

## Finalised guidance

# Collateral upgrade transactions (includes liquidity swaps)

February 2012



In July 2011 we consulted on industry guidance for liquidity swaps, a form of collateral upgrade transaction. The consultation ended in September 2011. Our final guidance is included in Annex 1.

### **Executive summary**

Our consultation was issued in response to observing an increasing trend of banks looking to improve liquidity by entering into new types of collateral upgrade transactions: in particular those transactions where banks look to access the liquidity embedded within asset portfolios held by insurers, although there have also been a number of transactions between two bank counterparties.

We recognise that these transactions enable the temporary transfer of liquid assets to firms that need them, whilst at the same time providing the lending firm with secured exposures (which can benefit its creditors including depositors and policy-holders) and potentially an enhanced yield. We see a role for these transactions on a sensible scale, provided the risks are properly identified and managed by both parties.

Collateral upgrade transactions allow the borrower to exchange poorer quality assets (e.g. illiquid or less liquid and/or low credit quality) for better quality assets (e.g. liquid and/or high credit quality). Our potential concerns with collateral upgrade transactions include: the continuing trend to encumber balance sheets to the potential detriment of consumers; using borrowed assets to meet liquidity requirements and/or help funding, i.e. whether this provides resilient liquidity or funding benefits in a time of stress; whether risk management frameworks are adequate to deal with the increased risk from extended maturities, significant size, and the use of potentially illiquid or less-liquid, poorer quality and difficult to value assets as collateral; and whether such transactions hinder the resolvability of firms.

The objective of the guidance is to alert firms to our concerns about collateral upgrade transactions and our expectations for managing the associated risks.

However, given the risks that asset encumbrance and liquidity pose to our objectives, we are considering further substantive work on all forms of collateralised borrowing transactions (i.e. not just collateral upgrade transactions). This second phase will define collateralised borrowing and may include work on data collection and ways to facilitate market transparency.

### **Other changes to the guidance consulted on**

We have restructured the guidance to make it more streamlined, which included removing the guidance relating to financial stability as this will be considered as part of the second phase of work.

### Collateral upgrade transactions (includes liquidity swaps)

The consultation feedback highlighted: the potentially unlimited variations in the structure of liquidity swaps; that some of these structures can also be used for transactions which are not liquidity swaps; the potential for arbitrage; and the rationale behind the narrow focus on liquidity swaps given that other transactions would pose many of the same risks.

In light of this feedback, we are clarifying the scope of the guidance to better explain the forms of collateralised borrowing that are of most concern to us. For the purpose of the guidance, collateralised borrowing transactions are limited to those in which there is a material difference in the quality of assets exchanged, and are now referred to as collateral upgrade transactions. This difference in quality may be a function of differences in liquidity, credit quality or another risk parameter. In order to clarify the scope, we also refer to specific collateralised transactions not caught within the scope of the guidance (e.g. generally, short-term and routine transactions). See Annex 1: section A2 for the detailed guidance. Although this guidance focuses on particular transactions, we are aware that many of the risks identified here apply to other forms of collateralised borrowing, such as shorter dated repo transactions.

We previously indicated that firms should notify us under Principle 11 of significant transactions. We have now provided some further guidance of the transactions that we would wish to be notified of in advance of execution: broadly those that materially exhibit the risks of concern and are described in section A3.

We have also amended the guidance for insurers; in particular, we have moved towards a more principles-based approach to the level of capital that we expect them to hold. However, we expect to be informed, in advance, of transactions for which it is proposed to hold a lesser amount of capital than for a comparable transaction, investment or structured investment.

#### Cost benefit analysis (see Annex 2)

We appreciate that clarifying the notification and risk management we expect from firms will result in them incurring some costs through additional staff time; possibly greater capital being held against some forms of collateral upgrade transactions; and some potential deals that pose unacceptable risks to our objectives not going ahead.

We also acknowledge the benefits that collateral upgrade transactions can bring. However, we believe that the potentially significant risks these transactions pose justify and require greater scrutiny, from both firms and supervisors, to assess and mitigate these risks. This is particularly acute if the market continues to grow, as our analysis suggests is likely, since it could then have systemic effects.

