SOLUTIONS RELATING TO THE IMPACT OF DERIVATIVES REFORM ON PENSION FUNDS

September 2017

EXECUTIVE SUMMARY

European pension funds actively support the initiatives undertaken by policymakers in response to the 2009 Pittsburgh G20 agreement to increase the safety and stability of the financial markets. There are, however, significant adverse consequences for pension funds arising from the necessity to post cash as margin, resulting from a combination of regulation and central counterparties' (CCP) requirements to accept only cash as variation margin (VM) for cleared over-the counter (OTC) derivatives.

The structure of pension funds requires them to be substantially invested in assets to fund future pension liabilities. These assets need to appreciate in value at least in line with the expected increase in liabilities in order to meet pensioners' retirement income, and thereby help to manage pension funds' funding level or financial solvency. Pension funds are therefore natural holders of bonds and other physical assets, but do not hold much cash. Cash returns are lower and its short-term nature makes it a poor matching asset for long-dated pension fund liabilities. Large cash holdings would therefore increase the asset-liability mismatch and increase the financial solvency risk of pension funds.

Pension funds are significant users of OTC derivatives, which form an integral part of the investment approach to manage their funding level or financial solvency risk. Pension funds are able to margin these transactions using high-quality government bonds without disturbing their asset-allocation and increasing their financial solvency risk. The **inability to post margin in cash remains the most significant issue for pension funds relating to derivatives reform.**

We are grateful for the continued commitment and engagement of European policymakers to make financial regulation work for European pension funds. We welcomed European policymakers' recognition of the cash margin issue faced by pension funds, reflected by their provision of a temporary clearing exemption for pension funds within the European Market Infrastructure Regulation (EMIR), and the corresponding Credit Valuation Adjustment (CVA) exemption within the Capital Requirement Regulation (CRR) for trades that banks have with pension funds. These exemptions were intended to allow pension funds to carry on accessing the non-cleared markets while posting high-quality government bonds as margin until a technical clearing solution for the cash margin issue was found.

While these exemptions for pension funds have been helpful, more recent developments within bank capital rules have resulted in a significant reduction of banks' appetite for accepting high-quality government bonds as VM for non-cleared trades. This is because the Basel III leverage ratio and Net Stable Funding Ratio (NSFR) rules provide preferential treatment for cash VM over high-quality government bond VM. **As a result of these bank capital rules, banks are increasingly pressurising pension funds to post only cash as VM even on non-cleared trades, creating the same cash VM issue for pension funds for non-cleared trades as they face for cleared trades. This makes the non-cleared markets unworkable for pension funds, and undermines the EMIR exemption.**

We question the rationale for providing preferential treatment for cash over high-quality government bonds as collateral within bank capital rules. Cash ultimately needs to be held directly with a bank or in financial instruments such as bank certificates of deposit, bank floating rate notes, and bank or commercial paper, all which introduce a non-sovereign credit risk that can become significant under stressed market conditions. In contrast, government bonds provide a direct sovereign covenant. Thus we believe there is less credit risk attached to government bonds deemed by the market to be high-quality than to cash held in short-term instruments. This explains why government bonds deemed by the market to be high-quality are currently accepted as initial margin (IM), allowing pension funds – which hold government bonds of varying maturities to manage the profile of their liabilities – to post these bonds as IM with appropriate haircuts applied to reflect duration risk.

