

THE ADVANCED DIPLOMA IN INTERNATIONAL TAXATION

June 2023

MODULE 3.05 – BANKING OPTION

ADVANCED INTERNATIONAL TAXATION (THEMATIC)

TIME ALLOWED – 3½ HOURS

This exam paper has **three** parts: **Part A**, **Part B** and **Part C**.

You need to answer **five** questions in total. You will **not** receive marks for any additional answers.

You must answer:

- **Both** questions in **Part A** (25 marks each)
- **One** question from **Part B** (20 marks)
- **Two** questions from **Part C** (15 marks each)

Further instructions

- All workings should be made to the nearest month and in appropriate monetary currency, unless otherwise stated.
- You must provide appropriate line breaks between each question, and clearly indicate the start of each new question using the formatting tools available.
- Marks are specifically allocated for clarity of presentation of your answers.
- The time you spend answering questions should correspond broadly to the number of marks available for that question. You should therefore aim to spend approximately half of your time answering Part A, and the other half answering questions in Parts B and C.
- There is no separate reading time, so you can start typing your answers as soon as the exam begins. However, we recommend that you set aside some time to thoroughly read each question and plan each of your answers.

For your information this paper includes:

User's Guide to the ISDA 2002 Master Agreement, 2003 edition (selected extracts)

Council Directive (EU) 2018/822 (DAC6)

House of Lords report on the use of Liability Driven Investment strategies by pension funds, 7 February 2023

PART A

You are required to answer BOTH questions from this Part.

1. East Downs plc is a United Kingdom-based trading company. Its accounting reference date is 31 March. Its functional currency is UK pound sterling.

In the year ending 31 March 2020, East Downs plc borrowed \$50 million from its bank to finance the acquisition of the shares in a United States subsidiary, Illinois Inc. The shares were to be held as an investment. The average £:\$ exchange rate has been as follows:

| <u>Year ending</u> | <u>£1:\$</u> |
|--------------------|--------------|
| 31 March 2020 | 1.28 |
| 31 March 2021 | 1.29 |
| 31 March 2022 | 1.37 |

In 2023 Illinois Inc. is required to write off an extensive research programme in which it had invested. The management of East Downs plc has decided to dispose of the company's shareholding, and is able to sell its shares in Illinois Inc. for \$30 million on 31 July 2023, when the £:\$ spot exchange rate is 1:1.40.

You are required to answer the following questions:

- 1) How should East Downs plc account for the exchange differences on its US dollar borrowing in the accounting periods ending 31 March 2020, 31 March 2021 and 31 March 2022? (10)
- 2) What will be the UK tax treatment of these exchange differences in 2020, 2021 and 2022? (10)
- 3) What will be the UK tax consequences of the sale of Illinois Inc. and repayment of the bank loan in 2023? (5)

Total (25)

2. Alpha Bank is seeking to increase its Tier 1 regulatory capital, in order to expand its loan book. Its directors are considering two proposals:

- An issue totalling £50 million of redeemable 4% fixed rate preference shares, which are contractually redeemable after four years.
- An issue totalling £50 million of convertible 4% perpetual fixed rate bonds.

You are required to write a memo, advising the directors on the advantages and disadvantages of each of the two proposals, with particular regard to:

- 1) How these securities would be classified for capital adequacy purposes. (5)
- 2) How the bank would treat and classify the cost of servicing the securities for accounting and tax purposes. (5)
- 3) How investors would treat and classify the return received from the bank for accounting and tax purposes. (5)
- 4) How the bank would deal with the redemption of the preference shares after four years, with regard to the purpose for which the shares were issued. (5)
- 5) The extra lending which the bank would be able to undertake if either of these proposals were adopted. (5)

Total (25)

PART B

You are required to answer ONE questions from this Part.

3. Universal Metals plc is a company resident in the United Kingdom. In the year ending 31 March 2020 it borrowed €50 million, for a five year term, from Martindale Bank, a bank resident in the Netherlands but with a UK branch. The contract is governed by English law and enforceable in the English courts. The interest is payable to Martindale Bank's UK branch.

The UK/Netherlands double tax agreement provides that interest is only taxable in the state in which the beneficial owner is resident.

It was intended that the loan should take the form of Eurobond notes. However, due to an error on the part of Universal Metals, the issue has never been listed on a recognised stock exchange.

Interest is due annually in arrears on 31 March, and has been paid as follows:

| <u>Year ending</u> | <u>Interest paid (€)</u> | Average £1:€ rate <u>at year end</u> | <u>Calendar year end</u> | Spot £1:€ rate at <u>calendar year end</u> |
|--------------------|--------------------------|---|--------------------------|---|
| 31 March 2020 | 2,500,000 | 1.147 | 31 December 2020 | 1.1254 |
| 31 March 2021 | 2,500,000 | 1.114 | 31 December 2021 | 1.1692 |
| 31 March 2022 | 2,500,000 | 1.174 | 31 December 2022 | 1.18 |

You are required to explain the UK tax consequences of these arrangements for:

- 1) **Universal Metals plc;** (7)
- 2) **Martindale Bank's UK branch; and** (7)
- 3) **Martindale Bank.** (6)

Total (20)

4. The UK House of Lords report on liability-driven investment (LDI) concluded that:

“Liability-driven investment strategies, particularly those that use leverage, were created as a solution to an artificial problem created by accounting standards, which drive sponsoring companies to focus heavily on current, rather than long-term, estimates of pension deficits. Pension schemes aimed to hedge volatility in these estimates by investing in bonds, but due to the low returns these offered and the need to close their deficits, they borrowed to boost their returns.”

You are required to discuss whether LDI hedging is a threat to financial stability, with reference to the UK's mini-budget proposals of 23 September 2022. (20)

PART C

You are required to answer TWO questions from this Part.

5. Atlas plc, a United Kingdom resident company, has sought funding of £100 million in order to finance possible acquisitions. To this end, it has entered into a loan note issuance programme with Alpha Bank.

You are required to explain the essential elements of a loan note issuance programme, and the accounting and tax consequences of such an issue of loan notes. (15)

6.

- 1) What modifications did the Basel III Accord make to address the perceived weaknesses of the Basel II Accord? (5)

Before the Basel III Accord took effect, the balance sheet of Omega Bank was as follows:

| | <u>£ million</u> |
|----------------------------------|------------------|
| Tier 1 Capital | 6,000 |
| Tier 2 Capital | 8,000 |
| Deposits | 86,000 |
| Total risk-weighted assets (RWA) | <u>£100,000</u> |

Omega Bank's regulator is now implementing the Basel III accord. It has set a regulatory minimum of 15% and a Tier 1 ratio of 10%.

- 2) How may Omega Bank comply with these requirements? (10)

Total (15)

7. Why and how did the availability of tax credits on dividends payable and paid by German companies give rise to the obtaining of double repayments of tax credits? What measures were taken to prevent this from happening? (15)

8. The Arab Universal Bank Ltd (AUB Ltd) is incorporated in the United Kingdom. It seeks to provide housing finance for UK resident individuals who wish to purchase housing in the UK for use as their own homes. The structures for providing finance must be Sharia-compliant.

You are required to explain the requirements which AUB Ltd will have to satisfy in a UK context, and how these conditions might be satisfied. (15)

User's Guide to the ISDA 2002 Master Agreement
2003 Edition

H. U.S. Tax Representations

1. General.

Section IV.B.3. above provides an in-depth description of the general theory behind the utilisation of Payer and Payee Tax Representations, as well as a detailed description of the mechanics of the gross-up provisions. Because a significant number of ISDA Master Agreements are entered into between parties at least one of which is a U.S. person or otherwise subject to U.S. information or backup withholding rules, this Section focuses exclusively on the Payee Tax Representations that should be used when a payer is a U.S. person or otherwise subject to U.S. information or backup withholding rules.

The Payee Tax Representations provided in Part 2(b)(i) and (ii) of the Schedule are generic representations that are not specific for any country. In October 2001, ISDA published on its website new Payee Tax Representations in sample form, for inclusion in the Schedule for contracts where the payer is a U.S. person (or otherwise is subject to U.S. information reporting and backup withholding rules). These new representations were added to help parties comply with new complex U.S. withholding and reporting rules (which generally became effective as of 1 January 2001). The new representations are set out in Part 2(b)(iii) through (vi) of the Schedule and are repeated for your convenience in paragraphs (A) through (D) of Section IV.H.4. below. In general, the Payee Tax Representations outlined below are utilised to reduce or eliminate any reporting or withholding obligations. Payers that are U.S. persons should consider obtaining one of the new representations. Which one of these representations should be provided depends on the payee's U.S. tax status, as explained below. Tax laws change periodically and caution should be used to determine whether any representation requested remains appropriate under the tax laws in effect at the time of each Transaction. Further, special rules may apply to Transactions that are characterised, for U.S. federal income tax purposes, as other than notional principal contracts. Although ISDA is providing these sample representations, each party to a Transaction should consult with U.S. tax counsel to determine what, if any, representation is appropriate in its case.

For a more detailed explanation of these representations, including citations to the relevant U.S. federal income tax regulations, readers are referred to "New U.S. Tax Representations for Schedule to ISDA Master Agreement" available at www.isda.org under the Tax Committee page.

In general, payments attributable to notional principal contracts are not subject to U.S. withholding tax, but may be subject to U.S. information reporting and backup withholding. The general "no withholding" rule does not, however, apply to payments treated as interest for U.S. tax purposes, even though paid in a Transaction documented as a swap.

2. Information Reporting.

a. IRS Form 1042-S Reporting. Notional principal contract payments generally must be reported on IRS Form 1042-S if treated under U.S. Internal Revenue Service regulations as effectively connected with the conduct of a trade or business in the United States. A safe harbor provides, however, that payments need not be reported if the payee represents in the Schedule that it is a U.S. person or a non-U.S. branch of a foreign person.

ISDA has provided sample alternative Payee Tax Representations for this purpose that may be added in Part 2(b)(iv) of the Schedule: paragraph (A) (for U.S. persons); paragraph (B) (for foreign persons that cannot act through a U.S.

branch); and paragraph (C) (for foreign persons that are multibranch parties able to act through a U.S. branch). Before making the representation in paragraph (C), payees should carefully consider whether they will in fact be acting through a non-U.S. branch in all Transactions in which payments are to be made to an address or an account outside the U.S. For example, a payee that directs payments to an account or address outside the U.S. with respect to all its Transactions, including those in which it is acting through its U.S. branch, could not make this representation. Further, a payer cannot rely on either paragraph (B) or paragraph (C) to avoid IRS Form 1042-S reporting if it knows, or has reason to know, that the payment is in fact effectively connected with the conduct of a trade or business within the United States.

b. IRS Form 1099 Reporting and Backup Withholding. Notional principal contract payments must be reported on IRS Form 1099 unless the payee is a corporation or otherwise eligible for an exemption. U.S. Internal Revenue Service rules set forth indicia of corporate status on which a payer generally may rely to avoid reporting, including an IRS Form W-9 with an employer identification number and a statement that the payee is a domestic corporation. Payments also need not be reported if the payee represents that it is a foreign person in the Schedule. Thus, foreign payees providing the new representations in paragraphs (B) and (C) of Section IV.H.4. below to avoid IRS Form 1042-S reporting also will be exempt from IRS Form 1099 reporting. Other foreign payees may make the sample representation in paragraph (D) to avoid IRS Form 1099 reporting.

A swap payment that is not exempt from IRS Form 1099 reporting is subject to a backup withholding tax unless the payee provides a valid U.S. Internal Revenue Service taxpayer identification number. (See also Section IV.H.2.c. below for a brief discussion of backup withholding).

c. Payments to Foreign Partnerships and Trusts. The sample representations in the Schedule may be used by a foreign partnership or trust that qualifies as a "withholding foreign partnership" or "withholding foreign trust" (as evidenced by an IRS Form W-8IMY certifying its status). Persons making payments to non-withholding foreign partnerships and trusts should consult tax counsel as to the representations and forms needed to avoid information reporting and backup withholding.

3. Treatment of Payments as Interest.

Swap agreements providing for up-front yield adjustment or other non-periodic payments from a non-U.S. party to a U.S. party may be treated by the U.S. Internal Revenue Service as loans to the U.S. person if those payments are "significant". If so, a portion of the payments from the U.S. to the non-U.S. party will be U.S.-source interest potentially subject to a 30-percent withholding tax.

Because there is no bright-line test whether a payment is "significant", Transactions with up-front (or other non-periodic) payments to a U.S. party from a non-U.S. party should be reviewed by tax counsel to determine whether they could be loans for U.S. tax purposes. If the only up-front payment is by a U.S. party, however, no review is necessary because interest paid to a U.S. person is not subject to withholding. U.S. Internal Revenue Service regulations permit reliance on a representation on IRS Form W-9 that a party is a U.S. person.

