Notes

Introduction

1. For further information we must take into account that the first attempt to map the shadow banking system was published by the FSB as part of the 2011 report, using data from eleven jurisdictions and the euro area. Then, this approach evolved continually in the following years.

   The 2014 report presents the results of the fourth annual monitoring exercise using end-2013 data, following the approach set out in the FSB report to the G20 in October 2011. This report includes data from twenty-five jurisdictions and the euro area as a whole, bringing the coverage of the monitoring exercise to about 80 per cent of global GDP and 90 per cent of global financial system assets; see FSB (2014) *Global Shadow Banking Monitoring Report 2014*, 30 October, pp. 1 and 38 where there are the results of *IMF"s Global Financial Stability Review*, October 2014, *statistical appendix*.

   It is helpful to refer to Williamson (1985), *The Economic Institution of Capitalism* (New York), p. 385 ff. for a digression on risk neutrality, which helps in understanding the role of the law under a perspective that emphasizes the "transaction costs" and, so, is useful for the purposes of this analysis.

   From a regulatory perspective, see Capriglione (2010), *Misure anticrisi tra regole di mercato e sviluppo sostenibile* (Torino) p. 43 ff. on the role of the global regulatory network in the financial markets.
2. See Pilkington (2008) "Conceptualizing the Shadow Financial System in a Stock-Flow Consistent Framework," *Global Business & Economics Anthology*, Vol. 2, p. 268 ff. where there is a first definition of a "shadow financial system," started with the growing of an institutional sector composed of all the unregulated non-banking financial institutions (NBFIs) that fall outside the regulatory scope of central banks

   See also the FSB (2014) *Global Shadow Banking Monitoring Report 2014*, October 30, where it is summarized that "The shadow banking system can broadly be described as credit intermediation involving entities and activities outside of the regular banking system. Intermediating credit through non-bank channels can have important advantages and contributes to the financing of the real economy; but such channels can also become a source of systemic risk, especially when they are structured to perform bank-like functions (e.g. maturity and liquidity transformation, and leverage) and when their interconnectedness with the regular banking system is strong. Therefore, appropriate monitoring of shadow banking helps to mitigate the build-up of such systemic risks."
3. See Schneider-Williams (2013) "The Shadow Economy", *Institute of Economic Affairs Monograph, Hobart Paper*, no. 172, who suggest that the main drivers of the shadow economy should be: tax and social security burdens, tax morale, the quality of state institutions and labour market regulation. This is why

the authors highlight that a reduction in the tax burden is, therefore, likely to lead to a reduction in the size of the shadow economy.

For the pre-crisis approach to this topic, see Davidoff and Solomon (2007), "Black Market Capital", *Wayne State University Law School Research Paper*, no. 07-26, where the author uses the abovementioned terms to indicate certain supply and demand, which "drives public investors to substitute less-suitable, publicly available investments which attempt to mimic the characteristics of hedge funds or private equity." It is also highlighted that, in the United States, "Yet, current federal securities regulation effectively prohibits the public offer and purchase in the United States of these hedge fund and private equity investments. Public investors, foreclosed from purchasing hedge funds and private equity, instead seek to replicate their benefits."

See also Fardmanesh-Douglas (2003) "Foreign Exchange Controls, Fiscal and Monetary Policy, and the Black Market Premium," *Yale University Economic Growth Center Discussion Paper*, no. 876, for the standards of examination of the relationship between the official and parallel exchange rates used before the crisis (in the paper, the authors take into account the data of three Caribbean countries, Guyana, Jamaica, and Trinidad, during the 1985–1993 period using co-integration).

4. See Ostrom (2005) *Understanding Institutional Diversity* (Princeton), p. 135 ff. for an analysis on the sense of permission rules, and of how the institutions are formed, operated, and influence behavior in the markets.
5. See Tyson and Shabani (2013) "Sizing the European Shadow Banking System: A New Methodology," *CITYPERC Working Paper Series*, no. 2013/01.
6. On this point, we must refer to the statement of the Federal Reserve Bank of New York about the fact that "Credit intermediation involves credit, maturity, and liquidity transformation. Credit transformation refers to the enhancement of the credit quality of debt issued by the intermediary through the use of priority of claims.... Maturity transformation refers to the use of short-term deposits to fund long-term loans, which creates liquidity for the saver but exposes the intermediary to rollover and duration risks. Liquidity transformation refers to the use of liquid instruments to fund illiquid assets"; see Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, no. 458, July 2010 (revised February 2012), p. 5
7. See Sakurai and Uchida (2013) "Rehypothecation Dilemma: Impact of Collateral Rehypothecation on Derivative Prices Under Bilateral Counterparty Credit Risk", *25th Australasian Finance and Banking Conference 2012*, for the background of our analysis, given the practice where a derivatives dealer reuses collateral posted from its end user in OTC derivatives markets. From this and other speculative practices arises the need for regulation that will be investigated in Chapter 6.

   See also Stiglitz (2012) *The Price of Inequality* (New York), p. xi, on the specific problems raised by the failure of markets in the recent crisis, and p. 52 for the implications on inequalities in the financial markets.
8. See Skeel (2010) "The New Financial Deal: Understanding the Dodd-Frank Act and its (Unintended) Consequences," *U of Penn, Inst for Law & Econ Research Paper*, no. 10-21, where it is clearly explained why the US regulation

has the goals of limiting the risk of the shadow banking system by more carefully regulating derivatives.

9. See Luck and Schempp (2014) "Banks, Shadow Banking, and Fragility", *ECB Working Paper*, no. 1726, where the authors highlights that the relative size of the shadow banking sector determines the stability of the financial system.

   See also Adrian and Liang (2014) "Monetary Policy, Financial Conditions, and Financial Stability," *FRB of New York Staff Report*, no. 690, where the authors review monetary policy transmission channels, focusing on vulnerabilities that affect monetary policy's risk–return trade-off, including 1) pricing of risk, 2) leverage, 3) maturity and liquidity mismatch, and 4) interconnectedness and complexity.

   We must take into account the approach of Troeger (2014) "How Special Are They? – Targeting Systemic Risk by Regulating Shadow Banking," *SAFE Working Paper*, no. 68,where the relevance of the phenomenon is measured by the financial stability concerns associated with shadow banking.

   In particular, see Sharma (2014) "Shadow Banking, Chinese Style," *Economic Affairs*, Vol. 34, Issue 3, p. 340 ff. where he describes the phenomenon as "poorly regulated, engaging in opaque forms of intermediation, deeply interconnected with the official banking system, and operating with implicit government guarantees, they pose a major source of systemic risk." On this basis, the author tries to explain the rapid proliferation of shadow banks in China.

10. See Kim (2014) "Money is Rights in Rem: A Note on the Nature of Money," *Journal of Economic Issues*, Vol. 48, Issue 4, pp. 1005–1019, where the author aims to demonstrate that contemporary banking, including commercial and shadow banking, creates money by mirroring credit in the image of rights in rem.

11. See Rixen (2013) "Why Reregulation after the Crisis is Feeble: Shadow Banking, Offshore Financial Centers and Jurisdictional Competition," *Regulation & Governance*, Vol. 7, Issue 4, p. 435 ff. where the author observes incremental and ineffective measures instead of a swift and radical regulatory reform in that sector after the crisis. This is why it is highlighted that, at the international level, governments are engaged in jurisdictional competition for financial activity, while, at the domestic level, governments are prone to capture by financial interest groups, but also susceptible to demands for stricter regulation by the electorate.

12. This is a fundamental criterion for contemporary legal orders, defined as "the benefits that individuals obtain from acts minus the harm done and the costs of enforcement of law," see Shavell (2004) *Foundations of Economic Analysis of Law*, (Cambridge), p. 575.

13. Please note that "the use of the term 'shadow banking' is not intended to cast a pejorative tone on this system of credit intermediation"; see FSB (2013) *Global Shadow Banking Monitoring Report 2013*, November 14, cit., p. 1.

    See, in general, Krugman (2012) *End This Depression Now!* (New York) for a useful review of the "economic slump" that has afflicted the United States, the European Union, and many other countries in the recent years; see also Posner (2009) *A Failure of Capitalism* (Cambridge), p. 41 ff. on the banking crisis of 2008 and the descent into depression.

14. See *The G20 Seoul Summit Leaders Declaration*, November 11–12, 2010, p. 2.

15. See *The G20 Cannes Summit Commitments*, November 3–4, 2011.
16. See *The G20 Los Cabos Summit Leaders Declaration*, June 18–19, 2012, p. 6.
17. See Capriglione and Troisi (2014) *L'ordinamento finanziario europeo dopo la crisi* (Torino), p. 25 ff. on the limits of the politics in regulating the global financial system.
18. As 1984 Nobel Prize-winning economist J. Tobin (1984) observed in his article "On the Efficiency of the Financial System," *Lloyds Bank Review*, July, p. 1 ff.
19. See *Scientific Background on the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2013*, "Understanding Asset Price," compiled by the Economic Sciences Prize Committee of the Royal Swedish Academy of Sciences, October 14, 2013, p. 1.
20. See *Scientific Background on the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2013*, "Understanding Asset Price", cit., p. 3.
21. See, once more, *Scientific Background on the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2013*, "Understanding Asset Price," cit., p. 1, where it is highlighted that "if it is possible to predict with a high degree of certainty that one asset will increase more in value than another one, there is money to be made."

1 General Observations

1. In other words there is not a "Grundnorm"; see Kelsen (1954) *General Theory of the Law and the State* (Cambridge—Milano), p. 116 ff.; Hart (1961) *The Concept of Law* (tr. Cattaneo, ed. Torino, 1965), p. 126.
2. See *Recital no. 69*, Directive 2014/65/EU.
3. See Masera (2009) "La crisi globale: finanza, regolazione e vigilanza alla luce del rapporto de Larosiere," *Rivista Trimestrale di Diritto dell'economia*, I, p. 147; from a legal point of view, see Capriglione (2012) "Commento sub art. 5 d. lgs. 385/1993," in Capriglione (ed.), *Commentario al testo unico delle leggi in materia bancaria e creditizia* (Padova), Vol. 1, p. 49 ff. where the author clarifies the evolution of the banking supervision, from the Italian experience of the twentieth century to the ESFS of the new millennium; see also Capriglione (2013) *L'Unione Bancaria Europea* (Torino), p. 69 ff., on the new role of the European Central Bank after the Regulation (EU) no. 1024 of 2013.

   See also Sciarrone, Alibrandi, and Santoro (2010) "La nuova disciplina dei servizi di pagamento dopo il recepimento della direttiva, 2007/64/CE (D. Lgs. 27 gennaio 2010, no. 11)," *Banca borsa e titoli di credito*, I, p. 377 ff., on the new EU regulation of the Single European Payments Area and its legal effects on the internal market.
4. See Rixen (2013) "Why Reregulation after the Crisis is Feeble: Shadow Banking, Offshore Financial Centers and Jurisdictional Competition," cit., where there is an explanation of the regulatory initiatives on shadow banks and OFCs at the international level and within the USA and the European Union, where I focus on France, Germany, and the United Kingdom.
5. Please note that "the use of the term *shadow banking* is not intended to cast a pejorative tone on this system of credit intermediation"; see FSB, *Global Shadow Banking Monitoring Report 2013*, November 14, 2013, p. 1.

6. The Federal Reserve Bank of New York gave a brief description of traditional banking industry useful for the purposes of this analysis. They explained that "in the traditional banking system, intermediation between savers and borrowers occurs in a single entity. Savers entrust their savings to banks in the form of deposits, which banks use to fund the extension of loans to borrowers. Savers furthermore own the equity and debt issuance of the banks. Relative to direct lending (that is, savers lending directly to borrowers), credit intermediation provides savers with information and risk economies of scale by reducing the costs involved in screening and monitoring borrowers and by facilitating investments in a more diverse loan portfolio"; See Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, no. 458, July 2010 revised February 2012, p. 4.
7. See FSB, *Global Shadow Banking Monitoring Report 2014*, cit., p. 35 ff.
8. The reader should be aware that the term "shadows" will mean both the "shadow banking system" and the whole alternative financial market. As a poet suggested, "A people always end by resembling its shadow," Rudyard Kipling, quoted in Maurois, *The Art of Writing*, "The Writer's Craft," sct. 2, 1960.
9. To clarify this sentence, it is useful to highlight the analysis made by the FSB, given that "The first attempt to map the shadow banking system was published by the FSB as part of the 2011 report, using data from eleven jurisdictions and the euro area. The approach evolved continually in the following years. The 2012 report expanded the coverage to 25 jurisdictions and the euro area as a whole, while in this latest report, the granularity of data collected has been enhanced to allow for a refinement of the estimate of the shadow banking system. More specifically, the 2013 monitoring report presents some preliminary steps to narrow down the estimated size of the shadow banking system by filtering out non-bank entities and activities that do not pose bank-like risks to financial stability"; see FSB (2013) *Global Shadow Banking Monitoring Report 2013*, cit., pp. 1–5, where they analyze the results published in *IMF's Global Financial Stability Review*, October 2013, statistical appendix.
10. This explains the option to delegate these analyses to the Analytical Group on Vulnerabilities (AGV), and to the Technical working group of the Standing Committee on Assessment of Vulnerabilities (SCAV); see FSB, *Global Shadow Banking Monitoring Report 2013*, cit., p. 5.
11. See FSB, *Strengthening Oversight and Regulation of Shadow Banking Policy Framework for Strengthening Oversight and Regulation of Shadow Banking Entities*, August 29, 2013, p. i.
12. See Kodres (2013) "What is Shadow Banking?", *Finance & Development*, Vol. 50, Issue 2, available at http://www.imf.org.
13. See Claessens, Pozsar, Ratnovski, and Singh (2012) *Shadow Banking: Economics and Policy*, edited by IMF Research Department, December 4, p. 3, where it is stated that "these functions can be economically useful, and need to be understood and properly regulated."
14. See G20 (2014) *Communiqué*, Meeting of G20 Finance Ministers and Central Bank Governors Washington D.C., April 10–11.

15. See "The Shadow Banking System in the Euro Area: Overview and Monetary Policy Implications," in *Deutsche Bundesbank Monthly Report*, March 2014, p. 15 ff., where it is also stated that "so far, the Euro-system's monetary analysis has addressed the risk that increased shadow banking activity could reduce the information content of monetary indicators by incorporating selected shadow banking entities (money market funds) into the calculation of monetary aggregates and by adjusting these aggregates for certain transactions (e.g. securitization). These corrections – in combination with a more detailed analysis of sectorial shifts in money holdings – currently ensure that the data on monetary aggregates are sufficiently meaningful."
16. See Luck and Schempp (2014) "Banks, Shadow Banking, and Fragility," cit., for a banking model of maturity transformation. It is an interesting conclusion, according to which, if the shadow banking sector is small relative to the capacity of secondary markets for shadow banks' assets, shadow banking is stable.
17. See Meeks, Nelson, and Alessandri (2013) "Shadow Banks and Macroeconomic Instability," (Banca d'Italia, Roma), no. 939, November 2013, p. 3.
18. See Tucker (2012) *Shadow Banking: Thoughts for a Possible Policy Agenda*, speech of the Deputy Governor Financial Stability, Member of the Monetary Policy Committee and Member of the Financial Policy Committee, at the European Commission High Level Conference, Brussels, April 27, 2012.
19. I refer to the following definition of "instruments, structures, firms or markets which, alone or in combination, replicate, to a greater or lesser degree, the core features of commercial banks: monetary or liquidity services, maturity mismatch and leverage"; see Tucker (2010) *Shadow Banking, Financing Markets and Financial Stability*, January.
20. See Tucker (2012) *Shadow Banking: Thoughts for a Possible Policy Agenda*, cit., where it is highlighted that "for other shadow banks, liquidity services are offered without such back-up lines. In those cases, claims on the shadow bank have, in effect, become a monetary asset. Examples probably include money market mutual funds and an element of the prime brokerage services offered by securities dealers to levered funds." So, in this case, the shadow banking system does not proceed to the exercise of the credit, but uses the savings in market transactions.
21. See *Credit and Liquidity Programs and the Balance Sheet*, available at http://www.federalreserve.gov, October 30, 2014. I refer to eligible collateral for this program (and a certain number of other lending facilities) shows how—at least until February 2010 (within the AMLF program)—ABCP issuers and Money Market Mutual Fund received liquidity facility from the FED. Moreover, the effects of "Term Asset-Backed Securities Loan Facility Program," which shows how the Federal Reserve responded aggressively to the financial crisis, must also be taken into account.
22. See European Commission (2014) "Proposal on Transparency of Securities Financing Transactions," January 29, where there are the responses to the *Communication on Shadow Banking and Proposal on Money Market Funds*, September 4, 2013; the *Green Paper on Shadow Banking*, March 19, 2012; and the *Conference: Towards a Better Regulation of the Shadow Banking System*, April 27, 2012.
23. See European Commission, *Green Paper on Shadow Banking*, cit., p. 2.

