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A CRITICAL ASSESSMENT OF THE EU MONETARY, FISCAL AND FINANCIAL REGULATORY FRAMEWORK AND A REFORM PROPOSAL

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A CRITICAL ASSESSMENT OF THE EU MONETARY, FISCAL AND FINANCIAL REGULATORY FRAMEWORK AND A REFORM PROPOSAL

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Abstract: Europe is at a critical crossroads for the evolution of its overall political and institutional design. Its founding goal, the creation of the internal single market, is consistent neither with the existing setup, nor with the direction recently impressed to that evolution. The inconsistency between the fiscal, monetary and financial regulatory framework and the construction of the single market cannot be solved by reforming the EU treaties simply because there is no agreement on the new design. Following Minsky's analysis, we single out the weaknesses and fragilities of that framework when the heterogeneous reality of the EU is taken into account. While constraints on fiscal and monetary reforms derive from the existing treaties, for financial regulation they come from mixing the international approach, which makes financial stability dependent on the financial morphology freely determined by financial markets, with the belief that the EU integration will come from the operation of private interests. We show that the current approach to financial regulation fails on both regards. Complying with the existing EU treaties, we propose a reform of ECB operations that would create the single financial market, at least for the euro area, and allow a reform of the existing fiscal rules capable of converting the current deflationary stance into a reflationary one. To complete the strengthening of the systemic cushions of safety, following the Minskyan approach a radical reform of financial regulation is presented that would combine higher financial resilience with finance more closely serving national economies. The three reforms would critically contribute to the consistency of the euro area design and make its membership attractive for the non-euro EU countries that currently strongly oppose entering into it, at least for those that do not want to go on playing the inshore-offshore game.

Key words: EU, Euro Area, ECB, fiscal rules, monetary policy, financial regulation

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1. INTRODUCTION

The present deliverable starts offering a critical assessment of the state and development of financial regulation in the European Union (EU), inserted in the wider political, institutional and policy context. If proof was required that public involvement with the financial system is critical for the entire economy and that a systemic view embracing the consistency of the whole spectrum of public policies is necessary, the recent crisis has abundantly provided for it.

Being a work in progress with no clear final design, the political and institutional set up of the EU is in many ways a peculiar construction. In addition, moving different parts at different speed, at each stage of that progress often the result is not just an incomplete but also an incoherent construction. This is particularly relevant when for some crucial aspect the degree of harmonisation among the member countries is pushed to its limit, as for the subset of countries that share the same currency and the same monetary policy while retaining a relevant part of fiscal sovereignty. The EU intervenes in the fiscal sphere dictating aggregate rules, or limits, on public deficit (near zero in structural terms) and debt (lower than 60 percent of GDP), thus restraining national sovereignty. If national government debts were constrained to zero, the euro area (EA) subset would be near to the US design, with the crucial difference that the EA does not have a central treasury with its discretionary policies on federal expenditure, taxes and debt. As we shall see, in this context a relevant inconsistency comes from the common central bank using a toolbox that is undistinguishable from that adopted by central banks of federal states. No consideration is given to the necessity of moulding the European Central Bank (ECB) to the peculiar design of the EA. In Section 2, we argue that whatever we may think of the existing EU and EA designs, whether they are faulty or just incomplete, they are not consistent with the Union's primary economic goal of creating a single internal market for capital, firms, goods and services. More than that, the EU/EA construction suffers from relevant fragilities whose solution cannot be left to an undefined long period. The reform proposals currently under scrutiny are not capable of producing a long-term viable design.

Section 3 briefly presents the Minskyan theoretical and policy underpinning of our analysis, linking the degree of financial fragility to financial morphology, to the regulatory framework and to the consistency of the entire policy toolkit.

Section 4 shows that, despite the recent reforms, the current international approach to financial regulation does not deal with the heterogeneities and endogenous fragilities exposed by Minsky, particularly relevant for the EU/EA. In addition, the quest for a higher regulatory and supervisory harmonization, up to the creation of the Banking Union (BU), might introduce further inconsistencies and fragilities. Significantly, many of them come from the wrong assumption that the design faces or will produce financial integration, i.e. a single financial market. We argue that this is not the case in the present and foreseeable EU/EA political and institutional framework due to dependence of financial operators on national sovereign conditions.

Section 5 presents a proposal for a different political, institutional and policy scenario, starting from the goal to create a single EA financial market. First, we propose to change the operational way in which the monetary policy is conducted, endowing the European Central Bank (ECB) with the creation of the single yield curve that is the necessary condition for the existence of a single financial market. Second, a different fiscal pact is proposed, capable of avoiding the current long-term deflationary stance of the EA fiscal policies. Third, we propose to adopt at the EU level a different regulatory and supervisory framework, following some of Minsky's prescriptions. Such reform would also remove the necessity to adopt the high degree of regulatory and supervisory harmonisation currently pursued and often resisted. Although the reforms here proposed would leave open several structural questions, they could re-position the EA/EU into a politically viable dynamic path.

Section 6 offers brief concluding remarks.

2. A POLITICAL AND INSTITUTIONAL PREMISE

While following the development of international standards, the current and still evolving EU financial regulatory framework conveys the idiosyncratic features that characterize the peculiarity of the EU construction. The latter comes from pursuing the goal of the internal

single financial market in a framework of a coalition of states, each retaining large doses of sovereignty.

The profound changes that have characterised the morphology, regulation and supervision of worldwide financial systems since the 1970s are part of a more general trend stemming from the end of the Bretton Woods order and the rethinking and redesign of public policies, in short of the role of the State. When, reflecting on the recent crisis, we ask what went wrong and the remedies we need, we should take a wider view embracing fiscal, monetary and regulatory policies, and the shift in the balance of the public-private partnership in favour of the markets. The historical members of the EU incorporated that shift in different forms and degrees, and politically motivated new accessions have increased the already large EU's systemic heterogeneity.[1]

This has made even more problematic the evolution pursued in the same period mired at accompanying the liberalisations deemed necessary to create the EU single market for firms, capital, goods and services with the setup of a coherent political and institutional framework. The peculiarity of the EU design comes from attributing to liberalised markets the task of integrating and homogenising such structurally diverse situations, with the EU and national authorities self-relegated to the role of producing and enforcing common rules. The bizarre and anti-historical idea was that economic integration would have paved the way to political integration, not the other way round. The fundamental task given to markets necessarily required that market-friendly rules should form the core of national systems, with each country inserting them into its own legal and institutional framework, and supplementing them with welfare enhancing measures as far as they did not distort the basic rules. The recent crisis has shown that markets may at best provide convergence but not integration, that convergence is fragile, that factors leading to divergence cause political de-integration and that market-friendly rules are among such factors.[2] A reassertion of the political primacy in the public-private partnership is long due, not just in Europe.

Because of the concomitant liberalisation at the world level, the advantages coming from belonging to Fortress Europe, which should have greatly benefited the adhering countries

and defended them from barbarian shocks, are not so clearly materialising for most EU members as it was expected in the fragmented international framework of the 1950s and 1960s. If we look at the substance of the movements of goods, services, capital and firms, in general a country belonging to the EU benefits only from a limited difference in the degree of fragmentation and only for a part of its foreign activities. This is also because the globalisation of the last decades was accompanied and favoured by the proliferation of international standards, which touch a wide range of economic and financial issues. The EU, as one of their major proponents, is bound to adopt them. Having the EU's legislation to follow the principles of subsidiarity and proportionality, the set of EU rules has been predominantly aimed at pursuing minimum not maximum harmonisation, thus limiting the homogenisation internal to the region with respect to international standards.[3] At the same time, critical issues, such as those relating to fiscal and judiciary matters, firmly remains in national hands. The result is that the difference between the regional and international integration of the EU countries is not significant as could be expected in a political union.[4] International agreements, like the TTIP, should further deepen international not regional integration. Therefore, the question has increasingly become which advantages the EU can provide to its members in such a globalised environment, a question that has become of vital relevance after the dismal performance of the EU construction during the recent crisis.[5]

To answer the previous question, the type of construction that the EU currently is and is planned to be is crucial. One way to look at it is considering the consistency of different ideas of Europe with different notions of the internal single market, which is a basic pillar of the Union. The necessary conditions for a genuine single market are single authorities and legislation on economic, financial, fiscal and social matters, which require a centralised nation state. A federal state leaves some discretion to adapt to local conditions, thus allowing for a certain degree of market fragmentation. A supranational union is a much looser arrangement where the cooperating countries retain much of their sovereignty, thus infringing at a higher degree the single market condition. The international institutions that constitute the public side of globalisation (G20, FSB, IMF, WB, WTO, OECD, etc.), whose goals are to discipline systemic competition among participating

countries and to decrease the fragmentation of world markets, *de facto* produce the same results as a loose union. For the financial sector, the G20, through the Financial Stability Board and other international standard setters, 'forces' member countries to adopt common international standards, thus producing a minimum harmonisation of rules and practices. Although the EU is a stricter model of union, we should ask what sort of single internal market is consistent with its current design and what realistically we can expect from future reforms. Moreover, doubts are mounting that the relative benefits coming from a feasible internal market constitutes a fair price to pay for having to resign the additional doses of sovereignty and margins of policy freedom that the EU/EA construction requires.

