

# ***Basel III and beyond***

The trillion dollar question:  
can bail-in capital bail out  
the banking industry?

November 2011



## Overview

Bail-in capital is central to the design of Basel III. Basel III and CRDIV, which will have the force of law, require all new non-equity capital from 1 January 2013 to have a new bail-in feature. These are new instruments for which, as yet, there is no liquid market.

Capital alone is insufficient to make a bank safe – confidence in an institution and access to liquidity are also essential. However resilient capital levels and the ability to withstand losses in a crisis are important contributors to market confidence and continuing access to liquidity. Bail-in capital could have a key role to play in maintaining confidence.

The Basel Committee's estimate for additional equity capital required for banks from its member jurisdictions was USD 600 billion to achieve a Basel III ratio of 7% for Common Equity Tier 1. Assuming a "new normal" average ratio of 10% this rises to over USD 800 billion.

For non-core Tier 1 instruments, in the absence of firm figures from the Basel Committee, we estimate that there is, globally, about USD 600-800 billion in issue, and USD 800- 1000 billion in various forms of Tier 2 instruments. That is, roughly USD 1.4 – 1.8 trillion will have to be refinanced with equity or Basel III-compliant bail-in capital over the ten years starting from 1 January 2013.

There have been a handful of issues of so-called contingent capital or CoCo bonds so far; by Lloyds, Rabobank and Credit Suisse. For example, on 2 November 2011, Rabobank (which is AAA-rated) issued USD 2 billion in CoCo bonds priced to yield 8.4%. The trigger point for conversion is 8% Tier 1. The issue was oversubscribed – demonstrating that investor appetite exists for attractive returns, particularly where the likelihood of conversion seems small. For lower-rated banks, issuing such instruments is likely to be more difficult and more expensive.

In this article we examine the challenges and practical issues that need to be addressed before bail-in capital can become a reality. The sections we address are:

- Defining bail-in capital
- The rationale and the problem of the bail-in debt proposals
- Where are we now?
- The size of the capital problem
- Debt-holder risk management – avoiding the death spiral
- Systemic considerations – protecting against contagion
- Legal issues – treating investors fairly
- Accounting issues – how will bail-in debt be valued?
- Tax – should bail-in debt be treated as debt or equity?
- Pricing – what price will make bail-in debt attractive to investors?
- A look to the future

## Defining bail-in capital

On 13 January 2011 the Basel Committee on Banking Supervision (BCBS) announced that all non-core equity capital instruments would have to have a bail-in feature, as follows:

*The terms and conditions of all non-common Tier 1 and Tier 2 instruments issued by an internationally active bank must have a provision that requires such instruments, at the option of the relevant authority, to either be written off or converted into common equity upon the occurrence of the trigger event unless:*

- a) the governing jurisdiction of the bank has in place laws that (i) require such Tier 1 and Tier 2 instruments to be written off upon such event, or (ii) otherwise require such instruments to fully absorb losses before tax payers are exposed to loss;
- b) a peer group review confirms that the jurisdiction conforms with clause (a); and
- c) it is disclosed by the relevant regulator and by the issuing bank, in issuance documents going forward, that such instruments are subject to loss under clause (a) in this paragraph.

*The 'trigger event' is defined as the earlier of:*

- 1) a decision that a write-off, without which the firm would become non-viable, is necessary, as determined by the relevant authority; and
- 2) the decision to make a public sector injection of capital, or equivalent support, without which the firm would have become non-viable, as determined by the relevant authority.

As very few jurisdictions will have the legal capacity to meet the requirements under (a) to (c), the vast majority of all new capital instruments issued after 1 January 2013 will need to have the bail-in feature. As existing capital instruments that do not have this feature will be progressively haircut by 10% per annum, it follows that they will need to be replaced over time with ones that do.

The terms "bail-in capital" and "CoCos" are often used interchangeably, but it is useful to make a distinction. At PwC, we define bail-in capital as instruments where write downs are triggered by the regulator at the point of non-viability (when capital ratios are close to the regulatory minimum); CoCo instruments are those that convert to equity when a pre-defined trigger point (such as a higher Common Equity Tier 1 capital ratio) is passed as a going concern- not at the point of resolution. The issues arising from both types of capital are broadly the same, as, using our definition, the only real distinction is that the conversion trigger for bail-in capital is at the discretion of the regulator whereas for CoCos it is a fixed trigger.

