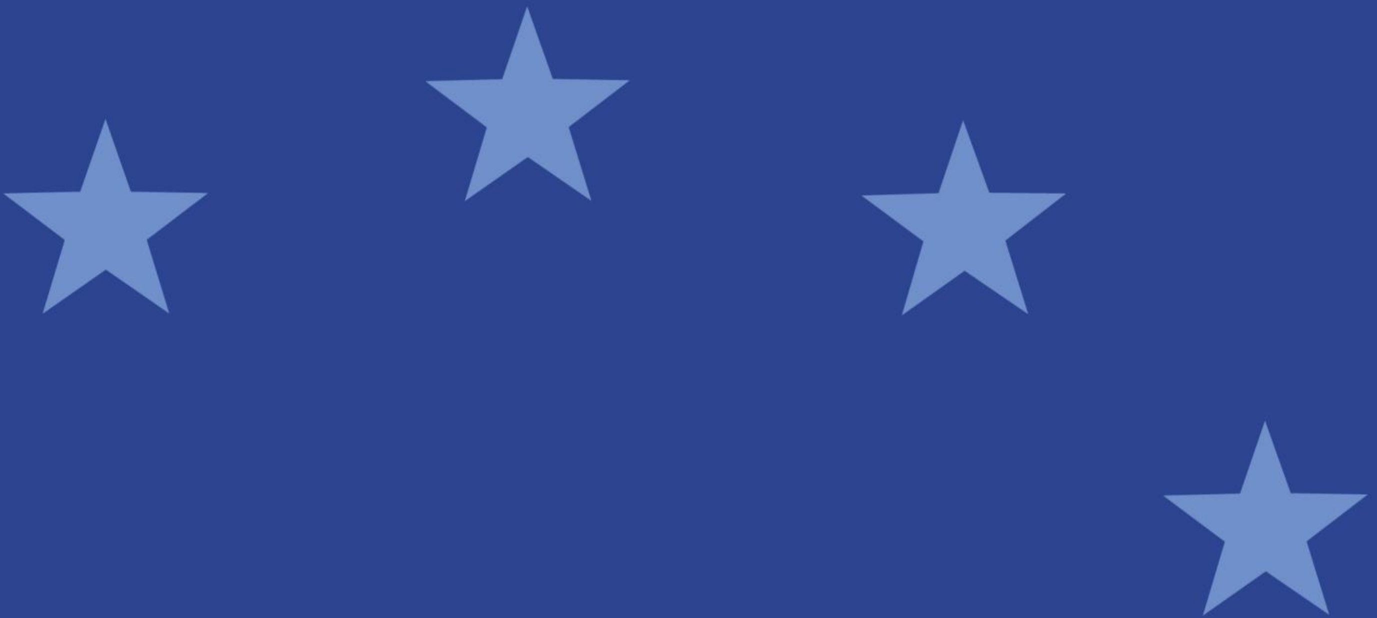
First Report for Consultation

Central Clearing Solutions for Pension Scheme Arrangements



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Acronyms

BCBS	Basel Committee on Banking Supervision
CCP	Central Counterparty
CRR	Capital Requirement Regulation
CSD	Central Securities Depository
EBA	European Banking Authority
EEA	European Economic Area
EIOPA	European Insurance and Occupational Pensions Authority
EMIR	European Market Infrastructure Regulation
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
FC	Financial Counterparty
GDP	Gross Domestic Product
HQLA	High Quality Liquid Asset
ICMA	International Capital Market Association
IM	Initial Margin
LR	Leverage Ratio
NFC	Non-Financial Counterparty
OTC	Over-The-Counter
PSAs	Pension Scheme Arrangements
UCITS	Undertakings Collective Investment in Transferable Securities
VM	Variation Margin

1 Executive Summary

Reasons for publication

Regulation (EU) 2019/834 (hereinafter ‘EMIR Refit’) entered into force on 17 June 2019 and has introduced a number of amendments to EMIR, one of them being a further extension of the exemption from the clearing obligation for pension scheme arrangements (PSAs). This extension was introduced because of the challenges that PSAs would face to provide cash for the variation margin calls related to their cleared derivative contracts.

However, this extension goes hand in hand with the EMIR Refit objective of also ensuring that progress is made by the relevant stakeholders in addressing these challenges and for PSAs to clear their contracts. As part of this latter objective, EMIR Refit provides that the European Commission should prepare a report assessing whether viable technical solutions have been developed for the transfer by pension scheme arrangements of cash and non-cash collateral as variation margins and the need for any measures to facilitate those viable technical solutions.

As a first milestone of that monitoring, and in order to provide input for the report from the European Commission, the European Securities and Markets Authority (ESMA) is required under EMIR Refit to produce, in cooperation with the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA) and the European Systemic Risk Board (ESRB), a first report to the European Commission, within 6 months from the entry into force of EMIR Refit, documenting the progress made towards clearing solutions for PSAs. This document only constitutes a preliminary report on which ESMA is publicly consulting in order to provide for the second phase more comprehensive input to the European Commission. The deadline for this first report has not allowed sufficient time for other authorities to provide their views, beyond cooperation with technical staff. Therefore, this report represents ESMA’s current understanding of the issues faced by PSAs in dealing with cash variation margins, the issues encountered by CCPs and clearing members in providing viable alternatives to posting cash for the purpose of meeting variation margin calls, and a provisional analysis of the possible solutions. ESMA has given due consideration to the work and discussions of the Expert Group set up by the European Commission as required under EMIR Refit. Following the consultation and for the purpose of preparing a second report to the European Commission, ESMA intends to cooperate closely with EBA, EIOPA and the ESRB and allow for the full reflection of their views.

In addition, in preparation for the second report due in a year’s time and in order to get input from a wide range of stakeholders, this report also serves as the basis for a public consultation, and thus also includes a range of questions.

Contents

This report presents in Section 3 the regulatory context of this report, the next regulatory steps initiated by EMIR Refit and what is their implication for ESMA.

Section 4 introduces the issue at stake and studies more specifically in its sub-sections the rationale for the usage of derivatives by PSAs, the issues caused by central counterparties' requirement to have variation margin calls fulfilled exclusively in cash and its quantitative impact.

Section 5 concerns the ongoing exemption of clearing for PSAs, while Section 6 explores the different solutions envisaged so far to facilitate PSAs to centrally clear their over-the-counter trades.

The last section highlights the expected steps following this report.

Annex 1 provides the EMIR Refit articles relevant to central clearing obligations for PSAs, while Annex 2 presents the questionnaire with respect to central clearing obligations for PSAs, and more specifically solutions to facilitate PSAs discharging their variation margin requirements.

Next Steps

ESMA is submitting this first report to the European Commission. In addition, ESMA uses the publication of this report to also launch a public consultation with the questionnaire included in Annex 2 of the report. This consultation will allow ESMA to gather input and drill further down into the issues, collect data and have a better representation of the range of views from stakeholders beyond the ones actively participating in the Expert Group.

The feedback received to this consultation and the additional discussions of the expert group will thus serve as the basis for developing the second report due by December 2020. ESMA intends to cooperate closely with EBA, EIOPA and the ESRB in the development of this second report to allow for the full reflection of their views in the report.

2 Introduction

1. EMIR requires specifically identified standardised over-the-counter (OTC) derivatives to be cleared via a central counterparty (CCP) as a measure to mitigate risks. OTC derivatives are vital to manage European pension funds' solvency risks and the European Securities and Markets Authority (ESMA) is very much aware of the challenges that pension scheme arrangements (PSAs) would face to start clearing their OTC derivative contracts.

