SHADOW BANKING, BANKING UNION
AND CAPITAL MARKETS UNION

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ABSTRACT: *This paper analyses the development of shadow banking and considers the challenges it poses for regulators and supervisors vis-à-vis latest developments regarding i) the Banking Union, which led to the Single Supervisory Mechanism that became operational in November 2014, and ii) the Capital Markets Union that is one of the most important projects of the Juncker Commission. The focus is on the interconnections between the various elements of the financial system and their impact on systemic risk in the perspective that the financial system is a fundamental infrastructure of the economy and should be structured in order to contribute to growth and job creation.*

1. The financial system (made up of intermediaries and markets) is one of the fundamental infrastructures of any economic system, therefore in assessing the contribution of shadow banking and the banking and capital markets union we should use the prism of growth and job creation.

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The difficulties in stimulating growth, in a context of extremely low inflation, have led the ECB to implement an accommodating monetary policy that implies

1. low yields, which means that asset managers, insurance companies etc. are turning to loans to increase their returns and that banks are struggling to maintain their profitability from traditional banking
2. further liquidity injections by the ECB in the coming months
3. weak and weakening euro, that might drive savers to turn to other currencies.

Low yields and ample liquidity are two conditions that may favour a further rise in shadow banking.

The weak and expected-to-weaken-further euro may pose specific immediate challenges for the capital markets union as investors leave euro-denominated asset classes.

2. The term "shadow banking system" was allegedly[1] coined by Paul McCulley of Pacific Investment Company Management (PIMCO) in August 2007 at the U.S. Federal Reserve's (Fed's) annual symposium in Jackson Hole, Wyoming, who defined shadow banks as "levered-up intermediaries without access to either Federal Deposit Insurance Corporation (FDIC) deposit insurance or the Fed's discount window to protect against runs or stop runs. But since they don't have access to those governmental safety nets, shadow banks do not have to operate under meaningful regulatory constraints, notably for leverage, only the friendly eyes of the ratings agencies."

This term was subsequently widely used since the beginning of the financial crisis, as a result of the increasing volume of banking activities performed outside the regulated banking system. Despite its extensive use, there is no straightforward and generally-accepted definition of "shadow banking".

[1] See IMF, *What is Shadow banking?*, in *Finance and Development*, June 2014.

Poszar (2008) defines shadow banking as "the network of highly levered off-balance sheet vehicles". In a more recent definition, Pozsar et al. (2010) shadow banks are "financial intermediaries that conduct maturity, credit, and liquidity transformation without access to central bank liquidity or public sector credit guarantees".

Kodres (2013) gives a simple but effective definition of shadow banking system describing it as "many financial institutions that act like banks (but) are not supervised like banks".

The first 'official' definition was provided by the Financial Stability Board (FSB) in 2011: the shadow banking system as "a system of credit intermediation that involves entities and activities outside the regular banking system".

In the inaugural release of the Global Shadow Banking Monitoring Report issued in 2012 using end-2011 data, the FSB sets out a two step-approach in defining the shadow banking system as a driver for systemic risk and as a development of regulatory arbitrage that could undermine the benefits of financial regulation. It combines a macro perspective, related to the structure of the financial institutions, and a micro perspective, focused on the features of the financial instruments that compose the "non-bank credit intermediation".

In particular, in 2014 the FSB distinguishes two different measures of the shadow banking system: the so called Monitoring Universe of Non-Bank Financial Intermediation (MUNFI) that is composed by the global financial assets of non-banking institutions (Other Financial Institutions – OFIs[2]), and a narrower measure that deducts from the global financial assets of the OFIs all the financial assets not involved in credit intermediation, financial assets that are prudentially consolidated into a banking group and financial entities whose activities do not exhibit risks associated with shadow banking.

[2] OFIs comprise all financial institutions other than those included in the sectors Monetary Financial Institutions – MFIs and the Insurance Corporations and Pension Funds ICPFs, see BAKK-SIMON - BORGIOLI - GIRON - HEMPELL - MADDALONI - RECINE - ROSATI, *Shadow banking in the euro area: An overview*, in *ECB Occasional Paper no.133*, 2012.

The fact that shadow banking does not have a universally-acknowledged definition stems from the relevantly recent attention paid to this phenomenon and from the different regulatory systems which may influence what is considered shadow banking in different jurisdictions. But especially it reflects the complexity and the continuously-evolving and innovative nature of financial activities performed outside the banking sector also as a reaction to the regulatory requirements imposed on banks.