Even if swap payments to a non-U.S. party are treated as interest, no withholding is required if: (i) the interest is effectively connected with the conduct of a trade or business in the U.S.; (ii) the interest qualifies as "portfolio interest"; or (iii) the payee qualifies for the benefits of a treaty providing a full exemption.

a. Effectively Connected Income. U.S.-source interest is effectively connected income exempt from withholding if, prior to payment, the foreign beneficial owner of the payment provides a valid IRS Form W-8ECI with which the payment reliably can be associated that includes both: (i) the owner's taxpayer identifying number and (ii) a representation, under penalties of perjury, that the amounts for which the certificate is furnished are effectively connected with the conduct of a trade or business in the U.S. and are includable in the owner's gross income for the taxable year.

Even if a U.S. payer relies on the effectively connected exemption in not withholding on payments that are treated as interest, the payer may be required to report payments under the agreement on IRS Form 1042-S.

b. Portfolio Interest. To qualify for the portfolio interest exemption, the payee must certify on IRS Form W-8BEN that it is a foreign person and is the beneficial owner of the payment. The exemption is not available, however, unless the obligation on which the interest is paid is in registered form. (See Section IV.G. above).

The portfolio interest exemption is denied to: (i) a bank receiving interest on an extension of credit made pursuant to a loan agreement entered into in the ordinary course of its trade or business and (ii) a payee related to the payer in specified ways. Thus, U.S. persons making swap payments potentially treated as interest may consider requesting a representation in the Schedule that the payee is neither a bank nor related to the payer. U.S. Internal Revenue Service rules do not expressly authorise reliance on such representations and ISDA has not provided sample language.

Alternatively, U.S. persons entering into a 2002 Agreement with a non-U.S. bank should consider an income tax treaty as a fallback position in the event that the portfolio interest exemption turns out to be unavailable. (See Section IV.H.3.c. below).

Further, special rules not discussed here may limit availability of the portfolio interest exemption for payments to foreign entities treated for U.S. tax purposes as conduits for extensions of credit by non-U.S. persons.

c. Treaty Exemption. A payer may treat a payment of U.S.-source interest as qualifying for relief from withholding if, prior to payment, the payment can be reliably associated with a withholding certificate on IRS Form W-8BEN with all the representations and other information necessary to support the payee's claim of treaty benefits (including the completion of Part II thereof and the provision of a U.S. tax identification number).

Not all tax treaties provide complete exemption from tax for U.S.-source interest payments; some provide only a reduced rate. A payer must examine the provisions of the applicable treaty before determining that payments treated as interest for U.S. tax purposes will be exempt from withholding.

Special rules not discussed here apply in determining the availability of treaty benefits in the case of payments of U.S.-source interest to foreign partnerships and other fiscally transparent entities.

4. Sample Representations for Inclusion in Part 2(b) of the Schedule to the 2002 Agreement.

| If payee is | then request representation in . . . |
|--|--------------------------------------|
| a U.S. person | paragraph (A) |
| a non-U.S. person with no U.S. office | paragraph (B) |
| a multibranch non-U.S. person with both a foreign office and a U.S. office | paragraph (C) |
| a non-U.S. person acting only through a U.S. office | paragraph (D) |

Insert in Part 2(b)(iii):

(A) The following representation [will] [will not] apply to Party A and [will] [will not] apply to Party B:

It is a "U.S. person" (as that term is used in Section 1.1441-4(a)(3)(ii) of the United States Treasury Regulations) for U.S. federal income tax purposes.

OR

(B) The following representation [will] [will not] apply to Party A and [will] [will not] apply to Party B:

It is a "non-U.S. branch of a foreign person" (as that term is used in Section 1.1441-4(a)(3)(ii) of the United States Treasury Regulations) for U.S. federal income tax purposes.

OR

(C) The following representation [will] [will not] apply to Party A and [will] [will not] apply to Party B:

With respect to payments made to an address outside the U.S. or made by a transfer of funds to an account outside the U.S., it is a "non-U.S. branch of a foreign person" (as that term is used in Section 1.1441-4(a)(3)(ii) of the United States Treasury Regulations) for U.S. federal income tax purposes.

OR

(D) The following representation [will] [will not] apply to Party A and [will] [will not] apply to Party B:

It is a "foreign person" (as that term is used in Section 1.6041-4(a)(4) of the United States Treasury Regulations) for U.S. federal income tax purposes.

5. Explanation of U.S. Payee Tax Representations.

The following provides a brief explanation of the four representations outlined in (A) through (D) in Section IV.H.4. above.

a. Representation A (Payee is a U.S. Person). If the payee is a U.S. person, it should provide the representation in paragraph (A). If the payee provides the representation in paragraph (A), the payer will not be required to report payments on IRS Form 1042-S. The payer, nevertheless, may be required to report on IRS Form 1099 unless the payee is a corporation (or other "exempt recipient"). If reporting is required, backup withholding also will be required if the payee fails to provide a valid U.S. Internal Revenue Service taxpayer identification number to the payer.

b. Representation B (Payee May Not Act Through a U.S. Office). If the payee provides this representation, the payer generally will not be required to report payments on either IRS Form 1042-S or IRS Form 1099.

c. Representation C (Payee is a Multi-Branch Party That May Act Through a U.S. Office). This representation differs from the second representation in that it applies to a non-U.S. person with multiple branches, at least one of which is in the U.S. (while the second representation applies to a non-U.S. person that does not have U.S. branches). If the payee provides this representation, the payer will not be required to report payments on IRS Form 1099. In addition, the payer will not be required to report on IRS Form 1042-S payments to an address outside the U.S. or to a bank account outside the U.S., because the payee will have represented that it is a non-U.S. branch of a foreign person with respect to such payments. A non-U.S. party that enters into swaps through both U.S. and non-U.S. branches under a single Schedule, but directs that payments under all swaps be made to an address outside the United States, could not give this representation. The rules for determining whether income of a foreign person is effectively connected are complicated and parties entering into Transactions with a foreign person that operates through U.S. and non-U.S. branches should consult their tax advisors regarding the appropriate representations to be made.

d. Representation D (Payee is a Non-U.S. Person Acting Only Through a U.S. Office). If the payee provides this representation, the payer will not be required to report any payments on IRS Form 1099. Reporting on IRS Form 1042-S may be required.

I. U.S. Confidential Tax Shelter Legislation

In February 2003 the U.S. Internal Revenue Service finalised U.S. Treasury regulations regarding the disclosure, registration and list-keeping requirements related to abusive tax shelters. U.S. Internal Revenue Service regulations may treat a transaction (not otherwise thought of as a tax shelter) as an abusive tax shelter if certain information regarding the tax treatment and tax structure of the transaction is required to be kept confidential. Such treatment would require a participant otherwise required to file a U.S. tax return to disclose the transaction to the U.S. Internal Revenue Service on its tax return and, in certain circumstances, subject that person or other persons connected with the transaction (whether or not required to file a tax return) to certain other requirements, such as registering the transaction with, or maintaining a list of participants for, the U.S. Internal Revenue Service. Participants in Transactions should consider whether, in light of those regulations, a provision should be added to the Schedule that provides that the tax treatment and tax structure of the transaction need not be kept confidential. The final regulations provide a safe-harbor, in which a transaction will be presumed not to be confidential under these regulations if every person making or providing statements about the potential tax consequences that may result from the transaction provides express written authorisation to the taxpayer in substantially the following form: "the taxpayer (and each employee, representative, or other agent of the taxpayer) may disclose to any and all persons, without limitation of any kind, the tax treatment and tax structure of the transaction and all materials of any kind (including opinions or other tax analyses) that are provided to the taxpayer relating to such tax treatment and tax structure." Such written authorisations generally must be effective from the commencement of discussions related to such transaction. Although standardised industry-wide language to preclude confidentiality has not yet been developed, ISDA may consider publishing such language in the future. In the interim, participants in Transactions that have a U.S. nexus may wish to incorporate in the Schedule the language from the final regulations (or other appropriate language).

COUNCIL DIRECTIVE (EU) 2018/822

of 25 May 2018

amending Directive 2011/16/EU as regards mandatory automatic exchange of information in the field of taxation in relation to reportable cross-border arrangements

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 113 and 115 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Parliament,

Having regard to the opinion of the European Economic and Social Committee,

Acting in accordance with a special legislative procedure,

Whereas:

- (1) In order to accommodate new initiatives in the field of tax transparency at the level of the Union, Council Directive 2011/16/EU has been the subject of a series of amendments over the last few years. In this context, Council Directive 2014/107/EU introduced the Common Reporting Standard ('CRS') developed by the Organisation for Economic Cooperation and Development (OECD) for financial account information within the Union. The CRS provides for the automatic exchange of information on financial accounts held by non-tax residents and establishes a framework for that exchange worldwide. Directive 2011/16/EU was amended by Council Directive (EU) 2015/2376, which provided for the automatic exchange of information on advance cross-border tax rulings, and by Council Directive (EU) 2016/881, which provided for the mandatory automatic exchange of information on country-by-country reporting of multinational enterprises between tax authorities. In light of the use that anti-money-laundering information can have for tax authorities, Council Directive (EU) 2016/2258 placed an obligation on Member States to give tax authorities access to customer due diligence procedures applied by financial institutions under Directive (EU) 2015/849 of the European Parliament and of the Council. Although Directive 2011/16/EU has been amended several times in order to enhance the means tax authorities can use to react to aggressive tax planning, there is still a need to reinforce certain specific transparency aspects of the existing taxation framework.
- (2) Member States find it increasingly difficult to protect their national tax bases from erosion as tax-planning structures have evolved to be particularly sophisticated and often take advantage of the increased mobility of both capital and persons within the internal market. Such structures commonly consist of arrangements which are developed across various jurisdictions and move taxable profits towards more beneficial tax regimes or have the effect of reducing the taxpayer's overall tax bill. As a result, Member States often experience considerable reductions in their tax revenues, which hinder them from applying growth-friendly tax policies. It is therefore critical that Member States' tax authorities obtain comprehensive and relevant information about potentially aggressive tax arrangements. Such information would enable those authorities to react promptly against harmful tax practices and to close loopholes by enacting legislation or by undertaking adequate risk assessments and carrying out tax audits. However, the fact that tax authorities do not react to a reported arrangement should not imply acceptance of the validity or tax treatment of that arrangement.
- (3) Considering that most of the potentially aggressive tax-planning arrangements span across more than one jurisdiction, the disclosure of information about those arrangements would bring additional positive results where that information was also exchanged amongst Member States. In particular, the automatic exchange of information between tax authorities is crucial in order to provide those authorities with the necessary information to enable them to take action where they observe aggressive tax practices.
- (4) Recognising how a transparent framework for developing business activity could contribute to clamping down on tax avoidance and evasion in the internal market, the Commission has been called on to embark on initiatives on the mandatory disclosure of information on potentially aggressive tax-planning arrangements along the lines of Action 12 of the OECD Base Erosion and Profit Shifting (BEPS) Project. In this context, the European Parliament has called for tougher measures against intermediaries who assist in arrangements that may lead to tax avoidance and evasion. It is also important to note that in the G7 Bari Declaration of 13 May 2017 on fighting tax crimes and other illicit financial flows, the OECD was asked to start discussing possible ways to address arrangements designed to circumvent reporting under the CRS or aimed at providing beneficial owners with the shelter of non-transparent structures, considering also model mandatory disclosure rules inspired by the approach taken for avoidance arrangements outlined within the BEPS Action 12 Report.
- (5) It is necessary to recall how certain financial intermediaries and other providers of tax advice seem to have actively assisted their clients in concealing money offshore. Furthermore, although the CRS introduced by Directive 2014/107/EU is a significant step forward in establishing a framework of tax transparency within the Union, at least in terms of financial account information, it can still be improved.
- (6) The reporting of potentially aggressive cross-border tax-planning arrangements can contribute effectively to the efforts for creating an environment of fair taxation in the internal market. In this light, an obligation for intermediaries to inform tax authorities of certain cross-border arrangements that could potentially be used for aggressive tax planning would constitute a step in the right direction. In order to develop a more comprehensive policy, it would also be necessary that as a second step, following the reporting, the tax authorities share information with their peers in other Member States. Such arrangements should also enhance the effectiveness of the CRS. In addition, it would be crucial to grant the Commission access to a sufficient amount of information so that it can monitor the proper functioning of this Directive. Such access to information by the Commission does not discharge a Member State from its obligations to notify any State aid to the Commission.
- (7) It is acknowledged that the reporting of potentially aggressive cross-border tax-planning arrangements would stand a better chance of achieving its envisaged deterrent effect where the relevant information reached the tax authorities at an early stage, in other words before such arrangements are actually implemented. To facilitate the work of Member States' administrations, the subsequent automatic exchange of information on such arrangements could take place every quarter.

