



## **Appendix 1:**

Extract from AIB's Annual Financial Report 2017



# Consolidated income statement

for the financial year ended 31 December 2017

	Notes	2017 € m	2016* € m
<b>Continuing operations</b>			
Interest and similar income	5	2,481	2,611
Interest expense and similar charges	6	(305)	(598)
<b>Net interest income</b>		<b>2,176</b>	<b>2,013</b>
Dividend income	7	28	26
Fee and commission income	8	436	430
Fee and commission expense	8	(45)	(35)
Net trading income	9	97	71
Profit on disposal of loans and receivables	10	32	11
Other operating income	11	277	403
<b>Other income</b>		<b>825</b>	<b>906</b>
<b>Total operating income</b>		<b>3,001</b>	<b>2,919</b>
Administrative expenses	12	(1,694)	(1,462)
Impairment and amortisation of intangible assets	30	(83)	(70)
Impairment and depreciation of property, plant and equipment	31	(58)	(39)
<b>Total operating expenses</b>		<b>(1,835)</b>	<b>(1,571)</b>
<b>Operating profit before provisions</b>		<b>1,166</b>	<b>1,348</b>
Writeback of provisions for impairment on loans and receivables	25	113	294
Writeback of provisions for impairment on financial investments available for sale	14	–	2
Writeback of provisions for liabilities and commitments	39	8	2
<b>Operating profit</b>		<b>1,287</b>	<b>1,646</b>
Associated undertakings and joint venture	29	19	35
Profit on disposal of business	15	–	1
<b>Profit before taxation from continuing operations</b>		<b>1,306</b>	<b>1,682</b>
Income tax charge from continuing operations	17	(192)	(326)
<b>Profit after taxation from continuing operations</b>			
attributable to owners of the parent		<b>1,114</b>	<b>1,356</b>
<b>Basic earnings per share</b>			
Continuing operations	18(a)	<b>39.7c</b>	<b>48.6c</b>
<b>Diluted earnings per share</b>			
Continuing operations	18(b)	<b>39.7c</b>	<b>47.9c</b>

\*As reported in the 2016 consolidated financial statements of Allied Irish Banks, p.l.c.







## **Appendix 2:**

Central Bank of Ireland - Frequently Asked Questions in respect of credit servicing





Banc Ceannais na hÉireann  
Central Bank of Ireland

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## FAQ – Credit servicing

### 1. Why has the law changed?

When a consumer takes out a loan from a regulated lender (“the original lender”) it is subject to all the relevant consumer protections. Most loan agreements include a clause that allows the original lender to sell the loan on to another firm. The loan agreement is the document that describes the terms and conditions of a person’s loan.

In the past, if the original lender sold a loan to another person who was not regulated by the Central Bank (“an unregulated firm”), the consumer could lose the protections they previously had under the various Central Bank statutory Codes of Conduct.

In July 2015, the Consumer Protection (Regulation of Credit Servicing) Act 2015 (“the 2015 Act”) was introduced to fill the consumer protection gap where loans are sold by the original lender to an unregulated firm. The 2015 Act introduces a regulatory regime for a new type of entity called a ‘credit servicing firm’.

### 2. What is a credit servicing firm?

Under the 2015 Act, if the firm who bought the loans from the original lender is an unregulated firm then the loans must be serviced by a credit servicing firm who is regulated by the Central Bank.

Credit servicing firms are firms who manage or administer loans on behalf of the unregulated firm. ‘Credit servicing’ includes all interactions with the consumer<sup>1</sup> in respect of the loan, including:

- Notification of changes in interest rates or payments due;
- Collecting repayments on the loan;
- Managing complaints; and

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<sup>1</sup> The 2015 Act covers cash loans by relevant borrowers, who are either:

- A natural person (unless they are a professional client under MiFID or a regulated financial service provider); or
- A micro, small or medium- sized enterprise (SME) (within the meaning of Commission Recommendation 2003/361/ EC of 6 May 2003) but only to the extent that the credit was advanced to the SME by a regulated financial service provider.

Some loans are not covered by the 2015 Act – these include hire purchase agreements and consumer hire/leasing agreements. The servicing of loans which have been granted to consumers who are not ‘relevant borrowers’, is also outside the scope of the 2015 Act.

- Assessing the consumer's financial circumstances in cases of financial difficulties.

Credit servicing firms must act in accordance with Irish financial services law that applies to 'regulated financial service providers'. This ensures that consumers, whose loans are sold to another firm, maintain the same regulatory protections they had prior to the sale, including under the various statutory Codes of Conduct issued by the Central Bank.

If a firm is servicing the portfolio of loans on behalf of a regulated lender then they do not need to be separately authorised by the Central Bank as a credit servicing firm, as this arrangement is covered under existing rules covering outsourcing that apply to all regulated financial services firms.

### 3. What additional consumer protections does the new law introduce?

The new law makes sure that all relevant consumer protections **will continue to apply to the loan** when it is sold on to another firm.

Credit servicing firms must act in accordance with financial services legislation including;

- the Consumer Protection Code 2012 ('the Code');
- the Code of Conduct on Mortgage Arrears 2013 ('the CCMA');
- the Code of Conduct for Business Lending to Small and Medium Enterprises ('the SME Code')<sup>2</sup>; and
- the Minimum Competency Code 2011 ('the MCC').

The full versions of the Codes can be downloaded from our website [www.centralbank.ie](http://www.centralbank.ie). Our Consumer Guides to the Code and the CCMA are available at [www.centralbank.ie/publicinformation](http://www.centralbank.ie/publicinformation).

### 4. How can I check if my loan can be sold on?

If you are unsure whether your loan can be sold on by your original lender to another firm, you should check the terms and conditions of your loan agreement or contact your original lender.

### 5. What should the original lender do if it wants to sell a loan?

Provision 3.11 of the Central Bank's Consumer Protection Code 2012 requires that, where a regulated lender intends to transfer all or part of its 'regulated activities' to another regulated entity, it must provide advance notification to both the Central Bank and affected consumers.

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<sup>2</sup> It should be noted that the SME Code will only apply for the interim period until it is replaced by the forthcoming Central Bank (Supervision and Enforcement) Act 2013 (Section 48)(Lending to Small and Medium-sized Enterprises) Regulations 2015, which will come into effect 6 months after the date of publication.



From the date of enactment of the 2015 Act, the original lender must now provide a consumer with at least 2 months' notice before transferring all or part of its loan book covered by the Code to another person, including where the transferee is an unregulated entity. Where the transferee is an unregulated entity, the Code now requires that the regulated lender also notify the consumer of the regulated entity that will be 'servicing' the loan for the unregulated entity.

This was not the case before the enactment of the 2015 Act because servicing a loan was not a regulated activity requiring authorisation by the Central Bank.

In the event that there is a change in the credit servicing firm, the existing credit servicing firm must also notify the Central Bank and the consumer in advance, in accordance with the timelines set out under Provision 3.11 of the Code.

**6. How can I check if a credit servicing firm is regulated by the Central Bank?**

To check if a credit servicing firm is regulated by the Central Bank, visit the register at [www.registers.centralbank.ie](http://www.registers.centralbank.ie)

**7. How can I make a complaint against the original lender or a credit servicing firm?**

If you are not satisfied with how the sale of your loan is being dealt with by the original lender, you should make a complaint to the original lender. If you are not happy with the service you receive from a credit servicing firm, you have the right to complain to that firm.

In either case, the firm will handle the complaint in accordance with its complaints handling process. The Central Bank's Consumer Protection Code 2012 also includes rules that firms must follow when they handle the complaint.

If the complaint is not resolved to the consumer's satisfaction, they can refer the complaint to the Financial Services Ombudsman, where they are an 'eligible consumer' covered by that Scheme. Further details on the Financial Services Ombudsman Scheme can be found on [www.financialombudsman.ie](http://www.financialombudsman.ie).

**Further information**

If you have questions that are not addressed in this Q&A document, please contact us at the relevant email/number below:

Consumers – [enquiries@centralbank.ie](mailto:enquiries@centralbank.ie), 1890 777 777

Stakeholders - [codes@centralbank.ie](mailto:codes@centralbank.ie).

Authorisation related queries - [creditservicingfirms@centralbank.ie](mailto:creditservicingfirms@centralbank.ie).





### **Appendix 3:**

#### **Register of Credit Servicing Firms**





## Credit Servicing Firms

*Authorised under Part V of the Central Bank Act, 1997 as amended by the Consumer Protection (Regulation of Credit Servicing Firms) Act, 2015 to provide credit servicing.*

*Or*

*Who have notified the Central Bank that they wish to avail of the transitional provisions provided for under Section 34F of the Central Bank Act, 1997.*

Ref. No	Name and Address	Authorisation Status	Date of Authorisation
C145707	Acenden (Ireland) DAC t/a Acenden 1st Floor, Block P7 East Point East Wall Road Dublin 3	Authorised	01 September 2017
C141396	Cabot Financial Ireland Limited Block D Cookstown Court Old Belgard Road Tallaght Dublin 24	Authorised	05 May 2017
C148966	Elstree Mortgages Limited t/a Elstree Mortgages Limited Fourth Floor Equity House Upper Ormond Quay Dublin 7	Transitional	
C145702	Fitzwilliam Loan Management Unlimited 61A Fitzwilliam Square Dublin 2	Authorised	03 March 2017
C145708	Hudson Advisors Ireland DAC 4th, 5th and 6th Floors Fitzwilliam Court Leeson Close Dublin 2	Authorised	08 May 2017
C145700	Lapithus Management DAC Huguenot House 5th Floor 35/38 St. Stephens Green Dublin 2	Authorised	03 March 2017
C29016	Link ASI Limited t/a Asset Services 2 Grand Canal Square Grand Canal Harbour Dublin 2 D02 A342	Authorised	01 August 2017
C145706	Mars Capital Finance Ireland DAC t/a Mars Capital Grand Canal House Upper Grand Canal Street Dublin 4	Authorised	17 July 2017

Ref. No	Name and Address	Authorisation Status	Date of Authorisation
C145701	Mount Street Mortgage Servicing Limited 16 Fitzwilliam Place Dublin 2	Authorised	28 April 2017
C148968	Situs Asset Management (Ireland) DAC t/a Situs Asset Management (Ireland) DAC 1 Northbrook Road Ranelagh Dublin 6	Authorised	15 February 2018
C180332	Situs Asset Management Limited 34th Floor 25 Canada Square Canary Wharf London E14 5LB	Transitional	

Total number of transitional Credit Servicing Firms: 2

Total number of authorised Credit Servicing Firms: 9



## **Appendix 4:**

### **Register of Retail Credit Firms**



## Retail Credit Firms/Home Reversion Firms

*Authorised under Part V of the Central Bank Act, 1997 as amended to carry out retail credit firm and/or home reversion firm business.*

*Or*

*Who have notified the Central Bank that they wish to avail of the transitional provisions provided for under Section 34E of the Central Bank Act, 1997 as a retail credit firm as at 8 July 2015.*

Ref. No	Name and Address	Authorisation Status	Dates of Authorisation	
			Retail Credit	Home Reversion
C26880	ACC Loan Management DAC t/a ACC Loan Management, ACCLM George's Dock House 2 Georges Dock IFSC Dublin 1	Authorised	16 November 2016	
C33133	AIB Leasing Limited Bankcentre Ballsbridge Dublin 4	Authorised	13 October 2010	
C129700	AvantCard DAC Dublin Road Carrick on Shannon Leitrim	Authorised	13 December 2016	
C38648	BMW Financial Services (Ireland) DAC t/a BMW Financial Services Swift Square Santry Demesne Dublin 9	Authorised	21 August 2017	
C128647	Dilosk DAC t/a Dilosk, ICS Mortgages 16 Hume Street Dublin 2	Authorised	14 August 2014	
C49177	Everyday Finance DAC t/a Everyday 16 Briarhill Business Park Ballybrit Galway	Authorised	24 December 2008	
C33156	Fexco Asset Finance Unlimited Company Iveragh Road Killorglin Co Kerry	Authorised	01 May 2015	
C134073	Finance Ireland Credit Solutions Limited t/a Finance Ireland Commercial Mortgages, Finance Ireland Leasing, Finance Ireland Agri 85 Pembroke Road Ballsbridge Dublin 4	Authorised	07 May 2015	

Ref. No	Name and Address	Authorisation Status	Dates of Authorisation	
			Retail Credit	Home Reversion
C121598	First Citizen Finance Designated Activity Company t/a First Citizen Finance, Motorplan, Motorplan Direct, Simplicity Bloom House Gloucester Square Dublin 1	Authorised	20 September 2013	
C145839	Future Finance Loan Corporation Limited 6th Floor College House 2/3 Townsend Street Dublin 2	Authorised	09 May 2017	
C47705	Haven Mortgages Limited t/a Haven The EBS Building 2 Burlington Road Dublin 4	Authorised	28 May 2009	
C37043	Pepper Finance Corporation (Ireland) DAC t/a Pepper Asset Servicing, Pepper Homeloans, Pepper Money 4th Floor, Two Park Place, Hatch Street Upper Dublin 2	Authorised	27 October 2016	
C54145	Permanent tsb Finance Limited 56-59 St Stephen's Green Dublin 2	Authorised	23 July 2009	
C43125	Residential Reversions Limited t/a Sixty Plus Finance 18 Merrion Row Dublin 2	Authorised		15 October 2008
C57454	RKR Financial Services Ltd t/a Fee Finance t/a Fee Finance 396 North Circular Road Phibsboro Dublin 7	Authorised	12 April 2010	
C39721	Secured Property Loans Limited t/a Secured Property Loans Limited Drumcoura Lake Resort Derrygoan Ballinamore Leitrim	Authorised	04 November 2009	
C40415	Seniors Finance Ireland Limited t/a S.H.I.P. 85 Pembroke Road Ballsbridge Dublin 4	Authorised	25 September 2008	
C39895	Seniors Money Mortgages (Ireland) Designated Activity Company t/a Seniors Money 38 Pembroke Road Ballsbridge Dublin 4	Authorised	31 October 2008	

Ref. No	Name and Address	Authorisation Status	Dates of Authorisation	
			Retail Credit	Home Reversion
C37760	Shared Home Investment Plan Limited t/a S.H.I.P. 85 Pembroke Road Ballsbridge Dublin 4	Authorised		25 September 2008
C44436	Springboard Mortgages Limited t/a Springboard Mortgages 100 Lower Mount Street Dublin 2	Authorised	22 September 2008	
C36267	Start Mortgages Designated Activity Company t/a Start Mortgages Trimleston House Beech Hill Office Campus Clonskeagh Dublin 4	Authorised	25 November 2008	
C44346	Stepstone Mortgage Funding Ltd One Spencer Dock North Wall Quay Dublin 1	Authorised	18 June 2010	
C53595	Wm Neville Finance Limited Rockfield House Spawell Road Wexford	Authorised	12 May 2009	
Total number of transitional Retail Credit Firms:		0		
Total number of authorised Retail Credit Firms:		21		
Total number of authorised Home Reversion Firms:		2		







## **Appendix 5:**

### **Feedback Statement on CP109 – Consultation on Potential Changes to the Investment Framework for Credit Unions**





Banc Ceannais na hÉireann  
Central Bank of Ireland

Eurosystem

# Feedback Statement on CP109 – Consultation on Potential Changes to the Investment Framework for Credit Unions

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## Foreword

*The Central Bank undertook a review of the existing investment regulations in 2017 to consider whether it is appropriate and prudent to facilitate investment by credit unions in other classes of investments. CP109 set out our proposed changes to the investment framework for credit unions and invited feedback on these proposals.*

*I would like to take this opportunity, on the publication of the revised regulations for credit unions and the feedback statement on CP109, to acknowledge the level of interest in these regulations and to thank all those who have provided feedback on the Central Bank's proposals.*

*The Central Bank acknowledges the important role which credit unions play in Irish society and in the financial system, and the strong voluntary and community ethos of the sector. Both the role and ethos reflect the primary objects and purpose of credit unions to promote thrift among their members by the accumulation of their savings and the creation of sources of credit for members' mutual benefit at fair and reasonable interest rates. Our statutory mandate is to ensure the protection by each credit union of the funds of its members, and to maintain the financial stability and well-being of credit unions generally. This informs our approach to all aspects of the regulatory framework for credit unions, including the investment framework.*

*The Central Bank remains of the view that any changes to the investment framework for credit unions should reflect the fact that it is the savings of credit union members (which can be withdrawn on demand) that will be invested by credit unions and that the risk profile of credit union investment portfolios should reflect this. We acknowledge that this will necessarily impact on the level of return that appropriate investment portfolios can generate. However, we are strongly of the view that lending and the provision of services to members should be the key drivers of sector viability and that it is therefore not appropriate to seek to calibrate the investment framework to drive returns.*

*In recognition of this, we established a new unit in 2016 with a mandate to engage with credit unions on business model changes in order to progress well-developed proposals supported by credible risk-focused business plans. We will also be undertaking a review of longer term lending limits in 2018 with a view to supporting prudent lending opportunities for credit unions.*

*The Central Bank has given detailed consideration to the submissions received on the proposals set out in CP109 and this feedback has influenced the approach in areas such as:*

- *Concentration limits for new classes of investments;*

- *The application of liquidity requirements; and*
- *Transitional arrangements for the revised counterparty limit.*

*These regulations introduce important changes to the investment framework for credit unions with the introduction of three additional classes of investments which will facilitate increased levels of diversification in credit union investment portfolios.*

*The changes being made with the introduction of these revised regulations demonstrate the flexibility provided by the provision of regulation making powers to the Central Bank. The sector brought forward detailed proposals around the provision of funding by credit unions to approved housing bodies to facilitate social housing and following comprehensive engagement and consultation credit union regulations now allow for credit unions to provide funding to support the provision of social housing.*

*The Central Bank will continue to review and update regulations as appropriate following consultation. The Central Bank is keen to ensure that regulations remain appropriate for the credit union sector and in the future, and where credit unions set out a clear path on how they wish to develop, we will consider any amendments to the regulations that may be appropriate to facilitate such development.*



**Patrick Casey**

***Registrar of Credit Unions***





## 1. Introduction

Following a review of the investment framework for credit unions, the Central Bank published CP109 “Consultation on Potential Changes to the Investment Framework for Credit Unions” (CP109) on 11 May 2017. CP109 set out potential changes to the investment framework for credit unions, along with a Regulatory Impact Analysis (RIA), and sought views from credit unions and other sector stakeholders on the potential changes outlined, together with feedback as to whether there are additional investment classes appropriate for credit unions taking account of the appropriate risk profile for such investments. CP109 posed 18 specific questions for respondents to address. The closing date for submissions was 28 June 2017.

74 submissions were received in response to CP109. The Central Bank would like to thank all parties who took the time to make a submission on CP109 to inform the policy development process. The submissions received can be broken down as follows:

- 58 from individual credit unions;
- 3 from credit union bodies;
- 5 from investment firms; and
- 8 from others (including professional bodies, TD’s and Approved Housing Bodies (AHBs) stakeholders).

All submissions received are available on the Central Bank website at the following [link](#). Following completion of the consultation on CP109 and consideration of the submissions received, in line with section 84A of the Credit Union Act, 1997 (the 1997 Act), the Central Bank has consulted with the Minister for Finance and the Credit Union Advisory Committee (CUAC). The Central Bank also further consulted with credit union bodies at that time.

This paper summarises the feedback received on CP109 and sets out the Central Bank’s considered decisions. It is intended to be read in conjunction with CP109 and makes reference to proposals and terms used in the original consultation document, which can be found on the Central Bank’s website at the following [link](#).

Section 2 of this feedback statement provides a high level summary of the proposals set out in CP109, the feedback received and the Central Bank’s response to this feedback. Section 3 provides details on the proposals set out and questions posed in CP109 along with a summary of the feedback received on each question posed in CP109 and the Central Bank’s response. Section 4 of this feedback statement provides an overview of additional feedback received and the Central Bank’s response to this feedback. The final section, Section 5, of this feedback statement provides details on the statutory consultation conducted in line with section 84A of the 1997 Act. The amending regulations for the investments and liquidity framework are set out in Appendix 1. Comparison tables outlining the differences between the Credit Union Act 1997 (Regulatory Requirements) Regulations 2016 (the 2016 Regulations) and the amending regulations on investments and liquidity can be found in Appendix 2.

This feedback statement is published to promote understanding of the policy formation process within the Central Bank and is for information purposes only. This document does not alter legal or regulatory requirements for credit unions. This document does not constitute legal advice and should not be used as a substitute for such advice. It is the responsibility of all credit unions to ensure their compliance with legal and regulatory requirements.

As indicated in the RIA which accompanied CP109, the Central Bank will undertake and publish analysis of credit union sector investments, two years post commencement of the amending investment regulations for credit unions, to assess and analyse the actual impact which the changes to the investment regulations have had.



## 2. Executive Summary

### Review of Investment Framework for Credit unions

In order to ensure that the investment regulations remain appropriate for the credit union sector, the Central Bank undertook to review the investment regulations in 2017 to consider whether it is appropriate and prudent, at this stage, to facilitate investment by credit unions in other classes of investments.

The review was undertaken in the context of:

- the Central Bank's statutory mandate to regulate and supervise credit unions with a view to ensuring the protection by each credit union of the funds of its members and the maintenance of the financial stability and well-being of credit unions generally;
- the objects of credit unions set out in the 1997 Act;
- the legislative requirement, set out in section 43 of the 1997 Act, for credit unions to ensure investments do not involve undue risk to members' savings;
- the existing makeup of sector investments (including observed trends over the past five years);
- proposals being brought forward by the sector; and
- changes to the investment environment arising from the Banking Recovery and Resolution Directive (BRRD).

### Consultation on Potential Changes to the Investment Framework for Credit Unions

Following a review of the investment framework for credit unions, the Central Bank published CP109 "Consultation on Potential Changes to the Investment Framework for Credit Unions" (CP109) on 11 May 2017. CP109 set out potential changes to the investment framework for credit unions, along with a Regulatory Impact Analysis (RIA), and sought views from credit unions and other sector stakeholders on the potential changes outlined.

CP109 indicated that the Central Bank is considering the following potential additional investment classes for credit unions which would be accompanied by the introduction of specified credit quality, maturity and concentration limits:

- Bonds issued by Supranational Entities;
- Corporate Bonds; and
- Investments in Tier 3 AHBs<sup>1</sup>.

CP109 set out information on the impact of BRRD for credit union investments and articulated the Central Bank's view that it is not appropriate for credit unions to invest in debt instruments that are subordinated to senior liabilities issued by the same credit institution and thereby eligible for MREL (Minimum Requirements for Own Funds and Eligible Liabilities).

CP109 also set out proposals to reduce the existing investment counterparty limit from 25% to 20% of total investments and sought feedback on the use of collective investment

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<sup>1</sup> The regulatory code applied to AHBs divides AHBs into three tiers – Tier 3 refers to larger AHBs.

schemes and any barriers to credit unions using collective investment schemes within the existing investment framework.

## Feedback Received

Feedback received is broadly supportive of the proposals to introduce additional classes of investments for credit unions. However, while respondents recognise the diversification benefits of additional classes of investments, many express concerns that the proposals would not provide credit unions with opportunities to enhance investment returns in the current interest rate environment.

A large number of submissions raise concerns around the proposal to reduce the counterparty limit from 25% to 20% of total investments citing the challenge presented by the withdrawal of counterparties from the credit union market and the potential reduction in availability of eligible senior bank bonds as barriers to meeting a reduced counterparty limit.

In addition to this feedback which relates to specific questions posed in CP109, respondents also provide significant feedback on bank bonds and existing liquidity requirements for credit unions.

## Bank bonds

Many submissions raise concerns on the implications of the Central Bank's position that it is appropriate that credit unions would not be permitted to invest in subordinated debt instruments that are eligible for MREL, given their risk profile and the potential implications for credit unions should the institutions that issued the instrument enter into resolution. Feedback provided indicates that the Central Bank's position would effectively close off the investment class of bank bonds to credit unions as institutions are likely to focus on issuance of subordinated debt instruments that are eligible for MREL, limiting the availability of eligible senior bank bonds for credit unions. Respondents express concerns about the impact that this would have on credit unions' ability to generate income from their investment portfolios.

## Liquidity

Submissions also highlight challenges credit unions face in relation to meeting existing liquidity requirements. Feedback provided notes the low and negative rates currently being paid on short term deposits held by credit unions and indicates that some counterparties are no longer accepting short term deposits from credit unions. Expanding the definition of liquid assets to include certain bonds is put forward as a suggestion in a number of submissions.

## Central Bank Response

The Central Bank has given detailed consideration to the submissions received and the feedback has influenced our approach in areas such as the:

- concentration and credit quality limits for proposed additional classes of investments;
- liquidity requirements; and
- transitional arrangements for the revised counterparty limit.

## Concentration and Credit Quality Limits

Having considered the feedback received, the Central Bank is making a number of changes to the concentration limits proposed in CP109. These changes provide for the inclusion of supranational bonds in the concentration limit currently applying to



government bonds<sup>2</sup> which will provide additional flexibility for credit unions to invest in these bonds. Additionally, the concentration limit for investments in corporate bonds has been increased to 50% of regulatory reserves.

In relation to investments in AHBs, a tiered concentration limit is being applied to investments in AHBs which will facilitate larger investments by credit unions with total assets of over €100m.

Having considered feedback in relation to investments in corporate bonds, the Central Bank has changed the minimum credit rating for investment in corporate bonds through an Undertaking for Collective Investment in Transferrable Securities (UCITS) from a rating of A to investment grade, in acknowledgement of the diversification opportunities that this may provide for credit unions and has also introduced an additional counterparty limit where investment is undertaken directly in corporate bonds.

## Bank bonds

The Central Bank remains of the view that it is appropriate that credit unions would **not** be permitted to invest in debt instruments that are subordinated to senior liabilities issued by the same credit institution, given their complexity and risk profile and the potential implications for credit unions should the instrument be written down or converted into equity.

We are of the view that a number of the proposed changes set out in this feedback statement will address some of the concerns raised in submissions in relation to the proposed amendment to the definition of bank bonds. These include the changes, referred to above, in the concentration limit for supranational and corporate bonds and the changes being made to liquidity requirements which may help to encourage further diversification in credit union investment portfolios.

## Liquidity

In light of the submissions received on liquidity, the Central Bank undertook analysis on the liquidity position of credit unions with a view to better understanding how the liquidity requirements are impacting on individual credit unions and the sector more broadly – details on this analysis is set out in section 4.2.

Having considered the feedback received and the additional analysis undertaken by the Central Bank, we have decided to introduce a number of amendments to the existing liquidity requirements. These changes will broaden the definition of liquid assets, allowing credit unions to include certain bonds when calculating liquidity subject to applicable discounts and will reduce the short term liquidity requirement from 5% to 2.5% of unattached savings. The Central Bank believes that this may help to encourage increased levels of diversification in credit union investment portfolios and a more proactive approach to liquidity management.

Further details on feedback received and the Central Bank's response to this feedback is set out in sections 3 and 4 of this feedback statement.

Where there is financial data presented and analysis undertaken throughout this feedback statement, this is based on financial data submitted by individual credit unions on the 30 June 2017 Prudential Return (PR). 275 credit unions reported a PR for this period.

Appendix 2 contains a table for both the investment and liquidity framework which illustrates the current framework and the framework which will apply when the amending regulations contained in Appendix 1 are commenced for credit unions.

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<sup>2</sup> Irish and EEA State Securities. The concentration limit for this investment class is currently 70% of total investments.

## 3. Responses To Questions Posed in CP109

### 3.1 Potential Additional Investment Classes

Under the existing regulatory framework, credit unions are permitted to invest in a range of specified investment classes which include government bonds, bank deposits, bank bonds and collective investment schemes made up of these instruments. Investments in these classes are subject to specified maturity and concentration limits.

In order to ensure that the investment regulations remain appropriate for the credit union sector, the Central Bank undertook to review the investment regulations in 2017 to consider whether it is appropriate and prudent, at this stage, to facilitate investment by credit unions in other classes of investments.

CP109 highlighted the current level of concentration in credit union investment portfolios with the majority of credit union investments held in accounts in authorised credit institutions (73%) or bank bonds (18%). Additionally, a large proportion of credit union investments are held with a small number of counterparties with nearly 70% of total investments held with only five counterparties. CP109 sought to understand why there is such concentration in investment portfolios and to understand if there are barriers to diversification within the existing investment framework.

CP109 proposed that credit unions be permitted to invest in corporate and supranational bonds and Tier 3 AHBs and set out proposed credit quality, maturity and concentration limits for each of these potential investment classes. This was aimed at helping to ensure that appropriate levels of diversification could be achieved in credit union investment portfolios. CP109 sought views on the appropriateness of the proposed investment classes for credit unions.

#### Question 1

*Do you have any comments on the current level of diversification in credit union investment portfolios? Are there any barriers to the use of existing diversification options within the current investment framework? If so, please provide details and any suggestions to address these.*

#### Question 2

*Do you have any comments on the potential introduction of additional investment classes for credit unions and the appropriateness of the classes being considered by the Central Bank?*

#### Question 3

*Taking account of the appropriate risk profile for credit union investments, are there any additional investment classes that the Central Bank should consider? If so, please outline the investment classes and why such investment classes are considered appropriate for credit unions.*

### Submissions to CP 109

#### Diversification

A large number of submissions comment on the current level of diversification in credit union investment portfolios and barriers to diversification. A significant number of these submissions note that credit union investment portfolios are concentrated in deposits and under diversified. Some respondents highlight that the range of authorised investments and the resulting diversification options in the 2016 Regulations are very restricted. A small number state that over several years the investment framework has been incrementally reduced so that only “no growth assets” are permitted. A number believe they have little choice other than to consider cash deposits or bank bonds for investments. A small number mention that the low yields available on EU government



bonds means these have not been a worthwhile investment in recent years. A limited number of submissions note that the high percentage of investments in accounts in authorised credit institutions further compounds the impact of negative yields on credit unions.

A significant number of submissions express concerns on changes to the definition of senior Bank Bonds set out in CP109. Further detail on the feedback received in relation to bank bonds is set out in section 4.1.

A limited number of respondents believe that the current liquidity ratio requirements and definitions effectively restrict investment in government and bank bonds and are barriers to the use of existing diversification options within the current investment framework. A small number of respondents suggest expanding the definition of liquid assets, which would assist credit unions in diversifying further and promote investment in bonds.

A limited number of submissions identified lack of investment options as the most significant barrier to diversification in credit union investment portfolios. Another challenge highlighted by limited numbers of respondents is a lack of demand from credit institutions for credit union deposits.