## *The rationale and the problem of the bail-in debt proposals*

The rationale behind the bail-in proposal is quite straightforward. In many of the cases where banks were rescued by the injection of public money, the holders of non-core capital instruments such as preference shares, hybrid equity or Tier 2 debt did not suffer any loss of principal (aside from temporary losses on a mark-to-market basis). Since the taxpayer is meant to be the last resort, it seemed odd that those who had enjoyed being paid for taking on the risk of ranking immediately ahead of ordinary shareholders, and subordinated to all other creditors, should also enjoy a status that effectively put them ahead of taxpayers when it came to absorbing losses.

The problem is that the ranking of creditors and capital providers is set according to the normal insolvency rules – once the core equity has been completely exhausted, the next level of capital providers contributes to absorbing the loss until that capital has been exhausted, and so on up the chain of subordination. In the case of a bank which was rescued as a going concern, the normal insolvency process did not start, and the core equity of the bank was not completely exhausted – it had merely fallen to a dangerously low level at which investor and market confidence was in danger of evaporating. We believe that bail-in capital is a “good thing”, but, as we shall see, it is likely to be difficult to make it work in practice.

## *Where are we now?*

Interestingly, when BCBS issued a slightly revised version of the Basel III rules in June 2011, the bail-in/CoCo requirement was not fully included in the rules governing eligibility of capital instruments, despite the announcement in January.

A criterion that was included in the December 2010 rules, for Additional Tier 1 instruments to have a write-down/conversion feature at a ‘pre-specified trigger point’, but (a) this only applied to Additional Tier I instruments treated as liabilities for accounting purposes, and (b) the pre-specified trigger point was not defined, and could presumably be in the form of a fixed trigger, such as the Common Equity Tier 1 ratio falling below a pre-set level. The January 2011 announcement, on the other hand, firstly covered all non-core equity capital, including Tier 2, and secondly defined the trigger point as the exercise of regulatory discretion, not a pre-set trigger.

It is interesting to note that CRD IV issued in July set a minimum trigger level of 5.125% CET1. However the EBA has been given the challenge of defining how bail-in debt should work from a technical perspective (the EBA does not have to opine until 1 January 2013).

It looks as if the BCBS and other interested bodies may be reconsidering. This comes through clearly in the July 2011 paper which sets out proposals for the additional tougher requirements of “Globally systemically important banks”, or G-SIBS as they are now often called. The paper discusses some of the pros and cons of bail-in capital and concludes that, given the uncertainties, the additional capital requirements for G-SIBS should be met entirely out of common equity. The paper does however go on to say (at paragraph 89) that the BCBS “will continue to review contingent capital, and support the use of contingent capital to meet higher national loss absorbency requirements than the global requirement”.

The Cannes G20 summit in November, nevertheless, confirmed that G-SIBS will be required to hold additional Common Equity Tier 1 – the most expensive form of capital. There is also the option for national authorities to set a higher level of loss absorbency which could be funded from Basel III compliant Additional Tier 1 and Tier 2 instruments.

## The size of the capital problem

*Of the estimated USD 1.4 – 1.8 trillion discussed above, we estimate, based on extrapolation from the impact studies published by the BCBS and others, that up to USD 1 trillion of this will be refinanced in the form of common equity, to meet the much higher Common Equity Tier 1 ratio required by Basel III.*

*This still leaves around USD 400 – 800 billion which would have to be refinanced in the form of an untried and untested capital instrument that has been created by the stroke of a regulator's pen. This is not how capital markets develop, and one cannot force banks to issue a capital instrument without understanding whether there is even a market for it or at what price such instruments will be attractive to investors.*

*We would also note that classic holders of Tier 2 or even hybrid Tier 1 capital are pension funds, insurance companies and the like, which require assets of a specific duration to match their liabilities. The presence of any kind of conversion feature may place these instruments outside the investment mandates of these investors.*

## Debt-holder risk management – avoiding the death spiral

A key issue with bail-in debt of any kind is that the holders of the debt would want to hedge their exposure if the bank is coming under pressure and bail-in looks likely. To do this they would naturally short the stock, which in extreme circumstances would potentially exacerbate the death spiral. Therefore a bail-in regime, in theory, would need to prevent holders of bail-in debt from shorting the stock. This would be impractical because there would be ways to avoid this restriction, for example by taking on a synthetic short by using derivatives. Even if this were possible, however, without the ability to hedge, who would then buy bail-in bonds?