- (8) To ensure the proper functioning of the internal market and to prevent loopholes in the proposed framework of rules, the reporting obligation should be placed upon all actors that are usually involved in designing, marketing, organising or managing the implementation of a reportable cross-border transaction or a series of such transactions, as well as those who provide assistance or advice. It should not be ignored either that, in certain cases, the reporting obligation would not be enforceable upon an intermediary due to a legal professional privilege or where there is no intermediary because, for instance, the taxpayer designs and implements a scheme in-house. It would thus be crucial that, in such circumstances, tax authorities do not lose the opportunity to receive information about tax-related arrangements that are potentially linked to aggressive tax planning. It would therefore be necessary to shift the reporting obligation to the taxpayer who benefits from the arrangement in such cases.
- (9) Aggressive tax-planning arrangements have evolved over the years to become increasingly more complex and are always subject to constant modifications and adjustments as a reaction to defensive countermeasures by the tax authorities. Taking this into consideration, it would be more effective to endeavour to capture potentially aggressive tax-planning arrangements through the compiling of a list of the features and elements of transactions that present a strong indication of tax avoidance or abuse rather than to define the concept of aggressive tax planning. Those indications are referred to as 'hallmarks'.
- (10) Given that the primary objective of this Directive concerning the reporting of potentially aggressive cross-border tax-planning arrangements should focus on ensuring the proper functioning of the internal market, it is critical not to regulate at the level of the Union beyond what is necessary to achieve the envisaged aims. This is why it would be necessary to limit any common rules on reporting to cross-border situations, namely those involving either more than one Member State or a Member State and a third country. In such circumstances, due to the potential impact on the functioning of the internal market, one can justify the need for enacting a common set of rules, rather than leaving the matter to be dealt with at the national level. A Member State could take further national reporting measures of a similar nature, but any information collected in addition to what is reportable in accordance with this Directive should not be communicated automatically to the competent authorities of the other Member States. That information could be exchanged on request or spontaneously according to applicable rules.
- (11) Considering that the reportable arrangements should have a cross-border dimension, it would be important to share the relevant information with the tax authorities in other Member States in order to ensure the maximum effectiveness of this Directive in deterring aggressive tax-planning practices. The mechanism for the exchange of information in the context of advance cross-border rulings and advance pricing arrangements should also be used to accommodate the mandatory and automatic exchange of reportable information on potentially aggressive cross-border tax-planning arrangements amongst tax authorities in the Union.
- (12) In order to facilitate the automatic exchange of information and enhance the efficient use of resources, exchanges should be carried out through the common communication network ('CCN') developed by the Union. In this context, information would be recorded in a secure central directory on administrative cooperation in the field of taxation. Member States should have to implement a series of practical arrangements, including measures to standardise the communication of all requisite information through the creation of a standard form. This should also involve specifying the linguistic requirements for the envisaged exchange of information and upgrading the CCN accordingly.
- (13) In order to minimise costs and administrative burdens both for tax administrations and intermediaries and to ensure the effectiveness of this Directive in deterring aggressive tax-planning practices, the scope of automatic exchange of information in relation to reportable cross-border arrangements within the Union should be consistent with international developments. A specific hallmark should be introduced to address arrangements designed to circumvent reporting obligations involving automatic exchanges of information. For the purposes of that hallmark, agreements on the automatic exchange of financial account information under the CRS should be treated as equivalent to the reporting obligations laid down in Article 8(3a) of Directive 2014/107/EU and in Annex I thereto. In implementing the parts of this Directive addressing CRS avoidance arrangements and arrangements involving legal persons or legal arrangements or any other similar structures, Member States could use the work of the OECD, and more specifically its Model Mandatory Disclosure Rules for Addressing CRS Avoidance Arrangements and Opaque Offshore Structures and its Commentary, as a source of illustration or interpretation, in order to ensure consistency of application across Member States, insofar those texts are aligned with the provisions of Union law.
- (14) While direct taxation remains within the competence of Member States, it is appropriate to refer to a corporate tax rate of zero or almost zero, solely for the purpose of clearly defining the scope of the hallmark that covers arrangements involving cross-border transactions, which should be reportable under Directive 2011/16/EU by intermediaries or, as appropriate, taxpayers, and about which the competent authorities should exchange information automatically. Moreover, it is appropriate to recall that aggressive cross-border tax-planning arrangements, the main purpose or one of the main purposes of which is to obtain a tax advantage that defeats the object or purpose of the applicable tax law, are subject to the general anti-abuse rule as set out in Article 6 of Council Directive (EU) 2016/1164.
- (15) In order to improve the prospects for the effectiveness of this Directive, Member States should lay down penalties against the violation of national rules that implement this Directive. Such penalties should be effective, proportionate and dissuasive.
- (16) In order to ensure uniform conditions for the implementation of this Directive and in particular for the automatic exchange of information between tax authorities, implementing powers should be conferred on the Commission to adopt a standard form with a limited number of components, including the linguistic arrangements. For the same reason, implementing powers should also be conferred on the Commission to adopt the necessary practical arrangements for upgrading the central directory on administrative cooperation in the field of taxation. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council.
- (17) The European Data Protection Supervisor was consulted in accordance with Article 28(2) of Regulation (EC) No 45/2001 of the European Parliament and of the Council. Any processing of personal data carried out within the framework of this Directive must comply with Directive 95/46/EC of the European Parliament and of the Council and Regulation (EC) No 45/2001.
- (18) This Directive respects the fundamental rights and observes the principles recognised in particular by the Charter of Fundamental Rights of the European Union.

(19) Since the objective of this Directive, namely to improve the functioning of the internal market by discouraging the use of aggressive cross-border tax-planning arrangements, cannot sufficiently be achieved by the Member States but can rather, by reason of the fact that it targets schemes which are developed to potentially take advantage of market inefficiencies that originate in the interaction amongst disparate national tax rules, be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality as set out in that Article, this Directive does not go beyond what is necessary in order to achieve that objective, especially considering that it is limited to cross-border arrangements concerning either more than one Member State or a Member State and a third country.

(20) Directive 2011/16/EU should therefore be amended accordingly,

HAS ADOPTED THIS DIRECTIVE:

ARTICLE 1

Directive 2011/16/EU is amended as follows:

(1) Article 3 is amended as follows:

(a) point 9 is amended as follows:

(i) in the first subparagraph, point (a) is replaced by the following:

'(a) for the purposes of Article 8(1) and Articles 8a, 8aa and 8ab, the systematic communication of predefined information to another Member State, without prior request, at pre-established regular intervals. For the purposes of Article 8(1), reference to available information relates to information in the tax files of the Member State communicating the information, which is retrievable in accordance with the procedures for gathering and processing information in that Member State;';

(ii) in the first subparagraph, point (c) is replaced by the following:

'(c) for the purposes of provisions of this Directive other than Article 8(1) and (3a) and Articles 8a, 8aa and 8ab, the systematic communication of predefined information provided in points (a) and (b) of this point.';

(iii) in the second subparagraph, the first sentence is replaced by the following:

'In the context of Articles 8(3a), 8(7a) and 21(2), Article 25(2) and (3) and Annex IV, any capitalised term shall have the meaning that it has under the corresponding definitions set out in Annex I.';

(b) the following points are added:

'18. "cross-border arrangement" means an arrangement concerning either more than one Member State or a Member State and a third country where at least one of the following conditions is met:

(a) not all of the participants in the arrangement are resident for tax purposes in the same jurisdiction;

(b) one or more of the participants in the arrangement is simultaneously resident for tax purposes in more than one jurisdiction;

(c) one or more of the participants in the arrangement carries on a business in another jurisdiction through a permanent establishment situated in that jurisdiction and the arrangement forms part or the whole of the business of that permanent establishment;

(d) one or more of the participants in the arrangement carries on an activity in another jurisdiction without being resident for tax purposes or creating a permanent establishment situated in that jurisdiction;

(e) such arrangement has a possible impact on the automatic exchange of information or the identification of beneficial ownership.

For the purposes of points 18 to 25 of this Article, Article 8ab and Annex IV, an arrangement shall also include a series of arrangements. An arrangement may comprise more than one step or part.

19. "reportable cross-border arrangement" means any cross-border arrangement that contains at least one of the hallmarks set out in Annex IV.

20. "hallmark" means a characteristic or feature of a cross-border arrangement that presents an indication of a potential risk of tax avoidance, as listed in Annex IV.

21. "intermediary" means any person that designs, markets, organises or makes available for implementation or manages the implementation of a reportable cross-border arrangement.

It also means any person that, having regard to the relevant facts and circumstances and based on available information and the relevant expertise and understanding required to provide such services, knows or could be reasonably expected to know that they have undertaken to provide, directly or by means of other persons, aid, assistance or advice with respect to designing, marketing, organising, making available for implementation or managing the implementation of a reportable cross-border arrangement. Any person shall have the right to provide evidence that such person did not know and could not reasonably be expected to know that that person was involved in a reportable cross-border arrangement. For this purpose, that person may refer to all relevant facts and circumstances as well as available information and their relevant expertise and understanding.

In order to be an intermediary, a person shall meet at least one of the following additional conditions:

(a) be resident for tax purposes in a Member State;

(b) have a permanent establishment in a Member State through which the services with respect to the arrangement are provided;

(c) be incorporated in, or governed by the laws of, a Member State;

(d) be registered with a professional association related to legal, taxation or consultancy services in a Member State.

22. "relevant taxpayer" means any person to whom a reportable cross-border arrangement is made available for implementation, or who is ready to implement a reportable cross-border arrangement or has implemented the first step of such an arrangement.
23. for the purposes of Article 8ab, "associated enterprise" means a person who is related to another person in at least one of the following ways:
 - (a) a person participates in the management of another person by being in a position to exercise a significant influence over the other person;
 - (b) a person participates in the control of another person through a holding that exceeds 25 % of the voting rights;
 - (c) a person participates in the capital of another person through a right of ownership that, directly or indirectly, exceeds 25 % of the capital;
 - (d) a person is entitled to 25 % or more of the profits of another person.

If more than one person participates, as referred to in points (a) to (d), in the management, control, capital or profits of the same person, all persons concerned shall be regarded as associated enterprises.

If the same persons participate, as referred to in points (a) to (d), in the management, control, capital or profits of more than one person, all persons concerned shall be regarded as associated enterprises.

For the purposes of this point, a person who acts together with another person in respect of the voting rights or capital ownership of an entity shall be treated as holding a participation in all of the voting rights or capital ownership of that entity that are held by the other person.

In indirect participations, the fulfilment of requirements under point (c) shall be determined by multiplying the rates of holding through the successive tiers. A person holding more than 50 % of the voting rights shall be deemed to hold 100 %.

An individual, his or her spouse and his or her lineal ascendants or descendants shall be treated as a single person.

24. "marketable arrangement" means a cross-border arrangement that is designed, marketed, ready for implementation or made available for implementation without a need to be substantially customised.
25. "bespoke arrangement" means any cross-border arrangement that is not a marketable arrangement.';

(2) the following Article is inserted:

'Article 8ab

Scope and conditions of mandatory automatic exchange of information on reportable cross-border arrangements

1. Each Member State shall take the necessary measures to require intermediaries to file information that is within their knowledge, possession or control on reportable cross-border arrangements with the competent authorities within 30 days beginning:
 - (a) on the day after the reportable cross-border arrangement is made available for implementation; or
 - (b) on the day after the reportable cross-border arrangement is ready for implementation; or
 - (c) when the first step in the implementation of the reportable cross-border arrangement has been made, whichever occurs first.

Notwithstanding the first subparagraph, intermediaries referred to in the second paragraph of point 21 of Article 3 shall also be required to file information within 30 days beginning on the day after they provided, directly or by means of other persons, aid, assistance or advice.

2. In the case of marketable arrangements, Member States shall take the necessary measures to require that a periodic report be made by the intermediary every 3 months providing an update which contains new reportable information as referred to in points (a), (d), (g) and (h) of paragraph 14 that has become available since the last report was filed.
3. Where the intermediary is liable to file information on reportable cross-border arrangements with the competent authorities of more than one Member State, such information shall be filed only in the Member State that features first in the list below:
 - (a) the Member State where the intermediary is resident for tax purposes;
 - (b) the Member State where the intermediary has a permanent establishment through which the services with respect to the arrangement are provided;
 - (c) the Member State which the intermediary is incorporated in or governed by the laws of;
 - (d) the Member State where the intermediary is registered with a professional association related to legal, taxation or consultancy services.

4. Where, pursuant to paragraph 3, there is a multiple reporting obligation, the intermediary shall be exempt from filing the information if it has proof, in accordance with national law, that the same information has been filed in another Member State.

5. Each Member State may take the necessary measures to give intermediaries the right to a waiver from filing information on a reportable cross-border arrangement where the reporting obligation would breach the legal professional privilege under the national law of that Member State. In such circumstances, each Member State shall take the necessary measures to require intermediaries to notify, without delay, any other intermediary or, if there is no such intermediary, the relevant taxpayer of their reporting obligations under paragraph 6.

Intermediaries may only be entitled to a waiver under the first subparagraph to the extent that they operate within the limits of the relevant national laws that define their professions.