3. As a result of the financial crisis new, more binding regulations were imposed on banks and thus presumably favoured a further expansion of shadow banking. Shadow banking activities are basically interlaced with core credit operations of banking institutions and insurance companies, creating a source of systemic risk for the financial system at large. The first step in appraising the value and the riskiness of the shadow banking activities is to classify its main components.

The Global Shadow Banking Monitoring Report of the Financial Stability Board based on the data of the Global Financial Stability Report published by the International Monetary Fund[3] estimates the size of the shadow banking system.

MUNFI assets considerably increased in the period of observation (2002-2013), reaching approximately €67 trillion ($75.2 trillion) in the 20+Euro Area (EA) group[4]. The trend is strongly positive in 2013, up by €4.3 trillion ($4.8 trillion) with a 7% growth rate from the value of 2012.

Comparing these values with the level of GDP, *20+EA-group* shadow banking activities represent 120% of GDP in 2013, with a considerable expansion from 114% in 2012.

[3] See IMF, *Global Financial Stability Review*, October 2014.

[4] The *20+EA-group* comprises 20 individual jurisdictions (Argentina, Australia, Brazil, Canada, Chile, China, Hong Kong, Indonesia, India, Japan, Korea, Mexico, Russia, Saudi Arabia, Singapore, Switzerland, Turkey, United Kingdom, United States, South Africa) plus the Euro Area (Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, Holland, Portugal, Slovakia, Slovenia, Spain).

The Euro Area, the United Kingdom and the United States represented 80% of total global MUNFI assets in 2013 with about €22 trillion ($25 trillion) in the EA and the US and €8.3 trillion ($9.3 trillion) in the UK.

The 2013 EA annual growth rate is on the *20+EA-Group* average level (7%), but there are several differences between the various components. For instance, the 2013 UK annual growth rate is about 1%, after being strongly negative (-8%) in the previous year. In the most emerging market jurisdictions, the average growth rate is higher than the *20+EA-Group* average level and exceeded 20% in 2013.

Despite the lack of a generally acknowledged definition, we can infer that shadow banking refers to all the non-banking instruments that imply credit intermediation and maturity and liquidity transformation. Hence, it is useful to examine the trends of two different types of activities: (i) money market funds and repurchase agreements and (ii) securitisations.

3.1 Money Market Funds (MMFs) are mutual funds that invest in short-term financing instruments such as government securities, short-term bonds, repurchase agreements, commercial papers, and other money funds. For these reason MMFs are widely used as banking activities in maturity and liquidity transformation, and represent an alternative to bank deposits, with more attractive yields.

Between December 2013 and June 2014, the average maturity, and in particular the average life, of EU prime MMFs assets rose considerably (+3% and +14%). Daily liquidity levels fell by 10%, while weekly liquidity increased 2%. These mixed developments in average MMFs liquidity probably reflect efforts by MMFs to restore profitability by accepting marginally more maturity risks within their portfolios.[5]

MMFs are an important source of short-term financing for financial institutions and non-financial institutions, and lead to a high level of interconnection that could distress the banking system in a crisis event. In order to preserve the integrity and stability of the financial system the European Commission proposed a regulation on 4

[5] See ESMA, *Trends Risks Vulnerabilities*, No. 2, 3 September 2014

September 2013 defining a framework that will make the MMFs more resilient to future financial crisis and at the same time secure their financing role for the economy.[6] The International Organization of Securities Commissions (IOSCO) also developed several recommendations regarding MMFs.[7]

In both cases the recommendations propose to introduce common standards for the regulation and management of MMFs to ensure a minimum level of weekly and daily liquidity and to guarantee diversification, high quality, and good credit standing of the MMFs investment. These standards are organized in principles regarding valuation, disclosure, credit ratings and liquidity management.

This harmonisation process is aimed at enhancing the soundness and the integrity of the MMFs, preserving the role of MMFs as a financing tool and minimising the effects of a new crisis. Investors and issuers as well will benefit from the proposed framework: investors will be more aware of the risk they are going to take, and issuers will be able to operate in a more stable environment.