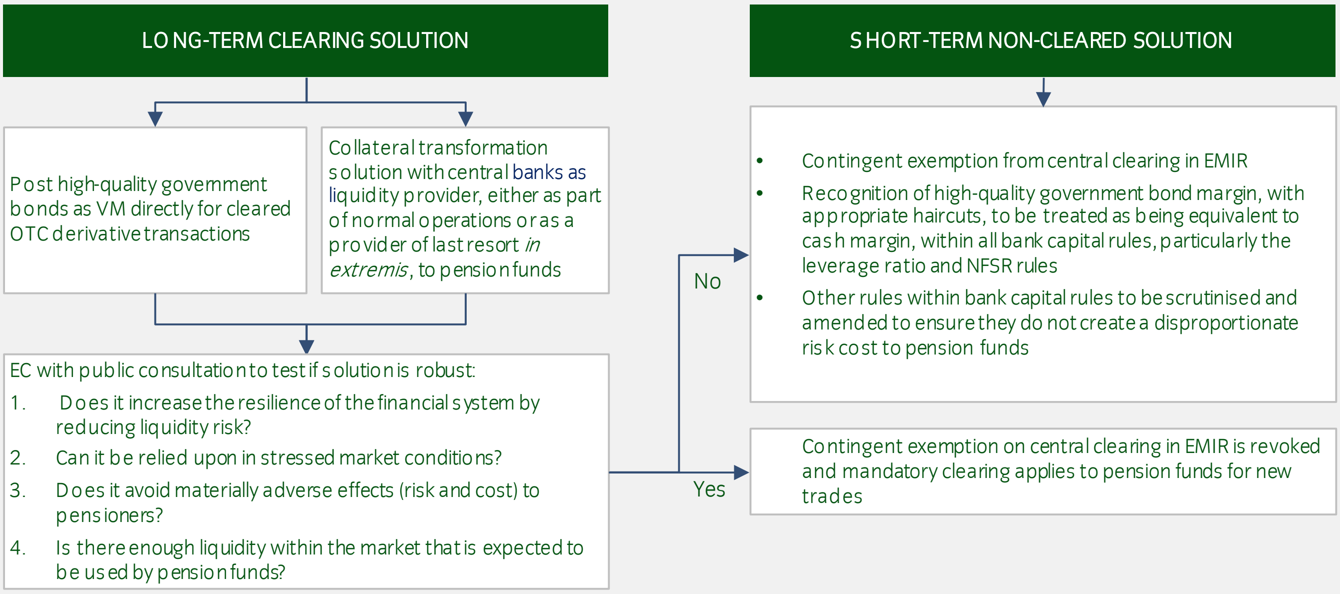
Therefore, we fundamentally believe that pension funds should be able to post, with appropriate haircuts, high-quality government bonds as VM as well as IM preferably within an appropriate cleared regime. If that is not possible, then the non-cleared regime must remain useable for pension funds.

In this paper, we outline our suggestions for both a long-term clearing solution and a short-term non-cleared solution to resolve the cash margin issue for pension funds. We believe these solutions should be progressed simultaneously as part of the current EMIR review and the European implementation of key Basel III ratios under the CRR II package. Please note that **while there is some industry support for developing direct membership clearing models, they <u>will not eliminate the need to post VM in cash</u> and therefore should not be considered as a solution for addressing pension funds' priority issue**.

- A **long-term clearing solution** could involve CCPs accepting high-quality government bonds as margin on OTC derivatives, or a collateral transformation solution that allows pension funds to transform high-quality government bonds into cash even *in extremis*. For the latter, we believe central banks would need to play a key role, and either provide liquidity as a last resort, or as part of normal market operations.
- A **short-term non-cleared solution** would involve a contingent exemption from clearing for pension funds (contingent until a robust long-term clearing solution is found), combined with key amendments to bank capital rules to ensure that the non-cleared markets remain liquid and that it does not introduce disproportionate costs or risks for pension funds during the period of the contingent exemption.
- As a priority, amendments must be made to bank capital rules in the CRR II package so that high-quality government bonds, with appropriate haircuts, are treated at least similarly to cash when posted as margin. Other elements of bank capital rules must also be scrutinised to analyse the impact on pension fund portfolios. We set out other amendments that are also likely needed.
- The contingent exemption shall be revoked by the EC once a robust long-term clearing solution is developed meeting certain pre-defined conditions, rather than expire based on some set time-limit. This would therefore **not be a permanent exemption**, and would also not take the form of a time-dependent rolling exemption, which would create market uncertainty and potentially run the risk of expiring before a solution is developed.
- We are keen to engage with policymakers, authorities, and market participants on this issue to find (technical) solutions.

In addition to the above, see the back page for futher endorsements

Illustration of the proposed solution



The following sections expand on the cash VM issue faced by pension funds, our proposed solution, the impact of bank capital rules on pension funds, and the importance of the role of central banks for a robust collateral transformation solution if CCPs could not accept bonds as VM. Please also refer to the Frequently Asked Questions (FAQ) supporting document which provides further technical details on many issues including the challenges we have faced to date on developing a clearing solution, initiatives taken by the industry, a comparison with the US pensions market and an analysis of cash versus high-quality government bond margin.