When tackling the above questions, we have first to admit that the EU design is currently in a state of confusion that cannot be simply justified by being a work in progress. Second, the inconsistencies of its current design are too serious to put their resolution into a long-term perspective. Let us then pause to reflect briefly on the direction the union design is taking. After the recent crisis, the old fiscal rules have been strengthened and procedures for macroeconomic imbalances violation introduced. The ban on fiscal transfers, recently violated, is reasserted. Transfers are limited to the few structural funds whose low effectiveness will be further restricted by the pressure to cut the EU balance. Structural reforms to liberalise domestic markets, the labour market in particular, are pushed throughout the entire area in order to spur productivity (or deflationary) gains. To think that on these bases the EU countries will converge socially and economically it is not just dreaming; it is bad political and economic theory. The EU is not the sum of Bavaria, Catalonia, Lombardy, London, and so on; each country has its costly 'south'. In centralised or federal states, regional transfers are the way to keep together parts with different production specialisation and hence productivity dynamics, even when high labour mobility is present. This is hardly an economic solution because social transfers rarely produce convergence; it is a political solution. Because the Greek islands and the Italian and Spanish souths, just to exemplify, have limits to host cheap tourism, and productivity gains are substantially absent in the tourist industry, long-term divergence in growth rates is the result and a continuous deflationary stance is necessary just to keep up with the current EA fiscal, monetary and macro prudential rules. A union built on the convergence on rules that

increase economic and social divergence is hardly a viable political long-term construction. The effects of the recent crisis on such construction have strengthened political positions that view higher benefits coming from freeing some of the union's countries from the EU/EA constraints, at the limit from exiting the union. Right or wrong that this may be, especially when considering the costs of regime switch, those positions cannot be left without an answer based on feasible systemic solutions.

Presently two positions prevail, a full-fledged political union and a looser union. When proposing a design for which the EU should be thought of as national systems competing under the same rules, Otmar Issing (2013, 2015) lucidly presents the second perspective. The problem, however, is what sort of rules and how strict, or fixed, they should be. For instance, the UK favours fewer and less strict rules. In the many fields covered by the EU legislation, the HM Treasury has commissioned a series of reports whose purpose is to evaluate not the overall net benefit coming from belonging to the EU, but the benefit coming to the UK from any single rule, and eventually whether that rule should be changed or the UK granted the opt out from it. Even if not all the other EU countries can count on the same expertise, we can image what could be the result if they performed the same exercise. Democratically granting to every country the freedom to opt-out from undesired rules, or making rules more flexible so as to include all national options, would not just produce a Europe *à la carte*, it would destroy the same idea of a single internal market, i.e. of an internal market appreciably more 'single' than the international one.

Somehow different is the solution for a looser union that the new European Commission is working on, mainly to weaken the probability of a Brexit. The solution is based on the strong reassertion of the principles of subsidiarity and proportionality, which means to repatriate national sovereignty on several crucial issues. We agree that the EU should not legislate on the minimum size of clams. But we are given no clue if that revision is following some general principles or will be driven by the heaviest hands, as experience suggests as being more probable. Because any set of rules is not neutral, especially for such a heterogeneous coalition of states, a minimum of democratic decency would require the EU authorities to spell out and submit to public debate what sort of new EU they have in mind.

Instead, the presidents of the European Commission, the European Council, the Eurogroup, the ECB and the European Parliament recently published a proposal on "Completing Europe's Economic and Monetary Union" (European Commission, 2015a). Being the EU a two-tier system, in the economic sphere notably for the single currency and for financial regulation and supervision, one limit of the proposal lies in its only concern with the subset of the euro countries. The dream of the five presidents is that once the problems of the euro area will be solved along the lines they propose, the EU non-euro countries will joyously enter the EMU. However, in the meantime they are working to increase the polarisation between the two tiers along undisclosed lines.

The above proposal builds on a previous report by the presidents of the European Council, the European Commission, the Eurogroup, and the ECB (European Council, 2012). In order to create a genuine Economic and Monetary Union (EMU) the report had proposed the creation of four unions over the next decade, a banking union, a fiscal union, an economic union and a political union. The four unions remain at the heart of the new proposal and the new appealing catchword is to shift the EU governance from rules to institutions. The fundamental role of old and new institutions should be to enforce what are now called "benchmarks for convergence" that would de facto add to the existing rules, especially fiscal ones, to which "could be given a legal nature" (Ibid, p. 5). Again, convergence relates to rules not to economic and social matters. Only at the end of the convergence process, set unrealistically at 2025, some degree of fiscal centralisation, particularly in the form of a European Treasury (ET), could be introduced. However, the extremely vague ET proposal is more smoke than substance because it would be banned from active policies and from producing long-lasting fiscal transfer inside the area;[6] it would thus act as a passive cushion for systemic shocks only interesting the entire area. If we recall the cost for the US Treasury to cushion the economic effects of the recent systemic crisis, we can hardly believe that the ET will have access to only a small fraction of those resources. Worth to note, the proposal does not mention that the strict enforcement of the existing EA rules, stricter than for the other EU countries, requires running for at least two decades large primary surpluses, meaning a long-term deflationary stance hardly appealing for incumbents and new entrants.

It is then clear that no fundamental regime change is foreseen in the above proposal, while the more rigid enforcement of a wider set of rules would further polarise the EA with respect to non-EA countries. Above all, the four unions will not solve the fundamental weakness of the euro construction, due to a single monetary policy not coupled by a single fiscal power. Much has been said on the financial integration of EU and Euro area countries before the recent crisis and the subsequent de-integration (see e.g. IMF 2013). As a matter of fact, what had occurred in Europe and globally was the internationalisation of capital flows, not integration if we reserve the latter term to structurally stable configurations. The recent crisis showed how fragile financial globalisation is. The expansion of cross-border finance inside the EA, much of it interesting wholesale markets, was due to the apparent disappearance of exchange and sovereign risks, and was ready to revert when those risks re-entered into market expectations. Absent a credible political union, we must speak of financial convergence and divergence, not of integration and de-integration. As argued in a recent paper (Tonveronachi, 2015a), the absence of a single fiscal authority impedes the existence of the set of single risk-free assets that is a necessary condition for producing financial integration, i.e. a single financial market.

The type and degree of political union necessary to make the EMU design consistent with the officially proposed reforms is in no way in the European agenda. Net of much rhetoric, the EU authorities offer a realistic assessment of the political and social fragmentation of the EU, to which the faulty euro design has greatly contributed. Instead of being a stimulus for political integration, as some of its proponents expected, the euro construction has produced political de-integration. Differently from the realism of their assessment, the reforms proposed by the EU authorities are prone to cause further tensions and crises inside the area. Not only these reforms do not touch the fundamental weaknesses of the design, but they also appear to be rather schizophrenic. While the euro area is tightening its rules and their enforcement, the other EU countries will variously repatriate significant doses of sovereignty. It is not, as some commentator argue, to allow a Europe at two speeds, but to allow speeding in opposite directions. A radical rethinking of the entire design is due, along different lines from the ones currently pursued.

3. THE MINSKYAN APPROACH TO FINANCIAL FRAGILITY AND POLICIES

Although the main reference of Minsky's analysis is the US financial system, where capital markets play a significantly larger role than in Europe, banking keeps the centre stage in his theory.[7] This is because in the existing institutional framework the liquidity and credit necessary to a dynamic system finally depend on the liquidity provided by the banking system, which is backed by the central bank's creation of primary liquidity. Moreover, the acceptance function and management of deposits render banks crucial actors in the payment system. These two features explain the systemic relevance of the banking system, i.e. why resilience with respect to its own internal dynamics and to shocks coming from other parts of the financial system and from the economy is systemically crucial.