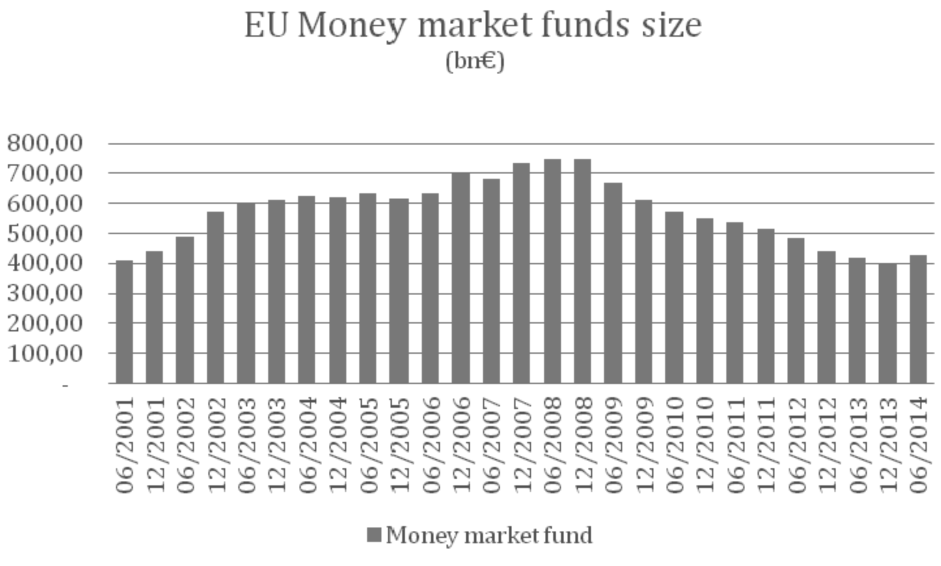

Figure 1 – Author's elaboration on ECB, Statistical Data Warehouse

[6] See EUROPEAN COMMISSION, *Regulation of the European Parliament and of the Council on Money Market Funds*, Proposal, 4 September 2013.
[7] See IOSCO, Policy Recommendations for Money Market Funds, 1 October 2012.

A repurchase agreement is a bilateral contract involving a cash borrower (REPO seller) that agrees to sell securities to a cash lender (REPO buyer) buying them back at specified price and date, with interest (REPO rate) paid over the period of the agreement. REPOs are widely used for maturity transformation, because the maturity of the agreements are typically shorter than the maturity of the underlying asset. Dealers use REPOs to borrow from lenders or from Money Market Funds in order to finance their own assets and post haircuts (cash collateral) at least at the same amount of the value of the borrowed securities. Lenders investing in REPOs are typically pension funds, insures of sovereign wealth funds that operate in order to gain additional revenues from their portfolios.

The repo activity revealed by the latest survey of the International Capital Market Association (2014) suggest a growth of the European repo market and shows an increase in market leverage that might concern regulators. The size of the total European REPOs market in the first half of 2014 was €5,78 billion (€2,97 billion REPO and €2,81 billion reverse REPO), rising by 5% from the previous semester (December 2013) and by almost 20% from the previous 5 years (June 2009).

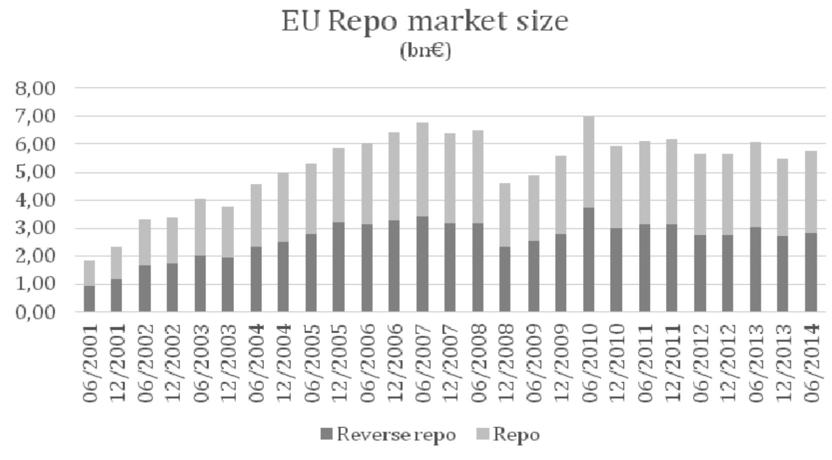

Figure 2 - Author's elaboration based on International Capital Market Association (2014), European repo market survey, Number 27, September[8]

[8] "The total value, at close of business on December 10, 2014, of repos and reverse repos outstanding on the books of the 67 institutions which participated in the latest survey was EUR 5,499.6 billion. This represents a return back almost to the level seen in December 2013. It is still much higher than the crisis trough of EUR

3.2 The activity of the European securitisation[9] market (Figure 3) increased in 2008 as banks retained securitisations to pledge as collateral with central banks in order to obtain financing during the financial crisis[10].