Given that plenty of investors buy junk bonds there will always be an argument that if the coupon is high enough someone will buy it. The absence of a hedge will therefore push the cost up significantly and will restrict the pool of willing investors but not eliminate it.

Another challenge is that the conversion event is not necessarily an event of default under International Swaps and Derivatives Association terms for a credit default swap (CDS) and as such any institution holding bail-in capital cannot protect itself from the risk of conversion with a CDS. This may make bail-in capital too risky for many traditional investors, such as pension funds and fixed income unit trusts.

### **Systemic considerations – protecting against contagion**

There is also a broader question as to how bail-in debt will be valued during a systemic crisis.

If there is a systemic crisis, what will happen to the market when the first institution fails and bail-in debt converts? The market for these instruments and CoCos may dry up, which will make it impossible for other institutions to raise capital through new issues.

## Legal issues – treating investors fairly

There may be issues with shareholder protection rights, as the ordinary shareholders suffer a massive dilution when debt is converted. Alternatively the bank may need ordinary shareholder permission to issue such debt.

Different solutions will apply in different jurisdictions, which mean that the terms of bail-in debt may differ significantly by issuer, which would prevent creation of a single, fungible asset class, which will lead to liquidity issues, leading in turn to lack of investor demand.

A major uncertainty is whether one can over-ride the bankruptcy regime in the jurisdiction in question. For example under section 365 of the US bankruptcy code, the terms of an executory contract (one which is not yet fully performed, e.g. a debt contract which is still outstanding, which would be the case in bail-in debt) may not be amended unfavourably to the debtor just because the debtor files under Chapter 11. Current cases are testing these sorts of provision but as yet the outcome is unclear.

Another issue is legal enforceability of the discretion of the supervisor to trigger the write-down or conversion. In many common law jurisdictions, such as under English law, the courts have jealously protected their right to hear claims of judicial review of any decision made under powers given to a public body, where any individual or group can show that they have suffered as a result of that decision. So ordinary shareholders, for example, who have seen the value of their holdings reduced by the

execution of a conversion of bail-in capital into equity, may feel aggrieved and seek to have the decision reviewed by the courts. Attempts by Parliament, including so-called ‘ouster clauses’ in legislation, to restrict the ability of the UK courts to review decisions, have proven to be unworkable as the courts have always found a way to exercise their jurisdiction to review such decisions. In the cases of the nationalisation of Bradford and Bingley and Northern Rock, the valuation of the banks for the purposes of nationalisation had to be considered independently to establish whether shareholders had been treated fairly.

The implication is that insolvency regimes around the world will need to be amended to accommodate bail-in debt. Given the slow nature of legislative processes, how many will achieve this by 1 January 2013?

There is also the major issue of the discretion exercised by a bank’s board in arriving at loan loss provisions, which drive the level of book capital. Given uncertainties, there is always a wide variation in the views over the required level for provisions. This is an art, rather than a definitive science. On the cusp of a conversion, the board will need to be exceptionally careful and to understand the provisioning methodology, and the regulatory capital models in immense detail. These could be dangerous waters for the board and, indeed, the regulators.

## Accounting issues – how will bail-in debt be valued?

As the IFRS/US GAAP convergence project is delayed, the treatment of bail-in debt over the long term is somewhat uncertain i.e. the treatment of the liability element of an instrument. In the meantime, IAS 39 continues to be the relevant standard. From the issuer’s perspective, the future replacement standard, IFRS 9, retains the same accounting principle. IAS 39 requires the embedded derivative to be valued separately. However, if a bail-in debt instrument is not accounted for as a compound instrument, how should the issuer value the embedded derivative?

