and plays a crucial role in the UK economy, particularly in relation to small and medium enterprises. The current state of RBS and its continued ownership by the Government create serious problems for the UK economy, despite the commendable work of Stephen Hester and his team in cleaning up its balance sheet since 2008. RBS's capital position remains weak, impairing its ability to provide the levels of lending or competition needed for the restoration of vitality to the banking sector and for the UK's full economic recovery. RBS continues to be weighed down by uncertainty over legacy bad assets and by having the Government as its main shareholder. Such problems for one of the UK's largest banks weaken confidence and trust in banks and bank lending. They also undermine wider economic confidence and investment activity even for firms not facing immediate credit constraints."[1]

[1] Parliamentary Commission on Banking Standards, 'Changing banking for good', 19 June 2013, para 497

4.7 The PCBS recommended that the Government:

> "should immediately commit to undertaking a detailed analysis on splitting RBS and putting its bad assets in a separate legal entity (a 'good bank / bad bank' split) as part of an examination of the options for the future of RBS."[2]

4.8 In his evidence to the Parliamentary Commission on Banking Standards on 6 March 2013, the then Governor of the Bank of England, now Lord King, commented that "the legacy problems of the balance sheet of RBS have had macro-economic effects. It has clearly been a drag on the supply of lending to the UK real economy". He advocated a restructuring of RBS that divided it into two: a healthy, well-capitalised bank, capable of lending to the UK real economy and being sold back to the private sector relatively soon; and decisively separating and running down those assets that are likely to generate continuing losses.

Mansion House 2013

4.9 In his Mansion House address on 19 June 2013, the Chancellor confirmed that the Government's objectives for its shareholdings in Lloyds Banking Group and RBS are exactly the same: "We want to maximize the ability of these important banks to support the British economy. We want to get the best value for money for the taxpayer. And we want to do what we can to return them to private ownership."

4.10 The Chancellor set out that "while [RBS] is healing, [...] it has not healed as quickly as we all hoped. It has not done as much to support the recovery as any of us would have liked. And we as taxpayers are still a long way from getting our money back."

4.11 In addition, he asserted that "the plan set out, independently, by the Board of the bank needs to be pursued aggressively. Under this, RBS will focus on its core UK business, serving its personal, SME and corporate customers. It will not aspire to be a global full-service investment bank, and the ongoing reduction of its markets business will continue, as it needs to."

4.12 The Chancellor confirmed that "I will only sell our stake in RBS when we feel the bank is fully able to support our economy and when we get good value for [...] the taxpayer. [...] [D]espite all the progress of recent years, RBS remains weighed down by too many poor assets [...] The question is – do we remove those poor assets from RBS, and set up what's known as a bad bank? This would then enable RBS to focus on the good parts of its business – supporting the British economy and maximising the benefits for the taxpayer".

4.13 He therefore announced that the Government would "urgently investigate the case for taking the bad assets [...] out of RBS". This Review sets out the findings of that investigation.

Review of the case for good bank/bad bank split for RBS

4.14 In order to deliver an analytically sound, robust and credible assessment of this proposition, HM Treasury retained a number of external expert advisers, whose work is reflected throughout this Review:

- Rothschild is one of the world's largest independent financial advisory groups. Rothschild has provided corporate finance advice and recommendations across the whole scope of the Review, including undertaking the financial modelling of the good bank/bad bank split and advising on RBS valuations, investibility and strategy;

[2] Ibid

- BlackRock Solutions has led some of the largest-scale risk assessments, valuation, analysis and portfolio exercises across the world in support of financial stability. For this Review, it has provided portfolio analytics; cash flow projections; and five-year and lifetime loss projections with regard to RBS assets under consideration in any good bank/bad bank split;
- Slaughter and May is a leading international law firm. It has provided commercial legal advice on a wide range of issues, including the transferability of assets and other contractual positions into a bad bank, regulatory capital and regulatory permissions issues, State aid and the impact of RBS's minority shareholdings; and
- PricewaterhouseCoopers (PwC) is a leading professional services firm. It has undertaken an assessment of the logical consistency and arithmetical accuracy of the financial model produced by Rothschild, as well as providing advice on general accounting treatments.

Summary of the Review's findings

4.15 The Review has assessed a vast range of information and data from RBS and has been undertaken with the external professional support of Rothschild, BlackRock Solutions and Slaughter and May. For each of the three objectives the review has tested the case for a good bank/bad bank split and highlighted a number of potential pros and cons, along with some significant uncertainties and risks.

Objective 1: accelerate the return to the private sector

4.16 The analysis against this first objective shows that, overall, there may be some theoretical improvement in RBS's valuation from the creation of an external bad bank, which could help the Government to move along the path toward re-privatising RBS. Modelling undertaken by Rothschild for the Review has shown that transferring assets into an external bad bank may lead to some theoretical uplift in valuation, due to an improvement in the residual good bank's return on equity, but that this effect would be expected to quickly diminish over time. Any valuation uplift is also uncertain and likely to be small; and this analysis excludes the impact of any value-destructive remedies which might be sought by the European Commission.

4.17 In addition, the analysis also suggests that investors have already begun to price in the potential effect of improving asset performance for RBS, so it is not clear that the drag of the legacy assets is the main impediment to the Government selling down its stake in the bank.

Objective 2: supporting the British economy

4.18 In order better to support the British economy, creating an external bad bank must improve the remaining good bank, encourage the provision of more credit to the economy and be sufficient to make a difference at the macroeconomic level.

4.19 The Review has undertaken a comprehensive assessment of the potential impact on the economy of creating a taxpayer-funded external bad bank for RBS.

4.20 The impact of such a good bank/bad bank split depends on a number of assumptions, around the economic context – the extent to which impaired credit supply is subduing growth, if at all – and the effectiveness of intervention: the extent to which an external bad bank would improve RBS's ability and incentives to lend.

4.21 The Review's analysis of a range of potential scenarios suggests that there could be a marginal positive impact on the British economy if RBS's lending is affected by risk around its capital position. But this impact is small overall – due to the bad bank's limited impact on RBS's

capital position – and is subject to large uncertainties. In the upper bound it might increase the average annual growth rate of GDP by 0.06 percentage points over the next five years, but the impact is likely to be lower and could be zero. There is also a small risk of a negative impact, if it resulted in a negative impact on the gilt market.

4.22 It is clear from the analysis that a more fundamental improvement in the capital position of RBS than can be achieved through an external bad bank is required to have a significant impact on the British economy.

Objective 3: getting the best value for the taxpayer

4.23 The value for money assessment of creating a taxpayer-funded external bad bank needs to consider both the direct and indirect value implications for the taxpayer of creating an external bad bank.

4.24 On the direct value to the taxpayer of setting up and owning a bad bank, the Review has shown that an external bad bank could be constructed such that its value is broadly neutral to the taxpayer in a 'base case' scenario, i.e. the Present Value of the future cash flows – interest payments and principal received – for the taxpayer would be zero, using the Government's Green Book approach.

4.25 However, there are significant risks and uncertainties to this analysis, which could lead to the taxpayer transferring value both to minority shareholders in RBS (by over paying for the assets) and/or to RBS creditors (by taking risk away from them and onto the public balance sheet).

4.26 The external bad bank would also have direct implications for the public finances, most likely increasing levels of public debt and potentially also increase in the deficit at the time of executing the bad bank. However, the Treasury does not believe that the volume of gilts that would be needed to fund the creation of the external bad bank would materially impact the Government's cost of financing.

4.27 Overall, the Government does not believe that these fiscal effects, in themselves, are of sufficient magnitude to undermine the case for an external bad bank, if that case were otherwise considered to be strong. The indirect value implications for the taxpayer are largely captured in the assessment against the first two of the three objectives – whether the external bad bank creates value and helps accelerate exit from the taxpayer's shareholding; and whether the external bad bank benefits the wider economy.

4.28 Therefore, the extent to which these objectives are met through a taxpayer-funded bad bank also impact on whether the value for money for the taxpayer objective is met.

Overall assessment of the case for a taxpayer-funded external bad bank

4.29 While in retrospect, creating a taxpayer-funded external bad bank may well have been the right thing to do in 2008, or even in 2010, the analysis undertaken for the Review suggests that RBS is in a different place today.

4.30 RBS has run down its Non-Core division from £201 billion at the end of 2009, to around £45 billion by mid-2013, a reduction of over 75 per cent.

4.31 It has also strengthened its capital position significantly over the last five years, increasing Core Tier 1 capital holdings from £35 billion to over £48 billion.

4.32 Moreover, RBS now hold over £20 billion in provisions against its troubled assets, not just in Non-Core (where provisions stand at £11.4 billion) but also £10.4 billion in the 'core' bank, including over £4 billion on core Ulster Bank assets and nearly £5 billion in UK retail and corporate divisions.[3] This is reflected in the findings of BlackRock Solutions' analysis set out in Chapter 5.

4.33 Although it faces some challenging capital headwinds, RBS appears now to be realistic over provisions and future losses on its worst loans – with the risk concentrated in a relatively small pool of assets – reflecting the huge deleveraging and increasingly prudent outlook taken in recent years.

4.34 The Review's conclusion is therefore that, while an external bad bank could deliver some benefits against the Government's three objectives, these effects are likely to be marginal as well as highly uncertain. It could theoretically boost the valuation of RBS modestly at the margin, and would have a relatively small positive impact on RBS's capital position in a 'stress case', which might impact on the bank's willingness to lend in some circumstances.

4.35 However, Rothschild has advised the Review that the creation of a taxpayer-funded external bad bank would do more harm than good to RBS, as it would not contribute to a capital improvement, would distract management and would involve significant implementation challenges. It would, therefore, detract from meeting the Government's objectives.

4.36 Moreover, Rothschild has also advised that the creation of a taxpayer-funded external bank would not strengthen RBS but would in fact distract from the task of re-establishing RBS as a leading UK retail and SME franchise.

4.37 The Government therefore believes that, in addition to tackling RBS's remaining legacy 'high-risk' and poorly-performing assets, more fundamental actions are needed, as set out in earlier chapters of this document.

4.38 The following five chapters of this Review set out in more detail:

- Chapter 5: why consider a bad bank and what assets might it include?
- Chapter 6: would a taxpayer-funded bad bank accelerate RBS's return to the private sector?
- Chapter 7: would a taxpayer-funded external bad bank support the British economy?
- Chapter 8: would a taxpayer-funded external bad bank provide the best value for the taxpayer?
- Chapter 9: design and delivery of an external bad bank

[3] RBS Annual Reports

5 Why consider a bad bank and what assets might it include?

5.1 This chapter sets out how creating a bad bank for RBS could help achieve the Government's objectives, considering the different channels through which a bad bank intervention could impact a bank; and explores a number of precedents for good bank/bad bank splits. It then explains the approach taken to identify and analyse RBS assets potentially suitable for inclusion in a bad bank summarising the Review's approach to selection of appropriate assets for the Review; introducing the methodology employed for projecting the future performance of those assets; and presenting the key findings and implications of this exercise.

How a bad bank might help achieve the Government's objectives

5.2 A 'bad bank' separates the viable and profitable elements of a bank from distressed and non-performing assets. This allows the viable entity to continue to generate new business, and support businesses and the wider economy through new lending. A bad bank can (but need not necessarily) involve state intervention to acquire the distressed assets using taxpayer funds and hold the assets for an extended period of time until they either mature, default or the market recovers enough for them to be sold off to third parties.

5.3 In the context of RBS, a bad bank could:

1 reduce uncertainty in the future performance of RBS;

2 remove illiquid assets from the balance sheet of RBS;

3 remove risky assets that attract high-risk weightings for regulatory capital purposes; and/or

4 focus management and investors on the future and performance of 'core' RBS.

Reduce uncertainty in the performance of RBS

5.4 A bad bank can assist in removing high-risk and illiquid assets from a bank's balance sheet. There are challenges in disposing of such assets quickly, the income from such assets is uncertain and their valuation will potentially fluctuate significantly during their lifetime.

5.5 In reducing this uncertainty, the future performance of the good bank is more stable, allowing for a more accurate assessment of its future performance. This certainty is attractive for the purpose of valuing a bank and can provide investors with more confidence.

5.6 On the other hand, the act of creating a bad bank creates a need to crystallise a valuation of the transferred assets, which can mean a bank needs to recognise losses up front – upon transfer to the bad bank – that it may or may not otherwise incur in the future. While this may be desirable in assisting the bank in dealing with its legacy issues, in the short run it could result in depletion in its capital levels, requiring it to raise additional capital.

Remove illiquid assets from the balance sheet of RBS

5.7 In scenarios of stress, as observed in the recent financial crisis, markets for certain assets can become illiquid, limiting the ability of a bank to sell. This is primarily driven by a sudden drop in demand for these assets. As a result, these assets remain on the balance sheet of a bank reducing its ability to generate new business and lending. The only means by which a bank can then dispose of these assets is by accepting a significant haircut on what the bank may believe to be their intrinsic value.

5.8 The market value at a given point in time for an asset reflects a number of influences that are not necessarily related to the intrinsic value or real economic value of an asset, including the risk appetite of investors. At a given time, particularly in circumstances of stress, the market value of an asset is as much about the basic demand and supply for assets as it is about a reflection of the real economic value of those assets. In general, the two are often the same but in conditions of stress, this may not be the case.

5.9 In such circumstances, a government may have an advantage in being able to take a longer-term view of the real economic value of an asset rather than being held to the market value at any given time.

5.10 For the taxpayer, and particularly when the taxpayer has an existing shareholding in a bank, there can be advantages to separating out the performing and non-performing elements of a bank's balance sheet. In the long term, if the real economic value is realised, the taxpayer can benefit three-fold from i) the increase in value in the assets, ii) the increase in value in the residual good bank that was generating new business in the interim period, and iii) potentially from any benefit to the performance of the real economy that may result from freeing the residual good bank to lend.

5.11 However, it should be noted that counter to this is the risk that the assets may not perform and not realise their real economic value. This risk of loss relative to the price paid is, in this scenario, borne directly by the taxpayer.

Remove assets that require high risk-weightings for regulatory capital purposes

5.12 The assets that are typically transferred to a bad bank – those that are more likely to generate losses and/or to suffer from illiquidity in a stress – generally attract a higher regulatory risk-weighting which requires the bank to hold more capital against these assets. This is prudent from a regulatory and stability point of view.

5.13 However, holding this increased level of capital against these assets means that the additional capital cannot be deployed to generate new business through originating new lending. Depending upon the terms of transfer, a bad bank can assist in freeing up this additional capital by removing these assets from a bank's balance sheet.

5.14 In addition, government ownership of bad bank assets in a separate legal entity may benefit from reduced regulatory capital requirements because it would place a legal separation between the risky assets and the depositors of the bank remaining in the 'good' bank. This regulatory efficiency can benefit the taxpayer particularly where it already has a majority shareholding in the capital that is allocated to assets.

Focus management and investors on the future performance of 'core' RBS

5.15 A significant level of resources, both in monetary terms and in terms of management time, can be needed to deal with legacy issues in a bank. In removing these burdens through a bad bank, the good bank has the ability to focus its resources more clearly on its future objectives and strategy. This can assist in generating new business, supporting the economy, and returning

a bank to profitable levels. This can also allow for a bank to exit state support and/or ownership on an accelerated basis.

5.16 However, removing these burdens from a bank results in the burdens being managed by the Government instead. While this may be advantageous overall, it needs to be carefully considered; a bank may have greater expertise and experience in dealing with legacy issues where the Government may not. This is particularly likely to be the case with more complex assets such as structured finance or exotic derivatives.

Precedents for a good bank/bad bank split

5.17 Bad banks have been used by a number of financial institutions and governments to address problems in their financial sectors. Most recently a number of bad banks were established in response to the financial crisis that began in 2007.

5.18 Objectives for establishing a bad bank in these situations have varied. In recent years, the primary motivation has been to shore up confidence in both individual financial institutions and the financial sector as a whole. This has been particularly prevalent where the stability and viability of financial institutions have been in doubt.

5.19 As well as the practical benefits of a bad bank, as outlined at the start of this chapter, these have also been designed as a clear signalling tool to reassure participants, including investors, creditors and depositors that a government was willing to intervene to ensure the continuity of the financial sector for the benefit of the wider economy.

5.20 There are also a number of banks in recent years which have implemented 'internal bad banks', without reliance on Government support. This means that they 'carve out' their risky or legacy assets and put in place governance and disclosure practices to manage the accelerated run down of these assets. This is typically complemented by clear communications to the market as to the health of the 'core' bank, and commitments regarding accelerated exit from the troubled legacy assets. However, these options do not seek to transfer the economic risk of the assets to the government.

5.21 Examples of 'internal bad banks' include:

- Citi Holdings;
- UBS Non-Core and Legacy portfolio; and
- RBS Non-Core.

5.22 Whilst internal bad banks may not deliver a complete separation of the assets from the bank's balance sheet – at least not until an exit commitment has been credibly set out to investors – they can succeed in accelerating the disposal of legacy and high-risk assets, addressing uncertainty and focusing management's attention to improving the performance of the 'core' bank. They also have a significant advantage in not relying on taxpayer funding and, similarly, are less likely to involve the provision of State aid (which often comes with value-destructive restrictions or commitments).

5.23 The remainder of this section discusses in more detail four relevant precedents for an 'external' bad bank – Sweden (from 1991), the US (from 2008), Ireland (from 2009), and the UK (from 2008, Northern Rock and Bradford & Bingley) – and two relevant precedents for an 'internal' bad bank – Citi Holdings and UBS.

Nordbanken and Securum (Sweden) – 1991 onward

5.24 Nordbanken was the third largest bank in Sweden. The state owned the majority of the bank in 1990. When a housing bubble deflated in Sweden and Nordbanken was exposed to non-performing loans, it incurred large credit losses and could not meet its capital threshold. In response, the Swedish authorities nationalised the bank and established a bad bank, Securum, to remove toxic assets from Nordbanken's balance sheet to improve its stability and subsequent profitability.

5.25 Overall 33 per cent of Nordbanken's corporate loan book was put into Securum. Many of these assets were loans to companies and/or secured against land. It also took 45 per cent of Gotabanken assets, a private bank that was also nationalised as a result of the crisis.

5.26 Securum was created to be an asset management company rather than a bank. It was mainly staffed with experts from the property sector and the board had independence in its decision-making. Instead of taking fifteen years to wind down the assets in Securum as anticipated, it took five years. Overall taxpayers paid around three per cent of GDP to Securum.

5.27 In the long term, Nordbanken took over Gotabanken from which Nordea Bank emerged. The Swedish Government began privatising the bank in 1995, although it was not until September 2013 that the state sold its final stake.

5.28 Some studies have suggested that the economic recovery and the recoveries on the bad assets have since offset the initial outlay. However, a study by the Federal Reserve Bank of Cleveland concluded that Securum eventually returned about 58 percent of that upfront cost to the Swedish treasury.

5.29 Overall, the Swedish Government has been widely credited for acting quickly to directly intervene and establish a bad bank, force banks to recognise losses up front and restructure the financial institutions as appropriate. This allowed the banks to continue to support the Swedish economy.

Troubled Asset Relief Program (US) – 2008 onward

5.30 The uncertain value of mortgage assets that were on bank balance sheets following the sub-prime mortgage crisis in 2008 made it difficult for the banks to issue new, productive loans. This acted as a natural blockage that prevented the financial sector from supporting the economy in the subsequent recovery.

5.31 In response to this, on 3 October 2008 the Troubled Asset Relief Program (TARP) bill was signed into law, representing the biggest US government intervention in the financial markets since Roosevelt's New Deal. Initially over $700 billion was authorised to be used as part of the programme.

5.32 The primary purpose of the programme was to restore liquidity and stability in the financial markets. One of the initiatives under TARP, the Public Private Investment Program (PPIP) was established to support the markets for legacy assets in Commercial Mortgage Back Securities and Residential Mortgage Backed Securities.

5.33 This initiative used both private equity as well as equity available under TARP to acquire legacy assets from financial institutions. The US Treasury selected eight fund managers to establish and invest in Public-Private Investment Funds which would manage the investments.

5.34 In total, the US Treasury provided $18.6 billion under the PPIP, which it has recovered in full, plus a positive return of $3.8 billion.

National Asset Management Agency (Ireland) – 2009 onward

5.35 The National Asset Management Agency (NAMA) was established in 2009 following a systemic crisis in the Irish financial sector in large part caused by a deflation of Irish property prices, which affected all of the main Irish financial institutions. NAMA was set up by the Irish Government to take over the distressed assets held by Irish banks.

5.36 The primary objective of NAMA was to realise the best achievable financial return on the assets that it acquired from participating banks over a lifetime of up to 10 years. In doing this, NAMA assisted in improving the banks' ability to support the Irish economy through new lending and stabilising the remaining financial institutions by removing the tail risk associated with these assets. Overall NAMA acquired assets with a nominal value of circa €74 billion for a transactional value of €32 billion.

5.37 It is difficult to quantifiably assess the merits or otherwise of NAMA's approach at this stage as its legacy is still far from certain. The scheme is still ongoing and the recovery of the Irish economy is still under way.

UK Asset Resolution (United Kingdom) – 2008 onward

5.38 During the financial crisis in the UK, both Northern Rock and Bradford & Bingley were nationalised as they found it impossible to finance their businesses.

5.39 Northern Rock was subsequently split into Northern Rock Asset Management (NRAM) and Northern Rock plc, with Northern Rock plc being sold to Virgin Money for £747 million. Similarly Bradford & Bingley (B&B) was separated with the savings unit being sold to Santander UK, while the legacy mortgages and loans were taken on by the Government. Neither of the bad bank entities had a mandate to write new loans or other business, and were effectively established as run down vehicles.

5.40 Both NRAM and B&B were subsequently merged under a new holding company set up by the Government, UK Asset Resolution (UKAR). UKAR was established to facilitate the management of the closed mortgage books of both companies and to maximise taxpayer value. The Government's shareholding in UKAR is managed by UK Financial Investments (UKFI).

5.41 Under the umbrella of UKAR, both NRAM and B&B operate as separate legal entities, with significantly lower regulatory capital requirements due to the vanilla structure of their respective mortgage books, and their inability to write new business.

5.42 The Government's intervention for NRAM and B&B, and the subsequent establishment of UKAR was framed under the objectives of i) maintaining financial stability, ii) safeguarding depositors money, and iii) protecting the interests of the taxpayer.

5.43 UKAR continues to make good progress in meeting its objective of maximising value for the taxpayer while managing the rundown of closed mortgage books. UKAR's most recent results show a ten per cent year-on-year increase in its underlying profit before tax to £529 million, and it continues to reduce the funding from the taxpayer on an ongoing basis. Overall, UKAR has reduced its overall balance sheet from £110.9 billion at the end of 2010, to £82.8 billion in the first half of 2013.

Citigroup (US) – 2009 onward – internal bad bank

5.44 In January 2009, following the sub-prime mortgage crisis, Citigroup announced a group reorganisation which resulted in the creation of two internal units made up of the group's core and non-core businesses. The non-core business – Citi Holdings – handled the unwinding of the group's non-strategic businesses as well as high-risk assets.

5.45 Citi Holdings was created with a portfolio of circa $650 billion. Since then it has deleveraged substantially and continues to make significant progress in reducing the size of its balance sheet. Latest year on year figures show a further reduction of twenty-nine per cent, reducing its total assets to $122 billion. Since its reorganisation in 2009, Citigroup's share price has risen by thirty per cent.[1]

5.46 For the whole Citi Holdings, financial disclosure similar to the other divisions was made available to investors on a quarterly basis from the date of announcement including detailed profit and loss, balance sheet, and more granular information on the various portfolio of assets. This allowed investors to critically assess both parts of the business and clearly distinguish the value of the core business which would form the basis of its future valuation.

UBS (Switzerland) – 2012 onward – internal bad bank

5.47 In October 2012, UBS announced a significant restructuring of its investment banking operations that would see it exit a number of business lines and reduce the division's RWAs by up to forty-five per cent. To facilitate this, it transferred some investment bank activities, which were either capital or balance sheet intensive in areas with high operational complexity or carried long tail risks, to a new segment of its Corporate Center called "Non-core and Legacy Portfolio".

5.48 In executing an 'internal bad bank' type structure, UBS was seeking to manage its way out of a significant portfolio of assets which were outside of its strategy. The unit had a dedicated management team that was responsible for managing its assets. For the entire Corporate Center, financial disclosure similar to the other divisions was introduced. It included a detailed profit and loss statement, average allocated equity, total assets, RWAs, and some asset quality metrics. It has also disclosed additional information on the composition of the 'Non-Core and Legacy Portfolio' assets.

5.49 UBS discloses run-off targets for the "Non-core and Legacy Portfolio" unit. As at end 2012, the unit had CHF105 billion of RWAs and the group's objective is to reduce this to CHF85 billion by the end of 2013, to CHF55 billion by the end of 2015, and to CHF25 billion by the end of 2017.

What assets might go into an RBS bad bank?

5.50 Identifying the appropriate pool of assets, analysing them and understanding their behaviour under different macroeconomic scenarios is central to assessing the case for a good bank/bad bank split against the three objectives set out by the Chancellor:

- accelerating exit: the asset identification and performance projection exercise is instrumental in understanding how the residual good bank will perform. By modelling the effects of reducing uncertainty and removing certain assets from RBS's balance sheet, it is possible to project estimates of the profitability and capital position of the residual good bank, which in turn gives a view of how investors may value the company. Only once the investibility of RBS shares has improved will the Government be able to consider selling down its stake;
- supporting the British economy: the asset identification and performance projection exercise provides a basis from which to analyse the wider economic impacts of a good bank/bad bank split and the residual good bank's ability to support lending to the UK economy. Modelling loss projections and balance sheet risk is important in

[1] As of close, 30 October 2013.

understanding the impacts of a split on RBS's capital position across different macroeconomic scenarios and the likely effects this would have on lending; and

- best value for the taxpayer: the performance projection exercise results in cash flow and loss projections that would be a key input for determining the price at which the external bad bank would purchase the assets from RBS and hence the likely return for the taxpayer from owning the bad bank. The transfer price would also determine the financial implications for the residual good bank, which would remain 80 per cent owned by the taxpayer.

How the Review selected RBS assets for consideration

5.51 Despite the progress made since 2008, RBS still has a large balance sheet, with over £800 billion of funded assets (£1.2 trillion including derivative exposures).[2]

5.52 Most of these assets are low-risk or part of RBS's everyday business activity – mortgages, overdrafts or liquid assets (such as cash and gilts) held for prudential reasons. But others are more risky, whether due to their vintage – many loans made in the run-up to the financial crisis were on terms that would now be deemed unacceptable – or due to their underlying characteristics, i.e. some asset classes are by design high-risk, entered into in the pursuit of high return.

5.53 Given the potential benefits that creating a bad bank could have for meeting the Government's three objectives, the first task of the Review was to identify which assets should be assessed for possible inclusion. This involved identifying assets that met one or both of two broad criteria:

- assets which provide a poor return on equity, for example due to having high projected losses, low profitability or high capital intensity (i.e. high risk-weightings); or
- assets which perform particularly badly in a stress macroeconomic scenario – for example, the borrower's creditworthiness would be expected to decline significantly, or the asset's risk weighting would increase sharply – and therefore contain 'tail risks'.

5.54 Certain elements of RBS's balance sheet were ruled out of scope because they were part of RBS's ongoing 'core' business, primarily the UK Retail division (e.g. mortgages, overdrafts), which represents £111 billion of net loans and advances, and the Wealth division (a further £17 billion).[3] But everything else was deemed 'on the table' for potential inclusion in a bad bank.

5.55 While the financial crisis left RBS with hundreds of billions of pounds in troubled and non-strategic assets, the progress made in shrinking its balance sheet since then mean the loans and securities that met either of these criteria have a projected outstanding gross balance of £104 billion.[4] In terms of individual assets, this accounts for around one million individual loans of anywhere between zero to £500 million in value. RBS hold more than £15 billion of provisions against these assets, meaning their carrying value (or book value) as at end-2013 is projected to be approximately £89 billion.

[2] As of 30 June 2013, *Interim Results 2013,* RBS

[3] As of December 2012, *Annual Report and Accounts 2012*, RBS.

[4] In order to ensure consistency throughout the Review, analysis by both BlackRock Solutions and Rothschild was undertaken based on projections of the assets' size and condition, and RBS's balance sheet more broadly, as of 31 December 2013. In some instances this involved using balances as at 30 June 2013 and projecting, based on information provided by RBS, balances as at 31 December 2013. [DN – if needed: RBS's public statements regarding these assets will typically refer to their balance as at 30 June 2013 and hence would not match exactly the figures quoted in this Review].

5.56 These assets are typically in areas of the RBS balance sheet where risky and poor performing assets would expect to be located. As shown in Chart 5.A below, the assets primarily sit in one of the following groups:

- RBS Non-Core: the Non-Core division, set up in 2009 as a £258 billion run down unit, still holds around £45 billion of assets across a number of different RBS business lines,[5] including commercial real estate, project finance, aviation loans, leveraged finance and Non-Core elements of Ulster Bank and Citizens;
- Ulster Bank: Ulster Bank is the third largest bank in Ireland and the largest bank in Northern Ireland, and has been hard hit by the deep recession and property crash in Ireland; and
- Global Restructuring Group: RBS manage impaired corporate loans through a central function, the Global Restructuring Group, which specialises in managing distressed loans, helping customers return to health and, where necessary, maximising recoveries from defaulted loans.

5.57 Looking at the loan assets identified based on their asset classes:

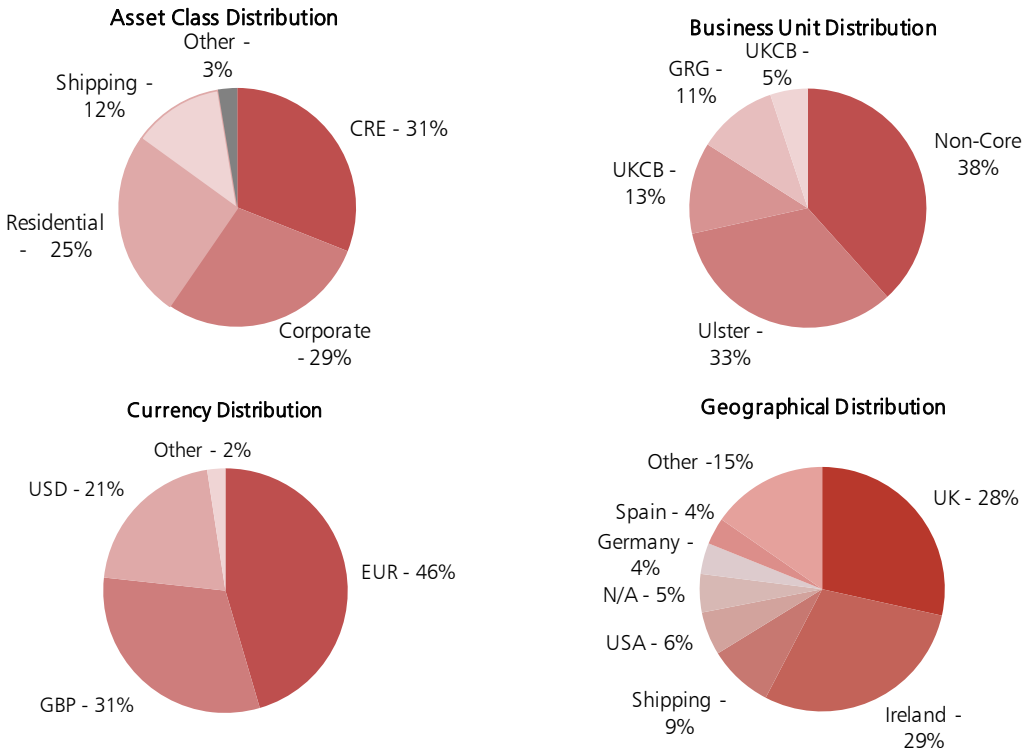
- approximately 60 per cent are loans to corporations or those backed by commercial real estate;
- a further 25 per cent are residential (mostly Irish mortgages); and
- 15 per cent are other exposures, including 12 per cent shipping loans (where RBS remain a major participant in the global shipping finance business).[6]

5.58 A major implication for this selection of assets is that the majority are not loans to UK households and businesses; rather they reflect the global nature of RBS's operations prior to the financial crisis.