24. See European Commission, *Green Paper on Shadow Banking*, cit., pp. 3–4.
25. See European Commission, *Communication from the Commission to the Council and the European Parliament, Shadow Banking – Addressing New Sources of Risk in the Financial Sector*, Brussels, September 4, 2013, COM(2013) 614 final.
26. It is not a coincidence that the Green Paper stated that "The FSB's work has highlighted that the disorderly failure of shadow bank entities can carry systemic risk, both directly and through their interconnectedness with the regular banking system. The FSB has also suggested that as long as such activities and entities remain subject to a lower level of regulation and supervision than the rest of the financial sector, reinforced banking regulation could drive a substantial part of banking activities beyond the boundaries of traditional banking and towards shadow banking"; see European Commission, *Green Paper on Shadow Banking*, cit., p. 2. Obviously, this is a statement which performs its duties as a piece of "soft law," given the absence of any regulatory power to enforce it.
27. See *Recital* no. 3, Directive 2014/65/EU.
28. See art. 2.1, Regulation (EU) no. 648/2012.
29. See *Recital* no. 13, Directive 2014/65/EU.
30. Art. 2 of Directive 2014/65/EU refers to the members of the ESCB and other national bodies performing similar functions in the European Union, other public bodies charged with or intervening in the management of the public debt in the Union and international financial institutions established by two or more Member States that have the purpose of mobilizing funding and providing financial assistance to the benefit of their members that are experiencing or threatened by severe financing problems. This is the result of the analysis made by the European Commission in order to modify the Regulation (EU) no. 648/2012.
31. See Lemma (2013) "The Derivatives of Italy," *Law and Economics Yearly Review*, vol. 2, part. 2, p. 480 ff.
32. See *Main Results of the Council*, Luxembourg, June 9, 2009.
33. See Sinha (2013) *Regulation of Shadow Banking – Issues and Challenge*, February 1, available at http://www.rbi.org.in.
34. See Sinha (2013) *Regulation of Shadow Banking – Issues and Challenge*, February 1, available at http://www.rbi.org.in, where it is published that "the more comprehensive definition, as adopted by the Financial Stability Board (FSB), i.e., *credit intermediation involving entities and activities (fully or partially) outside the regular banking system* has been globally accepted."

    Moreover, they highlight that "globally, shadow banking entities could be covered under the broad heads of (i) Money Market Funds, (ii) Credit investment Funds, Hedge Funds, and so on, (iii) Finance Companies accepting deposits or deposit like funding, (iv) Securities brokers dependent on wholesale funding, (v) Credit insurers, financial guarantee providers and (vi) securitization vehicles."
35. See "Shadow Banking in China, Battling the Darkness," *The Economist*, May 10, 2014.
36. See "Removal of Deposit Rates' Cap Expected this Year," Chinadaily.com., March 13, 2015.
37. See Mitchell (2014) "China's Shadow Banking Loans Leap", FT.com, January 15, where it is clarified that "funding from trust companies and other

entities in the shadow sector rose to its highest level on record and accounted for 30 per cent of the Rmb17.3tn ($2.9tn) in total credit issued last year, the People's Bank of China said, up from a 23 per cent share of aggregate financing in 2012."

38. See Pozsar, Adrian, Ashcraft, and Boesky (2013) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, Federal Reserve Bank of New York Economic Policy Review, December 2013, p. 1.
39. See Pozsar, Adrian, Ashcraft, and Boesky (2013) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., p. 1, where it is affirmed that "shadow banks conduct credit, maturity and liquidity transformation similar to traditional banks. However, what distinguishes shadow banks from traditional banks is their lack of access to public sources of liquidity such as the Federal Reserve's discount window, or public sources of insurance such as Federal Deposit Insurance. The emergency liquidity facilities launched by the Federal Reserve and other government agencies' guarantee schemes created during the financial crisis were direct responses to the liquidity and capital shortfalls of shadow banks. These facilities effectively provided a backstop to credit intermediation by the shadow banking system and to traditional banks for their exposure to shadow banks."
40. See Pozsar, Adrian, Ashcraft, and Boesky (2013) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., p. 3 ff. for an overview of the shadow banking system. In this paper, they refer to "Pozsar (2008) and Adrian and Shin (2009). Pozsar (2008) catalogues different types of shadow banks and describes the asset and funding flows within the shadow banking system." The authors also highlight that "Adrian and Shin (2009) focus on the role of security brokers and dealers in the shadow banking system, and discuss implications for financial regulation," given that "the term 'shadow banking' was coined by McCulley (2007). Gertler and Boyd (1993) and Corrigan (2000) are early discussions of the role of commercial banks and the market based financial system in financial intermediation."
41. See Kim (2014) "Money is Rights in Rem: A Note on the Nature of Money," cit., for an analysis of the monetary impact of the shadow banking.
42. This assesses the absence of prudential rules able to mitigate the effects of an incorrect estimate of the correlation of prices (by the credit rating agencies, risk managers, and especially by investors).

    The FED observes that "specifically, they did not account for the fact that the prices of highly rated structured securities become much more correlated in extreme environments than in normal times"; See Pozsar, Adrian, Ashcraft, and Boesky (2013) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., pp. 2–3.
43. See Pozsar, Adrian, Ashcraft, and Boesky (2013) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., p. 13.
44. In other words, the speed of high-frequency algorithmic trading influences the market results. The European legislators specify that we are in front of a way of negotiation "where a trading system analyses data or signals from the market at high speed and then sends or updates large numbers of orders within a very short time period in response to that analysis."

    I refer to high-frequency algorithmic trading that does not require human intervention for each individual trade or order and so, it is characterized, among others, by high message intra-day rates which constitute orders, quotes or cancellations. This is why the director highlights that "in determining what constitutes high message intra-day rates, the identity of the client ultimately behind the activity, the length of the observation period, the comparison with the overall market activity during that period and the relative concentration or fragmentation of activity should be taken into account"; see *Recital* no. 61, Directive 2014/65/EU.

45. Considering what is written in the text, it can be said that the intermediation activities placed in the shadow banking system can supply the demand for credit; see European Commission, *Communication from the Commission to the Council and the European Parliament, Shadow Banking – Addressing New Sources of Risk in the Financial Sector*, cit., p. 4.
46. See Davidoff and Solomon (2007) "Black Market Capital," *Wayne State University Law School Research Paper*, cit., in which certain ramifications of black market capital have been identified and examined. The authors focus, in particular, on the current hedge fund and private equity US regulation, one likely harmful to US capital markets. This is why, from his perspective, the author finds external costs inherent in the current regulatory scheme, which the SEC have not recognized.

    It is useful to highlight that, before the crisis, there was the tendency to suggest that the supervisors (and, in particular, the SEC) should consequently undertake a thorough cost–benefit analysis of its hedge fund and private equity regulation, and the conclusion that the benefits of a regulatory scheme permitting the public offer of hedge funds and private equity funds not only exceeds its costs but is superior to current regulation.

    This is why the "black market capital" was interpreted as an example of the "unintended effects of regulating under the precautionary principle" in an era of market proliferation.
47. The issue arising from the "social revolution" developed between 1945 and 1990, which was financed by new taxes and then grew under the unfair practice of tax evasion, is not new; see Hobsbawn (1997) *Age of Extremes. The Short Twentieth Century* (Milano, Italian edition.), p. 339 ff.
48. See Fitoussi and Laurent (2008) *La nuova ecologia politica* (Milano), p. 65 ff.
49. I refer, in particular, to *Recital* no. 11, Directive 2014/65/UE, where it is specified that "a range of fraudulent practices have occurred in spot secondary markets in emission allowances (EUA) which could undermine trust in the emissions trading scheme, set up by Directive 2003/87/EC... and measures are being taken to strengthen the system of EUA registries and conditions for opening an account to trade EUAs."

    It is also clear that these measures aim "to reinforce the integrity and safeguard the efficient functioning of those markets, including comprehensive supervision of trading activity."
50. This is obviously an unfair application of the shadow processes, which is only aimed at showing a different classification of a portion of the assets (the initial loan), and, as such, not in line with the provisions of the legislation.
51. See EBA (2014) *Why Do We Need a Single Rulebook?*, available at http://www.eba.europa.eu, data accessed November 4.

2 The Shadow Banking System as an Alternative Source of Liquidity

1. See Brogi (2014) "Shadow Banking, Banking Union and Capital Markets Union," *Law and Economics Yearly Review*, 2014, p. 383 ff.
2. See Claessens, Pozsar, Ratnovski, and Singh (2012) *Shadow Banking: Economics and Policy*, edited by the IMF, December 4, p. 8.

   From a legal perspective, the result of the analysis of Alpa (2010), *Markets and Comparative Law* (London), p. 119 ff. must be taken into account, which highlights the role of regulations and moral suasion in commercial contracts and services.
3. See Anand and Sinha (2012) *Regulation of Shadow Banking – Issues and Challenge*, cit. In line with this interpretation, there is Tucker (2012) *Shadow Banking: Thoughts for a Possible Policy Agenda*, cit., which explains that "non-bank intermediation of credit is not a bad thing in itself. Indeed, it can be a very good thing, helping to make financial services more efficient and effective and the system as a whole more resilient. We must remember that as we make policy," (p. 2).
4. This is a condition—the cost reduction—that appears to be able to increase the competition between the market-based financing and the traditional credit institutions even when the offering of money has the same Value-at-Risk (that is compatible with the paradigms of capital adequacy). But, this is not only the main parameter, given the importance of the qualitative elements in the regulation of financial markets, see Capriglione (2010) *Misure anticrisi tra regole di mercato e sviluppo sostenibile*, cit., p. 83 ff. on the role of ethics in finance.
5. See Manzocchi and Padoan (2005) "The Role of Financial Markets in Economic Performance," in Boyd (ed.), *European—American Trade and Financial Alliances* (Cheltenham) p. 1 ff.
6. The positive externalities of the financial activities and credit intermediation must also be taken into account; on this point, the analysis made by Castiello (1989), "Liberalizzazione dell'attività bancaria ed evoluzione dei controlli pubblici," *Bancaria*, p. 9 ff. should be highlighted; Salanitro (1988) "Tecniche giuridiche di individuazione e regolamentazione dell'attività bancaria e finanziaria," *Banca borsa e titoli di credito*, p. 325 ff.; Fazio (1987) "Controllo dell'attività bancaria e dell' intermediazione finanziaria," *Politica del diritto*, p. 445 ff.; Castiello D'Antonio (1987) "Evoluzione dell'oggetto e qualificazione dell'attività bancaria," *Rivista del diritto commerciale*, p. 155 ff.

   Please refer also to Stagno D'Alcontres (1987) "Attività bancaria come attività di impresa e servizio pubblico in senso oggettivo," *Rivista del diritto commerciale*, II, p. 233 ff. and Scuderi (1989) "Pubblico servizio e attività bancaria," *Giurisprudenza di merito*, p. 371 ff., which develop certain ideas on the juridical definition of banking in relation with the first innovations made by the European integration and the banking directives on the Italian legal framework. In this context, there are also the results of the analysis made by Caianiello (1985) "Attività bancaria e nozione di pubblico servizio," *Il Foro italiano*, c. 130 ff.

   With regard to the juridical nature of banking after the harmonization of European legal framework, see Capriglione (2012) "Commento sub art.

10 tub," in Capriglione (ed.), *Commentario al testo unico delle leggi in materia bancaria e creditizia* (Padova 2012), I, p. 114 ff.

7. In analyzing these aspects, however, it is clear that the essence of banking is the capacity of the inter-mediators to link persons who are in surplus with others that are able to repay and reimburse the capital temporary transfer; see Lemma (2013) "Etica e professionalità bancaria," in Sabbatelli (ed.), *Etica e professionalità bancaria* (Padova), p. 129 ff.
8. See Claessens, Pozsar, Ratnovski, and Singh (2012) *Shadow Banking: Economics and Policy*, IMF Research Department, December 4, p. 10, where it is explained that "today a large part of demand for savings instruments comes from corporations and the asset management complex. Global corporate short-term savings grew from less than $50 billion in 1990 to more than $750 billion in 2007 and over $1.2 trillion by the end of 2010."

   This process of "reverse maturity transformation" led the asset management complex cash holdings to rise from $100 billion in 1990 to over $2.5 trillion in 2007 and $2 trillion at end-2010, as seen in Thomas and Lemer (2011) "U.S. Groups Hit as Tax Keeps Cash Overseas," *Financial Times*, July 27.
9. In addition to the above-cited Claessens, Pozsar, Ratnovski, and Singh (2012) *Shadow Banking: Economics and Policy*, cit., there are the analyses of the FED, which observed that "large Cash Pools have created the demand for safe money in large denominations[hence]inside money, represented by repos, securities lending programs, MMMFs, and bank deposits have all expanded to meet the supply of large cash pools, but are all risky and led to costly runs"; see McAndrews (2012) "Inside and Outside Liquidity Provision," *ECB Workshop on Excess Liquidity and Money Market Functioning*, November 19/20, 2012.
10. See Claessens, Pozsar, Ratnovski, and Singh (2012) *Shadow Banking: Economics and Policy*, cit., p. 25.
11. On this point, see Monti (2001) "La dimensione internazionale della politica di concorrenza europea," *Mercatoconcorrenzaregole*, f. 3, p. 423 where the author suggests that the European institution must observe the global market (and not only the European one).
12. See Kim (2014) "Money is Rights in Rem: A Note on the Nature of Money," cit., where it is explained that shadow banking creates money by mirroring credit in the image of rights in rem.
13. It is not a potshot the assessment of the role of *backup financial institutions* to the shadow banking given that "other non-banking finance entities—such as mutual funds, insurance companies, etc.—provide alternatives to bank deposits and constitute alternative funding for the real economy, which is particularly useful when traditional banking or market channels become temporarily impaired"; see Anand and Sinha (2012) "Regulation of Shadow Banking – Issues and Challenge," cit.
14. See Tyson and Shabani (2013) "Sizing the European Shadow Banking System: A New Methodology," cit., where the authors present the results of a new methodology, used to estimate the UK shadow banking system (including European business managed from the United Kingdom). It is useful to take into account that they estimate the size at £548 billion, which, if combined

with hedge fund assets of £360 billion, gives total shadow banking assets of over £900 billion.

15. This is a process where the *asset backed securities* allow a specific structuring of the financing (by applying the techniques of *pooling* and *warehousing* in order to set the conditions required for the issuing to *collateralized debt obligations*).
16. Hence, the need to verify if the applicable rules are able to reduce the information asymmetries and the other market failures that penalize the circulation of money
17. See Stiglitz (2001) "Information and the Change in the Paradigm in Economics," *Prize Lecture*, December 8, p. 474, where it is said that "there are asymmetries of information between those governing and those governed, and just as markets strives to overcome asymmetries of information, we need to look for ways by which the scope for asymmetries of information in political processes can be limited and their consequences mitigated."
18. See Di Cagno and Spallone (2010) "An Experimental Investigation on Optimal Bankruptcy Laws," *European Journal of Law and Economics*, vol. 30, p. 205 ff.
19. See Keys, Mukherjee, Seru, and Vig (2010) "Did Securitization Lead to Lax Screening? Evidence from Subprime Loans," *The Quarterly Journal of Economics*, no. 125, p 307 ff., where the authors try to solve the question of whether the securitization process reduced the incentives of financial intermediaries to carefully screen borrowers.
20. See Bhattacharya, Chabakauri, and Nyborg (2012) "Securitized Banking, Asymmetric Information and Financial Crisis: Regulating Systemic Risk Away," available at http://www.lse.ac.uk, accessed November 4, 2014.
21. See, on this point, Stefanelli (2009) "Problematiche in ordine alla efficacia della regolazione pubblica in materia di informazione finanziaria," *Il diritto dell'economia*, p. 297 ff.
22. See Murphy (2013) *Shadow Banking: Background and Policy*, edited by Federation of American Scientist, December 31, p. 12.
23. It is useful to recall the result of an analysis on the "financial behavior"; see Marchisio and Morera (2012) "Finanza, mercati, clienti e regole, ma soprattutto persone', *Analisi Giuridica dell'Economia*, p. 19 ff.
24. See the well-known Akerlof (1970) "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, p. 488 ff.
25. Thus, the analysis of the informative–cognitive relations must be conducted on an individual base, because of the various ways able to conclude a direct relationship between the informer and the informed; however, the opportunistic behavior of the first will damage only the latter in the first instance, and then it will corrupt the confidence of the investors (and, in this way, damaging the whole capital market).
26. See Mirone (2014) "Sistema e sottosistemi dellanuova disciplina della trasparenza bancaria," *Banca borsa e titoli di credito*, f. 4, p. 377 ff.
27. See Bainbridge (2005) "Shareholder Activism and Institutional Investors," *UCLA School of Law, Law-Econ Research Paper* no. 05-20, where the author outlines that institutional investor activism, by itself, will not heal the pathologies of the corporate governance.

28. See Gorton and Metrick (2010) “Regulating the Shadow Banking System,” *Brookings Papers on Economic Activity*, p. 216, where the authors “propose the use of insurance for MMMFs, combined with strict guidelines on collateral for both securitization and repos, with regulatory control established by chartering new forms of narrow banks for MMMFs and securitization, and using the bankruptcy safe harbor to incentivize compliance on repos.”
29. This appears in line with the Diamond and Dybvig model of bank runs, see Diamond and Dybvig (1983) “Bankruns, Depositinsurance, and Liquidity,” *Journal of Political Economy*, no. 91, p. 401 ff.
30. I refer to the definition of “shadow banking system,” which highlights that it is “the system of credit intermediation that involves entities and activities outside the regular banking system”; See European Commission, *Green Paper on Shadow Banking*, cit., p. 3.
31. This explains also the success of the consultation process: “the Commission received in total 140 contributions, of which 24 from Public Authorities; 47 from registered organisations; and, 64 from individual organisations. Five organisations asked for their submissions to remain confidential”; See European Commission (2012) *Summary of Responses Received to the Commission’s Green Paper on Shadow Banking,* Brussels, December, p. 3.
32. This seems in line with the essence of banking, see Lemma (2013) “Etica e professionalità bancaria,” cit., p. 129 f.,
33. See Keynes (1953) “The General Theory of Employment, Interest, and Money” (San Diego, edition 1964), p. 158.
34. Only in this way we can avoid convergences between these two systems that, concretely, will only align the way of acting (with obvious anti-competitive effects).
35. See Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., p. 13 ff.
36. See Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., whereby it is clarified also that “over the past thirty years or so, these four techniques have became widely adopted by banks and non-banks in their credit intermediation and funding practices.”
37. See Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., where the authors add that “the vertical and horizontal slicing of credit intermediation is conducted through the application of a range of off-balance sheet securitization and asset management techniques (see Exhibit 5), which enable FHC-affiliated banks to conduct lending with less capital than if they had retained loans on their balance sheets.”