The European Central Bank analyses[11] the European market of securitisation due to its riskiness and the high level of shadow-transactions that it implies. In December 2009 the ECB started a "*Public Consultation on the Provision of ABS Loan-Level Information in the Eurosystem Collateral Framework*" to raise the level of disclosure in European securitisation market and to ensure an adequate risk assessment of ABSs because investors did not correctly evaluate the risks of the underlying securitised asset pools since these innovative instruments became increasingly complex as they increased their weight in the financial markets.

The availability of loan-by-loan information on the underlying assets backing the ABSs is necessary as of 2011[12] in order to use them as collateral with the ECB. In September 2014[13] the ECB tightened the reporting requirements for certain types of asset-backed-securities.

In the same perspective the Basel Committee on Banking Supervision (BCBS) and the Board of the International Organization of Securities Commissions (IOSCO)

4,633 billion in December 2008 but much lower than the pre-crisis peak of EUR 6,775 billion in June 2007.", International Capital Market Association (2015), European repo market survey, Number 28, February.

[9] "Securitization activity is at the heart of shadow banking, as it allows credit originators to sell pools of credit to other institutions, thereby transferring the credit risk." ADRIAN - ASHCRAFT, *Shadow Banking: A Review of the Literature*, Federal Reserve Bank of New York, Staff Reports, in *New Palgrave Dictionary of Economics*, October 2012.

[10] See Basel Committee on Banking Supervision (BCBS) and Board of the International Organization of Securities Commissions (IOSCO) (2014), Criteria for identifying simple, transparent and comparable securitisations, Consultative Document, 11 December.

[11] See MERSCH, *Speech* by the Member of the Executive Board of the ECB at the IMN Global ABS Conference, Barcelona, 11 June 2014: "[...] in recent months the ECB has put a great deal of public focus on reviving the European ABS market. Why are we so interested in this particular market segment? There are three parts to the answer: price stability, financial stability, and the stability of our balance sheet".

[12] See ECB, *Loan-by-loan information requirements for CMBSs and SME transactions*, April 2011

[13] "As of 1 October 2014, auto loan, leasing, consumer finance and credit card ABSs for which the mandatory level of compliance with reporting requirements has not been attained and for which the data provider has neither given an explanation for that non-compliance nor provided an action plan for achieving full compliance, will become ineligible for use as Eurosystem collateral. [...] These decisions will help secure a smooth transition to full compliance while ensuring a level playing field between different classes of ABSs at different stages of the compliance process.", ECB (2014), ECB modifies loan-level reporting requirements for some asset-backed securities, September.

(2014), have recently identified 14 "*Criteria for identifying simple, transparent and comparable securitisations*". [14]

A higher level of disclosure has the purpose of restoring the weakened confidence in the securitisation markets and increasing both the number of investors and the value of the investments.

This concise classification and quantification of the shadow banking activities provides a first level analysis of the value and the riskiness of the main components of the shadow banking system. The relevance of appraising the size of the shadow banking activities lies in the close relationship between traditional and shadow banking.

Shadow banks conduct liquidity and maturity transformation in a comparable way as the traditional banking intermediaries do, but the main difference between this two credit sources is the higher level of complexity of the shadow operations, besides opaqueness. Traditional banking intermediaries perform credit intermediations especially with deposits and held to maturity loans, shadow banks decompose this process into a wholesale funding and securitisation based lending intermediation with a higher level of complexity.

[14] "The purpose of these criteria is not to serve as a substitute for investor due diligence but rather to identify and assist in the financial industry's development of simple and transparent securitisations.", Basel Committee on Banking Supervision (BCBS) and Board of the International Organization of Securities Commissions (IOSCO), Criteria for identifying simple, transparent and comparable securitisations, Consultative Document, 11 December 2014.