[5] As of 30 June 2013, *Annual Report and Accounts 2012*, RBS; *Interim Results 2013*, RBS

[6] These figures relate to loan balances as at 30 June 2013.

Chart 5.A: Overview of assets considered in the Review



Source: BlackRock Solutions, RBS

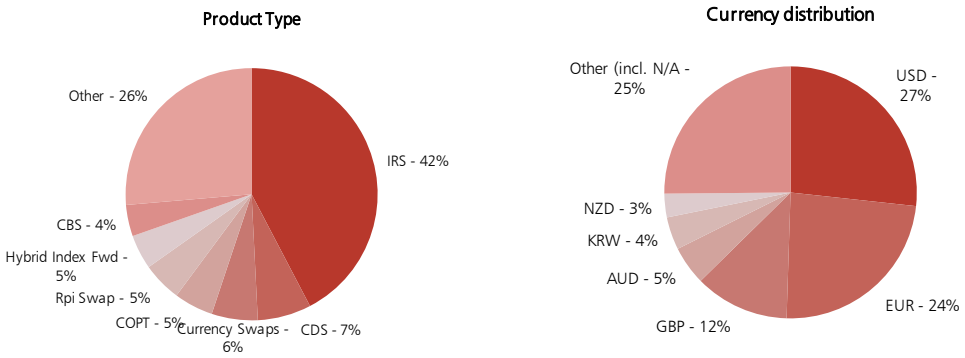
5.59 RBS also has a considerable investment banking arm, known as the **Markets division** (and formerly as Global Banking and Markets (GBM)). This Markets division is much smaller than pre-crisis: its assets have been scaled back from £579 billion as at the end of 2007 to £284 billion Third-Party Assets (TPA) by the end of 2012[7]. However, it retains many complex and long-dated derivative positions that can be both capital-intensive (i.e. high RWAs) and potentially subject to large losses under certain scenarios, and hence also met these criteria.

5.60 The Core Markets portfolios that have been identified for potential inclusion in a bad bank contain over 100,000 individual positions, and over 130 instrument types spread across more than 40 currencies. Many of these products are complex, with derivative types including:

- Credit Default Swaps (CDS);
- Interest rate swaps (IRS);
- Currency swaps;
- FX forwards; and
- Other exotic derivatives.

[7] *Annual Report and Accounts 2012*, RBS and *Annual Report and Accounts 2007*.RBS.

Chart 5.B: Core Markets portfolios – derivatives portfolio overview



Source: BlackRock Solutions, RBS

5.61 Whilst all £104 billion assets (including loans, securities and derivatives) were selected for the Review based on the criteria, it is likely that an optimal bad bank would consist of only a smaller sub-group of these assets, especially those at the higher end of the risk spectrum. This is discussed further in the following section.

Assessing future asset performance and RBS's management of the assets

5.62 In order to assess the case for an RBS good bank/bad bank split, it is necessary to understand the quality and projected performance of the assets under consideration, including their sensitivity to different macroeconomic scenarios. This work, which was undertaken for the Review by BlackRock Solutions, is presented in detail in this section.

5.63 The asset analysis delivered both (i) projections of future income and losses and (ii) a view on the risks and uncertainty associated with the asset values reflected by the future cash flow projections. As such, it provides an understanding of the risks present on RBS's balance sheet in the asset pools analysed.

Box 5.A: Assets and asset valuation

A substantial portion of a bank's assets consist of loans to individuals, companies and other financial institutions. Loans may be secured (i.e. in the case where a specific asset or assets are pledged as collateral for the loan) or unsecured.

The 'asset' here refers to the money lent by the bank to the borrower who will then, according to the terms of the loan agreement, pay interest and/or principal at regular intervals and – at the end of the term of the loan – will repay any outstanding principal balance remaining on the loan. Therefore, a loan asset is **a flow of payments the bank expects to receive over time**. In reality, the types of loans banks make can vary substantially in their design and complexity. For example, a loan might be:

- a seven-year loan to an Irish commercial property company, in 'bullet' form (i.e. full principal repaid at the end of the loan), secured against a property development in Ireland; or
- a five-year loan to a large European company that had been bought by a private equity company, where a number of banks have joined together into a 'syndicate' to make the loan and/or the bank has a 'junior' position, with another lender in the 'senior' position (who would get priority over repayments in the event of a default).

Loans can broadly be defined as performing (i.e. repayments are up-to-date) or non-performing (e.g. repayments are 90 days overdue, with definitions varying). When a loan is in difficulty, the lender may provide forbearance (e.g. allowing loan covenants to be breached or extending the repayment period for the loan); or the lender may choose to foreclose on the borrower and take ownership of any pledged collateral (in cases where the loan is collateralised).

Banks show loans on their balance sheet at the outstanding principal amount lent to the borrower. When prospects for repayments of principal deteriorate, a 'loss event' may occur, leading to the bank taking a 'provision' against the loan (which results in an immediate loss, and a reserve created against that loan which reduces the carrying value of the loan). When the loan either repays, is sold, or defaults and recoveries are made, either further write-offs will be required or – if the loss was less than the provisions already taken – some of the reserve is 'released'.

Loans are not the only type of asset banks hold on their balance sheet. Two other important categories are securities and derivatives:

- securities: these refer typically to bonds issued by companies or governments to raise money, but can also be more complex securities such as bonds backed by loans or other bonds. Examples include mortgage-backed securities (MBS), collateralised loan obligations (CLOs) and collateralised debt obligations (CDOs); and
- derivatives: these are contracts struck between the bank and a counterparty, who could be a company, a different bank or another financial market participant. There are many different types of derivatives, including interest rate, foreign exchange and credit default swaps; options; and forwards. However, the thing all derivatives have in common is that their value is *derived* from the value of another asset (hence the term 'derivative'). Banks often have large **gross** derivative exposures, but typically also own opposite positions with other counterparties. While this means that their **net** exposure to changes in the value of the underlying reference asset is far smaller, the bank retains exposure to both counterparties, often for very long periods (sometimes 20 years or more).

BlackRock Solution's asset analysis and loss projections

5.64 The Review commissioned BlackRock Solutions to provide cash flow and loss projections for the assets identified above for inclusion in the Review, across base and stress macroeconomic scenarios. BlackRock Solutions analysed £98 billion of the £104 billion of gross assets initially identified for review (i.e. before considering provisions taken by RBS). A small number of portfolios or sub-portfolios were omitted due to data limitations, highly complex or idiosyncratic derivative exposures, or because they were cash assets which wouldn't be transferred to any external bad bank.

5.65 As explained below, the Core Markets portfolios were analysed separately from the loan book, using a bespoke methodology.

Methodology

5.66 BlackRock Solutions used a combination of quantitative modelling techniques and in-depth reviews of certain assets in order to forecast cash flows and develop five-year and lifetime loss projections for the 'banking book' loan assets. As detailed in Box 5.A, the value of an asset depends on the cash flows it is expected to generate in the future. In turn, these projected cash flows are contingent on a number of macroeconomic, asset- and sector-specific variables and the performance of the economy as a whole. For instance, low growth and high unemployment may mean that more borrowers default on their loans, leading to lower principal repayments reflected in projected future cash flows and thus resulting in a lower valuation of the assets.

5.67 Comparing how assets perform under different macroeconomic scenarios thus provides a measure of their riskiness: assets with highly variable cash flows contain more risk for the owner, and are thus less valuable, than assets where the cash flow is less variable. In addition, modelling the performance of assets under stressful economic conditions feeds in to the analysis of the balance sheet risks faced by RBS, i.e. the risk that a bank becomes insolvent, or unable to lend, due to insufficient capital.

5.68 Cash flow projections for loan assets were modelled by BlackRock Solutions on the basis of the prevailing 'base case' and 'stress case' (or 'adverse case') macroeconomic scenarios published by the Bank of England. These scenarios are widely used for the modelling of regulatory requirements in the UK and thus constitute an independent and credible basis for modelling future loan performance.

5.69 In the Bank of England's own terms, the adverse case projections constitute a "severe but plausible hypothetical scenario generated for the purposes of stress-testing". The scenarios are also conservative compared to the current market consensus. For instance, the Bank of England suggests a 2014 'base' case UK GDP growth rate of 1.87 per cent and -3.42 per cent under stress,[8] which compares with a market consensus of 2.20 per cent.[9]

5.70 BlackRock Solutions collected asset and collateral level data directly from RBS on the specific portfolios in scope of the bad bank review. In total, in excess of one million assets and derivative trade positions were analysed, representing over 100 million data. This included information on individual assets and the corresponding collateral, portfolio-level reviews as well as credit and risk reports.

5.71 BlackRock Solutions applied different valuation methodologies, depending on the type of asset; the availability of loan level and associated collateral level data; and the granularity of

[8] *Prudential Regulation Authority (PRA) UK anchor scenario H2 2013*, 28 June 2013; *PRA UK baseline*, 28 June 2013.
[9] *Forecasts for the UK economy: a comparison of independent forecasts*, October 2013, HM Treasury.

information available in order to generate cash flows and loss projections. This made use of a number of input variables, depending on the key loss drivers for each loan type. This included information on:

- the probability of default;
- loss given default and level of expected recoveries;
- current and future estimated collateral values (such as home values, commercial real estate values and ship values); and
- other relevant variables.

5.72 Where necessary, these variables were calibrated in line with historical performance and other relevant benchmarks.

5.73 In addition to their modelling work, BlackRock Solutions conducted approximately 120 in-depth reviews of specific loan assets covering 18 per cent of the total portfolio exposure. These reviews involved a series of interviews with the relevant portfolio managers at RBS as well as a review of certain asset summary reports provided by RBS. The objective of these 'deep-dive' reviews was to gain a detailed understanding of particularly large or risky assets. This allowed BlackRock Solutions to override model parameters where appropriate and thus reflect relevant qualitative and quantitative factors for the respective assets.

Methodology for assessing the valuation of Core Markets portfolios

5.74 The nature and complexity of the Core Markets portfolios, which include exotic securities and derivative products, expose RBS to different risks than those from loan assets, and accordingly a different modelling approach to that employed for the loan book is required. These assets are carried at market value in RBS's books. The valuation of derivative exposures by RBS is performed on a daily basis and conducted in conjunction with scenario analyses and stress testing.

5.75 Because of these factors, it would be undesirable – and, for technical reasons, exceptionally expensive and difficult – for an external bad bank to purchase these assets. The reasons for this, together with the Treasury's preferred approach to removing these risks from RBS's balance sheet, are described in Box 9.G.

5.76 Accordingly, BlackRock Solutions adopted a sampling approach in order to 'spot-check' individual trades in the portfolio and identify and assess associated risks. In total, BlackRock Solutions valued around 150 individual positions, combining a random sampling approach with a review of the largest exposures and major asset types. By comparing the resulting valuations to those of RBS, BlackRock Solutions were able to conclude positively on the reasonableness of the bank's valuations for that sample.

Key findings

5.77 RBS management engaged positively and openly throughout the Review. BlackRock Solutions noted that RBS were highly professional, organised and knowledgeable about their assets under management.

Key finding 1: In aggregate, RBS's view of existing provisions and future impairments is realistic and in line with the lifetime loss projections calculated by BlackRock Solutions

5.78 Comparing BlackRock Solutions' projected losses to RBS's own provisions and projections of future impairments indicates that RBS appears to be, on the whole, realistic about potential future losses on these assets.

5.79 For some portfolios, RBS and BlackRock Solutions have similar views on projected asset performance on average and, whilst opinions may differ on the projected losses of specific portfolios, aggregate loss projections are on the whole comparable.

5.80 Across the whole portfolio, BlackRock Solutions's five-year loss projections are marginally higher than RBS's view of current provisions and 2013-2017 projected future impairments, by six per cent in the 'base case' scenario. On a 'stress' scenario, BlackRock Solutions' lifetime loss projections are lower than those of RBS, by three per cent.[10]

5.81 This indicates that, in aggregate, RBS appears to have a realistic view of the risk profile of the assets reviewed, including the potential increased losses under a 'stress' scenario. This is often not the case for external bad bank interventions typically undertaken in periods of financial distress and market illiquidity.

5.82 Looking particularly at the Core Markets portfolios of securities and derivatives, BlackRock Solutions were able to reconcile their own valuations closely to those produced by RBS across the sample population.

Key finding 2: RBS's understanding of asset risk is also realistic on a portfolio level: as expected, projected loan losses are concentrated in the pool of 'high-risk' assets

5.83 The stratification of assets into different risk pools reveals that the distribution of projected lifetime losses is in line with RBS's view of asset risk. 'High-risk' assets account for a disproportionate share of projected loan losses. Conversely, low-risk assets capture a relatively small share of total lifetime losses, suggesting that these assets are indeed a not very significant part of the overall pool, in terms of projected future losses.

5.84 This is to be expected, given that the pool of high-risk assets includes assets remaining in the Non-Core division – often impaired pre-crisis assets that have proved difficult to dispose of – and those in asset classes and geographies known to be troubled (e.g. Commercial Real Estate, Ulster).

Key finding 3: RBS is heavily provisioned on its legacy and risky assets and has substantial capital deductions in place

5.85 Based on the analysis by BlackRock Solutions, it appears that in the 'base case' scenario, 77 per cent of BlackRock's projected future five-year cumulative losses on these assets have already been provisioned against (i.e. RBS has already taken a loss on these assets.

5.86 While the above applies at the aggregate Group-level, the position is more nuanced within some of the individually regulated entities in the RBS Group, where future impairments may be greater than currently expected. For instance, RBS is currently undertaking a review of the appropriateness of provisioning in its Ulster Bank operations.

5.87 RBS's Expected Loss minus Provision (known as "EL-P") capital deduction also takes into account a significant proportion of future projected losses on these assets. In addition, the Bank of England identified additional expected future losses in its June 2013 capital shortfall exercise and required RBS to hold additional capital against these losses.

5.88 Taken together, RBS's existing provisions and levels of capital deducted appear to suggest that projected future losses are appropriately covered. The potential benefits from bad bank

[10] The comparison of 'stress' case losses are based on RBS current provisions and 2014-17 impairments and BlackRock Solutions' lifetime loss projections. This comparison is considered to be most appropriate given the differences in timings of provisions and realised losses. The comparison, however, is not straightforward due to the different assumptions made in the modelling process relating, for instance, to the lenders ability to renegotiate loans or the speed at which assets are sold or run-down, which might lead to different views on how the assets would perform.

interventions are often linked to reducing investor uncertainty over the value of assets where provisioning and capital holdings against assets are suspected to be weak; BlackRock Solutions' analysis suggests this appears not to be the case for RBS.

5.89 However, this is not to say that these assets do not contain additional tail-risks, as many remain exposed to adverse macroeconomic conditions and legacy issues (such as conduct and litigation risks). They are also very capital-intensive and hence still represent a potential barrier to refocusing RBS's balance sheet towards new lending for the UK economy.

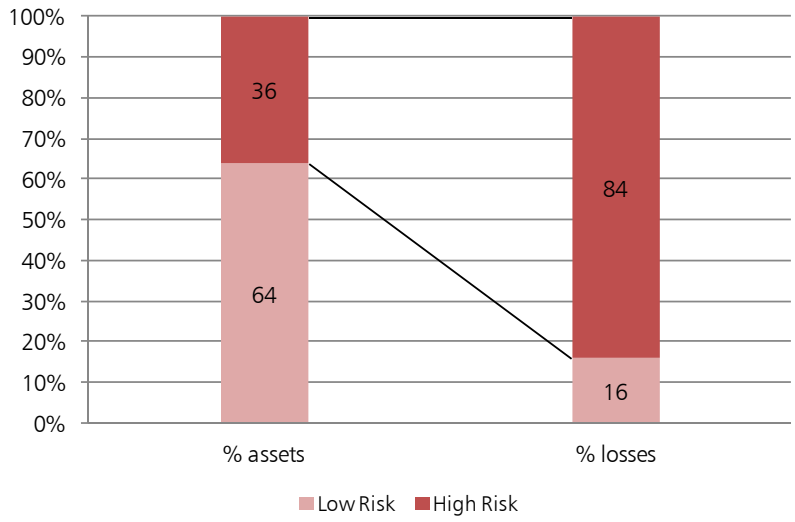
'High-risk' pool

5.90 Provisions, projected losses and capital deductions are largely focussed on relatively concentrated portfolios of £30 billion '**high-risk**' assets.[11] 'High-risk' assets are defined here as those with a credit rating comparable to Standard & Poor's credit rating of B/B- or below (depending on the credit model employed); or Risk-Weighted Assets – a measure of asset risk that determines the level of capital a bank has to hold against the assets – in excess of 150 per cent.

5.91 The 'high-risk' pool also includes the Core Markets portfolios discussed previously, although it is not possible to map directly many of these to recognised credit ratings. Derivative positions can often be exposed to risks other than credit risk – such as interest rate risk, the 'basis' risk (i.e. movement between different rates, such as exchange rates) or involve relatively high risk-weightings.

5.92 BlackRock Solutions' modelling outputs suggest that the 'high-risk' pool accounts for 36 per cent of the assets identified for inclusion in the Review account but 84 per cent of the projected lifetime losses, as illustrated in Chart 5.C below. They also account for 94 per cent of existing provisions on the whole pool.

Chart 5.C: High-risk and Low-risk losses

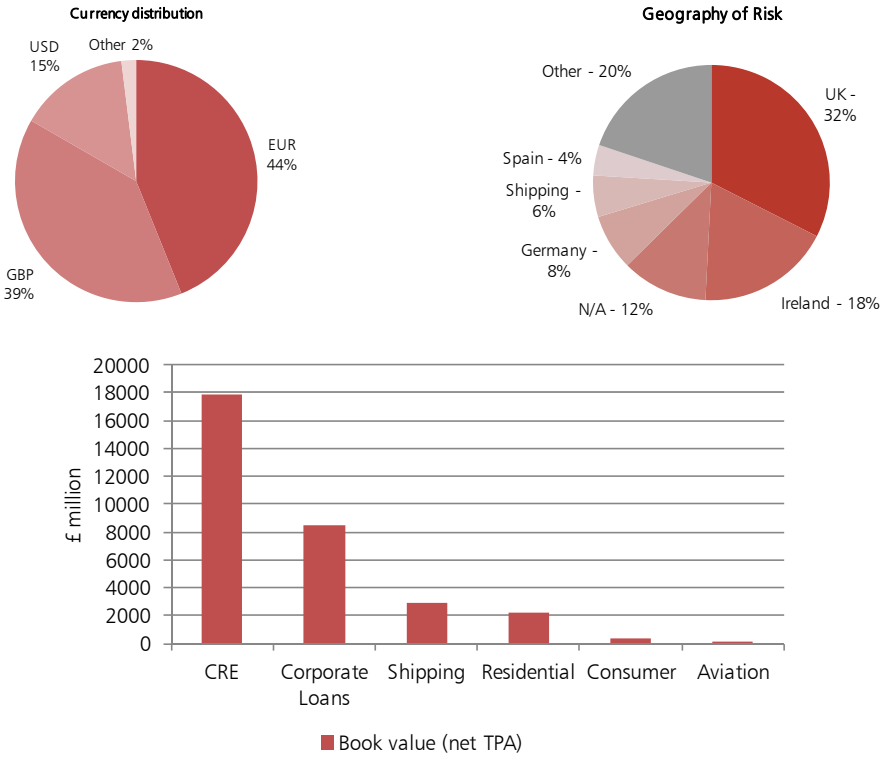


Source: BlackRock Solutions, RBS

5.93 The portfolio of 'high-risk' assets discussed above comprises 56 per cent commercial real estate (CRE), 26 per cent corporate loans, 9 per cent shipping loans and 7 per cent of primarily Irish residential loans, with the remaining spread across aviation and consumer loans. These are detailed in Box 5.D below.

[11] As projected at 31 December 2013.

Chart 5.D: High-risk portfolio descriptive statistics



Source: BlackRock Solutions, RBS

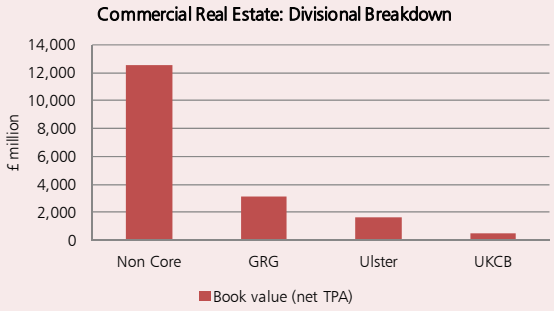
5.94 In aggregate, the majority of loans are denominated in sterling or in euros, with these two currencies accounting for 39 per cent and 44 per cent of the loan book respectively.

5.95 The UK, Ireland and Germany account for 32, 18 and 8 per cent of the country exposure respectively, with the remainder spread across global shipping activities and other countries in the world.

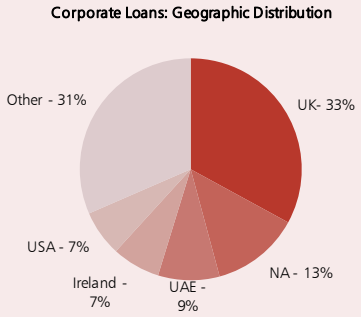
5.96 As expected, the proportion of non-performing loans is significantly higher across the high-risk asset pool in comparison to the overall pool analysed. For instance, over half of CRE loans in the whole portfolio are non-performing, but almost three-quarters in the 'high-risk' pool. Similarly, nearly a fifth of corporate loans are non-performing across the whole portfolio, but close to half in the 'high-risk' pool.

Box 5.B: 'High-risk' asset pool – selected asset classes

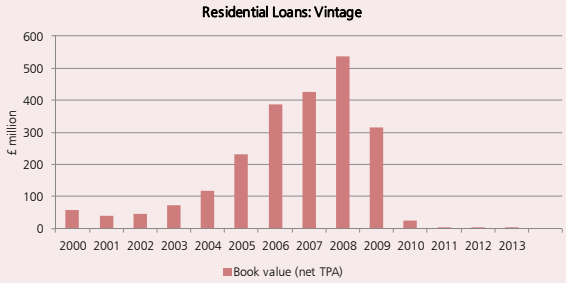
Commercial real estate (CRE) – £17.9 billion[12]: CRE assets, which account for over 50 per cent of the high risk asset pool, contain a high proportion of non-performing loans. These loans are distributed across RBS's business units, with a high concentration in the Non-Core division.



Corporate loans – £8.5 billion: The Corporate loan book is spread across a number of different countries, reflecting the global nature of RBS's legacy loan book as a whole. UK and US exposures account for 33 per cent and 32 per cent of the loan book respectively.



Residential – £2.3 billion: Analysing the origination of loans illustrates the huge expansion in lending in the run-up to the 2007-08 financial crisis. The chart opposite presents the vintage for residential loans. Almost one hundred per cent of loans in the 'residential' asset class (by book value) were originated in or prior to 2009.



Source: BlackRock Solutions, RBS

5.97 In summary, **a pool of 'high-risk' assets captures the majority of projected future losses on the assets identified for potential inclusion in a bad bank.**

5.98 The analysis undertaken by Rothschild – i.e. modelling the impact of a taxpayer-funded external bad bank for different perimeters – indicates that an external bad bank based on this £30 billion 'high-risk' asset pool would deliver the best results, focusing the intervention where it will maximise capital relief, reduce tail risk and improve RBS balance sheet strength.

5.99 The exclusion of low-risk assets is therefore strongly supported by Rothschild's financial model. This is discussed further in the following chapter, in particular in Box 6.D.

[12] June 2013 balances

6 Would a taxpayer-funded external bad bank accelerate return to the private sector?

6.1 This chapter sets out the approach adopted to assess whether a taxpayer-funded external bad bank would improve RBS's capital position, return on equity, valuation (or perception of value) and ultimately whether it would accelerate RBS's exit from Government ownership.

Rothschild's financial model

6.2 In order to support the Review's assessment of a good bank/bad bank split, Rothschild developed a financial model to assess the impact from such an intervention on RBS's capital position and valuation, compared to the status quo position (i.e. RBS in its current state). As outlined in Chapter 5, these were assessed on a 'base' and 'stress' case basis, using the prevailing Bank of England scenarios.

6.3 The model was developed to analyse a taxpayer-funded external bad bank, in which the assets would be transferred from RBS into a Government-owned entity. This model of a good bank/bad bank split is similar to both the Swedish and Irish cases highlighted in Chapter 5.

6.4 For simplicity, the model assumed that the transaction would occur at the end of 2013, although it was recognised that should this option be pursued a more realistic timeframe for implementation might in practice be somewhat later.

6.5 As an external bad bank would be likely to be focused on the 'high-risk' pool of assets, with those assets analysed by BlackRock Solutions projected to be £30 billion at the end of 2013, it was assumed that the transfer could be funded by the issuance by the Debt Management Office (DMO) of gilts to raise cash for the purchase, and it was also assumed that a cash injection from the Treasury into the external bad bank would ensure that the bad bank was sufficiently capitalised. The potential structure and funding of the bad bank is covered in more detail in Chapter 9.

6.6 The results of the Rothschild model exclude the impact of transferring the 'Core Markets' portfolios to the taxpayer-funded external bad bank, as well as a small number of other low-value portfolios, for the reasons set out in Chapter 5. However, these are insignificant in the context of the overall pool and consequently would not materially affect the results of the Rothschild analysis.

6.7 In order to confirm that an external bad bank focused only on RBS's 'high-risk' assets (as defined in Chapter 5) would deliver more 'bang for buck', the Review also considered the potential impact of a much bigger external bad bank that included all £83 billion of the assets analysed by BlackRock Solutions. This involved further assumptions regarding how a larger external bad bank could be funded. This analysis is set out in Box 6.D later in this chapter.

The structure of the Rothschild financial model

6.8 **The starting point for the model was the RBS Group forecasts for the period 2013-17, adjusted for the Bank of England 'base' and 'stress' scenarios, calculated on a fully-loaded Basel III basis.** RBS also provided detailed forecast financials for the period for the portfolios of assets considered for transfer to the bad bank, with the capital ratios (CET1 and CET1 leverage ratios).

6.9 The residual good bank financials were derived by making a number of adjustments to the 'status quo' Group forecasts. The Group forecasts were adjusted for the portfolios selected for transfer, through:

- the deduction from Group forecasts of: income on loans, interest on cash received from loan redemptions (as forecast by RBS); RWAs and capital deductions, net loans and advances to customers, and costs of implementation;
- the adding back to the Group forecasts of: impairment losses avoided, and costs no longer incurred; and
- income received on the consideration for the assets sold to the external bad bank.[1]

6.10 To help ensure that the financial model prepared by Rothschild was robust, PricewaterhouseCoopers (PwC) was retained by the Treasury to carry out procedures that tested the logical consistency and arithmetical accuracy of the model. Following this process, PwC confirmed to the Treasury that they did not believe the final model to contain any material errors in relation to logical consistency and arithmetical accuracy.[2]

6.11 Perhaps the single most significant input to the model is **an assumption regarding the price the Government would be willing to pay for the RBS assets**. The 'transfer price' dictates the write-down on the assets that RBS would be required to make at the time of the transaction, and would also – to an extent – reduce the amount of nominal capital RBS holds. On the external bad bank side of the transaction, the price paid for the assets determines the return that the Government would expect to earn from owning the assets.

6.12 Box 6.A explains the approach taken by the review to valuing the assets that would be transferred to an external bad bank and, in particular, the discount rates used in these calculations.

6.13 The price that the Government would be willing to pay for the assets would be lower than the carrying value on RBS's balance sheet, primarily because:

- the basis of valuation is different, given the need for the Government – as purchaser – to earn a return on the bad bank that is consistent with the requirements of the Green Book (see Box 6.A);
- the marginally higher projections of life time losses from the BlackRock Solutions analysis set out in Chapter 5; and
- the capitalised value of the costs associated with running the external bad bank, many of which would be transferred from RBS.

[1] The resultant tax losses on disposal based on tax rates per portfolios and the assumed creation of Deferred Tax Assets (which were deducted from CET1).

[2] Procedures as agreed and set out in PricewaterhouseCooper's contract with HM Treasury, available at: www.gov.uk/contracts-finder, on a specified version of the model.

6.14 Based on the valuation approach detailed in Box 6.A, it was assumed that the Government would be willing to pay up to £21 billion, at the end of 2013, for the £30 billion of 'high-risk' assets analysed by BlackRock Solutions.[3]

6.15 If the Government were to pay a higher price for the assets than has been assumed, the reduction in the loss attributable to its shareholding in RBS would be offset by a lower return earned from its ownership of the bad bank. This is explored further in Chapter 8.

6.16 The reduction in RBS's nominal capital would also be offset by the existence of considerable capital deductions against many of the assets considered here, as well as a reduction in RBS Group's Risk-Weighted Assets (which determines how much capital the bank needs to hold). The analysis set out below details the far smaller impact on RBS's overall capital position that would result from such a transfer.

[3] The modelling of the impacts of creating a taxpayer-funded external bad bank excluded the Core Markets portfolios and a number of other low-value portfolios.

Box 6.A: Discount rates and asset valuation

There are two important discount rate assumptions required in assessing the case for creating a taxpayer-funded external bad bank:

- The discount rate to apply to valuing the Government's purchase and subsequent ownership of the assets, as part of the overall value for money assessment of the intervention; and
- The discount rate to apply to the projected cash flows of the assets to estimate their intrinsic value (or 'Real Economic Value' in the terminology of the European Commission).[4]

For the former, Chapter 8 later in the Review explains the choice of the Social Time Preference Rate (STPR) to calculate the value to the Government of the cash flows arising from owning the bad bank.

For the latter, the appropriate discount rate for valuing an asset should take into consideration:

- the cost to the purchaser of raising the funds to buy the asset;
- the rate of return the purchaser needs to earn on the asset; and
- the level of risk that the purchaser would be exposed to, i.e. the risk that the cash flows received are not those projected under a 'base case' scenario.

In order to establish the appropriate discount rate, the Review therefore considered the cost of funding the bad bank (i.e. the cost of issuing gilts to raise cash) and the premium on top of this rate that would both protect the taxpayer from the risk it was taking on and lead to a bad bank that would earn an appropriate rate of return for the taxpayer.

For this latter requirement, the value to the Government of owning the external bad bank was modelled (as set out in more detail in Box 8.B). In order to protect value for money for the taxpayer, it was assumed that the Government would pay no greater than the price for the assets that would lead to a projected Present Value of the bad bank, in a 'base case', of zero.

From this, the discount rate for calculating the value of the assets (i.e. the gilt rate plus a premium) was established, such that the bad bank would expect to earn a sufficient rate of return to meet this requirement.

Key findings from the Rothschild model

6.17 Rothschild modelled the impact on Return on an Average Tangible Equity ("RoATE") on an adjusted basis (i.e. stripping out exceptional items including loss on transfer). The base case adjusted RoATE of the residual good bank is forecast to be higher than the status quo position, largely due to the removal of future impairments and operating costs making the good bank more profitable. Although the interest income on the transferred assets would also be removed, Rothschild assumed that RBS would redeploy the consideration received for the bad bank assets into gilts with an equivalent average maturity to the bad bank assets, thereby offsetting the impact on income. If the proceeds were invested in higher-yielding assets, RBS would need to hold capital against these assets, offsetting the benefit of the additional income. The forecast

[4] This is not necessarily the same concept as 'market price', for example it does not consider how liquid the market is for these assets; indeed, for many of the assets in question here, no liquid market with observable prices exists

improvement in RoATE is, however, relatively short-term, with the uplift being 3.6 per cent in 2014, but by 2017, the forecast improvement in RoATE is only 1.3 per cent.