Being physiologically speculative positions, banks' degree of fragility depends on the type and amount of the risks they assume. In addition to the standard features that make banks fragile like maturity mismatch, portfolio concentration, high leverage and funding volatility, Minsky focusses on the type of positions financed by banks, whether they are hedge, speculative of Ponzi positions; on profitability, which is the main factor for long-term resilience and crucially depends on the conditions created or permitted by regulation; and large dimension and high complexity, which make banks difficult if not impossible to manage and to supervise. In the short-term, banks' margins of safety depends on access to liquidity (it buys time) and on capitalisation (a low leverage decreases the funding risk and permits to absorb higher losses); in the long-term, sustained profitability is the cushion that permits a more resilient profile. Looking at the whole banking system, its dimension and complexity also marks the degree of systemic fragility.

However, both at the idiosyncratic and systemic level, bank profitability might present a trade-off with dimension-complexity.[8]

The increase of bank assets comes either from mergers and acquisitions or from internal growth. While both affect the dimension of individual banks, internal growth affects the degree of systemic bankarisation. Let focus on the latter. [9] If G_p is the potential rate of growth coming from internal resources, *RR* is the share of non-paid profits (retention

ratio), *ROE* is the return on equities, *ROA* the return on assets and *L* the leverage (defined as assets over capital), we may write:

$$(1)\quad G_p = RR \cdot ROE = RR \cdot ROA \cdot L$$

Bank managers are interested to maximise growth because their remuneration is variously linked to the dimension of the bank, *ROE* and bank's market capitalisation. In the last decades, an increasingly deregulated environment permitted bank strategies directed at using financial innovations to save on operational costs, to overcome constraints coming from the liability side, to increase trading activities and to save capital. These are the main causes that stand behind the huge increase of both bankarisation and of the systemic relevance of many individual banks.

The result is that high profitability is a factor for long-term resilience but also a factor producing fragility if it leads to larger dimensions and higher complexity. To the extent that regulation also permits that the search for profitability implies taking additional risks, the combination of these dynamic factors favours Minsky's endogenous accumulation of financial fragility and systemic crises.

Let us use equation (1) to look at the implications coming from Basel's bank regulation. If *C* is capital, *RWA* risk-weighted assets, *A* total assets, *MCR* capital minimum requirement and *RW* average risk-weight, we may write:

$$(2)\quad G_p = RR \cdot ROA \cdot \frac{1}{\frac{C}{RWA} \cdot \frac{RWA}{A}} = RR \cdot ROA \cdot \frac{1}{MCR \cdot RW}$$

Due to the many criticisms levelled against the methods used to compute risk-weights, Basel III has introduced a maximum leverage constraint, L_M, defined as:

$$(3)\quad L_M = \frac{A}{C} \leq 33$$

Assuming a prudent RR at 50%, applying the above leverage limit to the long-term average ROAs for the USA (1.3%) and the EU (0.5%) we obtain respectively G_p equal to 21.5% and

8.25%. Sensibly, the USA have adopted for its large banks a leverage of 16.7 that lowers G_p to 11%. Given the excess of the potential rate of increase of bank asset on any sensible level of the rate of growth of nominal GDP, the new limit on leverage maintains conditions favourable to an increase of bankarisation.[10]

Equation (2) may be expanded to take into account the different treatment reserved by Basel regulation to the banking and trading book. If the suffixes *b* and *t* stand respectively for the banking and the trading book, we may write:

$$(4) \quad G_p = RR \cdot ROA \cdot \frac{1}{MCR \cdot (RW_b \cdot \frac{A_b}{A} + RW_t \cdot \frac{A_t}{A})}$$

If the portfolio composition (A_b/A_t) is maintained constant, the rate of growth for the banking and trading books must be equal.

Let us now assume that as in Basel $RW_b > RW_t$. A higher value of A_t/A means a higher value of G_p, hence a higher potential rate of growth for both the banking and trading book. As a specialised institution, a commercial bank will have, for the same *RR* and *ROA*, a lower G_p. As long as the trading book is charged with a lower risk-weight, the universal banking model leads, *ceteris paribus*, to a higher G_p than the commercial bank, sacrificing the growth of the trading book in favour of the banking book. The result does not come necessarily from the undervaluation of risks in the trading book. Assuming that a lower risk weight measures them correctly, mixing commercial and investment banking produces a higher potential growth for the banking book. When discussing if and how to separate commercial and investment banking, the above implications of the Basel regulation should be taken into account. To give a quantitative feeling to the above arguments on the growth of banks assets and the influence exercised by the Basel regulation, the Appendix contains an exercise on one of Europe's largest universal banks, Deutsche Bank.

The fact is that Basel's parameters (*MC*, *RWs* and L_M) stemming from the risk-sensitive approach to capitalisation are not based on any sound metrics if judged from what should be a correct regulatory perspective. From a micro perspective, the aim, as clearly

expressed by the Committee when presenting Basel II, was to make the regulatory capital requirement converge to the economic capital computed by banks when using their 'best practices'. Unfortunately experience shows that best practices are not a synonym for good practices. From a macro perspective, Basel III is completely alien to problems such as excessive bankarisation.

Minsky offers, on the contrary, a sound metrics, both at the macro and micro level. Because idiosyncratic and systemic bank crises are normally the result of excessive expansion of bank assets, macro-prudential measures should ensure the rough pairing of the growth of bank assets and the growth of nominal GDP (G_Y). We can then write:

$$(5)\quad G_p = RR \cdot ROA \cdot L \cong G_Y$$

where G_Y is the policy target and *RR*, *ROA* and *L* should constitute, in different ways and with different features, policy tools.

In the policy mix, regulation should create a structural resilient environment capable of combining high *ROA* with low *L*. According to Minsky, it should be preferable to impose a common maximum leverage for the banking industry and to calibrate *RR* for each bank in order to constrain or to favour the growth of its assets.

Minsky's approach has several relevant implications. First, because financial crises are often the result of a protracted increase of leverage in both the financial and non-financial sector, the excessive indebtedness created during the financial expansion persists for a long period after the crisis despite efforts at deleveraging. This debt overhang reduces the speed of the post-crisis recovery. Focusing, as Basel regulation does, on bank leverage is not enough. Minsky's suggestion to control the growth of banks' assets also means controlling the growth of debt of their credit counterparties, thus exerting a strong influence on their aggregate leverage. Because quite often financial crises are linked to real estate mortgages, individual and aggregate leverage constraints in this sector could be reached by adding a safe limit to the debt to equity ratio.[11] Second, becoming a top-down macro prudential policy, bank regulation should be consistently coordinated with monetary and fiscal policies, participating to the production of a systemic cushion of safety by

containing the accumulation of endogenous financial fragility. Third, differently from Basel, no uniform treatment should be adopted for all banks and for all countries. The concept of the micro regulatory level playing field thus would disappear, replaced by a macroeconomic stability goal. Fourth, because profitability is the crucial variable for the future validation of positions, a structurally low ROA means structural fragility, also because it prevents to impose, as it happens in Europe, a low leverage ceiling. When discussing the Glass-Steagall Act, Minsky draws attention on how it attempted to create favourable structural conditions for commercial banking profitability. Fifth, in Minsky's scheme the effect of high profitability on the degree of bankarisation is kept in check by the RR policy.

Because in the past banks were left free to expand, often encouraged by supervisors, applying the previous limits to the growth of their assets would not solve the problems posed by existing systemically important banks (SIBs), which, as we have seen, Minsky opposes because they distort the bankruptcy mechanism and are impossible to manage and supervise. The recent crisis has made manifest that Minsky was right on all accounts.

However, the issue regarding bank dimension is a complex one and, unfortunately, empirical investigations are not very helpful. Traditionally, research has focussed on the economies of scale, with a sort of cyclicality in their results that intuitively appear to be linked to policy stances favouring or opposing large bank dimension. For instance, recent regulatory reforms on SIBs and proposals to cap bank dimension have reignited the debate, with empirical results that seem to contradict earlier findings on the limited size up to which economies of scale operate.[12] Banking is a dynamic industry and it is therefore affected by changes in technology, organisation and products; the above results may then vary with the passage of time. However, we find convincing that economies of scale exist for investment and wholesale banking, not much for traditional commercial and retail banking above a modest size. If, as it occurred in Europe in the last decades, large universal banks or bank holdings grew by further shifting towards investment and wholesale operations, much of the observed economies of scale (measured in terms of costs or gross profitability) might be the result only of a different operational mix.[13] We also suspect that the higher

fixed costs of compliance imposed by regulatory reforms have put at an increasing disadvantage the smaller dimension.[14] However, the private perspective on efficiency/profitability should not be the main drive for regulators.