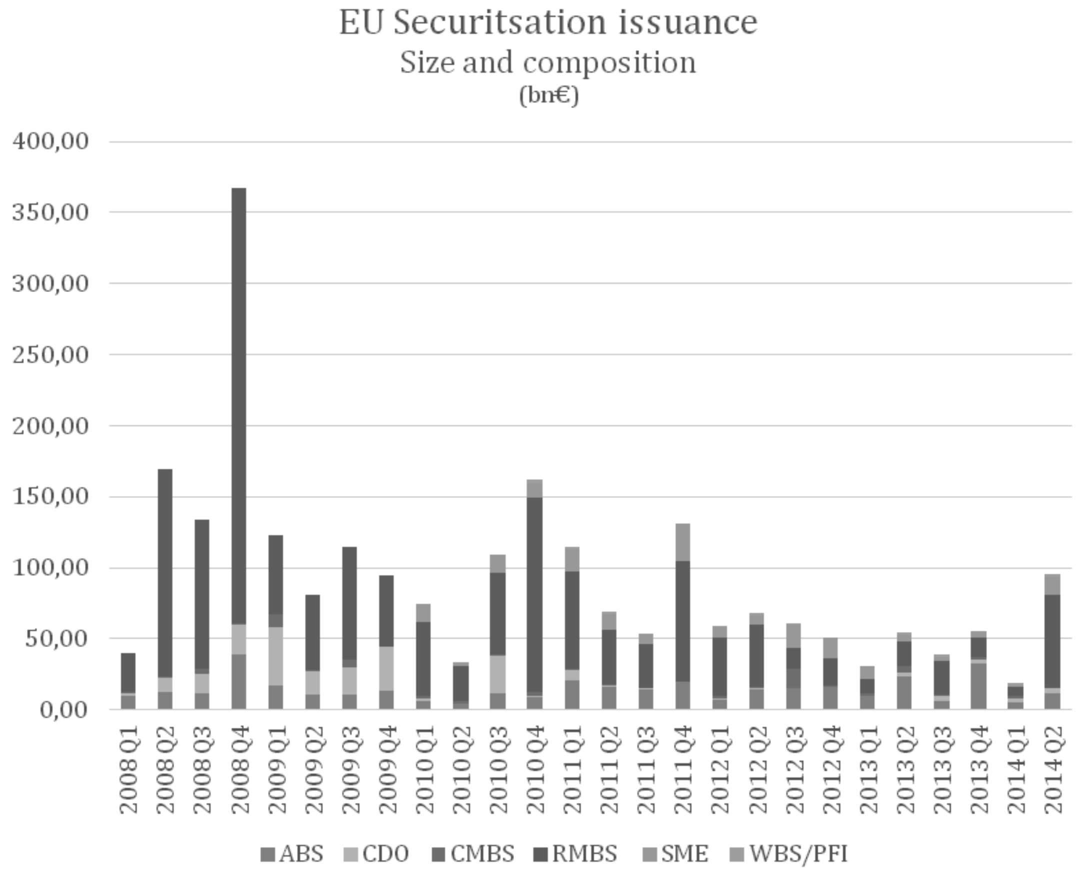

Figure 3 - Author's elaboration based on Association for Financial Markets in Europe (AF-ME), Europe Securitisation Data Reports, 2008-2014

Asset Backed Securities (ABS), Collateralized Debt Obligations (CDO), Commercial Mortgage Backed Securities (CMBS), Residential Mortgage-Backed Security (RMBS), Small and Medium Enterprises (SME)

Whole Business Securitization (WBS), Project Finance International (PFI)

4. Shadow banking represents an innovative and significant source of liquidity and financing for the real economy, which is to be further researched and understood.[15]

[15] See GIOVANNINI AND OTHERS, *Restarting European Long-Term Investment Finance: A Green Paper Discussion Document*, 30 January 2015