6.18 Under the stress case, the improvement in the residual good bank's adjusted RoATE versus the status quo would be much more considerable, with an improvement in RoATE of up to 15.8 per cent in 2014.

Table 6.A: Impact on Adjusted RoATE – base case and stress case

Adjusted RoATE (base case)	Base	Stress
2014	+3.6%	+15.8%
2015	+2.5%	+4.4%
2016	+1.7%	+2.2%
2017	+1.3%	+0.7%
Source: Rothschild modelling for HM Treasury		

6.19 As noted previously, while the loss incurred by RBS on the transfer of the assets would directly impact regulatory capital, the following offsetting factors mean that the 'good' bank's base case CET1 ratios would only be modestly lower than the 'status quo' position:

- the impact on regulatory capital would be partially mitigated by deductions already taken within RBS's regulatory capital, known as "Expected loss minus Provision" deductions ("EL-P"). Under Basel III rules, EL-P deductions are taken in full from CET1. However, as the loss on transfer would be greater than the existing capital deductions, this would not offset the full reduction in nominal capital;
- the CET1 ratio benefits from a reduction in RWAs of the transferred assets; and
- the avoidance of future impairments relating to the selected assets transferred.

6.20 However, the residual good bank's capital position would become increasingly worse versus the status quo in future years, as the status quo assumes that many of selected assets would mature (i.e. repay) between 2015 and 2017. As a result, the status quo's RWAs and future impairments would reduce due to asset maturity, without the upfront loss that would arise from an asset transfer in the external bad bank scenario, assuming the assets pay out as expected.

6.21 There would be a capital benefit to the residual good bank arising from the removal of the high-risk assets under a 'stress case' scenario, with the stress CET1 ratio for the residual good bank improving by up to 107 basis points (bps) versus the status quo. This is because 'stress' losses and RWAs are much higher under the 'stress' forecast. As such, one of the principal benefits of establishing an external bad bank would be to make RBS's capital position more robust under a 'stress' scenario; a good bank/bad bank split would reduce the level of tail-risk that RBS is exposed to.

Table 6.B: Impact on CET1 ratios – base and stress case

CET1 % impact	Base	Stress
2013	-5bps	-6bps
2014	-26bps	+33bps
2015	-37bps	+65bps
2016	-54bps	+88bps
2017	-59bps	+107bps
Source: Rothschild financial model		

6.22 In addition to the CET1 ratio, markets and regulators are increasingly considering the CET1 leverage ratio as measure of banks' capital strength, which is expressed as the CET1 nominal amount as a proportion of total assets (plus certain off balance sheet exposures including derivatives and lending commitments). The traditional CET1 ratio is a risk-based metric derived from RWAs, whereas the CET1 leverage ratio considers a firm's nominal CET1 position relative to its balance sheet size, and is not risk-adjusted.

6.23 Rothschild's analysis indicates that, under a 'base case', the residual good bank would have a worse CET1 leverage ratio that the status quo, in line with the trends of the CET1 ratio (i.e. capital ratio).

6.24 Conversely, under the stress case, the leverage impact would be broadly positive (i.e. looking forward, the good bank's stress case CET1 leverage ratios would be better than the status quo position). This is largely a result of the good bank's nominal stress capital position being higher than the status quo due to the removal of projected future losses (which are significant when high-risk assets are subjected to a 'stress' scenario).

Table 6.C: Impact on CET1 leverage ratio – base and stress case

CET1 leverage ratio impact	Base	Stress
2013	-24bps	-25bps
2014	-28bps	-2bps
2015	-31bps	+14bps
2016	-33bps	+24bps
2017	-35bps	+30bps

Source: Rothschild financial model

Potential valuation impact of a good bank/bad bank split

Approach to the theoretical valuation of the residual good bank

6.25 Proceeding with a taxpayer-funded external bad bank for RBS may have far-reaching implications for the valuation of RBS.

Box 6.B: How banks are valued

In normal times, the value of a bank is typically driven by the earnings that it generates, both now and in the future, and what investors are prepared to pay for this earnings stream. Estimating the value of a bank therefore requires investors to estimate both the path of future profits for a bank, and the degree of uncertainty that they have around this estimate: the riskier the future cashflows of the bank, the less they are worth today. This can be reflected as a bank's cost of capital, which is the rate at which investors discount a bank's expected future profits to a valuation today. In some circumstances investors might make adjustments to this value to take account of any capital surplus or shortfall in the bank.

Given the complexity inherent in valuing a bank, investors will often use more simple metrics as shorthand for value. For example:

- the price/earnings ratio (P/E) – the share price of a bank divided by its earnings per share. If a bank's shares traded on a high P/E ratio, this might indicate that the market expected particularly fast growth in its profits, or that the profit stream is likely to be very stable and highly predictable. Conversely, a relatively low P/E ratio might indicate an expectation that profits will fall (or grow more slowly than other banks'), or that the profit stream is very volatile and difficult to predict; and
- the price/book value ratio (P/BV) – the share price of a bank divided by its net asset value per share. Because banking is a capital-intensive business, a bank's earning potential is likely to be linked to the amount of capital that it has. A bank might trade on a high P/BV multiple if investors expected that it would be able to generate higher returns on capital. There is generally a high degree of correlation between a bank's return on equity and its P/BV multiple.

Because valuing a bank involves making a number of estimates about the future, valuation is inherently uncertain and requires making a number of material judgments.

6.26 As well as the direct impact on RBS's profitability, which is quantified in the Rothschild model, there may well be other impacts that cannot be so readily estimated:

- if capital markets believed that RBS had become less risky, its funding costs might fall and/or it may become a more attractive counterparty for wholesale clients;
- RBS's cost of capital might also fall as it becomes a less risky bank. This might be particularly significant if the market currently prices in a degree of 'tail risk' into RBS's cost of capital, as well as the usual uncertainty in a banking business; and
- the market's and the regulator's perception of its capital needs may also be impacted.

6.27 As the extent of these effects can be very hard to estimate, establishing the impact on the valuation of RBS is inherently subject to significant uncertainty. Nevertheless, it is possible to reach a judgement of whether or not there is likely to be an improvement in RBS's valuation and the likely extent of such an improvement, even if this cannot be precisely quantified.

The theoretical quantifiable value uplift

6.28 The principal approach to assessing the valuation impact on RBS was to use an empirically-observed relationship – between individual banks' return on equity and the "P/BV" (price-to-book value) multiple at which their shares are trading – to estimate the value impact of the profitability improvement shown in Rothschild's model. This is explained in Box 6.B.

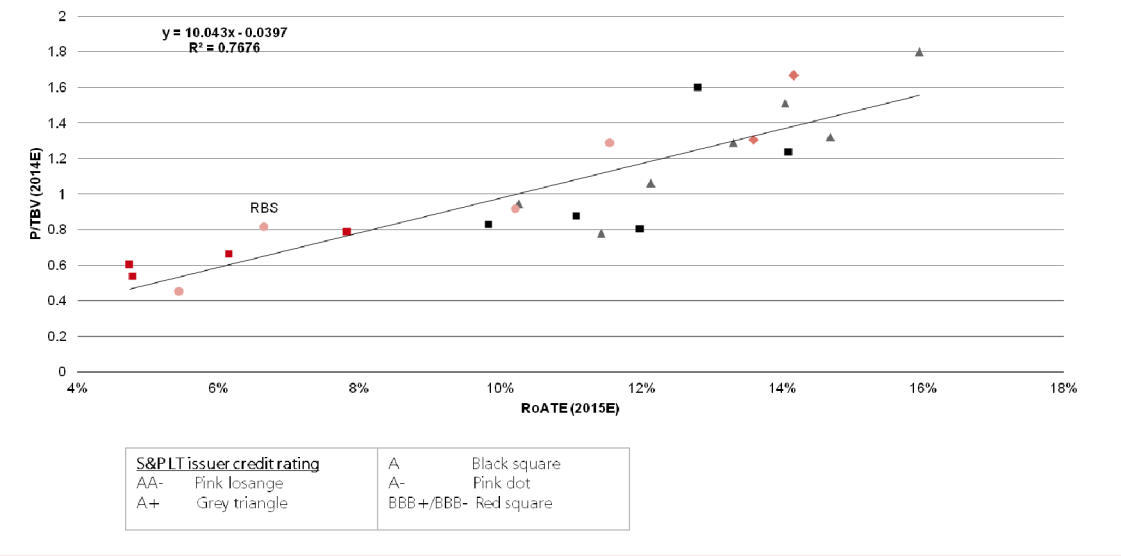
6.29 Rothschild also assessed whether any of the value drivers described above might have a material impact on RBS.

Box 6.C: Valuation analysis of RBS

The empirically observed relationship between 'share price divided by tangible book values' (P/TBV), which measures the share price of a company compared to its book value as reported in its financial accounts; and returns on average tangible equity (RoATE), capturing a bank's returns compared to its average holding of its most loss-absorbing capital (core tier 1 or tangible equity). Put simply, such analysis compares a bank's share price, i.e. how it is perceived in markets, with its profits. This gives you a broad sense of whether a bank is over- or undervalued.

The below analysis traces this relationship for a number of major European banks, plotting "P/TBV multiples" at which these banks currently trade with respect to their returns. The line-of-best-fit shows what P/TBV multiple an average bank might trade on for a given level of return on equity. For example, and according to the results, a bank earning a 10 per cent return on equity might expect to be valued at between 0.9x and 1x tangible book value.

The analysis indicates that RBS currently trades above the line, implying that it is not undervalued compared to the market when its level of profit is taken into account. Investors may have already priced in the potential effect of improving asset performance beyond 2015.



Source: SNL, Bloomberg

The chart also highlights the credit ratings of the different banks to determine if there is a relationship between credit ratings and valuation.

Whilst lower rated banks do trade at lower multiples than better rated banks, there does not appear to be any statistically significant correlation between greater credit risk (a reasonable proxy for overall risk) and lower valuation for given levels of profitability.

6.30 Rothschild used the analysis detailed in Box 6.C to estimate what P/TBV multiple the residual good bank would trade on. They then applied this multiple to the residual good bank's estimated book value, and applied adjustments to reflect the impact on the bank's capital position of the split. To ensure comparability, the value of the 'status quo' was also estimated using RBS's RoATE.

6.31 **The analysis, based on 2015 RoATE, generates a theoretical conclusion that the residual good bank might today be worth approximately £5.6 billion more than RBS 'status quo' would have been. However, it is highly likely that this materially overstates the value uplift for two reasons.**

6.32 First, there is an implicit assumption in the analysis that the effects on profitability are sustainable. In this case, the improvement in RBS's profits as a result of the split is very likely to rapidly decline, as the burden of impairment charges on the bad bank assets is expected to fall most heavily in the early years. Re-running the analysis two years forward confirms this: the theoretical value benefit on this basis falls to approximately £0.3 billion.

6.33 Secondly, as set out previously in Box 6.A, the Rothschild analysis assumes that the bad bank pays RBS the price that is consistent with the external bad bank having zero net present value under the Government's valuation framework. While the final transfer value of the assets would need to be negotiated with RBS, the Government would not be prepared to pay more for these assets, as (notwithstanding broader economic benefits) the taxpayer would not earn a sufficient return if it did so. Any reduction in the value actually paid for the assets would represent a reduction in the value of the residual good bank.

6.34 There is also the risk that the assets under-perform and the associated difficulties with servicing and managing the assets in the bad bank, which may affect value.

6.35 Finally, it is important to note that the analysis undertaken by Rothschild does not take account of potential EU State aid remedies and commitments (see Chapter 9), which could be value-destructive.

Box 6.D: Would a bigger external bad bank result in a better outcome?

The analysis in this chapter is based on analysing the transfer of £30 billion of 'high-risk' RBS assets into the taxpayer-funded external bad bank. This was based on including only 'high-risk' assets as defined in Chapter 5.

In order to establish whether creating a bigger bad bank – one that also included the 'lower-risk' assets identified in the initial assessment of RBS's balance sheet – the Review also considered the transfer of the much larger pool of assets totalling £83 billion. Using the valuation methodology discussed previously, this would lead to the Government being willing to pay up to £60 billion for these assets.

This would require a greater amount of funding than the Government would likely wish to issue in gilts before the purchase. Therefore, the analysis below assumes a loan from RBS to the external bad bank, guaranteed – in exchange for a fee – by the Treasury.

Table 6.D below shows the projected impact on RBS's capital position under a 'base case' and a 'stress case' scenario.

Table 6.D: Impact on CET1 ratios – base and stress of £83 billion external bad bank

CET1 % impact	Base	Stress
2013	-2.4%	-2.4%
2014	-2.8%	-1.9%
2015	-3.0%	-1.4%
2016	-3.2%	-1.1%
2017	-3.3%	-0.8%

Source: Rothschild modelling for HM Treasury

This demonstrates clearly that a larger bad bank would lead to a significantly worse outcome in terms of RBS's capital position (versus the status quo position and the smaller 'high-risk' bad bank), because:

- the 'low-risk' assets included in this pool do not have large projected future losses, so the benefits on returns of removing the assets are lower;
- there would be a significant loss on transfer compared to book value, as the bank would typically not be expected to hold provisions against these assets but the low returns of the assets would not justify a higher price;
- existing capital deductions to cover only a relatively small proportion of this loss, meaning that there is a significant 'day 1' erosion of regulatory capital (approximately 2.4 per cent), compared to only 0.05 per cent for the smaller 'high-risk' bad bank; and
- in terms of a 'stress' scenario, although RBS would benefit from lower future impairments, the loss on transfer continues to outweigh this benefit even in the later years.

An analysis of the potential valuation impact on RBS – using the same methodology as set out above – also shows that a bigger bad bank would adversely affect RBS's valuation, estimated at between minus £3 billion and minus £10 billion although, again, this is likely to materially overstate the value erosion for the same reasons as previously.

In summary, the analysis of a potential bigger external bad bank confirms that an asset

perimeter focussed on the 'high-risk' pool represents the most efficient intervention in terms of capital and value uplift.

Secondary value drivers

6.36 Other things being equal, **the cost of funding an RBS good bank** would be likely to be lower than that of RBS in the 'status quo', reflecting its higher profitability, stronger balance sheet and substantially reduced sensitivity to stressed conditions. However, RBS has limited need to raise term funds in the wholesale markets in coming years, and residual RBS – which will have received cash consideration for assets sold to the bad bank – will have an even lower requirement. This means that RBS will only be able to capture the benefit of reduced funding costs to a marginal extent, so any value benefit also is likely to be minimal.

6.37 In the coming years, RBS will need to issue additional Tier 1 and Tier 2 capital that is compliant with the Capital Requirements Directive IV (CRD4). The cost to an institution of issuing this capital is sensitive to the perceived risk profile of the issuing institution, and so it may be the case that it would be cheaper for RBS "good bank" to raise this capital than it would be for RBS "status quo." However, this benefit is again likely to be modest for two reasons.

6.38 First, RBS would be expected to dispose of the 'high-risk' assets that would be transferred to any external bad bank over a number of years in the ordinary course of business. The benefit would therefore apply only to issuance made in the short term. Secondly, the good bank/bad bank split would be expected to have a modestly negative impact on RBS' common equity tier one ratio. This may adversely impact the terms on which RBS could issue contingent convertible securities, particularly if the Bank of England (as RBS's prudential regulator) requires a CET1 high 'trigger'.

6.39 As the residual RBS would have a lower risk profile than RBS 'status quo' – and so might be expected to have **a lower cost of capital** – this would make every pound of future profit worth more to an investor today, and so could theoretically lift the valuation of RBS "good bank".

6.40 This could be because investors would be able to forecast the future profitability of RBS with greater certainty, as the assets which are most sensitive to economic outcomes would have been removed. RBS's overall earnings would therefore be more stable.

6.41 Rothschild analysis suggests that in Europe there is currently no detected correlation between the predictability of a bank's earnings (as measured by the variance in analyst forecasts for future profits) and its valuation, although there is some, albeit weak correlation, when looking at US banks.

6.42 To the extent that there is some benefit from improved certainty on future profitability, it is likely that, as RBS would be shedding the bad bank assets over time in any event, this benefit may accrue to RBS in time anyway. Rothschild therefore judges that there is likely to be limited benefit, if any, to RBS's cost of equity from this effect.

6.43 By removing high-risk assets from RBS's balance sheet, the good bank/bad bank split could also substantially reduce RBS's tail-risk, and hence its cost of equity, although Rothschild has been unable to find any objective evidence that the market currently penalises valuations of banks with a perceived higher exposure to tail risks.

Summary of assessment against return to private sector objective

6.44 The analysis undertaken by Rothschild for this Review suggests that creating a taxpayer-funded external bad bank could theoretically achieve some uplift in the value of the remaining RBS Group, although this impact is likely to be marginal, temporary and subject to considerable uncertainty.

6.45 Furthermore, Rothschild's analysis suggests that investors have already begun to price-in the potential effect of improving asset performance for RBS.

6.46 Rothschild's analysis also shows that RBS's capital position would be affected by the creation of an external bad bank, although the significance of the impact would depend on whether a 'base case' or a 'stress case' macroeconomic scenario were to materialise:

- under a 'base case', transferring the assets into a taxpayer-funded external bad bank would lead to modestly lower capital ratios for RBS than those in the status quo, reducing RBS's capital ratio in 2017 by 59 bps;
- however, if a 'stress case' occurred, removing the 'high-risk' assets from RBS's balance sheet would mean that its capital ratios fared better than without a good bank/bad bank split, as it would reduce the level of tail-risk that RBS is exposed to.

6.47 In summary, while there may be some benefit to RBS valuation creating a taxpayer-funded external bad bank – and hence ease of exit for the Government's shareholding – any increase in RBS valuation is very uncertain and likely to be small, and it would not be expected to improve RBS's capital position in a 'base case'.

6.48 As a result, Rothschild has advised the Review that the creation of an external bank would not strengthen RBS but would, in fact, distract from the task of re-establishing RBS as a leading UK retail and SME franchise.

7 Would a taxpayer-funded external bad bank support the British economy?

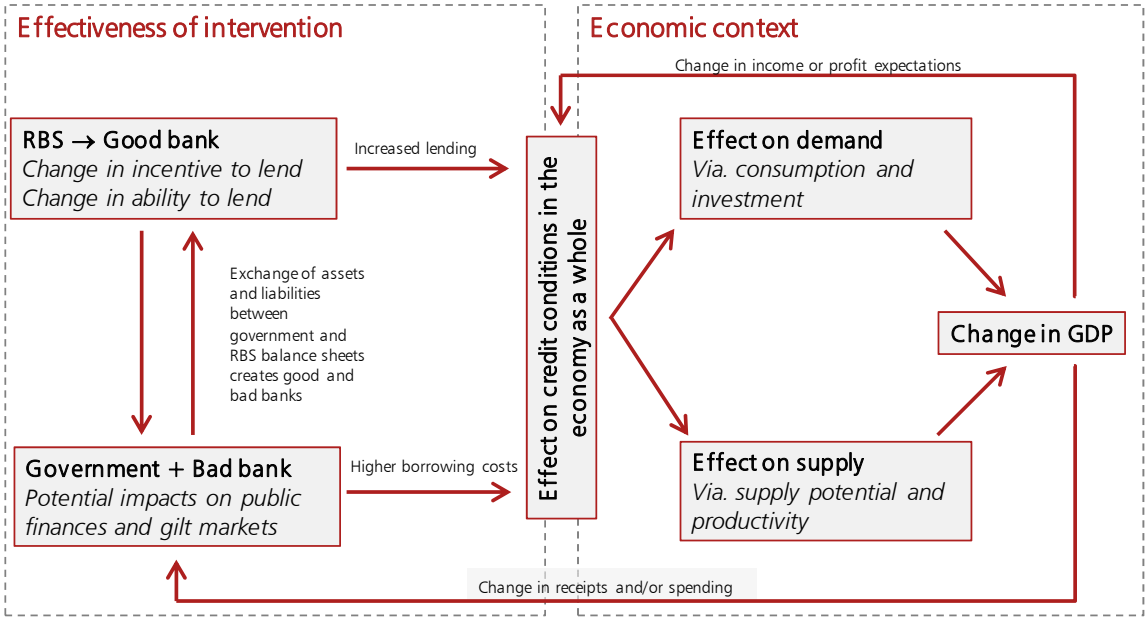
7.1 This chapter assesses the economic case for and against a good bank/bad bank split of RBS through the creation of a taxpayer-funded external bad bank. It discusses the economic context, including the role of credit and lending in the economy and the role of RBS in particular; the potential effectiveness of the intervention at increasing RBS lending; and estimates the overall impact on the British economy under a range of different scenarios.

Introduction

7.2 Estimating the economic impact of creating an external bad bank depends on a number of judgements, including the effectiveness of the intervention (i.e. the extent to which it might increase lending in the economy) and the economic context (i.e. the impact that additional lending will have on the economy as a whole). Both of these judgements are highly uncertain.

7.3 Assessing the economic impact of a good bank/bad bank split is complicated. Consideration needs to be given to how changing the balance sheets of RBS and the public sector can lead to changes in credit flows; how changes in credit flows can lead to changes in economic activity; and how those changes in economic activity can feed back into further impacts on credit flows and the public finances. This is illustrated in Figure 7.A. The rest of this chapter considers all of these channels.

Figure 7.A: Illustration of the economic impact of a good bank/bad bank split



Source: HM Treasury

7.4 The process starts with exchange of assets (i.e. RBS loans) and liabilities (i.e. Government issuing gilts to fund the transfer) between RBS and the public sector, leading to the creation of the 'good' bank and the external bad bank.

7.5 This transfer can affect both agents: it can change RBS's ability and incentive to lend, and it might change government borrowing costs. These two effects could combine to change credit conditions in the economy.

7.6 This change in credit conditions can affect both the supply-side and the overall level of demand in the economy. A change in credit conditions changes households' ability to consume and firms' ability to invest. Similarly, a change in credit conditions can affect the supply potential and productivity of firms. The combination of these two can affect GDP, which in turn can feed back into credit conditions, through changes in income and profit expectations, and to the public sector, through changes in receipts and public spending.

7.7 This complicated set of interactions means that an assessment of the overall effect is inherently highly uncertain. The quantitative analysis therefore presents a range of potential impacts. To produce this range, a series of economic judgements is needed, which can be grouped into those reflecting the economic context and those reflecting the effectiveness of intervention.

Economic context

7.8 Credit conditions and the performance of the banking sector have played an important role in the UK's economic performance in recent years. The Government has previously set out that, "evidence has accumulated that suggests the impact of the financial crisis on GDP and underlying productivity has been greater than expected".[1]

7.9 The case for an external bad bank therefore requires a judgement on the extent to which this economic context continues to influence the recovery, how much of the effect is attributable to RBS's lending behaviour, and therefore the scope for a successful intervention to improve wider UK economic outcomes.

7.10 The authorities have already introduced a range of policies over recent years to support the banking system and lending in the economy, including the original capital injections in the autumn of 2008, the Special Liquidity Scheme (SLS) and Credit Guarantee Scheme (CGS).

7.11 More recently, the introduction of the Bank of England's Funding for Lending Scheme (FLS) in 2012 has improved lending conditions. As Paul Fisher, the Bank of England's Executive Director of Markets, recently noted:[2]

"The FLS is continuing to support lending to the UK economy with a range of indicators suggesting that credit conditions are steadily improving for households and firms, and FLS participants collectively expect net lending volumes to pick up over the remainder of this year."

7.12 One channel through which the ongoing effects of the financial crisis might be felt is the flow of credit to the real economy (households and businesses). Impairments in credit markets can weigh on both demand, through subdued spending and investment, and supply, through forbearance and impaired reallocation of resources. Credit conditions are currently improving as the economy moves from recession to recovery, but it is important to ensure that a lack of lending will not constrain the recovery.

7.13 To estimate the potential benefit to the economy of a successful intervention, the following analysis considers three questions. First, whether there is evidence that credit supply or demand has been constrained recently. Second, if so, what impact that might have on output – in

[1] *Budget 2013*, HM Treasury

[2] News Release – Bank of England and HM Treasury Funding for Lending Scheme – 2013 Q2 usage and lending data

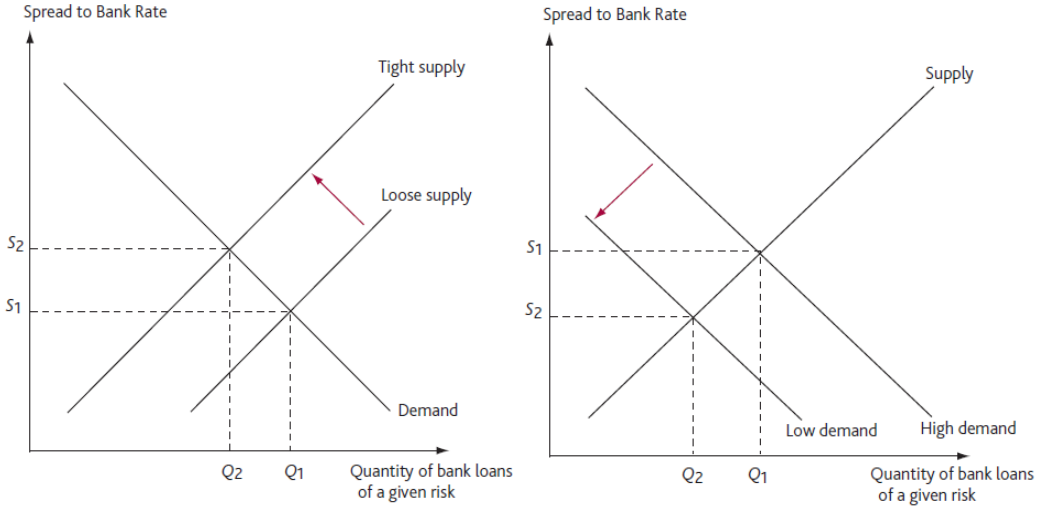
particular whether constrained credit could be subduing productivity (and thereby having longer term effects) as well as aggregate demand. And third, the extent to which increased lending by RBS could improve credit conditions in the economy as a whole.

Credit supply and credit demand

7.14 The issue of credit supply and demand in the current recovery has been much debated,[3] with often strongly held views on each side of the debate. It is not possible to come to a definitive conclusion on this topic, and inevitably it is likely that both effects have been present to some extent. It is nevertheless an important topic to address; the larger any credit supply problem is, the larger the potential impact on lending a positive intervention might have.

7.15 There are two sources of evidence that can be drawn on: direct measures of credit, such as net lending or credit spreads; and indirect measures of credit conditions, such as surveys of households and businesses. Because credit conditions for households (especially mortgages) have been improving across a range of indicators,[4] the focus here will generally be on credit conditions for non-financial businesses (also called private non-financial corporations or PNFCs).

Chart 7.A: Illustration of a tightening of credit supply (left-hand side) and a weakening of credit demand (right-hand side)



Source: Bank of England

7.16 Chart 7.A sets out how credit supply and demand effects might be distinguished in bank lending. If credit supply was impaired, the price of credit would rise, and the quantity fall; on the other hand, if credit demand was the issue, both quantities and prices would be expected to fall.[5]

7.17 Chart 7.B illustrates the full range of external sources of finance for non-financial businesses (PNFCs). Overall lending has shrunk for PNFCs, driven primarily by shrinking bank lending. But this has not been the case for all lending sources. In particular, firms have been able to access bond markets in recent years, although this has not made up for the impact of shrinking bank lending. Furthermore, bond financing in recent years has been roughly in line

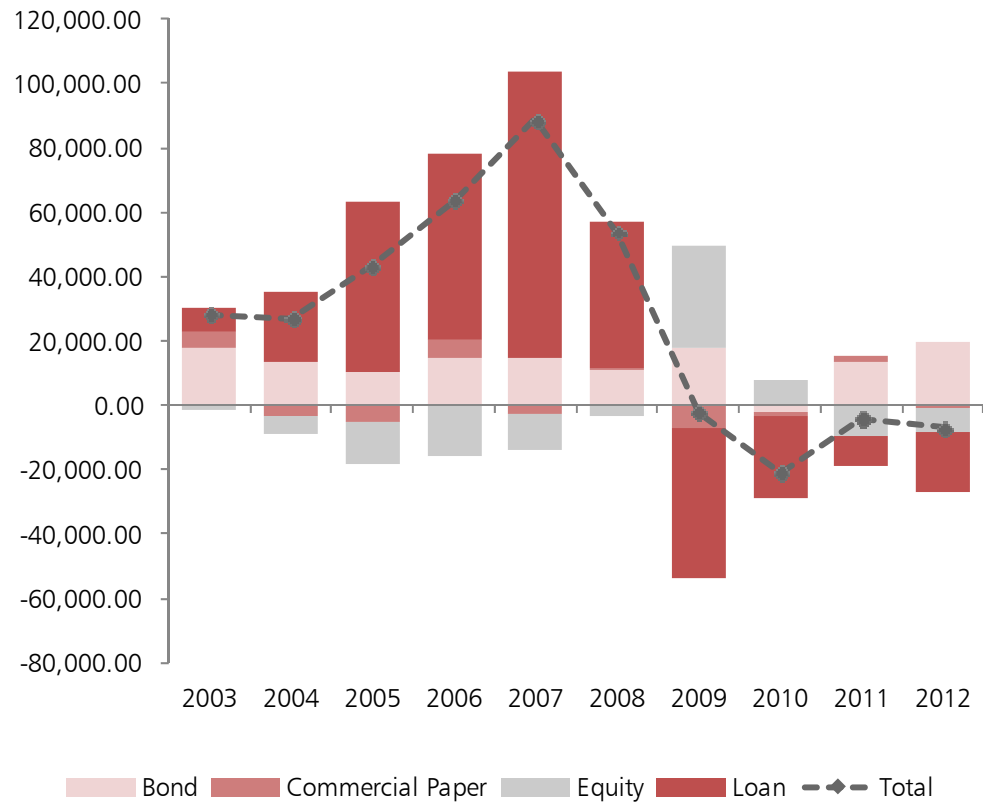
[3] See, for example, *Understanding the weakness of bank lending*, Bell, Venetia & Gary Young, Bank of England Quarterly Bulletin, 2010 Q4 or *United Kingdom: 2013 Article IV Consultation*,IMF, 2013

[4] See, for example, *Inflation Report*, Bank of England, August 2013

[5] *Understanding the weakness of bank lending*, Bell, Venetia & Gary Young, Bank of England Quarterly Bulletin, 2010 Q4

with the trend pre-crisis, which suggests that there is demand for credit, at least from larger firms which are able to access capital markets.

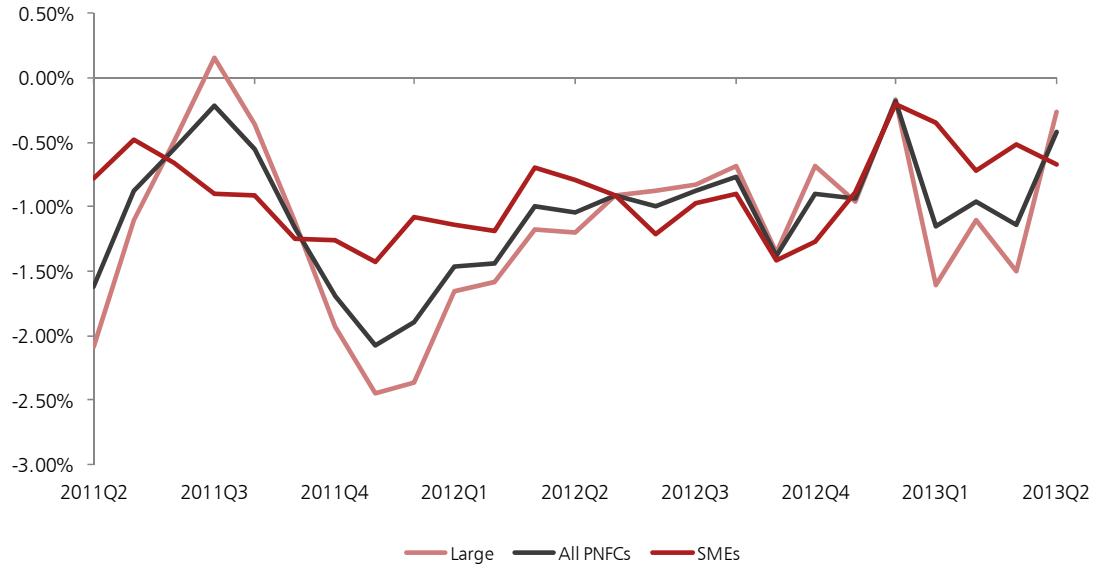
Chart 7.B: Sources of PNFC financing



Source: Bank of England

7.18 Assessing the change in the quantity of bank lending is relatively straightforward. As illustrated in Chart 7.C, lending to PNFCs has been weak in the current recovery and bank lending has been contracting for both large and small firms.