    Moreover, the same highlights that “thus, whereas a traditional bank would conduct the origination, funding and risk management of loans on one balance sheet (its own), an FHC (1) originates loans in its bank subsidiary (2) warehouses and accumulates loans in an off-balance sheet conduit that is managed by its broker- dealer subsidiary, is funded through wholesale funding markets, and is liquidity-enhanced by the bank (3) securitizes loans via its broker-dealer subsidiary by transferring them from the conduit into a bankruptcy-remote SPV, and (4) funds the safest tranches of structured credit assets in an off- balance sheet ABS intermediary (a structured investment vehicle (SIV), for example) that is managed from the asset management subsidiary of the holding company, is funded through wholesale funding markets and is backstopped by the bank."

38. See Carey, Post, and Sharpe (1998) "Does Corporate Lending by Banks and Finance Companies Differ? Evidence on Specialization in Private Debt Contracting," *Journal of Finance*, vol. 53, Issue 3, where the authors try to establish empirically the existence of specialization in private-market corporate lending, adding a new dimension to the public versus private debt distinctions now common in the literature. There is an interesting comparison of a large sample of corporate loans made by banks and finance companies. It shows the two types of intermediary, which are equally likely to finance information-problematic firms. In this paper, evidence supports both regulatory and reputation-based explanations for this specialization.
39. See FSB (2014), *Global Shadow Banking Monitoring Report 2014*, cit. p. 5.
40. See *Statement by European Commissioner for Competition Margre the Vestager on Tax State Aid Investigations*, Brussels, November 6, 2014, where the DG investigates on tax rulings, given that "if in a tax ruling, the tax authorities of a Member State accept that a tax base of a specific company is calculated in a favourable way which does not correspond to market conditions, it may give to the company a more favourable treatment than what other companies would normally get under the country's tax rules, and this could constitute State aid."
41. We must consider the classical approach made by Capriglione (1983) *L'impresa bancaria tra controllo e autonomia* (Milano), p. 290 ff. on the weight of limitations to banking.
42. It must be highlighted that we are in a situation different from the one examined by Schneider and Williams (2013) *The Shadow Economy*, cit., where there is a measurement of the shadow economy that requires estimation of economic activity that is deliberately hidden from official transactions, indicating that the shadow economy constitutes approximately 10 per cent of GDP in the UK, about 14 per cent in Nordic countries, and about 20–30 per cent in many southern European countries.
43. See Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., p. 11, where it is stated that "through this intermediation process, the shadow banking system transforms risky, long-term loans (subprime mortgages, for example) into seemingly credit-risk free, short-term, money-like instruments, stable net asset value (NAV) shares that are issued by 2(a)-7 money market mutual funds which require daily liquidity."
44. It is important to consider that the third millennium started with a wave of mergers and acquisitions in the banking industry, followed by a restatement of the EU regulation (by Directive 2007/44/EC); see on this point Sciarrone and Alibrandi (2008) "Nuove regole europee in materia di acquisizioni e concentrazioni nel settore finanziario," *Banca borsa e titoli di credito*, I,p. 246 ff. It goes without saying that, nowadays, we must consider the prospective of returning to a smaller average size of banks, given the issues raised by the G-SIBs.

45. See Masciantonio (2013) "Identifying and Tracking Global, EU and Eurozone Systemically Important Banks with Public Data," *Bank of Italy Occasional Paper* no. 204.

    With regard to the G-SIIs, BCBS published in November 2014 a list of financial institutions with the corresponding "bucket" of higher loss absorbency capital. Other indicators from global systemically important institutions were issued by EBA in late September. The authority also affirms that their "identification, which leads to a higher capital requirement, falls within the responsibility of national competent authorities and will take place in January 2015 for the first time. It will follow global denominators disclosure and G-SIB exercise results, expected to be published by the BCBS and the FSB, in November each year."
46. See Masera (2012) "CRAs: Problems and Perspectives," *Analisi Giuridica dell'Economia*, Vol. 2, p. 425 ff.
47. The abovementioned consideration recalls the analysis of Amato (2013) "Il costituzionalismo oltre i confini dello Stato—Constitutionalism beyond the State," *Rivista trimestrale di diritto pubblico*, f. 1p. 1 ff., where the author deals with the emergence of powers in the global arena.
48. See Di Gaspare (2011) *Teoria e critica della globalizzazione* (Padova), p. 253 ff. on the role of globalization in the evolution of financial markets. See also Masera, "Taking the Moral Hazard out of Banking: the Next Fundamental Step in Financial Reform," *PSL Quarterly Review*, 2011, 64(257), p. 105 ff.
49. See Padoan (2013) "Criminalità organizzata, attività illegali nel sistema finanziario, paradisi fiscali e sviluppo economico," *Seminario della Scuola di Perfezionamento per le Forze di Polizia*, Roma, 8 maggio 2013; see also OECD (2013) "OECD Integrity Review of Italy. Reinforcing Public Sector Integrity, Restoring Trust for Sustainable Growth," *OECD Public Governance Reviews*, 2013.

    It is imperative to highlight the example given by Italy, where law no. 190 of 2012 provides new tools to fight against corruption within the government, followed by the Law Decree no. 101 of 2013, converted with amendments by Law no. 125 of2013, which increases the number of members and the relevance of the National Anti-Corruption Authority for evaluation and transparency of public administrations.

    See also Amorosino (2014) "Il piano nazionale anticorruzione come atto di indirizzo e coordinamento amministrativo," *Nuove Autonomie*, f. 1, p. 21 ff., where the author takes in to consideration the nature and role of the "Italian anti-corruption plan," and concludes that it is an act of administrative directive and coordination—defined as an "act of directive"—highlighting its deficiencies and limits of effectiveness.
50. Another order of issues refers to the financial innovation, which—usually through the use of derivatives—does not reduce the costs of intermediation; see Masera (2013) "Corporate governance, compliance e risk management nelle grandi banche internazionali: attività illegali e illecite, multe, indennizzi e processi penali," *Rivista trimestrale di diritto dell'economia*, Vol. 2, p. 84, where the author recalls the attention on the fact that certain international banks have operated on the CDS market in order to avoid the rules and the standard of the Basel Agreements (with short credit and, then, moving forward the risk buckets in order to reduce the capital requirements). It must

be noted that key conclusions of the cited article are: (i) official quantitative analysis of these phenomena would be highly desirable; and (ii) banks' supervisory authorities should be empowered to enact prompt incisive revision processes, with a view to ensuring the necessary standards of integrity and compliance in case of evident failures in the corporate governance of large international banks.

See also, Slovik (2013) "Systemically Important Banks and Capital Regulation Challenges," edited by OECD (Paris); Financial Crisis Inquiry Commission (FCIC), "The Financial Crisis Inquiry Report: Final Report of the National Commission on the Causes of the Financial and Economic Crisis in the United States," chaired by Phil Angelides, January 2011.

51. Even in the emerging economies the fight against illegal trade is strong, where there is a specific contrast to the distortions coming from the cash flows injected by illicit networks. It is worth noting that "From Wall Street to other financial centers across the globe, illicit networks are infiltrating and corrupting licit markets, reducing productivity, and dis-incentivizing investments in research and development—not to mention, jeopardizing public health, emaciating communities' human capital, and eroding the security of our institutions and destabilizing fragile governments," see Luna (2012) "The Destructive Impact of Illicit Trade and the Illegal Economy on Economic Growth, Sustainable Development, and Global Security," *Remarks of the Director for Anticrime Programs, Bureau of International Narcotics and Law Enforcement Affairs*, *The OECD High-Level Risk Forum*, OECD Conference Centre Paris, France, October 26, 2012.
52. I am referring to problems similar to the ones that characterized the "London Whale". As reported by Hurtado (2014) "The London Whale," *Bloomberg Quick Tale*, updated October 21, 2014. The Whale case received attention when the US Federal Reserve's Inspector General said that "regulators had botched oversight of the JPMorgan unit where the losses took place." More in particular, the examiners in the New York Fed had spotted risks in the unit's trading as early as 2008 but never followed up. Furthermore, the cited article precise that "there was poor coordination with other regulatory agencies."

    See, also, Bart and McCarthy (2012) "Trading Losses: A Little Perspective on a Large Problem," *Milken Institute*, October, 2012, and the report *ad hoc JPMorgan Chase Whale Trades: A Case History of Derivatives Risks and Abuses*, March 15, 2013.
53. See *CEBS Guidelines On Prudential Filters for Regulatory Capital*, December 2004. I refer, in particular, to the role that—in Europe—has been recognized as the "prudential filters," which are the rules able to limit the negative effects of certain accounting standards and principles; see also Lemma (2006) "L'applicazione del Fair Value alle banche: problematiche giuridiche e soluzioni," *Banca borsa e titoli di credito*, I, p. 723 ff.
54. In this direction is oriented the work of Masera (2007) "L'impresa e la creazione di valore," in Capriglione (ed.), *Finanza, Impresa e Nuovo Umanesimo* (Bari), p. 67 ff.
55. See Capriglione (2007) "Introduzione" and Antonucci (2007) "La responsabilità sociale e l'impresa bancaria," in *Finanza, Impresa e Nuovo Umanesimo*, cit., p. 14; see also Baggio (2005), *Etica ed economia* (Roma), p. 19.

56. See Levy (2006) *The State after Statism: New State Activities in the Age of Liberalization* (Cambridge), p. 469 ff.

3 Shadow Banking Entities

1. See Gorton and Souleles (2005) "Special Purpose Vehicles and Securitization," *FRB Philadelphia Working Paper*, no. 05-21, where the authors analyze securitization and special purpose vehicles (SPVs), which are more common in corporate finance praxis.
2. See Fabozzi and Kothari (2007) "Securitization: The Tool of Financial Transformation," *Yale ICF Working Paper*, no. 07-07, where the authors find that, in a broadest sense, the term "securitization" implies a process by which a financial relationship is converted into a transaction.
3. See Lucas, Goodman, and Fabozzi (2007) "Collateralized Debt Obligations and Credit Risk Transfer," *Yale ICF Working Paper*, no. 07-06, where the authors emphasize the role played by CDOs in the application of the securitization technology and in the credit risk transformation schemes.
4. See Coval, Jurek, and Stafford (2008) "The Economics of Structured Finance," *Harvard Business School Finance Working Paper*, no. 09-060, where the authors examine how the process of securitization allowed a big amount of risky assets to be transformed into securities that were widely considered to be safe. They argue that at the core of the financial market crisis has been the discovery that these securities are actually far riskier than originally advertised.
5. It goes without saying that the link mentioned in the text suggests the inclusio of SPVs within the consolidation range of the relevant banking group (in a capital adequacy perspective), for a pre-crisis analysis of the securitization legal framework that explains this problem, see Troiano (2003) *Le operazioni di cartolarizzazione* (Padova), where the author takes into consideration both the EU regulation and the Italian legislation.
6. It shall be taken into account thatoften the vehicles act in accordance with executive directions or legal frameworks processed by the banks' managers on the basis of their technical and financial knowledge, and the assumption related to the demand for securities coming from its clients.
7. Often, the lack of internal control systems has prevented the assumption of appropriate decisions in front of the deterioration of the assets owned. And this went along with consequent systemic degenerations.
8. It shall be useful to take into account the Italian praxis of supervision on the consolidation of the balance sheets, see Bank of Italy, "Disposizioni di vigilanza per le banche," Circular no. 285 of December 17, 2013, First Part.I.2.7.
9. See Becht, Bolton, and Röell (2002) "Corporate Governance and Control," *ECGI—Finance Working* Paper, no. 02/2002, where the authors identify a specific corporate governance dilemma whether the intervention of a large shareholder needs to be regulated in order to guarantee a better protection for small investors, taking into account that such a rule increases managerial discretion and scope for abuse.

10. See Guida and Masera (eds) (2014) *Does One Size Fit All?*, *passim*, where the authors state that "an important lesson of the global financial crisis was that the Basel II microprudential capital requirements did not ensure financial stability." Another significant lesson was that they had even destabilizing effects by increasing procyclical lending and regulatory arbitrage.
11. See Tosun and Senbet (2014) "Internal Control and Maturity of Debt," *WBS Finance Group Research Paper*, where they investigate the various effects of internal board monitoring on firms' debt maturity structure.
12. See, in particular, Masera (2014) "CRR/CRD IV: The Trees and the Forest," *SSRN Working Paper* no. 2418215.
13. See, in particular, the provisions of Regulation EU no. 575 of 2013, part three, Tit. II.5 and part five.
14. See Babis (2014) "Single Rulebook for Prudential Regulation of Banks: Mission Accomplished?", *European Business Law Review* (Forthcoming), *University of Cambridge Faculty of Law Research* Paper, no. 37/2014, where the author focuses on the prudential regulation aspects of the rulebook, examinating whether the CRR/CRD 4 framework has created a truly single rulebook by identifying possible threats to uniformity.
15. See Keynes (1953) *The General Theory of Employement, Interest, and Money*, cit., pp. 338–339.
16. See Adrian andLiang (2014) "Monetary Policy, Financial Conditions, and Financial Stability," cit., where the authors show the consequences that arises if monetary policy does not target financial stability considerations and the financial vulnerabilities given from persistent accommodative monetary policy.
17. See art. 14, EU Regulation no. 1024/2013.
18. Therefore, the set named as shadow banks must be referred, for its content, to a phenomenon with a plural nature and a composite outlook, which can complement commercial banks according to the "genus-differentia" scheme; see Webber (1991) *L'etica protestante e lo spirito del capitalismo*, (Milano edition, 1994), p. 71.
19. See Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., p. 1, where it is highlighted that the specialized shadow bank intermediaries are bound together along an intermediation chain. They, in particular, reveal the presence of a "network of shadow banks," operating in this intermediation chain as the shadow banking system. Therefore, the authors believes that shadow banking is a somewhat pejorative name for such a large and important part of the financial system.
20. See Schwarcz (2013) "Regulating Shadows: Financial Regulation and Responsibility Failure," *Washington and Lee Law Review* (forthcoming), where the author highlights the modern financial architecture, where financial services are increasingly provided outside of the traditional banking system and without the need for bank intermediation between capital markets and the users of funds.
21. It can be useful to consider the recent statements on the distribution of complex financial products published by ESMA; see *Opinions* of February 7, 2014 (MiFID practices for firms selling complex products) and March 27, 2014 (Structured Retail Products—Good practices for product governance

arrangements). Please note that Italian supervisory authority CONSOB published a Communication (N. 0097996/14 of December 22, 2014) in order to identify a list of "complex financial products" (including asset backed securities, convertible, structured, and credit linked products) and advises intermediaries not to offer such products to retail investors.

22. See Meeks, Nelson, and Alessandri (2013) "Shadow Banks and Macroeconomic Instability," *Bank of Italy Working Papers*, no. 939, p. 19 ff. and see also Adrian and Ashcraft (2012) "Shadow Banking Regulation," *FRB of New York Staff Report*, no. 559 where the authors highlight how shadow banks conduct credit intermediation without direct or explicit access to public funding or other credit guarantees.
23. See, once more, Meeks, Nelson, and Alessandri (2013) *Shadow Banks and Macroeconomic Instability*, cit., p. 11.
24. In this sense, moreover, are oriented international institutions that recognize the existence of a plurality of subjects, autonomous in the adoption of appropriate corporate governance systems and in the definition of their capital structures; see Bakk-Simon, Borgioli, Giron, Hempell, Maddaloni, Recine, and Rosati "Shadow bank in the Euro Area: an Overview," edited by ECB, *Occasional Paper*, no. 133/April 2012.
25. See McCulley (2014) "Make Shadow Banks Safe and Private Money Sound," FT.com, June 16.
26. See Goodhart, Kashyap, Tsomocos, and Vardoulakis (2012) "Financial Regulation in General Equilibrium," *Chicago Booth Research* Paper, no. 12-11, where the authors analyze how different types of financial regulation combat the financial crisis. They highlight in the Abstract that "the proposed framework can assess five different policy options that officials have advocated for combating defaults, credit crunches and fire sales, namely: limits on loan to value ratios, capital requirements for banks, liquidity coverage ratios for banks, dynamic loan loss provisioning for banks, and margin requirements on repurchase agreements used by shadow banks."
27. See Zingales (2009) "The Future of Securities Regulation," *Chicago Booth School of Business Research Paper* no. 08-27, where the author analyzes investors' confidence after a crisis, comparing the Great Depression of the 1929 and the recent financial crisis of 2007.
28. See, on this topic, Pennisi (2009) "La responsabilità della banca nell'esercizio del controllo in forza di covenants finanziari," *Rivista di diritto societario*, f. 3, pt. 3, p. 627 ff., for an analysis of the duites provided by the Italian legislation.
29. In order to better understand the benefits arising from the use of captive financial company, we must consider the possibility to eliminate independent credit institutions and services providers. So the holding of the group can set up the loans according to its business parameters and not (only) to the financial market trends; see on this point Bodnaruk, Simonov, and O'Brien (2012) "Captive Finance and Firm's Competitiveness," *SSRN Working Paper*, no. 2021503.
30. See Moodys' *The Fundamentals of Asset-Backed Commercial Paper*, February 3, 2003, available at http://www.imf.org.
31. I refer to the analysis of Adrian (2011) "Dodd-Frank One Year On: Implications for Shadow Banking," *Federal Reserve Bank of New York Staff Report*,

no. 533, p. 3 where the question of the consolidation of ABCP conduits is analyzed.