BACKGROUND

Together, as pension fund stakeholders, the supporters of this paper represent more than €1 trillion of assets managed on behalf of European pension funds.

Defined benefit pension funds within the European Union account for €2.9trn[1] of assets under management in 2015, and play an important role in the economy. They pay retirement income to pensioners; are significant investors in European infrastructure, government bonds and other assets that provide important social benefits; and they undertake prudent investment and asset-liability risk management exercises to help to mitigate risks borne ultimately by corporate (and other) sponsors on their commitment to back retirement income for their retired employees.

For many pension funds, an integral part of their investment approach is to use OTC derivatives to manage their funding level or financial solvency risk.

As already recognised by EMIR policymakers, pension funds "typically minimise their allocation to cash in order to maximise the efficiency and the return for their policy holders. Hence, requiring such entities to clear OTC derivative contracts centrally would lead to divesting a significant proportion of their assets for cash in order for them to meet the ongoing cash margin requirements of CCPs."[2]

An independent report published by Europe Economics and Bourse Consult for the European Commission (hereafter referred to as the "Europe Economics and Bourse Consult report") estimates that if European pension funds were required to post VM in cash, the total cash collateral needed by them to support a 100bp (1%) move in rates would amount to €205 billion to €255 billion, increasing to €420 billion in more stressed scenarios. It further estimates that this would cost European pensioners between €2.3 billion and €4.7 billion annually.[3] This is a significant and disproportionate cost to European pensioners. While the likelihood of this move taking place the same day may be small, the cumulative impact of a significant move in rates over a short time period would likely lead to some forced sales of physical assets in unfavourable market conditions to meet these margin calls affecting the financial solvency of pension schemes.

As an example, for a 1% rate move, a pension scheme with an average liability duration of 20 years, and using OTC derivatives to manage liability risk, would need to source cash equal to 20% of its assets assuming it is fully funded, or 28% of its assets if it has a funding level of 70%[4]. This assumes the scheme hedges 100% of its liabilities. Hedging only 50% of liabilities with swaps would

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[1] Analysis based on pensions statistic published by European Insurance and Occupational Pensions Authority (EIOPA) 2004-2015, updated 20 November 2016. Raw data can be found here: https://eiopa.europa.eu/financial-stability-crisis-prevention/financial-stability/statistics

[2] Recital 26. European Market Infrastructure Regulation Level 1 text. REGULATION (EU) No 648/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on OTC derivatives, central counterparties and trade repositories found here: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0648&from=EN

[3] Page 10. Baseline report on solutions for the posting of non-cash collateral to central counterparties by pension scheme arrangements: a report for the European Commission prepared by Europe Economics and Bourse Consult.

[4] Assuming an average duration of a swap portfolio to be 20 years (matching those of pension fund liabilities), a 1% move in rates would incur a mark-to-market of 20% (=20 x 1%) of notional of swaps.
If only 50% of the liabilities are hedged with swaps, then 1% of rate move would incur a mark-to-market of 10% (=20% x 50%) of liabilities. This is equivalent to 10% of assets if funding level is 100% (i.e. assets equal size of liabilities); or 14% (=10% / 70%) of assets if funding level is 70% (i.e. if assets are 70% the size of liabilities).

reduce this to 10% and 14% of assets respectively. It is not uncommon for pension funds to have as low as 0%-3%[5] allocation to cash and most of this will be encumbered cash to pay out retirement income. A large cumulative move in rates over a short time period would be unlikely to be met with excess cash buffers and liquidity from repo markets alone, but would likely result in some forced sales of physical assets.

The temporary clearing exemption provided under EMIR, combined with the CVA exemption under CRR rules, allowed pension funds to carry on accessing the non-cleared markets while posting government bonds as margin without incurring disproportionate costs, therefore providing a temporary relief from the cash VM issue.

However, as banking regulations have continued to evolve, we have seen two behavioural changes by banks. Firstly, there has been a gradual shift by some banks to prefer cleared trades over non-cleared trades as bank capital rules provides a strong incentive for clearing as intended by the G20. Secondly, banks have become less willing to accept high-quality government bonds as margin on non-cleared derivatives as bank capital rules provide preferential treatment for cash VM over high-quality government bond VM.