2. It must be highlighted that the funded occupational pensions' landscape is very heterogeneous across EU countries, not only in terms of size, but also in terms of vehicles or nature of the pension promise[1]. Some member states mostly rely on the pay-as-you-go first pillar to provide for adequate pensions, while others rely on the third pillar private pensions. EU countries representing a significant share of pension fund assets in the EU are the Netherlands and Denmark (as well as the UK, if we consider the EU before the 31 January 2020, as this analysis and this report were developed before that date), with a pension fund landscape rather concentrated in the Netherlands and Denmark. Moreover, it is in these two countries (as well as in the UK) that the use of derivatives by PSAs is the most pronounced.

3. Central counterparties currently only permit variation margin (VM) to be posted in cash. This requirement to post cash VM requires counterparties directly interfacing CCPs, and so potentially PSAs should they become direct members, to hold sufficient liquid resources. Holding cash buffers results in heightened liquidity requirements and could have knock-on effects on the strategic investment allocation for PSAs, which in turn was identified as an obstacle for them to access central clearing.

4. EMIR introduced to this end an initial temporary exemption, which expired on 16 August 2018, for PSAs from the clearing obligation to allow time for a suitable solution for the transfer of non-cash collateral as variation margins to be developed.

5. In view of the fact that no suitable technical solution for the transfer of non-cash collateral as variation margins had been found by CCPs and clearing members, the European Commission's proposal to amend EMIR (EMIR Refit) included amongst other measures a further extension until June 2021, potentially to be extended by another year or two, of the temporary exemption for PSAs from the clearing obligation.

6. There are a number of reasons which, so far, may have prevented viable solutions to be developed. Firstly, the characteristics of some PSAs' derivative portfolios, which are typically significant, long dated and unidirectional, coupled with investment strategies that usually prevent PSAs from increasing their cash holdings and a limited access of PSAs to liquidity via banks. Secondly, technical and legal risk management considerations introducing significant complexities for CCPs to step away from their current cash variation

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[1] It must be highlighted that Pension Scheme Arrangements are not only pension funds (i.e. Institutions for Occupational Retirement), but also include other national arrangements with the objective of asset management for retirement purposes.

margin protocols. Viable solutions will therefore require significant effort and collaboration from a number of actors including both the industry and policymakers.

7. It is however ESMA's assessment that it is only a matter of time before PSAs will need to clear at a large scale, not only because the exemption will eventually expire but also because liquidity is expected to shift to clearing due to strong incentives provided by market forces, driven by clearing obligations, bilateral margining requirements and capital requirements. Hence, there is urgency to develop a viable technical solution.

8. Moreover, with respect to systemic risk, the April 2017 ESRB opinion on Revision of the European Market Infrastructure Regulation concluded that:

   "While recognising the challenges faced by some counterparties in meeting the clearing obligation, the ESRB advises caution regarding exemptions from central clearing. It agrees with the European Commission's assessment that disproportionate costs and burdens need to be reduced. However, it supports a broad application of the clearing obligation, including for pension scheme arrangements and large non-financial counterparties (NFCs) that are active in the derivatives market."

9. The European Commission has set up a dedicated stakeholder group which brings together pension funds, CCPs, banks, CSDs, EU policymakers and central banks in order to work on a robust solution to the cash VM issue that can be relied upon in stressed market conditions. This may imply the assurance of a liquidity provider to transform high-quality government bonds into cash at a cost.

10. This report, after providing information on the regulatory context, presents the issue in Section 4, and studies more specifically in its sub-sections the rationale for the usage of derivatives by PSAs, the issues caused by CCPs' requirement to have VM calls fulfilled exclusively in cash and its quantitative impact. Section 5 discusses the ongoing exemption of clearing for PSAs, while Section 6 explores the different solutions envisaged so far to facilitate PSAs to centrally clear their OTC trades. The last section highlights the expected steps and the work that will follow this report. Lastly, the annexes provide the EMIR Refit articles relevant to Central Clearing Obligations for Pension Scheme Arrangements as well as the questionnaire for public consultation with respect to central clearing obligations for pension scheme arrangements, focusing more specifically on solutions to facilitate PSAs discharging their variation margin requirements.

3 Regulatory context of this report

11. EMIR Refit (see Annex 1) provides that the Commission should monitor the progress made by CCPs, clearing members and PSAs towards viable solutions facilitating the participation of PSAs in central clearing and prepare a report on that progress.

12. In order to provide input for this report from the European Commission, ESMA is required to produce a first report within 6 months from the entry into force of Refit, and every 12 months thereafter until the end of the exemption period, in cooperation with the EBA, EIOPA and the ESRB.

13. These reports must not only cover the solutions themselves but also the related costs for PSAs, thereby considering regulatory and market developments such as changes to the type of financial counterparty subject to the clearing obligation, and specifically must assess:

- whether the main market stakeholders have reached viable technical solutions to facilitate the participation of PSAs in central clearing by posting cash and non-cash collateral as VM;

- the implications of those solutions on market liquidity and procyclicality and their potential legal implications;

- the volume and nature of the activity of PSAs in cleared and non-cleared OTC derivatives markets, within each asset class, and any related systemic risk to the financial system;

- the consequences of PSAs fulfilling the clearing requirement on their investment strategies, including any shift in their cash and non-cash asset allocation;

- the implications of the clearing thresholds for PSAs;

- the impact of other legal requirements on the cost differentials between cleared and non-cleared OTC derivative contracts, including margin requirements for non-cleared derivatives and the calculation of the leverage ratio;

- whether any further measures are necessary to facilitate a clearing solution for pension scheme arrangements.

14. The deadline for this first report has not allowed sufficient time to consult publicly and little time for other authorities to provide their views, beyond cooperation with technical staff. Therefore, this report represents ESMA's current understanding of the issues faced by PSAs in dealing with cash variation margins, the issues encountered by CCPs and clearing members in providing viable alternatives to posting cash for the purpose of meeting variation margin calls, and a provisional analysis of the possible solutions. Furthermore, a questionnaire is included in annex as this report is intended as the starting point to publicly consult stakeholders, coordinate with the other authorities and develop recommendations in the subsequent reports.

4 Presentation of the issue

4.1 Why pension funds use derivatives

15. With an estimated total of aggregate assets above 4.03 trillion euros in the European Economic Area (EEA) in 2018[2], the European pension fund sector is a major participant in derivative markets.

16. The significance and size in terms of assets under management of private pension funds is diverse in the EEA. It is dominated by the large Dutch pension fund sector with investment assets amounting to 1.5 trillion euros at end of Q2 2019[3] (if considering the situation before the UK exit, then the UK would come first with 1.8 trillion Euro in the Defined Benefit sector). As for Denmark, its pension fund market was estimated at 610 billion euro at end 2018[4]. With regards to the average ratio of assets to GDP, as of end 2018, Denmark topped the ranking with assets worth 198.6% of GDP, followed by the Netherlands with 173.3%.

17. Unlike US counterparties, which use predominantly corporate bonds, EEA PSAs rely more on swaps as a key instrument for managing financial solvency risk. This is driven by a number of factors.

18. Firstly, structurally speaking, PSAs typically have long duration of liabilities (longer than US pension funds): liabilities valuation basis is typically based on nationally set discount rates, sometimes based on high-quality government bonds or swaps, rather than AA corporate bonds as for US pension funds, and the European corporate bond market is less deep when compared to the US.

19. Secondly, the current low interest / low yield environment is challenging for PSAs, which may pose the risk of a search for yield exposure, for instance via sophisticated investment approaches such as liability-driven investments, yet most PSAs in the European Economic Area are subject to strong, national investment rules.