In this respect, we face a more general issue, regarding the entire financial system. The fundamental idea behind the financial liberalisation of the last decades was to leave markets and firms free to operate and innovate; eliminating any barrier to competition was seen as the push for obtaining higher efficiency. Efficiency is thus seen as the foundation for long-term resilience and the way to lower financial costs for the non-financial sector. Lower volatility, fewer basis points for the bid-ask spread and lower margin requirements and haircuts for trading operations, cheaper access to mortgages, and so on, seemed for a while to confirm the validity of that approach. Unfortunately, that was happening in tranquil times, and no thought was given to the Minskyan endogenous accumulation of fragility that this approach was favouring. How the increasingly recurrent systemic and idiosyncratic crises of the last decades have shown, the goal of long-tern resilience was an illusion. With the non-financial sector paying the bill of the crises, the second illusion concerns the long-term benefits that accrue to the entire economy from the higher operational efficiency associated to the above liberalisation. The third illusion concerns the results in terms of systemic efficiency of the current regulatory approach, also in tranquil times. Doubts exist that the higher resources absorbed by the increased financialisation, which are mainly distributed as higher remunerations in the financial sector, benefit the non-financial sector, especially when the speculative game bringing relevant short-term gains distracts resources from more useful uses.[15] Non-financial firms too have increasingly participated to this game.

Minsky's approach adds fragility and crises to Tobin's argument (1984) on the worse outcome coming from improving operational efficiency when allocative inefficiency is present. Lower operational costs coming from liberalisation would produce higher allocative inefficiency. This analysis was the basis of Tobin's later proposal to put some sands into the gear (Tobin tax). Tobin's example for drugs stands also for the financial system: softening regulatory defences, drugs could become cheaper but the death toll

would become unacceptable. Leaving private interest to shape financial morphology and to dictate to regulators its own rules, leaving SIBs to pose systemic risks and distort market mechanisms renders the system less structurally efficient and prone to repeated costly crises.

Furthermore, as Henry Simons forcefully argued (Simons 1948), the idea to equate economic freedom, competition and a free society is deeply flawed; leaving firms free to become giant conglomerates distorts competition and the democratic political decision process. The power of the financial lobby to influence parliaments, regulators and supervisors is well documented.[16] Regarding competition, the adoption of the theory of contestable markets has finally led authorities to punish observed collusions and not the power to collude. This makes supervisors' intervention difficult and not timely. When, as recently observed, the authorities intervene, large damages are already done. If, as it appears, large economies of scale in the wholesale market finally produce high barriers to entry and a handful of global players dominating international derivative markets, given the existence of strong incentives to collude innovative solutions to evade rules should be the expected outcome. Adding, as in the USA, limits to the share of retail deposits is ineffective because SIBs are global players and tap wholesale markets.

The current regulatory approach towards SIBs is directed at leaving them free to increase further their dimension/complexity, eventually adding untested and largely discretionary regulatory penalties. The systemic danger they pose is now faced by means of a special resolution regime, in which private investors should bear the losses (bail-in). Among the many criticisms levelled against such a regime (on which more later), the difficulties by the US authorities to approve the recovery and resolution plans (living wills) of their largest banks show the unsolvable complexity posed by banks with thousands of national and foreign subsidiaries and branches, operating with various risk mixes. The result is that the objective of shielding taxpayers by means of this special resolution regime is just not credible.

The above approach also remarks the more general difference between accepting high banking complexity and thus imposing complexity to regulation and supervision, thus

making them less accountable and efficient, and the adoption of measures aimed at making more simple and efficient banks' management, regulation and supervision.

Summing up. When the systemic, social and political implications of the degree of bankarisation and banks' dimension are considered, intervening on both appears to be the most appropriate policy. We could adopt either a gradual approach, in which large banks would be forced to have a negative asset growth, or the systemically safer solution of dismembering systemic banks into smaller units.

4. LIMITS OF THE CURRENT APPROACH TO FINANCIAL REGULATION AND THEIR IMPLICATIONS FOR EUROPE

4.1 EU fragilities and the regulatory approach

Although the arguments developed so far pose questions to the generality of the financial systems, they are specifically relevant for Europe. General are, for instance, questions related to the regulatory level playing field, bankarisation, bank dimension/complexity and to eventual benefits coming from structural policies, such as ring fencing some crucial activities from riskier ones. All this assumes special relevance in the EU given the dominance of banking and the presence of relevant financial fragilities and heterogeneities.

We have analysed in a previous work (Montanaro and Tonveronachi 2012) the main features of the banking systems for the main EU countries; its results can be summarised as follows.[17] "The specificities of European banking may be synthetized under three main headings, all of which associated with relevant fragility factors: the systemic dimension of banking systems and large banks, which constantly increased in the last decades at a pace that often indicates the over-expansion of banking intermediation; the excessive dependency of funding from volatile sources; high leverages. Moreover, these fragilities show a wide dispersion among the European systems, being associated with deep differences in national banking systems. The strong national specificities coexisting inside the EU reveal themselves in structural indicators and in the prevailing business models characterised by differences in activity composition, profitability and efficiency. These divergences are at a great extent explained by large differences in national economies, by

operative traditions of financial institutions and by several institutional factors, such as the reliability and efficiency of the legal systems. A different incidence of financial and fiscal rules and different styles of supervision also played a non-marginal role" (Ibid, pp. 348-349). The same paper shows that Europe is exposed to these fragilities to a higher degree than other developed areas. Following Minsky on how the combination between higher profitability and lower leverage improves resilience, Figures 1 and 2 show the more fragile combination that characterises the EU with respect to the USA.

These fragilities, which we repeat characterise all financial systems but Europe in particular, have been approached by international standards following the regulatory level playing field dogma directed at the resilience of individual banks, with complete disregard of the specific features and needs of heterogeneous economies.

Since the 1970s, problems stemming from large international banks have dictated the regulatory agenda. The post-Bretton Woods new international (dis)order was left in private hands, with global financial players assuming the task of managing liberalised international capital flows. It was clear very soon, especially after the 1980s Latin America foreign debt crisis, that international banks exploited regulatory gaps and has serious deficiencies at managing the increased risks of the post-BW era, especially sovereign, interest and exchange rate risks.

The solution devised for internationally active banks by the club of the main developed countries was the adoption, starting from the early 1990s, of a common minimum regulatory standard concerning capitalisation, Basel I, based on a crude form of weighting credit risk. Two principles were adopted: the international regulatory level playing field and the sensitivity to risk of regulatory capital requirements. The later releases of the standard – I.5, II, II.5, and III – have broadened capital hedging to market and operational risks, reasserted with force the two initial principles and introduced a third one: the convergence of regulatory capital to economic capital. As far as the 'best practices' adopted by the industry to measure risks were deemed by the Basel Committee to be reliable, they would inform the regulatory methodology.

From the very start, the EU enlarged the concept of the level playing field extending Basel's capital regulation from internationally active banks to every type of banks.[18] In the absence of central regulatory and supervisory authorities, the harmonization of national regulations was seen as a first necessary step for the creation of the internal single financial market. As we have already noted, following the EU subsidiarity and proportionality principles, until the recent crisis the harmonisation was, however, kept at a minimum level.

4.2 The orthodox path of post-crisis EU regulatory reforms

The first reaction to the crisis was the attempt to raise the level of harmonisation, up to the maximum where possible, with the creation of the three European Supervisory Authorities (ESAs) for banks, capital markets and the insurance industry. The objective stated in ESAs' regulations is to produce by means of technical standards a single rulebook and a single supervisory handbook for all EU member countries. Since then, the reaction of some countries, the UK in particular, against maximum harmonisation has led to maintain significant national discretion in the adoption of Basel III (CRD IV/CRR) and in the mandated technical standards produced by the European Banking Authority. However, the effort to reach maximum harmonisation has been maintained for the EA by means of the new Banking Union (BU), to which also other EU non-EA countries may voluntarily adhere. The first pillar of the BU is the Single Supervisory Mechanism (SSM), managed by the ECB in conjunction with the national supervisory authorities, which should insure for the adhering countries the adoption of the single supervisory handbook. The second pillar is the Single Resolution Mechanism (SRM), managed by the new Single Resolution Authority in conjunction with the national resolution authorities, which should ensure the homogeneous and effective resolution of large banks by pooling in a single resolution fund the resources coming from the banks of the BU area. The third pillar, the single deposit insurance mechanism, has so far encountered the objection of some countries and up to now is only one of the reforms proposed in the report of the five presidents previously discussed.