32. See Commission Decision of June 4, 2008 on State Aid C 9/08 (ex NN 8/08, CP 244/07) where it is specified that a SIV is "a corporate body ... have been used because they can remain off balance sheet and not be consolidated by banks. This allows banks tofund lending at cheaper rates than those they would provide themselves (due notably to the obligations of regulatory liquidity ratios). The conduit refinances investments in asset-backed securities (ABSs) by borrowing in the short-term asset-backed commercial paper (CP) market. Potential liquidity needs of the conduits (where the commercial papers are not sol dcompletely) are bridged by credit lines provided by commercial banks."
33. See Commission Decision of June 4, 2008, para. 8, cit. where it is stated that "Ormond Quay generated a significant surplus by financing the long-term and high-yield ABS investments through short-term and low-yield commercial papers," therefore, the European Commission has adopted the following decision: "the liquidity facility and the guarantee granted to Landesbank Sachsen Girozentrale (Sachsen LB) in connection with its sale constitute state aid within the meaning of article 87(1) EC that is compatible with the common market subject to the obligations and conditions set out in article 2" (art. 1).
34. See Claessens, Pozsar, Ratnovski, and Singh (2012) "Shadow Banking: Economics and Policy," cit., p. 22.
35. See Lemma (2006) *I fondi immobiliari tra investimento e gestione* (Bari), p. 197 ff.
36. See ECB, *Guideline of the European Central Bank*, of September 20, 2011, p. 14, note 6.
37. See SEC, *Money Market Funds*, definition available at http://www.sec.gov.
38. See EC, *Money Market Funds*, Proposal of the Commission, of September 4, 2013, and European Commission, *New Rules for Money Market Funds Proposed*, Memo/13/764 of September 4, 2013.
39. See Tarullo (2013) "Shadow Banking and Systemic Risk Regulation," speech at the Americans for Financial Reform and Economic Policy Institute Conference, Washington, DC, November 22, 2013.
40. See EC, *Money Market Funds*, Proposal of the Commission, of September 4, 2013, cit.
41. See EC, *New Rules for Money Market Funds Proposed – Frequently Asked Questions*, cit.
42. See Carney (2014) "Taking Shadow Banking Out of the Shadows to Create Sustainable Market-Based Finance," *Financial Times*, June 16, 2014, where it is said that "the cycle of excessive borrowing in economic booms that cannot be sustained when liquidity dissipates in core fixed income markets."
43. See Tucker (2012) "Shadow Banking: Thoughts for a Possible Policy Agenda," speech at the European Commission High Level Conference, Brussels, April 27, 2012, p. 4, where it is highlighted that "Compared to most types of shadow banking, money funds do not borrow – in the usual sense. But by promising par, they are in effect incurring debt-like obligations. And they can be exposed to leverage. At least in the run up to the crisis, some invested in levered paper, some of it in what amounted to Russian Doll

shadow banking – a money fund buys short-term ABCP backed by CDOs, etc."

44. See Carney (2014) "Taking Shadow Banking Out of the Shadows to Create Sustainable Market-Based Finance," cit.

4 Shadow Business of Banks, Insurance Companies, and Pension Funds

1. On the competition in the financial market and the need to clarify the relationship between the first and the need for a stable equilibrium (of the second), see Rabitti (2014) "La concorrenza nel settore finanziario e i provvedimenti del Governo Monti," *Assicurazioni*, II,p. 441 ff.
2. In other words, the research for the maximum efficiency in the shadow process required to provide all the services able to build a relationship between the demand for loans and the supply of structured financial instruments; see Pozsar,Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., p. 11.
3. See Greene and Broomfield (2013) "Promoting Risk Mitigation, Not Migration: A Comparative Analysis of Shadow Banking Reforms by the FSB, USA and EU," *Capital Markets Law Journal,* vol. 8, no. 1, where the authors focus on the importance of tailored solutions (made to address the specific activities which create risk), rather than apply standard rules to shadow banking entities, ignoring their own characteristics or risk profiles.
4. See Adrian and Ashcraft (2012) "Shadow Banking Regulation," *FRB of New York Staff Report* no. 559, cit., where the authors review the implications of certain shadow funding sources, including asset-backed commercial paper, triparty repurchase agreements, money market mutual funds, and securitization.
5. See Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., p. 13 ff.
6. See Desiderio (2005) "L'attività bancaria," in Capriglione (ed.) *L'ordinamento finanziario italiano* (Padova), p. 248 ff.
7. See *Recitals* nos. 2 and 5, Directive 2013/36/EU.
8. Therefore, the analysis of the supervisors will have to identify the exposure (on the way of banks) to the negative externalities of the aforementioned interactions (among the latter and the shadow banking entities); see Schwarcz (2013) "Regulating Shadows: Financial Regulation and Responsibility Failure," *Washington and Lee Law Review* (forthcoming), cit., where the author identifies the externalities as a third marketfailure category that need to be conceptualized as a sort of "responsibility failure."
9. In a future perspective, it would be useful to take into account the uniform definitions and reporting requirements for forbearance and non-performing exposures set out by the European Banking Authority on "EBA Final Draft implementing technical standards on supervisory reporting on forbearance and non performing exposures under article 99(4) of CRR."
10. See on this topic Anelli (1998) "La responsabilità risarcitoria delle banche per illeciti commessi nell'erogazione del credito," *Diritto della banca e del mercato finanziario*, f. 2,p. 137 ff.

11. See Duffie and Zhu (2011) "Does a Central Clearing Counterparty Reduce Counterparty Risk?", *Rock Center for Corporate Governance at Stanford University Working Paper*, no. 46, where the authors demonstrate how the participation of a central clearing may lower counterparty risk for a particular class of derivatives.
12. See Siclari (2013) "Tendenze regolatorie in materia di compliance bancaria," *Rivista Trimestrale di Diritto dell'Economia*, I, p. 156 ff., where the author quotes Capriglione (2009) *Crisi a confronto (1929 e 2009). Il caso italiano*, (Padova), *passim*; Napolitano (2009) "L'intervento dello Stato nel sistema bancario e i nuovi profili pubblicistici del credito," *Giornale dir. amm.*, no. 4, p. 429 ff.

    See also Lemme (2014) "Le disposizioni di vigilanza sulla governance delle banche: riflessioni a tre anni dall'intervento," *Banca borsa e titoli di credito*, 2011, f. 6,p. 705 ff.
13. See Enriques and Zetzsche (2014 "Quack Corporate Governance, Round III? Bank Board Regulation Under the New European Capital Requirement Directive," *Oxford Legal Studies Research Paper*, no. 67/2014, where the authors focus on the provisions aimed to reshape bank boards' composition, functioning, and members' liabilities. They argue that these measures are not appropriate to improve the bank's governance effectiveness and to prevent excessive risk taking.

    See also Bebchuk and Spamann (2010) "Regulating Bankers' Pay," *Georgetown Law Journal*, vol. 98, Issue 2, pp. 247–287 and *Harvard Law and Economics Discussion* Paper, no. 641, for a useful analysis of the incentive connected to banks' executive pay, which—as known—has produced excessive risk taking.

    In this study, the fact that in credit institutions pay packages focused excessively on short-term results must be taken into account, and this produces critical distortion that has received too little attention by the supervisors; see Bank of Italy, Circ. no. 285 of December 17, 2013, First Part, Title III, Ch. 1, Sec. III for an example of the national regulation of this topic.

    Undoubtedly, there is the need for corporate governance reforms aimed at aligning the design of executive pay arrangements with the interests of the industry (i.e. the stability of the market). Moreover, according to the Bebchuk and Spamann analysis, the interests of common shareholders could be served by more risktaking than is socially desirable. Thus, the results of the above analysis shall be taken into account, which provide a normative foundation for such pay regulation.
14. See Lemma (2011) "La riforma degli intermediari finanziari non bancari nella prospettiva di Basilea III," *Rivista elettronica di diritto, economia e management*, p. 184 ff., where I compare the Italian reform of financial intermediaries (enacted by legislative decree no. 141/2010) with the comprehensive set of measures developed in 2010 by the Basel Committee (i.e. Basel III). This work presents results that are useful for understandingwhether there is a link between the Italian reform and the new international "soft law" written to strengthen the regulation, supervision, and risk management of the banking sector.

    In the context of this article, the analysis of the shadow banking system shows the benefit of this new wide-ranging approach in the supervision ofvarious financial firms (including lenders and credit guarantee consortia). Nevertheless, it must not be forgotten that the innovations enacted by legislative decree no. 141/2010 purport the option of wider supervision—equal tobanks and financial intermediaries—to demonstrate that this improves the sustainability of the markets.

15. See Barbagallo (2014) "Doveri e responsabilità degli amministratori delle banche: il punto di vista della Banca d'Italia," speech at ABI conference L'impresa bancaria: i doveri e le responsabilità degli amministratori, p. 6, on the remedial action provided at European level against the crisis.
16. See Vella (2007) "Le Autorità di vigilanza: non è solo questione di architetture," *Dir. banca merc. fin.*, 2, p. 196.
17. This is linked to the document EBA, *Guidelines on Internal Governance*, September 2011, Title III, Section 23 (1, 3) where it is stated that "an institution must have in place a well-documented new product approval policy (NPAP), approved by the management body, which addresses the development of new markets, products and services and significant changes to existing ones."
18. To this purpose are the regulations on the CEO-1 risks, which appear to be able to condition the management, see Banca d'Italia, *Nuove disposizioni di vigilanza prudenziale per le banche*, Circular no. 263 of December 27, 2006 – 15° update of July 2, 2013, pp. 6–7.
19. See Billio, Lo, Sherman, and Pelizzon (2011) "Econometric Measures of Connectedness and Systemic Risk in the Finance and Insurance Sectors," *University Ca' Foscari of Venice, Dept. of Economics Research Paper* Series, no. 21 and *MIT Sloan Research Paper* no. 4774–10, where the authors propose an econometric model of connectedness, applied to the monthly returns of hedge funds, banks, brokers/dealers, and insurance companies. They find out that those sectors have become highly interrelated over the past decade, increasing the total level of systemic risk. However, the study shows a relevant asymmetry in the degree of interconnectedness among the financial system, with banks playing a much more important role in transmitting shocks than other financial institutions.
20. See Corrias (2013) "Causa del contratto di assicurazione: tipo assicurativo o tipi assicurativi?", *Rivista di diritto civile*, f. 1, p. 41 ff., on the role of the insurance contracts in the financial market
21. See Commission Delegated Regulation (EU) of October 10, 2014 supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking up and pursuit of the business of Insurance and Reinsurance (Solvency II), Brussels, October 10, 2014, C(2014) 7230 final.
22. These rules are quite different from the options made by EC, *Explanatory Memorandum*, Brussels, 10 October 2014, C(2014) 7232 final, in adopting the Capital Requirements Regulation (CRR1) in June 2013, the co-legislators introduced a requirement for all institutions (credit institutions and investment firms) to maintain a general Liquidity Coverage Requirement (article 412(1)) and to report regularly on the composition of the liquid assets in their liquidity coverage buffer to their competent authorities (CRR Articles 415–425).
23. See, *Delegated Regulation of 10th October 2014*, cit.

24. See Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., p. 22.
25. See *Delegated Regulation of 10th October 2014*, cit., p. 8.
26. See *Delegated Regulation of 10th October 2014*, cit., p. 8, where it explains that "the Solvency II Directive empowers the Commission to specify the elements of the system of governance including a non-exhaustive list of written policies."
27. See Regulation (EU) no. 1094/2010, Recital no. 10.
28. See Gallin (2013) *Shadow Banking and the Funding of the Nonfinancial Sector*, available at http://www.nber.org, p. 7 and p. 8. See also Boersch (2010) "Doing Good by Investing Well—Pension Funds and Socially Responsible Investment: Results of an Expert Survey," *Allianz Global Investors International Pension Paper* no. 1/2010, where the author conducts research on the future of socially responsible investment in pension fund portfolios. Hence, the explaination that pension funds are one of the main drivers of socially responsible investments just because of their long-term horizon and asset size.
29. See Gallin (2013) *Shadow Banking and the Funding of the Nonfinancial Sector*, available at http://www.nber.org, p. 10.
30. See, for a pre-crisis perspective, Impavido (2002) "On the Governance of Public Pension Fund Management," *World Bank Policy Research Working Paper*, no. 2878, where the author highlights the need for further reform to support the development of an appropriate set of governance guidelines.

5 Shadow Banking Operations

1. See Fabozzi and Kothari (2007) "Securitization: The Tool of Financial Transformation," *Yale ICF Working Paper*, no. 07-07, cit., where the authors explain how the combination of securitization techniques with credit derivatives and risk transfer devices creates innovative methods of transforming risk into commodities, allowing market participants to operate into sectors which were otherwise not open to them.
2. See Tucker (2012) *Shadow Banking – Thoughts for a Possible Policy Agenda,* cit., p. 3.
3. See Adrian and Ashcraft (2012) "Shadow Banking Regulation," *FRB of New York Staff Report*, no. 559, cit., where they confirm how shadow banks contributed to the credit boom in the early 2000s and then collapsed during the recent financial crisis of 2007–2009.
4. See European Comission, *Green Paper on Shadow Banking*, cit., p. 4, where the author refers to the FSB's analysis on the size of the phenomenon: "The FSB has roughly estimated the size of the global shadow banking system at around €46 trillion in 2010, having grown from €21 trillion in 2002. This represents 25–30% of the total financial system and half the size of bank assets. In the United States, this proportion is even more significant, with an estimated figure of between 35% and 40%."

   In this context, it is interesting to consider "the share of the assets of financial intermediaries other than banks located in Europe as a percentage of the global size of shadow banking system has strongly increased from 2005 to

2010, while the share of US located assets has decreased. On a global scale, the share of those assets held by European jurisdictions has increased from 10 to 13% for UK intermediaries, from 6 to 8% for NL intermediaries, from 4% to 5% for DE intermediaries and from 2% to 3% for ES intermediaries. FR and IT intermediaries maintained their previous shares in the global shadow banks assets of 6% and 2% respectively."

5. See, on this point, Troeger (2014) "How Special Are They? – Targeting Systemic Risk by Regulating Shadow Banking," for an analysis of the possible regulatory interventions.
6. See Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., p. 10.
7. These operations run in relation to "loan origination" and the "loan warehousing" (funded by an ABS issuance or an ABCP issuance); see, once more, Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., p. 10, where it is assumed that "in the shadow banking system, loans, leases, and mortgages are securitized and thus become tradable instruments. Funding is also in the form of tradable instruments, such as commercial paper and repo. Savers hold money market balances, instead of deposits with banks."
8. Undoubtedly, the rights arising from the loan will have to follow the pattern of credit transfer or be realized through the mechanisms of collective portfolio management (and, therefore, through the intervention of a "fund") or in synthetic mode (by entering in "credit default swaps").
9. See the case shown by Tucker (2012) *Shadow Banking: Thoughts for a Possible Policy Agenda*, cit., p. 3.
10. In other words, according to Tucker (2012) *Shadow Banking: Thoughts for a Possible Policy Agenda*, cit., p. 3: "That is, banks should hold more liquid assets against such exposures."
11. See Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit, p. 4, where it is stated that, "for example, a pool of illiquid whole loans might trade at a lower price than a liquid rated security secured by the same loan pool, as certification by a credible rating agency would reduce information asymmetries between borrowers and savers."
12. See Capriglione (2010) *Introduzione*, in Urbani (ed.) *L'attività delle banche* (Padova), p. 1.
13. Hence, we can rely on a peculiar form of enhancements, classified on the basis of relationships that exists with major operations "as either direct or indirect, and either explicit or implicit"; see Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., p. 5.
14. It should indeed check which are the constraints that the legislation poses to avoid the prevailance, in practice, of loan agreements to the real economy that transfer (or, rather, amplify) the risk of insolvency of the transferor.
15. In particular, the solution provided by Section 941 of the Dodd–Frank Act links the public intervention to a definition of the above operation where "a 'securitizer' to mean '(a) an issuer of an asset-backed security or (b) a person who organizes and initiates an asset-backed securities transaction by selling or transferring assets, either directly or indirectly, including through an

affiliate, to the issuer'," while the term "an 'originator' to mean a person who (a) through extension of credit or otherwise, creates a financial asset that collateralizes an asset-backed security and (b) sells an asset directly or indirectly to a securitizer"; see Board of Governors of The Federal Reserve System, *Report to the Congress on Risk Retention*, October 2010, p. 9.

See also Skeel (2010) "The New Financial Deal: Understanding the Dodd-Frank Act and its (Unintended) Consequences," cit., where it his highlighted that, even if Dodd-Frank Act will not end bailouts, it will be useful to orient the market towards safer trends.

16. See Board of Governors of The Federal Reserve System, *Report to the Congress on Risk Retention*, cit., pp. 1–2.
17. See the Preamble of law decree no. 145 of 2013, and its regulatory content as amended by the Conversion Law no. 9 of 2014.
18. See Bank of England and ECB, *The Case for a Better Functioning Securitization Market in the European Union*, May 2014, pp. 13–14.
19. See Bank of England and ECB, *The Case for a Better Functioning Securitization Market in the European Union*, cit., p. 19.
20. See Albertazzi, Eramo, Gambacorta, and Salleo (2011) "Securitization is not that Evil After All," *Bank of Italy Working Papers*, February 2011, p. 3.
21. This, however, does not explain the validity of the choice to anchor the production of shadow financial instruments to the securitization of loans to the real economy, nor clarifies which controls are to be provided to prevent the effect of the credit transformation is carried out to the detriment of final investors; see Albertazzi, Eramo, Gambacorta, and Salleo (2011) "Securitization is not that Evil After All," cit., p. 39, where it is added that "this result is consistent with the idea that the choice of the loans to be securitized is made with the aim of overcoming asymmetric information problems. Beyond this, we provide new direct evidence that the structure of the securitization deals is also chosen with a view to mitigating the costs of asymmetric information. We find evidence consistent with the fact that banks, particularly at the early stage of the securitization market life, are strongly committed to building up a reputation that will allow them to ensure repeated access to this important source of funding."