Issuers cannot just take the difference between the issue price and the theoretical price of a straight bond with the same maturity. Instead, the issuer needs to value the embedded derivative and then take the difference between it and the issue price as the bond component. But how does one value a put option when the strike price is unknown - because the bail-in terms may vary (for example, between write-down, write-off or conversion) - and/or the volatility is unknown, because the probability of exercise is impossible to gauge?



## Tax – should bail-in debt be treated as debt or equity?

Tax will be an important consideration in the type and range of instruments that develop to meet the new regulatory requirements; however, a number of the required regulatory features of these instruments make the tax treatment under the present tax rules uncertain in a number of respects. In particular, while issuers of existing innovative Tier 1 and Tier 2 instruments in the form of debt generally enjoy tax deductions for any coupons paid to investors, instruments reflecting the loss absorbency requirement may not be tax deductible under current rules. As far as bail-in debt and CoCos are concerned, the tax position is unclear, but there are indications that tax authorities may regard these as being much closer to equity than debt in nature and thus not tax-deductible (and as we will see in the next section on pricing, the return demanded by the holders of such instruments indicates that they are indeed much closer to equity).

This issue may also be viewed against the backdrop of the wider debate amongst tax policymakers regarding whether steps should be taken to correct the perceived bias of tax systems towards debt (i.e., through provision of tax relief for interest costs) on the basis that this is one of the factors which may have encouraged excessive leverage within the FS sector in the past.

As an example, consider the UK position. At this stage the UK Government has reached no firm policy decision regarding the tax deductibility of bail-in debt and CoCo type instruments. However, the UK tax authorities have identified a number of areas of uncertainty in relation to the treatment of these instruments under existing UK tax law. These include:

- The potential impact of the conversion or write down features of the instruments and whether these could result in interest coupons being “distributions” and therefore non-deductible under UK tax law.
- Whether the UK tax rules could operate to create a tax charge in the hands of the debtor company at the point a trigger event – such as a write-down – occurs. This will also depend upon the relevant accounting treatment applied by the debtor company.
- Whether the instruments will be subject to transfer duties.

The UK tax authorities are actively consulting with banks and their advisers on the above issues and this will no doubt continue as the relevant regulatory provisions develop further over the coming months. A similar process is going on in other jurisdictions.

Although much of the debate to date has focused on the taxation position of debtor companies issuing bail-in debt and CoCo-type instruments, the taxation position of investors will also need to be taken into account. In many cases, similar debt versus equity considerations may arise since in many jurisdictions interest income is taxable whilst dividend income may not be. Similarly, the tax deductibility of losses incurred on the occurrence of a trigger event will also be of direct interest to investors. Enhancing the taxation treatment of these instruments (e.g., through making coupons tax exempt) may also be another means of making them more attractive to investors.

## Pricing – what price will make bail-in debt attractive to investors?

It is difficult to comment on where the pricing of such instruments will end up, given their novelty and current scarcity. Only a handful of CoCo issues have been made, and some (such as those made by Lloyds and Rabobank in 2010) do not have the full bail-in feature required by the January 2011 press release – they are more akin to the ‘pre-set’ triggers covered by the December 2010 Basel III eligibility rules, and thus CoCos in our definition.

One recent issue (by Credit Suisse) does seem to have the full bail-in feature included, but as it was largely a swap in redemption of existing hybrids it cannot really be compared with an open

market price. However, the pricing on the issue (Treasury + 5.5%) indicates that the only difference between CoCos and CET1 is the tax deductibility, and, as discussed earlier, tax offices need to decide whether hybrid equity is actually equity (and therefore not tax deductible) or debt. As noted earlier, the most recent issue by Rabobank was priced at a similar level.

Using the Capital Asset Pricing Model, if one assumes a beta of around 1 (which would be typical for a bank, which is largely a reflection of the economy as a whole) and an equity market premium of 5%, then equity would cost treasuries + 5%, which is similar to the pricing of these CoCo issues.