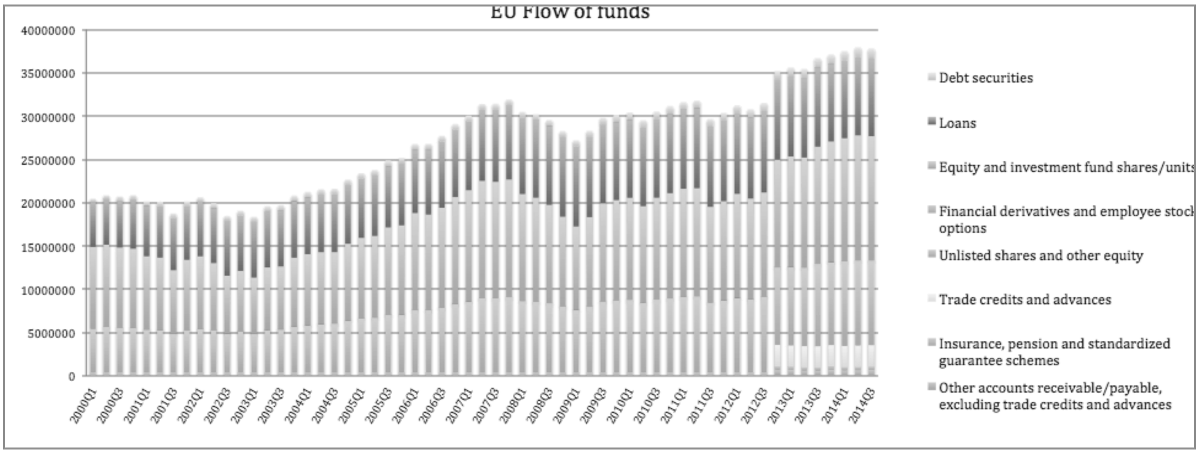

Figure 4 - Author's elaboration on based on EU Flow of funds, Euro area non-financial accounts data from ECB, Statistical Data Warehouse

Giovannini A. et al. (2015) find that for the EU28 countries, there is an increase in the level of equity between 2007 and 2013, but this value remains below 40% of total assets.

The outstanding value of long-term financing instruments rises from 46% of GDP in 1999 to 76% at the beginning of 2014. In particular, the outstanding value of long-term bonds rise from 5% of GDP in 1999 to 11% of GDP in 2014, while long-term loans increase from 42% to 66% of GDP over the same period. As concerns short-term instruments the outstanding value is stable around 25%. By comparing the relative weights of external and internal financing instruments, the authors conclude that firms' debt financing has been instable over the period of observation, and equity remains a stable source of finance in the EU28.

Irrespective of how you consider shadow banking, be it 'non-bank financial intermediation, i.e. credit intermediation outside the conventional banking system … which means there is no safety net' as the FSB calls it or 'non-bank banking/lending or as it has been called capital market lending' as defined by others in order to decide whether shadow banking should be a concern we need to address a two main questions: can more lending, non-bank lending to be precise, contribute to growth? And can it contribute to growth without increasing risk?

The answer is that it depends. If companies are postponing investment because they cannot raise enough debt, since capital constrained banks, due to their legacy of non-performing loans, are not lending creditworthy companies then it may be that shadow banking can be a useful complement of traditional banking

But even if there is a problem in the credit supply side, in order for non-bank lending to be a positive complement which does not increase risk, non-bank lenders must maintain sound and prudent management, which ultimately means that non-banks must achieve adequate liquidity and solvency conditions

Conversely, more credit is not the answer for companies which are already highly geared. Actually, more collateralised lending not only increases the risk of default of such companies but it also leaves non-guaranteed borrowers worse off.

Interconnectedness is of course another problem, shadow banking is closely connected to banking since banks provide liquidity to non banks. The shadow banking system can be considered as internal or external activity. The financial holding companies run internal shadow banking activity using regulatory loopholes to minimize regulatory costs and increase leverage for example throughout commercial paper. External shadow banking activity is the bank’s role of liquidity provider to other actors there are not banks, connecting non-financial institutions in the money market, pension funds and hedge funds, throughout repos. Moreover, banks often distribute the money market funds or the other funds which invest in loans, thus leading to reputational risk should something go wrong.

In general, shadow banking if totally unregulated exposes the financial system to runs, contagion, excessive credit growth and pro-cyclicality.

5. The crisis confirmed a number of well-known risks and which we should indeed consider when assessing the pros and cons of shadow banking:

a) mismatching is a problem. If the maturity of assets exceeds the maturity of liabilities, any entity, be it a bank, a company or an investment fund a liquidity problem arises

b) excessive leverage or, in other terms insufficient equity, that turns a liquidity problem into a solvency problem. Moreover, deleveraging is difficult, when trying to sell assets on the market, normally the assets which can be sold easily and without losing money are the ones which produce income in subsequent years, they are the better cash/earnings generators. So it may very well be that deleveraging ends up in fixing today's balance sheet at the expense of tomorrow's statement of income

c) deequitisation, long-term investing needs long-term financing, ideally equity financing. Since equity is a permanent source of funding for a company it is the ideal source of funding for investment. Loans, even long-term loans or bonds, must be reimbursed at maturity and at maturity either the company finds new sources of funds (i.e. is granted new loans, issues bonds or raises new equity) or it must reduce its assets. And if it cannot liquidate part of its assets this might lead to default

d) procyclicality – collateralised debt tends to be procyclical and bubble prone.