6. Each Member State shall take the necessary measures to require that, where there is no intermediary or the intermediary notifies the relevant taxpayer or another intermediary of the application of a waiver under paragraph 5, the obligation to file information on a reportable cross-border arrangement lie with the other notified intermediary, or, if there is no such intermediary, with the relevant taxpayer.
7. The relevant taxpayer with whom the reporting obligation lies shall file the information within 30 days, beginning on the day after the reportable cross-border arrangement is made available for implementation to that relevant taxpayer, or is ready for implementation by the relevant taxpayer, or when the first step in its implementation has been made in relation to the relevant taxpayer, whichever occurs first.

Where the relevant taxpayer has an obligation to file information on the reportable cross-border arrangement with the competent authorities of more than one Member State, such information shall be filed only with the competent authorities of the Member State that features first in the list below:

- (a) the Member State where the relevant taxpayer is resident for tax purposes;
 - (b) the Member State where the relevant taxpayer has a permanent establishment benefiting from the arrangement;
 - (c) the Member State where the relevant taxpayer receives income or generates profits, although the relevant taxpayer is not resident for tax purposes and has no permanent establishment in any Member State;
 - (d) the Member State where the relevant taxpayer carries on an activity, although the relevant taxpayer is not resident for tax purposes and has no permanent establishment in any Member State.
8. Where, pursuant to paragraph 7, there is a multiple reporting obligation, the relevant taxpayer shall be exempt from filing the information if it has proof, in accordance with national law, that the same information has been filed in another Member State.
 9. Each Member State shall take the necessary measures to require that, where there is more than one intermediary, the obligation to file information on the reportable cross-border arrangement lie with all intermediaries involved in the same reportable cross-border arrangement.

An intermediary shall be exempt from filing the information only to the extent that it has proof, in accordance with national law, that the same information referred to in paragraph 14 has already been filed by another intermediary.

10. Each Member State shall take the necessary measures to require that, where the reporting obligation lies with the relevant taxpayer and where there is more than one relevant taxpayer, the relevant taxpayer that is to file information in accordance with paragraph 6 be the one that features first in the list below:
 - (a) the relevant taxpayer that agreed the reportable cross-border arrangement with the intermediary;
 - (b) the relevant taxpayer that manages the implementation of the arrangement.

Any relevant taxpayer shall only be exempt from filing the information to the extent that it has proof, in accordance with national law, that the same information referred to in paragraph 14 has already been filed by another relevant taxpayer.

11. Each Member State may take the necessary measures to require that each relevant taxpayer file information about their use of the arrangement to the tax administration in each of the years for which they use it.
12. Each Member State shall take the necessary measures to require intermediaries and relevant taxpayers to file information on reportable cross-border arrangements the first step of which was implemented between the date of entry into force and the date of application of this Directive. Intermediaries and relevant taxpayers, as appropriate, shall file information on those reportable cross-border arrangements by 31 August 2020.
13. The competent authority of a Member State where the information was filed pursuant to paragraphs 1 to 12 of this Article shall, by means of an automatic exchange, communicate the information specified in paragraph 14 of this Article to the competent authorities of all other Member States, in accordance with the practical arrangements adopted pursuant to Article 21.
14. The information to be communicated by the competent authority of a Member State under paragraph 13 shall contain the following, as applicable:
 - (a) the identification of intermediaries and relevant taxpayers, including their name, date and place of birth (in the case of an individual), residence for tax purposes, TIN and, where appropriate, the persons that are associated enterprises to the relevant taxpayer;
 - (b) details of the hallmarks set out in Annex IV that make the cross-border arrangement reportable;
 - (c) a summary of the content of the reportable cross-border arrangement, including a reference to the name by which it is commonly known, if any, and a description in abstract terms of the relevant business activities or arrangements, without leading to the disclosure of a commercial, industrial or professional secret or of a commercial process, or of information the disclosure of which would be contrary to public policy;
 - (d) the date on which the first step in implementing the reportable cross-border arrangement has been made or will be made;
 - (e) details of the national provisions that form the basis of the reportable cross-border arrangement;
 - (f) the value of the reportable cross-border arrangement;
 - (g) the identification of the Member State of the relevant taxpayer(s) and any other Member States which are likely to be concerned by the reportable cross-border arrangement;
 - (h) the identification of any other person in a Member State likely to be affected by the reportable cross-border arrangement, indicating to which Member States such person is linked.
15. The fact that a tax administration does not react to a reportable cross-border arrangement shall not imply any acceptance of the validity or tax treatment of that arrangement.
16. To facilitate the exchange of information referred to in paragraph 13 of this Article, the Commission shall adopt the practical arrangements necessary for the implementation of this Article, including measures to standardise the

communication of the information set out in paragraph 14 of this Article, as part of the procedure for establishing the standard form provided for in Article 20(5).

17. The Commission shall not have access to information referred to in points (a), (c) and (h) of paragraph 14.
18. The automatic exchange of information shall take place within one month of the end of the quarter in which the information was filed. The first information shall be communicated by 31 October 2020.';
- (3) in Article 20, paragraph 5 is replaced by the following:
 5. The Commission shall adopt standard forms, including the linguistic arrangements, in accordance with the procedure referred to in Article 26(2), in the following cases:
 - (a) for the automatic exchange of information on advance cross-border rulings and advance pricing arrangements pursuant to Article 8a before 1 January 2017;
 - (b) for the automatic exchange of information on reportable cross-border arrangements pursuant to Article 8ab before 30 June 2019.

Those standard forms shall not exceed the components for the exchange of information listed in Articles 8a(6) and 8ab(14), and such other related fields which are linked to these components which are necessary to achieve the objectives of Articles 8a and 8ab, respectively.

The linguistic arrangements referred to in the first subparagraph shall not preclude Member States from communicating the information referred to in Articles 8a and 8ab in any of the official languages of the Union. However, those linguistic arrangements may provide that the key elements of such information shall also be sent in another official language of the Union.';

- (4) in Article 21, paragraph 5 is replaced by the following:
 5. The Commission shall by 31 December 2017 develop and provide with technical and logistical support a secure Member State central directory on administrative cooperation in the field of taxation where information to be communicated in the framework of Article 8a(1) and (2) shall be recorded in order to satisfy the automatic exchange provided for in those paragraphs.

The Commission shall by 31 December 2019 develop and provide with technical and logistical support a secure Member State central directory on administrative cooperation in the field of taxation where information to be communicated in the framework of Article 8ab(13), (14) and (16) shall be recorded in order to satisfy the automatic exchange provided for in those paragraphs.

The competent authorities of all Member States shall have access to the information recorded in that directory. The Commission shall also have access to the information recorded in that directory, however within the limitations set out in Articles 8a(8) and 8ab(17). The necessary practical arrangements shall be adopted by the Commission in accordance with the procedure referred to in Article 26(2).

Until that secure central directory is operational, the automatic exchange provided for in Article 8a(1) and (2) and Article 8ab(13), (14) and (16) shall be carried out in accordance with paragraph 1 of this Article and the applicable practical arrangements.';

- (5) in Article 23, paragraph 3 is replaced by the following:
 3. Member States shall communicate to the Commission a yearly assessment of the effectiveness of the automatic exchange of information referred to in Articles 8, 8a, 8aa and 8ab as well as the practical results achieved. The Commission shall, by means of implementing acts, adopt the form and the conditions of communication for that yearly assessment. Those implementing acts shall be adopted in accordance with the procedure referred to in Article 26(2).';

- (6) Article 25a is replaced by the following:

'Article 25a

Penalties

Member States shall lay down the rules on penalties applicable to infringements of national provisions adopted pursuant to this Directive and concerning Articles 8aa and 8ab, and shall take all measures necessary to ensure that they are implemented. The penalties provided for shall be effective, proportionate and dissuasive.';

- (7) Article 27 is replaced by the following:

'Article 27

Reporting

1. Every five years after 1 January 2013, the Commission shall submit a report on the application of this Directive to the European Parliament and to the Council.
2. Every two years after 1 July 2020, the Member States and the Commission shall evaluate the relevance of Annex IV and the Commission shall present a report to the Council. That report shall, where appropriate, be accompanied by a legislative proposal.';
- (8) Annex IV, the text of which is set out in the Annex to this Directive, is added.

ARTICLE 2

1. Member States shall adopt and publish, by 31 December 2019 at the latest, the laws, regulations and administrative provisions necessary to comply with this Directive. They shall immediately inform the Commission thereof. They shall apply those provisions from 1 July 2020. When Member States adopt those provisions, they shall contain a reference to this Directive or be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.
2. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

ARTICLE 3

This Directive shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

ARTICLE 4

This Directive is addressed to the Member States.

Done at Brussels, 25 May 2018.

For the Council

The President

V. GORANOV

ANNEX

ANNEX IV: HALLMARKS

Part I. Main benefit test

Generic hallmarks under category A and specific hallmarks under category B and under points (b)(i), (c) and (d) of paragraph 1 of category C may only be taken into account where they fulfil the “main benefit test”.

That test will be satisfied if it can be established that the main benefit or one of the main benefits which, having regard to all relevant facts and circumstances, a person may reasonably expect to derive from an arrangement is the obtaining of a tax advantage.

In the context of hallmark under paragraph 1 of category C, the presence of conditions set out in points (b)(i), (c) or (d) of paragraph 1 of category C can not alone be a reason for concluding that an arrangement satisfies the main benefit test.

Part II. Categories of hallmarks

A. Generic hallmarks linked to the main benefit test

1. An arrangement where the relevant taxpayer or a participant in the arrangement undertakes to comply with a condition of confidentiality which may require them not to disclose how the arrangement could secure a tax advantage vis-à-vis other intermediaries or the tax authorities.
2. An arrangement where the intermediary is entitled to receive a fee (or interest, remuneration for finance costs and other charges) for the arrangement and that fee is fixed by reference to:
 - (a) the amount of the tax advantage derived from the arrangement; or
 - (b) whether or not a tax advantage is actually derived from the arrangement. This would include an obligation on the intermediary to partially or fully refund the fees where the intended tax advantage derived from the arrangement was not partially or fully achieved.
3. An arrangement that has substantially standardised documentation and/or structure and is available to more than one relevant taxpayer without a need to be substantially customised for implementation.

B. Specific hallmarks linked to the main benefit test

1. An arrangement whereby a participant in the arrangement takes contrived steps which consist in acquiring a lossmaking company, discontinuing the main activity of such company and using its losses in order to reduce its tax liability, including through a transfer of those losses to another jurisdiction or by the acceleration of the use of those losses.
2. An arrangement that has the effect of converting income into capital, gifts or other categories of revenue which are taxed at a lower level or exempt from tax.
3. An arrangement which includes circular transactions resulting in the round-tripping of funds, namely through involving interposed entities without other primary commercial function or transactions that offset or cancel each other or that have other similar features.

C. Specific hallmarks related to cross-border transactions

1. An arrangement that involves deductible cross-border payments made between two or more associated enterprises where at least one of the following conditions occurs:
 - (a) the recipient is not resident for tax purposes in any tax jurisdiction;
 - (b) although the recipient is resident for tax purposes in a jurisdiction, that jurisdiction either:
 - (i) does not impose any corporate tax or imposes corporate tax at the rate of zero or almost zero; or
 - (ii) is included in a list of third-country jurisdictions which have been assessed by Member States collectively or within the framework of the OECD as being non-cooperative;
 - (c) the payment benefits from a full exemption from tax in the jurisdiction where the recipient is resident for tax purposes;
 - (d) the payment benefits from a preferential tax regime in the jurisdiction where the recipient is resident for tax purposes;
2. Deductions for the same depreciation on the asset are claimed in more than one jurisdiction.
3. Relief from double taxation in respect of the same item of income or capital is claimed in more than one jurisdiction.
4. There is an arrangement that includes transfers of assets and where there is a material difference in the amount being treated as payable in consideration for the assets in those jurisdictions involved.

D. Specific hallmarks concerning automatic exchange of information and beneficial ownership

1. An arrangement which may have the effect of undermining the reporting obligation under the laws implementing Union legislation or any equivalent agreements on the automatic exchange of Financial Account information, including agreements with third countries, or which takes advantage of the absence of such legislation or agreements. Such arrangements include at least the following:
 - (a) the use of an account, product or investment that is not, or purports not to be, a Financial Account, but has features that are substantially similar to those of a Financial Account;
 - (b) the transfer of Financial Accounts or assets to, or the use of jurisdictions that are not bound by the automatic exchange of Financial Account information with the State of residence of the relevant taxpayer;
 - (c) the reclassification of income and capital into products or payments that are not subject to the automatic exchange of Financial Account information;
 - (d) the transfer or conversion of a Financial Institution or a Financial Account or the assets therein into a Financial Institution or a Financial Account or assets not subject to reporting under the automatic exchange of Financial Account information;
 - (e) the use of legal entities, arrangements or structures that eliminate or purport to eliminate reporting of one or more Account Holders or Controlling Persons under the automatic exchange of Financial Account information;
 - (f) arrangements that undermine, or exploit weaknesses in, the due diligence procedures used by Financial Institutions to comply with their obligations to report Financial Account information, including the use of jurisdictions with inadequate or weak regimes of enforcement of anti-money-laundering legislation or with weak transparency requirements for legal persons or legal arrangements.
2. An arrangement involving a non-transparent legal or beneficial ownership chain with the use of persons, legal arrangements or structures:
 - (a) that do not carry on a substantive economic activity supported by adequate staff, equipment, assets and premises; and
 - (b) that are incorporated, managed, resident, controlled or established in any jurisdiction other than the jurisdiction of residence of one or more of the beneficial owners of the assets held by such persons, legal arrangements or structures; and
 - (c) where the beneficial owners of such persons, legal arrangements or structures, as defined in Directive (EU) 2015/849, are made unidentifiable.