    It shall be helpful to consider also the analysis on cross-country data made by these authors, because they show that the securitization of prime mortgages is a soundly functioning market, and—according to the paper—it should not be excessively penalized.
22. See Merusi (2009) "Per un divieto di cartolarizzazione del rischio di credito," *Banca borsa e titoli di credito*, I, p. 253 ff. and *Giustizia amministrativa*, p. 315 ff., where the author highlights the choice of non-facing this kind of financial activities, given that certain authorities were "investing part of the pension fund of its managers in hedge funds."
23. Furthermore, it shall be considered that an absence of capital requirements (calculated on the basis of credit risk) should have a competitive advantage for the shadow banking entities; see Kolm (2014) "Securitization, Shadow Banking, and Bank Regulation," *SSRN Working Paper*, no. 2521390.
24. I am referring not only to the new "retention rule," but also to the prospective interventions following the Directive no. 2010/76/EC, which improves the fight against the excessive and imprudent risk taking in the banking sector, and—in order to address the potentially detrimental effect of unfair

operations—a new form of supervision for credit institutions investing in re-securitization; see Recitals nos. 1, 3, and 24 of Directive no. 2010/76/EU.

25. See Adrian and Shin (2009) "The Shadow Banking System: Implications for Financial Regulation," *FRB of New York Staff Report*, no. 382,where it was anticipated that in the new, post-crisis financial system, the role of securitization will likely be held in check by more stringent financial regulation and by the recognition that it is important to prevent excessive leverage and maturity mismatch, both of which can undermine financial stability.
26. See Gorton and Metrick (2010) "Securitized Banking and the Run on Repo," *Yale ICF Working Paper*, no. 09-14, where the authors find that changes in the "LIB–OIS" spread, a proxy for counterparty risk, were strongly correlated with changes in credit spreads and repo rates for securitized bonds. They assume that these changes implied higher uncertainty about bank solvency and lower values for repo collateral. This raises concerns about the liquidity of markets for the bonds used as collateral led to increases in repo "haircuts": the amount of collateral required for any given transaction. They conclude that, because the declining asset values and increasing haircuts, the US banking system was effectively insolvent for the first time since the Great Depression.
27. See Mazzuca and Agostino (2011) "Empirical Investigation Of Securitisation Drivers: The Case of Italian Banks," *The European Journal of Finance*, Vol. 17, Issue. 8, p. 623 ff.
28. See Hansel and Krahnen (2007) "Does Credit Securitization Reduce Bank Risk? Evidence from the European CDO Market," *Working Paper*, March 20, available at http://www.cepr.org, where the authors analyze whether the use of credit risk transfer instruments affects risk taking by large, international banks.

    Furthermore, see Nijskens and Wagner (2011) "Credit Risk Transfer Activities and Systemic Risk: How Banks became Less Risky Individually but Posed Greater Risks to the Financial System at the Same Time," *Journal of Banking & Finance*, Vol. 35, Issue 6, p. 1391 ff. See also Uhde, Farruggio, and Michalak (2012) "Wealth Effects of Credit Risk Securitization in European Banking," *Journal of Business Finance & Accounting*, Vol. 39, where—using a unique cross-sectional dataset of 381 cash and synthetic securitizations issued by 53 banks from the EU-15 plus Switzerland between 1997 and 2007—these authors provide an empirical analysis of the time-dependent negative wealth effects of credit risk securitization announcements in European banking.
29. See Battaglia and Mazzuca (2012) "La relazione tra attività di cartolarizzazione e liquidità nelle banche italiane. Alcune evidenze empiriche dalla recente crisi finanziaria—Securitization and liquidity in Italian banks. Evidence from the recent financial crisis," *Banca Impresa Società*, p. 419 ff.
30. On the juridical relevance of the gentlemen's agreements, see Di Donna (2013) *Gentlemen's Agreements. Notazioni sulla fenomenologia degli accordi*, (Napoli) p. 12 ff.
31. See Picardi (2008) "Il 'Fondo comune di crediti' nel sistema della separazione patrimoniale," *Banca borsa e titoli di credito*, I, p. 76 ff.
32. See Rucellai (2012) "Cartolarizzazione sintetica e Credit Default Swap," *Giurisprudenza commerciale*, n. 3, p. 1, p. 371 ss.
33. It is important to once more recall the dynamics of "risk retention, transparency, and standardization," whose supervision must be entrusted to

authorities able to identify and manage the risks, and thus to limit the negative impact of a default of the shadow banking operations on the capital market; see Claessens, Pozsar, Ratnovski, and Singh (2012) *Shadow Banking: Economics and Policy*, cit., p. 22.
34. See Cossu—Spada (2010), "Dalla ricchezza assente alla ricchezza inesistente—divagazioni del giurista sul mercato finanziario," *Banca borsa e titoli di credito*, I, p. 401 ff.
35. This is a setting that allows us to grasp the limits of the techniques in question and the difficulties of a lawyer to deal with atypical forms of circulation of credit rights, especially with regard to cases in which there is the transfer of risks associated with the underlying assets (in terms of collection, origin and quality of the right acquired).All in all, in the shadow banking system, there are specific difficulties in managing *macro-interests* and, in particular, those with a collective character, as happens in the investment of savings and in the raising of equity; see Cossu and Spada (2010) "Dalla ricchezza assente alla ricchezza inesistente—divagazioni del giurista sul mercato finanziario," cit., para 6.2.1.
36. See Verde (2014) "Cartolarizzazione, patrimonio separato e limiti alle garanzie per gli investitori—Securitization, Separate Assets and Limits to the Guarantees for the Investors," *Rassegna di diritto civile*, p. 485 ff.
37. Moreover, it has been understood that any investor does not receive enough data to assume that his or her choices can be based on rationale decisions.
38. In addition, the financial instruments in question, as already mentioned, have to be traded in financial markets in order to be evaluated according to the criteria of fair market value (and, therefore, to produce the pro-cyclical amplification effects that the application of this method allows arrangers to realize). This makes it necessary that the placement of these instruments follows the rules laid down by the relevant regulatory framework.
39. See Ammannati (2012) "Mercati finanziari, società di rating, autorità ed organismi di certificazione," *Rivista di Diritto Alimentare*, 2012, f. 1, p. 17 ff., where the author clarifies that experience of the financial markets shows how the economic operators are not always structured on the rational assessment of information received, and then she specifies that the rating, as expressed in an alphabetical and easily intelligible mark, has partially changed its value in the market and is aimed at spreading systemic trust based on the CRAs' reputations.
40. See Partnoy (2006) "How and Why Credit Rating Agencies are Not Like Other Gatekeepers. Financial gatekeepers: can they protect investors?," *San Diego Legal Studies Paper*, no. 07-46, where the author describes how CRAs have changed radically since 1999, becoming more profitable than other gatekeepers and facing different and more important conflicts of interest. The author also highlights how CRAs are uniquely active in structured finance and particularly on collateralized debt obligations.
41. See Troisi (2013) *Le Agenzie di rating* (Padova), p. 152; see also Giudici (2011) "L'agenzia di rating danneggia l'emittente con i propri rating eccessivamente favorevoli?," *Le Società*, f. 12, p. 1451 ff.
42. See Troisi (2014) "Rating e affidamento dell'investitore: profili di responsabilità dell'agenzia," *Rivista Trimestrale di Diritto dell'economia*, II, p. 166 ff., where the author comments the decision of the *Federal Court of Australia,*

ABN AMRO Bank NV v Bathurst Regional Council [2014] FCAFC 65 related to this topic.

43. See Lener and Rescigno (2012) "Agenzie di "rating" e conflitti di interesse: sintomi e cure i," *Analisi Giuridica dell'Economia*, f. 2, p. 353 ff. for a deeper analysis of the conflict of interests.
44. See Troisi (2013) *Le Agenzie di rating*, cit., p. 151 ss. On this point, see also Principe (2014) "Presentazione," in Principe (ed.) *Le Agenzie di Rating* (Milano), p. VII ff., where the author explains the need to clarify the different issues relate to the rating assessments.
45. Regarding the CRAs, the European regulatory framework is actually composed by the Regulation (EU) no. 1060/2009, modified by the Regulation(EU) no. 513/2011 and the Regulation (EU) no. 462/2013, in which the oversight functions are attributed to ESMA. Instead, the Dodd-Frank Act (2010) regulates the credit rating agencies in the American markets, with a specific focus on their conflict of interests and their civil liability; see Acharya et al. (2010) *Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance* Vol. 608 (Hoboken, NJ); Alcubilla and Ruiz Del Pozo (2012) *Credit Rating Agencies on the Watch List: Analysis of European Regulation* (Oxford).
46. See Coval, Jurek, and Stafford (2009) "Economic Catastrophe Bonds", *The American Economic Review*, Vol. 99, Issue 3, p. 628 ff., where the authors confirm some of the ideas shown in Coval, Jurek, and Stafford (2009) "The Economics of Structured Finance", *The Journal of Economic Perspectives*, Vol. 23, Issue 1, p. 3 ff.; and Masera (2012) "CRAs: Problems and Perspectives," *Analisi giuridica dell'economia*, no. 2, p. 425 ff.

    See also Rablen (2013) "Divergence in Credit Ratings", *Finance Research Letters*, Vol.10, Issue 1, p. 12 ff., where the author examines a model in which a CRA operates in both the market for structured products and for corporate debt, and shares a common reputation across the two markets.
47. See Bolton, Freixas, and Shapiro (2012) "The Credit Ratings Game", *Journal of Finance*, Vol. 67, Issue 1, p. 85 ff.
48. See Malmendier and Shanthikumar (2007) "Are Small Investors Naïve About Incentives?", *Working Paper of the Department of Economics Harvard Business School*, UC Berkeley Harvard University, where the authors analyze how investors account for such distortions. Using the NYSE Trades and Quotations database, they found that small traders follow recommendations literally, and then present evidence on the returns of these strategies and discuss possible explanations for the differences in trading response, including informational costs and investor naiveté.
49. According to art. 8d, in case of use of multiple credit rating agencies, the issuer or a related third party shall consider appointing at least one credit rating agency with no more than 10 per cent of the total market share.

6 Non-Standard Operations in the Shadow Banking System

1. See Tucker (2012) *Shadow Banking – Thoughts for a Possible Policy Agenda,* cit., p. 6 ff., where it is highlighted that "these markets are vital to efficient capital markets."

2. See Beber and Pagano (2011) "Short-Selling Bans Around the World: Evidence from the 2007–09 Crisis," *Journal of Finance*, where the authors describe the choice of the global regulators on banning short-selling practices after the beginning of the crisis. This choice causes important variations on short-selling activities that generate various effects on liquidity, price discovery, and stock prices.
3. See Tucker (2012) *Shadow Banking – Thoughts for a Possible Policy Agenda,* cit., p. 6.
4. See ISLA, *Global Master Securities Lending Agreement*, January 2010, p. 3.
5. See Zhang (2014) "Collateral Risk, Repo Rollover and Shadow Banking," *LSE Working Paper*, SSRN no. 2496915 for a dynamic model of the shadow banking system that intermediates funds through the interbank repo market to understand its failing mechanism during the recent financial crisis.
6. See ISLA, *Global Master Securities Lending Agreement*, cit., p. 9.
7. See ISLA, *Global Master Securities Lending Agreement*, cit., p. 10. On this point see also Ali, Ramsay, and Saunders (2013) "The Legal Structure and Regulation of Securities Lending," *CIFR Paper*, no. 022/2014, where the authors outline the regulation of securities lending and short selling, including restrictions on short selling and the applicable disclosure requirements.
8. See ISLA, *Global Master Securities Lending Agreement*, cit., pp. 19–23.
9. See ICMA-SIFMA, *Global Master Repurchase Agreement*, April 2011, art. 1. See also Sakurai and Uchida (2013) "Rehypothecation Dilemma: Impact of Collateral Rehypothecation on Derivative Prices Under Bilateral Counterparty Credit Risk," cit., for a specific analysis of the practice where a derivatives dealer reuses collateral posted from its end user in over-the-counter (OTC) derivatives markets. Moreover, the authors highlight that, although rehypothecation benefits the end user through cost reduction of derivative trades, it also creates additional counterparty credit risk (since the end user may not receive the collateral back when the dealer suddenly defaults).
10. See Tucker (2012) *Shadow Banking – Thoughts for a Possible Policy Agenda,* cit., p. 6.
11. See Tucker (2012) *Shadow Banking – Thoughts for a Possible Policy Agenda,* cit., p. 6, where it is added that "it is also worth mentioning that some asset managers have no – zero – appetite to hold the underlying paper outright in the event of their counterparty defaulting, either because the assets are not covered by investment mandates or the fund managers do not know how to manage them, etc."
12. See Tobias and Shin (2009) *Money, Liquidity and Monetary Policy*, Federal Reserve Bank of New York Staff Report no. 360, *passim*.
13. See Tobias and Shin (2009) *Money, Liquidity and Monetary Policy*, cit., Abstract.
14. See Tobias and Shin (2009) *Money, Liquidity and Monetary Policy*, cit., Abstract.
15. See Constâncio (2012) *Introductory Remarks to the ECB Workshop – Repo Market and Securities Lending: Towards an EU Database*, available at http://www.ecb.europa.eu.
16. See Claessens, Pozsar, Ratnovski, and Singh (2012) *Shadow Banking: Economics and Policy*, cit., p. 22.
17. See Tucker (2012) *Shadow Banking – Thoughts for a Possible Policy Agenda,* cit., p. 7, who recalls the "Securities Lending and Repo: Market Overview and

Financial Stability Issues," and interim report of an FSB group chaired by David Rule.

18. See Claessens, Pozsar, Ratnovski, and Singh (2012) *Shadow Banking: Economics and Policy*, cit., p. 30, where it is summarized the empirical evidence that "around 50 to 70 percent of repo operations in the United States are cleared using TPR, with recent volumes approaching $1.8 trillion, much below the $3 trillion in 2008. The TPR market is a major source of wholesale funding for banks and dealer banks. The U.S. market is serviced by two clearing banks, Bank of New York and JP Morgan, both determined to be systemic by the Financial Stability Board. Pledged collateral is held with custodians and cannot be repledged. The TPR arrangement has several advantages: outsourcing collateral management to the TPR clearer, saving back- office costs for counterparties, and creating economies of scale, as securities are simply moved from one account to another within the clearer's books. It also allows market participants to exchange collateral baskets, outsource risk management (haircut calculation, margin calls, and substitution), pricing, and other ancillary tasks."
19. See Tucker (2012) *Shadow Banking – Thoughts for a Possible Policy Agenda,* cit., p. 7, because he said that "this has become apparent from the Lehman and MFG bankruptcies."
20. It is also closely connected with what was called the process-velocity (in circulating the money), but it is different from the above because—in the banking sector—intermediaries internalize this process (in their assets), while—in the financial market—agents achieve multilateral trade that amplify the possibility of capital circulation.
21. This follows the capacity to which correlates the judgment, clearly formulated in the economic analysis, that the offering must "refer to the enhancement of the credit quality of debt issued by the intermediary"; see Pozsar, Adrian, Ashcraft, and Boesky (2012) *Federal Reserve Bank of New York Staff Reports – Shadow Banking*, cit., p. 5.
22. See Draghi (1997) "Commento sub art. 46 d. lgs. 415 del 1996," in Capriglione (ed.), *La disciplina degli intermediari e dei mercati finanziari*, (Padova), p. 385.
23. We refer to the kind of problems raised by the *Statement by European Commissioner for Competition Margrethe Vestager on Tax State Aid Investigations*, cit, November 6, 2014.
24. On this point see Greene and Broomfield (2013) "Promoting Risk Mitigation, Not Migration: A Comparative Analysis of Shadow Banking Reforms by the FSB, USA and EU," *Capital Markets Law Journal*, vol. 8, no. 1, cit., where the authors outline the need for an increased analysis (by the supervisors) of shadow banking activities (instead of entity-based strategies, imposing bank-like regulation). This suggest the possibilities of a more effective identification of the risks' sources, a better uniformity in cross-border application of reforms, and to a greater flexibility in addressing financial innovation.
25. See Gorton and Souleles (2005) "Special Purpose Vehicles and Securitization," cit., where it is highlighted that SPVs become sustainable in a repeated SPV game, because credit institutions can implicitly commit to subsidize or bail out their SPVs when these would not honor their debts.