In particular, the Basel III leverage ratio and NSFR rules only permit cash VM to offset leverage ratio derivatives exposure or NSFR derivative asset exposure. As a result, many banks are now exerting pressure on pension funds to post cash-only VM even for non-cleared derivatives.

This has led to a dramatic reduction in the number of banks willing to provide liquidity to pension funds on non-cleared derivatives where pension funds post high-quality government bonds as margin, undermining the clearing exemptions provided to pension funds by EMIR policymakers. We are concerned that it will only be a matter of time before even the few remaining banks stop providing liquidity to pension funds who wish to post high-quality government bonds as margin.

As the 1 March 2017 implementation date for EMIR and other international non-cleared margin rules approached, many banks sought to re-negotiate old contractual terms and to formally refuse high-quality government bonds being allowed as VM. This change in behaviour by banks was a direct consequence of the strong incentives provided by the leverage ratio and NSFR bank capital rules, rather than the EMIR regulation and non-cleared margin rules.

The result of all these changes is that pension funds are now increasingly facing the same cash VM issues within the non-cleared regime as within the clearing regime.

At the same time, despite continued efforts by the pension fund industry, a robust clearing solution that can be relied upon in stressed market conditions, that allows pension funds to post high-quality government bonds as VM on cleared derivatives, has still not been developed. Please refer to FAQ questions 5 to 7 on this issue.

For small movements in rates and corresponding small margin calls, the repo market could possibly facilitate the transformation of high-quality government bonds into cash for pension funds, although it would introduce other risks including roll-risk and credit risk to repo counterparties. Moreover, for market movements of significant size, repo market liquidity is likely to be insufficient for the industry to rely on.

The independent Europe Economics and Bourse Consult report estimates that the cash buffer required by European pension funds for a 1% move in rates would likely exceed daily capacity within the repo markets. Furthermore, since the report was published in 2014, the repo market has come under significant pressure as banks shrink their balance sheets on the back of evolving bank capital rules. As a result, over the last couple of years we have seen a significant increase in bid-offer spreads in the government bond repo market, and a reduction in the size of the market has been cited by the International Capital Market Association (ICMA), as set out in FAQ question 4.

To protect against large movements in rates, pension funds would be forced to either divest physical assets (such as bonds and equities) to release the required cash, or avoid using derivatives. This would likely reduce potential investment returns for pension funds, harm pension funds' financial solvency and ultimately their ability to pay out retirement income. This increases the burden on pension funds' corporate (or other) sponsors and reduces the investment that European pension funds could make in European infrastructure, government bonds, and other assets that also provide important social benefits.

Further, it must be noted that the general push towards using only cash as margin is likely to ultimately create new liquidity risk within the financial system as a whole, as all market participants – not just pension funds – try to meet VM calls in cash. We believe this could significantly increase the demand for cash in times of stress when large VM calls would be expected. This is likely to significantly increase liquidity risk and exacerbate downward pressure on falling asset prices as market participants, not just pension funds, sell out of physical assets in order to meet cash VM calls. This would likely increase pro-cyclicality risk and reduce financial stability.

We believe it would be prudent to limit these risks by giving high-quality government bonds, with appropriate haircuts, at least the same treatment as cash within bank capital rules, and to explore further the possibility of creating alternative clearing models using high-quality government bonds as VM for cleared trades without also creating new disproportionate risks to pension funds, CCPs and the financial system more generally.

We would like to question the rationale behind policymakers' decision to give cash preferential treatment over high-quality government bonds. We believe high-quality government bond margin, with appropriate haircuts, is at least equal to, if not preferable to, the use of cash as margin. High-quality government bonds bear credit quality that is at least as good as, if not better than, cash; they possess the same or lower re-use risk than cash; and they bear the same contractual status as cash margin. Please refer to FAQ question 10 for more detail on these points.

We believe that all bank capital rules, including the leverage ratio and NSFR rules, must therefore recognise high-quality government bond margin with appropriate haircuts to be equivalent to cash margin. We are grateful to the EC for suggesting this in the NSFR rules as part of the EC's CRR II package, but this is still missing for the leverage ratio rules.