#### General

Firms should also be aware that we cannot restrict our discretion to take appropriate supervisory action to deal with matters as they develop. This may include providing individual guidance to firms on the adequate treatment of collateralised borrowing transactions within the parameters set in the guidance. It may also include preventing specific transactions that, due to their features or circumstances, pose unacceptable risks to our statutory objectives of financial stability and consumer protection.



**Paul Sharma**  
**Director of Policy**

### **Annex 1: Guidance for collateral upgrade transactions**

#### **A1. Application**

The guidance applies to all firms undertaking collateral upgrade transactions that fall within scope.

The guidance covers the notification and general risk management expectations, applicable to both parties to the transaction, and guidance specific to insurers.

For the purpose of this guidance, references to:

- 'borrower' are to the firm that receives the higher quality assets and, in return for which, posts collateral; and
- 'lender' are to the other firm which provides the higher quality assets and, in return for which, receives collateral.

#### **A2. Scope**

For the purpose of this guidance, a collateral upgrade transaction is where there is a material difference in the quality of assets exchanged, for a period of greater than a year (whether in a single transaction or by a series of transactions). This difference in quality may be a function of differences in liquidity, credit quality or another risk parameter. There are a number of means by which this outcome can be achieved and may take different legal forms.

The guidance applies to the forms of collateral upgrade transactions as described above, such as the following:

- long-term repo and reverse repo transactions, and long-term stock lending and borrowing (where long term is defined as greater than one year<sup>1</sup> or rolling or perpetual maturity); and
- any form of collateralised borrowing that is in substance economically similar, including synthetic transactions (e.g. a sale plus a collateralised and margined Total Return Swap).

In order to help prevent excessive pre-notification volumes of lower risk transactions there are certain transactions that are not in scope. Specifically the following are excluded:

- short-term repo and reverse-repo transactions, and short-term stock lending and borrowing transactions (where short term is defined as one year or less);
- the issuance of covered bonds;
- the creation of asset-backed securities;
- mortgage lending;
- leasing;
- collateralisation of amounts owed under contracts such as derivatives; and
- transactions with a central bank that would receive a 0% risk weight under the standardised approach to credit risk in BIPRU 3.

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<sup>1</sup> We do not expect transactions to be structured at marginally less than a year merely to circumvent the guidance, without other justifiable reason.

### Collateral upgrade transactions (includes liquidity swaps)

#### **A3. Risks**

The transactions of concern to us have a number of features which can increase risk. We expect firms to have adequate risk management process and controls to consider these risks and ensure appropriate mitigants are put in place.

The risks are as follows, though this list is not exhaustive:

- asset encumbrance;
- liquidity;
- collateral;
- operational (including legal);
- intra-group; and
- scale and concentration.

#### **Asset encumbrance – borrower**

If the transactions involve large haircuts, the borrower may be encumbering a significant proportion of its assets. This will structurally subordinate its unsecured creditors' (including depositors') claims over its assets given as collateral. This risks reducing the amount available to meet claims in the event of the borrower's default. Given the potential scale of these transactions, the risk of loss due to asset encumbrance could be significant, particularly during a period of market stress. The dynamic nature of the margining in these transactions, where a fall in the value of the collateral results in the borrower having to encumber more assets, and where triggers within transaction agreements may lead to additional margin calls, is likely to be exacerbated during such a period.

In the event that the borrower uses the borrowed assets to raise liquidity in the repo market, there will be further asset encumbrance and structural subordination of unsecured creditors, further increasing the risk of loss to those creditors.

We have previously articulated our views<sup>2</sup> about asset encumbrance and the expectation that firms discuss with us, in advance, all plans for significant new asset encumbrance and to apply issuance limits.

#### **Liquidity – both borrower and lender**

The liquidity provided to the borrower under the transaction may reduce in stressed times due to margin calls or other embedded triggers. This would particularly be the case where the borrower has pledged assets where falls in their market value are likely to be closely correlated with the borrower entering into a liquidity stress. As a result of these transactions, there is likely to be a significant reduction in the volume of liquid assets, both those eligible for the regulatory liquidity buffers and other buffers, that are available to the lender to cover its potential liquidity needs, such as cash outflows or margining requirements (on other transactions).

If a material part of a firm's liquid assets are borrowed or lent under such transactions, then a thorough analysis of its ongoing liquidity requirements should be undertaken before entering into such transactions, including an assessment of liquidity risk under stressed scenarios.