26. See Coval, Jurek, and Stafford (2008) "The Economics of Structured Finance," *Harvard Business School Finance Working Paper*, no. 09-060, cit., where the authors highlight the essence of structured finance activities in the pooling of economic assets (such as loans, bonds, mortgages) and succeeding issuance of a tranche (prioritized capital structure of claims), against these collateral pools. The authors show, as a result of this prioritization scheme, that many of the tranches are far safer than the average asset in the underlying pool.
27. See Lener and Lucantoni (2012) "Regole di condotta nella negoziazione degli strumenti finanziari complessi: disclosure in merito agli elementi strutturali o sterilizzazione, sul piano funzionale, del rischio come elemento tipologico e/o normativo?" *Banca borsa e titoli di credito*, I, p. 369 ff.
28. See Tucci (2014) " 'Interest Rate Swaps': 'causa tipica' e 'causa concreta'," *Banca borsa e titoli di credito*, II, p. 291 ff.; Tucci (2013) "La negoziazione degli strumenti finanziari derivati e il problema della causa del contratto," *Banca borsa e titoli di credito*, I, p. 68 ff.,on the problem of the Italian concept of contractual "causa," useful also for the analysis of the "consideration" of any swap.
29. See Tian (2011) *Shadow Banking System, Derivatives and Liquidity Risks*, MFA Annual Meeting, Chicago.
30. See Sakurai and Uchida (2013) "Rehypothecation Dilemma: Impact of Collateral Rehypothecation on Derivative Prices Under Bilateral Counterparty Credit Risk," cit., where there is an evaluation of the benefits and risks of derivatives rehypothecation. In particular, the proposal of a "derivative pricing framework" takes into account the presence of a bilateral counterparty credit risk, which should determine the rehypothecable collateral's amount.
31. It is useful to recall the analysis of Sakurai and Uchida (2013) "Rehypothecation Dilemma: Impact of Collateral Rehypothecation on Derivative Prices Under Bilateral Counterparty Credit Risk," cit., where there is a model in which two different types of collateral are used: the time delay of collateral posting and the rating-dependent collateral agreement.
32. See Classens, Pozsar, Ratnovsky, and Singh (2012) *Shadow Banking: Economic and Policies*, cit., Appendix 1. Over-the-Counter Derivatives: Central Counterparties and Under-Collateralization, p. 29
33. See ISDA (2014) *ISDA Comments – EU proposal on Structural Reform of the EU Banking Sector*, July, 2, p. 5.
34. See Piga (2001) "Do Governments use Financial Derivatives Appropriately? Evidence from Sovereign Borrowers in Developed Economies," *International Finance*, p. 189 ff.
35. It goes without saying that Greece is an example, and the Grexit is a risk that the shadow banking system cannot avoid; see Athanassiou (2009) "Withdrawal and Expulsion from the EU and EMU. Some Reflections," *Legal Working Paper* of ECB, p. 39 ff.
36. For an analysis of the *European building blocks*, see Capriglione (2013) *L'Unione bancaria europea*, cit., p. 111.
37. See Lemma and Haider (2012) "The Difficult Journey Towards European Political Union: Germany's Strategic Role," *Law and Economics Yearly Review*, p. 390 ff., where there is the following conclusion: "it remains the necessity to define new development trends of the European legal system, which

currently is hard-fought between the methodological austerity of the public finance (as framed since the Maastricht Treaty) and the auspices of a subsidiarian solidarism of the EU institutions (promoted by Mediterranean instances)."

38. See Montedoro (2010) *Mercato e potere amministrativo*, (Napoli) p. 13 and p. 319.
39. Illustrative in this regard is the diversity of ways in which the financial crisis occurred in Europe. Indeed, with regard to the effects of the latter on sovereign debt, it can be observed that Italy has failed to safeguard its balance by resorting to taxation, whereas other countries have instead requested external aid to its economy (i.e. Greece, Ireland, Portugal, etc.). It should be noted that—even if it had been adopted in the EMU (from the beginning), an austerity and rigor-oriented policy—there would not have been a solution to the structural problems, from ancient times, levied on Mediterranean countries (i.e. high levels of public debt, low tax revenue). This is because it seems plausible to assume that the cause of one of the above imbalances lies in the shortness of the time period granted to the states taking part to the monetary union to implement the economic and legal convergences necessary for a full harmonization. This suggests a possible justification for use, by the member states, of the negotiation of derivative financial instruments able to reschedule the financial burden (i.e. able to restructure public debt both in its interest and principal amount).
40. As a result, there is the need to verify the validity of the safeguards put in place by the system, to face the dangers of certain over-the-counter operations, privately concluded between states and international investment banks. The regulation must avoid these operations being resolved to the detriment of the states. In the absence of such safeguards, in fact, the Treasury would be exposed to the risks that—as we have seen—characterize the system under observation.
41. See Awrey (2010) *The Dynamics of OTC Derivatives Regulation: Bridging the Public-Private Divide*, in *Oxford Legal Studies Research Paper*, where the author "explores both the private and social costs and benefits of OTC derivatives and the respective strengths and weaknesses of public and private systems of ordering in pursuit of the optimal mode of regulating OTC derivatives markets."
42. See Capriglione, *Intermediari finanziari investitori mercati*, cit., p. 214–215.
43. In this context there is also the trouble of the unsolicited ratings on sovereign debts, see Troisi (2013) *Le Agenzie di Rating*, cit., p. 87 ff.
44. It is not rare to see this question in the press, see Frisone (2013) "Le insidie degli swap plain vanilla," *Il Sole 24 Ore*, November 9, p. 24.
45. See Anelli (1998) "La responsabilità risarcitoria delle banche per illeciti commessi nell'erogazione del credito," cit., p. 137 ff.
46. See, on this point, Lemma (2006) "L'applicazione del Fair Value alle banche: problematiche giuridiche e soluzioni," *Banca borsa e titoli di credito*, I, p. 723 ff.
47. See Monti (2000) *Manuale di finanza per l'impresa*, (Torino) p. 146, for an analysis of the forms in which these operations were designed in the beginning of the third millennium.

48. For a pre-crisis perspective, see Barth, Caprio, and Levine (2001) "The Regulation and Supervision of Banks Around the World: A New Database," *World Bank Policy Research Working Paper*, no. 2588.
49. See art. 449 "Exposure to Securitisation Positions" of the Regulation (EU) no. 575/2013.

7 Shadow Banking Risks and Key Vulnerabilities

1. Consequently, the creation of value made by the shadow processes is the profit of the arrangers, which is vulnerable by the effects of specific risks.
2. See *Report of the High-Level Group on Financial Supervision in the EU*, chaired by Jacques De La Rosiere, Brussels, February 25, 2009, p. 11.

   See also Troeger (2014) "How Special Are They? – Targeting Systemic Risk by Regulating Shadow Banking," where the author shows that the general policy goals of prudential regulation should legitimize an intervention in the shadow banking sector. In particular, the author concludes that a stricter regulatory treatment of financial innovation shall reduce the circumventions of existing rules and standards.
3. See Langfield and Pagano (2015) "Bank Bias in Europe: Effects on Systemic Risk and Growth," *ECB Working Paper*, no. 1797, where the authors argue that the phenomena arise owing to an amplification mechanism, by which banks overextend and misallocate credit when asset prices rise, and ration it when they drop, and then conclude by discussing policy solutions to Europe's "bank bias," which include reducing regulatory favouritism towards banks, while simultaneously supporting the development of securities markets; see also Espinosa, Vega, and Russell (2015) "Interconnectedness, Systemic Crises and Recessions," *IMF WorkingPaper*, no. 15/46 where the authors attempt to capture and integrate four widely held views about financial crises.
4. It must be considered that the regulation of this phenomenon identifies a significant moment in the process of evolution of the international regulatory framework, that—since the 1980s—the Basel Committee on Banking Supervision—acting as a forum for regular cooperation on banking supervisory matters—has brought deep transformations to the regulation of capital intermediation.
5. See Capriglione (1994) *L'ordinamento finanziario verso la neutralità* (Padova), p. VII.
6. This regulatory process has arrived to the "International Regulatory Framework for Banks," prepared by the Basel Committee on Banking Supervision (in June 2011), which introduces a comprehensive set of reform measures to strengthen the regulation, supervision, and risk management of the banking sector.
7. See Tyson and Shabani (2013) "Sizing the European Shadow Banking System: A New Methodology," cit., where there is the total amount of £ 900 billion.
8. See Knight (1921) *Risk, Uncertainty, and Profit*(Cambridge), where it is highlighted that "the difficulties ... arisen from a confusion of ideas which goes deep down into the foundations of our thinking."
9. See Acharya, Schnabl, and Suarez (2012) "Securitization Without Risk Transfer," *CEPR Discussion Paper*, no. DP8769, where the authors analyze

asset-backed commercial paper conduits, which experienced a shadow-banking "run" and played a central role in the early phase of the financial crisis of 2007–2009.

10. This is a dynamic shown by the recent crisis, see Anand Sinha (2013) *Regulation of Shadow Banking – Issues and Challenge*, cit., where it is stated that "these effects were powerfully revealed during the global financial crisis in the form of dislocation of asset-backed commercial paper (ABCP) markets, the failure of an originate-to-distribute model employing structured investment vehicles (SIVs) and conduits, 'runs' on MMFs and a sudden reappraisal of the terms on which securities lending and repos were conducted."
11. See Moreira and Savov (2014) "The Macroeconomics of Shadow Banking," *NBER Working Paper*, no. w20335, for an interesting macroeconomic model that centers on liquidity transformation in the financial sector. It shall be useful to take into account the idea that intermediaries can maximize liquidity creation by issuing securities that are money-like in normal times but become illiquid in a crash when collateral is scarce. Even if these authors call this process shadow banking, it can be considered that this is only a kind of shadow banking operations.
12. See O'Doherty, Savin, and Tiwari (2011) "Modeling the Cross Section of Stock Returns: A Model Pooling Approach," *Journal of Financial and Quantitative Analysis (JFQA),* where the authors find out how the benefits to model pooling are most pronounced during periods of such economic distress and recognize it as a valuable tool for asset allocation strategies.
13. See Briand, Nielsen, and Stefek (2009) "Portfolio of Risk Premia: A New Approach to Diversification," *MSCI Barra Research Paper*, no. 2009-01, where the authors confirm the benefits of diversification (in terms of less volatility) with a simple asset allocation case study, by comparing a 60/40 equity/fixed income allocation with an equal weighted allocation across eleven style and strategy risk premia.
14. See Anand Sinha (2013) *Regulation of Shadow Banking – Issues and Challenge*, cit.; see also the position of European Commission which said that "the 2008 crisis was global and financial services were at its heart, revealing inadequacies including regulatory gaps, ineffective supervision, opaque markets and overly-complex products. The response has been international and coordinated through the G20 and the Financial Stability Board (FSB)"; see European Commission, *Green Paper on Shadow Banking*, cit., p. 2.
15. See FSB, *Financial Reforms – Update on Progress to G20 Finance Ministers and Central Bank Governors*, April 4, 2014, p. 1.
16. See European Commission, *Communication from the Commission to the Council and the European Parliament, Shadow Banking – Addressing New Sources of Risk in the Financial Sector*, cit., pp. 3–4.
17. This is a reality analyzed by the European Commission that shows the negative externalities of a system qualified both by a cross-jurisdictional reach and an inherent mobility of securities and fund markets, see European Commission, *Green Paper on Shadow Banking – Frequently Asked Questions*, cit.

    See also Maimeri (2011) "Criteri di proporzionalità ed efficacia dei modelli di risk management," *Diritto della banca e del mercato finanziario*, f. 2, pt. 1, p. 241 ff., for an analysis of the Italian legislation on this topic.

18. See Adrian, Ashcraft, and Cetorelli (2013) "Shadow Bank Monitoring," *FRB of New York Staff Report*, no. 638, where the authors, by describing the characteristics of the shadow banking system and its interconnectedness with regulated financial institutions, call for a massive action of monitoring risks taking into account the recent efforts by the FSB.
19. See Campbel and Kracaw (1980) "Information Production, Market Signalling, and the Theory of Financial Intermediation," *The Journal of Finance*, Vol. 35, Issue 4, p. 863 ff.
20. It is, therefore, necessary to take regulatoryaction (of "hard law") that, avoiding outright bans, addresses the issues of market-based finance, according to the criteria of equity and efficiency.
21. See, on this topic, Antonucci (2009) "Regole di condotta e conflitti di interesse," *Banca borsa e titoli di credito*, 2009, f. 1, p. 9 ff.
22. See Luttrell, Rosenblum, and Thies (2012) "Understanding the Risks Inherent in Shadow Banking: A Primer and Practical Lessons Learned," *Staff Papers Federal Reserve Bank of Dallas*, no. 18.
23. See Bloise, Reichlin, and Tirelli (2013) "Fragility of Competitive Equilibrium with Risk of Default," *Review of Economic Dynamics*, p. 271 ff.
24. See Jobst (2010) "The Credit Crisis and Operational Risk—Implications for Practitioners and Regulators," *Journal of Operational Risk*, Vol. 5, Issue 2, where the author highlights the increased importance of operational risk underneath greater systemic risk concerns. In fact, from the author's point of view, the fallout from the financial crisis has demonstrated that many sources of systemic risk were triggered by vulnerabilities in operational risk management—which has not kept pace with financial innovation—and that there has been an excessive focus of regulation on prudential requirements, with a lack of identification of substantial operational risk in market-based liquidity transformation.
25. On the fees used in the practices, see Sciarrone Alibrandi (2011) "Le clausole di remunerazione degli affidamenti," *Analisi Giuridica dell'Economia*, f. 1, p. 169 ff.
26. One must take into account also the "traditional banking backstops," which, in the last century, was used to manage the banking risks; see Capriglione (2012) "Commento sub art. 5 d. lgs. 385 del 1993," cit., where the analysis of the supervisory goals allows to understand that only certain technical solution can be applied to the entities involved in "Shadow credit intermediation process." See also Luttrell, Rosenblum, and Thies (2012) "Understanding the Risks Inherent in Shadow Banking: A Primer and Practical Lessons Learned," cit., who highlight that "Any Financial institution that takes on maturity transformation faces the possibility of a running large numbers of depositors simultaneously demanding their funds, typically at a time of panic. Bank runs were commonplace in the nineteenth and early twentieth centuries, with thousands of banks failing in the 1920s and early 1930s alone."

    See also Acharya, Schnabl, and Suarez (2012) "Securitization Without Risk Transfer," cit., where the analysis of asset-backed commercial paper conduits shows the experienced shadow-banking runs, and their central role in the early phase of the financial crisis of 2007 to 2009. This analysis shows that regulatory arbitrage was one of the main motive behind setting up conduits. An this, because—according to these Authors—the guarantees were structured so as to reduce regulatory capital requirements.

27. See EC Commission, *Green Paper on Shadow Banking – Frequently asked questions*, cit.
28. We shall consider that the risks of an SPV are transmitted according to different paths, other than those abovementioned. We refer in particular to the contracts entered into with third parties in order to obtain liquidity guarantees or credit insurance. Moreover, at the economic level, it was alleged that "credit enhancement can come in the form of overcollateralization or external enhancement," hence the ability of the vehicle to manage its default risk (holding assets of higher value to that of the financial instruments issued) or to transfer it to the banks (which have granted credit lines) or insurance companies (which have subscribed a policy); see Luttrell, Rosenblum, and Thies (2012) "Understanding the Risks Inherent in Shadow Banking: A Primer and Practical Lessons Learned," cit., p. 25,
29. See Luttrell, Rosenblum, and Thies (2012) "Understanding the Risks Inherent in Shadow Banking: A Primer and Practical Lessons Learned," cit., p. 25
30. Penalizing, in the measurement of risk governance, it is the lack of data and news that can indicate, in detail, the actual reliability of the entities and their activities (hardly ponderable also in relation to credit, market and operational risks). In addition, there is the opacity of the evaluations of the risk of liquidity (in the short-term) and structural imbalances (in the long-term), to which is associated the lack of disclosure requirements on the financial leverage (including off balance sheet exposures). Consequently, it appears to be difficult to assess the overall risk exposure of the governance of the "shadow banking entities," whereas the absence of regulatory safeguards (acting as backstop) and patrimonial requirements adversely affects the ability to predict their systemic growth.
31. It is helpful to consider the "Recognition traditional securitisation of significant risk transfer" (according to art. 243, par. 4, and 244, par. 4 CRR), and to the use additional own funds requirements for securitisations of revolving exposures (art 256, par. 7 CRR), and to the calculation of risk-weighted exposure amounts under the IRB approach (or an Internal Assessment Approach, art. 259, par. 1 lett. c CRR) or with the *"look-through methodology"* (art. 259, par. 1, and par. 3 CRR).
32. We agree with Luttrell, Rosenblum, and Thies (2012) "Understanding the Risks Inherent in Shadow Banking: A Primer and Practical Lessons Learned," cit., p. 37 where it is highlighted that "to identify the major players in today's interwoven global financial-intermediation landscape, the FSB created a list of G-SIBs in 2011 and began in November to update it annually".
33. See Luttrell, Rosenblum, and Thies (2012) "Understanding the Risks Inherent in Shadow Banking: A Primer and Practical Lessons Learned," cit., pp. 38–39.
34. See Benigno and Romei (2014) "Debt Deleveraging and The Exchange Rate," *Journal of International Economics,* 93, p. 1 ff.
35. See Rule (2012), "Collateral management in central bank policy operations," in *Bank of England, Centre for Central Banking Studies Handbook*, no. 31 about the criteria used for collateralized lending of central banks, with regard to ECB and FED.

36. See Adrian and Liang (2014) "Monetary Policy, Financial Conditions, and Financial Stability," cit., for an analysis of monetary policy transmission channels and financial frictions that give rise to this trade-off between financial conditions and financial stability.
37. See Goodhart (2005) "Financial Regulation, Credit Risk and Financial Stability," *National Institute Economic Review*, Vol. 192, Issue 1, p. 118 ff.
38. See Adrian and Shin (2009) *The Shadow Banking System: Implications for Financial Regulation*, no. 382, Staff Report, Federal Reserve Bank of New York.
39. See Luttrell, Rosenblum, and Thies (2012) "Understanding the Risks Inherent in Shadow Banking: A Primer and Practical Lessons Learned," cit., p. 23.
40. See Lemma (2013) "Informazione finanziaria e tutela dei risparmiatori," in Capriglione (ed.), *I contratti del risparmiatore* (Milano), p. 259 ff.
41. See European Commission, *Green Paper on Shadow Banking – Frequently Asked Questions*, cit., where it is clarified that "shadow banking operations can be used to avoid regulation or supervision applied to regular banks by breaking the traditional credit intermediation process in legally independent structures dealing with each other. This 'regulatory fragmentation' creates the risk of a regulatory 'race to the bottom' for the financial system as a whole, as banks and other financial intermediaries try to mimic shadow banking entities or push certain operations into entities outside the scope of their consolidation. For example, operations circumventing capital and accounting rules and transferring risks outside the scope of banking supervision played an important role in the build-up to the 2007/2008 crisis."
42. This measure does not propose to deal with lending to households for the purposes of house purchases. Eligible lending to the non-financial private sector in the context of this measure thus excludes loans to households for the purpose of house purchases; see Decision of the European Central Bank of 29 July 2014 on measures relating to targeted longer-term refinancing operations (ECB/2014/34), para 2.
43. See BIS, *Central Bank Collateral Frameworks and Practices*. A report by a study group established by the Markets Committee (study group chaired by Guy Debelle, Assistant Governor of the Reserve Bank of Australia), March 2013, p. 5.
44. See BIS, *Central Bank Collateral Frameworks and Practices*, cit., p. 5.
45. See BIS, *Central Bank Collateral Frameworks and Practices*, cit., pp. 20–32, where it is highlighted that "as the ability to obtain market funding wanes or even vanishes, counterparties have a greater need to access central bank liquidity. In this environment, the opportunity cost of bringing less liquid assets to the central bank may fall, given that these assets are no longer as valuable in the market," whereas "in less volatile times, however, it seems that wider eligibility does not necessarily always attract less liquid collateral." Moreover, consider that, "for example, in Switzerland, more than 99% of all repo transactions in the prevailing interbank repo market are covered by SNB-eligible collateral."
46. See Bank of England, *Liquidity Insurance at the Bank of England: Developments in the Sterling Monetary Framework*, October 2013, p. 1, 4th edition.
47. See Benigno and Paciello (2014) "Monetary Policy, Doubts and Asset Prices, *Journal of Monetary Economics,* 64, p. 85 ff.