[5] In the Netherlands, where the majority of pension schemes are defined benefit pension schemes, an asset allocation of zero to cash is typical. See Page 7 of Global Pension Assets Study 2016 by Willis Towers Watson: https://www.willistowerswatson.com/DownloadMedia.aspx?media=%7B9FF7A5FA-C2E8-419F-9A80-149DFDE03218%7D
In the UK, cash and deposits accounted for 3% of assets in 2016 for defined benefit schemes, and most of this would be encumbered to pay out retirement income. See page 43, Figure 7.2 of The Purple Book 2016 by Pension Protection Fund: http://www.pensionprotectionfund.org.uk/Documents/Purple_Book_2016.pdf

PROPOSED SOLUTION

Given the strong market momentum towards clearing, we believe that central clearing, with a robust clearing model allowing pension funds to post high-quality government bonds as margin, is the best long-term solution for pension funds.

However, given the lack of such a clearing model today, we believe a short-term non-cleared solution should also be progressed simultaneously. Our proposal involves a contingent exemption for pension funds from clearing and amendments to bank capital rules allowing pension funds to carry on accessing non-cleared markets while posting high-quality government bonds as margin, as set out below.

Conditions for a solution:

We believe that any robust solution should meet all of the following conditions:

a) it should increase the resilience of the financial system by reducing liquidity risks;

b) it must be reliable in stressed market conditions;

c) it should "avoid materially adverse effects on pensioners" as set out in the EMIR level 1 text. We believe this includes avoiding both disproportionate risks and costs to pensioners; and

d) there should be sufficient liquidity within the derivative market that is expected to be used by pension funds. This is important to ensure that it is a useable solution that does not introduce disproportionate risks or costs to pensioners.

Long-term clearing solution:

Please note that **a direct membership clearing solution in itself does not eliminate the need to post VM in cash and therefore should not be considered as a solution for this issue.** This is discussed more in FAQ question 8.

We propose the following long-term clearing solution:

- **Pension funds post high-quality government bonds, with an appropriate haircut, instead of cash as VM directly into CCPs for cleared OTC derivative transactions.** This is currently strongly questioned or even resisted by many of the CCPs as it could increase the risk they themselves bear, while pricing and possible liquidity is also questioned by other market participants. We remain open to conversations on this where there is an appetite to engage on the topic.
- **If the above is not possible, we believe a robust collateral transformation solution would be required to allow pension funds to transform their high-quality government bonds into cash to post as margin for cleared OTC derivatives, even in stressed market conditions.** We believe it is important to acknowledge that such collateral transformation would only work if there is a reliable provider of cash, particularly in stressed market conditions. **We believe only central banks can be relied upon to provide liquidity in extreme conditions** and would therefore encourage central banks to consider acting as a liquidity provider to pension funds, either as part of normal operations or as a last resort *in extremis*, through a centralised and robust regulated entity. We are unable to rely on commercial banks to provide this service, particularly in extreme market conditions.

Short-term non-cleared solution:

In parallel to the above, we believe the following short-term solution should be progressed:

- **A contingent exemption from mandated central clearing for pension funds within EMIR (contingent until a robust long-term clearing solution is found), combined with appropriate amendments to bank capital rules within the CRR II package, should be provided.**
- **A contingent exemption is not a permanent exemption.** Its expiry is contingent on a robust clearing solution being developed. We believe it is more robust than a temporary time-based rolling exemption that creates uncertainty for the market, and has the risk of expiring before a robust clearing solution is developed. It can be argued that this aligns interests more effectively for CCPs as there would be no guarantee of winning pension funds' business unless a robust solution is developed.
- The amendments to the bank capital rules are needed to ensure that the non-cleared markets remain liquid for pension funds when posting high-quality government bonds as margin without being forced to take disproportionate risks or costs.
- **This means that all bank capital rules must recognise high-quality government bond margin with appropriate haircuts to be equivalent to cash margin.** We are grateful that the EC's CRR II package recognises this for the NSFR rules, but this is still missing for the leverage ratio rules. Specifically, the NSFR rules within the EC's CRR II package recognises VM posted as Level 1 high-quality liquid assets (HQLA) as defined in the Liquidity Coverage Ratio (LCR) rules, excluding extremely high-quality covered bonds, to be treated the same as cash VM. We request this is extended to leverage ratio rules.
- We request other elements of the bank capital rules are also scrutinised to ensure they do not create a disproportionate risk or cost to pension funds. In particular, there is a need for the following. This is further expanded in the next section:
  - IM meeting EMIR and BCBS/IOSCO[6] international non-cleared standards to be allowed to offset leverage ratio exposure for non-cleared trades. The EC's CRR II package permits this for cleared, but not non-cleared derivatives;
  - interest rate and inflation swaps to be treated within the same hedging set; and
  - the existing CVA exemption to be maintained while the clearing exemption applies to pension funds.
- We propose that once a robust clearing solution has been developed that meets the conditions set out earlier, the EC revokes the contingent exemption, upon consultation with the industry and other policymakers, while ensuring that it provides sufficient time for the pensions industry to implement the changes practically.
- We would be open to the EC conducting a review based on a set date, but the exemption should not expire based on a pre-determined date but only if a robust solution is found.