#### Appropriateness of Proposed Additional Investment Classes

Almost all submissions comment on the appropriateness of the potential additional investment classes. A large number of submissions welcome the introduction of additional investment classes for credit unions, with some submissions highlighting that these proposals provide an opportunity for credit unions to increase the current level of investment diversification and with a limited number stating that they believe that this will help to diversify risk.

A limited number of submissions on this specific question express the view that the proposals are not significant enough to introduce meaningful diversification into credit union investment portfolios and will not have an impact on income. A number of respondents comment that the concentration limits proposed in CP109 limit the potential for credit unions to diversify their investments.

A number of respondents agree with and welcome the specific proposals on supranational and corporate bonds while a small number of submissions express concerns on potential additional risks associated with corporate bonds.

Very few respondents comment on the proposals regarding investment in Approved Housing Bodies in the context of this question but those that did were generally supportive of this as an appropriate investment class for credit unions. The small number of respondents who comment state that the proposals contained in CP109 are broadly in line with their expectations.

Specific feedback provided in submissions on the three potential investment classes is outlined in sections 3.2, 3.3 and 3.4 below.

#### Other Additional Investment Classes

A large number of respondents comment on the appropriateness of investment in additional investment classes outside of the proposals set out in CP109. A significant number of these respondents request that credit unions be permitted to invest in subordinated debt instruments that are eligible for MREL subject to minimum credit ratings. Section 4.1 sets out an overview of the feedback received in relation to bank bonds and the Central Bank's response to this feedback.

A significant number of respondents suggest that the Central Bank should consider permitting credit unions to invest in semi-state companies and state sponsored projects such as infrastructure projects; including local community, schools or hospitals.

A number of respondents comment that investments in direct equity or equity based products would be appropriate for credit unions, providing diversification benefits.



Respondents suggest that equity exposures could be achieved through collective investments. Examples provided in submissions include UCITS including Exchange traded Funds (ETFs). One submission suggests that credit unions should be permitted to invest in absolute return funds. Submissions from investment advisors also comment that equities could provide diversification opportunities for the credit union sector subject to small concentration limits ranging between 5-10% of total investments.

Self-assessment of investment suitability is suggested by a number of respondents, citing that larger credit unions with sufficient risk, compliance and investment expertise could be permitted to determine their own investment risk appetite and portfolio allocation outside of the parameters set out in the investment framework. Section 4.4 sets out more detail on feedback received in relation to a differentiated or tiered approach to the investment framework.

Some respondents comment that investment in centralised SME or mortgage lending vehicles would benefit the sector. A submission from a representative body suggests that credit unions should be permitted to invest in Credit Union Service Organisations (CUSOs) established for the purpose of the provision of credit union services.

A limited number of respondents also comment on additional investment classes which would facilitate the diversification of credit union investment portfolios such as commodities, Real Estate Investment Trusts (REITs), inflation linked securities and non-EUR denominated investments.

#### Central Bank Response

##### Diversification

The amending investment regulations that are set out in Appendix 1, aim to facilitate diversification by providing an enhanced investment framework which is in line with an appropriate level of risk for credit unions and it is viewed will provide appropriate diversification opportunities in terms of investment type and counterparty. Changes to the proposed concentration limits for supranational bonds, corporate bonds and investments in AHBs should increase opportunities for credit unions to diversify their investments. In addition, changes are being made to the liquidity requirements for credit unions, which will see a change to the investments that may be considered as qualifying liquid assets and will facilitate further diversification in investment portfolios. The full details of these liquidity changes are included in section 4.2 with the amending regulations for liquidity included in Appendix 1.

##### Appropriateness of Additional Investment Classes

The Central Bank welcomes the feedback received on the additional investment classes proposed in CP109 and notes the comments provided. Having considered the feedback received, the Central Bank considers it appropriate to proceed with the introduction of the three additional investment classes proposed in CP109. Further detail on the proposals relating to these investment classes including maturity and concentration limits and credit quality requirements are set out in sections 3.2, 3.3 and 3.4 below.

##### Other Additional Investment Classes

The primary objects and purpose of a credit union remains the promotion of thrift among its members by the accumulation of their savings and the creation of sources of credit for their mutual benefit at fair and reasonable interest rates. Additionally, under section 43 of the 1997 Act, credit unions are required to ensure investments do not involve undue risk to members' savings. This informs the appropriate level of investment risk that credit unions should be permitted to take and should inform credit unions in setting their own investment risk appetites. As set out in CP109, the Central Bank is of the view that any changes to the investment framework for credit unions should reflect the fact that it is the savings of credit union members (which can be withdrawn on demand) that will be invested by credit unions and that the risk profile of credit union investment portfolios should reflect this. This will necessarily impact on the level of return that appropriate investment portfolios can generate.



This impacts the range of investments that would be considered appropriate for credit unions. In considering potential additional investment classes for credit unions, the Central Bank remains of the view that it is appropriate to focus on the lower end of the risk spectrum concentrating on fixed income investments and investments with particular characteristics that will help to ensure appropriate levels of investment risk for credit unions. The paragraphs below set out the Central Bank's comments on the specific investment classes suggested in submissions to CP109.

**State Projects:** the amending investment regulations set out in Appendix 1 continue to make reference to the Central Bank's ability to prescribe further classes of investments in which a credit union may invest, which may include investments in projects of a public nature. The Central Bank is open to considering proposals for this type of investment. As was the case with proposals around credit unions investing in social housing, where the Central Bank receives detailed proposals which can demonstrate that an investment could fall within the appropriate risk profile for credit union investments, it will consider further amendments to the investment regulations to facilitate such investments in the future.

**Centralised Mortgage Lending/Centralised SME Lending:** to date the Central Bank has engaged with sector stakeholders in relation to high level proposals to establish an entity to facilitate centralised mortgage lending by credit unions. The Central Bank will continue to engage with sector stakeholders on these proposals.

**Equities:** having considered the feedback received, the Central Bank remains of the view that investment in equities falls outside the appropriate risk profile for credit union investments and is of the view that some of the structures proposed for equity investment, could introduce an increased degree of complexity into credit union investment portfolios.

**Commodities:** the Central Bank is of the view that commodities do not represent an appropriate investment class for credit unions given their risk profile and the level of expertise required to manage such investments.

**REITs:** the Central Bank is of the view that REITs do not represent an appropriate investment class for credit unions given their risk profile and the level of expertise required to manage such investments.

**Inflation-linked securities:** credit unions are not currently precluded from investing in inflation-linked securities issued by the Irish and EEA Governments and this will remain the case when the amending investment regulations for credit unions are introduced.

**Non-EUR denominated investments:** credit unions do not currently have any currency exposures in their balance sheets and the Central Bank does not consider it appropriate for credit unions to introduce currency risk into their investment portfolios. This would introduce additional complexity into credit union portfolios and would require specific competencies to manage associated risks.

**CUSOs:** the Central Bank is open to giving consideration to how investment in CUSO's providing services to credit unions could be facilitated and will engage with the sector on proposals for the establishment of this type of entity.

The amending regulations set out in Appendix 1 incorporate a number of changes to the proposals outlined in CP109, which are aimed at addressing the feedback received through the consultation process. It is considered that the revised proposals reflected in these regulations will facilitate appropriate levels of diversification across an appropriate range of investment options.

## 3.2 Bonds issued by Supranational Entities

### Proposals set out in CP109

CP109 proposed permitting credit unions to invest in bonds issued by supranational issuers (entities formed by two or more central governments with the purpose of promoting economic development for the member countries). Examples of supranational entities that currently issue euro denominated bonds include the

European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD). CP109 proposed to permit such investments subject to the following limits:

**Minimum credit rating:** A minimum rating of no less than A or equivalent applied by at least two recognised rating agencies;

**Maturity Limit:** A maximum maturity limit of 10 years;

**Concentration Limit:** A maximum investment amount of 50% of the credit union's regulatory reserve, which gives potential for c.€895m investment at a sector level.

#### Question 4

*Do you have any comments on the potential to include supranational bonds in the list of authorised classes of investments set out in credit union investment regulations with a minimum credit rating requirement and maturity limit?*

#### Question 5

*Do you have any comments on the suggested concentration limit for credit union investments in supranational bonds? If you have suggestions, please provide them along with supporting rationale.*

### Submissions to CP109

#### Addition of supranational bonds to the list of authorised classes of investments

Almost all respondents to CP109 comment on the proposed introduction of supranational bonds to the credit union investment framework. A large number of respondents welcome this additional asset class, with some noting that permitting investments in supranational bonds would provide diversification benefits for credit unions.

Although a large number of respondents welcome this investment class, a large number also comment on the low yields that are currently available on this type of investment and indicate that investment in this class is likely to have little impact on a credit union's investment portfolio in terms of income generation. A small number of submissions view that supranational bonds are unlikely to form a significant proportion of a credit union's investment portfolio, and a limited number of submissions note that investment in European sovereign bonds is currently possible under the existing framework limiting the impact of adding supranational bonds as a class of investments for credit unions.

#### Minimum Credit Rating

Some respondents who comment on supranational bonds agree with the proposed credit quality requirement, however a small number disagree with the proposed requirement. A small number of respondents propose that a minimum rating requirement of investment grade may be more appropriate given the risk profile of supranational bonds.

A limited number of respondents comment on the fact that the proposed requirement is inconsistent with the 2016 Regulations, where no credit rating limit has been imposed on existing investment asset classes such as Accounts in Authorised Credit Institutions, Irish and EEA State Securities, and Bank Bonds.

#### Maturity Limit

A significant number of respondents comment on the proposed maturity limit of 10 years, with almost all of these submissions agreeing with the proposed maturity limit.

### Concentration Limit

Almost all respondents who comment on the introduction of supranational bonds as an investment class also comment on the proposed concentration limit for this class. Of these, the majority do not agree with the proposed limit based on the view that the



proposed limit is too low to have a meaningful impact on credit union investment portfolios. A small number of submissions propose that the concentration limit should be calculated as a percentage of total investments, while a further number of respondents propose including supranational bonds specifically in the current limit of 70% of total credit union investments which currently applies to both investments in bank bonds and government bonds.

Some respondents feel that the introduction of concentration limits based on regulatory reserves would add complexity to the management of investment portfolios. A limited number of respondents believe that credit unions should be allowed to choose their own concentration limits.

### Central Bank Response

#### Addition of supranational bonds to the list of authorised classes of investments

Having taken account of the feedback received from respondents, the Central Bank has decided to proceed with the addition of supranational bonds to the list of authorised classes of investments for credit unions. This new investment class will be subject to the following limits:

- A minimum credit rating requirement of investment grade (BBB- or equivalent) by at least 2 recognised rating agencies for direct investment or by 1 recognised rating agency for investment through a UCITS;
- A maximum maturity of 10 years;
- A concentration limit whereby exposure to the combination of Supranational Bonds and Irish and EEA State Securities cannot exceed 70% of the total value of a credit union's investments.

#### Minimum Credit Rating

The new investment class of Supranational Bonds will be subject to a minimum credit rating requirement of investment grade (BBB- or equivalent). This amendment reflects feedback received on the proposed minimum credit rating requirement set out in CP109. This minimum credit rating requirement will also be applied to investments in Irish and EEA State Securities in acknowledgement of the similar risk profile of these two investment classes. In general, credit unions have not invested in lower grade government bonds and this measure will prevent credit unions from investing in such bonds in the future, which could potentially result in undue risk to members' savings. In addition, it is viewed as appropriate that a rating requirement is placed on government bonds taking account of the changes being made to the liquidity framework.

The Central Bank requires that where Irish and EEA State Securities or Supranational bonds are held which no longer meet the minimum rating requirement, the credit union would be required to divest of the bond as soon as possible in order to ensure compliance with the regulations and ultimately to ensure appropriate management of the risks of its investment portfolio.

#### Maturity Limit

The 10-year maturity limit put forward in CP109 will remain unchanged.

#### Concentration Limit

In identifying an appropriate revised concentration limit, the Central Bank has assessed the current permissible investment in government bonds under the existing framework and the proposals put forward around the concentration limit for supranational bonds in CP109.

The current framework permits investment in Irish and EEA State securities up to 70% of total investments. Based on current financial data, this would permit an investment in this class of c.€8.2 bn. Total sector holdings in Irish and EEA State securities are currently

c.€0.71 bn., representing c.6% of total sector investments. The concentration limit of 50% of regulatory reserves proposed in CP109 equates to a potential investment of c.€0.9 bn. for supranational bonds.

It is proposed that an overall concentration limit of 70% of total investments is appropriate for a credit union's combined exposure to Irish and EEA state securities and supranational bonds.

Table 1 illustrates the overall potential sector exposure for these investment classes and includes detail on the maximum, minimum and average investment in Irish and EEA state securities and supranational bonds.

**Table 1**

	Investment €	Investment as a % of Total Assets	Investment as a % of Total Investments
Total exposure to Irish and EEA state securities and supranational bonds <sup>3</sup>	€ 8.2 bn	48.1%	70%
Largest maximum permitted investment <sup>4</sup>	€ 199.2 m	55.2%	70%
Smallest maximum permitted investment <sup>5</sup>	€ 0.11 m	4.9%	70%
Average maximum permitted investment (all credit unions where Total Assets ≥ €100m)	€ 85.9 m	49.9%	70%
Average maximum permitted investment (all credit unions where Total Assets < €100m)	€ 16.8 m	47.7%	70%

The application of an overall concentration limit of 70% of total investments for investments in Supranational Bonds and Irish and EEA State Securities would allow the sector to invest up to €8.2bn across government bonds and supranational bonds. This effectively facilitates the current level of investment in government bonds while providing more scope to invest in supranational bonds than proposed in CP109.

### 3.3 Corporate bonds

#### Proposals set out in CP109

Credit unions are currently permitted to invest in bank bonds but not permitted to invest in bonds issued by corporates. CP109 proposed to allow investment in corporate bonds subject to the proposed limits set out below:

<sup>3</sup> Calculated by applying the concentration limit to the total investments of each individual credit union and aggregating for all credit unions.

<sup>4</sup> Calculated by applying the concentration limit to the total investments of each individual credit union and identifying the credit union with the largest maximum permitted investment.

<sup>5</sup> Calculated by applying the concentration limit to the total investments of each individual credit union and identifying the credit union with the smallest maximum permitted investment.



**Minimum Credit Rating:** A minimum rating of no less than A or equivalent applied by at least two recognised rating agencies;

**Maturity Limit:** A maximum maturity limit of 10 years;

**Concentration Limit:** A maximum investment amount of 25% of the credit union's regulatory reserve, which gives potential for c.€448m investment at a sector level.

While the Central Bank acknowledged in CP109 some of the potential diversification benefits of investing in corporate bonds, we are of the view that investing in this investment class represents a significant change for credit unions compared to existing investments and requires a degree of expertise that credit unions will need to develop. CP109 articulated that it is vital that any credit union that undertakes investments in corporate bonds fully understands the specific characteristics of the investment and all associated risks.

CP109 proposed that as with existing classes of investments, under this proposal, credit unions would be permitted to gain exposure to corporate bonds through direct holdings of individual corporate bonds or through collective investment schemes, provided the underlying investments in the collective investment scheme fall within the limits and requirements specified in the regulations.

#### Question 6

*Do you have any comments on the potential to include corporate bonds in the list of authorised classes of investments set out in credit union investment regulations with a minimum credit rating requirement and maturity limit?*

#### Question 7

*Do you have any comments on the suggested concentration limit for credit union investments in corporate bonds? If you have suggestions, please provide them along with supporting rationale.*

### Submissions to CP109

#### Addition of corporate bonds to the list of authorised classes of investments

Almost all respondents comment on the introduction of corporate bonds to the credit union investment framework, with a large number welcoming the addition of this investment class. A significant number of submissions note the potential diversification benefits of this asset class, with a number commenting on the opportunity to allocate a portion of the investment portfolio to non-financial counterparties and the potential returns which such an investment may generate. While a limited number of respondents view the lack of regulation in this market as potentially increasing the risk profile of credit union investment portfolios, it is viewed by a number of respondents that the proposed minimum credit rating of no less than A may help to minimise the risks associated with this type of investment.

#### Minimum Credit Rating

A number of submissions express concerns with the credit rating proposed in CP109, and a significant subset request a minimum credit rating requirement of investment grade. Almost all of these respondents make this request due to a general lower return available on corporate bonds with an A rating, noting that investment grade would help income generation in the current low interest rate environment.

#### Maturity Limit

The majority of respondents agree with the proposed maturity limit of 10 years.

#### Concentration Limit

Almost all submissions disagree with the proposed concentration limit, commenting that a higher limit would have a greater impact on diversification. A significant number of

respondents request that the limit be set as a percentage of assets as they feel that the use of regulatory reserves adds an additional degree of complexity. In this respect, a number of responses request that the concentration limit for corporate bonds be included in an overall bond concentration limit of 70% of total investments, which would facilitate credit unions in deciding their fixed income investment strategy relative to their individual risk appetite.

### Central Bank Response

#### Addition of corporate bonds to the list of authorised classes of investments

Having taken account of the feedback received from respondents, the Central Bank has decided to proceed with the addition of corporate bonds as an investment class for credit unions. In recognition of feedback received and following further analysis, the proposed concentration limit set out in CP109 is increased to ensure that this class of investment provides meaningful diversification opportunities for credit unions. In addition, the credit rating requirement proposed in CP109 is being changed where investment in corporate bonds is undertaken via a UCITS. A specific counterparty limit for investments in corporate bonds is being introduced for direct corporate bond investment. This is aimed at seeking to ensure that an inappropriate level of risk is not introduced to credit union investment portfolios and to assist in driving further counterparty diversification. The revised limits for this additional investment class are as follows:

- a minimum credit rating requirement of A for direct corporate bond investment by at least 2 recognised rating agencies OR a minimum credit rating requirement of investment grade by at least 1 recognised rating agency for all corporate bond investments through a UCITS;
- a maximum maturity of 10 years;
- a concentration limit of 50% of regulatory reserves, which gives potential for c.€906m investment at a sector level; and
- specific counterparty limit for corporate bond which requires that a credit union shall not make a direct investment in corporate bonds issued by a particular counterparty which would cause the credit union's direct investments in corporate bonds with that counterparty to exceed 5% of the regulatory reserves of the credit union.

#### Minimum Credit Rating

Having considered feedback received on the proposed credit rating for corporate bonds set out in CP109 the Central Bank considers it appropriate to change the proposed minimum credit rating to investment grade for investments in corporate bonds through a UCITS. This is in acknowledgement of the diversification benefits which such an investment vehicle provides. A minimum A rating will apply to direct investments in corporate bonds.

For clarity the Central Bank definition of a corporate bond included in the amending regulations as set out in Appendix 1, does not permit investment in bank bonds issued through a holding company.

#### Maturity Limit

The 10-year maturity limit put forward in CP109 will remain unchanged. This maturity limit will apply to all corporate bond investments invested either directly or through a UCITS.

#### Concentration Limit

With respect to the concerns raised on the concentration limit, the Central Bank proposes to increase the concentration limit from 25% to 50% of regulatory reserves which gives potential for c.€906m investment in this investment class at a sector level.



### Specific Corporate Bond Counterparty Limit

The introduction of a specific counterparty limit for corporate bonds is aimed at ensuring that an inappropriate level of risk is not introduced into credit union investment portfolios. Therefore, it is deemed appropriate that, where a credit union undertakes investment directly in corporate bonds, the credit union does not have a direct exposure to any one corporate bond issuer which is greater than 5% of its regulatory reserves. This specific counterparty limit will also assist in driving counterparty diversification e.g. if a credit union invests to the maximum of 50% of regulatory reserves directly in corporate bonds, this limit will ensure that the overall corporate bond exposure is spread over a minimum of 10 counterparties.

Table 2 illustrates the overall potential sector exposure for this investment class and includes detail on the maximum, minimum and average investment in corporate bonds through UCITS under this concentration limit.

**Table 2**

	Investment €	Investment as a % of Total Assets	Investment as a % of Total Investments
Total exposure to corporate bonds <sup>6</sup>	€ 906 m	5.4%	8.3%
Largest maximum permitted investment <sup>7</sup>	€ 22.2 m	6.8%	10.2%
Smallest maximum permitted investment <sup>8</sup>	€ 0.06 m	6.3%	10.9%
Average maximum permitted investment (all credit unions where Total Assets ≥ €100m)	€ 9.4 m	5.5%	7.8%
Average maximum permitted investment (all credit unions where Total Assets < €100m)	€ 1.9 m	5.4%	8.5%

We acknowledge the non-financial sector diversification benefits this asset class would bring to credit union investment portfolios and believe this concentration limit would not introduce an inappropriate level of risk into credit union investment portfolios.

## 3.4 Investments in Approved Housing Bodies

### Proposals set out in CP109

Prior to publishing CP109 the credit union sector engaged with the Central Bank in relation to proposals for credit unions to provide funding to AHBs for the provision of social housing. Common bond restrictions limit the potential for credit unions to lend to AHBs, either directly or on a syndicated basis, and as a result proposals have focused on

<sup>6</sup> Calculated by applying the concentration limit to the regulatory reserve of each individual credit union and aggregating for all credit unions.

<sup>7</sup> Calculated by applying the concentration limit to the regulatory reserve of each individual credit union and identifying the credit union with the largest maximum permitted investment.

<sup>8</sup> Calculated by applying the concentration limit to the regulatory reserve of each individual credit union and identifying the credit union with the smallest maximum permitted investment.

investment-based funding. These proposals are based around the establishment of a collective investment vehicle, which would facilitate the provision of credit union funding to AHBs by way of investment.

Having considered proposals brought forward by the sector for investing in AHBs and undertaking research on the AHB sector, including the structure and funding model, the Central Bank outlined proposals in CP109 which would enable credit unions to undertake such investment. CP109 highlighted a number of identified risks and associated risk mitigants for this type of investment and outlined specific limits and requirements, which in the Central Bank's view, would be required in order for credit unions to be permitted to invest in AHBs. These limits are:

**Type of AHB:** The Central Bank is of the view that it would be appropriate to limit investment to Tier 3 AHBs only, in recognition of the higher level of oversight that these AHBs are subject to from the Housing Agency Regulator.

**Concentration Limit:** No specific concentration limit was proposed in CP109 but it was acknowledged that any concentration limit would have to be calibrated to take account of the longer term maturity of this investment class, the existing Asset and Liability Management (ALM) framework for credit unions and the maturity mismatch which already exists on credit union balance sheets. The RIA which accompanied CP109 explored some potential concentration limits and it was suggested that the concentration limit could be applied on a tiered basis to reflect the varying degrees of capacity and capability across the sector.

**Maturity Limit:** Taking account of the nature of social housing projects and the likely duration for such investments, the Central Bank noted that if investments in AHBs were to be permitted that this would require a longer maturity limit for such investments. Therefore, it was suggested in CP109 that a specific maturity limit for investments in AHBs of 25 years would be potentially appropriate.

CP109 sought views from respondents on a number of issues associated with investment in AHBs, including: the appropriateness of investment in AHBs as a new investment class for credit unions, the most appropriate structure for investments in AHBs, key risks and risk mitigants for this type of investment, asset liability management issues, concentration limit and the maturity limit.

**Question 8.**

*Do you think it is appropriate for credit unions to undertake investments in AHBs? If so, please provide a rationale?*

**Question 9**

*What would the most appropriate structure for investments in AHBs be e.g. investment vehicle?*

**Question 10**

*What do you consider to be the risks associated with this type of investment and what mitigants do you feel are available to manage these risks?*

**Question 11.**

*How can the ALM issues associated with such investments be addressed by credit unions?*

**Question 12.**

*Given the existing mismatch between the maturity profile of the sector's funding and assets and the likely maturity profile of such investments, the Central Bank is of the view that the concentration limit would need to be set at a level that reflects this. Do you have any views on what an appropriate concentration limit would be for such an investment? What liquidity and ALM requirements could be introduced to mitigate these risks and potentially facilitate a larger concentration limit?*



### Question 13.

*Do you have any comments on the proposal to include investments in Tier 3 AHBs in the list of authorised classes of investments set out in credit union investment regulations with a 25-year maturity limit?*

## Submissions to CP109

### Appropriateness of investments in AHBs

A large number of respondents comment on whether it would be appropriate for credit unions to undertake investments in AHBs with the majority in favour of this additional investment class. A significant number of those in favour cite the alignment of the social goals of both the credit union movement and the AHB sector as the principal rationale for permitting this type of investment. A limited number of respondents also point to investment diversification as a reason why credit unions should be allowed invest in AHBs. Some of those in favour also express a degree of caution with this type of investment, stating that they would like to see further information on the investment structure, risks and potential return. A small number of respondents do not think credit unions should be permitted to invest in AHBs, viewing this type of investment as too risky given the lack of liquidity and long term nature of such investments and noting the associated costs of establishing and managing a centralised investment vehicle as potentially too high to see a meaningful return.

### Investment Structure

A large number of respondents comment on what they think would be the most appropriate structure for investments in AHBs. The majority of respondents suggest that a centralised investment scheme or special purpose vehicle would be the most appropriate structure for this type of investment because such collective investments structures would improve the liquidity of the investment and diversify its risk.

Other suggested structures for investment in AHBs by credit unions from a limited number of respondents include an aggregator fund, a unitised investment structure and investment via a government issued housing bond. A limited number of respondents also suggest that credit unions should be permitted to invest directly in AHBs. A small number of respondents suggest that credit unions should have the option to invest in AHBs for the provision of social housing within a credit union's own local area.

### Risk and Risk Mitigants

A large number of respondents provide input on what they consider to be the key risks associated with credit unions investing in AHBs and what mitigants they feel are available to manage these risks. Counterparty risk (including regulatory risk) and duration risk (including liquidity risk) were the two main risks identified by respondents. The specific conditions around the funding model for social housing provided by AHBs, including the Capital Advance Lending Facility (CALF), the Payment and Availability (P&A) Agreement and the Continuation Agreement are identified by respondents as being the main risk mitigant for investment in AHBs. Statutory regulation of AHBs and investment in AHBs via a collective investment vehicle are also identified by some respondents as factors that could possibly mitigate the risk of this type of investment.

### Asset Liability Management

A large number of respondents comment on how ALM issues associated with such long term investments can be addressed by credit unions. The possible availability of a secondary market for investments by credit unions in AHBs through a centralised investment vehicle is identified by some respondents as a means of increasing the liquidity of such investments. A small number of respondents suggest that a centralised investment vehicle composed of projects of mixed duration would help address ALM issues. A small number of respondents also suggest the introduction of term deposits as a mechanism to extend the duration of credit unions' liabilities with a limited few also



referring to the traditional stickiness of members' savings in credit unions as evidence of an existing tool to address ALM risks associated with investments in AHBs.

A small number of respondents are of the view that the concentration limit for this type of investment should be set at an appropriately conservative level in the initial stages to limit the impact that this type of investment may have on participating credit unions' balance sheets. Finally, a centralised treasury management system for the credit union sector and training on ALM for credit union officers and directors are other ways a limited number of respondents suggest the ALM issues associated with investments in AHBs could be addressed.

### Concentration Limit

A significant number of submissions contain views on what an appropriate concentration limit would be for investment in AHBs. A large number of those who expressed views would prefer that the concentration limit be calculated as a percentage of the credit union's total investment portfolio as opposed to a percentage of regulatory reserves as proposed in CP109. Some of those in favour of the concentration limit being calculated as a percentage of the total investment portfolio suggest that a concentration limit of 5% of total investments would be appropriate while a similar number suggest that a higher limit, of between 10-20% of total investments, would be appropriate.

A small number of respondents are in favour of the concentration limit being based on a percentage of a credit union's reserves as was illustrated in the RIA which accompanied CP109. A significant number of these respondents propose a concentration limit of 70-100% of reserves as being an appropriate limit for this type of investment. A limited number of submissions also suggest that the concentration limit could be applied on a tiered basis and that the concentration limit should be reviewed a few years after implementation to ensure it remains appropriate.

A shared treasury management function, a centralised investment vehicle and a demonstrated ability by credit unions of capacity to manage ALM issues are cited by a limited number of submissions as ways to potentially facilitate a larger concentration limit. A similar number of submissions comment that duration matching by credit unions of long term investments in AHBs is not possible and consequently suggest that this type of investment should be subject to a relatively low concentration limit. A further few respondents see existing liquidity requirements as very conservative and sufficient to mitigate liquidity risks associated with this type of long term investment.

### Maturity Limit

A large number of submissions comment on the proposed 25-year maturity limit for potential credit union investments in AHBs. Most respondents on this question agree with the proposed 25-year maturity limit with a small number of respondents disagreeing. Of those who disagree, a number propose that a 30-year maturity limit would be more appropriate, citing alignment with the maximum duration of a P&A agreement as a rationale for this longer maturity limit. Another small number of respondents are of the view that the 25 year proposed maturity limit is too long and would introduce too much risk to individual credit union's balance sheets.

### Central Bank Response

#### Appropriateness of Investment in AHBs

Following sector engagement with the Central Bank in relation to proposals for credit unions to provide funding to AHBs for the provision of social housing and having taken account of the feedback from respondents, the Central Bank is of the view that it is appropriate for credit unions to be permitted to provide funding for social housing through investments in AHBs subject to certain requirements and limits. The government support provided to AHBs via P&A agreements and the CALF, the regulatory framework being developed for AHBs and the regulatory limits being put in place by the Central Bank should help to ensure that such investment will not add inappropriate levels of risk to credit unions' investment portfolios. Nonetheless, it is

important that there is realism on the proportion of the sector's surplus funds that could appropriately be allocated to investment in social housing. This must be informed by the specific characteristics of funding for social housing and appropriate levels of risk for members' savings. An important issue highlighted in CP109 is the need for credit unions to take account of maturity considerations and the balance sheet impact of undertaking investments in approved housing bodies which, by their nature, are likely to be illiquid and significantly longer term than existing credit union investments and could result in an increase in the existing maturity mismatch on the credit union's balance sheet. More broadly, consideration will also need to be given to the interplay between any possible move towards more longer-term lending together with longer maturity investments, which could also exacerbate this issue. If credit unions wish to significantly shift the maturity profile of their assets, they will need to consider how they can extend their funding profile, taking account of the demographics of their membership.

The Central Bank will now include investments in Tier 3 AHBs through a regulated investment vehicle as a permitted class of investment for credit unions. This investment class will be subject to the following limits:

Tiered concentration limit as follows:

- 25% of regulatory reserves for those credit unions with total assets less than €100 million; and
- 50% of regulatory reserves for those credit unions with total assets of at least €100 million.

Maximum maturity of 25 years.