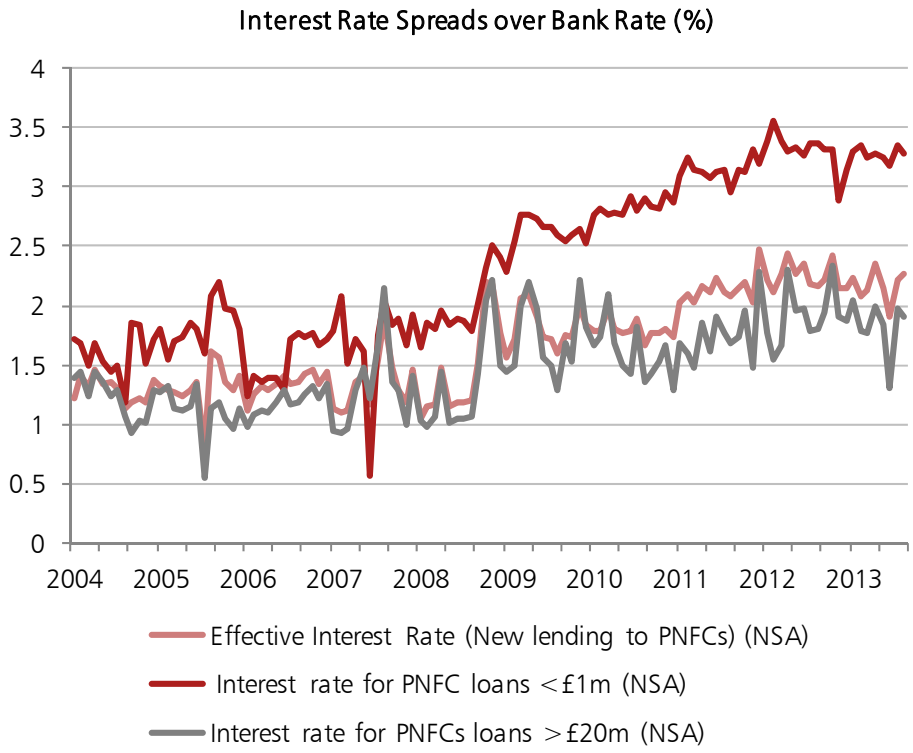
Chart 7.C: Growth in net lending by size of business



Source: Bank of England

7.19 Unfortunately, assessing price changes for business lending is more difficult. One option is to look at effective interest rates as represented by the spread over the Bank rate (Chart 7.D). It can be seen from this that effective interest rates remain elevated in business lending, especially for borrowing smaller amounts. If smaller amounts are more likely to be borrowed by smaller firms, it may be the case that the costs of borrowing are relatively more elevated for smaller firms than for larger.

Chart 7.D: Effective interest rates on PNFC lending, by size of loan



Source: Bank of England

7.20 However, interpreting average interest rates is not straightforward:

- changes in effective rates might represent a change in the composition of borrowers – for example, it may be that firms wishing to borrow in the current economic environment are just riskier;
- similarly, they do not reflect all aspects of loan pricing – for example, a bank's rates may be higher but its fees may be lower, so the overall cost of borrowing might be unaffected; and
- finally, it may be the case that lending was previously under-priced, and so an appropriate correction has driven up prices permanently.

7.21 The final direct measure of credit conditions is businesses' holdings of cash and deposits. These have risen over the crisis and are often cited as being evidence that firms do not need to borrow (and hence demand is the issue). However, this behaviour is difficult to interpret not least because it is aggregate data that does not reveal the extent of any under-lying variation between firms or sectors. Businesses' cash holdings can represent both preparations for expansion or precautionary saving in response to uncertainty over access to finance, amongst other things.[6]

7.22 Direct measures of lending conditions suggest that large firms have been able to access external funding through capital markets (see Chart 7.B) and some firms may have internal funding to draw on, reducing demand for credit. While the quantity of bank lending has fallen, direct measures do not give a clear picture of whether the price of borrowing has risen or fallen,

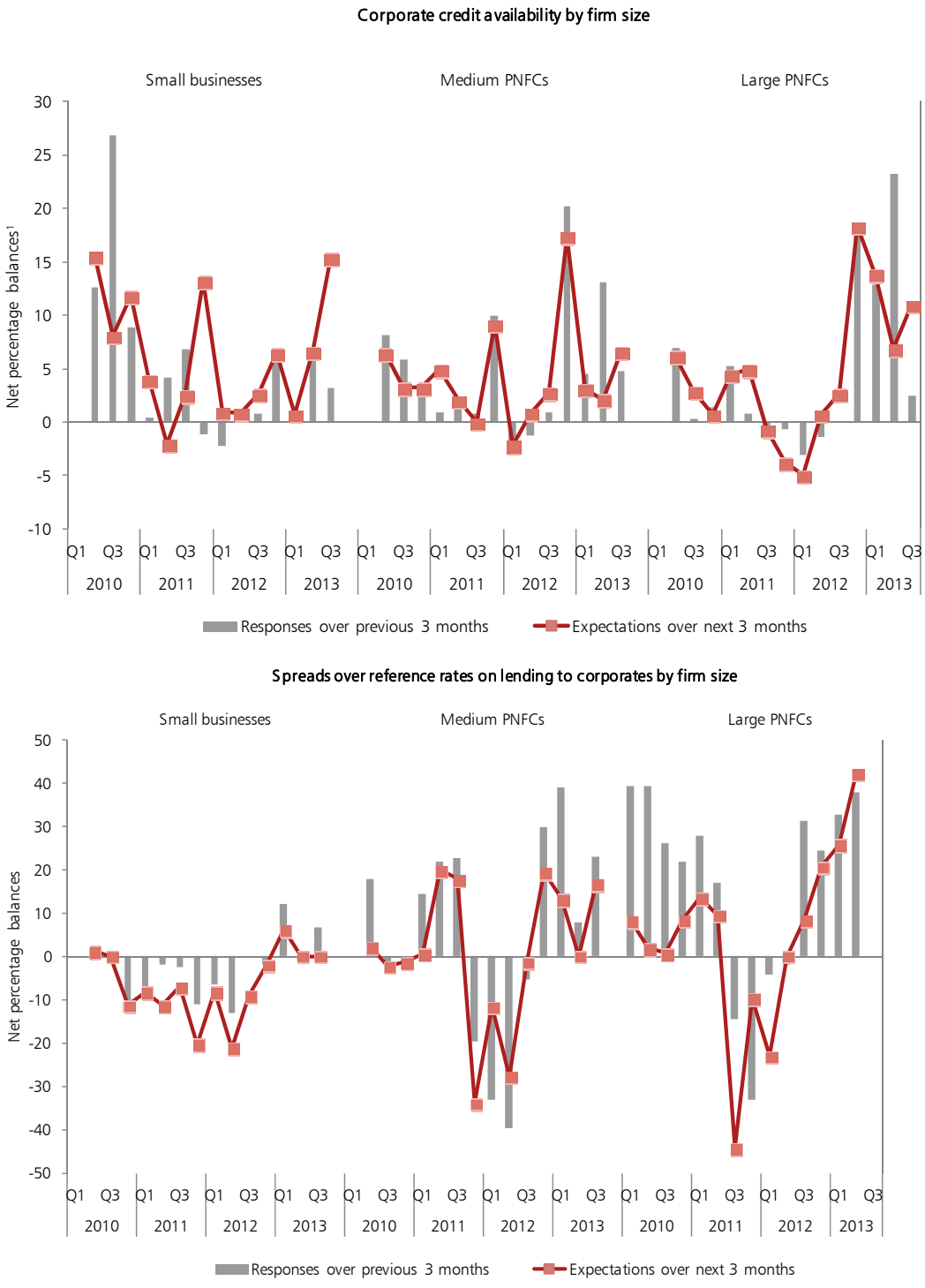
[6] *The Value of Financial Flexibility*, Gamba, Andrea and Alexander Triantis, The Journal of Finance, Vol. LXIII, No. 5, 2008 and *The Corporate Propensity to Save,* Riddick, Leigh A. and Toni M. Whited, The Journal of Finance, Vol. LXIV, No. 4, 2009

meaning we cannot determine whether subdued credit flows are the result of weak demand or supply. Survey indicators can help in untangling this last issue.

7.23 **Survey indicators** provide information from both a lender and a borrower perspective. The Bank of England's Credit Conditions Survey[7] is a survey of lenders. Chart 7.E shows lenders' perceptions of credit availability and credit spreads by firm size. These indicate that lenders perceive the availability and affordability of credit to have risen for the largest firms, to have risen somewhat for medium-sized firms and to have been broadly flat for the smallest firms. Credit demand (not shown) is perceived to be weak across all firm sizes.

[7] *Credit Conditions Survey*, Bank of England, 2013 Q2

Chart 7.E: Credit availability and credit spreads



[1] Net percentage balances are calculated by weighting together the responses of those lenders who answered the question. A positive balance indicates that more corporate credit is available.

Source: Bank of England

7.24 Surveys of borrowers, of which there is a wide variety, support this divergent picture for larger and smaller firms. Improving conditions for larger firms are borne out in both the Deloitte

CFO survey and the Bank of England Agents' survey. Deloitte's CFO survey[8] paints a positive picture of credit conditions for large firms, which report that credit is more available and cheaper than at any point since the survey began in 2007. Firms report that both bank lending and corporate debt are attractive forms of finance, and attitudes towards equity have also improved (Chart 7.F). Firms report that their demand for credit rose over the past 12 months, and will rise further over the coming 12 months. Finally, they anticipate that bank lending, corporate debt issuance and equity issuance will all rise for the corporate sector as a whole.

Chart 7.F: Reported attractiveness of different funding sources

Source: Deloitte CFO survey

7.25 However, challenging credit supply and demand conditions for smaller firms are evident in surveys, including the Bank of England Agents' survey and the Western Union Trade Monitor.

7.26 The most comprehensive source of information on the borrowing of SME's is the SME Finance Monitor. Although credit approval rates in the latest SME Finance Monitor were relatively high for those who chose to apply, other indicators presented a more challenging picture. Only 39 per cent of SMEs now have some form of external finance, the lowest figure since the beginning of the survey. Seven per cent of SMEs were would-be seekers of finance from banks but are reluctant to apply for fear of being rejected or because the process is felt to be burdensome. The former of these groups has been growing in size over recent quarters.

7.27 Finally, the SME Finance Monitor reveals that SMEs are very reluctant to change lender, even when applications for finance are rejected. Of the four per cent of all SMEs who had applied for a loan facility over the previous 12 months, only two per cent had applied for a new loan facility after switching bank. Amongst SMEs which applied unsuccessfully for credit from their main bank, around 15 per cent were seriously considering a change of bank. These

[8] *CFO Survey,* Deloitte, 2013Q3

'potential switchers' represent fewer than one per cent of all SMEs. This is an important issue for determining the overall effect of an RBS intervention: a low level of 'switching' implies that any individual bank's lending behaviour will be more important for determining the aggregate amount of lending in the economy.

7.28 A recent paper by NIESR[9] used the SME Finance Monitor to explore changes in SME financing in the post-recession period. It found that rejection rates had risen, even controlling for the relative risk of different firms. It also found that spreads on lending had risen, as banks had not passed on in full the cuts in the Bank of England base rate. As a result, the analysis concluded that SMEs face credit supply issues. NIESR also highlight weak demand though note that this, in part, reflects high levels of discouragement – that is, that there are SMEs which are choosing not to apply on the assumption that their application will be rejected. If this perception could be changed, SME credit applications might rise.

7.29 **Survey indicators therefore support the tentative conclusion drawn from direct measures; that credit conditions are improving for larger firms, but that both credit supply and credit demand remain weak for small and medium size enterprises**. Some weak credit demand is actually linked to weak credit supply, since some SMEs seem not to be applying for credit on the assumption that credit is unavailable.

7.30 The presence of tight credit supply, and some weak demand linked to supply conditions, implies that there could be scope for a successful intervention that raised lending to SMEs to have a positive impact on the economy, and make sure that credit constraints do not act to subdue the emerging recovery.

The role of credit in the economy

7.31 The scale of the impact on the economy depends on the role that impaired credit may be having on output. Credit conditions can have both shorter and longer-term effects on output and growth, by affecting both the supply side of the economy and level of aggregate demand. Demand impacts typically tend to dominate in the short-term as they influence the cyclical position of the economy and will therefore be influenced by monetary policy[10]. Supply impacts, on the other hand, can be much more persistent and can have much larger consequences for growth. An intervention that improves lending might therefore boost growth in the short-term, by supporting demand, and in the medium-term by supporting supply.

7.32 In the short-term, a change in credit conditions can affect household consumption and business investment. For example, a temporary rise in the cost of credit will lead households to postpone consumption and businesses to postpone investment.[11] This reduces GDP growth while the effects last. A central bank might look to offset these effects by reducing interest rates, pushing the cost of credit back down. However, this can be more complicated if interest rates are very low, or if banks do not pass on the full extent of falls in interest rates to the cost of lending.

7.33 In the longer-term, credit constraints can have an impact on the economy's supply potential and productivity. This can be through direct impacts, such as reduced levels of investment and so lower levels of capital; or through indirect impacts impeding the reallocation of resources. Even in the short-term, supply potential can be impaired as households need to

[9] *Evaluating Changes In Bank Lending To UK SMEs Over 2001-12 – Ongoing Tight Credit?,* Armstrong, Angus, E Philip Davis, Iana Liadze and Cinzia Rienzo, NIESR Discussion Paper No. 408, 2013

[10] The cyclical position of the economy is the current level of output relative to its 'potential' (or longer term trend) and will tend to influence the amount of inflation in the economy.

[11] Though causality could flow the other way round; the stronger the economy grows, the more opportunities to invest and spend and the stronger the perceived net worth of businesses becomes, increasing the ability to borrow.

save more and businesses need to hold more working capital. When supply for credit is constrained, rather than demand, it is likely that there are profitable opportunities that businesses wish to exploit, but which they are unable to do so because they cannot acquire the necessary funding.

7.34 Impaired credit supply can limit productivity growth because it prevents firms from being able to undertake otherwise profitable investments, preventing "capital deepening" and the growth in the potential output of the economy. It can also damage productivity growth through preventing company entry (e.g. because new firms cannot access the financing they need to grow) and company exit (e.g. through forbearance).

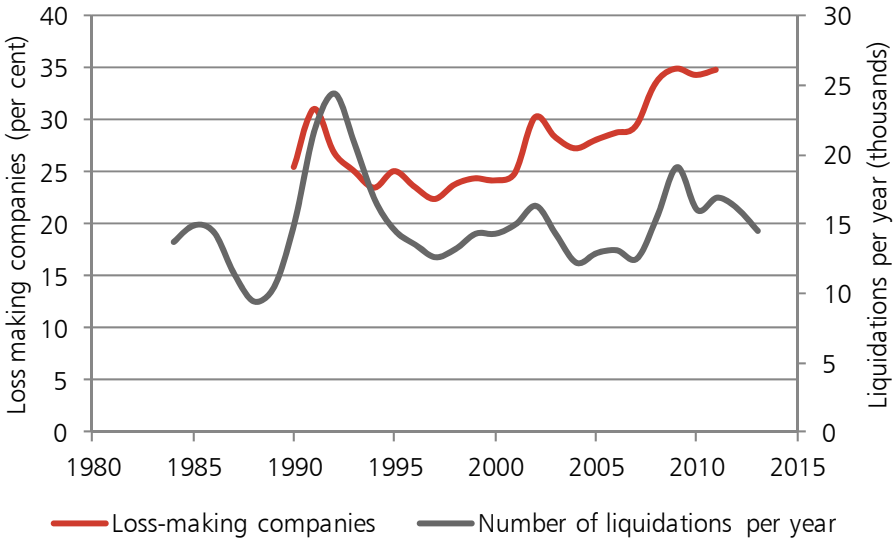
7.35 Normally, reallocation of the economy's resources (capital and labour) occurs as the rates of return for more productive firms rise and capital flows towards these higher rates of return. In the aftermath of a crisis that involved considerable changes in relative prices, transmitted through both higher inflation and a fall in the real exchange rate, a considerable need to reallocate resources between different firms and sectors (particularly from non-tradeable to tradeable sectors) would be expected. However, if credit is not readily available, the flow of capital to more profitable activities might be impeded, slowing down any adjustment and reducing productivity and GDP growth.

7.36 Detecting such impaired reallocation is challenging. As a result, the analysis for this Review has drawn on several different types of analysis to assess the extent of any problem:

- there may be indirect evidence of a problem (the 'symptoms');
- direct measures like rates of return might offer clues; and
- econometric and modelling results might provide evidence.

7.37 A wide-range of indirect indicators point to subdued reallocation. This can be seen in the rise of loss-making firms alongside a relatively subdued level of firm insolvencies (Chart 7.G) and relatively smaller changes in firm entries and exits compared to the 1990s recession, despite a much larger fall in GDP.

Chart 7.G: Company liquidations in England and Wales and an estimate of loss-making companies



Source: Bank of England

7.38 However, it is difficult to interpret these figures. As noted in the Bank of England's August 2013 Inflation Report, this may well be the product of lower interest rates and forbearance by HMRC, as much as any forbearance by the banking sector.

7.39 More direct measures of detecting impaired reallocation include looking at the dispersion of productivity and rates of return. The cross-sectoral dispersion of output and prices has increased markedly in the post-recession period,[12] consistent with subdued allocation. Further evidence suggests this may be concentrated particularly in capital reallocation – while wage dispersion has remained subdued, suggesting reallocation is working in the labour market, dispersion around the return on capital has grown while dispersion of the capital stock remains low by historic standards. A recent speech by Ben Broadbent[13] offered further evidence that capital was not being allocated appropriately, noting that – while in the pre-crisis period and in previous recessions, rates of return and investment had been correlated – this relationship appears to have broken down in the current recovery.

7.40 To understand the relevance of this result to an assessment of the merits of a good bank/bad bank split, it is important to understand the potential drivers of impaired capital reallocation. Broadly speaking, there are three likely causes:

- subdued entry and exit of firms;
- impaired financial intermediation; and/or
- high levels of uncertainty.

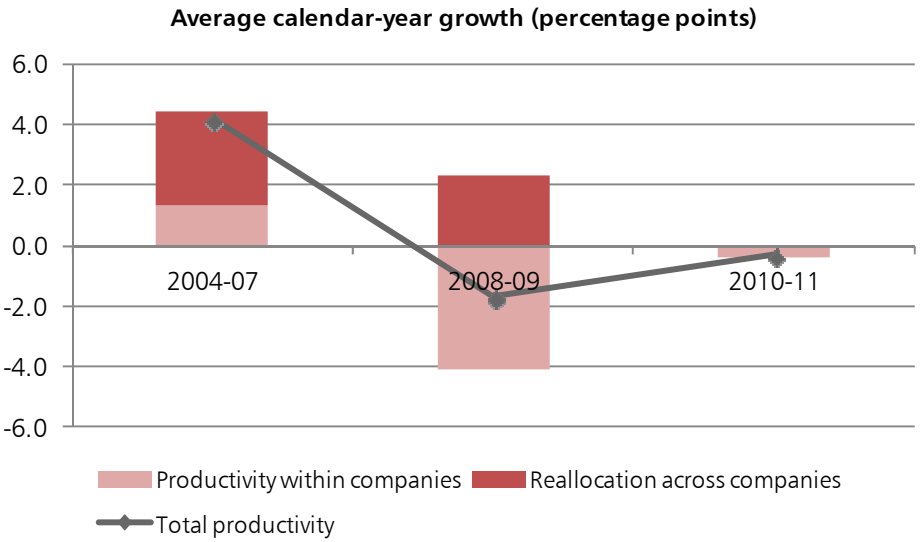
7.41 An intervention in the financial sector could impact on all three, most obviously by addressing impairment in capital allocation. Lack of finance might also be impeding the entry of new firms, and forbearance might be preventing the exit of unproductive firms. High levels of uncertainty may to some extent be linked to uncertainty around the financial sector.

[12] As illustrated for example, in the speech *Productivity and the allocation of resources* by Monetary Policy Committee member Ben Broadbent, 12 September 2012

[13] *Conditional guidance as a response to supply uncertainty,* Speech by Broadbent, 23 September 2013

7.42 Recent research by the Bank of England found that in the pre-recession period reallocation between firms (including via entry and exit) accounted for half of all productivity growth. As Chart 7.H shows, this process made no contribution to productivity growth in the first two years after the recession.

Chart 7.H: Contributions to productivity growth



Source: Bank of England

7.43 As noted above, part of this is likely to be the result of the low interest rate environment and policy interventions such as HMRC's "Time To Pay" policy. However, some of this may also be attributable to the banking sector. The difficulty facing SMEs in accessing finance is one reason to suppose that bank lending may be reducing the entry of new firms.

7.44 The role of the banking sector in firm exits is a more challenging topic. There is some evidence that banks are actively forbearing. For example, past surveys by the FSA have suggested that 35 per cent of commercial real estate (CRE) lending was subject to forbearance and that 14 per cent of SME lending had been (rising to 25 per cent for property-related SME lending).

7.45 SME forbearance was found to be negatively correlated with the capital position of the lending bank. Furthermore, a qualitative assessment was made of the extent of 'bad' forbearance, that is forbearance to firms that were thought to have low viability – on average a third of forbearance was judged 'bad', rising to just over half in one bank.

7.46 There is a well established evidence base, buttressed by recent analysis, which finds a link between uncertainty and GDP growth.[14] Results in the wider academic literature tend to emphasise that increases in uncertainty can have a negative impacts on firm investment, potentially explaining some of the weak capital reallocation that can be observed. However, while this force has clearly been at work, it is difficult to ascribe it specifically to the financial sector. As Haddow et al (2013) note, recent uncertainty shocks have been correlated internationally and coincide with the escalating situation in the euro area.

7.47 Quantifying the impact of impaired reallocation is complex. One approach is to estimate the impact using the dispersion of prices, as an indicator of misallocated resources, as the Bank have done recently. Based on this methodology, slow resource reallocation may account for

[14] Haddow et al (2013)

three to four per cent of the weakness relative to the pre-recession trend. This implies a potentially large positive impact on the economy if this process could be restored.

The role of RBS

7.48 The analysis above suggests that credit supply is likely to be constrained to some degree, with potentially significant impacts on output. The next question is how far an intervention that supported RBS lending might improve credit conditions in the economy as a whole.

7.49 As will be evident from the discussion above, SME lending is particularly important for supporting economic growth. Credit conditions for SMEs have shown less improvement than those for households and larger firms. Productivity growth seems to have been subdued at least in part because of subdued entry and exit of firms, in both of which SMEs appear to have been important. However, it remains to be established what role RBS may have played in this.

7.50 RBS is the biggest SME lender in the UK, with a self-reported market share of around 25 to 30 per cent of SME customer relationships. This means RBS has the potential to have a large influence on this credit market.

7.51 In theory, the effects of competition should mean that the actions of a single bank are not be an important driver of overall lending, competition by other banks should quickly erode any impact. However, for a range of reasons, the rate of bank account switching amongst SMEs tends to be very low. Research by the Office of Fair Trading (OFT) found annual switching rates of only two to five per cent for SME banking services. Survey research by the Federation of Small Businesses showed that over 85 per cent of SMEs had been with their main banking provider for more than three years, and up to 40 per cent had been with their main bank for 10 years or more.[15] By contrast, annual rates of switching were found to be 9.2 per cent for personal current accounts, 12 per cent for cash Individual Saving Accounts (ISAs) and 24 per cent for residential mortgages.

7.52 The Government has taken a range of actions to support competition in this market. The Rainbow disposal of 314 bank branches will lead to a strong new bank in the SME sector. Even without this measure, a range of new challenger banks have emerged in this sector, providing SME borrower with greater choice. The Funding for Lending Scheme should support this, especially following the strengthened incentives for SME lending announced in April 2013 and the extension to count lending by banking groups involving financial leasing corporations and factoring corporations (which can be important sources of finance to some SMEs) as well as certain mortgage and housing credit corporations.

7.53 However, RBS's large SME market share and the low levels of switching by SMEs still have important implications for the potential impact of any intervention. Because borrowers are reluctant to switch lending provider, an increase in RBS's lending to these businesses has the potential to raise the overall amount of lending to businesses in the economy. Similarly, subdued lending by RBS has the potential to weigh on overall lending.

[15] Review of barriers to entry, expansion and exit in retail banking, Office of Fair Trading, 2010

Box 7.A: RBS's assessment of the SME lending market

RBS is the biggest lender to SMEs, with a market share of around 25 to 30 per cent of SME customer relationships. RBS set out its view of conditions in the SME lending market in the 2013 interim results.[16]

Their overall assessment was that conditions remained challenging. In particular they highlighted subdued demand from SMEs, noting that lending to non-Commercial Real Estate SMEs had fallen from levels in the first quarter and that overdraft usage continues to decline. At the same time as outstanding loans and overdraft usage are falling, deposits from SMEs have been rising.

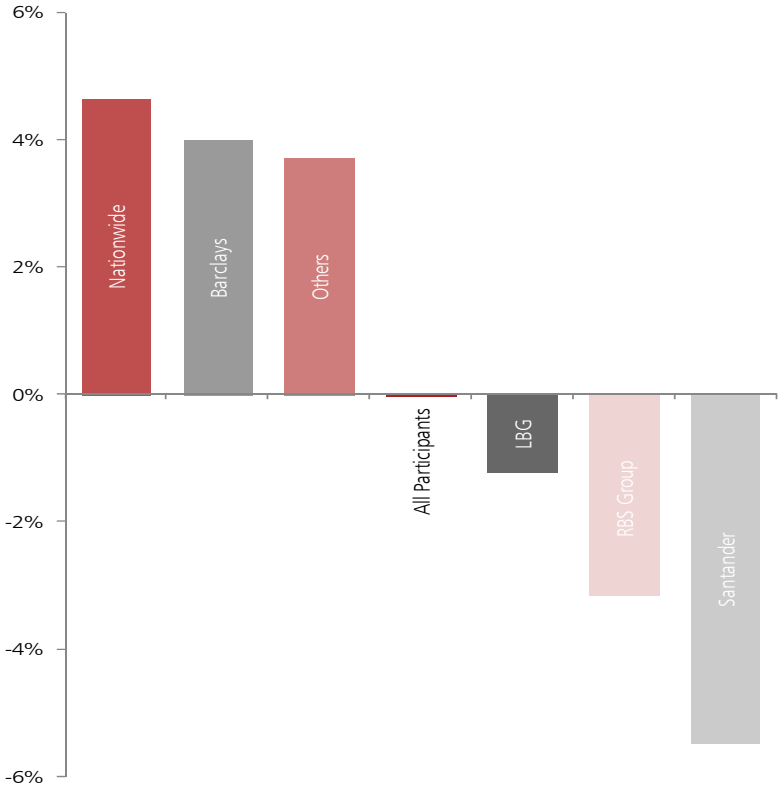
RBS's interim results also highlighted actions it is taking to boost its SME lending; it noted the launch of a review of their lending standards and practices; and finally, it noted some signs of improving conditions, citing in particular an eight per cent rise from the first quarter of 2013 in SME loan and overdraft applications.

7.54 Bank-by-bank data suggests that RBS sits amongst the group of banks that have been reducing their net lending, especially to businesses, as illustrated in Chart 7.I. The concern is that this could be translating into weaker lending conditions for SMEs, which could also impair entry of new firms, and that this might continue into the future.

7.55 However it should be noted that these figures show net lending, rather than gross lending to businesses which may be more important for this analysis. It is to be expected that RBS net lending has declined. The more important factor is whether RBS is extending new lending, and allowing entry and exit of firms, which is not clear from these statistics.

[16] *Interim Results 2013*, RBS Group, available at http://www.investors.rbs.com/results_presentations

Chart 7.I: Percentage change in the stock of FLS lending as a share of the base stock of loans at the start of the scheme



Source: Bank of England

Summary of assessment of the economic context

7.56 This section has looked at the UK economy to determine whether there were conditions that suggested a good bank/bad bank split might deliver wider support to the UK economy. Two findings in particular suggest than any intervention that supports SME lending might have this potential:

- credit conditions for SMEs have not yet improved to the same extent as those for households and larger firms; and
- resource allocation looks to have been to some extent impaired, and SMEs have played a role in this in so far as they are important for firm entry and exit.

7.57 Because RBS has a large share of the SME lending market and SMEs are reluctant to change bank, there is the potential for a successful intervention to have a positive impact on the wider economy, if such an intervention can raise net lending to the SME sector and relieve impairments in capital allocation, while not creating too many economic costs in the transition phase.

Effectiveness of a potential intervention

7.58 Having established the economic context, this section of the chapter addresses the 'effectiveness of intervention' portion of Figure [7.A] at the beginning of this chapter. An intervention could affect lending conditions in the economy as a whole through two channels: most obviously it could improve RBS's lending behaviour; but it could also have a negative impact on the gilt market which would feed through to lending in the whole economy. These factors are considered in turn. The previous section highlighted a key metric of success for any intervention: whether it can raise lending to the SME sector.

RBS and the 'good' bank

7.59 Capital is key for supporting bank lending, so whether RBS meets regulatory minima and the strength of its capital position following the creation of any external bad bank are vital questions.

7.60 It is also possible that uncertainty over RBS's future capital position, which will depend on future economic conditions, could be subduing lending. In this case an intervention that reduced the distribution of risks around RBS's capital position would have a further benefit to the economy. But there is no direct empirical evidence for this argument, which makes it difficult to quantify its significance.

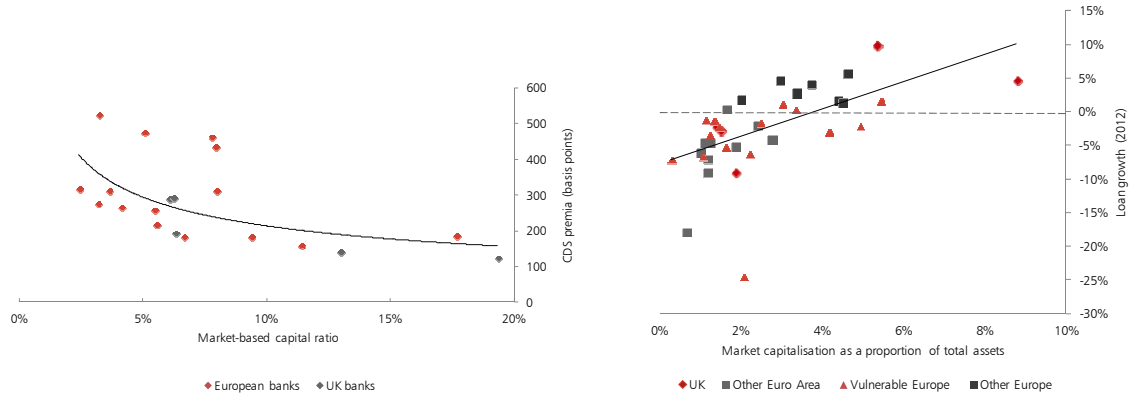
7.61 This section considers both factors. A range of factors that could influence RBS's present and future capital position are assessed, including profits, asset quality and future costs of conduct redress. These also present sources of uncertainty around RBS's capital position, potentially leading to risk aversion on the part of RBS, subduing its lending.