However, the birth of the BU has not gone unchallenged. The UK is the more vociferous in asking that, apart from formal declarations, the BU and more generally not all the EA's initiatives infringe the principle of the single market established by the treaties for the

entire EU area, which in plain terms means not putting at disadvantage UK firms and markets. It is evident that the EU is facing an existential problem. The abandonment of the principle of an ever-closed union is part of the compromise that the UK requires for not abandoning the EU. The ideal for the UK, and other EU countries of more recent accession, would be a free area for capital, firms, goods and services while keeping common rules at a minimum level. Limiting the circulation of people inside the union, would help to distance further it from the conditions required by an optimal currency area. This is their conception of the single internal market. We have argued in Section 2 that this would not be a true single market, but a market only a few less fragmented than the international one. If the EA, with its BU and other perspective reforms, were to go on pursuing the goal of an ever-closed union and a true single market, it is not conceivable that EU non-EA countries could receive the same benefits as if participating to this union without paying its costs. As a result, the idea of a Europe at two speeds would not work as a permanent solution without treaties changes. Not just the changes invoked by the UK et al, but additional ones directed at eliminating the clauses requiring equal treatment for EU member countries that refuse to join the EA. Otherwise, the EA will not be able, admitting there is the will, to pursue the single market objective.

Abstracting for the moment from the difficulties facing a fully operative BU, is open to discussion whether the maximum harmonisation of rules and practices, which is the objective of the BU, constitutes the condition for creating the single financial market for the EU area. We have seen in section 2 that without the existence of a single risk-free yield curve we cannot have a single financial market. The point is whether although not being a sufficient condition, the maximum harmonisation of rules is a necessary condition.

We have already argued that the convergence on rules and not on results requires a degree of homogeneity, across countries and banks, absent both at the international level and inside the EU. The idea that banks are banks and markets are markets, independently of the institutional, geo-political and operational context, is just nonsense. Worse, experience shows that strictly pursuing their homogenisation severe allocative distortions and instability follow. It is then understandable that the maximum harmonisation pursued by

the current rules, which, by the way, are modeled and calibrated on a sample of large international banks, encounters the opposition of local legitimate interests, which were rendered more aggressive by the fallouts of the recent crisis.[19]

This opposition is further fuelled by the high costs and complexity, for the industry and supervisors, of the entire regulatory framework (especially Basel III), not matched by its perceived effectiveness. At least the mix of two of its founding principles, highly risk sensitive capital requirements derived from incorporating internal banks' risk evaluations, are increasingly challenged, not least by some prominent supervisor. Tests made on a sample of large banks, asking them to evaluate credit and market risks for the same portfolio using their internal models gave widely different results. Consistent with the goal of simplifying and make more effective the Basel machine, Fed's Daniel Tarullo proposes for SIBs to complement the simpler Basel standardised methods with systemic stress tests, already in use, and for non-systemic banks to simplify further the entire framework (Tarullo 2014a, 2014b). We would push standardisation and simplification a step further than Tarullo, arriving at adopting a simple non-risk sensitive leverage, adding stress tests directed at evaluating systemic risks of SIBs. In this way, supervisors would stop meddling with ineffectual and distortive micro evaluations of risks, leaving bank managers to do their job, and acquiring more sensibly the role of guardians of systemic stability. Although this would constitute an important step in the direction of the Minskyan regulatory approach, there would remain two important gaps: the permanence of SIBs and systemic banking systems, and the absence of a sensible metrics for minimum capital requirement due to the lack of connection with specific macro dynamics.[20]

A further costly and complicating factor are the two new liquidity provisions contained in Basel III. They have been generally welcomed, although not by the banking industry, as the long-awaited final touch for completing the Basel standard. That capital can hedge any type of risks, so that higher capital requirements could also serve to keep liquidity risks at bay, as regulators held for a long time, has been repeatedly shown to be nonsense by experience. Of the two provisions, the net stable funding ratio correctly, although baroquely, tends to limit maturity transformation and reliance on wholesale funding. On

the contrary, the liquidity coverage ratio, which requires a bank to hold a stock of high quality liquid assets large enough to balance in a stressed scenario the outflows of funds for a 30 days period, adds significant costs to banks in tranquil periods and is irrelevant when, as during the recent crisis, a systemic liquidity crisis hits. Adding new rules to already burdensome ones might appear to increase, anyhow, resilience. On the contrary, additional regulatory costs should be evaluated with caution because, as Minsky stresses, lower profits lead to higher fragility. When banking system are highly profitable but may count on low systemic defenses, such as lending of last resort, the liquidity coverage ratio could represent a useful additional regulatory measure. When banks are poorly profitable but may count on strong systemic defenses, that rule would only be harmful. This is a further proof of the damages that the level playing field produces when leading to compelling homogeneous standards.

Because European banks, especially large ones, have been particularly exposed to wholesale funding and are universal in character, the net stable funding ratio, although implying higher funding costs, is a net addition to their resilience. For the liquidity coverage ratio, the outcome is much less positive. First, the poor profitability of many European banks strongly militates against its adoption. Second, it is likely that it "will distort the prices of the assets that satisfy this requirement as usually happens with any division between regulatory and non-regulatory assets." (Kregel 2012, p. 16) Third, differently from what one might expect, the EA does not offer a solid level playing field for its lending of last resort. Because of the dependence of banks on national sovereign, which we have discussed in Section 2, and of the ECB applying haircuts on sovereign collaterals according to their rating, banks working with weak sovereigns are at disadvantage when using the ECB discount window and for computing the liquidity coverage ratio. The proposal we offer in the next Section for the EA would eliminate such disparities, strengthen the ECB lending of last resort and make the adoption of the liquidity coverage ratio, which we anyway oppose, less a cause of further divergence.

The last regulatory addition is the special resolution regime for SIBs, whose key attributes have been promoted by the Financial Stability Board (FSB). Its goal is to shield government

finance from the cost of their failure and to make their resolution a swift process, avoiding disruptions in the payment system and the financing of the economy. The resolution should be fast, the functions associated to the payment system and to the credit for the economy preserved, and its cost finally borne by investors following a specific seniority order. A special resolution fund, eventually linked to the deposit insurance fund, should supply the necessary bridge finance. Critical for a swift resolution process are ex ante resolvability conditions approved by the competent authority, consisting of resolution plans and enough residual book capital and liabilities on which to count. To avoid creditors' runs that would deplete such resolution resources, the resolvability conditions should include residual maturity conditions on liabilities. We have already noted that the task of designing effective resolution plans (living wills) for such large and complex bank is almost impossible. In addition, if properly enforced, the above conditions would increase the cost of capital and the average cost of funding. In the above resolution mechanism, systemic is only the nature of a single bank. The limited resources of the resolution fund (in Europe it would be 1 percent of total secured deposits) would not be enough to face a bank systemic crisis.

The EU directive on bank resolution (BRRD) follows with some modifications the key attributes promoted by the FSB.[21] Instead of adopting the FSB's distinction between global and national SIBs, the directive and the EBA technical standards follows the proportionality principle, which substantially means linking for all systemic banks the resolvability requirements to the case-by-case supervisory assessment coming from the first and second pillar of Basel III. In addition, because some liabilities admitted on a going concern basis would not contribute to loss absorption or recapitalisation in resolution, resolution authorities should carefully ponder on the necessity to increase resolvability requirements. In other words, cautious resolution authorities should fix requirements at a higher level than Basel III. For countries adhering to the BU, its second pillar, the SRM consisting in a single resolution authority and a single resolution fund, must follows the outlines dictated by the BRRD. The provision that permits to tap the European Systemic Mechanism when the resources of the resolution fund do not suffice shows that the concerns about the scarce resources of the latter are not unfounded. For SIBs, a high degree of cooperation between the SSM and SRM will be necessary, ex ante when setting the resolvability

conditions, and ex post when the SSM judges that recovery is not possible and proposes to the SRM to take care of the failing bank.

The combined effects of the new capital and liquidity requirements (Basel III) and the new resolution regime are not easy to assess. The above narrative shows that the various requirements interact because they finally concern the same balance sheet variables. For instance, if the resolvability conditions for SIBs were strict enough, they could exceed the Basel requirements. If too loose, they would be irrelevant. For the EU, given its proportionality approach, the joint calibration of these measures case-by-case renders even more difficult and discretionary the already arduous Basel-type task to supervise complex, heterogeneous and operationally changing SIBs. In other words, the enlargement of the regulatory perimeter to liquidity and resolution poses additional challenges to the risk-based one-rule-fits-all paradigm.[22] Worth to note, again regulatory complexity and probable ineffectiveness comes from wanting to preserve SIBs as they stand.