#### Concentration Limit

Concentration limits have been set at what is viewed by the Central Bank to be an appropriate level to take account of the specific risk profile of this class of investment but also to enable interested credit unions to achieve a scale of collective investment that will allow them to make a meaningful investment in Tier 3 AHBs for the provision of social housing. The concentration limits for this investment class are applied on a tiered basis to take account of the greater degree of sophistication in systems and controls which may be in place in larger credit unions which would increase the capability of these credit unions to manage the particular risks associated with a long term investment of this nature. We are applying the concentration limit for this class of investment based on a percentage of a credit union's reserves as we are of the view that regulatory reserves is the most accurate indicator of a credit unions ability to absorb losses. Table 3 sets out the maximum exposure to tier 3 AHBs that would be permissible under these concentration limits. Table 4 analyses this data for credit unions with total assets greater than or equal to €100m and less than €100m and illustrates the largest and smallest exposures that would be permissible under these concentration limits.



**Table 3**

Total Sector Exposure to Tier 3 AHB <sup>6</sup>	€ 698 m
Tier 3 AHB Investment represented as a % of Total Assets (average)	3.2 %
Tier 3 AHB Investment represented as a % of Total Investments (average)	4.9 %

**Table 4**

	Total Assets ≥ €100 million	Total Assets < €100 million
Number of Credit Unions	52	223
Total Exposure to Tier 3 AHBs	€ 490 m	€ 208 m
Tier 3 AHB Investment represented as a % of Total Assets (average)	5.5 %	2.7 %
Tier 3 AHB Investment represented as a % of Total Investments (average)	7.7 %	3.9 %
Largest Maximum permitted Tier 3 AHB investment <sup>7</sup>	€ 22.2 m	€ 2.7 m
- As a % Total Assets	6.8 %	2.9 %
- As a % Total Investments	10.2 %	4.3 %
Smallest Maximum permitted Tier 3 AHB investment <sup>8</sup>	€ 5.22 m	€ 0.03 m
- As a % Total Assets	5 %	3.2 %
- As a % Total Investments	7.9 %	5.5 %

### Maturity Limit

The 25-year maturity limit put forward in CP109 will remain unchanged.

## 3.5 Other considerations

### 3.5.1 Counterparty Limit

#### Proposals set out in CP109

Regulation 26 of the 2016 Regulations requires that a credit union shall not make an investment with a counterparty, which would cause the investments with that counterparty to exceed 25% of the credit union's total investments. CP109 noted the high level of concentration to individual counterparties which currently exists in credit union investment portfolios, with close to 70% of overall sector investments held with just five counterparties.

In light of the potential new investment classes being introduced, CP109 proposed a reduction in the counterparty limit from 25% to 20% of total investments, with the objective of encouraging diversification and reducing counterparty risk. It was proposed that a 12-month transitional period would be provided in order to facilitate credit unions in achieving compliance with the reduced counterparty limit.

#### Question 14

*Do you have any comments on the proposal to amend the existing counterparty limit for credit union investments? If you have suggestions, please provide them along with supporting rationale.*

#### Question 15

*Do you have any comments on the proposed transitional arrangement to reduce the counterparty limit to 20% of total investments?*

### Submissions to CP109

Almost all submissions comment on the proposal to reduce the counterparty limit to 20% of total investments. Almost all of these submissions disagree with the proposed reduction in the limit. Concerns raised mainly relate to the difficulty which is being experienced by credit unions in finding suitable counterparties due to the current interest rate environment and the departure of certain counterparties from the Irish market. In addition, it is viewed by a small number of submissions that the proposals put forward in CP109 are insufficient to warrant a reduction in the counterparty limit at this time. Of the submissions which disagree with a reduction in the counterparty limit, some suggest that the counterparty limit should remain at 25%, while others do not put forward suggestions on an alternative counterparty limit. A small number of submissions agree with the proposal to reduce the counterparty limit with one submission citing that this would help to reduce investment risk especially in light of a bail-in scenario if one individual financial institution failed.

A large number of submissions comment on the proposed transitional arrangement for a reduction in the counterparty limit. Almost all of these submissions disagree with the 12-month transitional arrangement on the basis that the issue of a transitional arrangement should not arise given the general disagreement with the reduction in the counterparty limit. Of those that disagree with the proposed transitional arrangement some suggest that, notwithstanding any transitional arrangement, credit unions should be permitted to hold to maturity all fixed term investments. An alternate transitional arrangement of 24 months was put forward by some submissions.

### Central Bank response

The Central Bank notes the feedback received on the proposal for a reduction in the counterparty limit and the associated transitional arrangement but having considered the feedback remains of the view that a reduction to 20% of total investments for the



overall counterparty limit is appropriate. However, in order to take account of the feedback on proposed transitional arrangements this will be amended to allow a 24-month period, post commencement of the amending regulations, for credit unions to become compliant with this reduced limit. In addition, it will be permitted that a credit union may hold to maturity any fixed term investment which they hold at commencement of the amending regulations which would result in the credit union being non-compliant with the reduced counterparty limit. The Central Bank's decision to proceed with the reduction in the counterparty limit has taken account of changes to the proposals on concentration limits set out in CP109 and the decision to amend existing liquidity requirements and additional analysis undertaken on counterparty exposures in the sector.

As noted in section 3.3, the Central Bank also considers it appropriate to introduce an additional counterparty limit of 5% of regulatory reserves where direct investment in corporate bonds is undertaken to help to ensure that corporate bonds do not introduce an inappropriate level of risk to credit union investment portfolios. The counterparty limit for corporate bonds will ensure that, if direct investment is undertaken up to the maximum permitted concentration limit of 50% of regulatory reserves, the exposure is spread over a minimum of 10 counterparties.

#### *Analysis which supports final decision*

In arriving at the decision to reduce the counterparty exposure limit and in light of the feedback received, the Central Bank undertook further analysis to assess the potential impact which a reduction in the counterparty exposure limit will have for individual credit unions. This analysis is based on updated June 2017 Prudential Return data.

Table 5 illustrates the number of counterparties with which credit unions currently hold investments. As illustrated, over 98% of credit unions hold investments with at least 5 different counterparties with the majority having investments with between 9 and 12 counterparties. This suggests that there are a broad range of counterparties available to credit unions.

**Table 5**

Number of Counterparties	Number of Credit Unions
4 or less	3
5 to 8	107
9 to 12	138
13 to 16	27
<b>Total:</b>	<b>275</b>

Table 6 illustrates that over 80% of credit unions hold an investment with a counterparty which exceeds 20% of total investments<sup>9</sup>. This table also illustrates the total amount of investments which would require to be re-allocated to an alternate counterparty in order to ensure compliance with the reduced counterparty exposure limit of 20% of total investments<sup>10</sup>.

**Table 6**

No of Counterparties >20%	Number of Credit Unions	% of Credit Unions	Total Value of Investments to be reallocated
0	52	18.9%	€0
1	96	34.9%	€103.8m
2	79	28.7%	€145.2m
3	42	15.3%	€63.9m
4	6	2.2%	€4.1m
<b>Total</b>	<b>275</b>		<b>€317m</b>

Analysis suggests that of the credit unions who would be required to re-allocate an element of their investments to alternate counterparties the majority of these would require a re-allocation of less than 10% of their total investments. See Table 7 for further details.

**Table 7**

% of Total Investments requiring reallocation	Number of Credit Unions	Total Value of Investments to be reallocated
< 10%	196	€268.1m
≥ 10% and < 20%	20	€33.5m
≥ 20%	7	€15.4m
<b>Total</b>	<b>223</b>	<b>€317m</b>

<sup>9</sup> While credit unions may hold investments across multiple counterparties these are not evenly split across these counterparties.

<sup>10</sup> This is on the assumption that such investments which are in excess of the 20% counterparty limit are not fixed term investments. The Central Bank acknowledges that, in line with the transitional arrangements, where such investments are fixed term they may be held to maturity and no re-allocation will be necessary.



### Conclusion

The Central Bank is of the view that the amended investment framework, as detailed in the amending regulations in Appendix 1, provides credit unions with sufficient opportunity to re-allocate the necessary proportion of their investment portfolio in order to achieve compliance with a reduced counterparty exposure limit. Corporate bond and supranational bond investments will introduce additional counterparty opportunities and diversification potential for credit unions which previously did not exist. The Central Bank acknowledges that not all credit unions will choose to invest in the additional investment classes being added to the investment framework but we are of the view that there are sufficient opportunities for credit unions to achieve diversification to alternate investments including bank deposits and government bonds, both domestically and within Europe. In addition, the changes outlined in this feedback statement around liquidity may assist credit unions in diversifying their investments into products which have been previously under-utilised in the sector.

### 3.5.2 Collective Investment Schemes

#### Proposals set out in CP109

The 2016 Regulations provide that credit unions may invest in collective investment schemes comprised of permitted investment classes which include bank deposits, bank bonds and government bonds. Analysis undertaken prior to publication of CP109 indicated that there is limited use by credit unions of collective investment schemes. Based on December 2016 prudential return data, only c.3% of total investments are held in collective investment schemes. CP109 sought views from respondents on the use of collective investment schemes and aimed to establish whether there are any barriers to credit unions using collective investment schemes in the existing investment regulatory framework.

#### Question 16

*Do you have any comments on the use of collective investment schemes for credit union investments?*

#### Question 17

*Are there any barriers to credit unions using collective investment schemes in the existing investment regulatory framework?*

#### Submissions to CP109

A large number of submissions comment on the use of collective investment schemes by credit unions with a significant number of these respondents supporting or advocating their use as an appropriate investment for credit unions. Some of these respondents cite the diversification benefits across multiple counterparties as a reason why such investment is appropriate for credit unions. A small number mention that the benefits of investing via a collective investment scheme include the active management of investments by experienced fund managers and the separate and additional regulatory framework that underpins such schemes. A limited number only advocate investing in those collective investment schemes that are listed with a daily price and have no lock-in periods.

When focusing on possible barriers, a significant number of submissions state that investments in collective investment schemes are effectively restricted by the 2016 Regulations to low yield investments in Irish and EEA state securities, bank bonds and accounts in authorised credit institutions and that the list of permitted investments for collective investment schemes should be widened. A small number of respondents express concerns around supply in the market, as the cost of running such schemes is prohibitive against the current backdrop of low interest rates. There are recommendations by a small number that the definition of collective investment schemes should be expanded to incorporate investments in supranational bonds, corporate bonds, social housing/AHBs, state sponsored projects and equities.



Some respondents suggest that low credit union take-up of collective investment schemes may be due to the required accounting treatment under FRS 102 where a fair value valuation is required as opposed to a valuation based on amortised cost, which is more preferable for credit unions. A small number also suggest that the setup costs associated with such investments may be too high if the Central Bank does not authorise the vehicle and that this level of uncertainty needs to be assessed appropriately. A small number simply state that it is difficult for advisers to build a critical mass of credit unions to cover and sufficiently dilute the costs involved in setting up a collective investment scheme. Finally, a small number of respondents suggest that lack of knowledge of collective investment schemes is a barrier to investment.

#### Central Bank Response

The Central Bank is supportive of the use of collective investment schemes within appropriate limits and in particular acknowledges the diversification benefits that can be achieved through the use of such structures. The risk mitigation provided by the use of well diversified funds has facilitated the amendment to the minimum credit rating for corporate bond investments through a UCITS to investment grade from the single A minimum proposed in CP109. The amending regulations will expand the permitted classes of investments of which a collective investment scheme can be composed to also include corporate bonds and supranational bonds. This should provide further opportunities for investment in collective investment schemes by credit unions and help to drive further diversification in credit union investment portfolios. Based on analysis undertaken by the Central Bank it is considered that UCITS are the most appropriate structure for credit union investments in collective investment schemes.

When investing in UCITS credit unions should 'look-through' to the underlying holdings and counterparties held in the UCITS in order to ensure that the total investment portfolio of the credit union is in compliance with all regulatory requirements for investments. For example, where a credit union has a direct exposure to a counterparty and holds an investment in a UCITS with exposure to that same counterparty, the credit union should aggregate both exposures to determine their total exposure to that counterparty and to ensure compliance with the counterparty limit.

Where a credit union is investing via a UCITS, the Central Bank considers it appropriate that the UCITS has a minimum total assets size of €150 million and this has been reflected in the amending Regulations which are contained in Appendix 1. This is aimed at ensuring that credit unions invest in well-established diversified funds.

### 3.6 Proposed Timelines and Transition Period

#### Proposals set out in CP109

CP109 set out proposed next steps and timelines for the introduction of potential changes to the investment framework for credit unions out in the consultation paper.

	Step
<b>11 May 2017</b>	Consultation Paper on Potential Changes to the Investment Framework for Credit Unions published
<b>28 June 2017</b>	Consultation period closes
<b>Q4 2017</b>	Publish feedback statement and final regulations
<b>Q4 2017</b>	Commencement of final regulations

### Question 18

*Do you agree with the proposed timelines for the introduction of potential changes to the investment framework set out in this consultation paper? If you have other suggestions please provide them, along with the supporting rationale.*

#### Submissions to CP109

A large number of submissions comment on the proposed timelines set out in CP109. Over half of these agree with the proposals set out in CP109 particularly in relation to the proposed additional classes of investments. As set out in section 3.5, a large number of submissions raise concerns on the proposed transitional period for the reduction in the counterparty limit from 25% to 20% of total investments.

#### Central Bank Response

Having considered the submissions received, the Central Bank considers a commencement date of 1 March 2018 appropriate. However, we have increased the counterparty limit transitional arrangement, following commencement of the amended regulations, from 12 months to 24 months.

#### Transitional Arrangement

When the 2016 investment regulations were commenced on 1 January 2016, transitional arrangements were put in place for investments made prior to the commencement of the 2016 regulations that were in compliance with the legal and regulatory framework that was in place before the commencement of the 2016 regulations. On commencement of these regulations, credit unions were permitted to hold any investments that were not in compliance with the 2016 regulations for a period of two years from 1 January 2016. Where such investments had a fixed maturity date, credit unions were permitted to hold these investments until maturity, on the basis that they were in compliance with all requirements applying at the time the investment was undertaken. The two-year transitional period provided for under the 2016 Regulations expired at the beginning of 2018.

The amending regulations also contain transitional arrangements in relation to investments made prior to the amending regulations coming into force. As with the transitional arrangements applied in 2016, credit unions will be permitted to hold any investment that is not in compliance with the amending regulations for a period of two years where this investment was made in compliance with the applicable investment requirements which applied at the time the investment was undertaken. Additionally, where such investments have a fixed maturity date, credit unions will be permitted to hold them until maturity.

#### Communications and Guidance for Credit Unions

In order to assist credit unions in implementing the amending regulations, before the regulations commence on 1 March 2018, the Central Bank will develop a FAQ document for credit unions to address questions on the implementation of the changes to the investment framework regulations. This will be published in February 2018 and will be updated as appropriate based on questions raised by credit unions.

The Central Bank will also update the Investment and Liquidity Chapters of the Credit Union Handbook to reflect the changes being made to the investment framework. The updated Credit Union Handbook will be published in February 2018.



## Timelines and Transition Period

Date	Step
February 2018	Transition period before the amending regulations commence
February 2018	Publication of updated Credit Union Handbook and FAQ
1 March 2018	Commencement of amending investment and liquidity regulations
Q1 2020	Central Bank will perform and publish analysis of the impact which changes to the investment framework have had over the preceding two year period

## 4. Other Feedback

### 4.1 Bank bonds

#### Proposals set out in CP109

CP109 set out information on changes arising from the introduction of the BRRD. CP109 noted that it is important that credit unions understand the risk implications arising from the BRRD for their investment portfolios and ensure that the instruments they invest in continue to be within their risk appetite. CP109 further noted that the Central Bank is of the view that it is appropriate that credit unions would not be permitted to invest in subordinated debt instruments that are eligible for MREL given their risk profile and the potential implications for credit unions should the institution that issued the instrument enter into resolution. Arising from this, CP109 indicated that the Central Bank was proposing to amend the definition of bank bonds in the 2016 Regulations to clarify that bonds that are subordinated to any senior bonds issued by a credit institution do not fall within the definition of “bank bonds” set out in the regulations.

#### Submissions to CP109

A large number of submissions comment on the proposal to amend the definition of bank bonds in the 2016 Regulations. These submissions raise concerns on the potential impact of the proposed change noting that bank bonds are a significant class of investment for credit unions. Concerns were expressed that future bond issuance is likely to be made up of MREL eligible bonds and that as a result bank bonds available for credit unions to invest in will be severely curtailed which could impact on the ability of credit unions to generate income from investment portfolios. A number of submissions question whether it is appropriate to focus on the ranking of bonds and not the credit quality of the issuer and suggest permitting investment in subordinated debt instruments that are eligible for MREL subject to a minimum credit rating. A small number of submissions suggest that while such bonds are not appropriate for all credit unions that a tiered approach should be taken whereby credit unions that could demonstrate that they had appropriate expertise could be permitted to invest in subordinated debt instruments that are eligible for MREL.

A number of submissions note the higher level of investment risk involved in these bonds.

#### Central Bank Response

The Central Bank recognises the impact that the amendment to the definition of bank bonds in the 2016 Regulations to clarify that bonds that are subordinated to any other liability of a credit institution do not fall within the definition of “bank bonds”, may have on the available investment options for credit unions. It is noted that some issuance of bonds by credit institutions may not fall within the proposed amended definition of bank bonds it is further recognised that this may impact on the ability of credit unions to achieve appropriate levels of diversification in investment portfolios and this has been considered as part of the overall review of investment regulations.

The Central Bank remains of the view that it is appropriate that credit unions would not be permitted to invest in debt instruments that are subordinated to senior liabilities issued by the same credit institution given their complexity and risk profile and the potential implications for credit unions should the instruments be written down or converted into equity.

We are of the view that a number of the proposed changes set out in this feedback statement will address some of the concerns raised in submissions in relation to the proposed amendment to the definition of bank bonds in terms of availability of investments. These include the changes in the concentration limit for supranational and corporate bonds and the changes being made to liquidity requirements which will provide other diversification options for credit unions.



## 4.2 Liquidity

### Submissions to CP109

The liquidity requirements for credit unions are contained in the 2016 Regulations<sup>11</sup> and the section 35 Regulatory Requirements for Credit Unions<sup>12</sup> (Section 35 requirements). Credit unions are currently required to hold liquid assets up to a specific % of unattached savings. The short term liquidity ratio requires that credit unions hold at least 5% of unattached savings in short term liquid assets, those assets which can be accessed within 8 days. The minimum liquidity ratio requires that credit unions hold at least 20% of unattached savings in liquid assets which can be accessed within 3 months. In addition, credit unions who have more than 20% of their total loans maturing after 5 years are subject to increased liquidity requirements under the Section 35 requirements.

Although not specifically consulted upon in CP109, a large number of submissions comment on liquidity highlighting pressures which credit unions are currently facing in relation to liquidity requirements. A number of submissions raise concern or express disappointment that liquidity was not addressed in CP109. A small number of submissions comment that short term/overnight deposits are heavily relied upon to meet liquidity requirements, particularly the short term liquidity requirement. A significant number of submissions highlight the challenges being encountered from an investment perspective with the negative rates being offered on short term investments and the decreasing appetite of domestic financial institutions for such investments.

A large number of submissions that comment on liquidity suggest that certain bonds should be permitted to qualify as liquid assets for the purposes of meeting liquidity requirements and it is noted that such an approach to liquidity is taken under European Banking Regulation and UK Credit Union Regulation. A number of these submissions suggest that government bonds, corporate bonds and supranational bonds should be counted as liquid assets. A smaller number of these submissions suggest that a discount should be applied to such bonds.

### Central Bank Response

#### Analysis Undertaken

In light of the submissions received on liquidity, the Central Bank undertook analysis on the liquidity position of credit unions with a view to better understanding how the liquidity requirements are impacting on individual credit unions and the sector more broadly. Based on data submitted on the June 2017 Prudential Returns by individual credit unions, it appears that the majority of credit unions are operating with liquidity requirements significantly in excess of what is required. The average short term liquidity ratio for the sector is c.22% and the average minimum liquidity ratio is c.36%. Table 8 illustrates the number of credit unions within each liquidity bucket for each of the required liquidity ratios.

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<sup>11</sup> 2016 Regulations available [here](#).

<sup>12</sup> Section 35 Requirements available [here](#).

Table 8

Liquidity Ratio		Short Term Liquidity Ratio	
Ratio %	No of Credit Unions	Ratio %	No of Credit Unions
Less than 20%	0	Less than 5%	1
≥20% and <30%	111	≥5% and <10%	29
≥30% and <40%	96	≥10% and <15%	61
> 40%	68	> 15%	184
<b>Total</b>	<b>275</b>		<b>275</b>

Further analysis was undertaken to quantify the level of additional liquidity, for both the short term liquidity and minimum liquidity requirements, which is currently being held across the sector. Where a credit union holds additional liquidity this may further exacerbate the challenges which are currently being experienced in generating a sufficient return on investment portfolios in the current interest rate environment.

#### Short Term Liquidity Requirement

All credit unions are required to hold short term liquid assets which are at least equal to 5% of unattached savings. As indicated, a number of the submissions to CP109 outline that credit unions are currently being charged by credit institutions for placing deposits with them overnight/on a short term basis. Based on the current short term liquidity ratio requirement, analysis was undertaken to establish what level of liquid assets are currently being held short term (with a maturity of less than 8 days) in excess of what is required under the 2016 Regulations.

The analysis has been undertaken on the basis that credit unions may wish to operate with an element of excess short term liquid assets. This would allow for fluctuations in the level of unattached savings and would help to ensure that the credit union would be likely to remain in compliance with the short term liquidity requirement on an ongoing basis. The buffer assumed for this scenario is 5%<sup>13</sup> which results in a 10% short term liquidity requirement being used to assess whether a credit union holds additional short term liquidity. The results of the analysis are displayed in Table 9.

<sup>13</sup> The Central Bank is not advocating that credit unions hold liquid assets in excess of the liquidity requirements equal to 5% of unattached savings. It remains a matter for an individual credit union to determine what level of liquidity is appropriate to be held in excess of the minimum requirement relative to the nature, scale, complexity and risk profile of the credit union.



**Table 9**

Assuming credit union has a short term liquidity ratio of 10%:	
Number of Credit Unions with Additional Short Term Liquidity vs level required in regulations plus 5% buffer	245
Total Value of Additional Short Term Liquid Assets held across the sector	c.€946 million

#### Minimum Liquidity Ratio Requirement

Similar analysis to the above was undertaken for the minimum liquidity ratio. Once again, it was assumed that credit unions may wish to operate with an element of excess liquid assets, which would allow for fluctuations in the level of unattached savings and which would help to ensure that the credit union would likely remain in compliance with the minimum liquidity requirement on an ongoing basis. An arbitrary buffer of 5%<sup>13</sup> was selected and was applied to the minimum liquidity requirement of each individual credit union, taking account of where credit unions have a liquidity requirement in excess of 20% due to their level of overall lending which is greater than 5 years. The results of this analysis are displayed in Table 10.

**Table 10**

Assuming credit union has a minimum liquidity ratio of the required % plus a 5% buffer:	
Number of Credit Unions with Additional Liquidity vs level required plus 5% buffer	233
Total Value of Additional Liquid Assets held across the sector	c.€705 million

The evidence based on analysis undertaken does not fully support the concerns expressed by a number of the submissions to CP109 regarding the availability of investment options which meet existing liquidity definitions and related challenges in meeting existing liquidity requirements. While the analysis which is presented above is based on the entire sector and the profile of individual credit unions may not reflect the overall sector profile, the Central Bank would expect credit unions generally to take a more proactive approach to managing liquidity to strike a balance between meeting liquidity requirements and ensuring that investments do not involve undue risk to members' savings.

The 2016 Regulations introduced a change to the definition of liquid assets which was aimed at allowing a credit union to count as liquid those assets which have a maturity of greater than 8 days or 3 months. They must also have a written guarantee to the effect that the funds are available to the credit union in less than 8 days or 3 months, for the purposes of meeting the short term liquidity ratio and liquidity ratio respectively. Analysis appears to support feedback that has been provided to the Central Bank (outside of this consultation) that in practice credit unions cannot obtain such written

guarantees on their investments and therefore this provision cannot be used for the intended purpose by credit unions.

#### Central Bank Response

Having considered the feedback received on liquidity through the consultation process and in the interest of promoting asset class and counterparty diversification, the Central Bank is now making a number of changes to the liquidity framework for credit unions. Appendix 1 contains amending liquidity regulations for credit unions. These changes are aimed at streamlining the liquidity framework, addressing some of the concerns expressed by submissions to CP109 in relation to the costs associated with meeting existing liquidity requirements and driving further diversification in investment portfolios where the credit unions risk appetite provides for investment in these investment classes. The changes which will be made to the liquidity framework are summarised as follows with further explanation on each of the changes outlined below:

- Change to the definition of liquid assets;
- Requirements relating to the make-up of the minimum liquidity ratio in terms of cash and investment composition; and
- Incorporation of the short term liquidity requirement within the minimum liquidity requirement.

The minimum liquidity ratio of 20% of unattached savings will remain in place. The additional liquidity requirements contained in the Section 35 Requirements, which apply where a credit union has more than 20% of its loans outstanding for more than 5 years, also remain in place.

#### (i) Definition of Liquid Assets

Taking account of the feedback received and having explored the approach adopted in other jurisdictions, the Central Bank will permit certain bonds as qualifying liquid assets. Irish and EEA state securities, supranational bonds and bank bonds subject to an appropriate discount applied to market value will be permitted to count towards meeting the minimum liquidity requirement. There will be a maximum amount of these bonds which will be permitted to count towards liquidity; this is further outlined in (iii) below.

Discounts will be applied to the market value of these bonds at the following rates, depending on the remaining maturity of the investment product.

Remaining Maturity of Investment Product	Discount to Market Value of Product
> 3 months and < 1 Year	10%
1-5 Years	30%
> 5 Years	50%

The definition of liquid assets will remove the provision which was included and which was aimed at allowing a credit union to count as liquid those assets which have a maturity of greater than 8 days or 3 months, but have a written guarantee to the effect that the funds are available to the credit union in less than 8 days or 3 months, for the purposes of meeting the short term liquidity ratio and liquidity ratio respectively. This is in acknowledgement of the feedback received that this is not something which is available to credit unions in practice.



There will be one definition of liquid assets included within the liquidity regulations, as follows:

- cash;
- investments with a maturity of less than 3 months, excluding the minimum reserves;
- Irish and EEA state securities, supranational bonds and bank bonds which have a maturity of greater than 3 months (with the required discounts applied to market value dependent on remaining time to maturity of the investment).

### (iii) Composition of Liquidity

The following will apply to the composition of the minimum liquidity ratio of 20% of unattached savings:

- at least 2.5% of unattached savings must be available in cash and investments with a maturity of less than 8 days;
- no more than 10% of unattached savings is permitted to come from (c) within the definition of liquid assets as specified above.

Provision (a) has been incorporated to ensure that a minimum element of cash is always available for the credit union to meet any on demand repayment requirements which arise.

Placing a maximum cap on the amount of bonds which may qualify as liquid is aimed at ensuring that there is sufficient diversification, in terms of investment product and maturity duration, within the make-up of liquid assets and that there is not an over-reliance on one source of investment to meet the liquidity needs of a credit union.

The remaining components of the liquidity ratio may be allocated from cash or those investments which have a maturity of less than 3 months. Subject to the requirements outlined above, it is a matter for the credit union to decide how to allocate their investments for the purposes of meeting the liquidity requirement.

### (iii) Short Term Liquidity Requirement

Taking account of the requirement that a specific proportion of the minimum liquidity requirement is required to come directly from cash, it is no longer deemed necessary that there is a separate short term liquidity requirement. In effect, the short term liquidity requirement of 5% of unattached savings has been reduced to 2.5% and incorporated within the existing 20% liquidity requirement.

The FAQ document which the Central Bank will publish in advance of the commencement of the amending regulations will provide illustrative examples of how liquidity requirements may be assessed and calculated under the new liquidity framework.

The Central Bank has undertaken analysis to assess the likely impact which these changes to the liquidity framework will have for credit unions. This analysis is by reference to the liquidity requirement for each individual credit union (either 20% or a higher amount as required by the Section 35 Requirements).

### Cash and Investments with Less than 8 days to Maturity

Based on data submitted on the June 17 Prudential Returns by credit unions and as outlined previously, all credit unions with the exception of one currently meet the short term liquidity requirement of 5% of unattached savings and as a result should not have difficulty in meeting component (a) of the revised liquidity requirement which requires 2.5% of unattached savings is held in cash and investments with a maturity of less than 8 days.

### Allowable Government, Supranational and Bank Bonds

Credit unions currently hold c.€2.2bn and c.€0.7bn in bank bonds and government bonds respectively. Based on the current level of unattached savings a maximum of c.€1.3bn of the overall liquidity requirement for credit unions may come from holdings of bank, government and supranational bonds (after application of the relevant discounts). Based on the current bond holdings of credit unions and after application of the relevant discounts, there is c.€1.9bn of bonds which could potentially qualify as liquid assets across the sector. 118 credit unions currently hold bonds up to and in excess of the maximum amount allowable in meeting the liquidity requirement (i.e. 10% of unattached savings). The remaining 157 credit unions may benefit from undertaking additional investment in bond holdings which may qualify as liquid assets as their current bond holdings are not up to the maximum allowable amount. The Central Bank views that this may be an incentive for credit unions to further diversify their investment portfolios both in terms of gaining exposure up to the maximum allowable amount for liquidity and maintaining that exposure as existing bond holdings mature and reinvestment is required.

## 4.3 Additional Investment Analysis Provided

### Submissions to CP109

A significant number of respondents provide financial impact analysis on a number of the proposals set out in CP109. This analysis focuses on the potential impact on income arising from the proposals set out in CP109 and was prepared by an investment advisor for the majority of respondents. At a sectoral level, the analysis provided indicates that if no changes were made to the investment framework that the average income for the sector would be 0.31%. This analysis sets out 5 additional scenarios and associated weighted average income levels for the sector as follows:

- MREL eligible subordinated bank bonds not permitted, credit unions do not allocate to supranational or corporate bonds - weighted average income for the sector 0.24%.
- MREL eligible subordinated bank bonds not permitted, credit unions do allocate to supranational and corporate bonds - weighted average income for the sector 0.25%.
- MREL eligible subordinated bank bonds are permitted, credit unions do not allocate to supranational or corporate bonds – weighted average income for the sector 0.34%.
- MREL eligible subordinated bank bonds are permitted, credit unions do allocate to supranational or corporate bonds – weighted average income for the sector 0.31%.
- MREL eligible subordinated bank bonds are permitted, credit unions do allocate to supranational or corporate bonds and certain bonds may be interpreted as liquid for calculation of liquidity ratios – weighted average income for the sector 0.35%

None of the scenarios above assume any allocation to investments in AHBs.