20. Also, some PSAs invest to a great extent in high-quality government bonds to hedge their liabilities. As such, PSAs are often asset-rich and such assets are typically of high credit quality. However, the ability to fully hedge liabilities with bonds is constrained by the amount of bonds available for long-dated maturities. Derivatives have the dual advantage of being available for longer maturities (greater than 50 years) and can also be tailored (over-the-counter products) to more accurately match the dates of pension funds' liabilities, which is not generally possible with bonds. PSAs are as a result more likely to use OTC

[2] PensionEurope, Pension Fund Statistics 2018
[3] Source: EIOPA
[4] Source: http://www.oecd.org/daf/fin/private-pensions/Pension-Markets-in-Focus-2019.pdf

derivatives to create synthetic hedges for some of their long-term liabilities against a series of risks, such as interest rate and inflation volatility risks.

21. Lastly, prudential regulation in some Members States requires pension funds to value liabilities using an interest rate swap curve, rendering OTC derivatives - i.e. interest rate swaps - the natural hedging instrument.

22. All these factors lead to the fact that, unlike US pension funds, in a few Member States an integral part of the investment approach of a substantial proportion of the European pension fund sector (in terms of assets), yet limited to relatively few actors, is to use OTC derivatives to manage their interest rate risk as their liabilities are often long-dated, unidirectional and linked to interest rates and/or inflation. Pension funds are allowed to use these derivatives only for managing risks[5].

23. Consequently, such European PSAs typically have derivative portfolios which are large, long dated and unidirectional to offset risk relating to their liability profiles. Portfolios with such characteristics of size, duration and directionality constitute a meaningful counterparty risk, and, considered from the angle of the aggregate position of the industry, potentially a systemic risk. This has precisely been the type of risk that led to the introduction of the clearing obligation in the first place. On the other hand, such characteristics tend to magnify the implications of OTC derivatives regulations for pension funds, in particular the magnitude of initial margin required due to their long-term unidirectional cleared portfolios.

24. In conclusion, ESMA understands that PSAs have a structural need for engaging in OTC derivatives and specifically in OTC derivatives which are mandated to clear. Unless the European bond market changes significantly from the current situation, with a much larger availability of long-dated bonds, both from sovereign and corporate issuers, ESMA also understands that this need is permanent, and cannot be adequately fulfilled without the use of derivatives.

4.2 Why the central clearing requirement to post variation margin in cash poses serious challenges for PSAs

25. Central counterparties' current operational models only permit variation margin to be posted in cash by their clearing members. Some CCPs allow members to collateralise intraday margin calls with non-cash instruments, but these are considered as a form of insurance against the possible non-performance in meeting the end of day variation margin call, which still needs to be posted in cash. This is possible because intraday margin calls,

[5] Article 18.1(d) of the IORP Directive (2003/41/EC) stipulates that "investment in derivative instruments shall be possible insofar as they contribute to a reduction of investment risks or facilitate efficient portfolio management". This requirement is carried over into the IORP II Directive, which applies from January 2019.

unlike the end of day ones, are not redistributed to members, but only called from members out of the money with the CCP; they are therefore functionally closer to initial margins than to variation margins. It is the need of the CCP to redistribute the variation margin collected from clearing members with a debit balance to clearing members with a credit balance that is the driver for the need to have variation margins in the form of cash, which can then be redistributed with precision and finality, leaving no residual balance or risk with the CCP.

26. This implies that a sharp move in rates, either overnight or over some period, would require any PSA engaging directly with a CCP, just as any other member, to post (or receive) large amounts of cash in extremely short time frames for cleared trades. Should a PSA's existing liquidity provisions not suffice to meet a VM call within a few hours, which can prove challenging in stressed market conditions, or if it were unable to quickly sell assets, the CCP would be forced to declare it in technical default.

27. PSAs are often asset-rich and typically do not exhibit high allocation towards cash, with the exception of some Member States where the investment allocation is highly skewed to cash and cash-like deposits. Often PSAs have a large allocation to high-quality government and corporate bonds, usually matching the currency of their liabilities. However, there are some PSAs that exhibit high exposures to non-EEA capital markets.

28. Although PSAs could increase their holdings of cash from current levels to support central clearing, increasing cash holdings to the level required would have multiple negative impacts.

29. Firstly, holding liquidity buffers in the form of cash or very short dated instruments is problematic in designing portfolios of assets that match PSAs liability profiles, and therefore can undermine efforts to manage risk prudently. Secondly, and assuming a positively-sloped yield curve, short term assets and cash constitute a yield drag, reducing portfolios' investment returns, which compounded over a number of years may potentially represent a significant dent in the expected income for retirees. Finally, where liquidity is in the form of cash deposits, it exposes PSAs to concentrated credit risks to the banking sector, as opposed to sovereign or non-financial corporate risk. Admittedly, the currently low, ultra-low and negative interest rate environment makes some of these considerations less impactful.

30. For all the above reasons, ESMA understands that PSAs' preference when engaging with derivatives is to post variation margin in the form of high-quality government bonds that form part of their investment portfolio, which is admissible in the context of non-centrally cleared contracts.

31. ESMA also understands that, although some PSAs have voluntarily started to clear, this has been related to small volumes and in the capacity of clients of clearing members, and that what is holding back PSAs from clearing in large scale is primarily the cash VM issue, other issues related to clearing being of second order importance. However, it is unlikely that all PSAs would be eligible to become direct members, due to the size and complexity of their derivatives portfolio.

4.3 Quantitative impact

32. Having to post cash as VM may necessitate changes to pension funds' investment portfolios, and therefore may impact the performance of the pension funds and potentially Dutch and Danish pensioners (as well as UK pensioners, as the UK is considered in this report although an ex-Member State by now) who actually depend on the retirement income from private pension funds. This yield drag can take the form of lower return from the liquidity component of the portfolio, as well as funding costs of securing liquidity such as repos or bank credit.

33. There are two dimensions that need to be considered when estimating the impact of posting cash VM: the compounded effect of the yield drag over long investment periods, and the increased risks on PSAs' performance of technical defaults from unmet VM calls due to unexpected volatility spikes, which could result in early termination of contracts, loss of collateral and additional replacement costs to re-establish hedges and synthetic positions.

34. An independent report published by Europe Economics and Bourse Consult in 2014 for the European Commission ("Europe Economics and Bourse Consult report"[6]) estimated 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 estimated the potential annual reduction of returns for pension funds between €2.3 billion and €4.7 billion.

35. The aim of the above study was purely to quantify the isolated impact in VM that such rate move would have for pension funds. From a systemic risk perspective at European level, it is worth noting that during such a move, costs and risks are not specific to PSAs only, but impact in the same way all centrally cleared derivative users, including banks, UCITS funds or insurance companies. Moreover, risks of technical default for lack of eligible collateral impact bilateral positions as well as cleared positions. However, ESMA understands that PSAs are somewhat more constrained in their capacity to mitigate these risks, through limited flexibility in investment strategies, availability of investment matching the liability profiles, or access to alternative sources of liquidity.

36. In addition, while the likelihood of such a move over the same day is small, the cumulative impact of a significant move in rates over a short time period would likely lead to a race for cash collateral, which could involve actions ranging from bank funding or using the repo market to some forced sales of non-cash assets in adverse market conditions to meet these margin calls, affecting the financial solvency of PSAs. In a worst case scenario, a

[6] 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

massive cash collateral requirement would create liquidity risks for PSAs in a situation where the risk of intrinsic default of the PSA does not exist.

37. Finally, ESMA expects that markets will progressively move towards multilateral trading and away from bilateral OTC execution, which in turn implies a greater share of centrally cleared volumes. The impact of this shift is that liquidity, and therefore pricing, will become progressively better in the cleared segment.

5 Exemption of clearing for PSAs

38. Taking into consideration the long-term nature of the PSAs' activities and the structural difficulties they face in meeting largely one-sided variation margin cash calls for the clearing of their OTC derivatives through CCPs, EU policymakers provided a temporary exemption from the requirement to centrally clear derivatives for PSAs within the initial EMIR framework[7]. The transitional provision also aimed at providing further time to find an alternative solution which would allow pension funds to use high-quality securities, with appropriate haircuts, when posting VM for cleared derivatives.