8 The Shadow Banking System and the Need for Supervision

1. Moreover, in Europe, the institutional model went beyond the public nature of stock exchanges and the pervasive presence of supervisors in the business of banking. Indeed, already Directives nos. 93/6/EEC and 93/22/EEC had clearly indicated the independent purposeful and propulsive activity of brokers and managers; see Capriglione (1997) "Presentazione," in Capriglione (ed.) *La disciplina degli intermediari e dei mercati finanziari*, (Padova) p. XIV.
2. See Draghi (1997) "Commento sub art. 46 d. lgs. 415 del 1996," in Capriglione (ed.) *La disciplina degli intermediari e dei mercati finanziari*, (Padova) p. 384 ff., where the author shows the guidelines of the reform process aimed by directive 93/22/EC and the new roles of the financial markets as private enterprises able to self-regulate their activities, within a competitive system.

   See also Draghi (2009) "Guido Carli innovatore," Speech at Accademia Nazionaledei Lincei, 16 gennaio 2009; Draghi (2010) "Modernisation of the Global Financial Architecture: Global Financial Stability," Remarks of the Chairman of the Financial Stability Board to the Committee on Economic and Monetary Affairs European Parliament, March 17, 2010, where the above ideas are referred to the recent financial crisis.
3. See Valentino (1996) "Decreto Eurosim: focus sul big bang del mercato finanziario italiano," *Le Società*, n. 9, p. 1006 ff.
4. See Draghi (1997) "Commento sub art. 46 d. lgs. 415 del 1996," cit., p. 389, where the author emphasizes the risk that the regulatory strategy was aimed to promote the "old regime" than new market as enterprises.
5. See Sepe (2000) *Il risparmio gestito*, (Bari) p. 31 ff.
6. See Posner (1993) "The New Institutional Economics Meets Law and Economics," *Journal of Institutional and Theoretical Economics,* Vol. 149, Issue 1, p. 73 ff.
7. In that way, a technique for cross-border operation was found, and it required the adaptation of markets to competitive criteria (due to the possibility for operators to transfer trade in the financial markets more convenient in terms of operational possibilities, quality and price); seePadoaSchioppa (1988) "Verso un ordinamento bancario europeo," *Bollettino economico della Banca d'Italia*, no. 10. p. 57 ff., where the author links the need for a cross-border opening to the contents of the Single European Act (SEA). See also Costi (1991) "La seconda direttiva di coordinamento: i principi," in Cesarini and Scotti Camizzi (eds) *Le direttive della CEE in material bancaria* (Milano) p. 67 ff.; Capriglione and Sepe (1997) "Banche estere operanti in Italia," *Enciclopedia giuridica Treccani* (Roma), IV, p. 12 ff.
8. See Draghi (1997) "Commento sub art. 46 d. lgs. 415 del 1996," cit., p. 388.
9. See Enriques (2005) "Conflicts of Interest in Investment Services: The Price and Uncertain Impact of MiFID's Regulatory Framework," *University of Bologna and ECGI Working Paper*, available at SSRN no. 782828, where the author predicted "that, as a consequence of the home country control principle (investments firms and banks will have to comply with their own home country rules wherever they conduct their business within the EU),

the MiFID will lead to *de facto* complete harmonisation of the rules on conflicts of interest: Member States will refrain from enacting further rules on conflicts of interest so as to avoid to put domestic firms at a competitive disadvantage vis-à-vis EC firms."

10. See Recital no. 61, Directive no. 2014/65/CE; see also Kirilenko, Kyle, Samadi, and Tuzun (2014) "The Flash Crash: The Impact of High Frequency Trading on an Electronic Market," *SSRN* Paper, no. 1686004, where the authors try to understand if, in a particular case, HFTs cause certain crash events or they can exacerbate the price movement by absorbing immediacy ahead of others.
11. See Gorton (2009) "Slapped in the Face by the Invisible Hand: Banking and the Panic of 2007," *SSRN Working Paper*, no. 1401882, p. 1, where the author admits that "many private decisions were made, over a long time, which created the shadow banking system."
12. See Cioffi (2010) "Persistence and Perversity: The Global Financial Crisis, the Failure of Reform, and the Legitimacy Crisis of Finance Capitalism," *Western Political Science Association 2010 Annual Meeting Paper*, for a wider analysis of this topic from a political science perspective.
13. See FSB (2014) *FSB Reports to the G20 on Progress in Reforming Resolution Regimes and Resolution Planning*, November 12, 2014, and its *2014 Global Shadow Banking Monitoring Report*, cit, p. 35, where it is announced that the FSB, through its workstream, will try to identify the relevant authorities with oversight of shadow entities, and then revision of availability of policy tools to address the identified risks.
14. See Hobsbawm (1995) *Age of Extremes. The Short Twentieth Century*, cit.; Capriglione (2010) "Un secolo di regolazione," in Capriglione (ed.) *L'ordinamento finanziario italiano*, cit., p. 53 ss.
15. See Demirgüç, Kunt, and Huizinga (1999) "Market Discipline and Financial Safety Net Design," *World Bank Policy Research Working Paper*, no. 2183, where the authors outline that "the safety net that policymakers design must provide the right mix of market and regulatory discipline—enough to protect depositors without unduly undermining market discipline on banks."
16. For the juridical fundaments of such a decision see Oppo (1990) "Commento sub art. 41 Cost," Capriglione and Mezzacapo (eds) *Codice commentato della banca*, (Milano) I, p. 3 ff.; Merusi (1980) "Commento sub art. 47 Cost.," Branca (ed.), *Commentario alla Costituzione* (Bologna-Roma), III.
17. See Posner (2007) *Economic Analysis of Law*, (New York) p. 419 ff. and p. 465 ff., for a closer look at the market for corporate securities, in IRS double dimension: risk and expected return.
18. See Vento (2011) "Shadow Banking and Systemic Risk: In search for Regulatory Solutions," paper presented at European Association of University Teachers of Banking and Finance Annual Seminar, Valencia, Spain.
19. To the hypothesized renounce of the authority to impose a constraint-system (on alternative markets) is added, therefore, also the realization of the limited extension (and strength) of the national systems (confined within the territorial boundaries of the States). This reflects the ideas of Montedoro and Supino (2014) "Il difficile dialogo fra economia

e diritto in una prospettiva istituzionalistica," *Rivista Trimestrale di Diritto dell'Economia*, p. 135 ff.

20. See Lemma (2013) *Etica e professionalità bancaria*, cit., p. 134 and, in line with the foregoing, see Solomon (2000) "Historicism, Communitarianism and commerce: An Aristotelean Approach to Business Ethics," *Contemporary Economic Ethics and Business Ethics* (Berlin) p. 119; Black (2001) "The Legal and Institutional Preconditions for Strong Securities Markets," *UCLA Law Review*, p. 781 ff.; Koslowski (2001) *Principles of Ethical Economy* (Dordrecht-Boston-London), p. 13; Latouche (2003) *Giustizia senza limiti. La sfida dell'etica in un'economia mondializzata* (Torino) p. 254 ss.; Stirner (2006) *The Ego and its Own* (Cambridge) p. 141 ff.; Wilmarth (2009) "The Dark Side of Universal Banking: Financial Conglomerates and the Origins of the Subprime Financial Crisis," *Connecticut Law Review*, vol. 41, no. 4.
21. See Morera and Rangone (2013) "Sistema regolatorio e crisi economica," *Analisi Giuridica dell'Economia*, fasc. Vol. 2, p. 383 ff., for a focus on the *Italian* regulation and crisis.
22. See Renne (2014) "Options Embedded in ECB Targeted Refinancing Operations," *Banque de France Working Paper*, no. 518, for a first analysis of the implementation of new refinancing operations aimed at supporting bank lending to the non-financial private sector (announced in June 2014). It is important to recall this paper because it focuses on the options embedded in these targeted longer-term refinancing operations. In particular, it shows how quantitative results point to substantial gains—for participating banks—attached to the satisfaction of lending conditions defined by the scheme.
23. See Mésonnier and Monks (2014) "Did the EBA Capital Exercise Cause a Credit Crunch in the Euro Area?," *Banque de France Working Paper*, no. 491.
24. And I shall highlight how this is helping in the introduction of the European System of Financial Supervision (so called ESFS), as well as the new supervisory policies (which ended, within the euro zone, into the constitution of the European Banking Union, so called EBU); see Atik (2014) "EU Implementation of Basel III in the Shadow of Euro Crisis," *Review of Banking and Financial Law*, vol. 38, p. 287, where the author—after having the possibility of selective adoption of new prudential rules—discusses the future of Basel III in the EU as the euro zone approaches a banking union.
25. See the case of *Bank of Credit and Commerce International* and the recent events of banking default; See Stiglitz (2010) *Freefall*, New York, p. 238 ff. and the "Plan de soutien aux banques," in *Intervention de M. le Président de la République*; as well as the "Special Resolution Regime" of the British "Banking Act," of February 12, 2009.

    See also *Financial Stability and Depositor Protection: Strengthening the Framework*, edited by BoE, HMT and FSA, Norwich, 2008.
26. See Enriques and Zetzsche (2014) "Quack Corporate Governance, Round III? Bank Board Regulation Under the New European Capital Requirement Directive," *Oxford Legal Studies Research Paper*, no. 67/2014, where the Authors argue that European policymakers and supervisors should avoid using a heavy hand, respectively when issuing rules implementing CRD IV provisions on bank boards and when enforcing them.

27. See Masera (2014) "CRR/CRD IV: The Trees and the Forest," *SSRN Working Paper*, no. 2418215, where the author reviews the new CRR/CRD IV capital regulatory framework and highlights the weaknesses that continue to characterise the new capital regulatory framework.
28. See Turner (2012) "Shadow Banking and Financial Instability," *The Harvard Law School Forum*, April 16, 2012 where it is highlighted that "because of these ... features, entirely free banking systems—such as existed in the USA before the creation of the Federal Reserve in 1913—were inherently unstable".
29. In this context, the EC, *Communication on Shadow Banking and Proposal on Money Market Funds*, September 4, 2013 is the basis for a new action plan aimed to restore sustainable health and stability to this sector by addressing the shortcomings and weaknesses highlighted by the crisis. This also explain why the Commission's approach regarding the shadow banking sector consists of delivering transparent and resilient market-based financing, while tackling major financial risks. Despite this, the risk of National will to admit regulatory arbitrages would greatly undermine the future of this proposal.
30. See Capriglione and Troisi (2014) *L'ordinamento finanziario dell'UE dopo la crisi*, cit., p. X.
31. See Ferrarini and Chiarella (2013) "Common Banking Supervision in the Eurozone: Strengths and Weaknesses," *ECGI—Law Working Paper*, no. 223/2013, where the authors highlight that certain the weaknesses of the ESFS could be tempered by an extension of the Banking Union to a sufficient number of non-euro countries under the regime of close cooperation.

    See also Ferran (2014) "European Banking Union and the EU Single Financial Market: More Differentiated Integration, or Disintegration?," *University of Cambridge Faculty of Law Research Paper*, no. 29/2014, for the early indication that some non-euro member states do want to join EBU notwithstanding certain lingering differences between their position and that of euro area member states provide an encouraging sign as to the value of those efforts.
32. See Eurogroup (2014) *Work Programme for the Eurogroup for the Second Half of 2014*, Brussels, June 19, 2014, p. 2, for the policy priorities of this institutions, which shall pay close attention to financial stability in the euro area as well as to the euro area aspects in establishing and operationalizing the Banking Union. It is clear, then, that Eurogroup will follow closely the comprehensive assessment and the stress tests, discuss its implications and certain aspects of the functioning of the SRM and SRF.
33. See EC, *The Juncker Commission: A Strong and Experienced Team Standing for Change*, Brussels, IP/14/984,September 10, 2014.
34. See Rixen (2013) "Why Reregulation after the Crisis is Feeble: Shadow Banking, Offshore Financial Centers and Jurisdictional Competition," cit.
35. See *Opinion of the European Economic and Social Committee Communication from the Commission to the Council and the European Parliament — Shadow Banking — Addressing New Sources of Risk in the Financial Sector*, COM(2013) 614 final, 2014/C 170/09, where it is written that "it notes delay and recommends intensifying and accelerating action to clarify the crucial issue of strengthening oversight of the shadow banking sector, where mention

is simply made of a few issues and the only future measure referred to is the review of the European System of Financial Supervisors (ESFS), to be performed by the Commission in 2013."

36. Cfr. European Commission, *Programme of the Conference "Towards a Better Regulation of the Shadow Banking System,"* April 27, 2012.; see also Vento (2011) "Shadow Banking and Systemic Risk: In search for Regulatory Solutions," cit.
37. See Rixen (2013) "Why Reregulation after the Crisis is Feeble: Shadow Banking, Offshore Financial Centers and Jurisdictional Competition," cit., for a criticism against the lack of regulation and oversight in the shadow banking sector, still too unsupervised after the financial crisis.
38. See Hill (2014) *Capital Markets Union – Finance Serving the Economy*, Brussels, November 6, 2014.
39. See Enria (2009) "The Development of Financial Regulation and Supervision in Europe," in Mayes, Pringle, and Taylor (eds), *Towards a New Framework for Financial Stability* (London), p. 59 ff.
40. See Pellegrini (2012) "Conclusioni," in Pellegrini (ed.), *Elementi di diritto pubblico dell'economia*, (Padova) p. 569.
41. See ESRB, *Annual Report 2013*, p. 8, where there is a subdued economic outlook: challenges facing a banking sector that is still fragile.
42. See Calabresi (1985) *Ideals, Beliefs, Attitudes, and the Law*, (Syracuse), p. 84, where the author cites his (1982) "The New Economic Analysis of Law," *Proceedings of the British Academy*.
43. See Ferran and Alexander (2010) "Can Soft Law Bodies be Effective? Soft Systemic Risk Oversight Bodies and the Special Case of the European Systemic Risk Board," *University of Cambridge Faculty of Law Research Paper*, no. 36/2011, where the authors outline that "strengthening and reinforcing are words that feature prominently in many policy statements relating to these institutional developments but many of these bodies, including the FSB and the ESRB, are designed to operate without legally-binding powers."
44. See Draghi (2013) "Foreword," in ESRB, *Annual Report 2013*, cit., p. 5.
45. See Pellegrini (2012) "L'Architettura di vertice dell'ordinamento finanziario europeo: funzioni e limiti della supervisione," *Rivista Trimestrale di Diritto dell' Economia*, p. 52 ff., where the author clarifies the distinction between macro-prudential supervision, assigned to the ESRB, and a micro-prudential supervision, delegated to the ESFS, a network of national authorities which cooperate with three new European authorities (EBA, ESMA, EIOPA).
46. See Troiano (2010) "L'architettura di vertice dell'ordinamento finanziario europeo," in Pellegrini (ed.), *Elementi di diritto pubblico dell'economia*, cit., p. 542.
47. The duty of sincere cooperation is provided in art. 1, para 4, Regulation (EU) no. 1092 of 2010 (for ESRB); See also art.2, para. 4, Regulation (EU) no. 1093 of 2010 (for EBA); art. 2, para. 4, Regulation (EU) no. 1094 of 2010 (for EIOPA); art. 2, para. 4, Regulation (EU) no. 1095 of 2010 (for ESMA).

    For further clarification, see Casolari (2012) "The Principle of Loyal Co-operation: A 'Master Key' for EU External Representation?," in Blockmans and Wessel (eds) *Principles and Practices of EU External Representation*, (The Hague), p. 11 ff.

48. See European Commission, *Green Paper on Shadow Banking*, cit., p. 6; on this point, see also Moreira and Savov (2014) "The Macroeconomics of Shadow Banking," *NBER Working Paper*, no. w20335, for an interesting macroeconomic model, useful to understand the importance of a global perspective in regulating the shadow banking.
49. See Enria, Angelini, Neri, Quagliariello, and Panetta (2010) "Pro-Cyclicality of Capital Regulation: s it a Problem? How to Fix it?", *Bancad'Italia Occasional Paper*, no. 74, where the authors use a macroeconomic euro area model with a bank sector to study the pro-cyclical effect of the capital regulation, and reach the conclusion that "a permanent increase in the capital requirement would have negative consequences on welfare" (p. 38).
50. See European Commission, *Green Paper on Shadow Banking*, cit., p. 6; this approach has been confirmed by FSB (2014), *Global Shadow Banking Monitoring Report*, cit., presenting the data from 25 jurisdictions and the euro area as a whole, covering about 80 per cent of global GDP and 90 per cent of global financial system assets.
51. See Schoenmaker (2012) "Banking Supervision and Resolution: The European Dimension," *Law and Financial Markets Review*, Vol. 6, 2012, p. 52 ff., where the author highlights that "National authorities aim for the least-cost solution for domestic taxpayers. This results in an undersupply of the public good of global financial stability."
52. According to European Commission, *Green Paper on Shadow Banking*, cit., one must take into account that the EU institutions have taken important actions to address shadow banking issues raised by certain securitization structures, with the effect to avoid that the shadow operations will breach the capital adequacy requirements.