Analysis from another investment advisor focuses on the impact of the change to definition of senior bank bonds indicating that the “cost to the sector given the current mix at long term returns, would be c.€50m out of c.€230m of total sector income as measured like for like”. This was based on average returns for the sector between 2003 and 2017.

A significant number of respondents also provide analysis on the impact of the proposed reduction in the counterparty limit from 25% to 20% of total investments. This indicates that c.11% of portfolios would need to be reallocated between counterparties to ensure compliance with the revised counterparty limit.



#### Central Bank Response

As previously stated, credit union investment portfolios should reflect the objects of credit unions and the fact that it is members' savings that are being invested by credit unions. The primary objects and purpose of a credit union remains the promotion of thrift among its members by the accumulation of their savings and the creation of sources of credit for their mutual benefit at fair and reasonable interest rates. Additionally, under section 43 of the 1997 Act, credit unions are required to ensure investments do not involve undue risk to members' savings.

This informs the appropriate level of investment risk that credit unions should be permitted to take and should inform credit unions in setting their own investment risk appetites. As set out in CP109, the Central Bank is of the view that any changes to the investment framework for credit unions should reflect the fact that it is the savings of credit union members (which can be withdrawn on demand) that will be invested by credit unions and that the risk profile of credit union investment portfolios should reflect this. This will necessarily impact on the level of return that appropriate investment portfolios can generate.

While the Central Bank's focus is appropriate levels of risk rather than return, we note the potential for the proposed changes outlined in this feedback statement, including the changes to concentration limits and liquidity requirements, to have some positive impact on income generation.

### 4.4 Tiered Approach to Investment Regulation

#### Submissions to CP109

A limited number of submissions suggest that the investment framework should be tiered to allow flexibility for those credit unions that possess the skills and systems necessary to manage a more complex investment portfolio. It is also suggested in a limited number of submissions that credit unions should be able to apply for an exemption from investment regulations which would facilitate certain credit unions to operate outside the regulations where they can demonstrate they possess the necessary skills, knowledge and experience.

#### Central Bank Response

The revision to the concentration limits for investments in AHBs set out in this feedback statement will introduce an element of tiering into the investment framework. The Central Bank is of the view that the revised investment framework provides sufficient flexibility for individual credit unions to manage their individual investment portfolios within appropriate risk parameters and relative to their own investment risk appetite.

## 5. Consultation under section 84A of the Credit Union Act, 1997

Following consideration of the submissions received on CP109 the Central Bank provided draft amending regulations, along with an overview of the feedback received on CP109, to the Minister for Finance and the Credit Union Advisory Committee (CUAC) in line with the statutory consultation required under section 84A of the 1997 Act. While a number of the credit union bodies made detailed submissions on CP109, these bodies were also provided with the draft regulations and related documentation and invited to provide any additional comments ahead of finalisation of the amending regulations.

### Feedback Received

The Minister for Finance commented on a number of positive changes being introduced through the regulations including the additional asset classes and the changes to the liquidity requirements. Concerns were expressed that certain aspects of the regulations may serve to negatively impact on the profitability of the sector without a corresponding positive impact in terms of reducing the risk to members' funds. The importance of bank bonds as a class of investment for credit unions was highlighted and the likely implication for credit union investments as a result of the change to the definition of bank bonds was articulated. With regards to the revised liquidity requirements and reduced counterparty limit, questions were raised as to whether the discounts required for certain qualifying liquid assets are in line with those applied to credit institutions in Ireland and the EU and whether there are sufficient counterparties accepting cash and investments with short maturities which would allow credit unions to actively manage their cash and investment amongst counterparties. A question was posed on whether there are enough compliant funds which would allow credit unions to diversify investment income through investments in funds. Further information was requested on the impact the changes in the regulations are expected to have on credit unions, particularly their profitability. The Minister for Finance welcomed the review which the Central Bank has committed to undertake two years post commencement of the regulations to assess the impact which the regulations have had.

CUAC also expressed concerns in relation to the change to the definition of bank bonds which will see credit unions excluded from investing in bonds which are subordinated to any other liability of a credit institution and the implication that this may have on investment returns. CUAC also questioned whether, given the concentration limits, investment in corporate bonds was a realistic investment class for credit unions. Concerns were expressed on the minimum fund size for UCITS investments as this could potentially exclude a large number of regulated funds from consideration and in effect could allow for diversification in theory but not in practice. The importance of a RIA was highlighted in order for interested stakeholders to properly assess the likely impact of new regulations on the sector.

Both the Minister for Finance and CUAC requested with regards to investment in Tier 3 AHBs that the regulations be amended quickly if required so as not to inhibit appropriate funding structures which may be established or proposed over time.

The Irish League of Credit Unions, the Credit Union Development Association and the Credit Union Managers' Association collectively responded to the statutory consultation. The response received requested clarifications on a number of aspects of the draft regulations and reiterated concerns which had been expressed in their individual submissions to CP109, mainly in relation to changes to the definition of bank bonds/likely impact on investment returns and the reduction in the counterparty limit from 25% to 20% of total investments. Concerns were expressed in relation to the minimum funds size for UCITS contained in the draft regulations. The Central Bank met with these credit union bodies to discuss their submission to the statutory consultation in advance of issuing a formal response. At this stage useful feedback was received in relation to the technical wording of the regulation permitting Tier 3 AHB investments.



### *Central Bank Response*

Having considered the feedback received through the statutory consultation process the Central Bank made a number of amendments to the draft regulations. These changes primarily related to the minimum fund size for UCITS investments and the wording of the regulations relating to investment in Tier 3 AHBs and shares of a society registered under the Industrial and Provident Societies Acts. These changes are reflected in the regulations which are included at Appendix 1.

As outlined in section 4.1 the Central Bank recognises the impact which the change to the definition of bank bonds, to preclude investment in bank bonds which are subordinated to any other liabilities of a credit institution, may have. It is noted that issuance of bonds, in the near term, by domestic credit institutions may not fall within the proposed amended definition of permitted bank bonds. However, credit unions will continue to be permitted to invest in senior bank bonds and we understand that European credit institutions will continue to issue senior bank bonds. Additionally, as MREL 'buffers' are established, it is expected that domestic credit institutions will resume issuance of senior bonds given the lower associated funding cost. The primary objects and purpose of a credit union remains the promotion of thrift among its members by the accumulation of their savings and the creation of sources of credit for their mutual benefit at fair and reasonable interest rates. It is the savings of credit union members (which can be withdrawn on demand) that will be invested by credit unions and this informs the appropriate level of investment risk that credit unions should be permitted to take and should inform credit unions in setting their own investment risk appetites. This will necessarily impact on the level of return that appropriate investment portfolios can generate. We therefore remain of the view that the change to the definition of bank bonds is appropriate.

The regulation making powers of the Central Bank afford flexibility to ensure that all regulations applicable to credit unions remain fit for purpose and proportionate. We keep all regulations under review on an ongoing basis and as indicated previously, we remain committed to undertaking a review two years post commencement of the amending investment regulations, to assess the impact which the changes have had on credit union investment portfolios.

The Central Bank believes that the amendments being made to the regulations introduce important and significant changes to the investment framework for credit unions including the introduction of three new investment classes and the important changes to the liquidity requirements which were informed by feedback received as part of the consultation process.



# Appendix 1: Draft Credit Union Act 1997 (Regulatory Requirements) (Amendment) Regulations 2018

STATUTORY INSTRUMENTS.

**S.I. No.      of 2018**

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**CREDIT UNION ACT 1997 (REGULATORY REQUIREMENTS)  
(AMENDMENT) REGULATIONS 2018**

S.I. No. of 2018

CREDIT UNION ACT 1997 (REGULATORY REQUIREMENTS)  
(AMENDMENT) REGULATIONS 2018

In exercise of the powers conferred on the Central Bank of Ireland (the “Bank”) by section 182A of the Credit Union Act, 1997 (No. 15 of 1997) (the “Act”), the Bank, having consulted the Minister for Finance, the Credit Union Advisory Committee and other bodies that appear to the Bank to have expertise or knowledge of credit unions generally and that the Bank considers appropriate to consult in the circumstances, hereby makes the following regulations:

1. (1) These Regulations may be cited as the Credit Union Act 1997 (Regulatory Requirements) (Amendment) Regulations 2018.

(2) These Regulations come into operation on 1 March 2018.

2. In these Regulations “Principal Regulations” means the Credit Union Act 1997 (Regulatory Requirements) Regulations 2016 (S.I. No. 1 of 2016).

3. Regulation 2(1) of the Principal Regulations is amended –

(a) by substituting for the definition of “bank bonds” the following definition:

““bank bond” means a senior bond issued by a credit institution and traded on a regulated market where the capital amount invested is guaranteed by the issuer and, for the avoidance of doubt, does not include any bond that is subordinated to any other liability of that credit institution;”,

(b) by deleting the definition of “collective investment schemes”, and

(c) by inserting the following definitions:

““approved housing body” means a housing body granted approval status under section 6 of the Housing (Miscellaneous Provisions) Act, 1992;

“corporate bond” means a bond issued by a company and traded on a regulated market excluding the following:

- (a) a bond issued by a credit institution;
- (b) a bond issued by a holding company of a credit institution;

“credit rating” has the same meaning as it has in Article 3(1)(a) of Regulation (EC) No. 1060/2009 of the European Parliament and of the Council of 16 September 2009<sup>14</sup> on credit rating agencies;

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<sup>14</sup>OJ No. L302, 17.11.2009, p. 1

“holding company” means a company whose business consists wholly or mainly of the holding of shares or securities of other companies;

“recognised rating agency” means a credit rating agency that is registered or certified in accordance with Regulation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009<sup>15</sup> on credit rating agencies;

“supranational bond” means a bond issued by a supranational institution, being an institution formed by two or more central governments with the purpose of promoting economic development for the member countries;

“Tier 3 Approved Housing Body” means a housing body granted approval status under section 6 of the Housing (Miscellaneous Provisions) Act, 1992 and classified as Tier 3 under the Voluntary Regulation Code for Approved Housing Bodies in Ireland;

“UCITS” means an undertaking authorised as an undertaking for collective investment in transferable securities by the Bank or by a competent authority of another EEA State pursuant to Directive 2009/65/EC of the European Parliament and of the Council of 13 July 2009<sup>16</sup> on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS);”.

4. The Principal Regulations are amended by substituting for Part 3 the following –

*“Interpretation – Part 3*

7. (1) In this Part “relevant liquid assets” means the following unencumbered assets only:

- (a) cash;
- (b) investments with a maturity of less than 3 months, excluding the minimum reserve deposit account and the deposit protection account;
- (c) Irish and EEA State Securities, bank bonds and supranational bonds with a maturity of greater than 3 months, held either directly or through a UCITS, provided that all such Irish and EEA State Securities and supranational bonds comply with the minimum rating requirements specified in Regulation 29(1) or 29(3).

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<sup>15</sup>OJ No. L302, 17.11.2009, p. 1

<sup>16</sup>OJ No. L302, 17.11.2009, p. 32



(2) For the purposes of calculating the minimum liquidity ratio specified in Regulation 8(1), the following discounts shall be applied in valuing the relevant liquid assets specified in paragraph (1)(c):

- (a) where such investments have a maturity of greater than three months and less than one year, a 10 per cent discount shall be applied to the market value of such investments;
- (b) where such investments have a maturity of at least one year but less than 5 years, a 30 per cent discount shall be applied to the market value of such investments;
- (c) where such investments have a maturity of at least 5 years and up to 10 years, a 50 per cent discount shall be applied to the market value of such investments.

#### *Liquidity Requirements*

8. (1) A credit union shall establish and maintain a minimum liquidity ratio of relevant liquid assets of at least 20 per cent of its unattached savings, subject to the following:

- (a) at least 2.5 per cent of unattached savings shall be comprised of cash and investments with a maturity of less than 8 days;
- (b) no more than 10 per cent of unattached savings shall be comprised of the relevant liquid assets specified in Regulation 7(1)(c), after application of the applicable discounts specified in Regulation 7(2).

#### *Reporting Requirements*

9. (1) A credit union shall monitor its liquidity ratio on a continuous basis to ensure compliance with the liquidity requirements in this Part and in the Act.

(2) Where a credit union is failing, or likely to fail to comply, with the liquidity requirements in this Part or in the Act, it shall notify the Bank in writing no later than close of business on the next business day.”.

5. The Principal Regulations are amended by substituting for Part 5 the following –

#### *“Classes of Investments*

25. (1) A credit union may only invest in euro denominated investments in the following:

- (a) Irish and EEA State Securities;
- (b) supranational bonds;
- (c) accounts in credit institutions;
- (d) bank bonds;
- (e) corporate bonds;
- (f) regulated investment vehicles where the underlying investments of the regulated investment vehicle are investments in Tier 3 Approved Housing Bodies;
- (g) UCITS;
- (h) shares of, and deposits with, other credit unions;
- (i) shares of a society registered under the Industrial and Provident Societies Act 1893 to 1978, provided the society is not an approved housing body.

(2) For the purposes of Regulation 25(1)(f), the underlying investments of a regulated investment vehicle in a Tier 3 Approved Housing Body shall consist exclusively of loans or other forms of debt financing provided by the regulated investment vehicle to the Tier 3 Approved Housing Body.

(3) A credit union may invest in a UCITS only where –

- (a) the underlying investments of the UCITS are composed of instruments specified in Regulation 25(1)(a), (b), (c), (d) or (e) (or any combination of such instruments),
- (b) the UCITS has total assets with a value of at least €150 million, and
- (c) the making of such an investment would not cause a credit union to fail to comply with this Part.

(4) The Bank may prescribe from time to time, in accordance with section 43 of the Act, further classes of investments in which a credit union may invest its funds which may include investments in projects of a public nature. Investments in projects of a public nature include, but are not limited to, investments in social housing projects.

#### *Counterparty Limits*

26. (1) A credit union shall not make an investment with a counterparty which, were that investment to be made, would cause the credit union's investments with that counterparty to

exceed 20 per cent of the credit union's total value of investments.

(2) A credit union shall not make a direct investment in corporate bonds issued by a particular counterparty which, were that investment to be made, would cause the credit union's direct investments in corporate bonds issued by that counterparty to exceed 5 per cent of the total value of the credit union's regulatory reserve.

#### *Concentration Limits*

27. (1) A credit union shall not make an investment in Irish and EEA State Securities, either directly or through a UCITS, which would cause the credit union's combined investments in Irish and EEA State Securities and supranational bonds, held directly or through a UCITS, to exceed 70 per cent of the total value of the credit union's investments.

(2) A credit union shall not make an investment in supranational bonds, either directly or through a UCITS, which would cause the credit union's combined investments in Irish and EEA State Securities and supranational bonds, held directly or through a UCITS, to exceed 70 per cent of the total value of the credit union's investments.

(3) A credit union shall not make an investment in bank bonds, either directly or through a UCITS, which would cause the credit union's investments in bank bonds, held directly or through a UCITS, to exceed 70 per cent of the total value of the credit union's investments.

(4) A credit union shall not make an investment in corporate bonds, either directly or through a UCITS, which would cause the credit union's investments in corporate bonds, held directly or through a UCITS, to exceed 50 per cent of the credit union's regulatory reserve.

(5) A credit union shall not make an investment in a regulated investment vehicle referred to in Regulation 25(1)(f) which would cause the credit union's investments in such regulated investment vehicles to exceed –

- (a) 50 per cent of the credit union's regulatory reserve, where the credit union has assets of at least €100 million, or
- (b) 25 per cent of the credit union's regulatory reserve, where the credit union has assets of less than €100 million.

(6) A credit union shall not make an investment in another credit union which would cause the credit union's investments in other credit unions to exceed 12.5 per cent of the credit union's regulatory reserve.



(7) A credit union shall not make an investment in the shares of a society referred to in Regulation 25(1)(i) which would cause the credit union's investments in shares in societies referred to in Regulation 25(1)(i) to exceed 12.5 per cent of the credit union's regulatory reserve.

#### *Maturity Limits*

28. (1) With the exception of an investment in a regulated investment vehicle referred to in Regulation 25(1)(f), a credit union shall not make an investment, either directly or through a UCITS, which has a maturity date which exceeds 10 years from the date of the investment.

(2) A credit union shall not make an investment in a regulated investment vehicle referred to in Regulation 25(1)(f) where the underlying investments of that regulated investment vehicle have a maturity date which exceeds 25 years from the date of the investment.

(3) A credit union shall not make an investment which would cause the credit union to have more than 30 per cent of its investments maturing after 7 years.

(4) A credit union shall not make an investment which would cause the credit union to have more than 50 per cent of its investments maturing after 5 years.

#### *Minimum Rating Requirements*

29. (1) A credit union may invest directly in –

- (a) Irish and EEA State Securities, or
- (b) supranational bonds,

only where at least two recognised rating agencies have assigned to those investments a credit rating of investment grade or higher.

(2) A credit union may invest in corporate bonds directly only where at least two recognised rating agencies have assigned to each such investment a credit rating that is at least equivalent to an A3 rating on the rating scale issued by Moody's Investor Service.

(3) A credit union may invest in UCITS where the underlying investments of the UCITS are composed of –

- (a) Irish and EEA State Securities,
- (b) supranational bonds, or
- (c) corporate bonds,

only where at least one recognised rating agency has assigned to each such underlying investment of the UCITS a credit rating of investment grade or higher.

(4) Subject to Regulation 33(2), where an investment made by a credit union no longer complies with the minimum rating requirements specified in paragraph (1), (2) or (3), a credit union shall divest itself of that investment as soon as possible.

#### *Holding of Investments*

30. A credit union shall ensure that any investments made remain in compliance with the investment requirements in this Part.

#### *Investment Practices – Distribution of Investment Income/ Investment Gain*

31. A credit union shall not distribute from its annual operating surplus, investment income or an investment gain to members or transfer investment income or an investment gain to a reserve set aside to provide for dividends, unless the investment income or investment gain falls within the following:

- (a) investment income or an investment gain received by the credit union at the balance sheet date;
- (b) investment income that will be received by the credit union within 12 months of the balance sheet date.

#### *Investment Practices – Concentration Risk*

32. A credit union shall establish and maintain a written strategy having regard to section 43 of the Act to manage concentration risk which can result from dealing with a single counterparty or holding investments with similar characteristics like maturities and to ensure investments remain within the limits contained in these Regulations.

#### *Transitional Arrangements*

33. (1) Where, on 1 March 2018, a credit union has investments made in accordance with legislative requirements applicable at the time of the investment which do not comply with the requirements in this Part, the credit union shall (subject to paragraph (2)):

- (a) take such actions as are necessary in relation to those investments in order to ensure compliance with this Part –
  - (i) as soon as possible without incurring a loss, and
  - (ii) in any event not later than 1 March 2020 or such later date as the Bank may permit;

(b) only make an investment where the making of such an investment would not cause the credit union to either -

(i) fail to comply with any of the requirements in this Part, or

(ii) exacerbate a failure existing on 1 March 2018 to comply with any of the requirements in this Part.

(2) A credit union may hold to maturity all fixed term investments made in accordance with legislative requirements applicable at the time of the investment and held by that credit union on 1 March 2018.”.

Signed for and on behalf of the CENTRAL BANK OF IRELAND

on [insert date]

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PATRICK CASEY,  
Registrar of Credit Unions



## EXPLANATORY NOTE

*(This note does not form part of the Instrument and does not purport to be a legal interpretation)*

The purpose of these Regulations is to amend the Credit Union Act 1997 (Regulatory Requirements) Regulations 2016 (S.I. No. 1 of 2016).

## Appendix 2: Comparison Tables

### Investments

Area	2016 Regulations	Requirements in amending regulations
Irish and EEA state securities:	<b>Maturity:</b> 10 years	<b>Maturity:</b> 10 years
	<b>Credit Rating:</b> n/a	<b>Credit Rating:</b> Investment Grade
	<b>Concentration Limit:</b> 70% of Investment portfolio	<b>Concentration Limit:</b> combined limit of 70% of Investment portfolio for Irish and EEA state securities and Supranational bonds
Supranational bonds:	Not a permitted investment class	<b>Maturity:</b> 10 years
		<b>Credit Rating:</b> Investment Grade
		<b>Concentration Limit:</b> combined limit of 70% of Investment portfolio for Irish and EEA state securities and Supranational bonds
<u>Senior</u> Bank Bonds:	<b>Maturity:</b> 10 years	<b>Maturity:</b> 10 years
	<b>Credit Rating:</b> n/a	<b>Credit Rating:</b> n/a
	<b>Concentration Limit:</b> 70% of Investment portfolio	<b>Concentration Limit:</b> 70% of Investment portfolio
Corporate Bonds:	Not a permitted investment class	<b>Maturity:</b> 10 years
		<b>Credit Rating:</b> 'A' rating for direct investments. Investment Grade for investment through a UCITS

Area	2016 Regulations	Requirements in amending regulations
		<b>Concentration Limit:</b> 50% of Regulatory Reserves  <b>Counterparty Limit:</b> 5% of Regulatory Reserves for a direct investment in a corporate bond
<b>Tier 3 Approved Housing Bodies through an investment vehicle:</b>	Not a permitted investment class	<b>Maturity:</b> 25 years
		<b>Concentration Limit:</b> 25% of Regulatory Reserves for credit unions with total assets of less than €100m  50% of Regulatory Reserves for credit unions with total assets of at least €100m
<b>Accounts in Authorised Credit Institutions:</b>	Permitted class of investment	Permitted class of investment
<b>Collective investment schemes:</b>	The investment schemes comprise the following instrument types:	UCITS investment schemes comprising the following instrument types:
	a) Irish and EEA state Securities	a) Irish and EEA state Securities
	b) Bank Bonds	b) Bank Bonds
	c) Accounts in Authorised Credit Institutions	c) Accounts in Authorised Credit Institutions
		d) Supranational bonds
		e) Corporate Bonds
<b>Other credit unions:</b>	<b>Concentration Limit:</b> 12.5% of Regulatory Reserves	<b>Concentration Limit:</b> 12.5% of Regulatory Reserves
<b>Industrial and Provident Societies:</b>	<b>Concentration Limit:</b> 12.5% of Regulatory Reserves	<b>Concentration Limit:</b> 12.5% of Regulatory Reserves



## Other Investment Requirements

Area	2016 Regulations	Requirements in amending regulations
<b>Counterparty limit – investments in single institution</b>	25% of total investments	20% of total investments  5% of Regulatory Reserves for a direct investment in a corporate bond
<b>Currency Requirement</b>	Investment limited to EURO investments	Investment limited to EURO investments
<b>Overall Portfolio Maturity limits</b>	Investments maturing after 5 years – 50% of investment portfolio	Investments maturing after 5 years – 50% of investment portfolio
	Investments maturing after 7 years – 30% of investment portfolio	Investments maturing after 7 years – 30% of investment portfolio

## Liquidity

Area	2016 Regulations	Requirements in amending regulations
<b>Short term liquidity ratio</b>	Short term liquidity ratio of 5% of unattached savings	2.5% of unattached savings (now included in the minimum liquidity ratio)
<b>Minimum liquidity ratio</b>	Minimum liquidity ratio of 20% of unattached savings	Minimum liquidity ratio of 20% of unattached savings
<b>Composition of Minimum liquidity ratio</b>	n/a	(a) at least 2.5% of unattached savings comprised of cash and investments with a maturity of less than 8 days (b) no more than 10% of unattached savings may be composed of allowable liquid bonds (after application of required discounts)
<b>Relevant liquid assets</b>	1) Cash	1) Cash
	2) Investments with a maturity of less than 3 months excluding the minimum reserve deposit account and the deposit protection account	2) Investments with a maturity of less than 3 months excluding the minimum reserve deposit account and the deposit protection account
	3) Investments with a maturity of 3 months or more, excluding the minimum reserve deposit account and the deposit protection account where a written guarantee exists to the effect that funds are available to the credit union in less than 3 months.	3) Irish and EEA state securities, bank bonds and supranational bonds with greater than 3 months to maturity with the associated discount applied to the market value (this discount is dependent on the remaining time to maturity of the investment).
	Notification to Central Bank where fail to meet liquidity requirements	Notification to Central Bank where fail to meet liquidity requirements





Banc Ceannais na hÉireann  
Central Bank of Ireland

Eurosystem





## **Appendix 6:**

### **Residential Mortgage Arrears and Repossessions Statistics: Q4 2017**





## ***Residential Mortgage Arrears and Repossessions Statistics: Q4 2017***

### ***Summary***

- The number of mortgage accounts for principal dwelling houses (PDHs) in arrears fell further in the fourth quarter of 2017; this marks the eighteenth consecutive quarter of decline. A total of 70,488 accounts (10 per cent) were in arrears at end-December, a decline of 2.8 per cent relative to September 2017.
- The number of PDH mortgage accounts that were classified as restructured at end-December was 118,477. Of these restructured accounts, 87 per cent were deemed to be meeting the terms of their current restructure arrangement, down slightly from the previous quarter. There was a continued reduction in short-term restructure arrangements such as Interest Only and Reduced Payments, which was partly offset by an increase in longer-term arrangements such as Arrears Capitalisations.
- Non-bank entities now hold 61,446 mortgage accounts for principle dwelling houses and buy to lets combined. Of this number, 47,820 relate to PDH mortgage accounts, representing 7 per cent of all PDH mortgage accounts outstanding; 5 per cent are held by regulated retail credit firms with the remaining 2 per cent held by unregulated loan owners. Table 1 below further displays the breakdown of PDH mortgages and the arrears profile held by banks and non-bank entities.

**Table 1: Breakdown of PDH Mortgages and Arrears Profile held by Banks and Non-Bank Entities**

	Banks	Non-Bank Entities	
		Retail Credit Firms	Unregulated Loan Owners
% of all PDH loans	93%	5%	2%
% of all PDH mortgages in arrears	79%	11%	9%
% of all PDH mortgages in arrears over 90 days	76%	12%	12%
% of all PDH mortgages in arrears over 720 days	75%	9%	16%



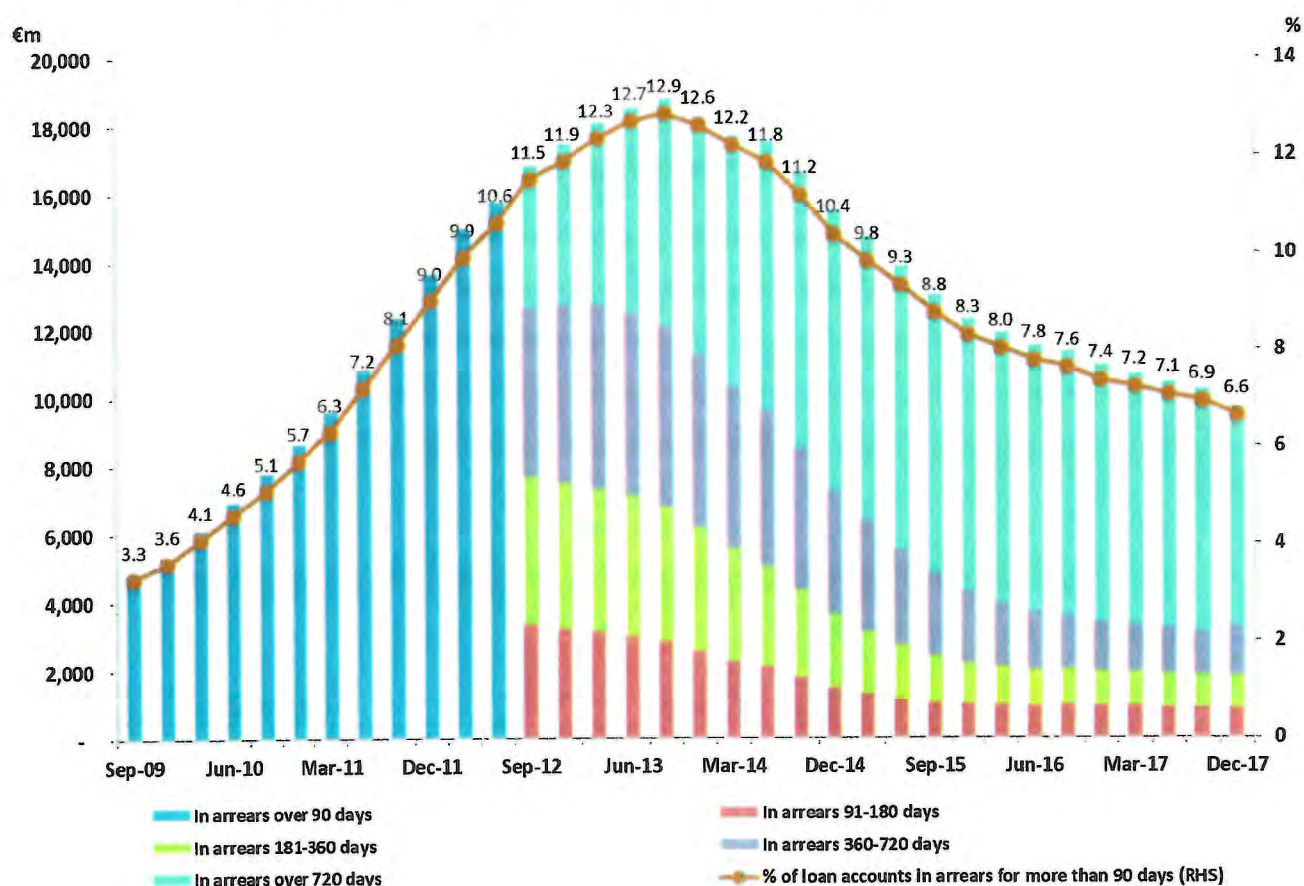
## Residential Mortgages on Principal Dwelling Houses

### Arrears

At end-December 2017, there were 729,722 private residential mortgage accounts for principal dwellings held in the Republic of Ireland, to a value of €98.5 billion. Of this total stock, 70,488 accounts were in arrears, representing a fall of 2,001 accounts or 2.8 per cent over the quarter. Some 48,433 accounts (7 per cent) were in arrears of more than 90 days.<sup>1</sup>

Quarter-on-quarter changes are impacted by a methodological change by a reporting institution. The number of accounts in arrears over 90 days fell by 4.4 per cent over the quarter, marking the seventeenth consecutive decline in this category. The outstanding balance on all lenders' PDH mortgage accounts in arrears of more than 90 days was €9.7 billion at end-December, equivalent to 10 per cent of the total outstanding balance on all PDH mortgage accounts.