39. More specifically, Recital 26 and Article 85(2) of EMIR establish that the clearing obligation is not to apply to PSAs until an appropriate technical solution is developed by CCPs for the transfer of non-cash collateral as variation margins.

40. This initial temporary exemption under EMIR for European pension funds expired on 16 August 2018. With the objective to avoid a disruption to certain PSAs who may have faced potential challenges clearing their OTC derivative contracts between 17 August 2018 and the entry into force of the new temporary exemption under EMIR Refit, ESMA publicly communicated that it expected national competent authorities to not prioritise their supervisory actions towards entities that were expected to be exempted again in a relatively short period of time, and to generally apply their risk-based supervisory powers in their day-to-day enforcement of applicable legislation in a proportionate manner.

41. It is within this context that the European Commission organized a series of roundtables in 2017 and 2018 to facilitate the discussion between the relevant stakeholders including not only the PSAs and CCPs but also clearing members and Central Banks, to monitor progress of industry efforts in this regard and to explore the remaining obstacles to the deployment of central clearing solutions for PSAs.

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[7] In terms of the exemption from the clearing obligation for PSAs, Capital Requirements Regulation envisages a similar exemption for banks' capital requirements for CVA risk on trades entered with PSAs. Such exemption is specified under Article 382(4)(c) of the CRR, and is closely linked to the clearing obligation under EMIR, also in terms of timing for its application/expiry.

42. As part of the EMIR review, the Commission recognised in its May 2017 legislative proposal, that no viable solution facilitating PSAs to centrally clear their OTC trades has been developed so far and that the temporary derogation should therefore be extended further. The purpose of this extension is to allow CCPs and other relevant stakeholders to develop a robust solution to enable PSAs to centrally clear – including in periods of market stress – without negatively impacting the revenues of future pensioners.

43. EMIR Refit now states that the transitional provision for European pension funds will expire on 18 June 2021, and further specifies that the Commission may adopt a delegated act to extend this exemption twice, each time by one year, where it concludes that no viable technical solution has been developed and that the adverse effect of centrally clearing derivative contracts on the retirement benefits of future pensioners of impacted member states remains unchanged.

44. EMIR Refit also provides for a new regime to determine when Financial counterparties (FC) and Non-Financial counterparties (NFC) are subject to the clearing obligation, depending on whether their positions exceed or not the clearing thresholds[8]. Differences between the two regimes exist not only with respect to the scope of application of the clearing obligation but also with respect to the calculation of the positions. As for the scope, when non-financial counterparties conduct the calculation, they are only subject to the clearing obligation for the OTC derivative contracts pertaining to those asset classes in respect of which the result of the calculation exceeds the clearing thresholds. As for the calculation, one important difference is that non-financial counterparties only need to include the OTC derivative contracts which are not objectively measurable as reducing risks, whereas financial counterparties need to include all OTC derivative contracts they enter into or novate, in accordance with Article 4a(3) and Article 10(3) respectively. It is however unknown at this stage what the impact of the amendments in Article 4a of EMIR will be with respect to the numbers of pension funds subject to the clearing obligation.

45. Central clearing however remains the ultimate aim, considering that regulatory and market developments enable market participants to develop appropriate technical solutions within that transitional period.

46. European PSAs are indeed expected to clear in the near future, not only because they are mandated to clear, but also due to market forces, driven by clearing obligations, bilateral margining requirements and capital requirements, expected to continue to shift liquidity to cleared trades. As the 2018 ESMA Annual Statistical Report on EU Derivatives Markets[9] indicates in 2017, clearing rates varied between 40% and 58% of gross notional amount

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[8] The clearing thresholds are defined under Article 11 of Commission Delegated Regulation (EU) No 149/2013:

- EUR 1 billion for credit derivative contracts
- EUR 1 billion for equity derivative contracts
- EUR 3 billion for interest rate derivative contracts
- EUR 3 billion for foreign exchange derivative contracts
- EUR 3 billion for commodity derivative contracts and others

[9] https://www.esma.europa.eu/sites/default/files/library/esma50-165-639_esma-rae_asr-derivatives_2018.pdf

for Interest Rate Derivatives. The ESMA Report on Trends, Risks and Vulnerabilities No. 2, 2019[10] also highlights the visible impact of the clearing obligation, with an increase of quarterly volumes of interest rate derivatives cleared during the last two years, from a low of EUR 107tn in 3Q17 to EUR 170tn in 1Q19. Lastly, while IM for non-cleared swaps encourages clearing in certain market segments, regulatory capital requirements for cleared versus non-cleared swaps as well as the significant benefits flowing from the ability to net a large and diverse swaps portfolio with a single CCP also constitute great economic incentives to clear.

6 Solutions explored so far to facilitate PSAs to centrally clear their OTC trades

47. Can PSAs submit anything else than cash to pay their VM? Is there a solution where PSAs would not have to substitute their non-cash assets into cash? There are a number of reasons why no viable solution to these questions could be provided to date. The main one is that technically it seems a complex problem to solve, and the solution requires extensive effort and collaboration from a range of stakeholders including both the industry and policymakers.

48. During the last few years, many stakeholders have engaged extensively on this cash VM issue, exploring various solutions. Obviously, the pension industry participated, but also the CCPs, banks, other market participants and EU policymakers.

49. Financial stability is at the heart of the issue: consequently, any solution should ensure the financial stability of the overall system.

50. In addition, if there is a clear and logical awareness that increasing financial stability and resilience would necessarily entail some increase in costs for users, one of the characteristics of the solution looked for is that the impact of PSAs funding costs on pensioners remains reasonable, compared to the status quo.

51. While no single "silver bullet" solution has emerged so far, participants agreed on required pre-conditions for a workable solution:

    - the solution should strike the right balance between the objectives (i) of financial system resilience and (ii) that the PSAs' participation in central clearing does not impose a cost on end users which is disproportionate compared to the policy objectives;

[10] https://www.esma.europa.eu/sites/default/files/library/esma_50-165-883_report_on_trends_risks_and_vulnerabilities_no.2_2019.pdf

- the solution can only be deemed functional if it is robust enough to be relied upon in both normal and stressed market conditions.

52. If the first condition could already be achieved through existing clearing models and infrastructures, a robust solution allowing pension funds to post high-quality government bonds as VM that can be relied upon in stressed market conditions has not been developed.

53. When assessing possible solutions to the cash VM problem, there are two broad approaches: the ones exploring how CCPs can overcome their functional need for cash VM and the ones exploring how PSA can overcome their impediments in term of cash availability to meet cash calls.

54. This report explores both types of solutions without prejudice: the ones targeting more flexibility in CCPs' models to accept non-cash collateral as VM (section 6.1), and those allowing PSAs to get a greater and continuous access to cash. Three different options for this last solution are developed in greater details hereafter: relying on the ancillary services of collateral transformation of clearing members (section 6.2); the market-based repo solution (section 6.3); and, providing access to alternative emergency liquidity arrangements (section 6.4).

6.1 CCPs accepting non-cash collateral for VM settlement

55. This section explores the scenario where PSAs become direct clearing members and are allowed to post high quality bonds, with an appropriate haircut, instead of cash for their variation margin calls directly to the CCP. Incidentally, this was historically the most commonly raised option by PSAs. Exploring this possibility at the very beginning seems rational. The cash VM is a CCP-specific feature with significant operational impact on all CCP users, both direct and indirect. It thus seemed appropriate to ask whether this is a negotiable requirement, perhaps the result of legacy operational set-ups, which can be overcome by technology or regulation, and to investigate how realistic or costly it would be to remove the impediment at the source before one embarks in looking for alternative solutions.