6. Creating a Capital Markets Union for the EU 28 countries is one of the objectives of the European Commission. The Commission published a green paper[16] that builds on the short term priorities set out in the Investment Plan for Europe such as reviving the markets for high quality securitization and simplifying the Prospectus directive by consulting on how those priorities should be implemented. To put it as Steven Maijor, the ESMA chair, said in a conference hosted by the Italian Presidency in November last year, the Capital Markets Union should maximise the benefits of capital markets and non-bank financial institutions for the real economy and thereby contribute to foster growth.

[16] See EUROPEAN COMMISSION, *Building a Capital Markets Union*, Green Paper, 18 February 2015.

The Capital markets union may indeed contribute to growth, especially if it leads to more capital, meaning equity capital, for companies, and especially start-ups and SMEs.

It may also be worth noting that the Capital Markets Union is yet to be accomplished as concerns regulations applied by securities markets in the 28 EU countries. It is particularly urgent, and as such it is reassuring that it is high in the European Commission's agenda, because it not just about rules. From an investor perspective one could argue that the Capital Markets Union or even a Global Capital Market Union is de facto here already. A European investor may buy securities issued and traded almost in any market. With a weak euro and expectations of an even weaker euro in the future, non-euro denominated assets will be increasingly appealing.

Shadow banking may indeed be a blind spot in the Banking and Capital Markets Union if some of its intrinsic risks are not addressed.

7. Just a few concluding but non conclusive comments, in that they conclude my remarks but do not propose recipes for success, just some food for thought on three issues – shadow banking and growth, challenges for regulators and the need for a grand plan to favour more capitalised companies – which may prove to be particularly important for the future.

1) Shadow banking and growth

Non-bank intermediation may contribute to growth and investment without undermining stability if it is not a way of circumventing regulation and capital adequacy provisions.

Moreover, a longer intermediation chain and direct risk taking by investors, through lending via insurance companies and investment funds may help share risk and contribute to growth provided it does not lead to more risk i.e. by sharing risk more leverage is achieved by companies which cannot sustain it then it may be detrimental to sustainable growth.

Low interest rates could lead to more leverage, leaving firms more vulnerable to temporary reductions in their profitability and to higher interest rates when the latter will rebound.

Perhaps ensuring that the managers of the investment funds/insurance companies entering the loan market have skin in the game, i.e. their pay-offs are aligned with those of their investors, and be affected by both downside and upside risk, can curtail risk-taking to an appropriate level.

2) Challenges for regulators

Going forward we can identify a number of oxymora and paradoxes, difficulties in striking the right balance between necessary regulation aimed at protecting investors and excessive regulation which may hamper growth.

Of course more regulation provides incentives for a further expansion in the shadow banking system.

In the aftermath of the crisis, regulation was aimed at restoring investor confidence, now regulation must pursue the objective of maintaining investor confidence which is of course related to investor protection and orderly markets.

- compliance with regulation is expensive and may hamper financial markets competitiveness, however it is at the core of investor protection, orderly markets, financial stability so it’s very difficult to strike the right balance
- rules should be simple and clear . Perhaps bans, temporary or permanent, might prove to be more effective than cumbersome transparency requirements, e.g. the temporary ban on the placement to retail investors of contingent convertibles introduced by the Financial Conduct Authority in the UK

- regulating financial firms which do not collect deposits but may in any case be subject to runs, such as in the case of the US. The Financial Stability Oversight Council has already designated insurers (such as AIG and Prudential Financial Inc.) and the financial arms of large corporations (such as GE capital) as systemically important and as such potentially subject them to tougher capital rules and other new regulations.

If shadow banks are unregulated this increases systemic risks. Vulnerabilities deriving from shadow banking may lead to contagion if banks provide the liquidity backstops and/or are involved in the distribution of products issued by non-bank lenders. Moreover, shadow banking may end up transforming credit risk in the books in market risk deriving from securities received in repurchase agreements, reputational risk from placement of products, and so on.