**Figure 1: PDH Mortgage Accounts in Arrears over 90 Days**



**Note:** The breakdown of arrears greater than 90 days is not available pre-September 2012.

<sup>1</sup> The figures published here represent the total stock of mortgage accounts in arrears of more than 90 days, as reported to the Central Bank of Ireland by mortgage lenders and credit service providers. They include mortgages that have been restructured and are still in arrears of more than 90 days, as well as mortgages in arrears of more than 90 days that have not been restructured.

Accounts in arrears of up to 90 days increased by 254 accounts, or 1.2 per cent in the fourth quarter of 2017; this follows on from a decline of 155 accounts in the previous quarter. The number of accounts in arrears over 360 days fell to 36,965 at end-December, equivalent to 5 per cent of the total stock of PDH mortgage accounts and representing a fall of 2,195 accounts over the quarter. For all institutions, the value of accounts in longer-term arrears over 360 days remains large, amounting to just under €7.9 billion at end-December 2017.

Accounts in arrears of between 361 and 720 days show an increase of 483 accounts or 6.4 per cent over the quarter. The number of accounts in arrears over 720 days declined by 2,678 accounts in Q4, or 8.5 per cent. This was the tenth consecutive decline in this category and follows a 1.7 per cent fall in the previous quarter. Accounts in arrears over 720 days now constitute 41 per cent of all accounts in arrears, and 89 per cent of arrears balances outstanding. As referred to earlier, quarter-on-quarter changes are impacted by the methodological changes by a reporting institution.

### **Restructuring Arrangements**

Forbearance techniques include: a switch to an interest only mortgage; a reduction in the payment amount; a temporary deferral of payment; extending the term of the mortgage; and capitalising arrears amounts and related interest<sup>2</sup>. The figures also include advanced modification options such as split mortgages and trade-down mortgages, which have been introduced to provide more long-term solutions for customers in difficulty.

A total stock of 118,477 PDH mortgage accounts were categorised as restructured at end-December 2017. This reflects a reduction of 574 accounts compared to end-September 2017. The share of interest only arrangements and reduced payment arrangements fell further during Q4, to 8.4 per cent, indicating a continuing move out of short-term arrangements. In contrast, arrears capitalisation arrangements increased over the quarter and continued to account for the largest share of restructured accounts at 33 per cent at end-December. A breakdown of restructured mortgages by type is presented in Figure 2.

A total of 6,476 new restructure arrangements<sup>3</sup> were agreed during the fourth quarter of 2017, the lowest figure recorded since end-September 2012. The data on arrears and restructures indicate that of the total stock of 70,488 PDH accounts that were in arrears at end-December, 25,478 (36 per cent) were classified as restructured at that time. Of the total stock of 48,433 PDH accounts that were in arrears of more than 90 days, 28 per cent were classified as restructured; up slightly since last quarter.

Some 78 per cent of restructured accounts were not in arrears at end-December 2017. Restructured accounts in arrears include accounts that were in arrears prior to restructuring where the arrears balance has not yet been eliminated, as well as accounts that are in arrears on the current restructuring arrangement. At end-

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<sup>2</sup> Arrears capitalisation is an arrangement whereby some or all of the outstanding arrears are effectively added to the remaining principal balance, to be repaid over the life of the mortgage.

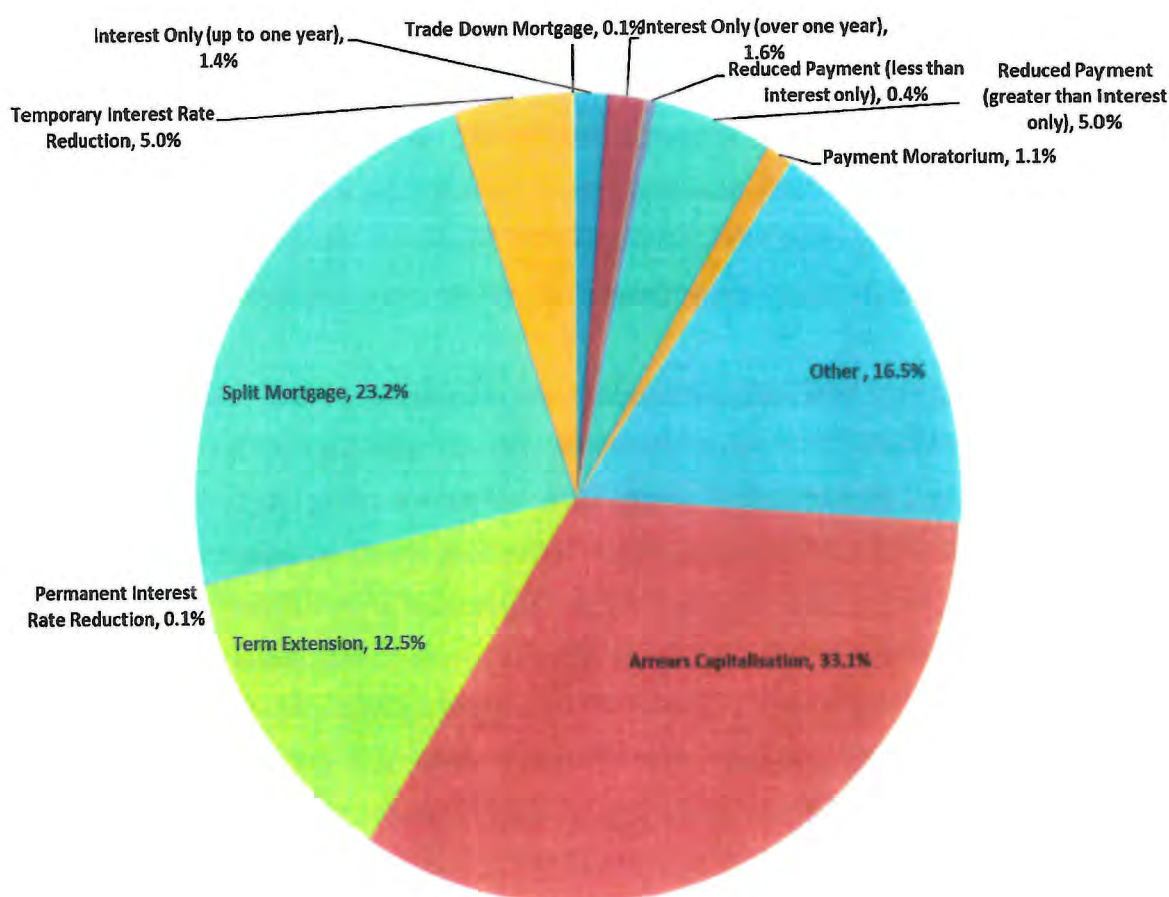
<sup>3</sup> This includes first-time restructures and further modifications of existing restructures.



December, 87 per cent of restructured PDH accounts were deemed to be meeting the terms of their arrangement. This means that the borrower is, at a minimum, meeting the agreed monthly repayments according to the current restructure arrangement.

It is important to note that 'meeting the terms of the arrangement' is not a measure of sustainability, as not all restructure types represent longer-term sustainable solutions as defined within the Mortgage Arrears Resolution Targets<sup>4</sup>. For instance, short-term interest only restructures are, in general, not part of longer-term sustainable solutions. The MART sustainability targets also include a significant number of accounts in arrears which are part of a legal process. These accounts are not classified as restructured within the Mortgage Arrears Statistics. Arrears associated with such accounts are recorded in full in the data.

**Figure 2: Restructured PDH Mortgage Accounts by Restructure Type, end-December 2017**



Inability to meet the terms of the arrangement implies that the restructure agreement put in place may not have been suitable. Table 2 shows the percentage of restructured accounts that were deemed to be meeting the terms of their arrangement at end-December 2017, broken down by arrangement type. Lower numbers

<sup>4</sup> Further details on the Mortgage Arrears Resolution Targets can be found [here](#).



indicate a greater number of borrowers are not currently meeting terms of new arrangement; this is particularly evident amongst cases in which a permanent interest rate reduction has been granted. As the figures in Table 2 only reflect compliance with the terms of the current restructure arrangement, we should expect to see a higher percentage of compliance among the restructure types that are likely to be shorter-term.<sup>5</sup> Accordingly, the figures show that of the total stock of accounts in the arrears capitalisation category, some 21 per cent of PDH accounts are not meeting terms of current restructure arrangement, i.e. the arrears balance has increased since the arrangement was put in place.

**Table 2: Percentage of Restructures 'Meeting the Terms of the Arrangement': end-December 2017**

<b>%</b>	<b>PDH</b>	<b>BTL</b>
<b>Total</b>	<b>86.8</b>	<b>86.5</b>
Interest Only - up to one year	91.1	81.8
Interest Only - over one year	94.9	93.6
Deferred Interest Scheme	81.0	n/a
Reduced Payment (less than interest only)	80.8	75.0
Reduced Payment (greater than interest only)	89.1	92.1
Temporary Interest Rate Reduction	90.8	95.6
Payment Moratorium	93.0	97.7
Arrears Capitalisation	78.8	71.0
Term Extension	93.3	95.4
Permanent Interest Rate Reduction	84.6	0.0
Split Mortgage	93.4	89.4
Other	85.6	87.6

#### **Legal Proceedings and Repossessions<sup>6</sup>**

During the fourth quarter of 2017, legal proceedings were issued to enforce the debt/security on a PDH mortgage on 829 accounts. During Q4 2017, there were 413 mortgage accounts where court proceedings concluded but arrears remained outstanding. In 258 accounts, the Courts granted an order for repossession or sale of the property. There were 1,717 properties in the lenders' possession at the beginning of the fourth quarter. A total of 311 properties were taken into possession by lenders during the quarter, down from 396 properties in the previous quarter. Of the properties taken into possession during the quarter, 138 were repossessed on foot of a Court Order, while the remaining 173 were voluntarily surrendered or abandoned. During the quarter, 406 properties were disposed of. As a result, lenders were in possession of 1,622 PDH properties at end-December 2017.

<sup>5</sup> It should also be noted that some categories reflect only a small number of arrangements, particularly in the case of BTL accounts.

<sup>6</sup> Legal proceedings record steps to repossess a property and include cases where a formal application has been made to a court to begin repossession proceedings, along with subsequent adjournments and judgement proceedings.

**Table 3: PDH Mortgage Arrears Repossessions and Restructures**

	Q3 2017			Q4 2017		
	Number	Balance €000	Arrears €000	Number	Balance €000	Arrears €000
<b>Mortgages</b>						
<b>Total residential mortgage loan accounts outstanding</b>	731,119	98,649,650	-	729,722	98,521,574	-
<b>Arrears</b>						
<b>Total residential mortgage arrears cases outstanding</b>	72,489	13,319,595	2,762,946	70,488	12,819,524	2,514,250
<i>of which:</i>						
in arrears up to 90 days	21,801	3,085,973	30,943	22,055	3,125,415	27,420
in arrears 91 to 180 days	5,716	889,169	28,366	5,610	871,227	30,708
in arrears 181 to 360 days	5,812	959,088	60,795	5,858	963,344	57,387
in arrears 361 to 720 days	7,536	1,269,373	149,602	8,019	1,442,254	165,129
in arrears over 720 days	31,624	7,115,992	2,493,240	28,946	6,417,284	2,233,606
<b>Total arrears cases over 90 days outstanding</b>	50,688	10,233,622	2,732,003	48,433	9,694,109	2,486,830
<i>% of loan accounts in arrears for more than 90 days</i>	6.9%	10.4%		6.6%	9.8%	
<b>Repossessions</b>						
Residential properties in possession - at the beginning of quarter	1,739			1,717		
Residential properties repossessed on foot of an Order during quarter	137			138		
Residential properties voluntarily surrendered/abandoned during the quarter	259			173		
Residential properties disposed of during this quarter	420			406		
Residential properties in possession - at end of quarter <sup>1</sup>	1,717			1,622		
<b>Total residential mortgage accounts restructured</b>						
<b>Restructures</b>	119,051	16,231,232	324,497	118,477	16,020,381	310,008
<b>Restructures not in arrears</b>	94,043	12,146,725		92,999	11,905,945	
<b>Total restructures by type:</b>						
Interest Only - up to one year	1,861	307,927	32,344	1,687	272,794	16,558
Interest Only - over one year	1,940	387,036	3,879	1,884	374,829	3,582
Reduced Payment (greater than interest only)	6,283	1,294,206	54,429	5,868	1,207,353	54,865
Reduced Payment (less than interest only)	538	108,862	8,635	531	103,151	7,771
Term Extension	15,223	1,610,439	39,184	14,784	1,565,186	40,577
Arrears Capitalisation	39,124	6,005,791	109,072	39,203	5,973,694	105,499
Payment Moratorium	1,420	215,420	6,803	1,334	214,228	7,048
Deferred Interest Scheme	21	3,902	555	21	3,900	547
Permanent Interest Rate Reduction	124	20,080	516	117	20,127	224
Split Mortgage	27,376	2,748,449	9,254	27,475	2,747,798	12,818
Trade Down Mortgage	61	9,559	0	62	9,632	0
Temporary Interest Rate Reduction	6,111	1,213,604	17,779	5,956	1,167,543	18,321
Other	18,969	2,305,957	42,047	19,555	2,360,146	42,198

\*Note that the 'Other' category mainly comprises accounts that have been offered a long-term solution, pending the completion of six months of successful payments. When these accounts transition into their permanent arrangement, the figures will be updated accordingly. The 'Other' category also includes a small number of simultaneously-agreed term extensions and arrears capitalisation arrangements.

<sup>1</sup> The number of properties in possession at the end of the quarter can also be impacted by reclassification issues.



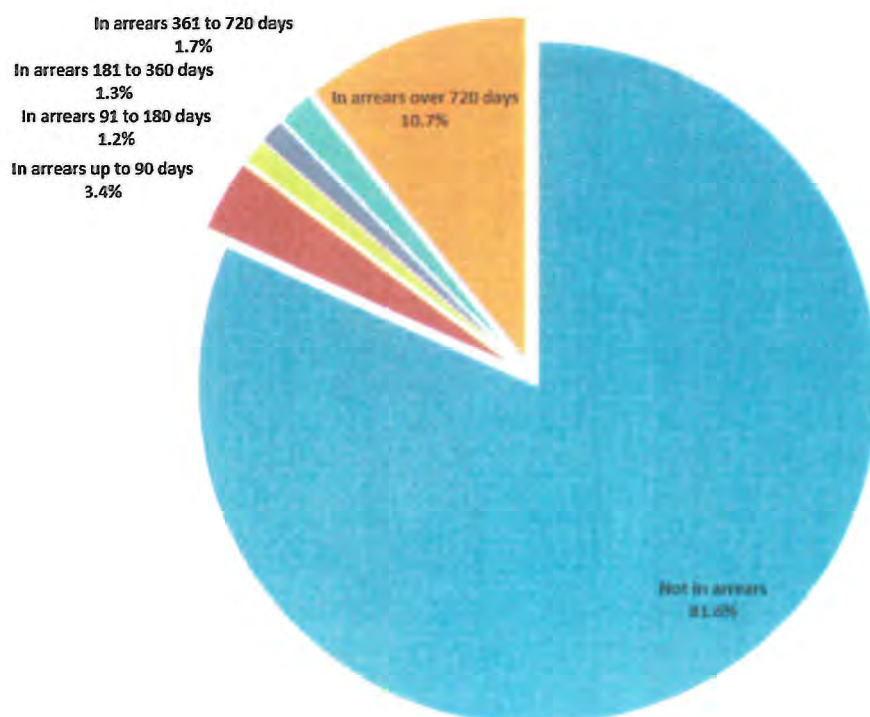
## ***Residential Mortgages on Buy-to-Let Properties***

### **Arrears**

At end-December 2017, there were 122,366 residential mortgage accounts for buy-to-let (BTL) properties held in the Republic of Ireland, to a value of €21.9 billion. Some 22,461 (18 per cent) of these accounts were in arrears, compared to 23,176 accounts at end-September 2017, reflecting a decrease of 3.1 per cent over the quarter. Of the total BTL stock, 18,257 or 15 per cent were in arrears of more than 90 days, reflecting a decrease of 3.2 per cent over the quarter. The outstanding balance on all BTL mortgage accounts in arrears of more than 90 days was €5 billion at end-December, equivalent to 23 per cent of the total outstanding balance.

The number of BTL accounts that were in arrears of more than 180 days was 16,759 at end-December 2017, reflecting a quarter-on-quarter fall of 4 per cent. BTL accounts in arrears greater than 720 days decreased by 3.6 per cent in the fourth quarter of 2017. Accounts in arrears of over 720 days now number 13,099 or 11 per cent of the total stock of BTL mortgage accounts. The outstanding balance on these accounts was €3.8 billion at end-December, equivalent to 17 per cent of the total outstanding balance on all BTL mortgage accounts.

***Figure 3: BTL Mortgage Accounts by Arrears Category, end-December 2017***





### **Restructuring Arrangements**

A total stock of 22,265 BTL mortgage accounts were categorised as restructured at end-December 2017, reflecting a decrease of 769 accounts over the quarter. Of the total stock of restructured accounts recorded at end-December, 79 per cent were not in arrears, while 87 per cent were meeting the terms of their current restructure arrangement. A total of 1,432 new restructure arrangements were agreed during the fourth quarter of the year, the lowest number of new restructures agreed in a quarter since this series began in 2012. On the BTL side, the largest cohort of restructured mortgages was in arrears capitalisation arrangements, which represented 23 per cent of all restructure arrangements. The data on arrears and restructures indicate that of the total stock of 22,461 BTL accounts that were in arrears at end-December, 4,706 (or 21 per cent) were classified as restructured at that time.

### **Legal Proceedings and Repossessions**

During the fourth quarter of 2017, rent receivers were appointed to 353 BTL accounts, bringing the stock of accounts with rent receivers appointed to 5,674; this is down from 5,701 accounts in the previous quarter. There were 731 BTL properties in the banks' possession at the beginning of Q4 2017. BTL repossessions in Q4 2017 were impacted by an initiative for assisted voluntary surrender of properties. A total of 1,230 properties were taken into possession by lenders during the quarter. Of the total BTL repossessions in the quarter, 39 were repossessed on foot of a Court Order, while the remaining 1,191 were voluntarily surrendered or abandoned. During Q4 2017, 178 properties were disposed of. As a result, lenders were in possession of 1,783 BTL properties at end-December 2017.

Table 4: BTL Mortgage Arrears Repossessions and Restructures		Q3 2017			Q4 2017		
		Number	Balance €000	Arrears €000	Number	Balance €000	Arrears €000
<b>Mortgages</b>							
<b>Total residential mortgage loan accounts outstanding</b>		124,702	22,530,381	-	122,366	21,946,335	-
<b>Arrears</b>							
<b>Total residential mortgage arrears cases outstanding</b>		23,176	6,044,233	1,949,113	22,461	5,844,868	1,810,313
<i>of which:</i>							
in arrears up to 90 days		4,312	847,324	42,715	4,204	860,672	27,753
in arrears 91 to 180 days		1,413	308,252	38,202	1,498	292,949	39,737
in arrears 181 to 360 days		1,647	386,129	57,326	1,538	363,112	63,413
in arrears 361 to 720 days		2,213	528,334	104,573	2,122	504,945	95,317
in arrears over 720 days		13,591	3,974,194	1,706,297	13,099	3,823,190	1,584,093
<b>Total arrears cases over 90 days outstanding</b>		18,864	5,196,909	1,906,398	18,257	4,984,196	1,782,560
<b>% of loan accounts in arrears for more than 90 days</b>		15.1%	23.1%		14.9%	22.7%	
<b>Repossessions</b>							
Residential properties in possession - at the beginning of quarter		635			731		
Residential properties repossessed on foot of an Order during quarter		77			39		
Residential properties voluntarily surrendered/abandoned during the quarter		243			1,191		
Residential properties disposed of during this quarter		198			178		
Residential properties in possession – at end of quarter <sup>1</sup>		731			1,783		
<b>Total residential mortgage accounts restructured</b>							
<b>Restructures</b>		23,034	5,314,890	174,019	22,265	5,116,765	161,915
<b>Restructures not in arrears</b>		18,239	4,136,925	-	17,559	3,960,684	-
<b>Total restructures by type:</b>							
Interest Only - up to one year		1,067	237,012	19,998	920	214,662	19,754
Interest Only - over one year		1,439	392,255	17,229	1,317	370,776	19,164
Reduced Payment (greater than interest only)		5,316	1,543,612	22,861	4,939	1,444,615	23,506
Reduced Payment (less than interest only)		55	14,287	1,099	52	11,252	1,158
Term Extension		3,662	600,850	21,638	3,642	590,126	20,494
Arrears Capitalisation		5,158	1,051,992	73,163	5,035	1,008,717	58,988
Payment Moratorium		274	48,039	2,021	256	44,116	1,587
Deferred Interest Scheme		0	0	0	0	0	0
Permanent Interest Rate Reduction		3	1,113	377	2	1,045	402
Split Mortgage		2,048	272,694	474	2,058	270,936	717
Temporary Interest Rate Reduction		119	24,440	212	113	23,315	462
Other		3,893	1,128,596	14,947	3,931	1,137,205	15,683

\*Note that the 'Other' category mainly comprises accounts that have been offered a long-term solution, pending the completion of six months of successful payments. When these accounts transition into their permanent arrangement, the figures will be updated accordingly. The 'Other' category also includes a small number of simultaneously-agreed term extensions and arrears capitalisation arrangements.

<sup>1</sup> The number of properties in possession at the end of the quarter can also be impacted by reclassification issues.

## ***Residential Mortgages held by Non-Bank Entities<sup>7</sup>***

### **Arrears**

At end-December 2017, non-bank entities accounted for 7 per cent of the total stock of PDH mortgage accounts outstanding. For BTLs the proportion was higher at just over 11 per cent. Overall, non-bank entities accounted for just over 7 per cent of the total stock of residential mortgage accounts outstanding (PDH and BTL) at end-December 2017 (9 per cent in value terms).

In terms of PDH mortgages held by non-bank entities, 77 per cent were held by regulated retail credit firms at end-December 2017. For retail credit firms, 16 per cent of accounts were in arrears over 90 days, with 7 per cent in arrears of over 720 days (Table 5). The equivalent figures for unregulated loan owners was 50 per cent and 42 per cent, respectively. Restructuring activity was lower among retail credit firms, with 18 per cent of loans restructured at end-December, compared to 21 per cent for unregulated loan owners.

In terms of BTL mortgages held by non-bank entities, a higher number of BTL accounts are held by retail credit firms compared with unregulated loan owners. Retail credit firms account for 51 per cent of total loan accounts held by non-bank entities. For retail credit firms, 24 per cent of accounts were in arrears, with 14 per cent of accounts in arrears of 720 days. The number of BTL accounts in arrears for unregulated loan owners was particularly high, with 78 per cent accounts in arrears, and over 65 per cent of all accounts in arrears over 720 days at end-December 2017.

### **Legal Proceedings and Repossessions**

There were 408 properties in non-bank entities' possession at the end of the fourth quarter, with 128 properties held by retail credit firms, and 280 held by unregulated loan owners. Some 28 properties were taken into possession by non-bank entities during the quarter, down from 52 properties in the previous quarter. Of the properties taken into possession during the quarter, 10 were repossessed on foot of a Court Order, while the remaining 18 were voluntarily surrendered or abandoned. During the quarter, 56 properties were disposed of.

A breakdown of PDH and BTL mortgages held by regulated and unregulated non-bank entities are presented in Table 5 and Table 6 below.

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<sup>7</sup> Non-bank entities comprise regulated retail credit firms and unregulated loan owners. Unregulated loans owners include owners of mortgages not regulated by the Central Bank of Ireland, that have purchased mortgage loans secured on Irish residential properties. The Consumer Protection (Regulation of Credit Servicing Firms) Act, 2015 was enacted to ensure that relevant borrowers, whose loans are sold to third parties, maintain the same regulatory protections they had prior to the sale.



Table 5: PDH Mortgage Arrears Repossessions and Restructures of Non-Bank Entities	Non-Bank Entities Q4 2017						
	Retail Credit Firms			Unregulated loan owners			Arrears €000
	Number	Balance €000	Arrears €000	Number	Balance €000	Arrears €000	
<b>Mortgages</b>							
Total residential mortgage loan accounts outstanding	36,763	5,885,458		11,057	2,084,266		
<b>Arrears</b>							
Total residential mortgage arrears cases outstanding	7,976	1,643,423	285,061	6,524	1,457,361	613,445	
% of total	22%	28%		59%	70%		
of which:							
in arrears over 90 days	5,947	1,328,178	282,898	5,575	1,319,721	612,121	
% of total	16%	23%		50%	63%		
in arrears over 720 days	2,545	675,599	229,213	4,607	1,171,714	598,765	
% of total	7%	11%		42%	56%		
<b>Repossessions</b>							
Residential properties in possession – at end of quarter	121			187			
<b>Total residential mortgage accounts restructured</b>							
<b>Restructures</b>							
% of total	6,792	1,112,352	20,454	2,338	343,421	20,618	
	18%	19%		21%	16%		
<b>Meeting the terms of the arrangement</b>							
% of total restructures	4,879	786,888	5,322	1,792	258,261	13,682	
	72%	71%		77%	75%		
<b>In arrears over 90 days, of which restructured</b>							
% of total in arrears > 90 days	986	183,027	19,199	686	126,106	20,249	
	17%	14%		12%	10%		

Note: See footnote 7.

Table 6: BTL Mortgage Arrears Repossessions and Restructures of Non-Bank Entities	Non-Bank Entities Q4 2017						
	Retail Credit Firms			Unregulated loan owners			
	Number	Balance €000	Arrears €000	Number	Balance €000	Arrears €000	
<b>Mortgages</b>							
Total residential mortgage loan accounts outstanding	7,016	1,176,012		6,610	1,749,650		
<b>Arrears</b>							
Total residential mortgage arrears cases outstanding	1,652	429,215	260,265	5,184	1,411,187	574,260	
% of total	24%	36%		78%	81%		
of which:							
in arrears over 90 days	1,401	394,232	258,302	4,948	1,358,387	571,650	
% of total	20%	34%		75%	78%		
in arrears over 720 days	1,015	333,551	244,715	4,303	1,234,552	541,174	
% of total	14%	28%		65%	71%		
<b>Repossessions</b>							
Residential properties in possession – at end of quarter	7			93			
<b>Total residential mortgage accounts restructured</b>							
<b>Restructures</b>							
% of total	313	57,736	7,462	447	143,227	17,969	
	4%	5%		7%	8%		
<b>Meeting the terms of the arrangement</b>							
% of total restructures	229	41,998	2,635	263	87,677	10,503	
	73%	73%		59%	61%		
<b>In arrears over 90 days, of which restructured</b>							
% of total in arrears > 90 days	104	19,857	5,903	259	82,049	17,932	
	7%	5%	2%	5%	6%	3%	

Note: See footnote 7.

### ***Annex 1: Mortgage Arrears Data and Further Information***

The mortgage arrears data, along with a set of explanatory notes, are available in the Mortgage Arrears section of the Statistics portal of the Central Bank of Ireland website: <http://www.centralbank.ie/polstats/stats/mortgagearrears/Pages/Data.aspx>.

The Central Bank of Ireland has produced a number of consumer guides to assist consumers who are in arrears or facing arrears, including

- Mortgage Arrears - A Consumer Guide to Dealing with your Lender;
- Mortgage Arrears - Frequently Asked Questions; and
- Guide to Completing a Standard Financial Statement.

The above guides, that include information on the protections that are available to consumers in financial difficulty, are available to download from the [consumer information section](#) of the Central Bank website.







## **Appendix 7:**

### **EBA Opinion on “virtual currencies”**







EBA/Op/2014/08

4 July 2014

## EBA Opinion on 'virtual currencies'



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## Abbreviations

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<b>AML</b>	Anti-Money Laundering Directive
<b>CIS</b>	Collective Investment Scheme
<b>DGSD</b>	Deposit Guarantee Scheme Directive
<b>EBA</b>	European Banking Authority
<b>EMD</b>	Electronic Money Directive
<b>ETF</b>	Exchange Traded Fund
<b>e-wallet</b>	Electronic wallet
<b>FC</b>	(Conventional) Fiat currency
<b>IOU</b>	I owe you
<b>KYC</b>	Know your customer (requirements)
<b>MiFID</b>	Markets in Financial Instruments Directive
<b>PSD</b>	Payment Services Directive
<b>SEPA</b>	Single Euro Payments Area
<b>VC</b>	Virtual currency



## Executive summary

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One of the tasks of the EBA is to monitor new and existing financial activities and to adopt guidelines and recommendations with a view to promoting the safety and soundness of markets and convergence of regulatory practice. In September 2013, 'virtual currencies' emerged on the EBA's radar as one of the many innovations to monitor. Following three months of analysis, the EBA issued a public warning on 13 December 2013, making consumers aware that VC are not regulated and that the risks are unmitigated as a result.

The question that remained unaddressed at the time was whether VCs should or can be regulated. This EBA Opinion sets out the result of this assessment and is addressed to EU legislators as well as national supervisory authorities in the 28 Member States.

VCs are a digital representation of value that is neither issued by a central bank or a public authority, nor necessarily attached to a FC, but is accepted by natural or legal persons as a means of payment and can be transferred, stored or traded electronically. The main actors are users, exchanges, trade platforms, inventors, and e-wallet providers.

While there are some potential benefits of VCs, for example, reduced transaction costs, faster transaction speed and financial inclusion, these benefits are less relevant in the European Union, due to the existing and pending EU regulations and directives that are explicitly aimed at faster transactions speeds and costs and at increasing financial inclusion.

The risks, by contrast, are manifold. More than 70 risks were identified across several categories, including risks to users; risks to non-user market participants; risks to financial integrity, such as money laundering and other financial crime; risks to existing payment systems in conventional FCs, and risks to regulatory authorities.

Numerous causal drivers for these risks were identified too, as these indicate the regulatory measures that would be required to mitigate the risks. The risks include the fact that a VC scheme can be created, and then its function subsequently changed, by anyone, and in the case of decentralised schemes, such as Bitcoins, by anyone with a sufficient share of computational power; that payer and payee can remain anonymous; that VC schemes do not respect jurisdictional boundaries and may therefore undermine financial sanctions and seizure of assets; and that market participants lack sound corporate governance arrangements.

A regulatory approach that addresses these drivers comprehensively would require a substantial body of regulation, some components of which are untested. It would need to comprise, amongst other elements, governance requirements for several market participants, the segregation of client accounts, capital requirements and, crucially, the creation of 'scheme governing authorities' that are accountable for the integrity of a VC scheme and its key components, including its protocol and transaction ledger.