The role of capital

7.62 There has been a rich research agenda on the role of capital and bank lending, including recent analysis in the aftermath of the events of 2007 and 2009. These results have underpinned the new Basel III regulatory regime.[17]

7.63 Chart 7.J offers a simple illustration of the importance of capital: higher capital ratios have tended to be correlated with lower funding costs and higher lending. Capital provides loss absorbing financing for a bank's activities. Higher levels of capital allow banks to absorb larger potential losses, reducing the risk around a bank's debt and allowing it to take risk onto its balance sheet, (for example through lending).

Chart 7.J: Bank funding costs (left-hand side) and bank loan growth (right-hand side), compared to measures of capital



Source: Bank of England

7.64 The level of capital a bank is required to hold is determined by regulators and regulatory standards. Banks are required to hold a certain amount of capital relative to their assets, once those assets have been adjusted to account for differences in risk ('risk-weighting'). If a bank's capital is below this required ratio, it must make an adjustment to meet the required minimum.

[17] See *How could macroprudential policy affect financial system resilience and credit? Lessons from the literature,* Giese, Julia, Benjamin Nelson, Misa Tanaka and Nikola Tarashev, Bank of England Financial Stability Paper No. 21, 2013 for a detailed treatment of macroprudential regulation

7.65 A bank can make this adjustment in two ways: it can change the amount of capital (the numerator); or, it can change its risk-weighted assets (the denominator).

7.66 The first of these can be achieved by changes on the liability side of the bank balance sheet: reducing the share of debt by issuing new equity; and retaining profits in the bank, rather than distributing them to shareholders.

7.67 The second of these can be achieved by changes on the asset side of the bank balance sheet, for example by reducing the share of riskier assets relative to safer assets or by reducing assets overall.

7.68 When banks are unable or reluctant to issue equity,[18] and when profits are low (because of, for example, the economic context or costs of conduct redress), adjustment through changes in assets may be the primary route to rebuilding the capital ratio. Such a process can have negative consequences for the wider economy, either because a bank chooses to reduce its assets across all categories, or because it chooses to rebalance its assets from lending activities with high risk weights (such as SME lending) to those with lower risk weights (such as mortgages). As noted by the Bank of England,[19] a reduction in lending is not necessary to improve capital ratios.

7.69 While there is robust evidence to support the role of capital in bank lending, this is not, of course, the only relevant factor.

7.70 There is tentative evidence that higher levels of capital may be a necessary, but not always sufficient, condition to restore healthy lending to the real economy, following banking crises. This could arise from a range of sources, including uncertainties around future profits, asset quality or wider economic factors as well as the challenge of adapting to new business strategies and management to adjust to new conditions following the crisis. International evidence offers some support to this possibility – see Box 7.B and Chart 7.K below – as does recent empirical work and the corporate financing literature.

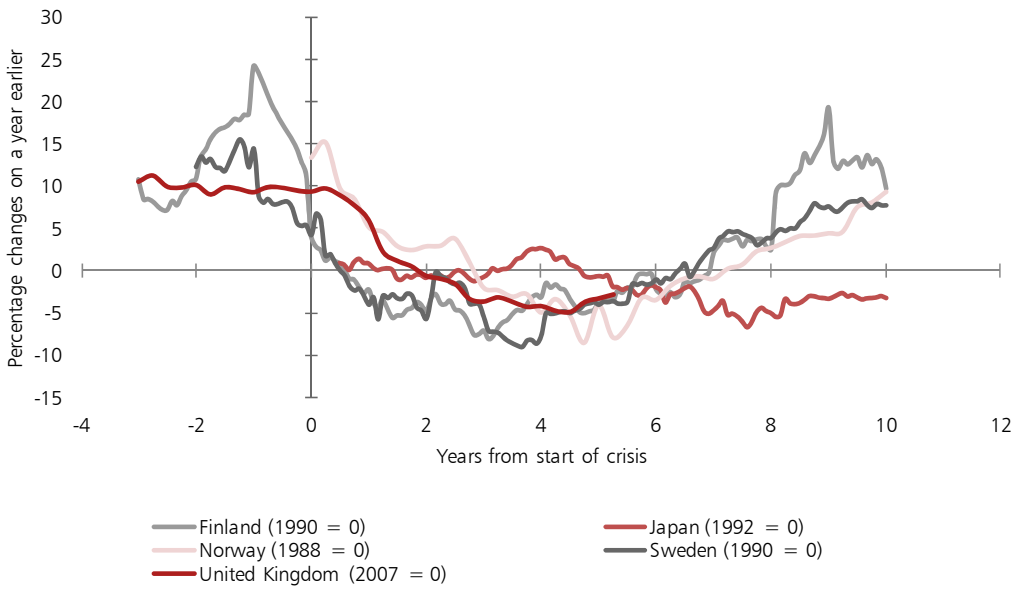
Box 7.B: Lending to the real economy following international financial sector interventions

Chart 7.K illustrates how lending to the real economy in the UK post-crisis compares to other episodes of banking crises internationally.

This illustrates just how long it can take for real economy lending to recover following a severe banking crisis. Even in the case of the Scandinavian banking interventions of the 1990s, which as noted in Chapter 4 in the case of Sweden were seen as successful interventions, it took six or seven years for lending to turn positive. This is despite the swift action taken by Scandinavian authorities to recapitalise and restructure their banking sectors.

[18] Box 2 of the *Financial Stability Report*, Bank of England, June 2012, discusses issues around the issuance of bank equity.
[19] Section 5.2 of the *Financial Stability Report*, Bank of England, June 2013, discusses these issues in further detail

Chart 7.K: Lending to the real economy following banking crises (selected countries)



Source: Bank of England

7.71 The corporate financing literature offers a third source of theoretical insight as to why factors besides the reported level of capital might also support lending.[20] The literature on so-called 'debt overhang' explores the theoretical possibility that shareholders of a firm (such as a bank) whose debt is perceived as at risk could have distorted incentives:

- first, compared with the situation of negligible risk to debt, their incentive to support the issue of new equity could be blunted because – by virtue of it reducing the risk to debt – part of the benefit of new equity would go to the holders of the debt (or those guaranteeing it);
- second, their incentive to support good new low-risk lending could likewise be blunted;
- third, they could be reluctant to dispose of assets of uncertain value, again because risk reduction benefits debt holders/guarantors. Moreover, disposal of such assets might reveal overstatement of book values. For these reasons a bank might want to forbear on problem loans to a greater extent than is efficient; and
- fourth, a bank with a low ratio of market-value-to-book-value has to raise proportionately more equity for any increase in lending because of regulatory capital requirements. In short: "Distressed banks (those with little market capital relative to their regulatory capital and liabilities) find it unappealing or impossible to raise the new equity required to make new risky loans, because so much of any equity raised will simply go to reducing the expected losses of the creditors, including the government who is insuring the deposits. So troubled banks contract instead."[21]

[20] Specifically, the 'debt overhang' literature, first elaborated in Myers (1977), with recent developments, eg. Diamond and He (2012). This section draws on recent applications to the banking sector by Bulow and Klemperer (2013), Landier and Ueda (2009) and Philippon and Schnabl (2013).
[21] *Market-Based Bank Capital Regulation,* Bulow, Jeremy and Paul Klemperer Bulow and Klemperer, mimeo, 2013

7.72 Finally, there are factors beyond capital that may affect a bank's lending behaviour. These are inherently more uncertain and difficult to measure, but can nevertheless be assessed qualitatively.

7.73 One obvious constraint might be management strategy. The management of a bank may have identified certain activities as key to the future of the business, and may seek to preserve these at the expense of other activities. For example, when discussing balance sheet adjustment above, it was noted that a bank might adjust its assets to meet a regulatory capital ratio. If the bank's strategy was to preserve certain riskier activities, for example investment banking, this might necessitate a large adjustment to other forms of lending, given these activities have lower risk weights.

7.74 Other factors to consider are the established skills and relationships of a bank's staff and branches. If a bank's staff are trained in one type of lending (for example, SME lending), but the bank's strategy is to move into another form of lending (for example, mortgages), then doing so will require retraining staff.

7.75 Similarly, these forms of banking often depend on established relationships (e.g. current account customers applying for mortgages). If a bank's strategy were to shift from one type of customer to another, this would take some time. In a period where staff are being retrained and activities re-oriented, overall lending might be expected to fall, before rising again as skills and relationships become more firmly established. These factors would be taken into account by RBS's management when deciding by how much, and to which sectors, lending might be directed.

Uncertainty and capital

7.76 As set out in the previous chapter, the creation of a taxpayer-funded external bad bank would not be expected to improve the capital position of RBS under a 'base case' scenario because the price paid would reflect the discounted expected cash flows of the bad bank assets (as set out in Box 6.A), although it would remove risk around that capital position (improving the capital position under a 'stress case' scenario).

7.77 It is possible that lack of certainty around a bank's capital position could also impair lending, and therefore that the creation of an external bad bank would support the economy, but this is much less certain and there is no conclusive evidence to support it.

7.78 There are many potential sources of uncertainty around a bank's capital position. Three stand out:

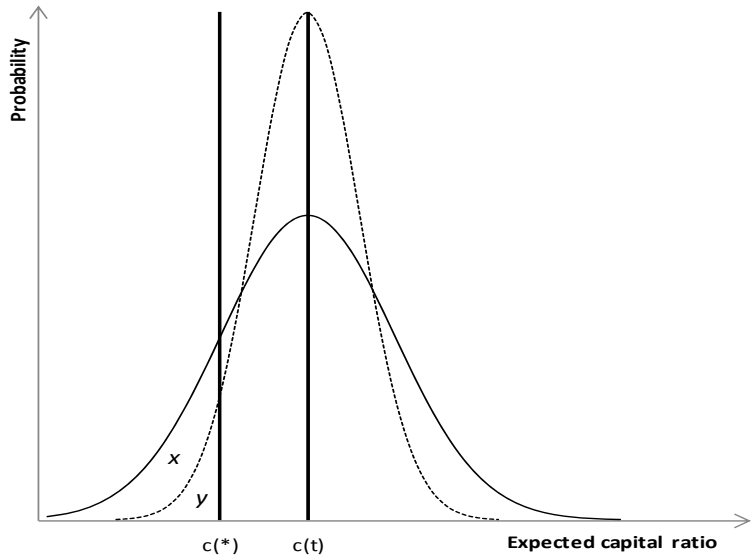
1 profitability: as noted before, banks can build capital by retaining profits, but banks with low profitability will struggle to do this. This implies that their capital position may be at risk over time as they cannot rebuild capital rapidly following unexpected loses;

2 asset values: asset prices are typically surrounded by uncertainty, and that uncertainty rises as assets are more complex and risky, making calculation of risk weights and appropriate precautions for losses difficult. This means that any bank's risk-weighted capital ratio is uncertain, and the degree of uncertainty rises the riskier the assets; and

3 unexpected losses: banks can face unexpected losses, either from unanticipated economic changes, or from litigation or regulatory fines. Such unexpected losses can be large and difficult to predict. Recent Payment Protection Insurance (PPI) conduct costs are a good example.

7.79 In theory it is plausible that reducing this capital uncertainty could support lending. This is illustrated in Chart 7.L. In this chart there is an assumption that there is some probability distribution (the plotted line) around the book capital ratio of a bank (the expected capital value c(t) at time t). For a bank with more risk around its capital position (as represented by the solid line), the risk that it does not meet the regulatory level of capital (represented by c(*)) is shown by the area *x*.

Chart 7.L: Capital position strengthens as uncertainty is reduced



7.80 The creation of an external bad bank reduces uncertainty around the capital position of the good bank, either because profitability is increased, asset uncertainty is reduced or for other reasons. As a result, the probability distribution narrows around the mean, shown as the shift from the solid line to the dashed line. The probability of any particular expected capital ratio rises the closer it is to the mean, increasing the probability that the mean is the true estimate. This reduces the risk that the actual capital position is below the regulatory level, again represented as the change from area *x* to area *y*.

7.81 If a bank is averse to the risk of failing to meet regulatory capital requirements then the creation of an external bad bank should leave RBS in a stronger position to extend lending. But while this theory is plausible, the scale of the effect is highly uncertain and it is not supported by direct empirical evidence.

The capital position of RBS

7.82 In light of the preceding discussion this section briefly recaps RBS's current capital position. The clearest way a taxpayer-funded external bad bank might support RBS's lending would be if it were to improve the residual good bank's capital position. Evidence of RBS's capital ratio is included in the bank's published accounts.

7.83 The accounts published for the first half of 2013 indicate that the book capital ratio of RBS stood at 8.7 per cent on a Basel III basis, with plans to raise it to 9 per cent by end-2013 and 10 per cent by end-2014.

7.84 Market indicators can be useful tools to identify the extent to which there is uncertainty around a bank's balance sheet. A Credit Default Swap (CDS) is a financial instrument that essentially provides insurance to the owner against default risk. As such, they can be used as a

useful indicator of market perceptions of risk. The spread on RBS CDS is amongst the larger of UK banks, indicating a market perception that RBS is more risky than other banks, although this measure does not identify the source of that risk.

7.85 As noted in Chapter 1, in November 2012, the Financial Policy Committee asked the Financial Services Authority (FSA) to assess banks' capital ratios against a seven per cent benchmark, after adjusting for two further factors:

"The [Prudential Regulation Authority (PRA)] should assess current capital adequacy using the Basel III definition of equity capital but after: (i) making deductions from currently-stated capital to reflect an assessment of expected future losses and a realistic assessment of future costs of conduct redress; and (ii) adjusting for a more prudent calculation of risk weights." (Recommendation 13/Q1/1)

7.86 The results of this exercise were published earlier in the year.[22] They indicate that after the requested adjustments RBS, of all the banks assessed, had the lowest capital ratio on a Basel III basis (6.5 per cent) and the largest capital actions (in absolute terms) required to achieve the target ratio of 7 per cent. Of these capital actions, a majority arose as a result of the adjustment to risk weights, where again RBS had the largest absolute adjustment.

7.87 **In summary, a bank's capital position a key driver of its lending performance: the higher the capital, the lower the bank's funding costs and the higher the bank's capacity for lending. Furthermore, the more capital a bank has, the better it is able to weather stress conditions.**

7.88 **The Review has concluded that, while uncertainty around capital might in part weigh on lending, an intervention is most likely to be successful in raising RBS's lending if it results in a stronger capital position for the residual good bank.**

The bad bank and public sector borrowing costs

7.89 Finally, the impact of an intervention on lending conditions in the economy depends not only on how RBS's lending is affected, but also how the Government's borrowing costs might be affected. There could potentially be an economic cost to the intervention if it were to cause gilt yields to increase and feed through into wider rates for the whole economy.

7.90 Creating a taxpayer-funded external bad bank would transfer risk from RBS shareholders and bondholders to the Government.

7.91 However, as the Government is the majority shareholder of RBS, purchasing 'high-risk' assets from RBS would largely amount to buying its own assets through the creation of liabilities (gilts). This should, in principle, primarily be seen as moving around assets and liabilities on the Government's balance sheet. For this reason, the Debt Management Office's central view is that markets are likely to look through the transaction with no significant impact on gilt yields.

7.92 But there is inevitably some risk that a negative market reaction. Even if small, e.g. because it may appear that the Government is absorbing risk that the market had assumed it would eventually sell-off, an increase in gilt yields, thereby impairing lending conditions in the whole economy, could potentially offset the benefits of an external bad bank on RBS lending. However any rise in yields, that was attributable to the RBS intervention, would need to sustained, rather than a short-lived response, for any effect to arise.

[22] *Prudential Regulation Authority (PRA) completes capital shortfall excercise with maor UK banks and building societies*, News Release, Bank of England, 20 June 2013, Further details at: http://www.bankofengland.co.uk/publications/Pages/news/2013/081.aspx

7.93 If markets agreed that there would be value from an external bad bank then RBS's share price could rise as a result. This would strengthen the Government's balance sheet. But it is unlikely that this would lead to a material change in gilt yields.

7.94 There could also be risk to the economy if an intervention were to have a negative effect on the position of the public finances, Chapter 8 sets out that there are both upside and downside risks. An intervention could result in additional costs to the public sector if it resulted in higher gilt rates, if there were a transfer of value to minority shareholders and bondholders, or if the economy were to decline unexpectedly. There are also some set-up and ongoing operational costs, which could be substantial. But equally there could be a benefit if an intervention boosted lending, which would improve GDP and therefore tax receipts.

Quantifying the overall impact on the British economy

7.95 The Review's analysis of whether creating a taxpayer-funded external bad bank would support the British economy concludes by quantifying the potential impact of such a good bank/bad bank split on the economy under a range of scenarios.

Approach to modelling

7.96 As described in the preceding sections, the case for intervention depends on the economic context for the intervention and its likely effectiveness. Both dimensions of the argument are uncertain. Reflecting this uncertainty, the Review has modelled the economic impact of creating an external bad bank under different scenarios to give a range of possible outcomes.

7.97 The effectiveness of intervention will depend on the response of RBS to changes in its projected capital position – a relationship that is well supported by the evidence – and the extent to which RBS lending might also be affected by uncertainty around that capital position, which is less certain.

7.98 Two scenarios were therefore modelled: a **lower bound** in which RBS is assumed to be unaffected by risk around its capital position, only by changes in its 'base case' capital position; and an **upper bound** in which RBS management are highly sensitive to downside risk.

7.99 In the lower bound case, the Review assumes no impact on lending behaviour because the creation of an external bad bank would not improve the capital position of RBS. However, it does reduce the risk around that capital position.[23] Rothschild analysis shows an improvement in the 'stress' capital position of the good bank relative to the status quo. In the upper bound scenario it is assumed that RBS weigh this change in the 'stress' capital position equally with the change in the 'base case'. Therefore in this scenario the reduction in risk to the capital position induces higher lending by RBS.

7.100 The effect of changes in RBS's lending behaviour on the economy then depends on the wider economic environment. To quantify this effect, three scenarios were modelled reflecting the range of possible explanations discussed previously:

1 a scenario where productivity is not impaired by credit availability. In this scenario, any additional lending only affects GDP by increasing aggregate demand in the economy in the near-term;

[23] Because the price paid would reflect the discounted expected cash flows of the bad bank assets as set out in box B.A. In fact, Rothschild shows a marginal negative impact on RBS's capital position.

2 a 'medium supply side impact' scenario, in which restricted credit supply is assumed to be suppressing the level of productivity temporarily. Additional lending by RBS therefore has a medium-term supply benefit; and

3 a 'high supply side impact' scenario, where credit supply constraints are not just having a temporary impact on productivity, but that this impact will never be fully reversed. Therefore, an effective RBS intervention which eased credit constraints more rapidly would leave GDP permanently higher by a marginal amount.

7.101 Combining these scenarios across both dimensions produces a matrix of potential outcomes, which can be summarised in Net Present Value (NPV) terms or as a change in the average annual growth rate of GDP.

7.102 These scenarios are not intended to represent an exhaustive range of potential outcomes. Rather, they set out a first order approximation of the size of the potential effects on the UK economy.[24]

7.103 In each scenario the size of the economic effect is determined by the impact on aggregate demand and aggregate supply, each of which is modelled separately:

Effect on aggregate demand in the economy

7.104 The demand impact has been calculated by estimating how a change in RBS's capital ratio might affect net lending in the whole economy, and in turn, how a change in net lending may feed through into GDP:

> Demand impact = difference in RBS capital ratio * elasticity of lending to capital ratio * elasticity of GDP to lending

7.105 The elasticities required to perform this calculation have been drawn from a range of existing sources and evidence. The elasticity of GDP to lending has been taken from Bank of England/National Institute of Economics and Social Research (NIESR) analysis, using the NIESR global economic model, which has been used for previous Bank of England evaluations of financial interventions.[25] The elasticity of lending to capital is based on Bank of England econometric analysis.[26]

7.106 The differences in RBS's capital ratio have been taken from the analysis by Rothschild detailed in the previous chapter.

7.107 As there is no significant change in RBS's capital position in the "base case", there is no impact in the scenario where RBS is unaffected by risk around its capital position. However, in the scenario where RBS is sensitive to risk, the difference in the stress case and in the 'base case' are both given equal weighting in the calculation.

7.108 This results in a small increase in demand, and so GDP. In the case with the largest impact, the total demand impact over time would be worth 0.6 per cent of current GDP (in Net Present Value terms).

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[24] As discussed in previous sections, there are risks – both upside and downside – from several other factors. These include a potential upside or downside impact on the public finances, with second round macroeconomic effects; potential changes in forbearance behaviour; changes in the strategic focus of the resulting RBS Group; and changes in wider market confidence in the UK economy and public finances.

[25] Occasional Paper 42: 'Measuring the Impact of prudential policy on the macroeconomy', PRA, 2012, Available at http://www.bis.org/events/bokbisimf2012/session4_measuring.pdf

[26] The PRA estimate an elasticity of 0.05 based on econometric analysis over the period 1996-2007. We assume that credit supply was not impaired in this period and therefore that this elasticity reflects a demand effect only. Their analysis is based on changes in the capital requirements for the whole banking system. The elasticity is likely to be lower for a change in a single bank, given potential substitution by other bank lending. Therefore we have used a more cautious estimate of 0.03.

7.109 By definition, demand benefits on the level of GDP are assumed to taper away over time, as the long-run level of GDP is determined by the supply side of the economy and no hysteresis effects are assumed.

Supply Impact

7.110 The supply side benefit of intervention will depend on the extent to which credit supply constraints are subduing productivity growth, and the degree to which those constraints which might be attributable to RBS's lending behaviour. A more rapid increase in RBS lending, which might follow an intervention, would then result in higher productivity growth in the economy. In the long-run this effect is likely to unwind as productivity 'catches up' in the counterfactual.

7.111 The size of the total benefit to the economy depends on the extent that any improvement in the level of productivity persists, if at all.

> Supply impact = (Trend growth – subdued productivity growth) * RBS's share of impaired productivity growth * acceleration of RBS lending following intervention * persistence of productivity benefit

7.112 In the lower bound scenario outlined above, where productivity is not assumed to be impaired by credit supply, there is no supply side benefit from an intervention regardless of any increase in RBS's lending behaviour. There would only be a demand effect.

7.113 In the other scenarios, impacts have been modelled using the OBR assessment of trend growth and Bank of England analysis of the potential impact of impaired capital allocation on productivity as a result of credit constraints.

7.114 In the 'high supply impact' scenario, it is assumed that:

- the impact on productivity growth is entirely attributable to credit conditions for SMEs. As RBS accounts for a third of the SME market, they are assumed to account for a third of the credit supply impact; and
- an improvement in the level of productivity has a small persistent benefit to the level of GDP: it is assumed that 90 per cent of the improvement in productivity is 'caught up' in the long term, but 10 per cent persists, resulting in a permanent marginal improvement in GDP.

7.115 In the 'medium supply impact' it is assumed that:

- RBS accounts for a smaller share of the credit supply problem – a sixth rather than a third – recognising that the problem is unlikely to be entirely related to SME lending (e.g. RBS accounts for a fifth of business lending); there are potentially substitution effects; and a portion of the impact may be systemic and unresolved by a single bank intervention; and
- none of that productivity benefit persists in the long run, instead it is all 'caught up'. As a result there is only a medium-term supply-side benefit to GDP.

7.116 The judgement about the responsiveness of RBS's lending behaviours is driven by the judgement about the effectiveness of intervention:

- in a scenario where RBS lending is not sensitive to risk around its capital position, an intervention has no impact on lending and so there are no benefits from intervention; however,

- in a scenario where RBS is affected by risk around its capital position, it is assumed that the 'good' bank's lending picks-up one year ahead of the 'status quo' reflecting the fact that setting up a bad bank could take up to 18 months and there would likely be a small lag before that feeds through into lending behaviour.

7.117 To the extent that RBS's lending picks-up faster than the status quo, the level of productivity in the economy increases. Eventually that increase in productivity unwinds (productivity 'catches up' in the counterfactual). In the 'medium impact' scenario it unwinds entirely.

7.118 As the supply side benefits persist some time into the future, the effects are calculated over 20 years and discounted into present prices.

Results: supply and demand

7.119 The results of this analysis are presented below in the form of a matrix of potential outcomes:

- Table 7.A shows the impact in terms of the total net impact on GDP over time, as a share of present GDP; and
- Table 7.B shows the impact this might have on the average annual growth rate of GDP over the next five years.

7.120 As an upper bound, an external bad bank could increase GDP over time by the equivalent of 1.2 per cent of today's GDP (in present value terms), which would represent an increase in the growth rate of around 0.06 per cent per annum on average over the next five years.

7.121 However, at the lower bound, an external bad bank would have no significant impact on the economy.

Table 7.A: Net impact on GDP over time, as a share of current GDP

		Effectiveness of intervention	
		Lending affected by risk around capital position	Lending only affected by 'base case' capital
Economic context	High supply side impact	1.2%	0%
	Medium supply side impact	0.6%	0%
	No supply side impact	0.1%	0%

Source: Treasury calculations

Table 7.B: Impact on average annual growth rate of GDP over next five years

		Effectiveness of intervention	
		Lending affected by risk around 'base case' position	Lending only affected by 'base case' capital
Economic context	High supply side impact	0.06%	0%
	Medium supply side impact	0.04%	0%
	No supply side impact	0.01%	0%

Source: Treasury calculations

7.122 It is unlikely that the outcome lies at either extreme of this range. On the effectiveness of the intervention, it is plausible to assume RBS lending would be affected to some degree by risk around its capital position. But the available evidence is inconclusive and so the scale of impact is hard to estimate. The left-hand column of this matrix assumes RBS is very sensitive to its stress capital position, which is likely to be an upper bound.

7.123 Similarly on the economic context there is evidence of some supply side impact, as described earlier in this chapter, but the scale is very difficult to estimate. The first row of this matrix is a plausible upper bound, but it is likely that the supply impact would be smaller.

7.124 This range is not exhaustive, and there are also scenarios in which the creation of an external bad bank could have a negative net impact on the economy. For example, a negative impact could arise if there was a negative gilt market reaction, in the form of a sustained increase in gilt yields, attributable to the intervention, as discussed earlier. While this is unlikely, it is inevitably a risk.

Summary of assessment of what is in the interests of the British economy

7.125 **The analysis undertaken for this Review suggests that creating a taxpayer-funded external bad bank could have a positive impact on the British economy, but that this is highly uncertain and likely to be small. The magnitude of any impact would depend on the extent to which RBS lending is affected by risk around its capital position, which it is not possible to assess or quantify.**

7.126 In the upper bound scenario such an intervention might increase the average annual growth rate of GDP by 0.06 percentage points over the next five years, but the impact is likely to be lower and could be zero. There is a small risk that the impact could be negative overall.

7.127 **The implication of this analysis is that a more fundamental improvement in RBS's capital position is likely to be required in order to have a significant impact on the British economy.** To have an unambiguous impact on the economy, an intervention would need to improve the bank's capital position in the 'base case', not just reduce uncertainty around that position.

8 Would a taxpayer-funded external bad bank get the best value for the taxpayer?

8.1 The third objective the Chancellor set out in his Mansion House address was to ensure the best value for money for the taxpayer. This chapter sets out the Review's assessment of a taxpayer-funded external bad bank against this objective. In doing so, this chapter explores the Government's framework for assessing value for money, distinguishing between the direct value to the taxpayer of owning an external bad bank, and wider value for money considerations. It then sets out the direct value to the taxpayer of an external bad bank and the Review's assessments of the possible impact on the public finances, along with the key risks and uncertainties to both of these.

Defining value for money for the taxpayer

8.2 The Government's framework for assessing policy options to ensure value for money for the taxpayer is set out in the Green Book.[1] Value for money for the taxpayer is defined broadly in the Green Book as "optimising net social costs and benefits".[2]

8.3 Value for money is based on the interests of society as a whole and not an assessment of value to the public sector alone. In evaluating whether a policy is value for money, the Green Book notes that the Government should evaluate the present value of all costs and benefits, using appropriate discounting of those costs and benefits due to materialise in the future. The Net Present Value (NPV), i.e. the difference between the present value of quantifiable costs and present value of quantifiable benefits for the lifetime of the policy, should also be considered alongside other significant factors that it has not been possible to value sensibly.

8.4 In that regard, this chapter distinguishes between the direct and indirect value for money considerations of an external bad bank. The direct value for money assessment needs to consider the value to the taxpayer – as well as the risks – of fully owning and funding a bad bank. It also needs to consider the direct impact on the public finances, and corresponding potential costs.

8.5 The indirect value for money considerations for the taxpayer are largely covered in the assessment against the Government's other objectives as set out at Mansion House.

8.6 First, the taxpayer is also 80 per cent owner of RBS and of any 'good' bank created. Value for money for the taxpayer also includes, therefore, any value created in the residual good bank following a good bank/bad bank split. This is covered in the assessment against the first of the Government's objectives: whether an external bad bank would accelerate exit from the Government's shareholding.

8.7 Second, value for money – in considering the implications for society as a whole and not just the public sector – also includes any wider benefits to the economy resulting from a good

[1] The Green Book: appraisal and evaluation in central government, HM Treasury, July 2011

[2] p4, Value for money and the valuation of public sector assets, HM Treasury, July 2008

bank/bad bank split. This is covered in the assessment against the second of the Government's objectives: whether an external bad bank would be in the interest of the British economy.

Box 8.A: Assessing value for money for the taxpayer

The assessment of value for money for the taxpayer should include an assessment of all of the costs and benefits of the policy intervention. Where quantifiable, it should express these costs and benefits in their present value, using a discount rate according to the principles set out in the Green Book.

In the case of an external bad bank, funded and owned by the taxpayer, this should include each of the direct and indirect costs and benefits, which can be represented as the following:

Value for money for the taxpayer =	*direct value of owning the bad bank*
plus/minus	*direct benefit/cost to the public finances*
plus	*80 per cent x (Δ value of residual good bank)*
plus	*wider benefits to the economy*

Assessment of whether an external bad bank is value for money

8.8 In setting out the Review's assessment of the value for money of an external bad bank, this section takes as its starting point the assumed parameters for an external bad bank (as set out in previous chapters), namely a bad bank that is created and owned by the Government; which includes the pool of 'high-risk' assets from RBS, currently projected to be carried on RBS's balance sheet at £30 billion at end-2013; and in which the transfer is funded through the issuance by of gilts.

Value for money for the taxpayer of owning the bad bank

Theory and methodology for valuing the taxpayer-owned bad bank

8.9 The analysis to develop a valuation for the Government of owning the bad bank uses a methodology based on discounting the future cash flows the bad bank would generate – through interest and principal repayments – and which takes account of the Government's position as both owner of the bad bank and its sole provider of capital. This analysis has been undertaken by Rothschild as part of the Review. Further detail on the 'Discounted Cash Flow' (DCF) methodology used can be found in Box 8.B.

8.10 The cash flows used to generate an estimate of the Present value of the bad bank for the taxpayer are under-pinned by a set of assumptions for the performance of the economy, along with asset- and sector-specific variables. Rothschild has modelled the cash flows for the bad bank on the basis of both 'base case' and 'stress case' macroeconomic scenarios, as published by the Bank of England and as used in BlackRock Solutions' modelling of the assets in scope for the bad bank, set out in Chapter 5.

Box 8.B: Discounted Cash Flow (DCF) methodology for valuing the bad bank

The financial model developed by Rothschild for the Review includes an assessment of the value of the taxpayer-funded external bad bank.

There are two broad potential methodologies for valuing such an entity, both of which were considered by the Review as options for valuing an RBS external bad bank:

- Dividend Discount Model (DDM): this method calculates the value today of future capital generated in a bank above a given minimum regulatory or economic capital ratio, which can theoretically be paid out as dividends to equity holders; and
- Discounted Cash Flow (DCF): this method calculates the value today of all future cash flows generated to providers of capital in a bank across the capital structure, for both debt and equity.