The analysis of the liquidity risk arising from these transactions should be based on cash-flow forecasts for a period of not less than the term of the transaction.

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<sup>2</sup> [http://www.fsa.gov.uk/pubs/international/cov\\_bond.pdf](http://www.fsa.gov.uk/pubs/international/cov_bond.pdf)

### Collateral upgrade transactions (includes liquidity swaps)

A firm should be satisfied that the cash flows under the following scenarios are sufficient to meet its liabilities as they fall due:

- Stressed expected cash flows with the transaction(s): with no event of default (e.g. inability to liquidate securities lent, adverse selection due to substitution rights, additional margin calls).
- Stressed expected cash flows with the transaction(s): with the counterparty default and retention of all collateral (e.g. maturity of collateral versus maturity of liabilities and reinvestment risk).
- Collateral liquidity: firms should include stresses under which the collateral becomes increasingly illiquid.

Banks (whether borrower or lender) are reminded that, as an extension of BIPRU 12.3, they are required under BIPRU 12.4 to consider multiple stress scenarios in addition to the regulatory stresses outlined in BIPRU 12.5 and above. Firms should document these stresses and associated risks in the Individual Liquidity Adequacy Assessment (ILAA).

#### Collateral – lender

The value of the illiquid or less liquid and/or lower credit quality collateral being taken by the lender may be difficult to assess and obtain independent valuations for (in particular where asset-backed securities are being used). This may be the case both before and after default of the borrower.

Own-issued and own-originated securities being used as collateral are potentially exposed to wrong-way risk, exposing the lender to increased risk that the collateral is an insufficient credit risk mitigant.

If firms do not have adequate systems and controls in place to appropriately value and manage collateral, they should not enter into these transactions. In this regard:

- Collateral should be individually identifiable, and suitably diversified, with adequate information available about the underlying assets held through any securitisation vehicle.
- Firms should have an independent and robust challenge process in agreeing valuations with the borrower. Evidence of reliance on the counterparty's valuation instead of a firm's own assessment or undue reliance on outsourcing could be grounds for finding a serious failure of that firm's risk management systems and controls (see, for example, SYSC 3, 7, 8, 14 – 17, as applicable).
- Asset valuation at the point of default is likely to be difficult to estimate (e.g. due to an absence of a sufficiently rich data set). In such circumstances, we expect firms to use highly prudent valuation methodologies as part of both the initial and ongoing risk assessment of these transactions, particularly if there are concerns about wrong-way risk.
- Firms should assume that the greater the price volatility of the collateral, the more amplified the effect of correlation is likely to be, particularly during periods of market stress (e.g. the failure of a bank).

Where the likely exit strategy in the event of default is collateral retention, we expect firms to have conducted appropriate due diligence before entering into the transaction to ensure that collateral retention is a viable strategy (section A5 also covers this point for insurers).

#### Operational risks (including legal) – both borrower and lender

Operational risk and legal risk (e.g. legal efficacy and operational consequences of material new clauses and new legal structures and arrangements) are untested and so may not work in the manner envisaged.

A firm should conduct legal reviews as necessary (as evidenced by a written and reasoned legal opinion) to ensure the enforceability and legal effectiveness of the collateral arrangements in all relevant jurisdictions, including in the event of the insolvency or bankruptcy of the counterparty. The legal review should include, but not be limited to, analysis of:

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- the legal effectiveness and enforceability of the contractual rights to liquidate and/or retain the collateral; and
- the ability of contractual and security rights to withstand challenge by liquidators and other creditors, including the extent of the lender's claim on excess collateral surviving post an event of default of the borrower (e.g. for how long).

Particular attention needs to be given to the circumstances in which standard documents (e.g. GMRA<sup>3</sup>, GMSLA<sup>4</sup>) are varied, or where different legal structures or arrangements are used or created, or where asset types that were not previously provided as collateral are used.

Firms should consider the potential effect of regulatory changes (e.g. Solvency II) and other changes on the economic rationale for transactions, including any adverse capital implications arising from these. Firms should consider whether they have appropriate contingency arrangements in the event of a significant adverse change.