    In this context, one must consider also that Directives Nos 2009/111/EC, 2010/76/EU, and Regulation (EU) no. 1205/2011, which seem aimed to improve the consolidation of securitization vehicles and the disclosure requirements, in order to improve financial market transparency.
53. See Vento and La Ganga (2009) "Bank Liquidity Risk Management and Supervision: which Lessons from Recent Market Turmoil?," *Journal of Money, Investment and Banking*, Issue 10, p. 78 ff.
54. I refer to the role of the "Euro Summit" (art. 12, Tr. SCG) and of the "Conference of the Representative" (art. 13, Tr. SCG); taking into account also the effect of the well-known "*balanced budget rule*" (art. 8, Tr. SCG).
55. See Pellegrini (2003) *Banca Centrale Nazionale e Unione Monetaria Europea*, (Bari), p 235 ff.
56. See Barbagallo (2014) "L'Unione Bancaria Europea," speech at NIFA—New International Finance Association, p. 3, where the authors assess the reason of this choice.
57. Underlying the above there is an idea of the unsustainable asymmetry between money and credit, see Masera (2013) *Moneta europea credito nazionale*, in *La Repubblica*, June 17, 2013. See also De Polis (2014) "Unione Bancaria e gestione delle crisi: un modello di Banca in trasformazione," *XII PAN European Banking Meeting*, p. 5 ff., for the pillars of banking crisis management.
58. See Ferrarini and Chiarella (2013) "Common Banking Supervision in the Eurozone: Strengths and Weaknesses," *ECGI—Law Working Paper*,

no. 223/2013, cit.; see also Austrin-Willis (2011) "EU and U.S. Solutions to Systemic Risk and Their Potential Influence on a World Trade Organization Approach," *Georgetown Law and Economics Research Paper*, where the author analyzes these two approaches to addressing systemic risk, which—in his opinion—differ greatly in both their specificity and the level of authority they entrust to centralized regulators. It is interesting that the idea of an "EU approach is better suited for adaptation to the WTO."

59. See Schoenmaker (2014) "The New European Banking Union Landscape," *Duisenberg School of Finance Policy Brief*, no. 35, where the author explains how the advance to Banking Union may creating a truly integrated EUM internal market.
60. See Hellwig (2014) "Yes Virginia, There is a European Banking Union! But it May Not Make Your Wishes Come True," *Max Planck Institute Collective Goods Preprint*, no. 2014/12 for a critical review of the prospects for European Banking Union as they appear in the summer of 2014.
61. See Henry et al. (2013) "A Macro Stress Testing Framework for Assessing Systemic Risks in the Banking Sector," *ECB Occasional Paper*, no. 152., where it is explained why the use of macro stress tests to assess bank solvency has developed rapidly over the past few years.
62. See European Commission, Press release, Brussels, January 23, 2014, p. 2.
63. See, on this point, Cassese, "Produzione delle regole e allocazione dei poteri di vigilanza nella dimensione europea," speech at the Congress "Dal Testo unico bancario all'Unione bancaria: tecniche normative e allocazione dei poteri," Rome, September 16, 2013.
64. It is well-known that ECB went beyond the euro system's regular open market operations, which consist of one-week liquidity-providing operations in euro (main refinancing operations, or MROs) as well as three-month liquidity-providing operations in euro (longer-term refinancing operations, or LTROs). This, with LTROs, provides additional, longer-term refinancing to the financial sector.

    It is important, for these purposes, to consider that in September 2014 the ECB announced two new purchase programmes, namely the ABS purchase programme (ABSPP) and the third covered bond purchase programme (CBPP3). The programmes will enhance transmission of monetary policy, support provision of credit to the euro area economy and, as a result, provide further monetary policy accommodation; see ECB, *Open market operations*, available at http://www.ecb.europa.eu.

    This is in line with the goal of Draghi (2014) *Monetary Policy in a Prolonged Period of Low Inflation*, Sintra, May 26, 2014, where he clarified that "an intermediate situation is one where credit supply constraints interfere with the transmission of monetary policy and impair the effects of our intended monetary stance. This would require targeted measures to help alleviate credit constraints."
65. See, on thispoint, Capriglione and Semeraro (2012) *Crisi finanziaria e dei debiti sovrani. L'Unione Europea tra rischi ed opportunità* (Torino) p. 100 ff., where the analysis is recalled of Belke (2012) "Three years LTROs—A first assessment of Non-Standard Policy," *Note of the Directorate General for Internal Policies—Policy Department: Economic and Scientific Policy*, April.

66. See Luck and Schempp (2014) "Banks, Shadow Banking, and Fragility," cit., where it is clarify that a safety net for banks may fail to prevent a banking crisis, but it may become too costly for the tax payers.
67. See FSB, *Recommendations to Strengthen Oversight and Regulation of Shadow Banking*, October 27, 2011, p. 16 ff.
68. See Zetzsche (2012) *The Alternative Investment Fund Managers Directive – European Regulation of Alternative Investment Funds* (Alphen and den Rijn), p. 21 ff., where the author highlight that "when the financial crisis came upon Europe... the light touch regulation, pro-market attitude for which the hedge funds group and the private equity group stood ran counter to the political interests of subjecting managers of AIFs to more stringent regulatory oversight."

    For an interesting point of view, see also Buttigieg (2013) "Negotiating and Implementing the AIFMD: The Malta Experience," *The Accountant, Spring 2014*, p. 34 ff.

    With regard to UCITs, see European Commission, *Greater Protection for Retail Investors: Commission Welcomes European Parliament Adoption of Strengthened European Rules on UCITS*, Brussels, April 15, 2014.
69. See Directive 2011/65/UE, Recital no. 94
70. See Regulation (EC) no. 2533/98; Regulation (EC) no. 24/2009; Guideline ECB/2008/31.
71. See Coulter (2013), "Capital Recycling and Moral Hazard in the Securitization Market," *2013 Financial Markets & Corporate Governance Conference*, where the author considers if rating agencies may mitigate the moral hazard problem of banks and propose a model to understand the interaction between a bank, a credit rating agency, and a continuum of investors, considering that the presence of a credit rating agency may still improve social welfare.

    On the contrary, the regulators seems oriented to further requirements to promote the maximization of social welfare, based on the retention models; see on this point the interesting analysis of Malekan and Dionne (2012) "Securitization and Optimal Retention Under Moral Hazard," *SSRN Working Paper*, no. 2038831, where the authors show that the optimal contract must contain a retention clause in the presence of moral hazard.
72. On the prospective for a cognitive-based approach to the regulatory process, see Di Porto and Rangone (2013) "Cognitive-based regulation: new challenges for regulators?—Regolamentazione su base cognitiva: nuove sfide per i regolatori?," *federalismi.it*, f. 20, p. 29 ff.; Rangone (2012) "Errori cognitivi e scelte di regolazione," *Analisi Giuridica dell'Economia*, f. 1, p. 7 ff.; Rangone (2012) "Il contributo delle scienze cognitive alla qualità delle regole—Behavioral science findings to improve the quality of regulation," *Mercato concorrenza regole*, f. 1, p. 151 ff.

    See also Siclari (2007) "Gold plating e nuovi principi di vigilanza regolamentare sui mercati finanziari," *Amministrazione in cammino*, where the author focus on the need for a level playing field in the financial markets.
73. See European Commission, "Proposal for a Regulation of the European Parliament and of the Council on 'Reporting and transparency of securities financing transactions'," Brussels, January 29, 2014 COM(2014) 40 final2014/0017 (COD) and, in particular, its explanatory memorandum,

where it is highlighted that "the crisis highlighted the need to improve transparency and monitoring not only in the traditional banking sector but also in areas where non-bank credit activities took place, called shadow banking."

74. See, on this point, Cassese (2009) *Il diritto globale*, (Torino) p. 17 ff.
75. See Lemma (2006) " 'Soft law' e regolazione finanziaria," *Nuova giuris prudenza civil ecommentata*, f. 11, p. 600 ff.; see also Gersen and Posner (2008) *Soft Law, U. of Chicago, Public Law and Legal Theory Working Paper*, no. 213, where the authors clarify that soft law consist of "rules" issued by bodies that do not comply with procedural formalities necessary to give the same an "hard legal status," but nonetheless these rules may influence the behavior of other law-making bodies and of the public.
76. See Claessens, Pozsar, Ratnovski, and Singh (2012) *Shadow Banking: Economics and Policy*, in IMF Staff Discussion Note.
77. See Ghosh, Gonzalez del Mazo, and Ötker-Robe (2012) "Chasing the Shadows: How Significant is Shadow Banking in Emerging Markets?", *The World Bank Poverty Reduction and Economic Management Network—Economic Premise*, where the authors specify that in select Central Eastern European countries, shadow banking grew rapidly until 2007, and then lost some of its share following the global financial crisis.
78. It is helpful to recall an analysis on the relations between the International financial centers and the viability of certain responses to the financial crisis of 2007–2009, and to the market global economic deceleration that ensued, agreed in 2009 by governments and financial authorities of the more developed countries. This, with particular regard to the ones that take into account the common strategies to overcome the crisis; see Santillan-Salgado (2011) "Offshore Financial Centers: Recent Evolution and Likely Future Trends," *Journal of Global Economy*, Vol. 7, Issue 2, where the author highlight the danger in getting to adopt measures that may dampen economic recovery by discouraging the flow of credit to the real economy.
79. See World Bank, *What the World Bank Is Doing*, available at http://www.worldbank.org, where it is highlighted that, in addition to its traditional tasks, the World Bank is also helping countries build resilience to external shocks associated with market volatility, by facilitating access to market-based risk management tools and capital market solutions.
80. One must take into account the position of Tobias (2011) "Monitoring Risk in the Shadow Banking System," *11th Annual International Seminar on Policy Challenges for the Financial Sector*, where it is assumed that much of the external shadow banking system can be supervised indirectly via banks or dealers, and then there is the conclusion that macro-prudential supervision includes the interaction of supervised institutions with shadow banking activities.
81. See also Sharma (2014) "Shadow Banking, Chinese Style," *Economic Affairs*, Vol. 34, Issue 3, p. 340 ff., where he tries to measure and understand the growth of shadow banks in China, by investigating how Chinese Government can best utilise the services of shadow banks without create systemic risks for the global financial system.
82. On the opacities of the "China's Shadow Banking," see Zhanh (2014) *Inside China's Shadow Banking. The Next Subprime Crisis?* (HI—USA), p. 95 ff.

83. See Ghosh, Gonzalez del Mazo, and Ötker-Robe (2012) "Chasing the Shadows: How Significant is Shadow Banking in Emerging Markets?," cit., p. 6.
84. See IFM, *How We Do it. Economic and Financial Surveillance*, available at http://www.ifm.org; see also G20, *Reforming Global Institutions*, Australia 2014, available athttp://www.g20.org, where it is highlighted that "reforming the IMF will ensure that it adapts to changing environments and remains strong, influential and representative of the global economy."
85. See Errico et al. (2014) "Mapping the Shadow Banking System Through a Global Flow of Funds Analysis," *IMF Working Paper—Statistics Department*, p. 37, even if it is still to be completed the data collection, in order to proceed, successively, to the verification of their reliability, as well as to identify the nodes interconnected of financial flows mentioned above (with respect to "each sector in each location").
86. One should also consider that the regulatory efforts need to focus on the sizable volumes of bank funding coming from non-bank asset managers via source collateral and institutional cash pools; see Pozsar and Singh (2011) "The Non-Bank-Bank Nexus and the Shadow Banking System," *IMF Working Paper—Research Department*, p. 14.
87. See IMF (2014) *Global Financial Stability Report. Risk Taking, Liquidity, and Shadow Banking: Curbing Excess While Promoting Growth*, cit., p. 74, where the Fund identifies the key drivers of the growth patterns of the shadow banking system and quotes the results ofJackson (2013) "Shadow Banking and New Lending Channels—Past and Future," *50 Years of Money and Finance: Lessons and Challenges*, Vienna: The European Money and Finance Forum; Caballero (2010) "The 'Other' Imbalance and the Financial Crisis," *NBER Working Paper*, no. 15636; Goda and Lysandrou-Stewart (2013) "The Contribution of U.S. Bond Demand to the U.S. Bond Yield Conundrum of 2004 to 2007: An Empirical Investigation," *Journal of International Financial Markets, Institutions and Money*, Vol. 27, pp. 113–136; Goda and Lysandrou (2014) "The Contribution of Wealth Concentration to the Subprime Crisis: A Quantitative Estimation.," *Cambridge Journal of Economics*, Vol. 38, Issue 2, pp. 301–327; and Lysandrou (2012) "The Primacy of Hedge Funds in the Subprime Crisis," *Journal of Post Keynesian Economics*, Vol. 34, Issue 2, pp. 225–253.
88. See Skeel (2010) "The New Financial Deal: Understanding the Dodd-Frank Act and its (Unintended) Consequences," cit., where the author highlights the implications for derivatives of the US regulation, will impose a new order (on this previously unregulated industry) and, in particular, it require that most derivatives shall be traded on an regulated trading venues (and backstopped by a clearing house or a central counterpart).
89. See Marchesi and Sabani (2013) "Does it Take Two to Tango? Improving Cooperation between the IMF and the World Bank: Theory and Empirical Evidence," *Centro Studi Luca d'Agliano Development Studies Working Paper*, no. 357, for an empirical analysis that shows that a Bank–Fund simultaneous intervention is beneficial to growth and that such beneficial effect is increasing with the willingness to coordinate of the two organizations. According to these Authors, this evidence would be in favor of a (more) centralized governance.

90. See Fitoussi and Laurent (2008) *La nuova ecologia politica* (Milano) p. 9, where the authors describe the economic self-regulation as the failure of an illusion.
91. See FSB, *2012 Global Shadow Banking Monitoring Report*, cit., p. 6; see also FSB, *2014 Global Shadow Banking Monitoring Report*, cit., p. 24, which confirms that systemic risks can spill over from shadow banking entities to the banking sector.
92. See FSB (2011) "Recommendations to Strengthen Oversight and Regulation of Shadow Banking," cit., p. 8.
93. The width of the "scope" therein corresponds to the option for a "process" that can be summed up in a monitoring framework for the shadow banking system able to identify and assess the risks on a regular and continuous basis; follows the input according to which the relevant authorities should have powers to collect all necessary data and information, as well as the ability to define the regulatory perimeter for reporting as well as the need that authorities should ex-change appropriate information both within and across the relevant jurisdictions on a regular basis to be able to assess the risks posed by the shadow banking system.

    In general, I shall take into account the opinion of Sepe (2014) "A Crisis, Public Policies, Banking Governance, Expectations & Rule Reform: When Will the Horse go Back to Drink?," *Law and Economics Yearly Review*, Vol. 3, Part 1, p. 210 ff., on the limits of current public policies.

    According to the above opinion, clearly there is a preference for a model of supervision based on the activities of scanning and mapping, in which the identification of the aspects of the shadow banking system posing systemic risk or regulatory arbitrage concerns will require a specific combination of intervention policies.

    In the end, I agree with the decision of FSB proceeding to the regulation of banks' interactions with shadow banking entities; see FSB (2011) "Recommendations to Strengthen Oversight and Regulation of Shadow Banking," cit., pp. 4–5 and 7–12.
94. See Dallas (2011) "Short-Termism, the Financial Crisis, and Corporate Governance," *Journal of Corporation Law*, Vol. 37, p. 264 ff., for an exploration of the reasons why financial and non-financial firms engage in short-termism with particular attention given to the financial crisis of 2007–2009.
95. See Posner (2007) *Economic Analysis of Law*, cit., p. 469, where the author explains the link between diversification, leverage, and debt-equity ratio and p. 473 on the challenge of "behavioral finance," which—as aforementioned—does not find any protection in the shadow banking system.

    It is important to recall the author's idea that "it is important that the law not assume that people are more rational than they are" (p. 475).
96. This is consistent with the approach of Shavell (2004) *Foundations of Economic Analysis of Law* (Cambridge), p. 473 ff., and, in particular, pp. 474–490, where there are the differences between the "certain enforcement" and the "enforcement with a probability."
97. See Draghi (2014) "Financial Integration and Banking Union," speech at the Conference for the 20th Anniversary of the Establishment of the European Monetary Institute, Brussels, February 12, 2014, where he discussed the

question whether the quality and comprehensiveness of integration matters. And, in his opinion, they do. Draghi concludes that there are costs which can arise from a type of financial integration (that is short term and reversible); or from having perfect integration in one market and fragmentation in another.

98. See Cooter and Ulen (200) *Law and Economics*, (Boston) p. 91, where there is an analysis of the key elements of transaction costs, and p. 95 ff. where the authors focus on the level of them and the appropriate legal rule.
99. See FSB (2011) "Recommendations to Strengthen Oversight and Regulation of Shadow Banking," cit., p. 12, and FSB, *2014 Global Shadow Banking Monitoring Report*, cit., where the overview of the global macro-mapping results shows with emphasis that the "Monitoring Universe of Non-Bank Financial Intermediation" continued to grow in 2013.
100. See FSB (2014) *Structural Banking Reforms: Cross-border Consistencies and Global Financial Stability Implications*, for a quantitative assessment of potential cross-border financial stability implications related to national structural banking reforms that have recently been implemented or proposed.

Index