So far as banks are concerned, one of the goals of the EU when putting additional regulatory costs on banks is to incentivise the shift of some of their lending activities to capital markets, thus dis-inflating their systemic relevance for the financing of the economy.[23] That the current regulatory measures are pushing managers to modify banks' operational mix is already becoming apparent; the question is whether this is structurally going in the direction that the authorities want to promote. After having increased their trading book as the result of Basel I.5, an unwanted result for regulators we may suppose, many large banks are now cutting on trading and market making in favour of private banking and wealth management, which demand much less regulatory capital. This might make banks less fragile, but has little to do with financing the economy. True, in Europe banks are still restricting credit to the economy, but this comes from the dynamic effects that we have discussed before when regulation puts further limits to leverage and low GDP growth increases credit risks and decreases already dismal banks' profits. Anyway, changing entrenched habits in bank-customer relationships will not be easy.

In order to facilitate the access to capital markets by firms and investors and eliminate barriers across the EU, the European Commission has produced a proposal for a Capital

Markets Union (EC 2015b). Apart from the name, the proposal has nothing to see with a union, at least not in the same sense as the Banking Union. What the proposal contains is a sort of harmonised deregulation "with a view to maximising the benefits of capital markets and non-bank financial institutions for the wider economy. … A Capital Markets Union should move the EU closer towards a situation where, for example, SMEs can raise financing as easily as large companies; costs of investing and access to investment products converge across the EU; obtaining finance through capital markets is increasingly straightforward; and seeking funding in another Member State is not impeded by unnecessary legal or supervisory barriers." (Ibid, p. 4) The document recognises that national differences in insolvency and securities laws and tax treatment are formidable barriers to a significant harmonisation; and, we may add, their solution would require treaty changes that in the foreseeable conditions do not have any chance of success. We may suspect that the Commission is playing the old game of leaving markets free to arbitrate among different jurisdictions, hoping to push in this way Member Countries towards a deeper harmonisation than the Commission can politically impose. As the painful experience for banks has shown, this might mean convergence towards more fragile standards. If the EBA was considered inadequate to act as centralised supervisor, and the Banking Union was created also to remedy that gap, the absence in the Commission's proposal of an effective central supervisory authority shows not only that we cannot speak of a Union, but also that we could be led to experience again a painful low standard experience. Interestingly, while the Bank of England expresses the British opposition against a central authority (BoE 2015), the ECB, promoter and guardian of the single financial market, sees it as the necessary final step to render effective the entire design (Eurosystem, 2015). Our opinion is that, given the relevance for the British economy of the City of London, except in the case of a Brexit will be politically difficult to replicate the model of the BU creating a single capital markets supervisor for the Euro Area, eventually adding voluntary EU non-EA adhesions. Equal conditions for all EU countries established by the EU treaties will impede also in this case the eventual EA road towards maximum harmonisation.[24]

4.3 From sectors to system

Enlarging the discussion to capital markets opens the wider issue of the dynamics and morphology of the entire financial system. Because of financial innovations and the deregulation initiated in the 1980s, the model of specialisation forced by regulation, where banks were restricted to short-term financing and capital markets to work on the long-term segment, has been generally abandoned. The result is that each sector is allowed to work on a mix of short and long-term financing, thus also permitting a certain degree of substitutability between the two when one or the other sector is hit by a crisis. The Commission's proposal on the CMU seems to follow this approach: "stronger capital markets would complement banks as a source of financing, and would … make the financial system more stable by opening up a wider range of funding sources" (EC 2015b, p. 2). It remains to be seen what this will mean for an area dominated by large supermarket banks that tend to internalise a wide range of activities. However, apart from re- or de-specialisation, the ample process of financial deepening has also seen ownership and operational links between the typologies of financial firms increasing their interconnectedness.

A systemic discussion on financial fragility may usefully start from the quantitative and qualitative analysis proposed by Schinasi (2007) on the evolution of the assets of financial institutions for eight countries with most mature financial systems, for the period 1970-2000 (Figure 3). Schinasi shows not only the rapid growth of financialisation, but also that, as a percentage of GDP, monetary assets slightly declined, leaving non-monetary assets to explain the overall conspicuous dynamics.[25]

The financial system has become much more leveraged, in the sense that financial assets have acquired a much larger share with respect to the liabilities of the central bank and the banking sector. The reading of Schinasi's inverted pyramid in terms of liquidity leverage follows from Minsky's analysis on the increasing superimposition of interlinked financial layers with decreasing quality of liquidity. Liquidity layering means adding leveraged layers with inferior liquidity quality, or what, as we shall see in a moment, Kregel terms 'fictitious' liquidity. The amplification and propagation of a liquidity crisis starting in the upper layers depends on the ability and disposition of the lower layers to supply the liquidity needed to

stop deleveraging. When layering is associated with high leverage, as Schinasi's data show, the burden weighing on the lower parts of the inverted pyramid due to flights to higher quality liquidity increases to an extremely dangerous level.

As Kregel explains, "In a consolidated view of the financial system, every liability in the nonbank financial system, as well as the short-term liabilities of the nonbank nonfinancial system, are all ultimately dependent on the liquidity created by the deposit-taking, insured banks. This means that a failure to meet a payment commitment by any institution in the financial system will have an impact on all the others in the system, and will ultimately depend on the liquidity provided by the banking system" (Kregel 2012, p. 11).[26] As Minsky puts it, banks are *de facto* proxy lenders of last resort due to their 'monopoly' in accessing the central bank's lender of last resort facility.

According to Kregel, the deregulation of the last decades "validated a plethora of diverse structures that were introduced to provide additional liquidity into the system as a result of competition between commercial and investment banking. … Indeed, the recent crisis can be described as the collapse of "fictitious" liquidity created by these structures, the failure of the banking sector to provide sufficient liquidity to prevent the onset of a 'debt deflation' (what Minsky defined as the ultimate attempt to access liquidity by "selling position to make position" – that is, selling assets in order to redeem liabilities), and finally, the inability of the Federal Reserve to intervene sufficiently quickly to ensure the provision of liquidity for the non-bank financial institutions which could not find support from the insured banks." (Kregel 2012, p. 12).[27]

The eventual inability of banks to provide the requested liquidity in times of stress is also the result of financial deregulation. The latter permitted the deterioration of the traditional monetary quality of banks' liabilities due to larger recourse to wholesale funding, to the increase in the share of non-traditional instruments in banks' balance sheet, and to the increase of their interconnections with the higher layers, also due to various activities coexisting inside the same holding company (Kregel 2012, p. 15).

The fragility coming from the upper layers of liquidity further vindicate Minsky's assertion that "stability produces instability". In fact, the degree of leveraging of these layers depends not only on the increased complexity of financial structures, but also on being their operations mainly based on margins and haircuts that are gauged to the volatility of financial instruments. Thus periods of stability and low volatility, as happened in the recent pre-crisis period, lower those requirements to ludicrously low levels, produce large increases in the leverage of the layers of worst liquidity and prepare the conditions for the next crisis. This dynamic also implies morphological changes, with (de)regulation allowing the proliferation of new instruments and institutions in the name of market efficiency and enhanced liquidity. Regulators should be preoccupied not of what happens in times of tranquillity, but of the fact that innovation producing fictitious liquidity and ephemeral efficiency gains pave the way to increased fragility and instability.

The above analysis helps to single out four further issues that are relevant for regulatory purposes: the wrong target when regulation is only directed to micro-liquidity requirements; the role of nonbank intermediation, among which the so-called shadow banking; the "fictitious" nature of a large part of interconnections; and the need to focus on financial transactions.

After decades of unfruitful discussions on liquidity regulation, the chosen approach has been to introduce micro liquidity requirements. We have already briefly analysed the two liquidity ratios introduced by Basel III. Regulators should be concerned about conditions leading to systemic illiquidity; when that occurs, many assets that regulation considers liquid becomes illiquid; Basel liquidity coverage ratio is an ineffective umbrella in conditions of heavy rain.[28] If the liabilities of LTCM had been made up of only patient capital, the fund would have had time to orderly liquidate its assets with few market disturbance and with losses weighing only on its wealthy shareholders. The special vehicles that managed securitisation had illiquid assets funded by short-term liabilities, a clear example of an unregulated banking function. As Kregel suggests, many shadow institutions would not have been viable if properly regulated (Kregel 2012, p. 17); in fact, where supervision applied strict requirements for consolidation or vehicles' capitalisation, as in Italy and

Spain, no shadow banks of this sort flourished. The explosion of credit enhancement, which transformed the almost totality of CDO in assets with AAA rating, came from the fact that the guarantees on which they were based were not properly priced because not properly regulated (the case of the financial arm of AIG is a clear example). If money market mutual funds guarantee the minimum redemption value of their shares, they transform shares into deposits and they should then be treated as banks. With no guarantee, eventual problems come from market liquidity.

We have then three related issues: funding risk, shadow banking and market liquidity.