#### **Intra-group – both borrower and lender**

Intragroup transactions potentially require a higher level of risk management and governance to ensure that any conflicts of interest (e.g. the interests of the relevant group company being set aside in the interest of another group company or the group as whole) are appropriately managed, and that transactions are carried out at arm's length.

#### **Scale and concentration – both borrower and lender**

The scale and concentration risk of any collateral upgrade transaction (e.g. due to use of own-originated securities, single or few counterparties) may potentially exacerbate the above risks.

Firms should therefore have appropriate limit structures in place to manage these risks. This should include (but is not limited to): scale of transactions (e.g. size and maturity); the type of assets lent and collateral received; model sensitivities (e.g. duration or interest rate risk capped by some form of risk measure; minimum levels of over-collateralisation / haircut by asset class).

#### **A4. Notification to the FSA**

Under "Principle 11 Relations with regulators - A firm must deal with its regulators in an open and cooperative way, and must tell the FSA promptly anything relating to the firm of which the FSA would reasonably expect prompt notice".

Any proposed significant transactions that are within scope should be notified to us well in advance of the execution date so the risks inherent in the proposed transactions can be assessed.

We consider a transaction to be significant if it materially poses one or more of the risks in section A3. For example, we expect to be notified of:

- any intra-group transaction;
- any transaction that relies on material amounts of own-issued and/or own-originated securities as collateral; and

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<sup>3</sup> Global Master Repurchase Agreement

<sup>4</sup> Global Master Securities Lending Agreement

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- any transaction for which a firm proposes holding an amount of capital that is below that required to be held on a comparable asset (for example, some structured covered bonds that fall outside of the regulated covered bond regime)

It is possible that a transaction between two firms might pose material risks to one but not the other (e.g. due to differences in the size of the respective balance sheets). In this case only the firm that is exposed to the material risk is expected to notify us.

#### **A5. Guidance specific to insurers as lenders (in addition to Sections A1 – A4 and A6)**

The following guidance is specific to insurers in relation to these transactions.

##### **Pillar 1**

We consider these transactions to fall within the definition of a 'stock lending' transaction (as defined in the FSA Handbook Glossary) and the provisions on stock lending in INSPRU 3.2.36R to 3.2.36AR must be met in relation to such a transaction for the purposes of GENPRU 2 Annex 7R (Admissible assets in insurance).

##### **Liquidity**

If a material part of the insurer's liquid assets will be loaned or transferred under such transactions, then a thorough analysis of the insurer's ongoing liquidity requirements should be undertaken before entering into such transactions. This includes assessing the impact on liquidity risk under stressed scenarios, or as a result of higher than expected levels of policy surrenders, or of possible margin calls resulting from other unrelated transactions entered into by the insurer (see INSPRU 1.1.34R to 1.1.40G, GENPRU 1.2.26R to 1.2.31R, GENPRU 1.2.42R, SYSC 11 and INSPRU 4.1).

##### **Collateral re-hypothecation**

If collateral is relatively illiquid and re-hypothecated, there may be difficulties in realising the collateral within a reasonable timescale, in the event of the borrower wishing to substitute the collateral, or in matching the insurer's liabilities in the event of counterparty default. There may also be additional risks for the insurer resulting from any leveraging of collateral received. The insurer should take account in its Pillar 2 ICA of any mismatch between the type, quality and liquidity of the collateral held by the insurer following any rehypothecation, and the collateral that would need to be returned to the borrower.

##### **Individual capital assessment**

In addition to the risks associated with the current assets and liabilities on the balance sheet, the Pillar 2 ICA should also take account of all the additional risks associated with the transaction, including credit, liquidity, legal and operational risks, along with considering the reliability of asset valuations in both normal and stressed conditions.

For the purpose of this assessment, the loss given default should, depending on the likely exit strategy, either assume that the collateral would be sold at a distressed market price, or that the collateral will be retained at a suitably prudent 'market value' haircut allowing for the return of any excess collateral, and for any mismatch risk by duration, interest type (e.g. fixed/floating) and/or currency, between the remaining collateral and the liabilities.

The assumed probability of default should be based on an adequate assessment of credit risk in stressed conditions that should reflect the potential concentration risk if there are very few counterparties, the way in which concentration risk is being hedged (other than with collateral), the extent of encumbrance of the counterparty's

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assets, and the assumed absence of any external government or supra-national support for the counterparty.