## *A look to the future*

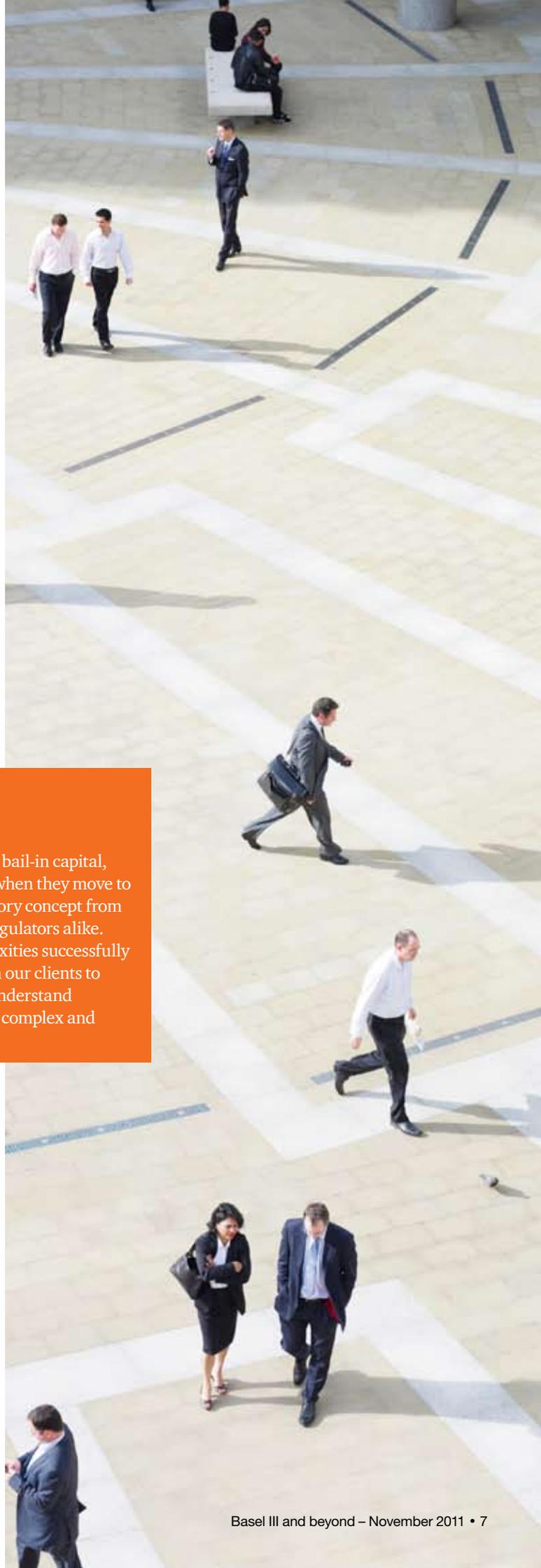
There is a strong need for flexible capital instruments that make the banking system safer. It is also clear that the level of capital required, even with the Basel III transition period to 2022, is enormous and that equity investors are unlikely to have sufficient capacity to accommodate it – not least because bank returns on equity are falling and are uncertain.

Bail-in debt is a potential solution but it is not yet clear how it will work in practice. The volume of bail-in debt required is estimated at around USD 400 - 800 billion (that is, in round terms, issues averaging USD 40 - 80 billion a year for ten years from January 2013, and assuming that the balance of up to USD 1 trillion in non-core equity is refinanced in the form of common equity).

Regulators and industry now have just 12 months to make it workable and to create the investor demand that will be critical for it to be successful.

## *Conclusion*

In this article we have discussed a variety of issues associated with bail-in capital, including: risk, accounting, tax, legal and what happens to banks when they move to resolution. Bail-in capital is just one of many areas where a regulatory concept from Basel III has complex implementation implications for firms and regulators alike. PwC has the expertise to help you to address address these complexities successfully and create real value from Basel III. We are currently working with our clients to address the many regulatory changes that are affecting them; to understand interdependencies and overlaps; and to create real value in today's complex and changing environment.



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### *Basel III and beyond*

*A Practitioner's Guide to Basel III and Beyond is a complete guide to the implications of Basel III and related reforms.*

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Design: ML1-2011-11-16-1634-AG