E. Specific hallmarks concerning transfer pricing

1. An arrangement which involves the use of unilateral safe harbour rules.
2. An arrangement involving the transfer of hard-to-value intangibles. The term “hard-to-value intangibles” covers intangibles or rights in intangibles for which, at the time of their transfer between associated enterprises:
 - (a) no reliable comparables exist; and
 - (b) at the time the transaction was entered into, the projections of future cash flows or income expected to be derived from the transferred intangible, or the assumptions used in valuing the intangible are highly uncertain, making it difficult to predict the level of ultimate success of the intangible at the time of the transfer.
3. An arrangement involving an intragroup cross-border transfer of functions and/or risks and/or assets, if the projected annual earnings before interest and taxes (EBIT), during the three-year period after the transfer, of the transferor or transferors, are less than 50 % of the projected annual EBIT of such transferor or transferors if the transfer had not been made.'

**HOUSE OF LORDS
INDUSTRY AND REGULATORS COMMITTEE**

7 February 2023

Andrew Griffith MP
Economic Secretary to the Treasury
HM Treasury
1 Horse Guards Road
Westminster
London
SW1A 2HQ

Laura Trott MBE MP
Parliamentary Under Secretary of State (Minister for Pensions)
Department for Work and Pensions
Caxton House
Tothill Street
Westminster
London
SW1H 9NA

Copied in:

Charles Counsell, Chief Executive of The Pensions Regulator
Nausicaa Delfas, incoming Chief Executive of The Pensions Regulator
Nikhil Rathi, Chief Executive of the Financial Conduct Authority
Andrew Bailey, Governor of the Bank of England
Sir Jon Cunliffe, Deputy Governor for Financial Stability of the Bank of England
Sam Woods, Chief Executive of the Prudential Regulation Authority

Dear Ministers,

The use of Liability Driven Investment strategies by pension funds

In September 2022, the turbulence in financial markets that followed that month's fiscal statement and the publication of the then-Government's Growth Plan drew attention to the use of liability-driven investment (LDI) strategies by defined benefit (DB) pension funds. The use of LDI strategies played a significant role in bringing about action by the Bank of England to temporarily purchase £19.3 billion of gilts, having initially pledged up to £65 billion to do so. The Bank has indicated that following the fiscal statement, rising gilt yields had the potential to cause LDI funds to be wound up, which would have driven further sales of gilts disruption of core funding markets and consequent widespread financial instability".

In light of these events, the Industry and Regulators Committee, in collaboration with the Economic Affairs Committee, wrote to the Bank of England, the Financial Conduct Authority (FCA), and The Pensions Regulator (TPR). We felt further scrutiny was required, and therefore held a number of public and private sessions to take evidence on the use of LDI by DB pension funds and its implications for regulation. This included public sessions with Legal and General, the FCA, and TPR.

We were disappointed that ministers could not meet us before writing this letter, but we welcome that you have now agreed to appear before the House of Commons Work and Pensions Committee in March, which members of the Industry and Regulators Committee will attend.

In advance of hearing from you in March, we are writing to you to make a number of recommendations for action to improve regulation in this area and reduce the risk of similar disruption in future, on which we expect a response from the Government.

Summary of our findings

1. The fundamental issue is that leveraged LDI has been created as a solution to an artificial problem created by accounting standards, but in the real world its application creates downside risks.

The artificial problem is the accounting requirement to measure the current value of scheme assets against a 'present value' of future pension liabilities discounted at a low-risk market interest rate. This fails to recognise the potential upside from investing in a broad portfolio of assets including equities and other real assets that could be expected to have a higher return over the long term, so a scheme may show an accounting deficit now even if the expected returns from the investment strategy should allow commitments to be met. It also means that when market interest rates fall, the discounted value of future liabilities is shown as having grown, with a corresponding increase in the scheme deficit, even when the actual future payment commitments and the long run expected return on assets are unchanged. Since the scheme deficit has to be reported in the accounts of the parent company, such volatility is unwelcome. LDI strategies were designed to avoid this accounting volatility by investing assets in

bonds and gilts that had the same sensitivity to market interest rates as the discounted liabilities, so their values move up and down together whether interest rates rise or fall. Because this then reduced the expected long run return on assets relative to equity investments, leveraged LDI strategies retained a proportion of their investments in higher return equity assets and then borrowed money using the smaller gilt part of their portfolio as security to buy swaps and repos that still extended fixed interest rate cover across the whole portfolio.

This strategy meant that over a period of falling interest rates the pension fund assets benefitted from having a high sensitivity to interest rates. Real asset values rose, matching the higher accounting value of discounted liabilities, while the equity returns and ongoing contributions were able to accumulate to close the deficit. For this reason many claimed that leveraged LDI strategies had been successful in helping to reduce or eliminate pension fund deficits. However, this amounted to a one way bet on falling interest rates. In the real world when interest rates started to rise again last year the high sensitivity to interest rates worked the other way. Asset values fell while the future value of pension liabilities (the actual commitment to future pension payments) stayed the same, so LDI strategies meant that, while the accounting deficit was protected, pension funds actually lost real value. Furthermore, since in leveraged LDI strategies they had borrowed using the value of their gilts as security, the increased collateral requirements on swaps and repos as interest rates rose meant they were forced to sell longer dated gilts to meet the collateral cash requirements. Given how significant pension funds had become in the gilts market, that in turn further depressed gilt prices, increased yields and created a further spiral in rising rates until the Bank of England intervened. These forced sales of gilts at low prices were another real loss to the pension funds.

LDI investment strategies may have a benefit for schemes which have significant near-term pension payment commitments by locking in matching cash flow income and avoiding shortterm asset volatility. However, for schemes with a longer-term horizon where the higher expected real returns on equities and other real assets would be a better match, the LDI schemes artificially encourage overinvestment in low-return gilts. And, as recent experience shows, while leveraged LDI schemes may deliver higher returns when interest rates fall, they not only further accentuate investment losses when rates rise but also run the risk of market instability and further losses from the collateral requirements.

The better solution would be to adopt accounting standards for parent companies and pension funds which reflect the expected long-run return on the actual asset portfolio, enabling pension funds to invest an appropriate share of their portfolio in equities and other real assets without increased volatility in the reported fund deficit, and avoiding the need for leveraged LDI strategies to boost their returns.

The use of LDI strategies caused the Bank of England intervention. If it were not for the use of leveraged LDI, then it is likely there would only have been some volatility and a market correction. The approaches of accounting standards, the regulator, and the widespread adoption of leveraged LDI has transformed pension schemes from being long-term institutions into ones focused mainly on short-term volatility in prices and interest rates.

The Government and the UK Endorsement Board should review the system of pensions accounting to see whether a less volatile, longer-term asset-led approach would be more appropriate for schemes that still have some time left to run.

2. Underlying EU legislation, which does not permit the use of borrowing and derivatives for the purposes described above, appears to have been permissively transposed in a way that allows pension schemes to continue using such strategies.

The Government should review whether the use of leverage and derivatives by pension schemes should be more tightly controlled in the future. If schemes are to continue to use leveraged LDI, there should be far stricter limits and reporting on the amount of leverage allowed in LDI funds and greater liquidity buffers introduced for leveraged exposures.

3. Trustees and regulation of investment consultants

We were told that it is possible that some pension scheme trustees were not aware of the potential implications of their LDI strategies and their decision-making struggled to match the pace of markets. This led them to become dependent on advice from investment consultants, whose advice to schemes is currently unregulated and may not be comprehensive over the whole portfolio or cover operational requirements.

The Government should ensure that investment consultants are brought within the regulatory perimeter as a matter of urgency.

4. Regulators, systemic risks and leverage

Despite calls for more information and a review of stress tests from the Financial Policy Committee, regulators in the sector appear to have been slow to recognise the systemic risks caused by the concentration of pension schemes' ownership of assets such as index-linked gilts, and the increasing use of more complex, bank-like strategies and instruments by pension funds.

Regulators should ensure they have more information on the leverage present within pension scheme finances and that stress tests are conducted. The more bank-like strategies and instruments that are used by pension schemes, the more bank-like its supervision should be, and the Government should consider giving the Prudential Regulation Authority a role in overseeing pension schemes.

Meanwhile, The Pensions Regulator should be given a statutory duty or ministerial direction to consider the impacts of the pensions sector on the wider financial system. The Financial Policy Committee should continue to take the lead on systemic risks to financial stability and should be given the power to direct action by regulators in the pensions sector if they fail to take sufficient action to address risks.

Accounting standards

Defined benefit (DB) pension schemes promise to pay their pension beneficiary a set amount in the future for life, often a sum that will rise in line with inflation. This is the actual value of pension funds' liabilities. Although it is impossible for pension funds to know exactly what the total cost of this will be, as it will vary based on inflation and how long a beneficiary lives, they are able to make an estimate of the present value of their liabilities. These net present values of estimates of liability are commonly just called liabilities. In order to meet their liabilities, pension funds invest in assets. The funding position of a scheme is how its current

market value of assets compares with the present value of its liabilities. It can be expressed as a ratio of the scheme's assets and liabilities (known as the funding level) or as the difference between the assets and liabilities (referred to as a surplus or deficit).

As the Bank of England noted in its November 2018 Financial Stability Report, in recent times most UK DB pension funds have generally had estimated liabilities that exceed their assets, meaning that they were in deficit. The Bank argued that these liabilities are "exposed to interest rate and inflation risk", and that pension funds "could invest only in bonds to hedge this risk", as bond fixed cashflows line up with pension schemes' liabilities. However, the returns on bonds would not provide enough return to close pension schemes' deficits. Pension funds therefore also needed 'growth assets', such as equities. Using LDI strategies that employ leverage, a majority of DB pension funds aimed to hedge against interest rate and inflation risks while retaining their exposure to growth assets by using existing holdings of bonds as collateral to borrow cash, which is then invested in a variety of gilts, swaps and derivatives.

The Committee heard from several stakeholders that the uptake of LDI strategies has been, in the words of Legal & General (L&G) CEO Sir Nigel Wilson, "accounting driven". Changes to accounting standards in the late 1990s meant that pension fund deficits counted as part of the sponsoring company's balance sheets, meaning that corporate managements became more concerned about these deficits and the liabilities of their pension schemes. The value of these liabilities on corporate balance sheets appeared to "bloat and shrink" over time, not due to changes in longevity or other factors that are relevant to liabilities, but through the effect of changes in the interest rate used to estimate the present value of the liabilities. In the following years, it became "conventional wisdom" in the industry that liabilities should be hedged and framed around low risk market interest rates, rather than expected returns on assets, as had previously been the case. As a result balance sheet volatility increased, as a short-term fall in interest rates increased the discounted value of liabilities and increased the reported deficit, even though the actual future value of liabilities and assets might be unchanged. This led to a change in pension fund managers' investment objectives from "open-ended growth to clearly defined liabilities".

We heard that the shift towards focusing on liabilities rather than assets has led DB pension funds to dramatically increase their investment in bonds and reduce their investment in equities, which are regarded as riskier, reducing the amount of capital that pension funds provide to invest in the growth of UK companies. Very little focus, if any, seems to have been given to the riskiness of the substantial use of borrowing, derivatives, or the operational resilience these require.

The Pensions Regulator told us that while the accounting rules fall outside its remit, "it is true that many sponsoring employers, in many cases, are happy for a pension scheme to move to more bonds to help protect it against the volatility of that accountancy number". However, TPR Chief Executive Charles Counsell argued that there are many drivers of LDI use, including ensuring that savers get the full benefits promised to them by their employer and managing the expense and risk to the sponsoring employer. The 100 Group Pensions Committee, representing the views of the Finance Directors of FTSE 100 and large UK private companies, argued against any regulation action that would discourage hedging, arguing that this "would lead to more risk and cost for schemes and their sponsoring employers. Yet it is worth noting that only the sponsoring company is required to adhere to the accounting standards, and trustees do not have a responsibility towards the expense and risk of the sponsoring employer.