First, as Kregel argues, Basel's liquidity coverage ratio is "specious for as Keynes reminded, there is no such a thing as system liquidity, while it is possible to restrict the operation of institutions that provide liquidity" (Kregel 2013, p. 16, note 13). In other words, provision of short-term liquidity is the duty of the central bank, while regulation should curb the creation of "fictitious" liquidity.

Second, part of the problem comes from regulation distinguishing between pre-defined types of institutions instead of by functions (Kregel and Tonveronachi 2014). A functional approach to regulation, which ultimately targets specific functions wherever they are carried out and not specific institutions,[29] would cut shadow banking and render not viable a consistent part of the creation of "fictitious" liquidity (for several examples see Kregel 2012, pp. 17-18).

Third, a string of financial and technical innovations not met by re-regulation has built operational layers seriously affecting market liquidity. The large dimension of intermediaries has favoured the creation of dark pools that internally net clients' orders at prices that *should* reflect market quotations. In addition, a large part of contracts are over the counter (OTC), which means that they too do not go through the markets while apparently taking market prices as reference. The result is that if such large a mass of orders do not 'disturb' market prices, they do not however contribute to the so-called price discovery, which is left to a reduced pool of operations. In these conditions, and especially if organised markets are fragmented, it becomes easier to move the market, for marginally

relevant operators too. The case of high frequency traders that gain from moving the market by accessing information on the execution of transactions with nanoseconds anticipation has become subject of hot debate (Lewis 2014). Independently from the opinion of whether in normal times operations such as those referring to dark pools, OTCs and high frequency trading contribute to liquidity, the point is that these are forms of 'fictitious' liquidity because they disappear when systemic events hit. Regulators should ensure structural conditions for minimising the disappearance of liquidity in hard times and not let that the apparent creation of liquidity in good times finally produce endogenous Minsky processes leading to systemic liquidity crises.

Summing up. The sectional approach to regulation helps to lose sight of the perimeter and consistency of the entire regulatory and supervisory framework.[30] The principle that regulation should not hamper the financial sector's freedom to innovate means weakening attempts to rein on past, present and future innovations mainly directed at eluding regulation and creating fictitious liquidity. Not reining, but interfering. We have showed several instances in which regulation based on hedging risks and on incentives, i.e. prudential regulation, produces serious unwanted consequences.

4.4 An unorthodox regulatory ripple

Although international, regional and national authorities are not questioning the fundamental principles of the past approach to regulation and supervision, the recent crisis has raised their concern on leaving private interests with a too free hand in moulding the financial system.

The most relevant issue relates to structural reforms for the banking sector. As clearly explained in a report of the Financial Stability Board,

> Structural banking reforms have recently been implemented or proposed in a number of jurisdictions, which account for a material share of global banking assets. The most far-reaching reforms are in jurisdictions that are home to global systemically important banks (G-SIBs), as well as host to substantial operations of G-SIBs. The recent financial crisis highlighted concerns around the complexity and

> resilience of banking group structures. A broad aim of many structural banking reforms is therefore to introduce a separation between certain 'core' banking activities – such as payments and retail deposit-taking – and the risks emanating from investment banking and capital market activities. The reforms are designed to reduce risks to banking groups stemming from trading activities, limit the range of activities covered by the public safety net, and more generally to simplify legal and operational structures of complex banking groups, in order to enhance their supervisability and resolvability with a view to reducing systemic risk, enhancing depositor protection and limiting fiscal exposures. The reforms have mostly taken the form either of functional separation of types of financial activities through outright prohibitions, 'ring-fencing' or subsidiarisation; or of geographical separation via local subsidiarisation requirements for domestic operations of foreign banks. (FSB 2014, p.1)

Although not happy with the fragmentation produced by the above reforms and with their non-homogeneous design, the FSB admits that they are preferable to the post-crisis tendency of adopting stronger national self-defence measures. The justification of these structural reforms follows from the need to protect the payment system, reduce complexity, and improve supervisability and resolvability while reducing fiscal exposures. As we have seen, all these objectives were part of Minsky's approach to regulation. The question is if the above forms of specialisation are capable of producing the wanted result at a meaningful extent.

In the USA, the Volcker rule forbids bank proprietary trading and relevant connections with hedge and private property funds. The rule does not intend to protect retail deposits and the payment system from the riskiest activities, being only directed at risks considered not useful from a social perspective. More significantly, the USA has adopted the foreign organisation rule, which obliges relevant foreign subsidiaries to organise as intermediate holding companies (IHC). Because the IHCs are obliged to satisfy regulatory and supervisory requirements locally, the result is enhanced subsidiarisation (which also means limiting infra-group transfers). To the extent that the US are implementing, or

could implement, international standards with relevant modifications, grounded on the need to better serve their economy, a significant regulatory international fragmentation would ensure, thus weakening the level playing field principle.

In Europe, the earlier and the most wide-ranging reform adopted up to now is the ring fencing adopted in the UK, stemming from the Vickers report. The legislated rules are full of exemptions that also apply to individual entities and that are dealt with in the secondary legislation. Since the latter is yet in progress and, being subject to the political orientation of the government and parliament might change in the course of time, the evaluation of the rules must take into account this type of flexibility. The purpose is to ring fence retail activities, the definition of whose perimeter is subject to general and individual specifications, from the more risky investment ones. As a general rule, the legislation applies to UK-incorporated entities with more than £ 25bn of core deposits, including subsidiaries of foreign banks, but excluding branches of foreign banks and overseas subsidiaries of UK banks (on the latter point the Act does significantly depart from the recommendations of the Vickers report). As far as possible, the ring-fenced body should be legally, financially and operationally independent from the rest of the corporate group, also meaning that compliance with regulatory requirements is on a solo basis for the ring-fenced entity. Proprietary trading, market making and commodity trading are excluded in principle from the ring-fenced entity, but are allowed to be performed by other entities inside the same group. International wholesale banking, mainly referring to branches of banks incorporated outside the European Economic Area, is subject to recognition by the relevant UK supervisory authority following the equivalence principle and on the guarantee by the foreign authority on equal treatment and on the effectiveness of the resolution framework. With respect to the USA, the ring-fenced body is allowed a more restricted range of activities, but the separation is weaker remaining the forbidden activities inside the same group.

The Council of the EU published in June 2015 a proposal on banking structural measures, attempting to compose disagreements on the first draft of regulation produced by the Commission and with the declared purpose of homogenising at the EU level national

legislations. Following the Liikanen report, roughly the Commission's proposal was adding the Volcker rule to supervisors' discretionary decision on ring fencing, which, differently from the UK's general case, maintained market making inside the credit entity. It was left to the supervisors' evaluation whether investment and financial activities other than proprietary trading, such as risky securitisation and complex derivatives, should be separated. "The basic principle of the proposed regulation is that 'deposit taking institutions' within banking groups can only engage in these activities as long as the competent authority does not decide that they need to be performed within a distinct 'trading entity'" (EC 2014, p. 8). Preoccupied by the implications of the Commission's proposal for universal banking, France and Germany had signaled their dissatisfaction by adopting legislation only obliging proprietary trading to be carried out by a separate entity inside the group. On the contrary, the ECB was favourable to the general features of the Commission's proposal, but opposed the clause allowing a Member State to derogate from the separation requirements when national legislation adopted before 29 January 2014 had equivalent effects of the proposed regulation. In its new role as supervisor, the ECB was preoccupied to have to apply different and inconsistent national legislations. The recent Council's proposal substantially accepts the French and German position by separating and not by forbidding proprietary trading and leaving supervisors with discretion on ring fencing.

Overall, the unorthodox structural ripple is barely visible. The separation of the two banking cultures, trading/investment as distinct from commercial, whose unification has also been used to elude regulation, increase dimension and weaken competition, results hardly significant. Besides, ring fencing do not make the two components of the existing SIBs less systemic, while the proposed solutions adds wide discretionary powers to supervision and in some cases to politics that will increase regulatory uncertainty and distortionary lobbying activity. If inside the banking union future regulation will entrust the use of structural discretionary powers only to national supervisors, it is not clear whether the ECB, whose mandate is to supervise the large banks that are the object of structural regulation, will be able to produce and enforce a homogeneous rulebook.

More generally, the issue of separation and ring fencing poses two questions. First, on where regulators prefer to concentrate flexibility. The model of universal banking tends to concentrate flexibility within supermarket banks, leaving them to adjust operations and balance sheet according to their strategies.[31] Separation and ring fencing shift flexibility to individual and institutional investors, whose portfolios adjust on products and institutions according to their variable expectations. Regulators more accustomed to, and confident on regulating banks may prefer the universal banking model. Second, regulation and financial innovations may impede to reach the desired results. During times of tranquility, non-ring fenced institutions may offer to investors attractive substitutes with respect to heavy regulated ring-fenced banks. If a crisis hits the non-ring fenced sector, investors would run towards the protection of ring-fenced institutions, posing the systemic risks discussed above. In other words, focusing regulation on banks and leaving wide open the door to financial innovations permit both types of flexibility and creates the same environment that in the USA produced the overriding of the Glass-Steagall Act well before its formal abandonment (Kregel 2010).