56. The purpose of VM is to allow the CCP to rebalance daily any credit or debit positions towards its members. During a normal VM cycle – one where there are no defaults – the CCP will collect from members all VM due representing their portfolio losses, and redistribute to members all VM owed, representing their portfolio gains towards the CCP. These transfers net out precisely, leaving the CCP with no residual credit or debit balance at the end of the cycle, and are final. The result is that the CCP resets all positions to zero at the end of each cycle, and in so doing restores the loss capacity absorption of the initial margin collected, which is no longer encumbered by unpaid intraday losses.

57. Cash is functional in performing these functions, because it has a stable and unquestionable value, it can be moved quickly for any amount and at very little cost, and its transfer is final. Substituting bonds for cash would imply a number of things.

58. Firstly, one would need to have certainty and stability of the value of the bond posted in lieu of cash. Whereas the nominal value of cash is constant and will not change with time, the value in cash of a security – no matter how liquid, of high quality or short tenor – will always be subject to market action. Therefore, a precondition for developing a solution would be for members to agree on valuation protocols for posted collateral. This in turn implies agreement over the correct Price Alignment Interest[11]. CCPs would not know what collateral would be posted, leading to complications with respect to the 'cheapest to deliver'. Without the Price Alignment Interest, the discount factor cannot be determined, nor the valuation calculated. And without the valuation, the VM cannot be determined.

59. Due to significant operational and legal risk challenges resulting from the fact that variation margins need to be passed through daily between counterparties on either side of back-to-back trades, that solution would leave counterparties with a negative mark-to-market VM with a shortfall in meeting their VM obligations to those counterparties that have a positive mark-to-market.

60. Alternatively, CCPs could transform the non-cash collateral into cash on behalf of the PSA members. CCPs receive large portions of their IM from members in the form of cash, which is routinely invested in bank deposits, repos and high-quality liquid assets (HQLA). Technically this would be as if the PSAs became one of the approved repo counterparts of the CCP, and the posting of non-cash VM could be technically viewed as two separate operations: a repo transaction where the CCP invests the cash IM through a repo transaction with the PSA, and the PSA posting the proceeds to meet the cash call.

61. However, from a risk profile and business model perspective, should CCPs be required to routinely accept non-cash collateral for VM, their role of pass-through entity of the VM would be altered: they would have to run an investment book made up of securities sales and repos so that they convert the non-cash assets provided by PSAs as VM to pay out cash to the VM gainer. This is different from the current repo book for IM reinvestment due to the commitment to a specific counterparty (the PSA), and the implicit wrong-way risk.

62. Consequently, such requirement would challenge the premise that CCPs maintain a risk-neutral and flat book, may alter CCPs' resilience and would increase CCPs' exposure to non-default losses.

63. Many discussions with CCPs so far on whether they could accept bonds as VM concluded on the unfeasibility of finding operational solutions for CCPs to accept non-cash VM. Moreover, other than for risk management considerations, given the critical role in the reduction of systemic risk in the markets they serve, CCPs may not be the right place to

[11] Price Alignment Interest is the overnight cost of funding collateral. It is debited from the receiver and transferred to the payer to cover the loss of interest on posted collateral.

look for a solution. Indeed, apart from increasing operational and legal risk at CCPs, which may not be commensurate to the benefits it would provide, these benefits would apply only for direct membership of PSAs, which seems restricted, even going forward.

64. This solution, gathering strong reservations from many stakeholders, CCPs obviously but also regulators, was eventually disregarded, and the focus switched to how PSAs can fund cash VM with reliable sources of liquidity.

6.2 Relying on the ancillary services of collateral transformation of clearing members

65. ESMA understands that no or few PSAs are currently direct clearing members to CCPs, and that few would be eligible to become such, for reasons pertaining to legal, operational as well as technological capabilities such as participation to auctions or liabilities in the event of CCP recovery and resolution actions, which go beyond the issue of VM settlement. Therefore, a solution focusing on the collateral transformation services already provided by clearing members, such as banks, to their direct clearing clients was studied.

66. This option has many benefits: not only it does not require PSAs to increase their cash buffer, but also it relies on the ancillary service of collateral transformation already offered by clearing members, and thus would only require a small amount of adjustment to be implemented as banks are already particularly equipped to provide such service. Moreover, this solution would avoid CCPs to face additional operational and legal risks.

67. However, this solution was swept away on the basis that, if collateral transformation services are indeed negotiable by clients with their clearing members, such services expose clearing members to additional risks and costs, including related capital requirements covering collateral and security financing transactions. Clearing members are thus more reluctant to extend collateral transformation to VM flows, concerned by the impact on their balance sheet or their banking prudential requirements: securities VM is not eligible as risk-reducing in all prudential ratios.

68. One of the important regulatory reforms post the global financial crisis was with regards to capital requirements, including in particular the introduction of the leverage ratio ('LR'), a non-risk weighted measure requiring banks to hold capital in proportion to the global size of their exposure. Given its non-risk weighted nature, the leverage ratio effectively makes it more costly to engage in low margin activities, such as the repo intermediation activity. Not only the margin on repos is low, but also repos expand a bank's balance sheet and consequently attract a capital charge under the leverage ratio. Banks can thus be expected to either adjust their prices or limit supply in response to this increase in cost. This can explain that banks are less inclined or able to engage in repo intermediation and seek opportunities minimizing the use of their balance sheet when engaging in repo activities.

69. Moreover, the leverage ratio requirement reform had meant that banks refrained from acting as clearing members to develop their client clearing business. The LR requires banks to hold a minimum amount of (Tier 1) capital funding as a share of their total exposures. At the same time, in the LR framework, margin could initially not be used to decrease the level of exposure. Thus, in client cleared transactions, the LR may have acted as a costly constraint as banks offering client clearing services were seeing their leverage exposure measure increase, and consequently were required to raise additional capital.

70. However, the regulatory context has changed and the amendment of the Capital Requirement Regulation in May 2019[12], as well as the changes brought by the Basel Committee on Banking Supervision ('BCBS'), have addressed this impediment to client clearing services and changed the leverage ratio treatment of client cleared derivatives, such that to 'permit cash and non-cash forms of initial and variation margin received from a client to offset the replacement cost and potential future exposure for client cleared derivatives'[13]. This recent amendment, already applicable in the EU, may alleviate some bank clearing members' concerns on capital requirements, help make clearing more economic for such clearing members, potentially encourage new service providers to provide such services and increase the competition between themselves as well as their capacity.

71. Even though the most significant change of the leverage ratio was impacting derivatives, a minor change on the calculation of reverse repos, i.e. where a bank provides a repo to its counterparty, for LR purposes has also been introduced, allowing banks to cap their exposure to the amount of cash lent. Admittedly, in principle, as cash already generates capital charges in the LR, keeping the cash or doing a reverse repo may be equivalent for banks.

72. With respect to this option of client clearing service providers, in terms of EU policies, the changes to the leverage ratio rules applicable to banks would be expected to encourage banks to engage further in repo intermediation activities and reduce its impact on the repo market liquidity. However, this is too recent to have quantitative supporting evidence, which ESMA is hoping to collect through the questionnaire to this report, together with estimates of the revised costs.

6.3 The market-based repo solution

73. This section describes industry initiatives known to ESMA which focus on how to provide PSAs with reliable sources of liquidity to fund cash margins and addresses the options available to PSAs to source cash through providers other than the CCP or their clearing

[12] OJ L 150, 7.6.2019, p. 1–225, Recital 12: "A leverage ratio should also not undermine the provision of central clearing services by institutions to clients. Therefore, the initial margin on centrally cleared derivative transactions received by institutions from their clients and that they pass on to central counterparties (CCPs), should be excluded from the total exposure measure."
[13] BCBS 'Leverage ratio treatment of client cleared derivatives' - June 2019

member, by turning directly to the wider market. In practice this means the repo market, as ESMA understands that sourcing liquidity through uncollateralised bank credit would be both too expensive and possibly not admissible under regulatory constraints.