Critics of the use of LDI claim that it is entirely driven by the need to hedge against interest rate risk and thus volatility in estimates of the present value of liabilities over time. They argue that interest rate risk is only introduced by the accounting standards and the use of marketbased discount rates, as interest rate risk does not apply to actual liabilities, which are only affected by the extent of the promised benefits, wage inflation, inflation and member longevity. They suggest that while LDI creates stability in how pension deficits are accounted for on corporate balance sheets and in conversations with the regulator, it involves taking on a large amount of risk through leverage and derivatives in order to address an issue of measurement. They also point out that although using leverage to maintain a high bond coverage while investing in equities reduces exposure to falling interest rates, it creates an increased real loss in asset values when interest rates rise.

However, others suggested that LDI is not just a response to a measurement issue, but a real issue in that companies now guarantee their pension schemes in a way that they did not historically. Consultants suggested that market-based discount rates reflect the nature of pension risks and the guaranteed nature of liabilities and argued that accounting standards have not been the driver of investment strategies, which are more concerned with levels of risk and funding regulations from TPR. As L&G Chair Sir John Kingman told us, "there is a very strong view in the accounting world that the current approach is the right way to value liabilities". It is noted that insurance company liabilities for pension portfolios that they have taken over attract significantly lower liability estimates under insurance accounting standards, which use best estimate rather than 'prudent' methods.

TPR's Neil Bull stressed that a lot of schemes are closed and maturing, moving rapidly towards a situation where they have cashflows to mirror the assets that they hold, meaning that they move towards bonds as a lower risk position to match these cashflows. He argued that it is right for such schemes to look at a bond market rate of discount to measure their risk position, but emphasised that this does not mean that the scheme cannot invest in other ways, suggesting that schemes with a strong employer covenant may want to take more risk. He also argued that investing in riskier assets would put savers at risk if the fund was in a position where it was paying out to members. He stressed that many pension schemes are looking to secure their liabilities with insurance companies through a buy-out, with buy-out pricing using an approach driven by bond yields and market rates. He clarified that some pension schemes, particularly those with longer term liabilities and stronger covenants, do use an asset-led discount rate, stressing that "that flexibility exists in the system" and will be reflected in TPR's scheme funding code. However, he emphasised that mature schemes use market rates of discount because they are looking at matching cash flows.

Mr Bull said that LDI is also used in the US and the Netherlands, both of which "clearly have different regulatory regimes and different nuances to their liabilities" but are both "exposed to the risks of inflation and interest rates" due to the use of a market rate of discount. He noted his experience working in both regimes, arguing that using LDI was "a useful tool to help with that risk, hedging a degree of the interest rate and inflation exposure". Mr Rathi noted that one distinction with the Netherlands is that typically its pension funds will manage around 50 per cent of their interest rate risk through hedging, whereas the UK's pension funds have "typically been significantly higher than that". Critics observe that in the Netherlands, pension scheme borrowing, including through the use of highly leveraged repos, is prohibited in line with EU legislation.

It is clear that the main driver of the increasing use of LDI, and particularly leveraged LDI, by DB pension schemes has been changes in accounting standards, which have introduced a sense of short-termism to what should be long-term investment strategies through the regular measurement of the present value of liabilities on company balance sheets. This has been exacerbated by the use of market-based discount rates, which have introduced an artificial volatility to liabilities which has led DB schemes to focus very heavily on investing in bonds. The low returns on these bonds have

led schemes to introduce leverage to their investments to boost returns. The artificial volatility introduced by the accounting standards has become the dominant risk consideration and the risks in the compensating LDI strategy have been ignored or underestimated.

Pension schemes could have found a balance between growing assets and meeting liabilities by investing more of their funds in equities and other long-term real assets, rather than multiply leveraged borrowing to increase returns. This is not a typical or prudent situation for pension schemes to be in and would likely be a surprise to pension scheme members.

While using a market-based discount rate and investing closely in line with liabilities may make sense for mature schemes that are beginning to make payments, it is not obvious that it is a suitable approach for pension schemes, even DB pension schemes, that may have decades left in them. However, despite the fact that some DB schemes take an asset-driven approach with an asset-based discount rate, current accounting standards mean that this approach would cause volatility in pension schemes' funding ratios and on sponsoring employers' balance sheets. The Government and the UK Endorsement Board should review whether the current system of accounting for pension scheme finances in company accounts is appropriate and whether to introduce a system that does not drive short-termism in pensions investment. More schemes should be allowed to take an asset-based approach if this is appropriate for them. If a change is deemed appropriate, the UK should adopt different accounting standards and promote their adoption internationally.

The impacts of LDI

Debates over the appropriateness and value of regularly measuring liabilities using market rates dominate assessments of the impact of LDI strategies. Proponents of LDI suggest that it has allowed funding ratios and deficits to be stable under current accounting rules, which is good for sponsoring companies and trustees. They suggest that LDI allows the matching of assets with liabilities and the use of leverage has allowed schemes to address the scale of their deficits during a period where returns on assets have been low due to quantitative easing and low interest rates. Mr Bull stressed that bonds are an ideal investment to match cash flows with liabilities.

Mr Counsell told the Committee that the ability to use leverage to invest in growth assets has helped to mitigate the impacts on pension funds of low and falling long-term interest rates over the last 20 years. He said that about 60% of DB schemes have invested in LDIs in one form or another. He said during the period of LDI's existence, funding levels have improved, rising from 83% in 2012 to 108% in 2021 on aggregate. However, he acknowledged that LDI is not the only thing that has contributed to increased funding. Sir Nigel emphasised that LDI has delivered "really good outcomes", arguing that schemes are "probably in the best place they have been" in the last 20 to 25 years, with many finding themselves in surplus "after many years of being in deficit".

The 100 Group Pensions Committee argued that leveraged LDI investment strategies have played an "important role" in "efficiently and appropriately managing key pension scheme risks". They argue that this "has resulted in a steady improvement in the financial position of most key schemes" and that without leveraged LDI in place funding deficits "would have been more volatile, and/or likely to have been significantly larger", placing greater contribution obligations on sponsoring companies.

Critics of LDI argue that funding positions have improved because LDI put pension schemes in a position where as long as gilt yields were falling, the swaps involved would make profits. They suggest that this was speculation on interest rates remaining low, but that the reverse of this spiral was always possible and was triggered by the September 2022 fiscal statement. Others suggested that the leverage involved in LDI allowed pension funds to benefit doubly from the boom but questioned whether remaining in that position was the right thing to do at the end of a long boom market and with interest rates known to be rising. They suggested that while LDI had been successful during a period of low interest rates and resolved accounting difficulties, it had caused real effects in markets, including driving index-linked gilt prices to very high levels and causing visible systemic concentration risks in gilt markets.

These disagreements extend to the effects of the recent market turbulence on pension fund finances. Proponents of LDI suggest that while pension funds hold less valuable assets after the turbulence, their liabilities are also at a lower level, emphasising that this is important for insurance buy-outs. Mr Counsell told us that there has been an improvement in the funding level of schemes in aggregate, so funding has risen, in effect. Mr Bull argued that the point of UK scheme funding arrangements is to invest in a way that means assets and liabilities move in lockstep, suggesting that whether assets rise and fall is less relevant than whether the funding level of the scheme has changed. Critics of LDI suggested that the volatility in the market-based measurement of liabilities means they are not useful in measuring the funding position of pension schemes, arguing that it cannot be beneficial that pension funds have lost assets.

Bank of England Governor Andrew Bailey has indicated that the Bank has made profits of "around £3.8 billion" on the gilts that it bought during its temporary intervention. Given that LDI funds are likely to have been the owners of a large proportion of the gilts sold, it is probable that DB funds have lost out on much of this figure as a result of the turbulence. Others estimate that losses by pension funds are potentially significant and far exceed this amount, as other assets were sold by pension schemes in order to meet collateral calls.

Pension funds' concentration in the market for gilts, and particularly index-linked gilts, through their following LDI strategies, helped to trigger market instability following the September 2022 fiscal statement. As large numbers of DB pension funds and LDI funds were attempting to sell gilts at the same time, this led to a downward spiral in the prices of those gilts. The Bank of England argues that if it had not intervened, a large number of pooled LDI funds would have been left with negative asset value and faced shortfalls in the collateral posted to banking counterparties, with DB pension fund investments in those funds being worth zero. If the LDI funds defaulted, the large quantity of gilts held as collateral by the banks that had lent to these funds would then potentially be sold on the market. This would amplify the stresses on the financial system and further impair the gilt market, which would in turn have forced other institutions to sell assets to raise liquidity and add to self-reinforcing falls in asset prices. This would have further disrupted the functioning of the core gilt market, which in turn "may have led to an excessive and sudden tightening of financing conditions for the real economy".

The increasing use of LDI, and particularly leveraged LDI, is claimed to have improved the funding levels of DB pension schemes, at least in the way they are usually measured. We have concerns that any such growth has been enabled by a large increase in leverage at a time of falling interest rates, meaning that pension funds have been borrowing to boost

investment returns. The risks associated with such operations did not appear to have been given due consideration, nor had gilt concentration risk both within schemes and systemically.

While this leverage may have worked well for pension schemes during a long period of low and falling interest rates, schemes' exposure to leverage put them at risk when interest rates rose, with schemes taking a one-way bet on interest rates remaining low. This effect was exacerbated by the fact that so much of the pensions industry was heavily invested in gilts, particularly index-linked gilts, meaning that when schemes were required to sell these assets to meet margin and collateral calls, their effects on the financial system were amplified and led to loops that endangered both pension funds and the Government's ability to sell its debt.

The use of borrowing and derivatives by pension schemes

The use of leverage and derivatives is key to considerations of the risks posed by LDI. In December 2019, TPR published a survey on DB pension scheme leverage and liquidity prepared by a research company, which found that 45% of all schemes had increased their use of leverage over the last five years, accounting for 58% of scheme assets. The notional principal of schemes' leveraged investments totalled £498.5 billion. The survey sets out that the level of leverage ranged from 1x to 7x.

Critics of LDI suggest that LDI funds, and particularly pooled LDI funds which involve several small and medium-sized pension schemes, tend to be leveraged several times over, making them unstable and requiring only relatively small declines in price or yield to require high degrees of leverage to be unwound. Sir Nigel said that L&G had told its regulators that the gilt market was "a lot more fragile than we had ever seen, and relatively small amounts of volume were causing very large price movements". However, as noted earlier, those more sympathetic to the use of LDI emphasise the benefits of leveraged LDI in helping to close pension scheme deficits, particularly in situations where schemes are heavily invested in bonds.

Critics also question the legality of what is effectively borrowing by pension schemes in their LDI strategies. They argue that the Occupational Pension Schemes (Investment) Regulations 2005 say explicitly that borrowing by pension schemes is illegal except in the short-term for liquidity purposes, and yet pension schemes have been borrowing using repurchase agreements (repo). Repos see organisations sell a security such as a gilt and agree immediately to repurchase it at a later date from the same dealer it was sold to, with the difference between the two prices being the short rate of interest. They argue that TPR has deemed that repo agreements are not borrowing but that most other organisations, including the Bank of England and the FCA, do see it as borrowing.

Similar concerns are held by critics in relation to the use of derivatives by pension schemes. Critics highlight that in the EU legislation which underpins the UK's current regime, derivatives are only permitted to be used by pension funds for investment purposes, which would mean that hedging liabilities using derivatives would be illegal. However, the UK regulations transposing the relevant EU legislation do not include this reference to investment, with some suggesting that this may have been done in order to allow the continued use of leveraged LDI.

Mr Bull explained TPR's view that the use of LDI does not equate to borrowing money. He also outlined that the use of derivatives is "explicitly allowed" in the Regulations for efficient portfolio management and to reduce risks. However, FCA Chief Executive Nikhil Rathi said that it is "clear that there was leverage and, effectively, borrowing going on in the system".

Witnesses told the Committee that it was the extent of the September 2022 fiscal statement that was to blame for the market turbulence, rather than the use of LDI. While the fiscal statement was the trigger for changes in gilt markets, we believe that the downward spiral was caused by the presence of leverage in LDI funds and subsequent collateral demands from lenders against a backdrop of rising inflation and interest rates.

We have heard from firms and regulators that the repo arrangements used in leveraged LDI funds are not technically borrowing and so are legal for pension schemes, which are prohibited from borrowing except for short-term liquidity purposes. This appears to be contrary to at least the spirit of UK and EU legislation in this area. The use of borrowing and derivatives by pension schemes, which transforms them from long-term, stable savings institutions into short-term, market-driven vehicles, is of great concern, and the UK's regime appears to be particularly permissive in this area. The Government should review the relevant regulations and consider whether the use of repos and derivatives, instruments more commonly used by investment banks than pension funds, should be more tightly controlled and supervised in future.