However, whilst such a 'long-term' regime is not in place, some of the more pressing risks identified will need to be mitigated in other ways. As an immediate response, the EBA



recommends that national supervisory authorities discourage credit institutions, payment institutions and e-money institutions from buying, holding or selling VCs.

The EBA also recommends that EU legislators consider declaring market participants at the direct interface between conventional and virtual currencies, such as virtual currency exchanges, to become 'obliged entities' under the EU Anti Money Laundering Directive and thus subject to its anti-money laundering and counter terrorist financing requirements.

This immediate response will 'shield' regulated financial services from VC schemes, and will mitigate those risks that arise from the interaction between VC schemes and regulated financial services. It would not mitigate those risks that arise within, or between, VC schemes themselves.

Other things being equal, this immediate response will allow VC schemes to innovate and develop outside of the financial services sector, including the development of solutions that would satisfy regulatory demands of the kind specified above. The immediate response would also still allow financial institutions to maintain, for example, a current account relationship with businesses active in the field of VCs.





## Background

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1. One of the tasks of the EBA, in accordance with Article 9 of its founding regulation, is to monitor new and existing financial activities and to adopt guidelines and recommendations with a view to promoting the safety and soundness of markets and convergence in regulatory practice.
2. In September 2013, virtual currencies (VCs) emerged as one of the many innovations the EBA was monitoring at the time. VCs are a digital representation of value that is neither issued by a central bank or public authority nor necessarily attached to a FC, but is accepted by natural or legal persons as a means of exchange and can be transferred, stored or traded electronically.
3. In their decentralised variant, VC schemes tend to be created online using powerful computer hardware, which allows users to 'mine' small amounts of the currency by solving deliberately complex algorithms. The increase in the supply of VC units in the decentralised VC schemes that exist is said to be fixed by a mathematical protocol. Only small amounts are released over time, and the computing power required to mine a unit increases over that time. Miners validate VC transactions and tend to operate anonymously, from anywhere in the world.
4. VC units can also be bought at exchanges using conventional FC, such as the euro, the pound sterling or the US dollar. VC units are held in personalised accounts known as an electronic wallet (e-wallet). Using this wallet, consumers can send VCs online to anyone else willing to accept them, or convert them back into FC. Each transaction is validated and recorded on a transaction ledger often referred to as a block chain.
5. At present, the size of all VC schemes is difficult to gauge, due to the uncertain reliability of the data sources. It is also unknown how many VC transactions are carried out, not as a means of payment but as a mere exchange between VC and FC. Using a generous interpretation, the number of global VC transactions has never exceeded 100 000 per day across the globe,<sup>1</sup> compared to approximately 295 million conventional payment and terminal transactions per day in Europe alone (i.e. credit transfers, direct debits, e-money transfers, cheques, etc.).<sup>2</sup>
6. In autumn 2013, however, the EBA noticed increased VC activity across EU Member States, with a growing number of VC schemes being launched, an increasing number of merchants, and a rising number of individuals using VCs, and Bitcoins in particular, not only as an

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<sup>1</sup> See for example, [http://blockchain.info/charts/n-transactions?timespan=1year&showDataPoints=false&daysAverageString=7&show\\_header=true&scale=0&address](http://blockchain.info/charts/n-transactions?timespan=1year&showDataPoints=false&daysAverageString=7&show_header=true&scale=0&address)

<sup>2</sup> Which are equivalent to EUR 94.5bn per year, see <http://sdw.ecb.europa.eu/reports.do?node=1000001439>



investment but as a means of paying for goods and services. Market participants were apparently drawn to VCs because of the benefits of being able to transfer VC units peer-to-peer without the need for an intermediary. Given that the regulation of payment services and relevant EU directives – such as the Payment Services Directive (PSD) and the Electronic Money Directive (EMD) – fall into the EBA's scope of action, the EBA began assessing the phenomenon.

7. Following three months of analysis of the potential risks to individuals arising from using VCs, the EBA issued a public warning on 13 December 2013, making consumers aware that they may lose their money on an exchange, that their VC units may be stolen from their digital wallets, that they are not protected when using VCs as a means of payment, that the value of VCs has been very volatile, that transactions in VCs may be misused for criminal activities and that individuals holding VCs may be subject to unforeseen tax liabilities.<sup>3</sup>
8. In the months following the publication, several of the risks that had been highlighted in the warning started to materialise, as a market-leading exchange (Mt. Gox) had to close due to mismanagement, cyber-attacks and theft of a substantial amount of Bitcoins. As the most popular VC scheme at the time, the value of Bitcoins fluctuated wildly, and several jurisdictions changed the tax status of VCs.
9. However, VC schemes tend to have properties that are very similar to those provided by conventional payment service providers, as regulated and supervised by the EBA and the national supervisory authorities across the 28 EU Member States. The question yet to be addressed was whether VCs therefore should, or could be regulated.
10. The question was given further impetus because a few national jurisdictions, within the EU as well as beyond, began to take national approaches that deviated from one another. Some jurisdictions considered imposing requirements on specific VC market participants as specified in existing legislation or regulations, while others created new licensing requirements. Others still decided to ban financial institutions from interacting with VCs.
11. To find a solution to the issue of whether VCs can and ought to be regulated, the EBA carried out additional analysis during the first half of 2014, the results of which are presented in this EBA Opinion. The first chapter specifies a definition of VCs and identifies the main actors participating in the markets for VCs, such as users, exchanges, trade platforms, inventors, e-wallet providers and others. This is followed by a chapter specifying the potential benefits, such as transaction costs, transaction speed and financial inclusion outside of the EU.
12. The report continues by identifying the main risks arising from VCs, separated into risks arising to individuals, to other market participants, to financial integrity, to existing payment systems in conventional FCs, and to regulatory authorities. Each of the 70+ risks identified is tentatively prioritised based on indicative judgements of the probability of their

<sup>3</sup> See <http://www.eba.europa.eu/-/eba-warns-consumers-of-virtual-currencies>





materialisation and the impact of this materialisation. The causal drivers are also identified for each risk, as these will indicate the regulatory measures that would be required to mitigate the risk drivers.

13. The final chapter concludes by proposing an immediate regulatory response as well as a potential response for the long term.





## Definition of virtual currencies and market participants

14. At the time of writing this report, more than 200 different VC schemes are said to be in circulation,<sup>4</sup> and many more are expected to be developed in the future, some of them with features that are not predictable at present. While this creates challenges when specifying definitions that are useful for the development of a regulatory approach, some differentiating features that should withstand the test of time can be identified nevertheless. These are specified in this chapter.
15. The same challenge arises when identifying the actors that participate in the market for VCs who would be the parties affected by any regulations developed. Many different types of actors are vying to be the first to offer innovative ancillary VC services of one kind or another, such as automated machines used to exchange VC against FC and vice versa, the possibility to reverse charges, etc. It is uncertain which service offerings will emerge in the future, which ones will gain market acceptance and which underlying business models will therefore survive. Again, however, some key market participants with functions that create particular risks can be identified for regulatory purposes. These are also specified in this chapter.
16. Finally, it must be noted that VCs existed long before the more recent emergence of the decentralised VCs that this report focuses on. Early examples of centralised VCs that were not convertible to FCs (such as World of Warcraft Gold or frequent flyer miles), unidirectional convertible VCs (such as the former Facebook Credits or Linden Dollars) and bidirectional convertible centralised VCs (E-gold or Liberty Reserve). Originally, the desire for these currencies arose because members of a virtual community, such as a video game, were looking for a convenient way to reward the users, as well as to enable other financial transactions with the users.
17. Today, the size of all VC schemes, in aggregate as well as relative to conventional payment services, is difficult to gauge due to the uncertain reliability of the data sources. It is also unknown how many VC transactions are carried out, not as a normal payment but for a currency exchange between VC and FC. However, even if interpreted very generously, the number of Bitcoin transactions, which accounts for the vast majority of VC transactions, has never exceeded 100 000 per day across the globe,<sup>5</sup> compared to approximately 295 million conventional payment and terminal transactions (i.e. credit transfers, direct debits, e-money transfers, cheques, etc.) per day in Europe alone.<sup>6</sup>

<sup>4</sup> See, for example, <http://coinmarketcap.com/>

<sup>5</sup> See for example, [http://blockchain.info/charts/n-transactions?timespan=1year&showDataPoints=false&daysAverageString=7&show\\_header=true&scale=0&address=](http://blockchain.info/charts/n-transactions?timespan=1year&showDataPoints=false&daysAverageString=7&show_header=true&scale=0&address=)

<sup>6</sup> Which are equivalent to EUR 94.5 billion per year, see <http://sdw.ecb.europa.eu/reports.do?node=1000001439>



## Definition

18. This document concerns the phenomenon commonly referred to as 'virtual currencies'. As will become evident, the usage of the term 'currency' is misleading for several reasons, including the insinuation that it is therefore exchangeable against other currencies, which may not necessarily be the case. However, this document will not suggest a different denomination but, to reflect the common public usage of the term, will retain this term throughout the document.
19. VCs are defined as a digital representation of value that is neither issued by a central bank or public authority nor necessarily attached to a FC, but is used by natural or legal persons as a means of exchange and can be transferred, stored or traded electronically.<sup>7</sup> VCs can therefore be characterised along the distinguishing features specified below. Although some of the features resemble activities or products that are already within the remit of the EU E-Money Directive, these products are not intended to be included here, as e-money is a digital representation of FC, which VCs are not.

### A digital representation of value

20. This part of the definition refers to the fact that the value is essentially represented in digital form. This does not exclude the possibility that it may also be physically represented, such as through paper printouts or an engraved metal object. The term 'digital representation of value' is close to the monetary concept of a 'unit of account' but includes the option to consider VCs as private money or a commodity. It also avoids making reference to a standard numerical unit of account for the measurement of value and costs of goods, services, assets and liabilities, which might (according to some views), imply that it needs to be stable over time.

### Not issued by a central bank or a public authority; not necessarily pegged to a fiat currency

21. This element of the definition differentiates VCs from FC issued by central banks or public authorities. Currency issued by a central bank or public authority is considered FC, regardless of its (physical or digital) form. The difference between electronic money and a virtual currency is that the latter is not necessarily attached to a FC, i.e. it does not have a fixed value in a FC and, furthermore, is not necessarily fixed to be redeemed at par value by an issuer. Electronic money, by contrast, means electronically, including magnetically, stored monetary value as represented by a claim on the issuer, which is issued on receipt of funds

<sup>7</sup> It is theoretically conceivable that a central bank or public authority might back a particular VC scheme. However, it can be reasonably argued that, in this case, the currency is no longer a virtual but a fiat currency.



for making payment transactions, and which is accepted by a natural or legal person other than the electronic money issuer.<sup>8</sup>

#### Used by natural or legal persons as a means of payment

22. VCs can be used as a 'medium of exchange' to obtain goods and services from one holder, such as a private person or company, to another. This avoids the inconveniences of a barter system, i.e. the need for a coincidence of wants between the two parties involved in the transaction. How widely a VC scheme is accepted amongst market participants (i.e. its acceptance network) varies from scheme to scheme and could deliberately be designed to be for broader or for more limited use (e.g. for a specific community of individuals).

#### Can be transferred, stored and traded electronically

23. VCs can be (i) transferred from one user to another via electronic means, (ii) stored on an electronic device or server and (iii) traded electronically. However, it does not exclude physical transfers, the storage of copies in other forms (e.g. paper, minting and engraving) or that the VC is traded in other ways. Furthermore, the potential function of VCs as a 'store of value', i.e. that the value can be saved and retrieved in the future, does not necessarily imply that the value will remain stable over time and will not be subject to inflation or deflation.
24. The aim of the above definition is to distinguish VCs from (fiat) currency and, in particular, from e-money as digital representation of FC. In economic theory, money performs three different functions: (1) a unit of account, (2) a means of exchange and (3) a store of value. In principle, VCs could potentially fulfil one or more of the functions of money. However, the definition of VC above reflects the fact that these functions are, at least currently, not comparable in terms of quality, and are not always fulfilled at the same time as each other or to the same extent. Furthermore, from a regulatory perspective, inclusion of the term 'currency' in the denomination 'VC' is misleading as it implies the highest liquidity of the asset, wide or universal acceptance within its geography, as well as exchangeability with other (virtual and fiat) currencies, which may not necessarily be the case for every single VC scheme.
25. A number of additional characteristics can be identified for some of the VCs that currently exist, as outlined below. These are, however, not distinguishing features since either they do not apply to all VCs or it cannot be stated conclusively that they are applicable to all possible variant of VCs in the future.

#### No legal tender status

<sup>8</sup> See Article 2.2 of the Electronic Money Directive (EMD), at <http://eur-lex.europa.eu/lexa-content/FN/TXT/?uri=CELEX:3200910110>





26. VCs are not legal tender, which means the following features are not fulfilled: (a) mandatory acceptance, i.e. that the creditor of a payment obligation cannot refuse currency unless the parties have agreed on other means of payment; (b) acceptance at full face value, i.e. the monetary value is equal to the amount indicated; and (c) that the currency has the power to discharge debtors from their payment obligations.
27. Currently, no VC has legal tender status in any jurisdiction, but it is theoretically possible that a VC might be declared legal tender in some jurisdictions in the future. However, this is unlikely to happen in an EU/EEA member state, and if it was issued by a public authority, it would cease to be a decentralised VC and would instead become a FC backed by a central authority.<sup>9</sup>

#### Central versus decentralised scheme

28. Some VCs are issued and controlled by an individual or a group of individuals, while other VC schemes are issued and operated in a decentralised manner.

#### Convertibility

29. Some VCs are convertible (or open) and, therefore, can be exchanged back-and-forth for fiat money at an exchange rate, whereas others are non-convertible (or closed), i.e. are specific to a particular community and cannot be exchanged for fiat money under the rules governing its use.

#### Non-redeemable

30. This refers to the observation that, unlike electronic money, a VC, particularly in its decentralised variant, does not represent a claim on the issuer.

### Market participants

31. While at present a broad list of potential VC actors can be identified, not all of them necessarily need to be regulated. The more probable addressees for regulation are specified below.

#### Users

32. A user is a person or legal entity that obtains VC and uses it to purchase real or virtual goods or services, or to send remittances in a personal capacity to another person (for personal use), or who holds the VC for other purposes, such as an investment. Typically users can obtain VC in one of the following three ways:

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<sup>9</sup> The legal tender status of euro banknotes and coins is laid down by Article 128 (ex-Article 106 of the EC Treaty) of the Treaty on the Functioning of the European Union (TFEU). Exclusive right to authorise the issue of banknotes and approve coin volume issuance within the European Union is given to the European Central Bank. It would be necessary to amend the TFEU if a VC were declared legal tender.

- obtaining VC, for example through an exchange (or, for most centralised VCs, directly from the entity governing the scheme) using FC or some other VC;
- engaging in specific activities, such as responding to a promotion, completing an online survey, 'mining' (running special software to solve complex algorithms to validate transactions in the VC system); and/or
- receiving VC from the scheme governing entity, the issuer or another user who is acting for purposes other than his or her trade, business or profession.

#### Merchants

33. A merchant is a user in a trade, business or professional role who accepts VCs in exchange for goods and services.

#### Scheme governance authorities

34. A scheme governance authority is a legal person establishing and governing the rules for the use of a VC scheme, maintaining a central payment ledger, and who is responsible for the integrity of the scheme. In a centralised VC scheme, the scheme governance authority is also the issuer and therefore also has the authority to withdraw the VC from circulation.<sup>10</sup>

#### Exchange

35. An exchange is a person or entity engaged in the exchange of VC for FC, funds or other brands of VC. Exchanges may generally accept a wide range of payments, including cash, credit transfers, credit cards and other VCs. Comparable to traditional currency exchanges, the larger VC exchanges provide an overall picture of the changes in a VC's exchange price and its volatility.
36. Some exchanges may offer services to their clients, such as conversion services for merchants who accept VCs as payment, but fear a depreciation risk and would immediately like to convert any incoming VC-payments into a (national) fiat money of their choice.

#### Trade platforms

37. Trade platforms function as market places: they bring buyers and sellers of VCs together by offering them a platform on which they can offer and bid for VCs. Some trade platforms may even help their clients to locate merchants in their vicinity.

#### Processing service providers

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<sup>10</sup> The concept of governance authority is derived from the European Central Bank, *Harmonised oversight approach and oversight standards for payment instruments*, February 2009. Here the governance authority is described as being accountable for the overall functioning of the scheme that promotes the (initiation of the) payment instrument in question, and for ensuring that all the actors involved comply with the scheme's rules. Moreover, it is responsible for ensuring the scheme's compliance with oversight standards.



38. A processing service provider is an entity that facilitates the transfer of VC units from one user to another, usually through the means of information technology. In decentralised VC schemes, the provision of these services is sometimes rewarded by granting VC units to the provider, an activity that is referred to as 'mining' I.

#### Wallet providers/custodians

39. Users may hold their VC accounts on their own devices or entrust a wallet provider to hold and administrate the VC account (an e-wallet) and to provide an overview of the user's transactions (via a web or phone-based service). With some VCs, the services entrusted to the wallet service provider may include the custody of the user's public and private key. Wallets can be stored both online ('hot storage') and offline ('cold storage'), the latter of which increases the safety of the balance by protecting the wallet.

#### Inventors

40. An inventor is a person, or a group of people, who created or originated the concept of a particular VC and its underlying code and protocol.

#### Technical service providers

41. A technical service provider is a third party providing additional (non-core) technical services that interact with the VC scheme through, for example, software applications, or to enable mining pool access.

#### Information providers

42. An information provider makes available information on VC-related exchange rates, news feeds and other data.

#### Miners

43. In decentralised VC schemes, miners solve deliberately complex algorithms to obtain small amounts of VC units. Miners tend to operate anonymously, from anywhere in the world, and validate VC transactions. When a group of miners controls more than half the total computational power used to create VC units, the group is potentially in a position to interfere with transactions, for example by rejecting transactions validated by other miners.



## Potential benefits

44. Supporters of VCs attribute numerous advantages to VC schemes. Some of these are more conceptual (such as financial inclusion), while others are more practical (e.g. transaction speed) or financial (e.g. lower transaction costs) in nature. What unites most of the advantages is that, at this stage of the development of VCs, many remain hypothetical, as the advantages have often not (yet) materialised.<sup>11</sup>
45. Listed below are the advantages that can conceivably be characterised as potential 'benefits', i.e. that could be objectively identified against a benchmark as an advancement for at least some market participants or for society more widely. Some of these benefits incur associated risks, which are also highlighted.

### Economic benefits

#### Transaction costs

46. Due to the absence of intermediaries, VC transactions can currently be achieved at lower costs than other means of payment, such as payment cards or bank transfers. This is partly due to the absence of any regulatory requirements that would guarantee the safety of those means. VCs can also be less expensive for merchants as payees as well as for payers to whom transaction costs may be partially passed on. Although reliable and independent data on the exact costs of VC transactions is difficult to ascertain, some anecdotal suggestions have been made that average transaction fees on the Bitcoin network tend to be less than 0.0005 BTC, or 1% of the transaction amount.<sup>12</sup>
47. This compares with 2%-4% for traditional online payment systems or an estimated 8%-9% for remittance without involving bank accounts via money transmitters.<sup>13</sup> Transactions within or between VC schemes are also not subject to the exchange fees applied to conversions for transactions with third countries, therefore providing further potential for cost savings, (although conversion fees would typically apply as and when VC are exchanged against FC or vice versa). The increase in competition for transaction services may also have a cost-reducing effect on the costs of conventional transactions in FC.

<sup>11</sup> An exception may be regarding those market participants who have already taken advantage of the significant exchange rate volatility of VCs, or the anonymity feature that allows them to escape surveillance, purchase illegal goods, evade taxes, commit other forms of crime or avoid seizure of their assets. However, these are not considered to be benefits.

<sup>12</sup> Brito, J., *Beyond silk road: potential risks, threats, and promises of virtual currencies*, Testimony before the Senate Committee on homeland security and governmental affair, 18 November 2013, p. 11.

<sup>13</sup> Wu, R., *Why we accept Bitcoin*, Forbes, 13 February 2014, at <http://www.forbes.com/sites/grouptthink/2014/02/13/why-we-accept-bitcoin/>, and World Bank, *Remittance Prices Worldwide*, 2014.



48. Unsurprisingly, the low transaction costs, as well as the high divisibility of VC units, make VC schemes a particularly attractive way to effect micropayments.
49. However, several caveats need to be made about these alleged benefits. Firstly, the cost advantages are not guaranteed, as miners of popular decentralised VCs such as Bitcoins currently tend to be compensated by both transaction fees and a share in recently mined VC units. It is reasonable to assume that, as the number of newly issued VC units decreases over time, miners will have to rely more on transaction fees to recoup their investment of processing power. It is therefore reasonable to assume that transaction fees will increase in the future.
50. Secondly, most merchants that accept VCs tend to convert them immediately into their local FC,<sup>14</sup> an activity that also incurs costs (estimated to be 1% of the amount to be exchanged).<sup>15</sup> Thirdly, the higher fees for other means of payment transactions are partly due to the regulatory requirements imposed on the regulated entities that provide them, as a result of security measures, corporate governance, internal control measures, prudential requirements and more. Should VCs schemes be regulated as a financial service, associated (although perhaps not identical) costs will inevitably impact upon VC service providers as well. These compliance costs will negate at least some of the cost advantages that VC systems are currently enjoying.
51. Finally, and most importantly, the cost differentials between FC and VC transactions referred to above are much less pronounced in the Member States of the European Union that are part of the Single Euro Payments Area (SEPA). The SEPA is the EU's payment-integration initiative for the simplification of bank transfers in euros. As of spring 2014, the SEPA consists of 34 countries, including the 28 EU member states. Furthermore, the EU regulation on the equality of charges for cross border payments eliminates the differences in charges for cross-border and national payments in euros.<sup>16</sup> As a result, the costs arising for payers and payees when making cross-border transactions through conventional payment services is already low or, indeed, free, therefore significantly reducing the cost advantages of VCs in Europe.

#### Transaction processing time

52. Transactions using VCs can potentially be settled faster than those of FCs.<sup>17</sup> For Bitcoins, the total process time is said to be between 10 and 60 minutes. It is claimed that, on average, a new block is added every 10 minutes to the blockchain transaction ledger. In this respect, VC payments appear to compare favourably with credit transfers or card payments, particularly for payments between different currency areas. Also, processing VC payments takes place on a 24/7 basis, unlike payments made through traditional payment systems. However, for

<sup>14</sup> Krohn-Grimberghe, A. en C. Sorge, *Practical aspects of the bitcoin system*, Paderborn, Universität Paderborn, 2013.

<sup>15</sup> UBS, *Bitcoin and Banks. Problematic currency, interesting payment system*, 24 March 2014.

<sup>16</sup> See Regulation(EC) No 924/2009 at [http://ec.europa.eu/internal\\_market/payments/crossborder/](http://ec.europa.eu/internal_market/payments/crossborder/)

<sup>17</sup> 'Virtual Currencies: The Legal and Regulatory Challenges', Global Forum on Law, Justice and Development and held at the World Bank's headquarters in Washington, DC on 14 June 2013.





similar reasons as explained above, these benefits are reduced for the 34 countries of the SEPA agreement, because the payee needs to be credited, at latest, by the next business day. Moreover, a number of countries around the world have already established several settlement cycles per day or even 24/7 real-time payment services. Furthermore, regarding card payment transactions, real-time authorisation transaction systems guarantee the payment to the payee.

#### Certainty of payments received

53. VC schemes allow merchants to avoid having to refund transactions, particularly those that are based on an alleged non-fulfilment of a contract. In conventional FC payment systems in some jurisdictions, merchants have been reported to complain about large numbers of consumer-initiated payment charge backs that were based on false claims that a product had not been delivered.<sup>18</sup>
54. The downside of this benefit is that, for payers, the irrevocability of transactions does not allow consumers to be protected against error or fraud resulting from the merchant or other actors. These and other risks arising from the non-reversibility feature of VCs are specified in the subsequent chapter.

#### Contributing to economic growth

55. Compared to traditional payment systems with established business actors, VCs have spawned new types of businesses that did not exist before. The use of decentralised VCs offers various new business opportunities. For example, the activity of mining has spawned the development of specialised mining hardware, specialised server farms, commercial mining services such as mining pools, as well as demand for safe storage capacities. Further business opportunities have arisen for exchanges and trade platforms, due to the need to convert VCs into FCs and vice versa. The main focus of innovation opportunities is the IT sector although they may also arise in the financial services sector.<sup>19</sup>

#### Financial inclusion outside the EU

56. In jurisdictions where financial services are not widely available, where users have a high risk profile, where the national currency is not convertible into other FC, where financial services are too expensive for individuals, or where the administrative burden for obtaining an account is high, VC schemes provide an alternative way for individuals to achieve the same end: accessing commerce and effecting payment transactions.
57. However, this potential benefit is likely to be much less pronounced in the European Union, as directives such as the Payment Accounts Directive, adopted in April 2014 will provide

<sup>18</sup> Brito, J., *Beyond silk road: potential risks, threats, and promises of virtual currencies*, Testimony before the Senate Committee on homeland security and governmental affairs, 18 November 2013, p. 10.

<sup>19</sup> UBS, *Bitcoin and Banks. Problematic currency, interesting payment system*, 24 March 2014





cheap basic bank accounts for all citizens in the EU.<sup>20</sup> In contrast to VC, these accounts offer consumer protection and are subject to safeguarding requirements. The potential benefit is therefore more likely to advantage non-EU countries, especially in the case of money remittances, as VCs offer a less expensive alternative to conventional remittances that cost, on average, 8.36% of the amount sent.<sup>21</sup> Less developed countries may also benefit, for example by linking VC services to mobile payment services, allowing users to exchange their currency into Bitcoins via mobile phone.

58. However, this alleged benefit comes at a price, because VC schemes allow individuals, entities and jurisdictions that are subject to embargos or financial sanctions to circumvent those restrictions and participate in international trade and finance. Sanctions tend to be imposed on jurisdictions, and are therefore excluded from international finance because of a deliberate policy decision by a sovereign state or an intergovernmental organisation such as the EU or the UN, with a view to promote humanitarian or other political objectives. Consequently, the potential benefit also constitutes a significant risk of undermining an important policy tool of sovereign states, which is further explained in the chapter on risks below.

## Individual benefits

### Security of personal data

59. VC payment transactions do not require the provision of personal or sensitive data, unlike credit card data or passwords in the case of conventional payment methods. In this sense, VC units can be considered to be like cash: whoever possesses them also owns them, removing a source of potential identity theft.<sup>22</sup>

### Limited interference by public authorities

60. Some supporters of VCs consider FCs to be an untrustworthy means of payment due to governments' or central banks' power to control, and allegedly abuse, the supply of money denominated in that currency.<sup>23</sup>
61. However, while from a philosophical viewpoint, some people may argue that a system based on a central bank with the authority to influence money supply is not ideal, it does not automatically mean that a superior alternative is to have money supply set by an algorithm, as in decentralised VC schemes. On the contrary, as examined in great detail in the risks section below, the substantial exchange rate volatility illustrates that the depreciation of VC

<sup>20</sup> See [http://ec.europa.eu/internal\\_market/financeservices-retail/inclusion/index\\_en.htm](http://ec.europa.eu/internal_market/financeservices-retail/inclusion/index_en.htm)

<sup>21</sup> World Bank, *Remittance Prices Worldwide*, March issue, 2014

<sup>22</sup> Wu, R., *Why we accept Bitcoin*, Forbes, 13 February 2014 <http://www.forbes.com/sites/groupthink/2014/02/13/why-we-accept-bitcoin/>.

<sup>23</sup> ECB, *Virtual Currency Schemes*, 2012, p. 22, box 2, at <http://www.ecb.europa.eu/pub/pdf/other/virtualcurrencyschemes201210en.pdf>

units can be significantly greater in magnitude, and can also be much less predictable. The algorithm, protocol and transaction ledger might also be manipulated or might not be designed in good faith.

62. In summary, many of the potential benefits are likely to materialise outside the EU, in regions where the payment infrastructure may be less developed or less trustworthy.



## Risks, and their causal drivers

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64. The main objective of a financial regulator is to identify risks arising from financial activities, prioritise them, and take mitigating action, if required. This chapter lists the risks that can arise from VCs and clearly identifies the bearer of the particular risk, the impact on the risk bearer in the event that the risk materialises, and the conditions needed for the risk to materialise. The causal drivers of the risks are also identified, as these will indicate the regulatory or supervisory measures that would need to be taken to mitigate the risks.
65. Finally, the risks are ranked into low, medium and high, in the interests of pursuing efficient and effective regulatory or supervisory intervention. However, the ranking is tentative because the phenomenon of VCs being assessed has not existed for a sufficient amount of time for there to be quantitative evidence available of the existing risks, nor is this of the quality required for a robust ranking.
66. Instead, the ranking is based on a tentative and preliminary assessment of factors such as the probability of a risk to materialise, the severity of the impact should the risk materialise, and an assessment of the anecdotal evidence available, such as bankruptcies of specific exchanges, cases of VC theft, etc.
67. Approximately 70 risks can be identified as arising from VCs. Some of these are similar, if not identical, to risks arising from conventional financial services or products, such as payment services or investment products, while others are specific to VCs. In the following, the risks are separated into risks to users, (indicated by the prefix A); risks to other market participants, (B); risks to financial integrity, (C); risks to payment systems in FCs, (D); and risks to regulators, (E). Where useful, a risk category may be further divided into sub categories. The risks are also numbered to facilitate additional analysis in subsequent chapters. An overview of all the risks is provided in Figure 1.