The DDM model is the most commonly used approach for valuing equity 'going concern' banks, alongside a DCF approach for other parts of the capital structure, due to the capital ratio target under which regulators require banks to operate. However, there are a number of features of this approach that means it does not lend itself to valuing a bad bank appropriately under Government ownership, and that a DCF methodology should instead be used.

While the DDM model is useful for valuing shares in the equity of a bank, it does not consider other elements of the capital structure whereas a DCF method does. As the Government would be both sole equity and debt holder in such a bad bank, the DCF method is preferable in this respect.

Furthermore, the DDM method takes into account that banks generally have a diverse funding structure, with varying levels of risk tolerance and costs of funding. However, the bad bank would be fully funded by the Government, which is the sole bearer of risk in the bad bank and which is better reflected in the DCF method.

While theoretically it should be possible to achieve the same result using the two methodologies, in practice the difficulty of appropriately splitting and pricing the capital structure in the DDM model renders the DCF the much preferred option, in particular when all of the capital structure will come from the same source (Government) with the same cost of funds.

Both methods require valuing today future streams of income. To generate this 'present value' for the bad bank, a discount rate must be chosen to reflect that money received in future is worth less than that today. The bad bank valuation accords with the approach set out in the Green Book, whereby future cash flows are discounted by the "Social Time Preference Rate" (STPR). The STPR is 3.5 per cent per annum real, added to which is an assumption of 2 per cent annual inflation, to create a nominal discount rate of 5.5 per cent.

8.11 As discussed in Chapter 6, the value of future cash flows received by the Government as owner of the bad bank, in interest and principal repayments, depends crucially on the price paid for those assets. The higher the price paid for the assets, the more likely it is that those assets underperform relative to their value on transfer, and therefore the bad bank is more likely to incur lower profits (or higher losses), which would diminish the value to the Government of owning the bad bank. The discount rate should include a premium to reflect the level of risk

being taken on by purchasing the assets, and hence this premium would be different for portfolios of assets with different levels of risk.

8.12 As detailed in Box 6.A, the discount rate chosen by the Review for valuing the individual assets to be transferred was the one that would result in the taxpayer-funded external bad bank having a Present Value of zero (when evaluated on a Green Book basis, i.e. when the bad bank cash flows were discounted using the Social Time Preference Rate).

8.13 Notwithstanding the complexity in projecting cash flows for the assets, establishing such a 'correct' value of the assets is challenging and dependent on the position and objectives of the purchaser. In the case of a taxpayer-funded external bad bank, there are a number of competing constraints for the Government in pricing the assets:

- from the perspective of value for money for the taxpayer, a higher discount rate leads to a relatively more conservative assumption for the value of the assets in question, and therefore a lower transfer price from RBS to the bad bank. This increases the valuation of the bad bank and the forecast rate of return on the assets for the Government. This approach also reduces the likelihood of overpaying and thereby transferring value to RBS's minority shareholders;
- from RBS's perspective, a higher discount rate (and lower transfer value) would result in a larger write-down of the assets at the point of transfer to the bad bank and therefore relatively more erosion of RBS's capital base; and
- from a European Commission (EC) State aid perspective, a higher discount rate and lower transfer price is likely to reduce the amount of aid that the EC would be expected to deem had been provided to RBS through creating an external bad bank.

8.14 Paying a higher price for the assets would increase the value that could 'leak' (i.e. be transferred) from the taxpayer to RBS, in the sense that the Government may be 'over-paying'. This would in effect be the Government providing a subsidy to RBS, and hence to its shareholders (including the 20 per cent minority shareholders) and to its bondholders.

8.15 In increasing the likelihood that the price paid is distortive to the market and providing a subsidy to minority shareholders in RBS, a higher price also increases the likelihood of State aid commitments being imposed by the European Commission.

Key risks and uncertainties in valuing the taxpayer owned bad bank

Downside risks to valuation from a stress scenario

8.16 The assessment above is based on an assumption that the "base case" macroeconomic scenario is realised. The value for money assessment also needs to consider the downside risks for the taxpayer from a worse macroeconomic outcome, or 'stress case'. In the case where the economy performs weaker than in the 'base case', the cash flows that the assets in the bad bank generate for the taxpayer will be lower.

8.17 To consider this effect, Rothschild also modelled the cash flows and resulting valuation for the bad bank under a 'stress case' scenario. **Were a stress case to materialise, the Present Value to the taxpayer of owning and funding the bad bank – using the Green Book's Social Time Preference Rate – would become significantly negative, falling to a negative value of more than £4 billion**.

Potential value 'transfer' from the Government to RBS

8.18 The value to Government of owning the bad bank needs to be weighed against the possibility of giving away value from the taxpayer as part of the transaction to create a bad bank. The potential value transfer is difficult to quantify, but as set out above broadly refers to the case where the Government 'overpays' for the assets it purchases, so that the true underlying value could prove to be lower than the Government assumes when purchasing them. This would increase the valuation of the residual good bank, but at the expense of the taxpayer.

8.19 This is a risk at all potential transfer prices for the assets, given the uncertainty over valuing assets that are in some cases illiquid or where there is no observable market, but the higher the transfer price (resulting from an assumption of a lower discount rate) the higher the risk.

8.20 The approach outlined above seeks to mitigate against the possibility of transferring value from the taxpayer, through conservative estimates for the performance of the assets and the choice of discount rate in determining the potential transfer price.

Value for money of funding the bad bank

8.21 The value for money assessment so far has considered the value to the taxpayer of owning assets within the external bad bank, through the cash flows in terms of interest and principal repayments that those assets generate. In addition, the choice of how to fund the assets in the bad bank – that is, the liability structure – has implications for the value for money for the taxpayer.

8.22 As explored in more detail in Chapter 9, the preferred structure for the bad bank from a value for money perspective is to pay for the assets, and provide for their ongoing funding, by raising cash through issuing gilts. This is because, as the Government would become the sole economic owner of the assets in the bad bank, it is in the taxpayer's interest to fund these assets in the most efficient and lowest-cost manner possible.

8.23 Therefore, funding through gilt issuance is, in principle, preferable from a value for money perspective. If it were necessary to transfer creditors from RBS to an external bad bank – for example, if there were liabilities 'attached' to these assets, as explained in Chapter 9 – the consent of creditors would be required. As they would be unlikely to accept this without some form of Government guarantee, the transaction would be likely to result in some value transfer from the taxpayer to creditors, reflected in the higher yield that a bad bank would be paying to these creditors than it could otherwise obtain a 'Government-backed' asset.

8.24 Furthermore, this would likely be reflected by a significant increase in value of the debt held by these creditors due to the reduction in their risk exposure, i.e. from RBS exposure to UK Government exposure.

8.25 More broadly, there is also a potential risk-transfer from the Government to creditors of the residual 'good' RBS. In removing 'high-risk' assets from the RBS's balance sheet, the Government would help to improve the balance of risks for the bank's creditors, which could also act to increase the value of the debt held by those creditors due to the reduction in their risk exposure.

Costs, timings and risks to execution

8.26 A taxpayer-funded external bad bank would most likely be costly, lengthy and complex to set-up, which also has implications for getting best value for the taxpayer:

- it would incur both set-up and ongoing operational costs, which would be borne by the taxpayer and which would impact on value for money. These costs would

include, for example, staff overheads, IT capabilities and other support functions, as set out in the design and structure of the bad bank in Chapter 9; while these costs are unlikely to be substantial enough, on their own, to impact materially the value for money case, creating an external bad bank would bring significant risks to the taxpayer such that, were execution to prove impossible, the taxpayer would bear an irrecoverable cost;

- as outlined in more detail in Chapter 9, RBS is a highly complex organisation and the separation of its balance sheet through a good bank/bad bank split would be an intricate and highly complicated operation. The costs of setting up a bad bank would depend on both the size of the bad bank created, and the types of assets included. In particular, inclusion of the more complex assets from RBS's balance sheet, such as derivatives, would imply a substantially higher ongoing cost from staff overheads and support systems;
- there are further significant risks to the execution of a bad bank from the requirement to agree Long-Term Service Agreements and, where required, Total Return Swaps (TRS), to cover the ongoing management and economic ownership of the assets in question, creating the potential for misaligned incentives between the RBS staff who would retain the day-to-day management of the assets and the approach that would secure most value for the taxpayer; and
- the time that it would take to reach agreement with RBS on the nature of the transfer of systems, staff and operations would likely be substantial, estimated by the Review as between 12 and 18 months, exposing the taxpayer to a lengthy ongoing risk.

Impact on the public finances

8.27 The public finances are accounted for using an international national accounting standard (the European System of Accounts 1995, or ESA95) with further advice on implementation for the specific needs of government accounting in the Eurostat Manual on Government Deficit and Debt (MGDD).

8.28 The independent Office for National Statistics (ONS) would determine how to account for a taxpayer-funded external bad bank. The discussion set out here is therefore the Treasury's view based on the accounting manuals and the experience of the existing UK bad bank (UK Asset Resolution, or UKAR).

8.29 The Eurostat MGDD defines a "financial defeasance" structure as having some or all of the following features:

- being closed to new deposits-taking, or partly open under restrictive conditions;
- being closed to new lending, or partly open under restrictive conditions;
- strong externally imposed restrictions from competing on banking and financial markets; and/or
- in most cases, a foreseen limited lifetime linked to the progressive liquidation of the assets by recovery or sales on the market.

8.30 An external bad bank would be expected to meet these criteria and would therefore be considered as a defeasance structure. As it would be wholly-owned by the Government, the bad bank would be classified to Central Government and its debt and deficit impacts would therefore be part of the general government fiscal aggregates (Treaty debt and deficit), as well

as the Government's preferred measures of Public Sector Net Debt and Deficit (excluding the temporary effects of financial sector interventions): the 'ex' measures, PSNDex and PSNBex.

8.31 The financing requirement would be increased by the purchase price of the assets as a result of creating the external bad bank, and therefore PSNDex would also increase by this amount. As the purchased assets run-off, this would provide an income stream for the Government which would reduce the future need to borrow from the markets, and so debt would decline. Based on the Review's analysis of likely cash flows from the bad bank in the 'base case', and debt interest implications, there would be an overall cash benefit to Government and therefore debt, eventually, would be reduced.

8.32 Deficit impacts arise from the initial purchase and then from the running down of the assets. In most instances under ESA95 if financial assets are purchased at a market price there is no deficit impact. Specific guidance exists for the case of financial defeasance and ONS will decide on the basis of this whether and deficit impacts should be recorded.

8.33 Ongoing impacts on the deficit would arise from the balance between income and expenditure. If income (mostly interest on the assets) exceeded expenditure (interest on gilt financing, running costs and write-offs of assets) then the deficit would be reduced.

8.34 However, these effects depend on the state of the economy. If the economy were to perform worse than modelled in the 'base case', the benefits would reduce. The discount rate applied in valuing the assets covers the Government partially for this risk. A tail-risk however remains, and so acting against the overall value for money argument for creating an external bad bank is the transfer of risk to the Government that would otherwise be partially shared with minority shareholders and creditors (i.e. in the status quo).

8.35 It would not be expected that the volume of gilts needed to cover this purchase, nor the transfer of risk to the Government in purchasing 'high-risk' assets from RBS, would materially impact the Government's cost of financing. An increase in the Debt Management Office's (DMO) financing remit of around £20 billion would increase the level of gilt auctions by about 15 per cent.

8.36 This increase in the Government's financing requirement would not, on its own, move the annual financing requirement out of proportion with recent years, but this extra supply of gilts in the market should increase the yield. In current conditions, an increase of in the supply of gilts of this magnitude mit should, however, be readily accommodated by the market, particularly if it was well-signalled in advance.

8.37 The impact on the gilt curve, if any, would be determined by a number of factors, including the prevailing economic and monetary conditions. There could be a reaction to the announcement, but one that is judged as unlikely to move the yield curve more than 5 to 10 basis points (bps) above where it would otherwise have been. Using the debt interest ready-reckoner from the OBR's March 2013 Budget forecast, a 10bps rise in the yield curve would add £0.8 billion per year to debt interest costs by 2017-18 if it persisted, all other things equal.

8.38 The impact on the gilt market would also need to consider the potential upside to the public finances, were markets to agree that there would be value to the public sector from creating an external bad bank through, for example, a higher RBS valuation.

Indirect value for money considerations

8.39 The direct value for money considerations for creating a taxpayer-funded external bad bank represent one input into the overall calculation of value from a public sector perspective. The commercial value of the Government's holding in the residual good bank also needs to be

considered, alongside any wider costs and benefits, such as those on the economy and public finances.

8.40 Therefore, there is a clear read-across from value for money for the taxpayer test to the other tests for the bad bank review:

- on the first objective, accelerating the path to exit is clearly in the wider interest of the taxpayer. If creating an external bad bank creates value in the residual RBS, and therefore in the value of the Government's shareholding, this in turn helps to accelerate the path to exit from public ownership and increases the likelihood of the taxpayer returning a profit on its investment;
- Rothschild's modelling of the residual good bank, following the creation of an external bad bank, suggests that its overall valuation would increase today based on 2015 profitability forecasts, implying an increase in the Government's shareholding. However, this improvement in the residual good bank would be expected to diminish relatively quickly, such that there would be little improvement re-running the regression analysis two years forward , and therefore limited improvement in the value of the Government's shareholding; and
- on the second objective, creating an external bad bank that may have some benefit for the wider economy would also clearly be in the wider interest of the taxpayer. This is due to second-round effects feeding back from credit growth and GDP growth to both household and business income, and to higher tax revenues, which – everything else equal – would improve the fiscal position (although this effect is likely to be modest in practice).

Summary of assessment of value for money for the taxpayer

8.41 This chapter has set out the Review's assessment of whether creating a taxpayer-funded external bad bank would get best value for the taxpayer.

8.42 In terms of the direct value of owning the bad bank, the analysis has assumed that the RBS assets to be transferred would be valued such that, in a 'base case', the Government would earn a return consistent with the Green Book approach (i.e. the discount rate used in valuing the assets is such that the bad bank has a Present Value of zero).

8.43 However, there are significant risks and uncertainties to this which could lead to value being transferred from the taxpayer to both minority shareholders in RBS (by 'over paying' for the assets) and RBS creditors (by taking risk away from them and onto the public balance sheet), as well as risks to taxpayers of considerable losses in the event that a 'stress case' scenario were to materialise.

8.44 The Treasury also expects that creating an external bad bank would lead to an increase in levels of public debt, and could also likely result in a one-off hit to the deficit (although this would be for the ONS to establish if a good bank/bad bank split were pursued). However, it is not expected that the volume of gilts needed to fund the increase in public debt would materially impact on the Government's cost of financing.

8.45 Overall, therefore, the Government does not believe that these direct effects, in themselves, are of sufficient magnitude to undermine the case for a taxpayer-funded external bad bank, if that case were otherwise considered to be strong.

8.46 As this chapter has shown, there are also indirect value for money considerations for the taxpayer that arise from the assessments against the Government's first objective – whether an

external bad bank would increase the value of the residual good bank, and therefore the value of the taxpayer's shareholding – and the second objective, whether an external bad bank would benefit the economy more widely. Therefore, the extent to which these objectives are met through a taxpayer-funded bad bank also impact whether an external bad bank would get best value for the taxpayer.

9 Designing and delivering an external bad bank

9.1 This chapter sets out the structural and operational aspects, risks and uncertainties of executing a good bank/bad bank split for RBS, which have been considered to ensure that a taxpayer-funded external bad bank proposal is both feasible and deliverable. It highlights:

- the complex characteristics both of RBS as an institution and of its broad range of asset types;
- a number of variations of how an external bad bank could be structured, funded, and regulated and how these variations might mitigate or exacerbate the challenges and risks;
- how an external bad bank would be operated and the split executed;
- the range of risks that would be present were an external bad bank to be created; and
- the implications of European State aid rules.

9.2 The Review considered a wide range of options, which are set out and discussed in this chapter. There is not any one ideal solution but, based on the feasibility and risks of executing a bad bank – and in line with meeting the Government's objectives – the Review puts forward an initial view on the preferred method of how an external bad bank would be constructed (note that if the Government were to pursue such an approach, this would be subject to further due diligence).

9.3 The Review examined how a bad bank would be structured, funded and operated, the process for establishing it, and the execution risks involved. Analysis included legal, operational and state aid issues for each of the options considered in this chapter and highlighted the challenges that existed for each.

9.4 Consistent with the assumptions used by Rothschild to model the impacts of the intervention, the preferred option would involve an external bad bank, fully owned and funded by the Government. The bad bank would retain strategic decision-making functions, but day-to-day operations would be contracted out under a long-term service agreement with RBS or another provider, so as to avoid replicating expensive management and IT systems.

9.5 The Review's conclusions are that the execution risks are manageable, but considerable, and that an external bad bank could be established within 12 to 18 months.

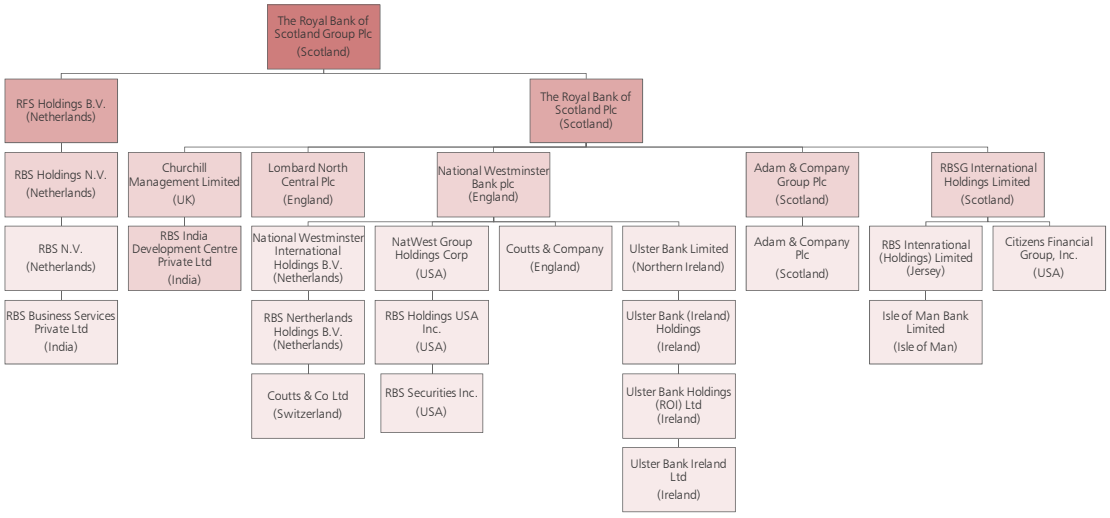
9.6 The remainder of this chapter considers these in more detail.

The complex characteristics of RBS and its assets

9.7 As illustrated in Chart 9.A, RBS Group contains a considerable number of companies, some of which are incorporated in non-UK jurisdictions and therefore subject to local law and regulations. The external bad bank considered here contains a large number of asset classes, as set out in Chapter 5. There are a number of issues which appear from the due diligence undertaken to date to be common to assets within these portfolios:

- some assets are legally connected to particular liabilities, and in order to transfer the asset to a bad bank the Treasury would also have to transfer (or otherwise assume) the liability;
- some assets will be secured against other property and whilst this security will often be transferable on the same terms as the asset, there will be situations where transferring the security will involve particular legal and practical complexities, in particular if RBS currently acts as security trustee, or where the bad bank needs to take a new security to replace an existing arrangement; and
- many assets are legally, economically or practically connected to derivative positions. These derivatives positions include positions which are designed to hedge the customer's risks and some which are designed to hedge the risks of RBS itself. These include hedges over interest rate risk or foreign exchange risk. In many cases where these connections exist it will be difficult to separate the asset from the connected derivative in an efficient or cost-effective fashion. Accordingly, in order to transfer the asset to a bad bank, the Treasury would also have to transfer the associated derivative position.

Chart 9.A: Simplified organisational chart of RBS



Source: RBS

9.8 The existence of these security arrangements and the connections with other instruments is perfectly normal in the operations of a commercial bank with sophisticated customers. However, they introduce a level of complexity in the management of individual assets within particular customer relationships. For example, customers may have a number of loans with RBS, some of which have associated derivatives positions. Furthermore, these positions may share common security with other exposures to the same customer.

9.9 In addition to the above, and as set out later in the chapter, many of the assets that would be transferred to a bad bank would be denominated in currencies other than sterling. Based on BlackRock Solutions' assessment of the portfolio of 'high-risk' assets, 44 per cent are denominated in euro, with an additional 15 per cent denominated in US dollars.

How an external bad bank could be structured

9.10 There are many ways in which an external bad bank could be structured and funded. These range from those in which derivative or insurance structures would be used to transfer

synthetically the risk of the bad bank assets from RBS to the Government, to a fully Government-owned and funded entity that would purchase the relevant assets from RBS.

9.11 The way in which a bad bank was structured would have important implications for whether or not a good bank/bad bank split would be capable of meeting the three objectives set out by the Chancellor at the Mansion House, in terms of how complete the break is between RBS and the 'high-risk assets'; how fast the implementation would be; and how the bad bank would be funded.

9.12 The Review considered a range of fundamental options for structuring such an external bad bank from two interlinked perspectives: who should own the bad bank, and who should provide it with funding. Having developed a preferred option, the Review also considered further variations that could better enable the bad bank to meet the Government's objectives.

The ownership of an external bad bank

9.13 There are three broad groups of possible ownership structure for a bad bank:

- on-going ownership of the assets by RBS, with the Government providing some form of protection against the performance of the assets;
- spinning off the bad bank to existing RBS shareholders, including the Government; or
- through one hundred per cent Government ownership.

9.14 All three models would take a significant amount of time to set up, estimated to range from 12 months to 3 years. A significant amount of RBS senior management time and attention would be taken up with this process throughout the period, time and attention that would not be available for running the residual good bank.

(i) On-going ownership of the bad bank assets by RBS, but with the benefit of Government support

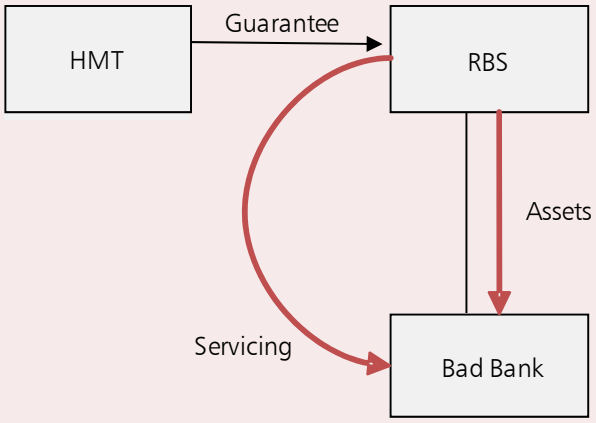
9.15 There are a number of ways in which RBS could continue to own the bad bank assets, but be protected from losses by the Government.

9.16 In these cases the bad bank assets would be subject to separate reporting and management, with a clear framework in place to exit the exposures as fast as was consistent with protecting taxpayer value.

9.17 One way of achieving this would be a guarantee structure. In this scenario, RBS could continue to own the assets, and the Government could provide credit protection to RBS to protect it against downside risks. In a variation of this, the assets could be transferred to a new subsidiary of RBS as illustrated in Box 9.A. In this case, the Government would need to guarantee some or all of RBS's investment in the bad bank subsidiary to ensure that RBS was isolated from the risks inherent in these assets and that the Bank of England's rules on large exposures – in its role as prudential regulator – were complied with.

Box 9.A: Illustration of a synthetic option (1): guarantee of a bad bank subsidiary

Overview



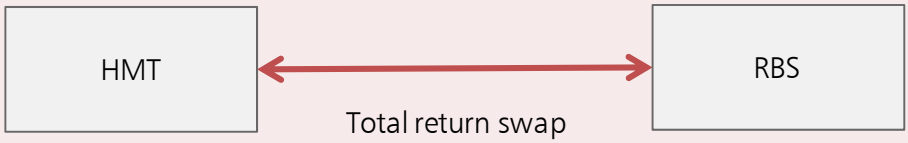
Key implementation steps

- RBS incorporates a new subsidiary to act as the bad bank;
- RBS transfers a selected asset portfolio to the bad bank funded by intra-group debt guaranteed by the Government;
- The bad bank would have its own management and control functions, but RBS would retain its systems and service the bad bank's assets; and
- Government guarantee would require majority approval of RBS' independent shareholders.
- **Implementation would take 12 to 18 months,** given the need to transfer assets to a separate subsidiary.

9.18 Alternatively, the Government and RBS could enter into a Total Return Swap (TRS), in which all of the risks and rewards of the assets were synthetically transferred from RBS to the Government, as illustrated in Box 9.B.

Box 9.B: Illustration of a synthetic option (2): a total return swap

Overview



Key implementation steps

- RBS and the Government enter into a total return swap ("TRS") under which:
  - the Government agrees to pay RBS an agreed fixed return on the selected bad assets to their maturity as well as any associated costs (e.g. further advances); and
  - RBS agreed to pay to the Government its actual receipts from the assets to their maturity.
- on the maturity of each asset, the Government would pay to RBS the original agreed value of the asset and RBS would pay to the Government its actual receipts from the asset at maturity;
- the economic effect of the TRS would be that the Government suffers any losses on the bad bank's asset portfolio and benefits from any increase in the value of the portfolio;
- the bad bank would have its own management and control functions, but RBS would retain its systems and service the bad bank's assets; and
- the TRS would take approximately 12 months to implement.

Note that there would be significant complexities in structuring and operating a TRS as it would need to meet a number of accounting and regulatory requirements to enable RBS to remove the underlying assets from its balance sheet. While this should be possible, it is likely to be time-consuming and may be challenging to implement.

9.19 The benefit of these approaches compared to others is practical. These arrangements would involve the least operational and financial disruption to RBS, and should be capable of being put in place more quickly than any of the other possible structures. However, the extent of this benefit should not be overstated: in particular, legally transferring assets to a new subsidiary will be complex and time consuming. Similarly, for a TRS structure there are considerable legal, technical and ongoing operational complexities to ensure that the TRS is effective in removing the bad bank assets from RBS's balance sheet for both accounting and regulatory purposes.

9.20 There are however a number of difficulties in synthetic structures, particularly a guarantee, which cause them to fall short of the Government's objectives.

9.21 First, RBS would continue to fund the assets. While the Government would provide protection to RBS against the risks inherent in it doing so, this is inefficient from a taxpayer value perspective, as the Government has a structurally lower cost of funding than a bank.

9.22 Secondly, all of these structures would entail some form of on-going Government involvement in RBS and the way in which it manages its assets. These factors are likely to make it

harder to start returning RBS to private sector ownership. A complex and cumbersome governance and incentive arrangement would need to be put in place to ensure that the assets were managed properly in the interests of taxpayers.

9.23 Thirdly, under a guarantee structure (but not a TRS), RBS would derive the benefit if the bad bank assets performed better than expected, whereas the Government would bear the losses if they performed worse than expected. This means that RBS's and the Government's interests would not necessarily be aligned in the way these assets were managed in future.

Box 9.C: The Asset Protection Scheme

In 2009, the Government created the Asset Protection Scheme (APS), under which the Government insured the risk of a portfolio of higher risk assets within RBS. Under the APS, the Government would was obliged to cover 90 per cent of any losses under the insured portfolio, once RBS had borne the cost of a £60 billion 'first loss', similar to the excess on an ordinary insurance policy. In return, RBS paid insurance premiums to the Government totalling £2.5 billion. RBS exited the APS in October 2012, when it was clear that it would not need to draw on the policy and the benefits that the APS brought to RBS's capital position were starting to be eroded by changes in regulatory rules.

The APS was designed with a very different purpose to the objectives of the proposed good bank/bad bank split. It was intended to preserve RBS's viability by giving funding markets confidence that RBS would be able to withstand even the most adverse economic circumstances, as RBS's potential losses on a very broad portfolio of assets were capped.

A good bank/bad bank split under current circumstances, on the other hand, would be designed to make RBS a better and stronger bank more able to serve its stakeholders and the broader economy, while protecting taxpayer value.

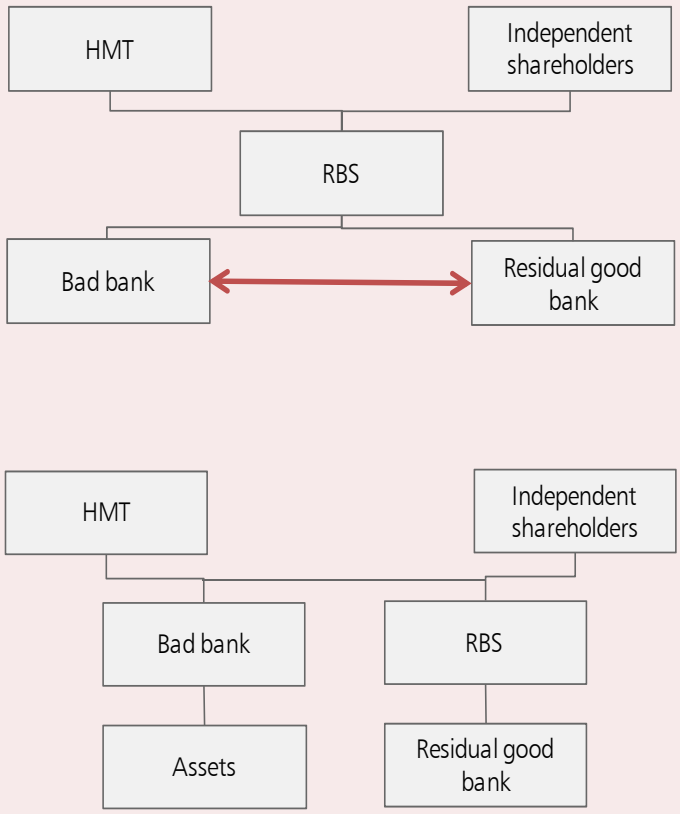
(ii) Spin-off of bad bank assets to RBS shareholders, with Government providing protection to RBS

9.24 As illustrated in Box 9.D, under this structure RBS would transfer the bad bank assets to a new subsidiary, which it would fund and manage. This entity would then be listed as a distinct entity and spun off to RBS shareholders pro rata to their existing holdings in RBS, such that on inception the Government would own 80 per cent and RBS minority shareholders 20 per cent. RBS would have no ongoing ownership of the equity in the bad bank.

9.25 The bad bank entity could be funded either by RBS (assuming that the listing authorities were content that an RBS-funded bad bank was sufficiently separate from RBS to be listed) or by the Government. In the event that RBS funded it, the Government would also need to provide protection to RBS over the performance of its loan to the bad bank, enabling it to eliminate the whole of its exposure to the risks of the bad bank assets, and to avoid breaching the Bank of England's rules on large exposures.

Box 9.D: Illustration of a spin-off structure

Overview



Key implementation steps

1. Creation of bad bank:

- RBS selects an existing holding company – which is the indirect owner of all or substantially all of the good assets – to act as the good bank; and
- RBS establishes a bad bank outside the good bank sub-group, funded either by RBS (possibly with Government support) or by the Government.

2. Listing the bad bank:

- Preparation: it would only be possible to list the shares in the bad bank if RBS and the bad bank were fully separated, in particular as to:
  - Governance: RBS and the bad bank would need be able to demonstrate that they were managed fully independently of each other so that both could retain a listing;
  - Systems: RBS and the bad bank would need to have fully independent asset servicing capabilities; and
  - Regulation: RBS and the bad bank would need to be separately regulated by the Bank of England/Financial Conduct Authority (FCA);
  - Financial track record: a pro-forma three year financial track record for the bad bank would need to be prepared.
- The transaction would require majority approval of RBS's independent

shareholders where there was Government involvement.

- **Creating and spinning off a bad bank could take up to three years** to create the vehicle, put in place the necessary servicing systems and obtain a listing.