Regulatory oversight of systemic risks

The Bank of England, particularly its Financial Policy Committee (FPC), has oversight of overall UK financial stability, including overseeing risks relating to pension funds. This was noted in its November 2018 *Financial Stability Report*, which discussed the liquidity risks in non-banks caused by the use of leverage. The report suggested that fund managers running LDI programmes reported daily monitoring of the level of liquid assets held against potential calls on collateral arising from stress, but it was not clear whether pension funds paid sufficient attention themselves to liquidity risks. The Bank outlined that it would work with other domestic supervisors, including the FCA and TPR, to enhance monitoring of potential liquidity demands and losses generated by non-bank leverage. However, while the Bank was aware of these issues from a financial stability perspective, it has no power or influence over pension schemes, which are directly supervised by TPR.

TPR Chief Executive Charles Counsell told the Committee that TPR's role is to regulate trust-based DB and defined contribution (DC) pension schemes, focusing on governance, risk and ensuring that trustees comply with the relevant legislation. Mr Rathi told the Committee that the FCA's focus is on DC pensions rather than DB pensions. In relation to LDI, specifically the FCA supervises investment managers who have been delegated investment management responsibility from funds in overseas jurisdictions, particularly Ireland and Luxembourg. The FCA also regulates bank counterparties in relation to their conduct in this area, as they help to provide leverage, while the Prudential Regulation Authority (PRA) looks at the solvency and liquidity of bank counterparties.

The Telegraph reported in October 2022 that the Bank of England had "lashed out" at the FCA and TPR for having "failed to crack down on risky investment strategies that left retirement funds exposed to ructions in the bond market". Mr Rathi pointed out that in the article, "there is a difference between the headline and what was said in the note of the Financial Policy Committee", which he sits on. He argued that the FPC talked about the "need for regulators to work together on increased standards in future".

We have heard criticisms of TPR that it has focused insufficiently on the overall systemic risks caused by pension fund investment strategies. Some evidence we heard suggested that TPR focuses narrowly on the funding positions of each pension scheme and does not seek to understand the consequences of encouraging pension schemes to invest in a very similar way. Others in the industry were not clear on what action had been taken following the FPC's warning in November 2018, arguing that the risk of a downward spiral had not been fully understood and managed. We also heard from industry witnesses that none of the regulators have the mandate, the powers and the information to cover pensions investment systemically, suggesting that a regulatory grip on investment strategy has not existed at any level.

Mr Counsell said that regulators collectively had looked for the degree to which pension schemes and LDI funds would be able to withstand shock increases in bond yields, typically to something like 100 basis points, whereas what happened was a "much greater" increase of about 150 basis points in less than three days. He argued that this was an "extraordinary shock" that was far beyond what was expected to be reasonably plausible. Mr Bull agreed that the speed of the rise in gilt yields was "outside the realms of plausibility" and followed an existing, slower increase. He suggested that if the increases had happened over months then schemes would have been able to deal with them, but the problem was that they occurred in "a matter of days".

Mr Counsell emphasised that TPR surveyed pension schemes on the issue of leverage following the November 2018 Financial Stability Report, which found that schemes were well diversified and actively monitoring risks in relation to leverage and liquidity. He explained that TPR issued guidance in 2017 asking schemes to carry out stress tests but the regulator does not carry them out itself, suggesting that this could lead to burdens for schemes. Mr Rathi said that the FCA looked at how asset managers could cope with interest rate rises between March and September 2022 and 150 basis points "seemed fine". He argued that the system did not think about what would happen if something "very dramatic" and unprecedented happened, noting that some asset managers were subsequently requiring buffers of 300 or 400 basis points but that there is a judgement about how much cash to hold versus what is available to invest in other assets.

Simon Walls, Director of Wholesale Sell-Side at the FCA, said that following the November 2018 Financial Stability Report, the FCA was involved in follow-up work including discussing with LDI managers the buffers they used, which at the time were around 100 basis points. He said that the regulator identified "idiosyncratic" operational issues and as rate expectations rose, it asked LDI funds whether this was being managed, finding that generally it was being managed well. He also stressed that the vulnerabilities during the market turbulence were the size and speed of market movements, explaining that LDI funds were generally "designed for calm times", with trustees having a week or two to provide money. He said that this "would generally be okay, but was proven wanting here".

Mr Rathi said that all regulators have a responsibility to look at systemic risks, and while the FPC has an overview, the other regulators contribute to its discussions. He said that LDI risks were on the radar but did not receive the attention that other issues did, arguing that going forward, where regulators are dealing with fragile markets where 'black swan' events are happening every few months, it will be important to test whether risks that regulators have not thought of could crystallise. Mr Walls said that the FCA expects companies to risk manage to "extreme but plausible events", but stressed that what this means has changed, highlighting that the FCA is continuing to monitor this issue on a regular and at least weekly basis and is looking for the next such event.

Sir John said that L&G sees more overlap between regulators than underlap, suggesting that the issue was not that regulators were failing to work together effectively. Sir Nigel stressed that ultimately the Bank of England is the "ultimate decision-maker", with Sir John agreeing that in the end, "the central bank had to take the lead", because it has the balance sheet to provide support. Sir Nigel agreed with the suggestion that the Prudential Regulation Authority (PRA) might have a bigger role to play in overseeing DB pensions, given its oversight of insurance and the increasing likelihood of pension funds being bought out by insurance.

Sir Nigel said that L&G did not have a dialogue with any of its regulators that the scenario faced was one that the firm should be modelling in its stress testing. He suggested that the event "caught us all by surprise" and that the firm's stress testing had "never taken into account the degree of stress that was in the market". Sir John suggested that if the UK had experienced a "large secular rise" in rates, as happened in the rest of the world, there would not have been as dramatic an incident, arguing that the issue was "the particular speed of what happened in the markets" and that none of the relevant stakeholders, including industry and the regulators, "believed that it was a plausible scenario that the Government would do something that would create such extraordinary instability in the market in two trading days". Sir Nigel accepted that following recent unpredictable events, "we should be looking for more black swan events", which will result in a different type of stress testing and a need to think about the capital buffers in place. However, Sir John emphasised that "there is no free lunch here", and that "the more protection there is in the system, the greater the cost will be to pension funds and their sponsors".

Questions have also been raised about the amount of information regulators receive in relation to LDI exposures. We heard from industry that while TPR has an annual return process for all schemes to provide information, this is voluntary and not completed by many schemes, meaning that the regulator does not have information about levels of leverage, buffers and liquidity related to LDI. It was suggested that TPR could collect systemically important information in this way but it asks the wrong questions.

Mr Counsell told the Committee that TPR has not historically collected data on leverage, liquidity and buffers in LDI exposures systematically, and is "certainly considering" whether it needs to do so going forward. He argued that TPR has "pretty good intelligence" about what is going on across schemes through its discussions with supervisors and other means. However, he explained that TPR has been focused on improving the data it holds and collects from companies over the last couple of years and has consulted alongside the Pension Protection Fund (PPF) on being able to collect information on asset breakdowns in much more detail, with changes set to be implemented in 2023.

Mr Walls said that when looking at the leverage of LDI funds, looking at buffers is probably better than looking at leverage, as this provides information on the sensitivity of the portfolio to moves and the number of basis points that can be handled. He said that the FCA has looked at this on a periodic basis, reviewing this with 90% of firms in the market. He said that during the market episode the FCA was reviewing this on a daily basis and by November it was doing so weekly. However, he said that this would not be the steady state level of oversight, as the FCA has thousands of funds and numerous other risks to look at, and their job is not to "second-guess the risk management of companies". Mr Rathi said that the FCA is getting information on leverage on an intense and frequent basis, leading leverage to be managed down "fairly materially" over the weeks following the episode. However, he stressed that there have been issues in the non-bank system more broadly with "not just the traditional visible leverage but synthetic and hidden leverage" which often "comes to light only after the event". He argued that the international

community has to get "far better at least at tracking what is going on". Sir Nigel said that L&G provides regulators with key information on systemic risks on a weekly basis.

Mr Rathi argued that in banking, there is a stress test but also a resolution regime, so there is something in place if institutions fail. He argued that this needs to happen in the non-bank system, as that is where leverage has moved from the banking sector following post-financial crisis reforms. He argued that the question of how to cope with failures must be addressed, especially in an environment where government bond markets around the world are "much less liquid, particularly at the long end of the curve", meaning that previous assumptions about the ability to sell collateral "do not necessarily hold in the same way today".

Mr Rathi also stressed that the difficulty of non-bank finance reform is that the sector is so interconnected and the UK is a "small part of the overall global pie". He explained that the FCA and the Bank of England have been working with international counterparts on non-bank finance, as lots of firms are supervised overseas, and they have been trying to secure international agreement for a cross-border strengthening of resilience through the Financial Stability Board (FSB) and the G20. But "that is hard going" and it is taking time to get the necessary agreement and execution. He also explained that there were operational difficulties with some custodians being overwhelmed using manual procedures.

While the Bank of England's Financial Policy Committee noted levels of leverage in pension schemes in its November 2018 Financial Stability Report, it is unclear that sufficient attention has been focused on these risks since that time. While The Pensions Regulator and the Financial Conduct Authority have been surveying firms on this issue in the intervening period, it is a concern that the regulators, and The Pensions Regulator in particular, have not had enough information on pension schemes' LDI exposures and liquidity buffers or their operational capabilities. The Pensions Regulator should require DB pension schemes to provide it with information on the levels of leverage and liquidity buffers present in their LDI funds, while the Financial Conduct Authority should ensure it is collecting sufficient information on systemic risks in the sector from investment managers.

We have heard from regulators and the industry that the recent market turbulence was a result of the speed of movements in financial markets, which could not have been foreseen. It should not be a surprise to financial regulators, firms or pension schemes that financial markets can move quickly and create unforeseen risks, especially where hidden pockets of leverage exist. It appears they have focused too much on static risks such as the funding levels and liquidity buffers of individual schemes and funds, rather than being aware of and ensuring the system is protected as much as possible against dynamic, systemic risks.

These systemic risks are more likely to be found in the pensions sector now that it is using more complex, bank-like strategies and instruments, including leverage and derivatives. The more bank-like a pension scheme's strategy is, the more bank-like its regulation and supervision should be, although it is noted that pension scheme supervision was designed not to be burdensome on small schemes. This suggests that there could be a role for the PRA in overseeing pension schemes, particularly given the increasing likelihood of schemes being bought out by insurers, who are also overseen by the PRA. The Government should review whether the PRA should be given joint or direct supervisory responsibility of pension funds using bank-like strategies and instruments.

The shifting of leverage from the banking system to non-banks and the increasing number of unexpected, 'black swan' events means that regulators need to think about applying more elements of banking regulation to other areas, especially where they have the capacity to pose systemic risks to the financial system. Rather than providing guidance that pension funds should carry out stress tests, The Pensions Regulator should closely supervise stress testing by at least a sample of DB pension funds, or carry out its own stress test, to ensure it is on top of systemic risks in the sector. If TPR feels it is unable to do this, it should request that the FCA, the PRA or the Bank of England carry out this stress testing on its behalf. Similarly, the FCA should carry out much more stringent stress testing of leverage within investment managers where this has the potential to cause systemic risks.

The Financial Policy Committee should continue to take the lead on systemic financial stability risks, but it is a concern that little action beyond surveys appears to have been taken following the November 2018 Financial Stability Report. The Pensions Regulator and the Financial Conduct Authority need to follow up on the risks outlined by the FPC more actively in future. The FPC should have the power to direct action by the other regulators if they fail to do so. Substantial improvements in supervision are required throughout the chain of regulators involved in this area, including the FPC.

We recognise that it is difficult to oversee leverage within non-banks due to the international character of many of their operations. We welcome that the regulators are pushing for international agreements on managing leverage in nonbanks and hope to see further progress in this area. Nevertheless the sources for the turmoil lay within strategies and regulation that are entirely in the control of the UK and can be independently addressed.

The role of The Pensions Regulator

The Pensions Regulator regulates occupational pensions, including DB pension schemes, in the UK. Its statutory objectives are:

- to protect the benefits of members of occupational pension schemes;
- to protect the benefits of members of personal pension schemes where direct payment arrangements are in place;
- to promote and to improve understanding of the good administration of workbased pension schemes;
- to reduce the risk of situations arising which may lead to compensation being payable from the PPF;
- to maximise employer compliance and employer duties and the employment safeguards introduced by the Pensions Act 2008;
- in relation to DB scheme funding, to minimise any adverse impact on the sustainable growth of an employer.

In the Pension Schemes Act 2021, the powers of TPR were strengthened to improve its ability to protect DB scheme members' savings. The measures in the Act include: strengthening the existing criminal and civil sanctions regime by introducing three new criminal offences and a new power to issue civil penalties of up to £1 million; strengthening the regime for Contribution Notices, which allow TPR to recover losses caused to be DB pension scheme as a result of avoidance behaviours; requiring increased transparency around corporate transactions, including how any detriment to a DB pension scheme is to be mitigated; and extending TPR's information gathering powers, enabling it to enter a wider range of premises and requiring individuals to attend interviews.