[6] BCBS refers to Basel Committee on Banking Supervision; and IOSCO refers to International Organization of Securities Commissions

BANK CAPITAL RULE AMENDMENTS NEEDED FOR A SHORT-TERM SOLUTION

Banks are a major counterparty to pension funds and we therefore support robust banking regulation. We however request that bank capital rules are scrutinised to ensure they do not disproportionately impact pension funds as banks pass on the impact to their clients. As a minimum, we feel the following changes are needed to ensure liquidity within the non-cleared markets is maintained for trades with pension funds during the period of clearing exemptions.

- **High-quality government bonds VM, with appropriate haircuts, should receive the same treatment as cash VM on OTC derivatives within leverage ratio and NSFR rules.**

  Both the Basel framework[7] and the EC's CRR II package[8] only permit cash VM to offset replacement cost (or mark-to-market) of derivative transactions when calculating exposure. Similarly, the Basel NSFR rules only permit cash VM to offset replacement cost, in the calculation of NSFR derivative assets.[9]

  We support the EC's CRR II package permitting VM in the form of Level 1 HQLA assets, excluding extremely high-quality covered bonds, to offset mark-to-market in the calculation of NSFR derivative assets.[10] We request that a similar recognition is made for Level 1 HQLA assets for the leverage ratio rules.

- **IM on non-cleared trades must offset leverage ratio exposure, particularly following the move to SA-CCR.**

  The EC's CRR II package requires leverage ratio exposure to be calculated using the SA-CCR model.[11] This significantly penalises one-directional pension fund portfolios. We believe this increases leverage exposure multiple times for a typical pension fund's non-cleared derivatives portfolio.

  We believe segregated IM posted on non-cleared derivatives meeting EMIR and BCBS/IOSCO international standards should be allowed to offset leverage exposure calculations, so that there is a mechanism to offset this increased exposure and to ensure the non-cleared markets do not become prohibitively costly for pension funds. The EC's CRR II package only permits IM to offset exposures on cleared trades, but not non-cleared, trades.[12]

- **Interest rate and inflation swaps of the same currency must be treated as being within the same hedging set.**

  The EC's CRR II package does not treat interest rates and inflation as being within the same hedging set of SA-CCR rules.[13] Interest rates and inflation swaps provide a natural offset to each other, reflecting their natural economic link. If this offset is not allowed, we believe the leverage ratio exposure for a typical pension fund's portfolio would significantly increase.

- **The CVA exemption must remain during the period of the pension fund clearing exemption.** As banking regulators overhaul the CVA methodology, we request that the existing CVA exemption for pension fund trades remains, so that the non-cleared markets do not become prohibitively costly for them.

[7] See paragraphs 25, 26 and Annex paragraph 2 of "Revisions to the Basel III leverage ratio framework - consultative document": http://www.bis.org/bcbs/publ/d365.htm
[8] See paragraphs 429c (3) of the EC's CRR II package: http://eur-lex.europa.eu/resource.html?uri=cellar:9b17b18d-cdb3-11e6-ad7c-01aa75ed71a1.0001.02/DOC_1&format=PDF
[9] See paragraphs 35 of "Basel III: the net stable funding ratio", found here: http://www.bis.org/bcbs/publ/d295.pdf
[10] See paragraph 428ag (3a) of EC's CRR II package
[11] See paragraph 429c (1) and 273(b)(65) of EC's CRR II package which replaces the standardised model with Standardised Approach for measuring Counterparty Credit Risk (SA-CCR)
[12] See paragraphs 429c (4) and 204a (62)(12a) of EC's CRR II package
[13] See paragraph 277a (1) of EC's CRR II package, although we understand there was a typo on this paragraph