9.26 Many of the considerations applying to RBS ownership of the bad bank also apply to this case.

9.27 Having RBS (or a third-party) fund the bad bank would cause value for money difficulties, given the Government's structurally lower cost of funding, and there would be a risk of transferring value to the bad bank if the Government funded the bad bank entity, as it would be difficult to price a true commercial rate for a loan to such an entity. The difficulty of aligning interests between the private sector shareholders of the bad bank – who would continue to share in any upside in the bad bank's assets – and the Government, which would be exposed to any downside once the bad bank's equity cushion was extinguished, would remain.

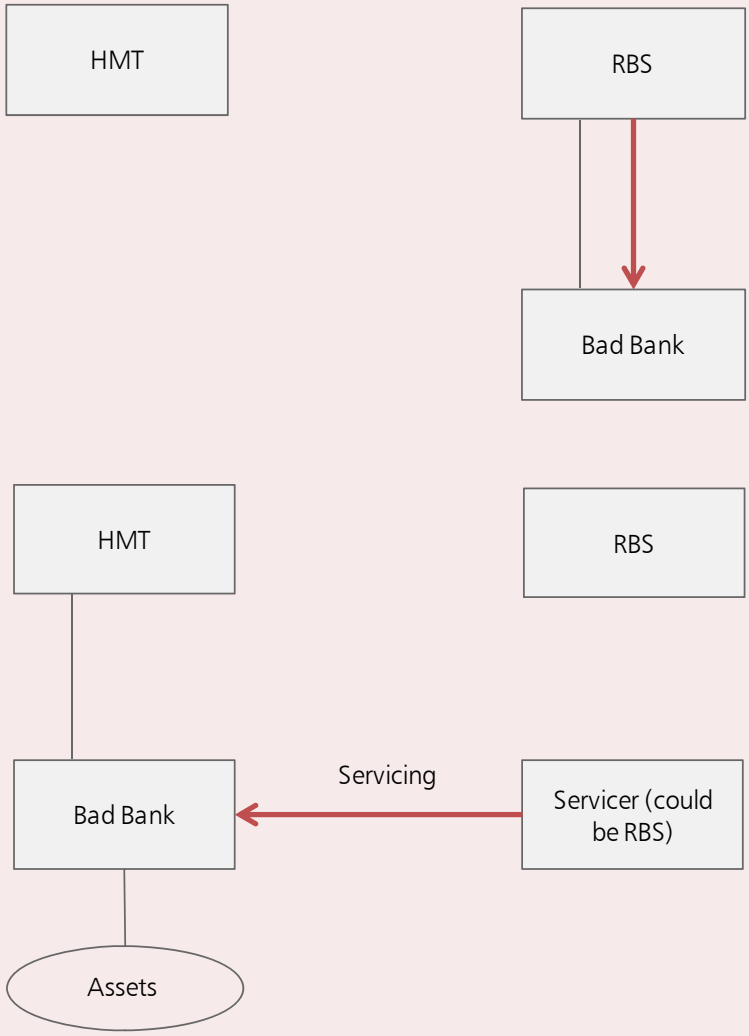
9.28 As noted in Box 9.D, creating a bad bank vehicle and spinning it off to shareholders could take up to three years to implement, as the bad bank vehicle would need to have independent servicing systems in order to meet requirements for listed companies. BlackRock Solutions' analysis suggests that by this point a significant portion of the projected losses on the bad bank assets would already have occurred, so this variant of bad bank would likely take too long to implement to be effective.

(iii) One hundred per cent Government owned bad bank

9.29 In this scenario, one option would be for RBS to create a bad bank subsidiary which would then be sold to the Government. Alternatively the Government could create a bad bank into which RBS would transfer the bad assets.

Box 9.E: Illustration of a Government-owned bad bank

Overview



Key implementation steps

1 – Creation of bad bank:

- RBS incorporates a new subsidiary to act as the bad bank;
- RBS transfers a selected asset portfolio to the bad bank funded by intra-group debt; and
- the bad bank would have its own management and control functions, but RBS would retain its systems and service the bad bank's assets.

2 – Transfer of ownership to HM Treasury:

- Purchase of bad bank by HM Treasury would require majority approval of RBS's independent shareholders;
- Shares in bad bank are sold to the Government for cash;
- If desirable, the RBS loan to the bad bank could be refinanced by the Government.
- Implementation would take 12 to 18 months.

9.30 A bad bank that was wholly-owned by the Government would avoid many of the issues associated with other external bad bank structures. It would provide RBS with a clean, "once and for all," break with the bad bank assets, although implementation may take some time. There would be no need for a significant ongoing relationship between the Government and RBS (other than some potential servicing arrangements in respect of bad bank assets), further accelerating the return of RBS to private sector ownership. There would not be issues with the alignment of interest between the taxpayer and other parties: the Government would bear all the reward as well as the risk in the bad bank's assets.

9.31 The entire process of creating the bad bank and selling it to the Government would probably take in the order of 12 to 18 months. This is materially faster than the spin-off scenario as there is no need for the bad bank to acquire its own systems or to obtain a listing. Furthermore, in the case of a Government-owned bad bank, it may be possible for economic risk transfer to occur before full implementation was achieved. This would enable RBS to obtain some, though not necessarily all, of the benefits of the bad bank in a shorter timeframe.

Other external bad bank structures

9.32 Various commentators have suggested other possible structures for the bad bank. The Review has considered each of these in depth, but concluded that the special features involved in each are insufficient to change the fundamental position arising from each structure.

9.33 In a structure similar to the 2009 UBS recapitalisation, RBS would capitalise a bad bank, and sell it to the Bank of England (the Bank) which would also provide funding to the bad bank. RBS could be granted an option to repurchase the equity in the bad bank at a pre-determined price if certain conditions were met in future. As the Bank is wholly owned by the Government, this would be economically equivalent to a bad bank that was wholly-owned and wholly-funded by the Government, save that RBS could effectively retain some of the upside in the bad bank assets as a result of the re-purchase option. Furthermore, the Bank has indicated to the Review that the bad bank assets fall substantially outside its collateral guidelines for its market operations, and so it would be likely to require an indemnity against loss from the Treasury if it were to agree to pursue such a structure.

9.34 In a 'New NatWest' structure, a clean bank focused on the UK retail and commercial banking markets would be spun out of RBS, which would continue to own the bad bank assets and other businesses that were not core to the 'New NatWest'. In principle, this approach has a number of attractions. However, executing such a split could take up to three years or more. This is because it is structurally similar to spinning-off the bad bank (as discussed above), except it would require a deeper reorganisation of RBS and would require the consent of large numbers of lenders to, and counterparties of, RBS. To the extent that it was necessary for the Government to provide funding or guarantees to either 'New NatWest' or the residual RBS, there would be similar implications for taxpayer value as under the bad bank spin-off scenario described previously.

9.35 Some commentators have suggested that a 'New NatWest' could best be achieved if RBS were fully nationalised first, and the substantial restructuring required to achieve this outcome was conducted under public ownership. This approach would not need minority shareholder consent to the various transactions required to facilitate the restructuring, giving the Government a freer hand to determine the ultimate outcome. However, the Government and RBS would still need to be cognisant of the interests of the customers, creditors and other capital providers of RBS. Furthermore, the nationalisation would have a high cost to the taxpayer.

9.36 The Review has also considered whether it would be possible for RBS's return to private sector ownership to be accelerated through a spin-off of a bad bank with a subsequent offer from the Treasury under which minority shareholders would be able to exchange their shares in the bad bank for some of the Government's shares in the residual RBS.

9.37 In this scenario, as in the 'New NatWest' structure and the bad bank spin-off structure discussed above, RBS's capital position would be reduced by the value of the bad bank's equity – either through it being distributed to RBS shareholders. As the extent of the reduction in the Government's shareholding in RBS would also be determined by the value of the bad bank's equity, a material reduction in the Government's shareholding could only be achieved with a correspondingly material reduction in RBS's capital ratios, which would not be in the interests of RBS, the taxpayer or the economy as a whole.

9.38 This structure would also take some time to implement. The share exchange could not take place until after the bad bank was created and spun out, which as described previously is likely to take three years itself.

How an external bad bank would be funded

9.39 As with ownership, there are a variety of ways in which an external bad bank could be funded. This section considers these options, and how non-sterling exposures in the bad bank could be managed.

Transfer of existing RBS liabilities to the bad bank

9.40 It is in theory possible for existing RBS liabilities to be transferred to a bad bank alongside the assets. This would reduce the total requirement for the Treasury to raise money through issuing gilts to pay for the bad bank assets, or for RBS to provide funding to the bad bank (as discussed below), and would enable RBS to reduce the total size of its balance sheet through the implementation of the bad bank.

9.41 This approach, however, suffers from a number of drawbacks. First, RBS's existing liabilities are likely to be more expensive than Government borrowing, which – as discussed in the previous chapter – would be negative for taxpayer value for money. Secondly, RBS creditors would need to consent to their loans being transferred to the bad bank, which may be seen as a worse credit risk than RBS. They may therefore seek a guarantee from the Government, which would represent a direct transfer of value from the taxpayer to creditors.[1]

9.42 It is nevertheless possible that some assets selected for a bad bank would be supporting existing secured funding transactions in RBS, or may be owned by special purpose entities as part of secured funding arrangements. In these cases, it may be necessary to transfer the associated secured liabilities to the bad bank as well as the asset, in order to avoid disturbing the funding structure; or to seek alternative arrangements, such as the synthetic transfer of RBS's residual economic interests in the relevant assets.

RBS funding the bad bank

9.43 RBS could itself provide funding to the bad bank. To do this would require a Government guarantee, to eliminate its risk exposure to the bad bank assets and to enable it to comply with the Bank of England's large exposure rules. This would carry some benefit to the balance sheet

[1] It would also be possible for the bad bank to offer to exchange bad bank debt securities or gilts for existing RBS debt securities. Even if RBS creditors accepted this exchange offer (which is uncertain, as the replacement securities would yield less than what they currently hold), it is not obvious that this would be an efficient way of raising gilt funding compared to normal issuance in to the market, with RBS conducting a subsequent liability management exercise if it so desired.

management of both RBS and the bad bank, as the loan could be structured to match the currency, interest rate and maturity profile of the assets being transferred to the bad bank. However, as RBS would still be indirectly funding the bad bank assets, there is a considerable inefficiency due to its structurally higher cost of funds than the Government's.

Direct Government funding of the bad bank

9.44 Direct Government funding of the bad bank would be the best alternative from a value for money perspective due to the Government's structurally lower cost of funds than other parties'. In the view of the Review, the challenges to this approach – such as managing the bad bank's foreign exchange exposures (see below) – could be effectively managed in other ways.

9.45 However, the ability of the Government to provide the entire bad bank's funding would need to be assessed in the context of its implications for the gilt market. Were a proposed bad bank to be very large, or completion was anticipated to occur very soon, it could be preferable to seek some form of 'bridge financing' from RBS such that the market impact of a significant additional supply of gilts could be managed. (This method of funding a large bad bank is equivalent to that assumed in the Rothschild modelling of a bigger bad bank, as set out in Box 6.D).

9.46 The Review has ruled out acquiring bad bank assets by issuing large volumes of gilts directly to RBS. As RBS already currently has a surplus liquidity position, it would be likely to seek to exit this position in a relatively short period, which would risk disrupting the gilt market, unless it co-ordinated such sales with the Debt Management Office (DMO). As this would eliminate the liquidity benefit to RBS of holding gilts (as it would not be able to sell as-and-when it wanted), this would provide it with no benefit compared to RBS lending to the bad bank with the benefit of a Government guarantee.

9.47 The Review has also ruled out using some of the Government's RBS shares as part consideration for the bad bank assets, as this would have an adverse effect on RBS's capital position.

Foreign currency assets in the bad bank

9.48 Analysis of the assets under scope for a bad bank, conducted by BlackRock Solutions and summarised in Chapter 5, highlighted a significant volume of assets denominated in non-sterling currencies. This exposure was primarily to euro and US dollar denominated assets, a function of the geographical location of the high-risk assets. The breakdown of this exposure is illustrated in Chart 5.D.

9.49 Whilst the proportion of foreign exchange exposure in the assets is high relative to the value of the asset portfolios, in absolute terms the exposure for the Government would not be material in the context of the Government's Official Reserves.

9.50 During the Review, a detailed strategy for managing this exposure was considered, including options to enter into hedging instruments with counterparties, or issue foreign denominated gilts to fund the assets. In summary, the Treasury's preference would be to manage this exposure in line with the Treasury's management of the Official Reserves, with the Bank of England acting as the Treasury's agent as per the existing agreement. As a result the exposure would sit on the Treasury's balance sheet and not on the balance sheet of the bad bank, thereby removing the bad bank's exposure to this currency risk.

Box 9.F: Government's Official Reserves

The Government's official holdings of international reserves comprise gold, foreign currency assets and International Monetary Fund (IMF) Special Drawing Rights (SDRs).[2] With the exception of the SDRs, these assets are held in the Exchange Equalisation Account (EEA). The EEA was established to provide a fund that could be used, when necessary, to regulate the exchange value of sterling. The reserves are also used to provide foreign currency services for government departments and agencies to provide foreign exchange for making payments abroad and to buy, sell and hold SDRs as required by the UK's membership of the IMF.

How an external bad bank would be regulated

9.51 Any potential taxpayer-funded external bad bank would likely be regulated by the Financial Conduct Authority (FCA) and be authorised as an Investment Firm. The prudential categorisation of the external bad bank would be determined by the regulatory permissions it required to perform its activities.

9.52 Due to the extensive activities that an external bad bank would perform – including dealing as principal in relation to derivative instruments – it is assumed that it would fall within the scope of the Markets in Financial Instruments Directive (MiFID) and would therefore be subject to CRD IV with an eight per cent Pillar 1 capital requirement. It is assumed that a Treasury guarantee of the bad bank's capital position would minimise Pillar 2 capital requirements.[3]

9.53 As a result of an external bad bank being a CRD IV firm, it would have a higher capital requirement than Northern Rock Asset Management (NRAM), which is regulated under the less onerous MIPRU regime[4], as a result of its activities being less complex and not falling within the scope of MiFID.

9.54 In addition to dealing with some of the operational challenges of physically transferring assets, a synthetic structure – such as those discussed earlier in this chapter – might result in a lower capital requirement for the bad bank. Irrespective of an external bad bank's formal capital requirements, given that the Treasury would fully own it and guarantee its capital position, any funding from the Treasury would remain at risk to the performance of the assets.

Assumed model of ownership and funding

9.55 The remainder of this chapter assumes that any taxpayer-funded external bad bank would be Government-owned, although it could use a Total Return Swap for certain assets. The Government would directly fund the external bad bank, with the exception that some liabilities might need to be transferred to the external bad bank because of their links to transferred assets.

9.56 Similar considerations apply to the other models with respect to operations, execution, risk and State aid.

[2] Special Drawing Rights are foreign exchange reserve assets defined and maintained by the IMF. They represent a claim on currency held by IMF member countries, and are exchangeable for euros, yen, sterling or dollars,]

[3] This sets out the minimum capital requirements firms will be required to hold for the purposes of covering credit, market and operational risk.

[4] Prudential sourcebook for Mortgage and Home Finance Firms, and Insurance Intermediaries

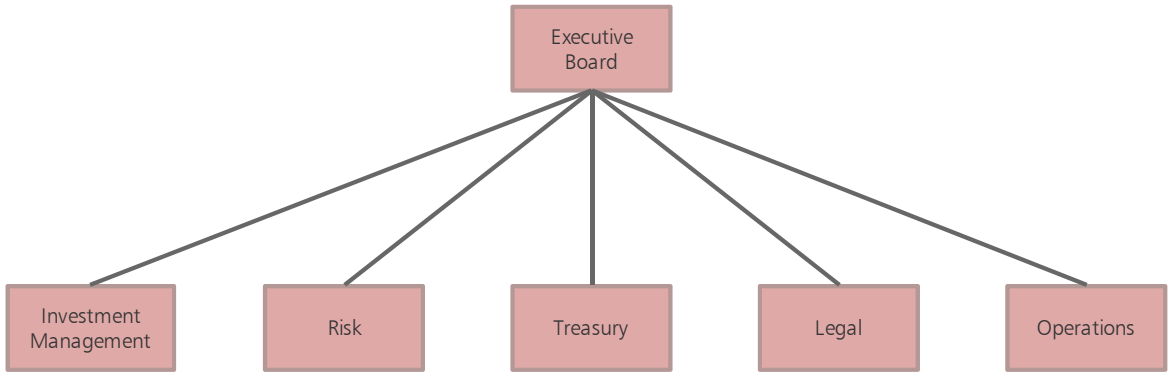
How an external bad bank would be operated

9.57 Based on the portfolio of 'high-risk' assets under consideration as part of the Review, as well as the structural and funding options considered here, the Review identified a minimum level of functionality which any bad bank would need to operate, as well as manage and service the assets.

9.58 As illustrated in Figure 9.A, the basic design structure of a bad bank would include:

- Executive Board of Directors – including Directors for each of the five divisions and a CEO;
- Investment management – investment strategy and portfolio management, including analysis of positions and portfolio reporting;
- Risk – managing credit, treasury and operational risk;
- Treasury – cash flow and other treasury management functions;
- Legal – insolvency specialists for working out non-performing loans including court procedures and repossessions; other legal advisers; and
- Operations – IT, human resources, audit, finance, regulatory reporting and accounting, asset administration.

Figure 9.A: Divisional structure of a bad bank



Source: HM Treasury

Design structure of a bad bank

9.59 According to information provided by RBS to the Review, the annual running cost of RBS's Non-Core division in 2012 – including indirect costs 'allocated' to the division – was approximately £950 million. While this is not directly applicable to a bad bank, it is indicative of the likely potential costs of running such an entity.

9.60 As with the funding and structural arrangement, there are a number of options available in order to operate a bad bank.

9.61 Fully operational bad bank. This would involve creating a fully operational bad bank. The Treasury would incorporate a new company that would be fully resourced to manage, service, and run down a portfolio of assets. This would involve replicating systems similar to those currently used by RBS and other investment banks.

9.62 Long Term Service Agreements. Alternatively, some or all of the activities of the bad bank could be contracted out using Long Term Service Agreements (LTSAs). These agreements could

be with RBS or another third party provider that specialises in the management of distressed assets. Other bad banks, including NAMA (in Ireland) and SAREB (in Spain) use similar arrangements with the financial institutions that originally owned the distressed assets, due to the prohibitive costs of replicating the necessary systems to manage a relatively small pool of assets.

9.63 To an extent, the LTSAs could be structured in a way that aligns the incentives of the LTSA provider with those of the Government. Mechanisms such as performance-related payments would be used to ensure where possible that services are provided to a high standard.

9.64 The Review's assumption is that it would be efficient to use an external provider for IT systems and some of the more junior staff functions. Separate systems, particularly IT systems, would be disproportionately expensive. Setting up such systems would also significantly delay the planning and execution phase for a bad bank.

9.65 A service agreement would also be needed for any period between agreement with RBS to go-ahead with a bad bank, and the point at which the final transfer is executed.

9.66 Governance. The governance arrangement for a bad bank would be defined by the Government, in line with similar structures established in recent years, on an arms-length basis akin to UKFI or UKAR.

How an external bad bank would be executed

9.67 The Review considered the necessary operational, legal and procedural steps that would be needed to set up and execute an external bad bank based on the 'high-risk' pool of assets set out in this report.

9.68 As a minimum, a full separation of some of RBS's assets into a taxpayer-funded external bad bank would require:

- initial agreement between RBS and the Treasury which will act as a basis for detailed negotiation;
- a period of detailed legal due diligence to finalise the assets that would be transferred to the bad bank;
- agreeing an appropriate transfer price with RBS for the assets following a full scope valuation exercise;
- setting up the infrastructure and systems required to run the bad bank in parallel, including agreeing any LTSAs; and
- completion of the transaction, whereby assets would transfer into the new bad bank (in some cases synthetically for at least a period of time).

9.69 The Review estimates the overall time for completion to be between 12 and 18 months. It should be noted that the precise timeline would only become clear once the initial agreement between RBS and the Treasury had been completed and the underlying due diligence work had begun. The remainder of this section provides a short summary of some of these processes.

Initial agreement as a basis for detailed negotiation – one month

9.70 The first step would be for RBS and the Treasury to set out an initial agreement to form a basis for detailed work with the relevant stakeholders as detailed later in the chapter. The agreement would be likely to include, as a minimum;

- setting out the scope of assets that are likely to be subject to the bad bank transaction;
- an agreed framework for valuing the assets, conducting legal due diligence in respect of them and seeking counterparty consents where required;
- a robust framework for managing the assets up to completion; and
- a broad timetable and framework for reaching a binding agreement and legally transferring the assets.

9.71 The agreement would anticipate transferring the economic risk to the external bad bank as soon as possible and prior to the full establishment of the bad bank's operations and the legal transfer of all assets. The Treasury and RBS would need to agree a robust governance framework for the interim period until the transaction terms are finalised, during which time RBS would retain control of and manage the assets.

Asset Due diligence – around twelve months

9.72 The Review undertook initial due diligence on the assets considered for transfer to an external bad bank.

9.73 However, finalising the assets that would be suitable for transfer and seeking required counterparty consents would require the Treasury and its advisers to undertake a more comprehensive assessment of a number of factors, including:

- the degree to which securities provided in relation to any loan are enforceable under the contract, and that the underwriting standards were adequate;
- the risks that might be transferred with the assets, for example previous conduct risks;
- any practical issues associated with transferring the assets, including identifying connected liabilities and derivative positions, and identifying and seeking any requirement for counterparty or regulatory consents; and
- any costs associated with the transfer of any assets.

9.74 In order to assess these factors, the Treasury would need to undertake significant due diligence of each asset, or class of assets. This "bottom-up" due diligence would in many cases involve reviewing the individual documentation containing the assets' contractual terms.

9.75 Some categories of asset may be subject to standard terms and conditions, which would shorten the process. However, other portfolios of assets are particularly complex and where the asset is subject to bespoke arrangements, it would require full due diligence of each related document.

9.76 In addition, RBS would be required to collate the contractual documentation, which would be a significant piece of work that would involve a number of different legal jurisdictions. Where there are agreements that are not subject to English law they would need to be reviewed by lawyers qualified in and familiar with the law of the governing jurisdiction; this would require significant and careful coordination between the Treasury, RBS and their legal advisers.

9.77 The Review anticipates that this process would be the most time-consuming and resource intensive part of the delivery of an external bad bank.

Asset valuation – four to six months

9.78 Following the announcement of its intention to create an external bad bank, the Treasury would, using expert advisers, carry out a detailed, full-scope valuation of the assets to be transferred.

9.79 This valuation would be carried out in parallel to the legal due diligence work in two stages. Stage one would involve establishing a detailed model and process to derive a precise value for the assets within the scope of the bad bank. Stage two would repeat the process shortly before the completion of the bad bank transaction, and would be used to agree a final transfer price between RBS and the Treasury. This could materially change the initial estimate of the value of the final transfer.

Bad bank planning and execution – six to twelve months

9.80 Following agreement with relevant stakeholders, the Treasury would resource itself with the necessary expertise for establishing the necessary infrastructure and personnel to operate a bad bank. This would involve a tendering process to recruit appropriate third-party advisers. Work on determining the appropriate governance structures and key management objectives of the bad bank would begin immediately. The operational requirements – such as IT, HR, customer servicing, risk management and compliance – would be defined through close work with RBS and consideration of the existing infrastructure required to service and manage the assets to be transferred.

9.81 As outlined in the previous section, it may prove cost-effective to contract out many of the services required to run a bad bank through LTSAs. A substantial amount of work would be involved in breaking down and specifying these activities in detail, and then negotiating and agreeing contracts with RBS and any other providers. The LTSAs would also need appropriate incentives to ensure that the objectives of the service provider and the bad bank are aligned.

9.82 The Executive Board of the bad bank would be staffed to ensure that it could adequately input into the final structure, governance and operational aspects of the bad bank. In addition, the Debt Management Office (DMO) would begin issuing gilts to raise the necessary funding as outlined earlier in this chapter.

Transfer completion – between one month and six months

9.83 Once the detailed due diligence and valuation work is completed, and the necessary bad band infrastructure is operational, it would be necessary to agree the final terms of a transaction with RBS, including final transfer values for the assets in light of the stage two valuation work, details of which assets would be legally transferred to the bad bank and which would remain subject to synthetic transfer arrangements, as well as the terms of any LTSA.

9.84 The legal transfer of the assets from RBS to the new bad bank would also need to be completed, where possible. It is likely that the legal due diligence work would uncovered a variety of practical issues associated with transferring the assets, such as different (and potentially) protracted processes for acquiring counterparty or regulatory consent. As a result, it is likely to be efficient to phase the legal transfer of assets to the bad bank over time.

Risks in creating an external bad bank

9.85 The Review's view is that the risks associated with setting up a bad bank are manageable. Nevertheless, **the risks are material and hence must play a significant role in the overall assessment of the merits of creating a taxpayer-funded external bad bank**.

9.86 Risks which did subsequently materialise would extend the time necessary to set up a bad bank, and likely result in the Treasury – and ultimately the taxpayer – incurring substantial further costs.

Long-Term Service Agreements

9.87 As outlined, many of the bad bank's activities would be likely to be delivered through LTSAs.

9.88 Since the Government would retain the economic risk and pay the LTSA provider for as long as the services are required, the alignment of incentives between both parties can only be partially achieved. This was a problem identified and observed in the Government's Asset Protection Scheme (APS) despite extensive resources put into suitable governance and contractual arrangements to mitigate against the risk.

9.89 In summary, the service provider would have little incentive to assess the risk of the asset or execute transactions at the best possible price as it would no longer benefit or incur a loss due to not being the economic owner of the asset. In effect, the Government would be holding the downside risk on the assets without adequate control over the day-to-day management of the assets. As a result, there could be differences between the service provider's behaviour and behaviour that would be in the best interests of the taxpayer.

9.90 One of the lessons learned from the Government's experience in developing the Asset Protection Scheme (APS) was the difficulty, and resources and time spent, on establishing governance and contractual agreements with RBS to address these incentive problems. The experience from the APS would be invaluable for engaging in a similar process again, but the difficulty of ensuring that the measures in place are appropriately robust should not be underestimated.

Transferability

9.91 The due diligence process would identify the portfolios of assets which are suitable for legal and/or synthetic transfer, and documents to effect these transfers could be prepared at the same time that the due diligence is undertaken.

9.92 However, finalisation of the documentation would only be possible at the conclusion of the due diligence process, and legal transfer to the bad bank would only be possible when counterparty consent (where required) has been obtained. The Review anticipates that the process of negotiating the terms on which the counterparties would give their consent would be time-consuming, and may require the preparation of detailed contractual documentation.

9.93 After the 'bottom-up' due diligence is concluded, the Treasury and RBS would negotiate the final commercial terms of the bad bank transaction, including adjustments to the transfer values, and incorporate these terms in to the transfer documentation. Legal solutions to issues identified during the due diligence process, such as indemnities for risks transferred to the Treasury which are not factored into the transfer values (for example, regulatory sanction for inappropriate conduct associated with the asset) would be negotiated between RBS and the Treasury and incorporated into the transfer agreements. Some of these could be negotiated during the due diligence phase, but would need to be finalised when the due diligence phase is completed.

9.94 A number of assets, particularly requiring counterparty consent to transfer are likely to be impossible to transfer in practice. A significant volume of work would be required to administer all the requests for consent. Consent would simply be refused in some cases. For example, when

NAMA was set up, many corporate borrowers challenged their transfer to NAMA in court because of the stigma of being considered a "bad" borrower.

9.95 The Review would expect some creditors to seek to renegotiate the terms of the contract as a price for their consent, which would result in substantial loss in value for the bad bank.

9.96 Negotiating with many of the counterparties over terms for consent would simply be too onerous to be financially viable; accordingly, as set out in earlier in this chapter, many of these assets would remain subject to economic transfer under the TRS only. Box 9.G below provides an example of an area where legal complexity would be likely to prevent a portfolio of assets being transferred to a bad bank.

9.97 The terms of any TRS would need to be co-ordinated with those of the LTSA, to ensure as far as possible that RBS and the LTSA provider acted in the interests of the bad bank's position as a whole, rather than maximising the value of those contracts that related to each agreement separately. In practice, this might be difficult to ensure, because it requires co-ordination between the bad bank, RBS and any other LTSA provider.

9.98 The Review also considered the implications of a transfer for RBS and a bad bank in relation to tax, pensions and employment. The Review anticipates that the establishment of a bad bank would not involve the transfer of any pensions liabilities which currently sit with RBS. Further, the anticipated structure of the bad bank would not transfer any RBS employees or member of RBS pension funds. Accordingly, the only impact of the creation of the bad bank on the operation of RBS's pension arrangements would be any implications of the transfer on the RBS pension funds' Trustee's view of the employer covenant.

Box 9.G: Targeted risk transfer for the RBS Core Markets portfolios

As noted in Chapter 5, a book of securities and derivatives within RBS's Core Markets division has been considered for the external bad bank, which the bank is running off as it is no longer consistent with its Markets strategy and/or risk appetite. Legally transferring ownership of these positions would be extremely challenging as over 100,000 positions with over 6,000 counterparties would need to be transferred, and the vast majority of these would require the consent of the counterparties involved.

While these positions could be transferred through a TRS (see Box 9.B) this is likely to be challenging for a number of reasons. In particular, a TRS that was effective from a regulatory and accounting standpoint may be prohibitively difficult to construct and operate, as it would need to ensure that the precise economics of every single contract were individually replicated.

Notwithstanding the complexity of a bad bank purchasing these assets, there are also a number of reasons to suggest that it would be preferable if they were instead sold to private sector institutions:

- first, the portfolio requires constant active management as the risk profile changes continuously. This would require the bad bank to set up a substantial risk management and trading infrastructure which would be time consuming, difficult and expensive. Other investment banks already have this infrastructure in place;
- secondly, the portfolio is marked-to-market on a daily basis. This means that there is no accounting benefit to be derived from the bad bank's ability to 'look through' current market conditions when assessing the real value of the assets;
- thirdly, as the positions are largely derivatives, they require relatively little funding compared to the degree of risk that they carry. As a result, the efficiencies arising from the Government's funding advantages would not exist; and
- finally, as a result of the way RBS manages its market risk, it would not be possible to transfer the portfolio on a hedged basis. This means that it is preferable to deal with it progressively over time, rather than as a single large trade, which would leave RBS and the bad bank with significant un-hedged risk.

As a result, there would be good reasons to deal with these assets in a different way to bad bank loan assets.

The main route to exit for these positions would be for RBS to sell them to one or more private sector buyers. Given the technical complexities described, it is likely to take many years to dispose of all of the elements of the portfolio. Accordingly, if an external bad bank were to be pursued, the Government would intend to explore alternative structures to mitigate some of the specific risks that these positions carry, in a way that would de-risk RBS and provide some capital relief. This could include addressing the portfolios':

- counterparty risk: the risk that RBS's counterparties to these trades are unable to fulfil their obligations to RBS; and
- downgrade risk: the risk that RBS would be required to post additional collateral with counterparties, or to find other banks to guarantee its obligations or 'step into its shoes' on each trade, in the event that RBS's credit rating were downgraded.

Litigation risks

9.99 The legal risk of third-parties challenging the Government's position cannot be ruled out. Although the Review is of the opinion that a challenge would be successfully defended, a legal challenge could further lengthen the implementation process and increase the cost of establishing a bad bank.

Jurisdictional

9.100 RBS currently operates across a number of legal jurisdictions, with significant activities in Ireland, Germany, Spain, the US, and others. Inevitably, these jurisdictions may have specific rules about the transfer of assets, security, or other contractual arrangements, in particular around whether counterparty consent is required. The existence and scope of these rules would emerge during the detailed due diligence phase, and could drive the decision on whether particular assets remain within scope for transfer, and are transferred legally or synthetically.