Figure 1: Overview of risks

ID		Risk description		Rank	
A) Risks to users					
General risks, irrespective of purpose	A01	User suffers loss when an exchange is fraudulent	High		
	A02	User suffers loss when an ostensible exchange is not a genuine exchange	High		
	A03	User experiences drop in value of VCs due to (significant and unexpected) exchange rate fluctuation	High		
	A04	User holding VCs may unexpectedly become liable to tax requirements	Med		
	A05	User who is a member of a VC mining pool does not get fair share of mined VC units from a mining consortium	Low		
	A06	User suffers loss when buying VCs that do not have the VC features that the user expects	Med		
	A07	User's computing capacity is abused for the mining benefit of others	Low		
	A08	User suffers loss due to changes made to the VC protocol and other core components	Low		
	A09	User is not in a position to identify and assess the risks arising from VCs	Low		
	A10	User is in violation of applicable laws and regulations	Med		
	A11	User loses VC units through e-wallet theft or hacking	High		
	A12	User loses VC units when exchange gets hacked	High		
	A13	User's identity may be stolen when providing identification credentials to access VCs	High		
	A14	Market participants suffer losses due to unexpected application of law that renders contracts illegal/unenforceable	Med		
When used as a means of payment	A15	Market participants suffer losses due to delays in the recovery of VC units or the freezing of positions	High		
	A16	Market participants suffer losses due to counterparties/intermediaries failing to meet contractual settlement obligations	High		
	A17	Market participants suffer losses of VC units held in custody by others	Med		
	A18	Market participants suffer losses through information inequality regarding other actors	Med		
	A21	User suffers loss when counterparty fails to meet contractual payment or settlement obligations	High		
	A22	User experiences fraud or loss of FC when using VC cash machines	Med		
	A23	User has no guarantee that VCs are accepted by merchants as a means of payment on a permanent basis	High		
	A24	User suffers loss when VC payment they have made to purchase a good is incorrectly debited from their e-wallet	High		
	A25	User is not able to convert VCs into fiat currency, or not at a reasonable price	High		
	A26	User is unable to access VCs after losing passwords/keys to their e-wallet	High		
	A27	User is not able to access VCs on an exchange that is a 'going concern' (i.e. has the resources to operate)	High		
	A28	User is not able to access VCs on an exchange that has gone out of business (i.e. does no longer have resources to operate)	High		
	A41	User suffers loss as a result of VC prices being manipulated	High		
	A42	User investing in regulated financial instruments (e.g. derivatives, SPS, CIs) using unregulated VCs suffers unexpected loss	Med		
A43	User is misled by unreliable exchange rate data	Med			
A44	User suffers loss when investing in fraudulent VC investment schemes	Med			
A45	User is exposed to significant price volatility within very short time frames	Med			
A46	User cannot execute the VC exchange at the expected price	Med			
A47	User is exploited by a VC Ponzi scheme	Med			
When used as an investment	B11	Exchange is operationally unable to fulfil payment obligations denominated in VCs or FCs	Med		
	B12	Exchange is not in control of its operation	Med		
	B13	E-wallet provider faces loss should their refund policies be abused to hedge currency transactions	Med		
	B21	After accepting VC for payment, merchant is not reimbursed	Med		
	B22	Unlike a FC, the merchant cannot be certain that they can spend the VCs received	Med		
	B23	The merchant cannot be certain of the FC purchasing power of the VCs they have received	Med		
	B24	Merchant faces compensation claims from customers if transactions have been wrongly debited	Med		
	B31	Wallet provider loses e-wallets provided for individuals	High		
	B32	Scheme governance authority fails to meet payment and other obligations	High		
	B33	Scheme governance authority is subject to unexpected civil/criminal liability that brings the VC scheme to a halt	Med		
	B34	E-wallet provider faces compensation claims from customers if functionality of wallet is compromised or fails to provide expected functionality	Med		
	B) Risks to non-user market participants				
	Specific risks to merchant participants	E01	Regulators decide to regulate VCs but the chosen regulatory approach fails	Med	
		E02	Regulators do not regulate VCs but the viability of regulated financial institutions is compromised as a result of their interaction with VCs	Med	
E03		Regulation and supervision of conventional financial activities is circumvented by unregulated 'shadow' activities that incur the same risks	Med		
E11		Regulator is subject to litigation as a result of introducing regulation that renders pre-existing contracts illegal/unenforceable	Low		
E21		Should the regulator decide to regulate VCs more leniently than FCs, an unequal playing field in the market for payment services will emerge	Med		
E22		If an unequal playing field is retained, the intensity of competition in the market for FC payment services diminishes as providers exit FC markets	Med		
E23		Regulators prevent potential new entrants to payment services market if the regulatory approach to VCs is excessive	Med		
E31		Should VCs gain widespread acceptance, central bank as issuer of FC can no longer steer the economy, as the impact of its monetary measures become difficult to predict	Low		
C) Risks to financial integrity					
Money laundering and terrorist financing	C01	Criminals are able to launder proceeds of crime because they can deposit/transfer VCs anonymously	High		
	C02	Criminals are able to launder proceeds of crime because they can deposit/transfer VCs globally, rapidly and irrevocably	High		
	C03	Criminals/terrorists use the VC remittance systems and accounts for financing purposes	High		
	C04	Criminals/terrorists disguise the origins of criminal proceeds, undermining the ability of enforcement to obtain evidence and recover criminal assets	High		
	C05	Market participants are controlled by criminals, terrorists or related organisations	High		
	C11	Criminal uses VC exchanges to trade illegal commodities and abuse regulated financial sector at point of entry	High		
	C12	Restorative justice of victims of crime is hindered by criminal using VCs to avoid seizure of assets, confiscation and financial sanctions	High		
	C13	Criminal can use VCs for anonymous extortion	High		
	C14	Criminal organisations can use VCs to settle internal or inter-organisational payments	Med		
	C15	VCs make it more feasible for individuals to engage in criminal activity	High		
	C16	Hacking of VC software, wallets or exchanges allows a criminal to implicate others in the criminal activities they commit	Med		
	C17	Criminals, terrorist financiers and even entire jurisdictions are able to avoid seizure of assets, confiscation, embargos and financial sanctions (incl. those imposed by IGOs)	Med		
	C18	Criminals are able to create a VC scheme	High		
	C19	Tax evaders are able to obtain income in VCs, outside monitored FC payment systems	Med		
Payment service providers (PSPs) that use FC and also provide VC services suffer losses due to laws that render VC contracts illegal	D01	Payment service providers (PSPs) that use FC and also provide VC services suffer losses due to laws that render VC contracts illegal	Low		
	D02	PSPs that use FC and also provide VC services fail due to liquidity exposures in their VC operations	Low		
	D03	PSPs that offer VC payment services suffer loss of reputation when VC payments fail, because they gave the impression that VCs were regulated	Med		
	D04	Businesses in the real economy suffer losses due to disruptions in financial markets that were caused by VC assets blocked, delayed, etc.	Low		
Regulators decide to regulate VCs but the chosen regulatory approach fails	E01	Regulators decide to regulate VCs but the chosen regulatory approach fails	Med		
	E02	Regulators do not regulate VCs but the viability of regulated financial institutions is compromised as a result of their interaction with VCs	Med		
	E03	Regulation and supervision of conventional financial activities is circumvented by unregulated 'shadow' activities that incur the same risks	Med		
	E11	Regulator is subject to litigation as a result of introducing regulation that renders pre-existing contracts illegal/unenforceable	Low		
	E21	Should the regulator decide to regulate VCs more leniently than FCs, an unequal playing field in the market for payment services will emerge	Med		
	E22	If an unequal playing field is retained, the intensity of competition in the market for FC payment services diminishes as providers exit FC markets	Med		
	E23	Regulators prevent potential new entrants to payment services market if the regulatory approach to VCs is excessive	Med		
	E31	Should VCs gain widespread acceptance, central bank as issuer of FC can no longer steer the economy, as the impact of its monetary measures become difficult to predict	Low		
D) Risks to payment systems in FCs					
Payment systems in FCs	D01	Payment service providers (PSPs) that use FC and also provide VC services suffer losses due to laws that render VC contracts illegal	Low		
	D02	PSPs that use FC and also provide VC services fail due to liquidity exposures in their VC operations	Low		
	D03	PSPs that offer VC payment services suffer loss of reputation when VC payments fail, because they gave the impression that VCs were regulated	Med		
	D04	Businesses in the real economy suffer losses due to disruptions in financial markets that were caused by VC assets blocked, delayed, etc.	Low		
Reputation risks	E01	Regulators decide to regulate VCs but the chosen regulatory approach fails	Med		
	E02	Regulators do not regulate VCs but the viability of regulated financial institutions is compromised as a result of their interaction with VCs	Med		
	E03	Regulation and supervision of conventional financial activities is circumvented by unregulated 'shadow' activities that incur the same risks	Med		
	E11	Regulator is subject to litigation as a result of introducing regulation that renders pre-existing contracts illegal/unenforceable	Low		
	E21	Should the regulator decide to regulate VCs more leniently than FCs, an unequal playing field in the market for payment services will emerge	Med		
	E22	If an unequal playing field is retained, the intensity of competition in the market for FC payment services diminishes as providers exit FC markets	Med		
	E23	Regulators prevent potential new entrants to payment services market if the regulatory approach to VCs is excessive	Med		
	E31	Should VCs gain widespread acceptance, central bank as issuer of FC can no longer steer the economy, as the impact of its monetary measures become difficult to predict	Low		
E) Risks to regulatory authorities					
To authority issuing FC (out of scope of FC)	E01	Regulators decide to regulate VCs but the chosen regulatory approach fails	Med		
	E02	Regulators do not regulate VCs but the viability of regulated financial institutions is compromised as a result of their interaction with VCs	Med		
	E03	Regulation and supervision of conventional financial activities is circumvented by unregulated 'shadow' activities that incur the same risks	Med		
	E11	Regulator is subject to litigation as a result of introducing regulation that renders pre-existing contracts illegal/unenforceable	Low		
Risks to competition objectives	E21	Should the regulator decide to regulate VCs more leniently than FCs, an unequal playing field in the market for payment services will emerge	Med		
	E22	If an unequal playing field is retained, the intensity of competition in the market for FC payment services diminishes as providers exit FC markets	Med		
	E23	Regulators prevent potential new entrants to payment services market if the regulatory approach to VCs is excessive	Med		
	E31	Should VCs gain widespread acceptance, central bank as issuer of FC can no longer steer the economy, as the impact of its monetary measures become difficult to predict	Low		
F) Risks to financial integrity					
Money laundering and terrorist financing	F01	Criminals are able to launder proceeds of crime because they can deposit/transfer VCs anonymously	High		
	F02	Criminals are able to launder proceeds of crime because they can deposit/transfer VCs globally, rapidly and irrevocably	High		
	F03	Criminals/terrorists use the VC remittance systems and accounts for financing purposes	High		
	F04	Criminals/terrorists disguise the origins of criminal proceeds, undermining the ability of enforcement to obtain evidence and recover criminal assets	High		
	F05	Market participants are controlled by criminals, terrorists or related organisations	High		
	F11	Criminal uses VC exchanges to trade illegal commodities and abuse regulated financial sector at point of entry	High		
	F12	Restorative justice of victims of crime is hindered by criminal using VCs to avoid seizure of assets, confiscation and financial sanctions	High		
	F13	Criminal can use VCs for anonymous extortion	High		
	F14	Criminal organisations can use VCs to settle internal or inter-organisational payments	Med		
	F15	VCs make it more feasible for individuals to engage in criminal activity	High		
	F16	Hacking of VC software, wallets or exchanges allows a criminal to implicate others in the criminal activities they commit	Med		
	F17	Criminals, terrorist financiers and even entire jurisdictions are able to avoid seizure of assets, confiscation, embargos and financial sanctions (incl. those imposed by IGOs)	Med		
	F18	Criminals are able to create a VC scheme	High		
	F19	Tax evaders are able to obtain income in VCs, outside monitored FC payment systems	Med		





## Risks to users

68. VCs create numerous risks for users, and natural persons in particular. Some of these arise irrespective of the intended usage and purpose of holding or buying VCs, while others are specific to VCs used as a means of payment or as an investment.

### Risks that arise irrespective of intended usage

69. The user risks in this category exist because of the technology underlying VCs and their general features.

#### User suffers loss when an exchange acts fraudulently (A01)

70. This risk arises when the conduct of employees of an exchange falls short of reasonable expectations by consumers; the exchange is not legally incorporated in a jurisdiction and cannot therefore be subjected to regulatory requirements; the corporate governance responsibilities of the exchange's senior management are unclear; and/or its business activities are not subject to an independent audit. The priority of this risk is high.

#### User suffers loss when the exchange they interact with does not exchange VC against FC (A02)

71. The risk can arise because anyone can anonymously create (and subsequently change the functioning of) a VC scheme. Anyone can set up and call themselves an exchange, and exchanges may not necessarily be registered entities subject to licensing or authorisation requirements. The priority of this risk is high.

#### User experiences drop in value of VCs due to significant or unexpected exchange rate fluctuation (A03)

72. Several different drivers can create this risk, including that VC markets, and the price formation therein, are relatively opaque, and that the VC price formation on exchanges can easily be manipulated, including by a concerted effort of a small number of large VC holders. Denial of service attacks may prevent processing of transactions, which can further exacerbate the problem. Finally, in the case of decentralised VC, there is, by design, no central authority that could intervene to stabilise exchange rates. The priority of this risk is high.

#### User holding VCs may unexpectedly become liable to tax requirements (A04)

73. The legal and regulatory treatment of VCs is unclear and inconsistent, as is their tax treatment. The taxable event and geographic location of the taxable event may also be unclear. This may potentially lead authorities to treat VCs as property, forcing users to track and pay capital gains. The priority of this risk is medium.



*As a member of a VC mining pool, a user does not receive a fair share of mined VC units (A05)*

74. The mining of VCs requires increased computing power over time, often exceeding that of a single computer. Users therefore have an incentive to mine VC units by pooling their computing capacity in a consortium. However, a fair distribution of the mined units (or the equivalent in converted FC) to which each member is entitled might be subject to manipulation by the mining pool owner. Similarly, members might be exposed to other forms of unequal treatment, due to a lack of transparency in business practices.
75. Any automated, IT-based distribution mechanism may, in turn, be subject to errors, fraud and hacking, as is the verification of transactions that mining initially requires. No refund rights exist either, through which disadvantaged users would otherwise be compensated, nor can an incorrect distribution of VC units be revoked, as VC transactions are irreversible by design. The priority of this risk is low.

*User suffers loss when buying VCs that do not have the VC features that the user expects (A06)*

76. The inevitable lack of standards and definitions found in innovative products and services makes it difficult for users to gauge the features of a particular VC scheme. The units of the VC scheme bought may even transpire to be different from the expected scheme. The risk arises because anyone can anonymously create (and subsequently change the functioning of) a VC scheme, any computer file can be misrepresented as a VC and any scheme name can be given to that file, including the name of an existing, genuine VC. Once the user detects the misrepresentation, they will be unable to reverse their decision as VC transactions are not reversible, the counterparties are anonymous, no legal contracts exist, and no complaints procedures are in place. The risk is of medium priority.

*User's computing capacity is abused for the mining benefit of others (A07)*

77. The mining and exchange of VCs is dependent on access to the internet and the processing power of personal computers (PCs), of which ever more is required over time to mine a VC unit. Both the internet and the PC have an unfavourable track record of protection against malware and other forms of hacking, making it feasible for a user's PC to be infiltrated and its computing capacity to be misused for the mining benefit of others. The priority of the risk is low.

*User suffers loss due to changes made to the VC protocol or other key components (A08)*

78. The risk arises because anyone can anonymously create (and subsequently change the functioning of) a VC scheme. The software protocol that controls the VC scheme is not subject to any independent standards and can be changed once a majority of miners agree. These changes may accidentally introduce errors, or miners may not necessarily act in good faith. The priority of the risk is high.





User is not in a position to identify and assess the risks arising from using VCs (A09)

79. The decentralised and unregulated nature of VCs makes it difficult for users to access independent and objective information that would explain the risks arising from holding VCs. Some users may also have unfair information advantages, and the emergence of new VCs will affect the incumbents, and their prices, in unpredictable ways. The priority of the risk is low.

User in violation of applicable laws and regulation (A10)

80. The regulatory and legal treatment of VCs is unclear and authorities may change their views unexpectedly, at short notice, and the view may not be communicated sufficiently. The priority of the risks is medium.

User suffers loss through e-wallet theft, hacking or soft/hardware malfunction (A11)

81. The risk arises because e-wallets are software that are stored on the user's computer or mobile devices. Those devices might suffer from malfunction as might the software itself. Furthermore, their encryption can be hacked, and unlike a conventional FC, this is possible from anywhere in the world. In many VC schemes, the e-wallet is stored unencrypted, making it an even easier target for hacking or theft. Furthermore, the user has no refund right after fraud because there are no safeguards in place, such as a deposit protection scheme for conventional accounts, and because lost or stolen coins cannot be distinguished from unused coins. The priority of the risk is high.

User suffers loss when exchange is hacked (A12)

82. An exchange may temporarily hold users' VC units but can be hacked. A user may suffer losses because of insufficient security measures implemented by the exchange, because the VC units were held in a separate account, because no own funds are available that could be used to repay users, because the user has no refund rights and because the transaction cannot be reversed. The risk priority is high.

User's identity may be stolen when providing identification credentials (A13)

83. Some VC schemes require users to identify themselves on the internet or at VC cash machines when buying/selling VCs, through passport scans, iris scans or finger printing. However, these identification measures are not subject to regulations or data protection laws, nor is the underlying IT software subject to safety standards. As a result, the user has no guarantee that the credentials they provided will be processed securely and only used for the intended purpose. Similar risks also arise for conventional payment transactions. The priority of the risk is high.

Market participants suffer losses due to unexpected application of laws that render contracts illegal or unenforceable (A14)

84. Until governmental and regulatory authorities have formed an opinion on VCs, legal uncertainty remains over any contractual relationships that market participants may have forged. Once authorities have formed a view, these legal contracts may be rendered illegal or unenforceable. The priority of the risk is medium.

Market participants suffer losses due to delays in the recovery of VC units or the freezing of VC positions (A15)

85. The risk arises due to the anonymity of (some) counterparties, the decentralised set-up of VC schemes, the fact that counterparties have insufficient own funds, and that VC markets become temporarily illiquid. The priority of the risk is high.

Market participants suffer losses due to counterparties/intermediaries failing to meet contractual settlement obligations (A16)

86. The risk arises due to the anonymity of (some) counterparties, which can undermine the enforcement of any legal contracts that may exist, the lack of 'payment vs. payment' procedures, the lack of settlement finality, the decentralised set-up of VC schemes, the fact that counterparties have insufficient own funds, and that VC markets become temporarily illiquid. The priority of the risk is high.

Market participants suffer losses of VC units held in custody by others (A17)

87. The risk arises because the custodian is insolvent, behaves negligently or fraudulently, lacks adequate governance arrangements to oversee transactions, fails to keep adequate records, or has inadequate own funds to repay creditors. Also, transactions are not reversible. The priority of the risk is medium.

Market participants suffer losses through information inequality regarding other market participants (A18)

88. The anonymity of some market participants and the lack of technological accessibility for others facilitate information inequality and insider know-how that are benefit the former and are to the detriment of the latter. The priority of the risk is medium.

### Risks that arise when using VCs as a means of payment

User suffers loss when counterparty fails to meet contractual payment or settlement obligations (A21)

89. The risk arises because anyone can anonymously create (and subsequently change the functioning of) a VC scheme, no legal contract exists between the counterparties that could be enforced, the counterparties are not known to one another due to their anonymity, the





counterparties have insufficient own funds to meet payment obligations, the payment service is not sufficiently reliable, the underlying IT security infrastructure is fragile, and no settlement finality exists. The priority of the risk is high.

**User experiences loss of FC units when using a VC cash machine (A22)**

90. When exchanging VCs for FCs at a VC cash machine, users cannot guarantee that the VC or FC units will be correctly credited to their benefit. This is because VC cash machines are not subject to harmonised technical specifications, nor are they subject to licensing requirements, and, when error or fraud occurs, VC transactions are not reversible. No effective complaints or redress procedures are in place either. The priority of the risk is medium.

**User has no guarantee that VCs are accepted by merchants as a means of payment on a permanent basis (A23)**

91. The risk arises because merchants are required to accept only legal tender in notes and coins, but they are not required to accept non-legal tender such as VCs. Furthermore, merchants may decide to vary the acceptance of alternative VCs over time, switching between various VC schemes. Merchants may also deem the overall costs and risks of VCs too high or too uncertain. The priority of the risk is high.

**User suffers loss when the VC payment they have made to purchase a good is incorrectly debited from their e-wallet (A24)**

92. The risk arises because no authority oversees the settlement process: instead the process is based on trust. Furthermore, if an error is detected, the transaction is irreversible, e-wallets may be hacked to conceal the error and no effective complaints and redress procedures are in place. The priority of the risk is high.

**User is not able to convert VCs into FC, or not at a reasonable price (A25)**

93. The risk can arise, for example, at an exchange where illiquid markets, low market depth, a lack of market makers and a non-fluid exchange can prevent arbitrageurs to operate and provide liquidity. More fundamentally, the risk can also arise because anyone can anonymously create (and subsequently change the functioning of) a VC scheme. The priority of the risk is high.





#### User cannot access their VCs after losing password/keys to their e-wallet (A26)

94. Unlike losing the password to your bank account, credit card or debit card, no central administrative entity may exist that could re-issue passwords. Additionally, no identity is attached to the e-wallet through which ownership could be proven. E-wallets can be hacked and no effective complains or redress procedures are in place. Although dependent on the amount at stake, the risk is deemed to be of high priority.

#### User cannot access their VCs on an exchange that is a going concern (A27)

95. The user may temporarily store their VC units on an exchange that is a 'going concern' i.e. is still functioning without an immediate threat of liquidation. However, they may find themselves unable to access them, because the exchange is not bound by any legal contract and is not subject to regulatory conduct and security requirements. The exchange can block the transfer of VC funds, FC funds or both, or may suffer from a lack of own funds. Furthermore, the transfers are not reversible. Although dependent on the amount at stake, the risk is of high priority.

#### User cannot access their VCs on an exchange that has gone out of business (A28)

96. Once an exchange has gone out of business, i.e. no longer has the resources needed to operate, users suffer because the exchange may have held insufficient own funds to satisfy the demands of its VC creditors, and the VC units may not have been held in a separate account in their name, but in that of the exchange instead. Furthermore, the status of VC creditors during bankruptcy proceedings and unwinding is also unclear. Whatever the causal drivers, users will have no right to be compensated for losses, nor are they protected by a scheme similar to a deposit guarantee scheme for conventional bank accounts. The priority of the risk is high.

### Risks when using VCs as an investment

97. Individuals may use VCs not only as a means of payment for goods and services but also as an investment. The investment may take the form of holdings in VC units themselves or in investment products such as exchange traded funds (ETFs) or contracts for difference (CFD) that use VCs as an underlying asset. The risks arising from these activities are listed below.

#### User suffers loss as a result of VC prices being manipulated (A41)

98. The risk arises because of the low depth of VC markets; the ability of concerted action, by a small number of large VC holders, to undermine price formation; the general opaqueness of VC markets; and the absence of any central authority that could intervene to stabilise price formation. The priority of the risk is high.

#### User investing in regulated financial instruments using unregulated VCs as an underlying suffers unexpected loss (A42)



99. The risk arises because the lack of regulation of the underlying amplifies any risk taken on by purchasing the regulated investment product, such as a collective investment scheme (CIS), derivative or structured products. In addition, the investment products are highly complex, the returns are uncertain, and the underlying is opaque. The priority of the risk is medium.

*User is misled by unreliable exchange rate data (A43)*

100. The risk arises because the trading, market activity, market making, settlement and clearing on exchanges across the world are not subject to independent standards that would usually ensure there are reliable and consistent exchange rates. Furthermore, price formation in VC markets is opaque and subject to manipulation, and the execution of buy and sell orders lacks transparency. The priority of the risk is medium.

*User suffers loss when investing in a fraudulent or Ponzi VC investment scheme (A44)*

101. The risk arises because the individuals involved in the underlying asset can conceal their identity and are therefore not subject to any probity requirements, nor are they required to disclose the risks to which the investor is exposed, etc. Furthermore, the nature of VCs leaves investors more vulnerable to abuse by a Ponzi scheme based on VCs than other, regulated forms of investments. Finally, the user may have no access to redress schemes. The risk is of medium priority.

*User is exposed to significant price volatility within very short time frames (A45)*

102. The risk arises because the trading, market activity, market making, settlement and clearing on exchanges across the world are not subject to independent standards that would usually ensure there are reliable and consistent exchange rates. Instead, the price of a unit of a particular VC scheme depends on the extent to which it is adopted and accepted as mainstream, which is uncertain. Furthermore, the market depth (i.e. the size of an order needed to move the market price by a given amount) is low, price formation in VC markets is opaque and subject to manipulation, and the execution of buy and sell orders lacks transparency. The priority of the risk is medium.

*User cannot execute the VC exchange order at the expected price (A46)*

103. The risk arises because VC exchanges tend to be cash poor. As a result, investors may find it difficult to sell the VCs when they want to, so as to prevent a loss or to make a profit. Furthermore, the low market depth gives rise to an increased execution risk, (i.e. that the order is not executed at the price expected by the user).

## Risks to non-user market participants

104. Risks also arise to other, non-user market participants, such as exchanges, trade platforms, e-wallet service providers, merchants and others. Some of the risks apply to all participants, while others are specific to only one of them.



## Risks specific to exchanges

### Exchange is unable to fulfil payment obligations denominated in VCs or FCs (B11)

105. The risk affects the exchange and, consequently, also affects its creditors, because the exchange lacks adequate governance arrangements to oversee transactions, fails to keep adequate records, or possesses inadequate funds to repay creditors. Additionally, the particular VC that is being exchanged, and the underlying protocol that controls it, could be technologically faulty or compromised, or the IT environment at the exchange itself could lack reliability or security. If the problem occurs once the exchange has defaulted, the risk arises because of insufficient financial safeguards against default and inadequate business continuity arrangements. The priority of the risk is high.

### Exchange is not in control of its own operation (B12)

106. The risk affects exchanges and, consequently, also affects their creditors, because the exchange lacks adequate governance arrangements to oversee transactions, fails to keep adequate records, and operates within an IT environment that lacks safeguards against hacking and loss of control. The priority of the risk is medium.

### Exchange suffers loss if refund policies are abused to hedge currency exchange transactions (B13)

107. If the exchange offers refund policies for VC transactions as a way to mitigate against one or more of the above risks, it may suffer losses as a result of other market participants abusing the policy to hedge VC currency exchange rate risks. The risk arises because of the high exchange rate volatility, and a transaction potentially taking a long time to be completed. The priority of the risk is medium.

## Risks specific to merchants

### After accepting VCs for payment, the merchant is not reimbursed (B21)

108. The risk arises because of the 'double-spending problem': unlike FC that has a physical representation in coins and notes, VC units are only digital files. Therefore, the act of spending a VC unit does not remove its data from the ownership of the original holder.

109. Electronic payment systems in FC prevent double-spending by having a central authoritative source that follows rules for authorising each transaction. By design, no central authority exists in a VC scheme. To prevent double-spending, VC schemes tend to use a decentralised system with separate nodes that follow the same protocol. The authenticity of each transaction is verified by adding it to a transaction ledger, called the block chain, which is to ensure that the inputs for the transaction have not previously been spent.

110. However, there is no guarantee that a particular VC scheme uses this verification approach, nor is it certain that if this approach is used, it is completed securely and is not compromised,





for example through 'blocking' individual users from the VC network. The priority of the risk is medium.

Unlike a FC, the merchant cannot be certain that they will be able to spend the VCs received (B22)

111. Once the merchant receives units that are denominated in a particular VC, there is no guarantee they will be able to spend them, for example, to pay invoices. VCs are not legal tender and therefore do not have to be accepted by other merchants, nor will the merchant be able to pay their tax liabilities in VCs. Acceptance of VCs depends entirely on the voluntary consent by other market participants, who may decide to vary the acceptance of alternative VCs over time, switching between various VC schemes. There is also no central authority that would act as a redeemer of last resort. The priority of the risk is medium.

The merchant cannot be certain of the FC purchasing power of the VCs they have received (B23)

112. The exchange rate between VC and FC fluctuates significantly, often within very short periods of time, and often due to unpredictable events, such as technological innovations or platform seizures. The purchasing power of a VC unit regarding goods and services denominated in a FC is therefore difficult to predict and exposes the merchant to exchange rate fluctuations. The priority of the risk is medium.

Merchant faces compensation claims from customers if transactions have been wrongly debited (B24)

113. E-wallet providers, exchanges, trade platforms and most other VC market participants are not regulated, and do not have a physical presence. Therefore, the VC scheme is not regulated either. Should an error emerge in a VC transaction, the aggrieved market participants may be left in a situation whereby the merchant is the only participant to whom a complaint and compensation claims could be addressed. More fundamentally, the risk arises because anyone can anonymously create, and subsequently change the functioning and core components of, a VC scheme. The priority of the risk is medium.

### Risks specific to miscellaneous non-user market participants

E-wallet provider loses e-wallet provided to individuals (B31)

114. E-wallets are digital files and therefore are not only susceptible to hacking and other security breaches but, unlike conventional wallets, can be stolen from anywhere in the world. Furthermore, the digital nature of e-wallets generates significant economies of scale, which in turn facilitates large-scale theft through internet hacking. The priority of the risk is high.



#### Administrator of a (centralised) VC fails to meet payment and other obligations (B32)

115. The risk arises to the administrator and, therefore, indirectly to its creditors. This is because an administrator of a centralised VC is in control of the VC scheme and its rules, but may change the rules, act without integrity, lack adequate and secure IT infrastructure and governance arrangements to oversee transactions, fail to keep adequate records, possess inadequate funds to repay creditors, or act with insufficient integrity (possibly leading to civil or criminal liability that leads to the discontinuation of the VC service). Should the risk materialise once the administrator has defaulted, the causal drivers are insufficient financial safeguards against default and inadequate business continuity arrangements. The priority of the risk is high.

#### E-wallet provider faces compensation claims from customers if the functionality of wallet is compromised or fails to provide expected features (B33)

116. The risk arises because of negligence on the part of the e-wallet service provider, inadequate governance arrangements, insufficient recordkeeping and lack of operational capacity. Additionally, e-wallet providers are not necessarily subject to legally binding terms and conditions with the user who holds the e-wallet. The user may therefore be misled about the functionality of its features, suffer a loss and will then seek to claim compensation from the e-wallet provider. The priority of the risk is medium.

## Risks to financial integrity

117. Risks to financial integrity comprise risks of money laundering and terrorist financing, as well as financial crime. While the risks across these two categories are manifold, their causal drivers are often very similar and are primarily related to the anonymity and borderless nature of VCs, and the fact that anyone can create a VC, including criminals and terrorists.

### Money laundering and terrorist financing risks

#### Criminals are able to launder proceeds of crime because they can deposit and transfer VCs anonymously (C01)

118. The risk arises because senders and recipients can carry out VC transactions on a peer-to-peer basis that do not require personal identification as there are no names attached to wallet addresses. Furthermore, there is no intermediary that could notify authorities of suspicious transactions. The priority of the risk is high.

#### Criminals are able to launder proceeds of crime because they can deposit and transfer VCs globally, rapidly and irrevocably (C02)

119. The risk arises because, as a means of payment, VC schemes are not confined to, and are accepted across, jurisdictional borders. VC transactions require nothing more than internet access, the VC infrastructure is often spread across globe, making it difficult to intercept transactions, and VC transactions tend not to be reversible. The priority of the risk is high.