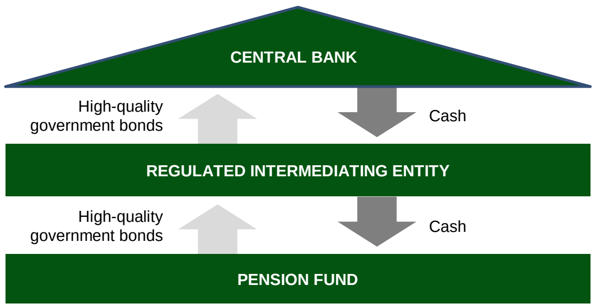
CENTRAL BANK LIQUIDITY CONDITIONAL FOR COLLATERAL TRANSFORMATION SOLUTIONS

Any collateral transformation comes with liquidity risk. Historically, banks have played a role by transforming high-quality government bonds into cash for market participants, supported by their access to central banks. With the onset of recent regulation, banks have been shrinking their balance sheets and are less able to provide this service. At the same time, the general push to post cash as margin is forcing non-bank entities such as pension funds, which do not benefit from central bank access, to take on this liquidity risk. Although pension funds could manage this in normal market circumstances, we believe this would be difficult in extreme market circumstances.

Given the changing landscape, we believe it is necessary for central banks to consider providing liquidity for pension funds. We believe it would ultimately reduce overall liquidity risks and make the financial system more resilient. We are keen to engage with policymakers to structure this to address any concerns they may have. Our initial thoughts are set out below.

- Central banks provide a high-level commitment to provide cash in exchange for high-quality government bonds to pension funds, at a cost and with a prudent haircut. This commitment could be provided either as part of a normal course of business or only as a last resort *in extremis*.
- The cost and haircut can be set up appropriately to align interests and to address any moral hazard concerns and to reduce any credit risk that the central bank may be taking.
- We propose that a high credit-quality, regulated entity intermediates between pension funds and central banks. This would avoid central banks having to have a direct relationship with hundreds of pension funds. Instead, they would have a relationship with an entity they regulate.
  - This entity could be an existing CCP, or any other regulated entity set up purely for this purpose (e.g. a new CCP that only trades with central banks and pension funds, or a new banking entity).
  - One option could be to link this to function to existing repo clearing facilities of CCPs which can intermediate between pension funds and central banks. However, a repo clearing service without central bank support is not a solution in itself as there is no guarantee that a cash provider would be there when needed.
- It is important to note that central banks would be exchanging eligible collateral of the state, or eurozone states, for cash in the same currency. The risk they would be taking would therefore be a combination of maturity transformation and credit risk, which could be appropriately managed with prudent haircuts

Proposed collateral transformation solution illustration



Alcatel Lucent Pension Scheme

Associated British Ports Group Pension Scheme

AstraZeneca Pensions Trustee Limited

Diageo Pension Trust Limited

EDS Trustee Limited

Goodyear Dunlop Tyres UK (Pension Trustees) Limited

Hewlett Packard Enterprise UK Pension Trustee Limited

ICL Pension Trust Limited

Kingfisher Pension Scheme

Marks and Spencer Pension Trust Limited

Nationwide Pension Fund

PACE Trustees Limited as trustee of The Co-operative Pension Scheme (Pace)

Pilkington Superannuation Scheme

QinetiQ Pension Scheme

Rentokil Initial Pension Trustee Limited

The Trustees of the Saint-Gobain UK Pension Scheme

Stanhope Pension Trust Limited

Taylor Wimpey Pension Scheme

TCG Southern Trustees Limited as trustee of The Somerfield Pension Scheme

Contacts

For further information please contact us, details below:

APG

Zöhre Tali
zohre.tali@apg-am.nl

ATP

Henrik Brarup Damgaard
hkh@atp.dk

Insight Investment

Vanaja Indra
vanaja.indra@insightinvestment.com

MN

Christiaan Wanningen
cfw@mn.nl

PGGM

Michel de Jonge
michel.jongede@pggm.nl

PKA

Inger Huus Pedersen
ihu@pka.dk