74. CCPs' efforts are focusing on developing and facilitating access to and use of their repo platforms, with the aim of enabling PSAs to transform their high-quality assets into cash for their VM calls. These initiatives will facilitate PSAs' access to cash for their VM calls for cleared derivatives via the repo market. This differs from the option where CCPs engage with PSAs to reinvest their cash reserves, discussed in section 6.1, as in this case the CCP would be intermediating between repo borrowers and lenders, as opposed to being the cash lender to the PSA in a principal capacity. However, when considering the repo market, two considerations come to mind in terms of exploring the feasibility of the solutions: the costs, and the risks, which in this case are represented by the reliability of the source of liquidity, especially during stressed market conditions.

75. Firstly, when quantifying the costs of transforming collateral into cash, one needs to consider on the one hand the interest rate charged by the cash lender. It is plausible to disregard the component of the size of the haircut applied to the collateral posted in the repo transaction both because PSAs do not have comparable capital requirements as banks in terms of their repo business, and most relevantly because supposedly PSAs are asset rich, meaning that the size of the haircuts will not impair their capacity to source enough cash with the collateral pools available to them. On the other hand, one needs to consider the investment strategies of the PSA in terms of portfolio allocation between long term, illiquid investments (not suitable for repos), collateral eligible investments, and cash reserves. The higher the latter, the least recourse the PSA would have to the repo market, but at a cost of a larger yield drag; vice versa, the thinner the cash reserves, the higher the overall portfolio return, but at the cost of incurring more frequently borrowing costs from repo transactions.

76. While ESMA has access to repo costs and pricing, little information is available in terms of the portfolio allocation implied costs and net investment drag, if any. Especially when considering that what matters in this case are not outstanding levels of liquidity buffers, but the frequency and size of the (negative) liquidity spikes, which would force PSAs to resort to the repo market and incur the related costs. Also, PSAs have large portfolios of highly desirable bonds, technically known as "specials". These bonds typically command a premium for the security lender, meaning that they can be used to source cash at negative rates. This should be factored into the calculations.

77. Secondly, the issue of reliable access to the repo market for PSAs (id est the risks) is more complicated to quantify. Repo markets have displayed instances of stress, with swings both in terms of pricing and in terms of depth. In addition, PSAs typically engage with the markets through their banks. This additional layer, which can serve as a shock absorber but also as a bottleneck if banks are unwilling to facilitate the access under specific market conditions, introduces an added dimension of complexity to estimating the risk of a liquidity shortage. Willingness of banks to provide services, which means providing balance sheet capacity is driven by the holistic commercial relationship with the PSA client, and not just

determined by price or liquidity. Furthermore, there could be impediments, both of a regulatory and of a technical/technological nature preventing PSAs from engaging in repos. These could also impact the overall costs. For example, if PSAs need to acquire collateral management capacity in terms of staff and systems specifically for the purpose of dealing with the liquidity management from the cash VM requirements, this would need to be reflected somehow.

78. This means that if the repo market is not available or not deep enough to deal with the PSA liquidity needs for their VMs, PSAs would risk not having the liquidity when needed. In such a scenario, an already difficult situation might be further aggravated by a CCP triggering defaults of PSAs not able to provide cash VM and may generate a systemic risk. It is therefore essential that PSAs are able to provide cash VM in all circumstances, even in cases where the repo market is not able to supply them with the liquidity needed.

79. Initiatives therefore focused on collateral transformation solutions, specifically on widening repo market participation. In parallel of using cleared repo platforms, additional initiatives to develop non-cleared repo were developed, for instance via non-bank cash providers, peer-to-peer repo platforms or repo liquidity funds, which led to a possible, though limited alternative to the CCPs solution. While all these initiatives allowed some PSAs to start to voluntarily clear certain OTC derivatives transactions, they did not increase the size of the repo markets available to pension funds.

80. The latest European Repo Market Survey[14] published by the International Capital Market Association (ICMA) highlights that the patterns seen over 2018 have broadly persisted in 2019. These are a strong overall growth and increased concentration of the repo market, a stronger domestic business (as opposed to the cross-border one) and a continued expansion of forward repo.

81. A range of reasons may explain the overall good health of the repo market:

- the market has now adapted to recent regulations and benefits from new regulatory-driven collateral demand;
- the largest banks are driving the growth in repo, perhaps thanks to their ability to adapt most efficiently to regulatory demands;
- a relaxation of the priority given to customer business when regulation constrained balance sheets;
- abundant liquidity from central banks undermining General Collateral repo; and
- forward management of repo books to avoid end-year tensions.

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[14] https://www.icmagroup.org/assets/documents/Market-Info/Repo-Market-Surveys/No-36-December-2018/ICMA-European-repo-market-survey-number-36-conducted-December-2018-040419.pdf

82. The recovery of the domestic repo business may be driven by the demand for collateral transformation by a wider range of market users, including more domestic non-bank financial institutions, faced with regulatory requirements for the CCP-clearing or collateralization of OTC derivatives.

83. The conclusion of ICMA is that usually the repo market looks in good shape, hence opening doors for collateral transformation and liquidity. However, there are occasions where the repo market may become temporarily impaired, with a decline in liquidity and the market pricing the reduced liquidity accordingly. Such spikes in the repo market are known for occurring at regular intervals, typically at year-end and at quarter-end, due to technicalities with regards to fiscal reporting deadlines for banks and other non-financial companies. However the range of these swings has been decreasing in recent years, and are expected to decrease further[15].

84. For instance, as recently as in mid-September 2019, tensions in the USD repo market were unusually high: instead of fluctuating as usual in an intraday range of 10 to 20 basis points, the US Secured Overnight Funding Rate (new US repo market-based overnight reference rate) saw its intraday range jump by 700 basis points up to nearly 10% on 17 September 2019. The explanations for this exceptional jump in repo rates have included a due date for US corporate taxes and a large settlement of US Treasury securities. It should be noted however that there were no spill-overs to the euro area repo market and the likelihood of a similar event in the euro area is rather limited.

85. With regards to business-as-usual, despite the above-detailed recent improvements in the EU repo market, concerns were raised that European repo markets may not have sufficient depth of liquidity to be able to cope with a sudden influx of PSAs wanting to repo. In order to ensure that in normal circumstances PSAs' collateral needs do not exceed the daily repo market's capacity, or would come at a disproportionate price, some quantitative analysis is required, comparing current and prospective PSAs' collateral needs with expected depth of the repo market.

86. A couple of leads have been identified which could improve the suitability of the repo market to provide an effective source of liquidity for PSAs: i) improving the settlement in EU by moving to T+1 settlements as a standard, and ii) from a regulatory perspective, the industry suggested amending bank capital rules (leverage ratio rules) to provide a better treatment of repo transactions in banks' balance sheets.

87. A tightening of the repo market could indeed occur in a number of circumstances, for instance due to: (i) the banking industry's decision to reduce its repo activity for commercial or prudential requirement reasons; (ii) liquidity stress, such as spikes in demand resulting from a significant rate rise; (iii) financial stability events; etc. Furthermore, the financial crisis demonstrated that the repo market may shrink in periods of market stress.

[15] BCBS has recently published policy recommendations (averaging of the LR) aimed at reducing quarter-end and year-end volatility and bound to be implemented in Europa by EBA.

88. Recurring episodes of temporary liquidity shortages generate fears about the sourcing of liquidity of PSAs in stressed circumstances. The results of a study quantifying PSAs' funding needs stemming from stressed VM calls, computing cash shortfall as liquidity freely available minus estimated funding needs, then checking the pool of safe assets of PSAs against cash shortfalls, are expected in Q1 2020.