- create a favourable context for good securitisations, that may imply lower interest rates for borrowers

- skin in the game
- can be used as collateral with the central bank
- marketable instruments so they can be sold on the market (provided the market exists) marketable instruments are an improvement *coeteris paribus*, i.e. if the same amount of risk remains. On the contrary if the longer intermediation chain enables higher risk levels, i.e. higher leverage, then securitisations may increase risk.

Of course as long as the market is sufficiently liquid, a securitised loan is less risk than a non-marketable loan in the books of a bank, however its credit risk depends on the characteristics and ultimately the financial structure of the borrower. In other words, a packaged/securitised loan, is still a loan for the company, so it will ultimately need to be reimbursed. If we are to pursue a ‘safer and sounder’ financial system which supports growth, a plan for more equity is necessary.

3) a plan to favour more capitalised companies

more risk capital in companies not only makes them more resilient, it is a pre-condition for sustainable growth.

Growth and innovation need investments and investments ultimately need equity, so fiscal incentives aimed at favouring higher equity levels, either via retained earnings or capital increases on the market and IPOs are important complements of a sounder financial system, safer banks and a successful capital market union.

8. References

ADRIAN - ASHCRAFT, *Shadow Banking: A Review of the Literature,* Federal Reserve Bank of New York, Staff Reports, in *New Palgrave Dictionary of Economics*, October 2012.

BAKK-SIMON AND OTHERS, *Shadow banking in the euro area: An overview,* in *ECB Occasional Paper no. 133*, 2012.

BCBS - IOSCO, *Criteria for identifying simple, transparent and comparable securitizations,* Consultative Document, 11 December 2014.

CETORELLI - PERISTIANI, *The Role of Banks in Asset Securitization,* in *Economic Policy Review*, July 2012.

EUROPEAN COMMISSION, *Building a Capital Markets Union,* Green Paper, 18 February 2015.

EUROPEAN COMMISSION, *Regulation of the European Parliament and of the Council on Money Market Funds*, Proposal, 4 September 2013.

ESMA, *Trends Risks Vulnerabilities,* No. 2, 3 September 2014.

FSB (2011), *"Shadow Banking: Scoping the Issues."* A background note of the Financial Stability Board, April.

FSB, *2012 Global Shadow Banking Monitoring Report,* November 2012.

FSB, *2013 Global Shadow Banking Monitoring Report,* November 2013.

FSB, *2014 Global Shadow Banking Monitoring Report,* November 2014.

GIOVANNINI and OTHERS, *Restarting European Long Term Investment Finance,* A Green Paper discussion document, 30 January 2015.

INTERNATIONAL CAPITAL MARKET ASSOCIATION, *European repo market survey,* Number 27, September 2014.

INTERNATIONAL CAPITAL MARKET ASSOCIATION, *European repo market survey,* Number 28, February 2015.

IMF, *What is Shadow banking?* in *Finance and Development*, June 2014.

IMF, *Global Financial Stability Review,* October 2014.

IMF, *Risk Taking, Liquidity, and Shadow Banking. Curbing Excess while Promoting Growth,* in *Global Financial Stability Report*, Washington, DC, October 2014.

IMF, *Italy: 2014 Article IV Consultation- Staff Report,* Country Report No. 14/283, Washington, DC, 2014.

IOSCO, *Policy Recommendations for Money Market Funds*, 1 October 2012.

MERSCH, *Speech by the Member of the Executive Board of the ECB at the IMN Global ABS Conference*, Barcelona, 11 June 2014.

MCCULLEY, *The shadow banking system and Hyman Minsky's economic journey*, in *Insights into the Global Financial Crisis*, 2009, pp. 257-68.

POZSAR, *The rise and fall of the shadow banking system,* in *Regional Financial Review 44:* 1 - 13, 2008.

POZSAR and OTHERS, "*Shadow banking*", in *Economic Policy Review*, December 2013, pp. 1 - 16.

TARULLO, *Shadow Banking and Systemic Risk Regulation,* speech at the Americans for Financial Reform and Economic Policy Institute Conference, Washington, D.C., 22 November 2013.

THIEMMAN, *Out of the shadow? Accounting for Special Purpose Entities in European banking systems,* in *Competition and Change Vol. 16*, No. 1, 2012, pp. 37 - 55.