An insurer should also be able to demonstrate the way in which it will cover its margin of solvency and maintain the capital level under its ICA/ICG (or Solvency II SCR and ORSA/supervisory review process) following a default event (ICA/ICG and SCR would then include a component in respect of credit risk on the collateral). We anticipate allowing an insurer a reasonable amount of time to restore this cover in appropriate circumstances, provided doing so is not incompatible with any directive applicable to insurance activities.

#### **A6. Guidance start date**

This guidance applies to all transactions that fall within its scope (see section A2), which are entered into on or after 31 March 2012.



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#### **Annex 2: Cost benefit analysis**

By moving liquid assets to where they are most useful, collateral upgrade transactions could create both benefits and risks to the UK economy. Benefits include achieving a more efficient allocation of liquidity and reducing the likelihood of systemic problems associated with illiquidity in the banking sector. Risks include:

- increased asset encumbrance combined with overcollateralisation and margin calls that could cause detriment to the borrower's creditors (including depositors);
- lenders may enter deals without appropriate analysis or controls and face unexpected liquidity or solvency problems in the future; and
- the complexity of collateral upgrade transactions could increase interconnectedness in an opaque way, potentially making the firms less liquid or resilient in times of stress and leading to resolution problems if firms get into difficulties.

These risks could also be systemic, and since there are significant negative externalities of failure, firms do not have incentives to take full account of these risks without regulatory intervention.

We believe that, without intervention, the market for collateral upgrade transactions could grow significantly and rapidly: discussion with firms and analysis of the level of surplus liquidity in the insurance sector suggest it would become at least tens of billions of pounds in size. If banks or other parties decide to engage in these transactions in significant numbers, or if insurers decide to buy additional assets (e.g. gilts or cash) to lend in this way, the market could grow to well over £100 billion. Our analysis suggests that, without intervention, this market would consist of both adequately managed transactions with any risks posed being mitigated, and transactions with features mentioned in section A3 that are not or are insufficiently mitigated and pose unacceptable risks to our objectives.

Given the potential size of the collateral upgrade market and the potentially significant benefits and costs, it is imperative to find an appropriate balance when we should intervene to stop transactions which pose unacceptable risks but allow transactions that have proper risk mitigation in place to proceed with as little cost as possible. We believe the clarified risk management and notification requirements in this guidance will allow us to move towards a more appropriate outcome. Further work on collateral upgrade transactions will enable us to review whether we have achieved this and if further intervention might be beneficial.

#### **Costs**

We expect this guidance to result in firms incurring some compliance costs and for us to incur some supervisory costs. Notifying us before conducting transactions and undertaking additional analysis or risk management activities will require resource from firms. Prior notification could also potentially delay transactions if firms wish to enter into them with haste, though prompt supervisory response should mitigate this. In addition, closer scrutiny will require some additional FSA supervisory time.

Clarifying the capital and liquidity treatment of long-term collateral upgrade transactions could lead to greater capital needing to be held against these transactions, which represents a cost to firms. However, this should only apply to cases where we would deem the capital a firm would otherwise hold to be insufficient to mitigate the risks these transactions pose, so should represent a net benefit to society. Notification and closer scrutiny of these deals might lead supervisors to consider some transactions to be inappropriate and stop them, or require mitigants to the extent that firms decide not to proceed with them. This represents a cost to firms, however, it too should only apply to cases where the risks a transaction poses outweigh the benefits, in which case the transaction not going ahead results in a net benefit to society.

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#### Benefits

Clarifying our rules regarding the risk management, capital and liquidity treatment for collateral upgrade transactions should lower the risks they pose to our objectives and the wider economy. While this will result in some costs for firms, as mentioned above, since these transactions have the potential to cause significant risks, reducing these represents a significant benefit.

Notifying us of collateral upgrade transactions with potentially risky features enables us to scrutinise these transactions more closely, stopping or applying mitigants to transactions that pose unacceptable risks to our objectives. This will result in firms and us incurring costs, but allows a firm's supervisor to address risks posed by these transactions on a case-by-case basis, which should lead to a more appropriate outcome in each case.

Additionally, firms have complained of a lack of clarity regarding the current rules around some forms of collateral upgrade transactions. This guidance should address this uncertainty to an extent, which is an additional benefit.