89. The main issue is understanding to what extent temporary limitations of the access to the repo markets, presumably during stressed events, can trigger much more severe consequences for the impacted PSAs; such that they would become disproportionate to the benefits of centralised clearing. For this quantification, ESMA seeks input from market participants.

90. It is with such a perspective that a potential complementary role for Central Banks to make the repo market flow better in such emergency times has been raised by market participants.

91. In conclusion, further analysis appears necessary to assess the extent to which repo markets would be able to absorb pension funds' liquidity demand in business-as-usual as in stressed circumstances.

6.4 Access to alternative emergency liquidity arrangements

92. This section aims to provide a grasp at how PSAs subject to a mandatory clearing obligation could access (emergency) liquidity arrangements in order to avoid that they become a source of systemic risk under market stress conditions, e.g. when the repo market does not allow PSAs to temporarily transform their non-cash assets into cash to pay their variation margins.

93. As traditionally PSAs have no direct access to liquidity arrangements provided by central banks[16], this section primarily considers alternative emergency liquidity arrangements that could be set up between PSAs and entities that have access to (standard or emergency) central bank liquidity facilities, such as banks (e.g. the PSAs' clearing service providers or third liquidity providers) or the CCPs. These alternative arrangements could ensure that PSAs can be provided with the required liquidity in stressed market conditions.

94. Reported experience shows that banks are not always willing to pass through this emergency liquidity to end users, such as PSAs. Furthermore, banks acting as clearing members were reported as reluctant to provide guaranteed repo lines to PSAs as, in the

[16] Most commonly, only credit institutions have access to central bank standard liquidity facilities, as part of the mechanism for the implementation of the monetary policy. In its own independence, a central bank may decide to grant access to emergency liquidity facilities to other entities than credit institutions, e.g. CCPs, in order to preserve financial stability.

existing legal framework, the leverage ratio encourages them to keep their cash rather than embark on the repo market.

95. Where CCPs have access to central bank liquidity, at least, in emergency situations, it could be considered whether these could facilitate an alternative emergency liquidity arrangement allowing PSAs to meet their variation margin obligations by posting non-cash collateral with the CCP, which in turn could re-hypothecate such collateral with the central bank in order to generate the liquidity that the CCP would need to pay out the corresponding variation margins to other clearing members. In other words, where the PSA has no sufficient liquidity to meet its variation margin obligations in cash, the CCP, instead of calling the PSA in default, would allow the PSA to provide bonds, for these to be straight away passed through by the CCP to the central bank, which would return cash, at a cost, to the CCP. The cash received by the CCP would be passed to the VM gainer, while the cost charged by the central bank would be borne ultimately by the PSA.

96. However, in order to disincentivise the use of this arrangement in normal market conditions, the costs for PSAs to obtain such an emergency liquidity should be significantly higher than that of generating liquidity through the repo market in standard conditions. Such a spread should remain though acceptable to PSAs in emergency situations.

97. It has to be investigated whether CCPs without a banking licence, which may access only emergency central bank liquidity facilities under certain conditions, can facilitate such emergency arrangements for PSAs, depending on their own access conditions to the central bank liquidity. Central banks are being consulted on this matter.

7 Next steps

98. ESMA supports resuming work on the pension funds exemption, and acknowledges that further information (e.g. more granular and comprehensive data to assess materiality of pension funds' liquidity needs) is needed from industry to make progress on solutions, though considers that more work is required to carefully analyse how the potential solutions would work in practice and what their implications would be.

99. It is however ESMA's conviction that a consultation with all stakeholders is necessary to inform the assessment of potential solutions and that such analysis should not be rushed. Consequently, ESMA is taking advantage of this preliminary first report to consult stakeholders. This consultation will allow ESMA to gather input and drill further down into the issues, collect useful data and get a better representation of the range of views from stakeholders beyond the ones actively participating in the Expert Group.

100. The feedback received to this consultation and the discussions of the expert group will thus serve as the basis for developing the second report due as per EMIR Refit by

December 2020. ESMA intends to cooperate closely with EBA, EIOPA and the ESRB in the development of this second report to allow for the full reflection of their views in the report.

8 Annexes

8.1 Annex 1 - EMIR Refit[17]: articles relevant to Central Clearing Obligations for Pension Scheme Arrangements

Article 1(24)(c) states that paragraph 2 of Article 85 of EMIR on developing technical solutions for the transfer by pension scheme arrangements of non-cash collateral as variation margin should be replaced by the following paragraphs:

Box 1: Article 1(24)(c) of EMIR Refit

2. By 18 June 2020, and every 12 months thereafter until the final extension referred to in the third subparagraph, the Commission shall prepare a report assessing whether viable technical solutions have been developed for the transfer by pension scheme arrangements of cash and non-cash collateral as variation margins and the need for any measures to facilitate those viable technical solutions.

ESMA shall, by 18 December 2019, and every 12 months thereafter until the final extension referred to in the third subparagraph, in cooperation with EIOPA, EBA and the ESRB, submit a report to the Commission, assessing the following:

(a) whether CCPs, clearing members and pension scheme arrangements have undertaken an appropriate effort and have developed viable technical solutions facilitating the participation of such arrangements in central clearing by posting cash and non-cash collateral as variation margins, including the implications of those solutions on market liquidity and procyclicality and their potential legal or other implications;

(b) the volume and the nature of the activity of pension scheme arrangements in cleared and non-cleared OTC derivatives markets, within each asset class, and any related systemic risk to the financial system;

(c) the consequences of pension scheme arrangements fulfilling the clearing requirement on their investment strategies, including any shift in their cash and non-cash asset allocation;

(d) the implications of the clearing thresholds specified pursuant to point (b) of Article 10(4) for pension scheme arrangements;

[17] Regulation (EU) 2019/834 of the European Parliament and of the Council of 20 May 2019 amending Regulation (EU) No 648/2012 (known as 'EMIR') as regards the Clearing obligation, the suspension of the clearing obligation, the reporting requirements, the risk-mitigation techniques for OTC derivative contracts not cleared by a central counterparty, the registration and supervision of trade repositories and the requirements for trade repositories --- OJ L 141, 28.5.2019, p. 42–63

(e) the impact of other legal requirements on the cost differentials between cleared and non-cleared OTC derivative contracts, including margin requirements for non-cleared derivatives and the calculation of the leverage ratio in accordance with Regulation (EU) No 575/2013;

(f) whether any further measures are necessary to facilitate a clearing solution for pension scheme arrangements.

The Commission may adopt a delegated act in accordance with Article 82 to extend the two-year period referred to in Article 89(1) twice, each time by one year, where it concludes that no viable technical solution has been developed and that the adverse effect of centrally clearing derivative contracts on the retirement benefits of future pensioners remains unchanged.

CCPs, clearing members and pension scheme arrangements shall make their best efforts to contribute to the development of viable technical solutions that facilitate the clearing of OTC derivative contracts by such arrangements.

The Commission shall set up an expert group composed of representatives of CCPs, clearing members, pension scheme arrangements and other relevant parties to such viable technical solutions to monitor their efforts and assess the progress made in the development of viable technical solutions that facilitate the clearing of OTC derivative contracts by pension scheme arrangements, including the transfer by such arrangements of cash and non-cash collateral as variation margins. That expert group shall meet at least every six months. The Commission shall consider the efforts made by CCPs, clearing members and pension scheme arrangements when drafting its report pursuant to the first subparagraph.

Article 1(26) states that paragraph 1 of Article 89 of EMIR on a transitional clearing exemption for pension scheme arrangements should be replaced by the following paragraph:

Box 2: Article 1(26) of EMIR Refit

Until 18 June 2021, the clearing obligation set out in Article 4 shall not apply to OTC derivative contracts that are objectively measurable as reducing investment risks that directly relate to the financial solvency of pension scheme arrangements, and to entities established to provide compensation to members of such arrangements in case of default.