The Act also requires DB pension schemes to have a funding and investment strategy, and to submit a statement on this strategy to TPR. The Department for Work and Pensions recently consulted on the draft regulations that will enable this requirement.

Critics of TPR suggest that it has strongly encouraged the use of LDI by pension funds, leading to a monoculture among pension schemes, particularly noting that the one area of the DB pensions landscape that is not regulated by TPR, the Local Government Pension Scheme, is barely involved with LDI. TPR Chief Executive Charles Counsell emphasised the benefits of LDI in his evidence to the Committee, particularly in bringing about an improvement in the funding levels of pension schemes and allowing schemes to hedge interest rates and inflation. He accepted that TPR had “absolutely encouraged the use of hedging strategies, and LDIs are a key part of that”. However, he stressed that TPR “does not dictate to pension schemes what their investment strategies be”, as these should be scheme-specific, dependent on the risks to scheme funding, and the strength of the underlying employer and the employer covenant. Despite this, we heard that pressure to use LDI has come precisely during scheme-specific negotiations around sponsor strength.

Critics also argue that TPR focuses too much on the estimated present value of liabilities at market rates rather than the actual liabilities in the long term, suggesting that the only justification for this is TPR’s statutory obligation to protect the PPF, which is also concerned with present value estimates. They also suggest that TPR should have been aware of the implications of funnelling large numbers of pension schemes in a similar direction, particularly if interest rates rose, and should have made the Bank of England aware of financial stability concerns.

Mr Counsell told us that TPR “typically” leaves engagement with the sponsoring company to trustees and only engages directly in particular scenarios, such as companies in difficulty and those experiencing takeovers, despite their important role as the ultimate guarantor of schemes.

However, those more sympathetic to TPR accept that while the regulator encouraged the use of LDI, it did not force schemes to use it. They also argued that it is hard for TPR to look at large, systemic issues, given the thousands of schemes they are regulating, suggesting that it would be easier for the FCA to take a systemic view in overseeing the lower number of large asset managers who dominate provision of LDI funds.

Asked about TPR’s statutory objectives, Mr Counsell said that the regulator has a clear understanding of the job given to it by Parliament, noting that the original objectives had been amended to require TPR to take into account the strength of the employer.

It appears that even if The Pensions Regulator did not advise or direct funds to undertake LDI strategies explicitly, its regulatory framework has firmly pushed schemes in that direction, leading to a situation where almost the entire DB pensions system was investing in the same types of assets. The index-linked gilts market then became almost entirely dominated by DB pension funds, meaning that even small actions in the same direction by each pension fund could cause large swings in key markets for government debt, with leverage multiplying these effects. It appears that TPR was so focused on individual scheme finances and protecting sponsoring employers that it underestimated the potential systemic risks its actions were causing for the wider financial system. TPR should be given a statutory duty or ministerial direction that it must consider the impacts of pension funds’ actions on the wider financial system and report to the Financial Policy Committee on potential systemic risks. TPR should also understand that trustees’ responsibility is the viability of the pension scheme itself, rather than that of the sponsoring company.

Trustees and scheme governance

Trustees play a crucial role in the operation of pension schemes. The law requires that most occupational pension schemes in the UK are set up as trusts. A trust ensures that the pension scheme’s assets are kept separate from those of the employer. A trustee is a person or company, acting separately from the employer, who holds assets in the trust for the beneficiaries of the scheme. Trustees are responsible for ensuring that the pension scheme is run properly and that members’ benefits are secure, including by collecting contributions, investing assets and paying benefits. The law requires that trustees have knowledge and understanding of (among other things) the law relating to pensions and trusts, as well as the principles relating to the funding of pension schemes and the investment of scheme assets. The law also obliges trustees to take advice. However, individual advisors do not necessarily cover the whole portfolio.

Concerns have been raised about whether trustees had the requisite expertise to know the potential implications of LDI, as well as the appropriateness of pension scheme governance. Mr Counsell said that there is “a question” around the governance within pension schemes, particularly small schemes. He said that there was an issue with the speed of decision-making during the episode, particularly with pooled funds. He stressed that this is not true across all schemes, but noted that many of his positive conversations were with larger schemes and with professional trustees operating across multiple schemes, questioning the degree to which trustees of small schemes were aware of what they were involved in. He expressed his preference to move to a point where all schemes have a professional trustee on their board but said that this is not currently practical as there are too many schemes and not enough professional trustees.

Mr Rathi said that there were “clearly gaps in competence” with some investors. He outlined the need to look at the structure of some LDI funds, particularly pooled funds, as some small schemes “do not have the financial acumen to know what they are buying”, especially where derivatives have been overlaid. He said that schemes need to be able to move quickly when markets shift but some schemes had to wait ten days to move cash. Given the “staggeringly large moves in markets”, he emphasised that this was “too slow”, noting that there is now some “soul-searching” among asset managers as to whether leveraged LDI will be available in the way that it had previously been.

Mr Counsell said that concerns over the quality of governance of small schemes had led TPR to push for the consolidation of smaller schemes, due to the evidence that they are less likely to be well-run than large schemes. He explained that in the DC market there are master trusts, which are large, well-run schemes that are authorised by TPR. In the DB market, TPR has set up a framework for ‘superfunds’, which are vehicles into which individual DB schemes can consolidate to take advantages of scale, but he noted that this is currently done on a voluntary basis. He called for superfunds to be put on a statutory basis, noting that while putting such a framework in place is complex, there have been a number of discussions over the last two or three years about how it might work, including with the Government.

It is clear that not all pension scheme trustees had the financial acumen to fully understand the LDI strategies that they were signed up to and their potential ramifications. The governance of small pension schemes may be inadequate in the

face of the speed of modern financial markets and the increasing use of bank-like instruments such as leverage and derivatives in the pensions space. We note TPR's work to establish superfunds.

Investment consultants

Under the Pensions Act 1995, pension scheme trustees "must obtain and consider proper advice on the question of whether the investment is satisfactory". We heard that the role of investment consultants in DB pension schemes is poorly understood, meaning that they often sail under the radar of regulation despite the fact that they are often key to decision-making on schemes' investment strategies. Given the small size and limited professional capacity of many schemes, consultants often operate as an outsourced executive to schemes, yet are not regulated in relation to most of their role in the system. We heard from consultants that only a narrow piece of their work is currently regulated, relating to particular products and investment decisions. Critics of LDI suggested that investment consultants had played a key role in persuading pension schemes to adopt LDI strategies, sometimes in quite a forceful way. We also heard that consultants can benefit from the complexity of LDI strategies, which can generate higher fees.

FCA Chief Executive Nikhil Rathi said that the FCA has been clear since 2018 that investment consultants should be brought within its regulatory perimeter, but stressed that this was a matter for Government and Parliament to decide. He explained the FCA's belief that pension funds do not necessarily have the ability to compare the performance of consultants in terms of the quality of disclosures and how to assess fees. He also suggested that there is a "nagging concern" about conflicts of interest in the investment consultancy model, and the extent to which consultants have used their privileged position with schemes to steer them towards other services that consultancies provide. He said that consultants are a "core part of the chain" yet this activity is not subject to regulatory oversight. Asked why the FCA did not take a lead and start regulating consultants, Mr Rathi said that the FCA cannot act outside of its perimeter due to a lack of powers to gather information and questions over the appropriateness of spending money to regulate an activity that the regulator has not been asked to. TPR Chief Executive Charles Counsell noted that trustees are required to take advice from consultants and yet this advice is not regulated, agreeing that there needs to be more regulation of consultants. He said that where trustees do not know the right questions to ask, then there is a risk for them.

However, Sir John said that while L&G's preference would be for consultants to be brought within the scope of regulation, that is "not particularly for reasons connected to this episode". He emphasised the importance of consultants as "important players in the system" with "serious responsibilities" and accepted that there are conflicts within the consultant model, but argued that the debate about regulating consultants has "nothing to do with this issue".

Investment consultants play a key role in determining the investment strategies of pension schemes. Given the predominance of LDI in those strategies, it is clear that consultants helped to drive schemes towards adopting LDI. While some of the work of investment consultants is currently regulated, it is problematic that they are not fully regulated as part of the regulatory perimeter, especially in relation to their advice to schemes on their investment strategies, for which they should not be able to disclaim liability. The Government should ensure that investment consultants are brought within the regulatory perimeter as a matter of urgency. Once this is done, regulators must have heed to the non-professional nature of trustees in their regulation of consultants and ensure consultants are liable for their advice.

Solutions

Those more sympathetic to the use of LDI, including regulators and the industry, suggest that the issue is not the continuing use of LDI, instead calling for operational and governance changes to avoid such an episode occurring again. Mr Counsell said that immediately, work needs to focus on the degree to which there is sufficient collateral to respond to shocks, ensuring a stronger buffer against bond yield movements than before the episode. However, he stressed that the more capital that is put aside as collateral, the bigger the cost in terms of the ability of schemes to be fully funded by investing in growth assets, suggesting that there will always be risk and a balance to be found. He argued that TPR is trying to create a system that puts a fair amount of burden on the employer and creates the right level of returns to get to a place where schemes are fully funded. Mr Rathi said that higher leverage caps and higher liquidity buffers are "on the table" in regulatory discussions. He stressed that LDI funds are organised overseas and marketed in the UK, but noted that regulators need to think about whether there should be greater safeguards against leverage.

Mr Walls said that there are lessons for asset managers around the consequences once the liquidity buffer is exhausted, arguing that there is a need to make the initial buffer big enough to deal with the subsequent consequences, even though this has a cost. He explained that each asset manager will have a range of funds with different buffers and that each of these buffers is likely to be higher now, at about 300 to 400 basis points, emphasising that lots of resilience has been built into the system through this episode, although this has costs and is not a steady state.

Mr Walls also argued that there is a need to make the knock-on consequences less severe when whatever buffer set is exhausted. He argued that there are "more obvious wins" on the operational side, such as reducing the time a manager of a pooled fund needs to call money in from trustees. He said that some managers have dealt with this better than others and some have introduced new arrangements, noting that there are "some fruitful ways" to manage funds' vulnerability to a sharp move.

Mr Counsell also suggested that the speed of decision-making by funds needs to be looked at, which is partly about governance but also the speed of decision-making by trustees and others in the system. Mr Walls said that there may be mechanisms that allow asset managers more discretion to access liquid assets outside of pooled funds. Mr Rathi said that some funds were not able to move quickly enough to provide capital to counterparties, which leads to thinking about whether the structure of these funds is right for the future, due to the inability to move assets that are outside the LDI mandate into the mandate to manage these risks. He also suggested that there needs to be a conversation about increasing insurance buyouts and professionalising the industry.

The *Financial Times* reported on 25 October that lawyers are attempting to redraft LDI contracts in order to be able to use assets other than cash as collateral for LDI exposures, in order to avoid having to sell off gilts to generate cash in a future stress scenario. Many current contracts state that LDI exposure collateral must be in the form of cash, and law firms told the FT that pension fund trustees are exploring the ability to use options other than cash, which in some cases would involve rewriting the underlying agreements.

Critics of LDI suggest that using assets as collateral and limiting leverage would not work and could see similar issues recur in future, noting issues with the use of assets as collateral during the financial crisis. They argue that stopping the use of derivatives is an option and might tackle some of the excesses on the leverage side, which is what prompted calls for cash and the sale of gilts but suggest that other assets could be used by schemes to replicate the effects of derivatives. They instead suggest the need to move to an alternative method of accounting for pension scheme finances that would eliminate the variability of market-based discount rates and would better reflect the true position of the pension scheme and sponsoring companies. They argue that this would recognise the fact that there is an employer covenant supporting pension schemes, suggesting that TPR has been looking at this issue from the wrong perspective, seeing pension scheme as being there to meet the employer's costs rather than the employer being there to support the scheme.

If schemes are to continue to use leveraged LDI, there should be far stricter limits and reporting on the amount of leverage allowed in LDI funds. The argument against this is that it might limit the benefits of LDI for growing pension schemes' assets, but if this is a concern, pension funds should invest more of their own funds in growth assets rather than using leverage and bonds. Changes to this effect should be included in the draft Occupational Pension Schemes (Funding and Investment Strategy and Amendment) Regulations 2023 and TPR's DB funding code.

Greater liquidity buffers should be introduced for any leveraged exposures to avoid collateral calls leading to cascading loops in markets. However, given the instability caused by even small price movements in the index-linked gilt market, buffers cannot be the only answer and must be accompanied by a reduction in leverage and in the concentration of ownership of certain types of bonds by DB pension funds.

Using assets other than cash as collateral has the potential to be risky due to the difficulties in valuing assets as collateral, particularly in stressed markets. LDI fund managers should not be given access to other assets within a pension scheme to pay collateral, as this would only open pension scheme finances up to even greater risks from leveraged LDI.

We would appreciate a response to our recommendations in writing by 7 March, and look forward to speaking with you on these important subjects further in March.

Yours sincerely,

Lord Hollick
Chair of the Industry and Regulators Committee