9.101 Furthermore, the legal and regulatory requirements for operating in these jurisdictions could differ from those in the UK. Assets which are subject to oversight in other jurisdictions may attract specific regulatory requirements, including capital requirements; be subject to special tax treatment; and be prone to particular forms of legal challenge or regulatory investigation, such as mis-selling investigations or market-manipulation inquiries.

9.102 In order to understand these particular risks and requirements, the Treasury would undertake detailed due diligence in each jurisdiction. Only after due diligence has been completed would the Treasury fully understand the risks which are specific to jurisdictions other than England and Wales and how they might be best mitigated.

RBS counterparties

9.103 The contractual terms of many of RBS' assets and liabilities will, include provisions that limit the right of RBS unilaterally to transfer those products to a third-party.

9.104 A common limitation is that the transfer can only be effected after RBS obtains the consent of the other party, or parties, to the contract.

9.105 In these circumstances, the relevant counterparties would have to give consent before that contract could be transferred. There are a significant number of contracts which would require consent to transfer within the 'high-risk' asset pool and it would take a significant time to contact the necessary counterparties and obtain their consent. Some counterparties may seek to renegotiate the terms of the contract as a price for their consent, which could result in substantial loss in value for the bad bank..

Non-UK regulators

9.106 Regulatory consents for the transaction would also be required from non-UK regulators, for example from the Central Bank of Ireland to ensure that Ulster Bank still meets regulatory requirements after selling some of its assets to the external bad bank.

State aid implications of an external bad bank

RBS's existing State aid commitments

9.107 Following the onset of the financial crisis in 2007-08, the European Commission (EC) agreed to the UK Government providing State aid to RBS. At that time, RBS was considered to

be a "company in difficulty", in line with the criteria set out in the Community Guidelines on State aid for Rescuing and Restructuring Firms in Difficulty.[5]

9.108 In particular, RBS suffered at that time from increasing losses, mounting debt, rising interest charges and falling net asset value. The initial rescue measures agreed to by the European Commission included:

- a recapitalisation approved by the European Commission on 13 October 2008, under which HM Treasury acquired £15 billion of ordinary shares plus £5 billion of preference shares (later converted to ordinary shares); and
- RBS's participation in the UK Credit Guarantee Scheme, approved by the European Commission on 13 October 2008, as well as the provision of liquidity assistance by the Bank of England.

9.109 In December 2009 the European Commission subsequently agreed to the provision by the Government of a broader recovery plan for RBS.[6] This included:

- a further capital injection of £25.5 billion. This support took the form of the issuance of 51 billion B shares at 50p per share, together with one enhanced Dividend Access Share; and
- participation in the UK Asset Protection Scheme (APS), an impaired asset measure which was designed, among other things, to reduce the credit risk associated with certain of RBS's impaired assets.

Box 9.H: State aid

Under European law, Member States may not give "aid" which gives a selective advantage to individual firms, except in specific circumstances and subject to the agreement of the European Commission. This is in order to ensure a level playing field across the Single Market, and to avoid distorting competition or propping up inefficient companies. Measures which could involve State aid include capital injections or government guarantees.

One of the grounds on which the grand of State aid may be approved by the European Commission is where there is aid "to remedy a serious disturbance in the economy of a Member State".[7] The European Commission agreed at the time of the financial crisis that aid to banks could be justified on this basis, subject to various conditions.[8]

When aid is given to a firm, the European Commission normally requires restructuring of the firm in order to ensure its return to long-term viability, and imposes compensatory measures to limit distortions to competition.

9.110 In order to return RBS to long-term viability and address the potentially anti-competitive effects of the aid provided in 2008 and 2009, the restructuring plan agreed between RBS, the Government and the European Commission included a number of divestments and restructuring commitments. The main commitments are described below, with a brief summary of progress against each:

[5] Communication from the Commission, Community Guidelines on State Aid for Rescuing and Restructuring Firms in Difficulty, 2004 OJ C 244/02
[6] State aid No N 422/2009 and N 261/2009, C(2009)10112
[7] Treaty on the Functioning of the European Union, Article 107
[8] European Commission, Banking Communication, 2008

- divestment of the Global Merchant Services and RBS Sempra businesses before December 2013. These were completed in 2010 and 2011;
- divestment of RBS Insurance (Direct Line Group) before December 2013. This is on track, with the holding now below 30 per cent;
- divestment of the "Rainbow" business comprised of 314 branches serving five per cent of small and medium enterprises and five per cent of mid-corporate customers in the UK. This has been delayed following the withdrawal of Santander from an agreement to purchase the business. RBS is now proceeding towards an initial public offering of the business and on 27 September 2013 announced a deal with a consortium of investors who will buy a significant minority interest at the time of the IPO. HM Treasury confirms that it will be supporting formal approval by the European Commission of the extension of the deadline for completion of the Rainbow divestment;
- reduction of RBS's funded balance sheet to below £1,036 billion. This has been exceeded, with funded assets at £843 billion at the end of June 2013;
- a prohibition on dividend payments on hybrid instruments, which ended in April 2012;
- a commitment that RBS should be at the leading edge of implementing global and national remuneration principles; and
- a ban on RBS making further acquisitions until the later of 31 December 2012 and the date on which all of the required divestments have been completed. This will remain in place until the Rainbow divestment has been completed.

State aid implications of creating an external bad bank

9.111 A good bank/bad bank split which involved the Government buying assets from RBS would be very likely to be perceived by the European Commission to involve the provision of State aid. It would be most likely treated as an "asset relief measure" in line with the experience of recent Irish and Spanish bad bank interventions.[9]

9.112 Any measures which include State aid must be notified to and approved by the European Commission. The European Commission assesses State aid measures for banks with reference to a range of "crisis communications" which it has issued since the onset of the financial crisis.[10] Together, these set out a framework which includes:

- the circumstances under which State aid should be permitted;
- restrictions on the form and value of State aid provided; and
- the need for a restructuring plan for banks receiving State aid, and for measures to offset the distortion to competition resulting from State aid.

9.113 How each of these points would apply to the creation of a taxpayer-funded external bad bank for RBS is considered further below.

[9] Communication from the Commission on the Treatment of Impaired Assets in the Community Banking sector, 2009 OJ C 72/01.

[10] In particular: the Communication from the Commission - The application of State aid rules to measures taken in relation to financial institutions in the context of the current global financial crisis, 2008 OJ C 270/02, since replaced by the Communication from the Commission on the application, from 1 August 2013, of State aid rules to support measures in favour of banks in the context of the financial crisis, 2013 OJ C 216/01; the Communication from the Commission: The return to viability and the assessment of restructuring measures in the financial sector in the current crisis under the State aid rules, 2009 OJ C 195/04.

9.114 For the European Commission to approve any new State aid involved in a measure such as a good bank/bad bank split, it must be persuaded that such a measure is necessary, generally by reference to the threat posed towards financial and economic stability. Where a bank is still completing the restructuring plan relating to the receipt of previous State aid, as is the case with RBS, the European Commission has stated that the provision of new aid "should remain a possibility if justified by reasons of financial stability. Any additional aid should remain limited to the minimum necessary to ensure viability".[11]

9.115 If the European Commission were to accept the case for an external bad bank for RBS, the design of the transaction would be likely to be subject to various requirements to ensure compliance with the State aid framework established by the crisis communications.

9.116 Importantly, the European Commission would need to agree the "Real Economic Value" of the assets being transferred to the bad bank, which would impose a ceiling on how much the bad bank (i.e. the Government) could pay RBS for them. The cash flow and loss projections undertaken for the Review by Blackrock Solutions would provide the basis for calculating the Real Economic Value of the assets, and the Government shares the European Commission's objective of ensuring that taxpayers do not over-pay. However, there is uncertainty around the position that the European Commission might take regarding agreement on the valuation of the assets.

9.117 Where State aid is provided to a firm, the State aid framework requires that a restructuring plan is put in place to ensure a return to viability, and that the firm commits to measures to compensate for the distortion to competition.

9.118 As set out above, RBS has already been subject to such requirements following the State aid provided in 2008 and 2009. Additional State aid provided through the creation of a taxpayer-funded external bad bank would be likely to require further structural or behavioural remedies.

Conclusions

9.119 The Review considered and assessed a variety of options to execute a taxpayer-funded external bad bank. After assessing these options, the Review focussed on a preferred approach involving a Government-owned, taxpayer-funded external bad bank. This plan is within the Treasury's expertise to undertake; however it entails a number of significant risks which make the overall proposal less likely to meet the Government's objectives, as set out by the Chancellor at Mansion House.

9.120 It would be possible to structure and fund a bad bank in a number of other ways; however, the Review's conclusion is that these alternative approaches would neither ease the delivery of an external bad bank nor reduce the risks associated with this.

9.121 Overall, it is the Review's conclusion that a proposal of this kind could be executed within 12 months to 18 months, and that the execution risks are both material and present a substantial element of uncertainty to the ultimate delivery of a successful good bank/bad bank split.

[11] 2009 OJ C 195/04, paragraph 7

Part 4: Conclusions of the Government's Review

10 RBS bad bank – separating the good from the bad

10.1 As set out in Chapter 3, RBS has today announced a new internal bad bank to address the legacy of the 'high-risk' and poorly-performing assets, building on the analysis undertaken during the course of the Government's Review into the case for an external bad bank.

10.2 This chapter sets out in more detail of the new internal bad bank that RBS is creating, including the composition of the bad bank and the governance and disclosure requirements that are being put in place, and assesses the merits of an internal bad bank against the case for an external bad bank.

Dealing with higher risk exposures without taxpayer support

10.3 The Government's Review of the merits of a good bank/bad bank split for RBS has clearly highlighted that, despite the progress made since 2008, RBS retains a rump of 'high-risk' and poorly-performing legacy assets. Whilst RBS appears now to be both realistically provisioned and realistically projecting future losses on its worst loans, resolving this issue is an important, although not sufficient, part of any new RBS direction.

10.4 If the issue is not addressed, these 'high-risk' assets will continue to create uncertainty over RBS's capital position – and hence may constrain its ability to expand lending to the UK economy – and act as a drag on returns, thereby delaying the bank's return to the private sector.

10.5 For these reasons, RBS has announced that is creating an 'internal' bad bank that does not rely on taxpayer support. The RBS bad bank will rapidly wind-down £38 billion of its 'high-risk' assets, with transparent disclosures to the market and a target to sell or wind-down 55 to 70 per cent within two years and all the remainder within three years.

Composition of the RBS bad bank

10.6 The composition of the assets in the internal bad bank is closely comparable to those identified by the Review as being suitable for any external bad bank and which were analysed by BlackRock Solutions.

10.7 RBS has used a more conservative definition of 'high-risk' in identifying the assets, using an internal credit score for borrowers equivalent to a Standard & Poor's rating of B+ or below (rather than the B/B- or below detailed in Chapter 5). This results in a somewhat larger pool of assets than was considered in the Review for potential transfer to any taxpayer-funded external bad bank.

10.8 A small number of individually identified assets from the pool identified in chapter 5 for potential inclusion in a taxpayer-funded external bad bank cannot be responsibly sold or swiftly run-off. If an external bad bank were created, these assets would have been managed by the bad bank over an extended period, as they will be by specialist teams within RBS.

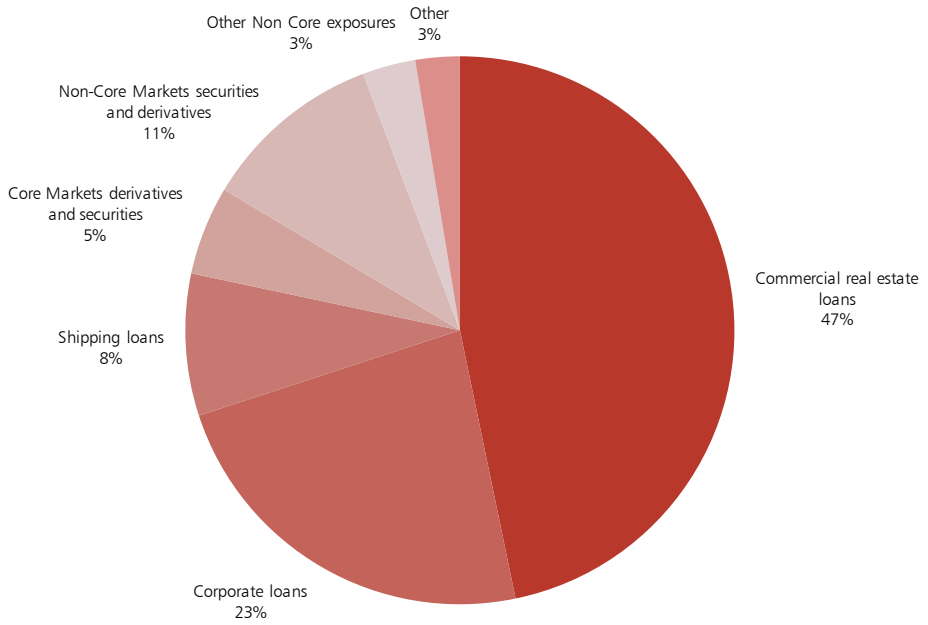
10.9 Similarly, there are a number of portfolios within the identified asset pool which RBS would have, in any event, wanted to exit in the near future, but are not suitable for inclusion in the new internal bad bank as they are not capable of rapid resolution.

10.10 Conversely, there are some assets that it would not have been possible to include directly in an external bad bank for practical reasons – for instance the Core Markets portfolios described in Chapter 5. RBS has identified a pool of these assets that it believes it will be able to resolve within the internal bad bank's three year existence, and this pool has therefore been added to the internal bad bank even though it would not have formed part of an external bad bank. The remainder of these portfolios will continue to be managed by specialist teams within RBS's Markets business.

10.11 There is therefore a small difference between the two pools, which will ensure that the internal bad bank's focus on disposing of legacy and poorly-performing assets is not diluted.

10.12 Table 10.A below shows a breakdown of the assets included in RBS's new internal bad bank by asset class.

Chart 10.A: Composition of internal bad bank



Source: BlackRock Solutions, RBS

10.13 Although the bad bank asset pool is small in the context of RBS's total balance sheet, representing less than five per cent of RBS's funded balance sheet, the group's risk exposures are heavily concentrated in this pool: these assets consume approximately 20 per cent of RBS's capital.

A credible path to exiting assets

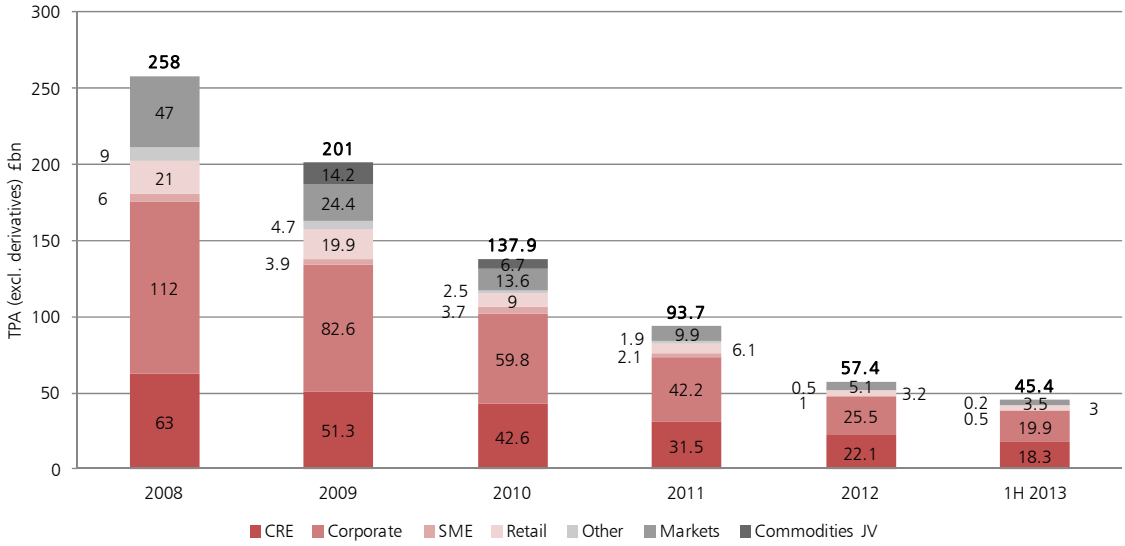
10.14 The rapid wind-down that will be pursued by RBS for the internal bad bank will ensure that the 'high-risk' assets are removed from RBS's balance sheet quickly and efficiently, and provide markets and other stakeholders with confidence that RBS has a deliverable plan to tackle its remaining poorly-performing legacy assets, and to shift its focus toward its future as a UK retail and commercial lender.

10.15 Central to achieving this is RBS's target of selling or winding-down all of these assets within three years. As a priority, the RBS board will put in place an extensive and robust governance and disclosure package for the bad bank (described below) that will enable the Group board and shareholders to assess the RBS bad bank's performance.

10.16 RBS management has considered extensively its approach for managing out the bad bank assets and has constructed a plan that shows how and when they intend to exit each bad bank exposure. For the larger exposures in the bad bank, the plan has been built up on an asset-by-asset basis.

10.17 The performance of RBS in reducing the size of the Non-Core division lends considerable credibility to its commitment to implement the bad bank effectively. Since inception, Non-Core has reduced its funded third-party assets at a rate of approximately £40 billion a year, notwithstanding the difficult market conditions that have prevailed through much of its existence.

Chart 10.B: RBS Non-core division – track record in reducing assets, £bn



Source: RBS company reports

Governance and disclosures

10.18 RBS has announced that it will put in place comprehensive governance agreements to ensure that the internal bad bank is able to achieve the rapid wind-down of high risk assets that is required, and that the Group's Board, regulators and shareholders are able to track its performance and hold the bad bank's management team to account.

10.19 The internal bad bank is to be a separate division of RBS,[1] with its own management team, reporting and disclosures. The bad bank will have a clear and over-arching primary objective which will reflect the division's mission of eliminating RBS's exposure to the bad bank assets while having due regard to the preservation of capital and value.

10.20 RBS will propose and agree with the Bank of England a set of asset management principles to underpin delivery of the core objective. These principles will set out, amongst other things:

- how the trade-off between intrinsic value and capital release should be managed, taking account of 'stress loss' and other risk reduction; and
- a series of milestones for total reductions in the size of the asset pool.

[1] Although not a separate legal entity.

10.21 RBS has noted that the creation of the internal bad bank will also require some recognition of accounting losses up-front. From a capital perspective, these adjustments will be very largely offset by a simultaneous reduction in the capital deductions that RBS holds against these assets, and will not affect the value that RBS would be able to realise for these assets in the market when the bad bank comes to sell them.

10.22 The RBS bad bank will be overseen by a committee of the Group Board comprising only non-executive directors. The Committee will formally report on the bad bank's progress against, and compliance with, the asset management principles to the Group Board on a quarterly basis.

10.23 RBS's publicly reported quarterly accounts will report separately an RBS bad bank balance sheet and profit and loss account, capital allocation, expected loss and other capital deductions and allocation of Group funding. It will also show in detail the bad bank's progress in exiting its assets and the amount of capital that has been released in the process of doing so.

10.24 This enhanced disclosure will provide greater transparency and clarity to investors on the impact of the internal bad bank on RBS Group and the overall performance of the 'core' RBS.

10.25 The bad bank's management and staff will have specific incentives which will be aligned with the bad bank's objectives and their contribution towards this performance.

10.26 The new internal bad bank represents a step-change in the focus that RBS will be giving to winding-down its poorly-performing assets, as explained in Box 10.A.

10.27 The proposed governance arrangements for the internal bad bank are at least as rigorous and transparent than Citi Holdings in the US, which will make RBS's bad bank a best-in-class example of an internal bad bank.

Box 10.A: RBS Non-Core division and the new RBS bad bank

Since 2009, RBS has operated a Non-Core division that currently manages many of the banks higher risk assets.

While Non-Core has had some considerable success in reducing these exposures, the governance and disclosure package for the internal bad bank represents a step-change in the focus that will be applied to dealing with troubled assets. The following are the more significant changes:

- Improved clarity of purpose. The internal bad bank's primary objective will be to eliminate RBS's exposure to the bad bank assets while having due regard to the preservation of capital and value, whereas Non-Core has operated with a number of arguably competing objectives, including capital efficiency, preservation of 'intrinsic value' (an internal measure of value) and balancing a number of risk measures;
- Sharper focus on 'high-risk' assets. Whereas the Non-Core division included a number of non-strategic businesses and assets as well as higher-risk exposures, the internal bad bank will be focused on RBS's highest-risk assets only. This will facilitate a more targeted and rigorous approach to eliminating risky assets;
- Stronger oversight. The internal bad bank will be overseen by a sub-committee of the Group Board comprising only non-executive directors. The internal bad bank will be formally assessed by the Group Board on a regular basis; and
- Better disclosure. The internal bad bank's consumption of the Group's capital and funding resources will be separately and clearly disclosed, and progress in eliminating higher-risk assets and releasing capital to the Group's ongoing operations will be far more transparent than in the past. This will better enable shareholders to assess the internal bad bank's progress and the likely final impact on the Group.

How the internal bad bank differs from an external bad bank

10.28 An internal bad bank – with a clear target for selling all assets in a defined timeframe – varies from an external bad bank in three main ways:

- the price at which RBS is able to sell the relevant assets (and the point at which it gets price certainty);
- the time elapsed until these assets are disposed of; and
- the nature of RBS's counterparty in making the asset sales (i.e. the Government vs. the private sector).

10.29 This section of the report assesses how these differences impact on achievement of the Chancellor's Mansion House objectives for its shareholding in RBS.

Accelerating the return of RBS to the private sector

10.30 While the internal bad bank will take longer to remove the bad bank assets from RBS's balance sheet than would have been the case with an external bad bank, it is not necessarily the case that this will lead to a slower return to the private sector for RBS. By the time that the external bad bank would be completed – in 12 to 18 months' time – RBS's internal bad bank

will have disposed of a significant proportion of the assets contained within it, and will have a clear plan for targeting exit the remainder of the assets over the coming 18 months. This means that the market is likely to have substantial visibility as to the path to exit of the bad bank assets, even if that disposal has not yet occurred, and as to the ultimate cost of doing so. As investors will be able to price for this small residual risk, the internal bad bank should not delay the Government's sell down of its RBS stake.

10.31 Furthermore, the Government has not engaged in detailed negotiations with the European Commission as to the likely parameters of a package of remedies to address the State aid that a Government owned bad bank would provide to RBS. This could lead to both a protracted period of uncertainty for an external bad bank, which RBS would not suffer in the case of the internal bad bank, and potentially the imposition of significantly value-destructive restructuring measures. Neither of these effects, if they materialised, would help RBS's return to the private sector.

10.32 The Review has also concluded that there can be no acceleration of the return of RBS to the private sector until there has been a substantial improvement in its capital position and in the performance of the core business. These measures, inevitably, will take some time to implement and to bear sufficient fruit for the market to become confident in their delivery.

10.33 The Review does not therefore believe that an external bad bank would facilitate a faster return to the private sector than an internal bad bank.

Getting the best value for the taxpayer

10.34 It may be the case that the Government would be willing to pay more for the bad bank assets than private sector purchasers would, reflecting its ability to hold assets for the longer-term (and hence look through market volatility) and, linked to this, its lower cost of capital. However, this would not necessarily be the case: the Government would need to take into account the cost of creating and operating an infrastructure to monitor the management and servicing of the bad bank assets, whereas the marginal cost of this for a private sector buyer that already has the infrastructure would be minimal.

10.35 Moreover, the European Commission restricts the price that the Government can pay for the assets to their 'real economic value,' and, where this is greater than their market value, treats the difference as the amount of State aid provided to the seller. As discussed in Chapter [9], any new State aid would be likely to require compensatory measures, for example structural or behavioural remedies, which could be value-destructive and so contrary to the Government's objectives for its shareholding in RBS. The extent to which such measures would be required would depend on the quantity of aid deemed by the Commission as being provided to RBS and the degree to which this would distort competition. Moreover, the prices at which assets would be transferred would have to be clearly defensible to the UK taxpayer.

10.36 Unlike the external bad bank, the internal bad bank would not increase the level of public debt and would not increase the taxpayers' exposure to RBS's 'high-risk' assets.

Conclusions on tackling legacy risks through a bad bank

10.37 The internal bad bank announced today by RBS will quickly and efficiently dispose of risky legacy assets that remain on its balance sheet, without the use of fresh taxpayer funds and without the significant operational and delivery risks an external bad bank would bring.

10.38 It will de-risk RBS, freeing up its balance sheet to re-focus on its role as a leading UK commercial and retail bank, delivering against of the Government's objectives as set out by the Chancellor at Mansion House.

10.39 Moreover, BlackRock Solutions has advised that RBS has demonstrated a strong track record for effectively managing down its Non-Core assets; and that it believes that that these skills combined with RBS's plan for setting up an internal bad bank offers the most efficient route to resolve the identified assets.

10.40 Therefore, the Review concludes that RBS's approach to managing down its remaining high-risk and poorly-performing assets – through a transparent and stringently-governed internal bad bank – will result in substantial de-risking of its balance sheet, in a quick and efficient manner.

11 RBS's new direction – conclusions

11.1 This chapter concludes the Review by comparing the benefits that will be achieved through the new direction announced by RBS – including the creation of an internal bad bank discussed in the previous chapter – with the potential creation of a taxpayer-funded external bad bank, against the Government's three objectives for its shareholding in RBS as set out at Mansion House in June 2013.

Objective 1: accelerating return to the private sector

11.2 Nearly five years after RBS required several successive bailouts from the then Government, RBS remains weighed down by the legacy of its pre-crisis actions – not just its poorly-performing legacy assets but also by weak returns in its 'core' businesses and a lack of strategic coherence.

11.3 A taxpayer-funded external bad bank could theoretically result in a small uplift in the valuation of RBS, due to improving the return on equity of the 'good bank'. However, this effect would be expected to diminish quickly over time and is, in any case, highly uncertain. It would also take between 12 and 18 months to put in place, involve considerable execution risks and be likely to lead to some compensatory commitments due to State aid requirements. And it would not deliver the fundamental changes required in RBS's 'core' businesses.

11.4 The new direction announced today by RBS comprehensively addresses not just its poorly-performing legacy assets, but also its balance sheet strength, strategic coherence and 'core' profitability:

- first, the internal bad bank will target the removal of 'high risk' and poorly-performing assets from RBS's balance sheet within three years (without resort to public funds or involving State aid). The enhanced disclosures RBS will provide for the internal bad bank, and the targeting of exit within three years, will give clarity and confidence to investors that the remaining legacy 'high-risk' assets will be dealt with;
- secondly, the new direction will re-focus RBS as a domestic retail and commercial bank with a stronger balance sheet and commitment to its UK and Irish activities. Reducing the use of capital deployed in international operations (such as Citizens) and focussing on its UK strengths will provide investors with a far clearer strategic outlook for RBS; and
- finally, the actions RBS has announced it is taking to cut costs and establish a sustainable business model for Ulster Bank will address the underlying weak profitability of RBS's 'core' businesses.

11.5 In summary, the actions announced today by RBS will put in place a comprehensive approach to deal with legacy 'high-risk' assets, strengthen RBS's balance sheet and provide a clear path to reprivatisation.

Objective 2: supporting the British economy

11.6 The Review has found that strengthening a bank's capital position is the surest way to enable increased lending.

11.7 While an external bad bank may reduce some uncertainty around RBS's capital position, by de-risking the bank and improving its capital position in a "stress case", its impact on capital in a "base case" would be modestly negative. The analysis undertaken for the Review has found that there may be a marginal positive impact on the British economy, with an upper bound of increasing the average annual growth rate of GDP by 0.06 percentage points per year over the next five years. But the impact is likely to be lower and could be zero.

11.8 The actions announced today by RBS will strengthen its capital position far more significantly through the divestment of Citizens and other measures. RBS's new direction will realise capital equivalent to adding 200 basis points to its Q3 2013 CET1 capital ratio through asset and/or business disposals (not including the impact of the RBS internal bad bank run-down) by end 2015. It is difficult to estimate exactly how much of this capital will be available for new lending (given further potential changes to regulatory capital requirements and should further headwinds arise) but capital is key to supporting bank lending. And the scale of this increase in capital is such that RBS's new direction will have a significantly greater benefit to the UK economy than any potential benefit that could be achieved by creating an external bad bank.

11.9 RBS's new direction will also transform the way it operates its SME lending business through becoming the number one bank for SMEs, as judged by customer experience, measured by a newly-created survey to be run by the Federation of Small Businesses (FSB) and the British Chamber of Commerce (BCC). The economic analysis in Chapter 7 shows that lending to SMEs is particularly important for supporting economic growth.

11.10 The new direction will also reduce risk around RBS's capital position faster than an external bad bank (which could take up to 18 months to set up) and, once successfully completed, to a greater degree (because RBS will exit from Citizens and continue to shrink their investment banking arm, as well as disposing of bad bank assets). The internal bad bank will also include a broader range of assets than the external bad bank, such as complex derivatives which would have been impossible to transfer to the external bad bank.

11.11 The new direction announced by RBS will therefore re-focus the bank on its core strengths of lending to UK businesses and households. This should result in greater benefits to the UK economy than could ever be achieved by the creation of a taxpayer funded external bad bank.

Objective 3: getting the best value for the taxpayer

11.12 The Government's Review has set out that, in considering the value for money for the taxpayer from any intervention or change in policy, the Green Book requires both direct and indirect impacts to be taken into consideration.

11.13 The Review has found that creating a taxpayer-funded external bad bank could result in a Green Book consistent rate of return from the Government's ownership of the bad bank – i.e. a Present Value of zero – although, if a 'stress case' were to occur, losses could run to £4 billion and there are also significant risks and uncertainties to this which could lead to value being transferred to either RBS minority shareholders, RBS creditors, or both.

11.14 The external bad bank would also likely lead to an increase in public debt levels – and hence have some impact on debt financing costs – but, overall, the Government does not believe that these direct effects, in themselves, are of sufficient magnitude to undermine the case for a taxpayer-funded external bad bank, if that case were otherwise considered to be strong.

11.15 There would also be indirect value for money considerations arising from the impacts on the Government's ownership stake in the residual 'good' RBS and the impacts on the British economy.

11.16 Overall, there is clearly a stronger case for getting value for the taxpayer through the new direction announced by RBS. In particular, the new internal bad bank does not require the direct extension of any further public funds to RBS, and so does not increase taxpayers' exposure to its legacy assets.

11.17 The other elements of the new direction will, in aggregate, result in an RBS that is better focused on the UK economy and closer to re-privatisation, creating substantial indirect benefits for taxpayer value.

The way forward for RBS

11.18 The Chancellor set out at his Mansion House address in June 2013 that, "while [RBS] is healing...it has not healed as quickly as we all hoped. It has not done as much to support the recovery as any of us would have liked. And we as taxpayers are still a long way from getting our money back".

11.19 The Bank of England will play a continuing role in overseeing the implementation of RBS's plan as part of its ongoing supervision of the firm. The shareholder value implications of the plan have been reviewed by UKFI. UKFI support the plan and will engage closely with the Board and management to oversee its development and implementation, in line with their mandate to act commercially and in the best interests of the taxpayer as shareholder.

11.20 By tackling its legacy of high-risk assets, strengthening its balance sheet, committing capital to its UK 'core' operations and boosting returns, RBS's comprehensive new direction will focus the bank on supporting the British economy while ensuring best value for the taxpayer.

11.21 Combined with retirement of the Dividend Access Share (DAS) – on which the Treasury and RBS are in advanced negotiations with the European Commission – and the early retirement of the Contingent Capital Facility, it will also accelerate the bank's return to the private sector.

11.22 Rothschild has advised the Review that that the new direction announced by RBS should, over time, address many of the bank's challenges and areas of investor concern, which in the longer term should be reflected in an improved valuation and improve the prospects for an earlier return of RBS ownership to the private sector.

11.23 The new direction for RBS is supported wholeheartedly by the management and Board of RBS, the Bank of England, UKFI and the Government.

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