The clearing obligation set out in Article 4 shall not apply to OTC derivative contracts as referred to in the first subparagraph of this paragraph entered into by pension scheme arrangements from 17 August 2018 until 16 June 2019.

8.2 Annex 2 - Questionnaire

8.2.1 Presentation of the Questionnaire

The European Securities and Markets Authority (ESMA) publishes a questionnaire which aims to gather views and data on central clearing obligations for pension scheme arrangements (PSAs), and more specifically on solutions to facilitate PSAs discharging their variation margin requirements.

ESMA invites market participants, pension funds, banks, CCPs, central banks, authorities and trade associations of financial market participants to respond to the questionnaire. While ESMA will in parallel engage directly with the European Banking Authority (EBA), the European Insurance and Occupational Pensions Authority (EIOPA) and the European Systemic Risk Board (ESRB) to receive their views and inputs, these authorities may equally respond formally to the questionnaire should they want to.

Responses will allow ESMA to gather input and drill further into the issues, collect useful data and get a better representation of the range of views from stakeholders beyond the ones actively participating in the Expert Group gathered semi-annually by the European Commission.

By December 2020, ESMA will deliver a second report to the European Commission based on its findings, in line with the EMIR Refit. The feedback received from this consultation will serve for developing this second report.

The questionnaire will be open for two months, closing on 15 June 2020. It is presented on ESMA website.

Before responding to the questions, respondents are invited to read the ESMA Report on Central Clearing Solutions for PSAs, as well as the explanatory note providing further details on the structure of the questionnaire, instructions on how to respond, the publication of responses, data protection and abbreviations, definitions and legal references.

8.2.2 Questionnaire

On Section 4.1: Why pension funds use derivatives

Q1: Do you agree with the description made of the portfolios of EU pension funds as well as their use of derivatives? In particular, do you agree that PSAs use derivatives to build synthetic long-dated positions in order to overcome the availability of suitable sovereign or corporate bonds alternatives? Please elaborate on the reasons for your answer.

Q2: Do you have any data with respect to the structure of PSAs' portfolios? In particular regarding the duration gap which derivative strategies are designed to address?

Q3: Do you have any data on the volume and nature of the activity of PSAs in cleared and non-cleared OTC derivatives markets, within each asset class, and any related systemic risk they might pose to the financial system? What portion of non-cleared derivatives would be replaceable by cleared products if the impediments to clearing were removed?

Q4: Do you think that PSAs fulfilling the clearing requirement would have significant consequences on their investment strategies, including any shift in their cash and non-cash asset allocation? Please elaborate on the reasons for your answer and provide numerical data supporting your answer where available.

Q5: Are there further considerations, other than investment strategies mentioned above, either driving or constraining the use of derivatives for PSAs?

On Section 4.2: Why central clearing requirement to post variation margin in cash poses serious challenges for PSAs?

Q6: Do you agree with the description of the challenges met by PSAs to post variation margin in cash? Please elaborate on the reasons for your answer.

Q7: Do you have any data with respect to the value and/or share of cash holdings in PSAs' portfolios? Can you provide estimates of how much those would need to be increased to service cash variation margin calls?

Q8: Do you have any data with respect to estimated changes in variation margin for your outstanding contracts for a +/- 1% parallel shift in the yield curve for: a) cash VM of centrally cleared contracts, b) cash VM for OTC contracts, c) bonds VM for OTC contracts, and d) for all your outstanding contracts?

Q9: Can you provide data on the prevalence of acceptance of non-cash collateral in the context of bilateral OTC trades? And conversely on the limitations imposed by counterparties to post initial margins in the form of cash?

Q10: Can you provide data on the size of the yield drag from holding cash buffers to service variation margin calls in cash? Possibly differentiating between drag from under-investment and costs of funding temporary high liquidity demands?

Q11: Are you (or are you aware of) a PSA which is a direct clearing member to a CCP? How have you addressed the issues regarding the posting of cash VM?

Q12: Can you indicate whether you have considered becoming a direct clearing member to a CCP for the purpose of clearing mandated contracts? If not, what were the reasons against becoming a direct member? Specifically, were there other considerations beyond the issue of cash variation margins?

On Section 5: Exemption of clearing for PSAs

Q13: Do you agree that the central clearing of OTC derivatives by PSAs by June 2023 at the latest is the ultimate aim? Do you agree that the entry into force of this requirement should be subject to regulatory and market developments enabling market participants to develop appropriate technical solutions within that period? Please elaborate on the reasons for your answer.

Q14: In the hypothetical scenario where the exemption were to be made permanent, do you think that there would be a price handicap for less-liquid non-cleared contracts vis-à-vis the cleared alternatives? Can you provide estimates of the size of the price differential and the impact, also in terms of yield drag on PSA portfolios?

Q15: Under the new regime provided in EMIR Refit with respect to the scope of application of the clearing obligation and the calculation of the positions, do you expect to be or not subject to the clearing obligation once the clearing exemption has come to an end?

On Section 6: Solutions explored so far to facilitate PSAs to centrally clear their OTC trades

Q16: Do you agree with the pre-conditions for a workable solution as described in paragraph 51? Please elaborate on the reasons for your answer.

Q17: Are there any other features that the solution should try and achieve?

On Section 6.2: Relying on the ancillary services of collateral transformation of clearing members

Q18: Do you agree with the statement that no or few PSAs were onboarded with the status of clearing members, but instead clear as direct clients of a clearing member? Do you think that this situation may evolve in the coming years? Please elaborate on the reasons for your answer.

Q19: Do you agree that relying on collateral transformation services already offered by clearing members to their direct clients may be part of the solution? Please elaborate on the reasons for your answer.

Q20: To what extent has the constraint on the bank clearing members' capital requirements been eased and now allows for their role of collateral transformation to be better fulfilled?

Q21: Do you think that modifying the calculation of the leverage ratio might have an impact on the offer on repo intermediation activities by banks and be a part of the solution? Please elaborate on the reasons for your answer.

Q22: Can you elaborate on issues you have encountered, or risks you perceive, in relying of clearing members to provide collateral transformation services, including transformation into cash to meet variation margin requirements? Is this a service that is available to you? If not, what are the obstacles?

On Section 6.3: The market-based repo solution

Q23: What is your view on solutions based on collateral transformation via the repo market? Do you think that initiatives on collateral transformation solutions via the repo market constitute one possible solution? What other solutions are worth exploring?

Q24: Do you think that the repo market is suitable for PSAs' needs? If not, what are the impediments for PSAs to access the repo market? Please elaborate on the reasons for your answer, specifying if these are related to cost, operational complexities or regulatory constraints.

Q25: Do you have any data with respect to PSAs' potential liquidity demand in business-as-usual? Also, do you have any data with respect to PSAs' maximum liquidity needs in stressed market conditions?

Q26: Do you think that PSAs fulfilling their liquidity needs via the repo market will have strong implications on this market's liquidity and procyclicality? Can you provide quantification of the risk of the likelihood of a failure of market-based repo solutions to meet PSAs' needs? Under which conditions?

On Section 6.4: Access to alternative emergency liquidity arrangements

Q27: Do you think that there is agreement or evidence that the impact of the limitations of the solutions explored so far would be such that there is a need for devising and developing some form of emergency liquidity tools? If so, under which scenarios and how could such tools actionably and realistically be deployed?

Q28: In the hypothetical scenario where central banks extended liquidity support to PSAs, can you provide estimates of the costs, also in terms of infrastructure, ancillary requirements, and regulatory obligations that this option would entail? Can you express the cost in term of yield drag on PSAs performance, especially vis-à-vis the null option of increasing cash allocation in PSAs' investment portfolios?

Q29: What type / form of emergency liquidity tools do you think could be deployed? And whom should they be accessible to? In particular, is there any tool other that central bank liquidity that you would recommend to ESMA to consider?