#### Criminals or terrorists use the VC remittance systems and accounts for financing purposes (C03)

120. The risk arises because, as a means of payment, VC schemes are not confined to, and are accepted across, jurisdictional borders. VC transactions require nothing more than internet access, the VC infrastructure is often spread across globe, making it difficult to intercept transactions, and VC transactions tend not to be reversible. The priority of the risk is high.

#### Criminals or terrorists disguise the origins of criminal proceeds, undermining the ability of enforcement authorities to obtain evidence and recover criminal assets (C04)

121. The risk arises because, as a means of payment, VC schemes are not confined to, and are accepted across, jurisdictional borders. VC transactions require nothing more than internet access, the VC infrastructure is often spread across globe, making it difficult to intercept transactions, and VC transactions tend not to be reversible. The priority of the risk is high..

#### Market participants are controlled by criminals, terrorists or related organisations (C05)

122. The risk arises because market participants are often led by individuals who are not 'fit and proper'. The risk also arises because VC schemes are not confined to, and are accepted across, jurisdictional borders. VC transactions require nothing more than internet access, the VC infrastructure is often spread across globe, making it difficult to intercept transactions, and VC transactions tend not to be reversible. The priority of the risk is high.

### Risks of financial crime

#### Criminals use VC exchanges to avoid regulated financial sector and trade in illegal commodities (C11)

123. The risk arises because senders and recipients can carry out VC transactions on a peer-to-peer basis that do not require personal identification, because there are no names attached to wallet addresses, and without the need for an intermediary that could be required to notify authorities of suspicious transactions.

124. In addition, as a means of payment, VC schemes are not confined to, and are accepted across, jurisdictional borders. VC transactions require nothing more than internet access, the VC infrastructure is often spread across globe, making it difficult to intercept transactions, and VC transactions tend not to be reversible. The priority of the risk is high.

#### Restorative justice for victims of crime is hindered by criminals using VCs to avoid seizure of assets and confiscation (C12)

125. In addition to the previously mentioned drivers of anonymity and the possibility for global and rapid peer-to-peer transactions, the risk is also caused by the possibility that law enforcement authorities are unable to target individual entities, as VCs do not require an intermediary (with the possible exception of exchanges). The priority of the risk is high.





#### Criminals can use VCs for anonymous extortion (C13)

126. The risk arises because senders and recipients can carry out VC transactions on a peer-to-peer basis that do not require personal identification, because there are no names attached to wallet addresses, and without the need for an intermediary that could be required to notify authorities of suspicious transactions.

127. In addition, as a means of payment, VC schemes are not confined to, and are accepted across, jurisdictional borders. VC transactions require nothing more than internet access, the VC infrastructure is often spread across globe, making it difficult to intercept transactions, and VC transactions tend not to be reversible. The priority of the risk is high.

#### Criminal organisations can use VCs for settlement of internal or inter-organisational payment needs (C14)

128. In addition to the previously mentioned drivers of anonymity and the possibility for global and rapid peer-to-peer transactions, the risk is also created because no interaction is required with the regulated financial system and the transactions are not monitored. The priority of the risk is medium.

#### VCs make it more feasible for individuals to engage in criminal activity (C15)

129. The anonymity of the creation (and subsequent changes to the function of VCs) combined with the easy access to VCs, the easy exchange between VCs and FCs, and the ability to avoid regulated financial systems makes it more feasible for individuals to engage in criminal activity, including the illicit purchase of goods and services and tax evasion. The priority of the risk is high.

#### The hacking of VC software, wallets, or exchanges allows a criminal to implicate others in the criminal activities that criminal commits (C16)

130. Criminals tend to use any means available to cover their tracks. Insufficient safeguards against the hacking and the lack of control of e-wallet providers, exchanges, trade platform and VC protocols allows a criminal to steal internet identities and therefore implicate others in the criminal activities they commit. The priority of the risk is medium

#### Jurisdictions are able to avoid seizure of assets and confiscation, as well as international embargoes and financial sanctions (C17)

131. VC transactions are not recorded and are anonymous, global and irrevocable. Also, decentralised VC transactions are not dependent on entities on which financial sanctions and embargoes could be imposed. As a result, it is difficult for governments and international governmental organisations to enforce financial sanctions or embargoes against other jurisdictions, for example to further humanitarian objectives. The priority of the risk is high.

#### Criminals are able to create a VC scheme and use it for criminal purposes (C18)



132. Given the anonymity of the sender and the recipient of VC transactions, and of the inventor(s) of the VC scheme, criminals are able to create anonymously a VC scheme and 'pre-mine' a substantial share before the VC units are more widely released. As and when the currency has gained popularity and benefits from a higher exchange rate (which is potentially many years later), the criminals will possess substantial purchasing power, without ever needing to interact with FCs or to use an exchange. The priority of the risk is high.

Tax evaders are able to obtain income denominated in VCs, outside monitored FC payment systems (C 19)

133. VC transactions are not recorded and are anonymous, global and irrevocable. Also, decentralised VC transactions are not dependent on entities on which financial regulations could be imposed. The priority of the risk is medium.

### Risks to payment systems and payment service providers in FCs

134. The risks listed in this category cover issues that may potentially arise as a result of possible interdependencies between payment systems denominated in FCs and those denominated in VCs.

PSPs that use FC and also provide VC services suffer losses due to laws that render VC contracts illegal (D01)

135. Until governmental and regulatory authorities have reached an opinion on VCs, legal uncertainty remains over any contractual relationships that market participants may have forged. Once authorities have reached an opinion, these legal contracts may be rendered illegal or unenforceable, with associated impacts on the liquidity of the PSP. The priority of the risk is low.

PSPs that provide services in FC as well as VC fail to meet their contractual obligations as payment system participants due to liquidity exposures in their VC operations (D02)

136. The risk arises because of the decentralised setup of the VC system, the anonymity of (some) counterparties, VC counterparties failing to hold sufficient VC units to settle transactions, VC exchange price changing rapidly and the price formation not being transparent. Furthermore, the liquidity management of the PSPs may be inadequate; the need for liquidity may intensify, as well as potential operational problems in linking FC and VC (e.g. settlement failure, outages, capacity, fraud and data loss). The priority of the risk is low.

PSPs in FCs offering VC payment services suffer loss and reputational risk when providing unregulated VC services that subsequently fail to perform (D03)

137. This risk applies, in particular, to credit institutions that are also PSPs, as they may offer additional VC payment services to their existing banking customers, therefore implying that the product offered is also regulated. Should the VC services fail to perform as expected, the PSP risks its reputation and, possibly, suffers a financial risk too. The risk arises because PSPs





have a legitimate incentive to innovate and provide better value or lower costs offerings to consumers, and because consumers have trust in their banks and the products they offer. The priority of the risk is medium.

The overall economy suffers losses due to disruptions in financial markets that were caused by VC transactions and assets that were blocked or delayed, etc. (D04)

138. The risk arises in a scenario where VCs have grown to be so important that their non-functioning leads to unexpected credit and liquidity exposures of PSPs in VCs, which in turn delays VC and FC transactions to the detriment of the genuine business of the overall economy. The priority of the risk is low.

## Risks to regulatory authorities

139. Regulators themselves incur risks regardless of whether or not they do anything at all, deliberately decide not to regulate or decide to regulate but the approach fails. The risks may be of a legal nature, of a reputational nature or because the activity undermines one or more of the regulator's objectives. Unlike the risks in the previous categories, the mitigation of the risks listed below is firmly in the hands of the regulators.

### Reputational risks

Regulators decide to regulate VCs but the chosen regulatory approach fails (E01)

140. The risk can arise if the analysis of the risks and the identification of the regulatory response have been incomplete, if the regulatory approach was arbitrated by market participants acting from outside the regulator's jurisdiction, or if the regulatory measures chosen were not suitable to mitigate the risks. The priority of the risk is medium.

Regulators do not regulate VCs but the viability of regulated financial institutions is compromised as a result of their interaction with VCs (E02)

141. The risk can arise if a decision not to regulate was made based on an incomplete analysis of the VC risks, or if the decision was insufficiently communicated to market participants. The priority of the risk is medium.

Regulation and supervision of conventional financial activities is circumvented by unregulated 'shadow' activities that incur the same risks (E03)

142. VC schemes offer the same service and are subject to the same risks as traditional payment systems in conventional FC, but do so outside of (or in ways only loosely linked to) the traditional payment systems. The absence of the regulation of VC schemes therefore undermines the regulator's objective of ensuring well-functioning payment systems. The risk arises because compliance costs are significantly lower in VC markets, if not non-existent, providing an incentive for market participants to use the unregulated markets and save compliance costs. The priority of the risk is medium.



### Legal risks

Regulator is subject to litigation as a result of introducing regulation that renders pre-existing contracts illegal/unenforceable (E11).

143. Once regulatory authorities come to a view on their regulatory approach to VCs, existing contractual relationships that market participants may have forged may be rendered illegal, which in some cases may prompt market participants to consider litigation action against the regulator. The priority of the risk is low.

### Risks to competition objectives

Should the regulator decide to regulate VCs more leniently than FCs, an unequal playing field will emerge in the market for payment and financial services (E21)

144. If regulators decide to regulate different activities that have the same function and the same risk profile with a differing degree of intensity (for example in terms of governance, prudential and anti-money laundering requirements), then an unequal level playing field is created in the market. This risk arises as a result of an incomplete analysis of VC risks.. The priority of the risk is medium.

If an unequal playing field is retained, the intensity of competition in the market for FC payment and financial services diminishes as providers exit FC markets (E22)

145. The risk arises as a result of participants in the market for FC payment services exiting the FC market due to cost pressures arising from competition with less regulated VC actors. The priority of the risk is medium.

Regulators prevent potential new entrants to the market for payment services if the regulatory approach to VCs is excessive (E23)

146. The risk can arise if the regulator's analysis of the risks arising from VCs was incomplete or insufficient or the identification of suitable regulatory measures was faulty. The priority of the risk is medium.

## The proposed regulatory approach

### Summary of the key risk drivers

147. To understand how to mitigate the risks described in the previous chapter, the drivers of the risks need to be identified and addressed. Figure 2 lists the risk drivers that have been identified in chronological order.

Figure 2: Overview of risk drivers

#	Driver of risks	Risk(s) for which the driver is relevant
a	<b>VC schemes can be created (and their functioning subsequently changed) by anyone, anonymously:</b> Anyone can anonymously create a VC and can subsequently make changes to the VC protocol or other core components if the required majority of (anonymous) miners agree.	A02, A06, A08, A21, A25, B31, C05, C15,
b	<b>Payer and payee are anonymous:</b> Transmitters and recipients of VCs interact on a person-to-person basis but remain anonymous.	A01, A03, A05, A06, A21, B01, B02, B03, B05, C01, C02, C03, C04, C05, C11, C12, C13, C14, C15, C17, C18, D01, D02, D03, E22,
c	<b>Global reach:</b> the internet-based nature of VC schemes does not respect national and, therefore, jurisdictional boundaries	C01, C02, C03, C04, C05, C11, C13, C17,
d	<b>Lack of probity:</b> exchange is neither audited nor subject to governance and probity standards, and is subject to misappropriation, fraud and seizure	A01, B23, C04,
e	<b>Not a legal person:</b> market participants are not incorporated as entities that could be subjected to standards	A01, A02, C12, C17,
f	<b>Opaque price formation:</b> price formation on exchanges is not transparent and is not subject to reliable standards, and exchange rates differ significantly between exchanges, which facilitates manipulation of exchanges	A03, A41, A43, A44, A45, A46, B23, D02, D03
g	<b>No refunds or payment guarantee:</b> VC transactions are not reversible, so no refunds are issued for erroneous transactions	A05, A06, A08, A 21, A22, A24, A27, A28, A29, A 43, B04
h	<b>Unclear regulation:</b> the regulatory treatment is unclear and creates uncertainty for market participants	A04, A10, B01, D01, E02, E11, E22
i	<b>Lack of definitions and standards:</b> the features of a product can be misrepresented because of a lack of definitions and standards	A06, A42,
j	<b>Inadequate IT safety:</b> the IT systems, infrastructure, transaction ledger, VC protocol and encryption are either insecure, subject to fraud and manipulation, and, in the case of the protocol, can be changed through a majority of miners	A07, A08, A11, A21, A22, A41, A42, B11, B12, B21, B31, C16, D01,
k	<b>Information is neither objective nor equally distributed:</b> limited availability of comprehensible, independent and objective information on VC activities. As a result, some market participants benefit from information inequality, e.g. on events that influence price formation	A09, A41, A42, B05, B06, D03
l	<b>Insufficient funds or VC units:</b> market participants have insufficient funds to meet financial obligations or to compensate creditors in the case of bankruptcy	A21, A28, A29, A30, B04, B12, D01, D02,
m	<b>No separation of accounts:</b> VC units temporarily held at an exchange are often not segregated from the exchange, i.e. held in client accounts	A27, A30,
n	<b>No complaint process:</b> no effective channel for users to complain	A06, A22, A42, B24, B33,
o	<b>Lack of access to redress:</b> no access to redress, compensation or protection schemes	A22, A28, A30, A42, A44,
p	<b>Lack of corporate capacity and governance:</b> lack of skills, expertise, systems, controls, organisational structure and governance exercised by market participants	A45, B04, B11, B12, B32, B33, E21
q	<b>No reporting:</b> lack of reporting requirements to any authority, e.g. of suspicious transactions	C01, C02, C03, C04, C11, C13, C14, C16
r	<b>Interconnectedness to FC:</b> VC units and FC funds can be exchanged easily, therefore creating spill-over effects or risks from VC to FC systems	D02, D03, D04, B05,
s	<b>Not legal tender:</b> merchants are not legally required to accept a particular (or any) VC and can switch between different VC schemes	A23
t	<b>No stabilising authority:</b> no authority that could provide exchange rate stability and/or act as the redeemer of last resort	A44, B22,





149. These risk drivers would need to be addressed to mitigate the risks identified in the previous chapter. The section below specifies the regulatory measures that would need to be taken to achieve this task. It is clear that a regulatory response that addresses the risks comprehensively – in other words, addresses risks that are comparable to risks in existing financial services, such as payment services and electronic money – would, in aggregate, require a substantial, and in some aspects unprecedented and untested, body of regulation, as well as resources to enforce the regulation.
150. This would include requirements for the governance of VC schemes, the segregation of client accounts, capital requirements and many others, which in aggregate would amount to a comprehensive regulatory approach, as described in the section below. It would be for EU legislators to form a view on whether this approach can be established within the scope of any of the existing EU directives or regulations, or whether a separate legal initiative would need to be started.
151. However, the details of a regulatory approach will take time to develop, and the feasibility of some components is yet to be assessed. As long as there is no regime in place, the question exists of whether some of the more pressing risks identified can and need to be mitigated. To that end, an 'immediate regulatory response' is proposed in a separate section below.

## A potential regulatory approach for the long term

152. This section addresses each of the risk drivers separately and, in aggregate, specifies a potential comprehensive regulatory approach for the long term.

### Scheme governance authority

153. To address risk driver a) – i.e. that anyone, including criminals, can anonymously create a VC without being held responsible for any changes made to the VC protocol, or other core elements of the VC scheme by others at a later stage – the creation of an entity that is accountable to the regulator would need to be a mandatory requirement for a VC scheme to be regulated as a financial service and for it to be allowed to interact with existing regulated financial services.
154. The entity would be called the 'scheme governance authority', which is a non-governmental entity that establishes and governs the rules for the use of a particular VC scheme.<sup>24</sup> It is a legal person, and is responsible for maintaining the integrity of the central transaction ledger, the protocol, and any other core functional component of the scheme. The scheme governance authority would be required to comply with regulatory and supervisory requirements of various kinds to mitigate identified risks.

<sup>24</sup> The concept of governance authority is derived from the European Central Bank, *Harmonised oversight approach and oversight standards for payment instruments*, February 2009. There, the governance authority is described as being accountable for the overall functioning of the scheme that promotes the (initiation of the) payment instrument in question and for ensuring that all the actors involved comply with the scheme's rules. Moreover, it is responsible for ensuring the scheme's compliance with oversight standards.



155. A governance authority may, at first, appear incompatible with the conceptual origins of VCs as a decentralised scheme that does not require the involvement of a central bank or government. However, the mandatory creation of a scheme governance body does not imply that VC units have to be centrally issued. This function can remain decentralised and be run through, for example, a protocol and a transaction ledger. If it is true that the decentralised VC schemes are secure, it should be possible for market participants to establish themselves as scheme governance authorities. However, if a legal person is not able to exercise authority over market participants and is therefore unaccountable to a regulator for compliance purposes, it would be unreasonable to expect a regulator to guarantee integrity in their place. In the case of a centralised VC scheme, the issuer of the scheme arguably already controls the core elements of the scheme.

#### Customer due diligence (CDD) requirements

156. The risk driver b), which concerns the anonymity of payers and payees could be addressed, at least within the EU, by requiring exchanges, and any other non-user market participants that interact with FC, to comply with CDD requirements. CDD requirements include the collection and verification of basic identity information; matching names against lists of known parties (such as 'politically exposed persons'); determining the customer's risk in terms of likeliness to commit money laundering, terrorist finance or identity theft; and monitoring a customer's transactions against their expected behaviour and recorded profile, as well as that of the customer's peers.
157. With transfers and exchanges of VC units (other than person-to-person transactions between wallets), information on the payer and the payee has to be exchanged with the relevant scheme governance authority. These transactions are then not only traceable but can also be linked to an individual's identity. KYC requirements would need to be imposed on exchanges, scheme governing authorities and potentially on some other market participants too.

#### Fitness and probity standards

158. To address risk driver d) -- the lack of probity of individuals that take decisions with potentially harmful effects on other market participants -- fitness and probity standards would have to be imposed on individuals performing specified functions in a scheme governance body, an exchange, and other relevant market participants. These standards will require individuals to be competent and capable, honest, ethical, financially sound and to act with integrity.

#### Mandatory incorporation

159. To ensure that market participants such as scheme governance authorities and exchanges can be held accountable for their actions (risk driver e)), they would be required to incorporate themselves in an EU Member State as a legal person that has standing to sue and be sued. Furthermore, a separation of the different risks of conventional FC and VC activities will be required



#### Transparent price formation and requirements against market abuse

160. To address the risk drivers of opaque price formation and market abuse (risk driver f), exchanges would need to be subject to market abuse requirements to prevent insider dealing (when a person makes use of information unavailable to other investors for personal gain) and market manipulation (when a person knowingly gives out false or misleading information to influence the price of a share for personal gain).
161. Furthermore, every transaction would therefore be documented, so authorities can monitor the process of price creation. To that end, exchanges would need to be authorised and subject to reporting requirements.

#### Authorisation and corporate governance

162. To address risk driver p), market participants such as scheme governance authorities and exchanges (and perhaps others) would need to be registered and authorised before beginning to provide VC services. An authorisation should only be granted to a legal person established in a Member State. The authorisation requirements would need to be tailored to address the risks specific to each type of market participants, such as accreditation of IT security with international standards certified by an independent third party and periodic assessments, to mitigate IT security vulnerabilities.
163. In addition, information on the identity of persons who ultimately own or control the legal entity would need to be provided, including evidence of their being fit and proper persons, and that they are capable to run these businesses.

#### Capital requirements

164. To ensure that market participants have sufficient funds to meet financial obligations in VC as well as FC, to compensate creditors during bankruptcy (risk driver l), and to absorb losses and facilitate an orderly wind-down, capital requirements will need to be placed on those participants that hold VC units on behalf of others. The requirements should consist of a fixed as well as a variable component that increase with business volume. The capital should be held in a FC.

#### Separation of client accounts

165. To address risk driver m), market participants that hold VC units on behalf of others would be required to segregate their client VCs from their own VCs, complete periodic reconciliations of VC trading systems and VC stock held, and to keep appropriate records of reconciliations and transactions.

#### Evidence of secure IT systems

166. Given the exclusively digital-based nature of VCs, the IT security of a VC scheme is of utmost importance. Scheme governance authorities would be required to document the way in





which they intend to guarantee the integrity of the transaction ledger, the protocol, the IT infrastructure and any other relevant components. Related requirements may also need to be placed on other market participants, such as exchanges and e-wallet providers. It will be a resource intensive task for regulators to check the adequacy of the systems and controls.

#### Payment guarantee and refunds

167. In the case of an unauthorised VC transaction, market participants involved in the transfer of the funds are required to refund to the payer immediately the amount of the unauthorised payment transaction and, where applicable, to restore the debited VC account to the state it would have been in had the unauthorised VC transaction not taken place. This would address risk driver g) regarding the lack of refunds and payment guarantees. Additional financial compensation may be determined in accordance with the law applicable to any contract concluded between the payer and their payment service provider.

168. Market participants could potentially comply with this requirement in various ways, and the effectiveness of each approach would require further assessment. These include: (a) the merchant keeping a deposit amount with a proxy as a condition of using the service, (which is used by the proxy to 'reverse' transactions as required); (b) the proxy maintaining a wallet for the sole purpose of sending unbacked IOU documents acknowledging the debt to the merchant (to which it will forward the 'cleared payment' – the merchant sees a payment immediately but cannot spend the money until the payment 'clears'); or (c), the proxy indicates to the merchant that it has received a valid payment, and will forward the payment on to the merchant once the customer has indicated that the merchant has fulfilled their part of the transactions.

#### Separation of VC schemes from conventional payment systems

169. Risk driver r) regarding the interconnectivity between VC and FC schemes should mainly be addressed by the mitigation measures in pre-existing oversight requirements for payment systems. However, complete mitigation can only be assured by requiring regulated financial institutions that decide to provide VC services to establish a separate entity for the VC-related business. This is to make sure that VC activities do not impair the financial soundness and settlement obligations of the regulated financial entity.

#### Miscellaneous requirements

170. Risk driver l), regarding the lack of definitions and standards, could be addressed by regulators defining broader terms, and for the scheme governance authority to develop more specific standards, quality marks and definitions, and to make this party responsible for public information. Drivers n) and o) could be mitigated by requiring firms to set up complaints and redress schemes that are akin to those already in place for regulated VCs.

171. Drivers k) and q) regarding the lack of reporting requirements and resultant non-objective information could be addressed by requiring relevant market participants to submit specified





documents to regulators, including the results of their transaction monitoring, data on the amount and exchange rate applied to executed transactions, in addition to an obligation to report suspicious transactions. The data and information provided can be used to produce more objective and reliable information for market participants. Some market participants would also be required to disclose terms and conditions of their services to consumers.

### Clear and transparent regulation

172. The risk driver of unclear regulation (h) would be addressed implicitly once the other risk drivers have been addressed and regulatory requirements along the proposal above have been put in place. However, even in this scenario, continued warnings to the public are likely to be required to make them aware of those risks that remain deliberately unmitigated, such as VC not being legal tender (see below).

### A global regulatory approach

173. As expressed in risk driver c), the global, internet-based nature of VCs would require a regulatory approach to strive for an international, and ideally global, coordination, otherwise it will be difficult to achieve a successful regulatory regime. In the absence of a global approach, national regulators will be required to issue continued warnings to potential users to make them aware of the risks of VC schemes that do not comply with the regulatory regime.

### Risks drivers that remain deliberately unaddressed

174. The last two risk drivers (s and t) remain deliberately unaddressed. Given that VCs are not issued by a public authority, there is arguably no reason why a government would want to assign legal tender status to a VC scheme that is beyond its control. There will also be no requirement to establish a central authority that could provide exchange rate stability and would act as the redeemer of last resort. However, it is conceivable that a scheme governance authority may decide to take on this additional role, and as a result, the VC scheme would no longer be decentralised. The risk drivers will therefore remain unmitigated, as will any risks that derive from them. Market participants will need to be repeatedly reminded about the continued existence of these risks even once VC schemes are subject to a regulatory regime.

### The immediate regulatory response for the short term

175. The comprehensive regulatory approach outlined above would be highly resource-intensive. Moreover, this approach may take considerable time to develop, fine-tune and implement, depending (amongst other things) on the development of the VC market. The question, then, is what should the regulatory and supervisory approach be in the meantime?
176. The risks identified in the previous chapter highlight the issues that arise for users, exchanges, wallet providers, conventional payment service providers and regulators, as well as the dangers to financial integrity more generally. Some of these risks are considered to be

of high importance, and some others have already materialised, through losses and theft of VCs, the bankruptcy of VC exchanges or large-scale money laundering and other criminal activity.

177. Until a comprehensive regulatory regime is developed, (if it is developed at all), only those risks can be mitigated that arise in the interaction between VC schemes and the regulated financial services sector (but not those that arise from activities within or between VC schemes). This would include risks of money laundering and financial crime, the risks to conventional payment systems, and some risks to individual users. To that end, the EBA recommends that national supervisory authorities discourage credit institutions, payment institutions, and e-money institutions from buying, holding or selling VCs, thereby 'shielding' regulated financial services from VCs.
178. The EBA also recommends that EU legislators consider declaring virtual currency exchanges as 'obliged entities' that must comply with anti-money laundering and counter terrorist financing requirements set out in the EU Anti Money Laundering Directive.
179. Furthermore, the EBA cautions against drawing similarities between existing payment and payment-related services and some VC-based services. The decentralised nature of many VC schemes, the fact that the functioning and rules of a VC scheme can be changed, and the absence of a redeemer of last resort means that VCs are not comparable to conventional payment or electronic money services. As a result, they give rise to risks that do not exist in these services. Declaring some actors as falling into the remit of a specific national or EU law may therefore lend credibility to these actors and, by implication, to VC schemes themselves that may not necessarily be warranted.
180. The immediate response specified above would 'shield' regulated financial services from VC schemes. As a result, the response would mitigate the risks arising from the interaction between VC schemes and regulated financial services, but it would not mitigate those risks that arise within, and between, VCs themselves.
181. Other things being equal, this immediate response will allow VC schemes to innovate and develop outside of the financial services sector, including the development of solutions that would satisfy regulatory demands of the kind specified above. The immediate response would also still allow financial institutions to maintain, for example, a current account relationship with businesses active in the field of VCs.

## Legal basis for this Opinion

182. One of the tasks of the EBA, in accordance with Article 9 of its founding regulation, is to monitor new and existing financial activities and to adopt guidelines and recommendations with a view to promoting the safety and soundness of markets and the convergence of





regulatory practice.<sup>25</sup> VCs are one of the activities it has been monitoring since September 2013 and on which it now issues this Opinion.

183. Furthermore, Article 1(3) mandates the EBA to act in the field of activities of credit institutions, financial conglomerates, investment firms, payment institutions and e-money institutions in relation to issues not directly covered in the Capital Requirements Directive, Payment Services Directive and the E-Money Directive, including matters of corporate governance, auditing and financial reporting, provided that EBA actions are necessary to ensure there is the effective and consistent application of those acts.

184. The EBA issues this Opinion to national supervisory authorities of credit institutions, payment service providers and electronic money institutions (in accordance with Article 29(1)(a) of the EBA Regulation) and to the EU Council, Commission and Parliament (in accordance with Article 34 of the EBA Regulation) as legislators in the European Union.

### The rationale for a consistent regulatory response across the EU

185. With regard to national supervisory authorities, the aim of the Opinion is to build a common supervisory culture and practice across the European Union, and ensure there are uniform procedures and consistent approaches throughout. These form part of the EBA's regulatory response by seeking to put in place appropriate supervisory (and, in the long term, regulatory) practices in relation to VCs, insofar as this falls within the competence of national authorities. Given that the regulatory environment for VCs is undeveloped, an EBA Opinion is an appropriate tool on which guidelines or recommendations could be built at a later stage, should a more comprehensive regime be developed in European Union law.

186. The European Parliament, Council and Commission can use the EBA Opinion to identify risks to consumers across the EU and to recommend that the EU institutions propose new legislation or amend existing legislation to establish those aspects of the regulatory regime proposed by the EBA that are not already established in European Union law.

187. The need for a regulatory response at European Union level by the EBA should be assessed against the EBA's objective, as established in Article 1(5) of the EBA Regulation, of protecting the public interest by contributing to the short-, medium- and long-term stability and effectiveness of the financial system, for the European Union economy, its citizens and businesses. In doing so, the EBA contributes to:

- improving the functioning of the internal market, including, in particular, a sound, effective and consistent level of regulation and supervision;
- ensuring the integrity, transparency, efficiency and orderly functioning of financial markets;
- strengthening international supervisory coordination;
- preventing regulatory arbitrage and promoting equal conditions of competition;

<sup>25</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32010R1093&from=EN>





- ensuring the taking of credit and other risks are appropriately regulated and supervised; and
- enhancing customer protection.

188. Where the EBA proposes legislative action by European Union institutions, it should take into account the powers available to the institutions to adopt legislation, and the principles of proportionality and subsidiarity. European Union financial services legislation is typically adopted either under Article 53(1) of the Treaty on the Functioning of the European Union (TFEU) (e.g. the Capital Requirements Directive), which concerns freedom of movement and the right of establishment, or Article 114 of the TFEU (e.g. the Capital Requirements Regulation), which concerns the approximation of law, regulation and administrative action with the object of the establishment and functioning of the internal market.

189. The EBA is therefore in a position to propose a regulatory regime to ensure that providers of VCs have access to the internal market regardless of the Member State in which they are established. A level of regulation can be established to ensure there is appropriate oversight in all Member States to support the wider access to the internal market. Legislation could establish minimum levels of regulation, a fully harmonised regime or a hybrid approach.

190. It is necessary for the EBA to establish whether this action should be taken at European Union level, i.e. whether the objectives of the regulatory response can be sufficiently achieved by the Member States or whether, by reason of the scale or effects of the proposed action, it can be better achieved at European Union level.

191. The clear advantage of action being taken at European Union level in respect of VCs is the possibility to implement a consistent level of regulation which ensures that the risks identified are mitigated for all market participants in the European Union. Without a Union response, national regimes are likely to take differing forms. The nature of VCs is that they can be provided from one Member State but used across the European Union (and beyond) with little or no local infrastructure needed. Differing levels or forms of regulation in one Member State could therefore lead to the VC industry shopping for the most convenient approach to the regulation, with European Union consumers receiving accordingly different levels of protection.

192. While only action at European Union level could ensure that providers of VCs can make use of the internal market, this may be a limited advantage given that while VCs may be used across national borders, there may only be limited cross-border provision of currency services or of cross-border establishments being used. Nevertheless, only regulation at European Union level can ensure there is removal or minimisation of any barriers to cross-border provision of services or cross-border establishments.