4.5 Summing up

The EU financial system suffers from the same fragilities interesting the financial systems worldwide, although to a higher degree than other developed area, respect to which it further offers weaker systemic cushions.

The array of regulatory measures derived from international standards are shaped by the original sin of leaving private interests to shape financial morphology. This necessarily implies that policing financial institutions must adjust to what the authorities assume to be the best industry's standards. The result is to leave financial complexity to grow, with regulation and supervision trying to catch up an endogenous dynamics, thus becoming themselves more complex, discretionary and unaccountable.

The mantra of the regulatory level playing field too is a value derived from the interests of financial institutions, not following, as Minsky shows, from the general interests that a jurisdiction should follow. Equal rules do not produce equal results when dynamic and

structural heterogeneities exist. This is particularly relevant for the EU and more so for the euro area, when the assumed goal is to dictate and enforce for such a coalition of heterogeneous states a single rulebook and a single supervisory handbook. The fundamental fallacy of this approach is the absence of homogeneity that it necessarily presupposes. Confirmations of that fallacy are the mounting opposition to maximum harmonisation, that have left durable signs in the CDR IV/CRR and on the inability to dictate homogeneous rules for structural regulation.

The EU is subject to further inconsistencies, tensions and national diverging interests. While the treaties were written for a speedy convergence towards the Economic and Monetary Union, increasingly the institutional setup is shaped for a long-lasting but fragile two-tier system (EA and non-EA countries). Increasingly, countries that should adopt convergence plans refuse to join the EA and the BU. Short of the UK and other countries leaving the EU, the ever-closing union will become a further national option. The EU must then face two vital challenges: decide where to go and then adopt a consistent institutional framework.

5 A PROPOSAL FOR REFORMING THE EA MONETARY, FISCAL AND REGULATORY FRAMEWORK

One of the shortcomings of the EU/EA methodology of introducing reforms step-by-step is that it does not guarantee that each stage presents a consistent design. We have argued in the previous Sections that the current stage, also marked by how the existing treaties are operationally applied, presents crucial inconsistencies and weaknesses that render the entire construction particularly fragile. The purpose of the present Section is to present proposals for reforming operations at the ECB and for revising the EA fiscal rules without having to modify the existing treaties, but capable of increasing the coherence of the present stage of the EA construction. Adopting a comprehensive approach to the monetary, fiscal and regulatory framework, we then offer some general lines for reforming the EU/EA financial regulation.

5.1 Monetary and fiscal reforms

The first step is to make the management of the monetary system coherent with the EA fundamental objective of completing the single internal financial market. As we have already argued, this requires the existence of risk-free assets common to all EA financial operators, a role that cannot be assumed by public debt given persistent national fiscal sovereignties.

Our proposal[32] is to empower the ECB with this role through the issuance of Debt Certificates (DCs) embracing the necessary maturity spectrum. Although rarely used, DCs are already present in the ECB balance sheet and there are no statutory limits on the tenor and volume of their issuance. The ECB would buy in the secondary markets an equal amount of sovereign debt equal to the DCs issuance, according to national capital key, i.e. the share of ECB capital owned by each member country. The DCs would compulsory substitute sovereign bonds as collateral in banks' operations with the ECB. The DCs would add to the instruments with which the ECB manages the liquidity of the EA. In this way, all EA financial operators would face a single yield curve and manage their liquidity using a common set of risk-free assets. Furthermore, being the liabilities of the central bank truly risk-free, a new seigniorage would accrue to the ECB, which would pay it back to member countries according to their capital key. The fundamental condition for a single financial market would thus be created and this objective would per se overcome any legal opposition to the ECB sovereign bond acquisition. By the way, the reform would not require per se widening the goals of the ECB outside inflation targeting.

However, resistance against the reform could be justified in terms of fiscal moral hazard. Each member country would see a share of its debt withdrawn from the market and its fiscal space further expanded by its share in the new seigniorage and by the lower cost of new emissions.

In a recent paper (Tonveronachi 2015c) we explore the implication of the above reform for sovereign debt and deficit under revised EA fiscal rules that maintains the constraint on debt sustainability coming from the existing treaties. Formally linking the emission of DCs to the demand of liquidity coming from the market, the increase of nominal GDP (NGDP) would at the same time increase the emission of DCs and the acquisition by the ECB of

sovereign bonds. The relevant Debt/NGDP ratio would concern the reduced amount of debt left to market operators. Maintaining the 60 percent ceiling for the Debt/NGDP ratio, the paper shows that under reasonable hypothesis on the initial volume of the ECB bond acquisition, many EA countries would immediately find themselves under that ceiling. The more indebted ones, obliged by a zero deficit rule, would converge to it in much shorter period than following the existing rule requiring fiscal surpluses to reach the 60 percent ceiling in twenty years. The paper also shows that the new ECB operational mechanism would permit countries, once under the debt ceiling, to assume fiscal deficit while maintaining debt sustainability. Linking the acquired fiscal room to much needed public investments would change the existing deflationary fiscal stance into a long-term reflationary one, which would also help to shorten the adjustment process of the more indebted countries and enhance the growth perspective of the entire area.

The effects of the above reforms on the financial system would be substantial. First, they would structurally de-fragment the EA financial system. Second, they would render effective the single monetary policy. Third, producing a reflationary stance, they would help banks to gain genuine profits and thus overcome the difficulties created by the recent crisis without assuming additional risks.

5.2 Financial regulatory reforms

The higher institutional and policy consistency created by the above reforms in the monetary, financial and fiscal spheres must, however, be completed by a profound revision of financial regulation. The above reforms strengthen the systemic cushions of safety, but, as experience shows, they are not sufficient to put a brake to the endogenous accumulation of financial fragility and instability.

Because fragility is amplified by the ample room left to private interests to shape financial morphology, institutional reforms should aim at restricting privately induced morphological changes. As Minsky pointed out, "Institutions are both legislated and the result of evolutionary processes [...] We cannot, in a dynamic world, expect to resolve the problems of institutional organization for all time. On the other hand, we cannot always be

engaged in radically changing institutions. [...] Only as the inadequate performance of an economic and social order becomes evident and serious does it become necessary to engage in thoroughgoing reform. Such a time has arrived." (Minsky, 1986, p. 7). Afterwards, regulatory reforms were indeed adopted, but going in the opposite direction to Minsky's approach, whose general lines we have briefly recalled in Section 3. It is not a question of specific regulatory measures, but of the first principles that inform the entire framework.

Following Minsky's analysis, the first step is to adopt a functional perspective starting from debt, intended as any form of guarantee granted to counterparty. If financial institutions are unable to serve their debt, they fail. If they are supposed to be unable to serve their debt, funding disappears and illiquidity causes bankruptcy. This applies to financial institutions in general, not just banks. Two principles should be followed. First, financial institutions should be allowed to use leverage only if required by the physiology of their business, not as a means to amplify profits (and losses). Second, uniform regulation should apply to any leveraged financial institution.[33] The physiology of debt only applies to what Minsky calls the acceptance function, by which new credit is created and which from now on will be referred to as the banking function. In the present institutional setup, only those labeled as banks or credit institutions perform this function. In any case, any financial institutions allowed to create credit through leverage, for example by accessing the central bank's discount window, would be considered and regulated as a bank.

The adoption of the previous two principles would produce far-reaching consequences. First, it would not require authorities to adopt a taxonomy for differently regulating financial institutions, a taxonomy easily circumvented by financial innovations. Second, shadow banking would disappear and with it a large portion of fictitious liquidity. Third, securitisation could regain the transparency that had, and still has, in some European systems. Fourth, because financial contracts would be forbidden the use of leveraged instruments such as margins and haircuts, fictitious liquidity would take another fatal blow. Fifth, the issues of specialisation, separation and ring fencing would only concern putting bank's capital at risk in financial operations, which would anyway be much less

attractive. This would pose no problem once capital requirements for banking operations were separately satisfied.

The substantial residual issue would be how to regulate banks.[34] Minsky's approach discussed in Section 3 supplies the required perspective. Let us recall and discuss the main issues concerning dimension and asset growth, asset composition, liquidity and capitalisation.

Being one intended effect of the Banking Union that of increasing cross-border banking inside the EA, ceteris paribus the BU will exacerbate the systemic threat posed by large banks, a threat that, for the reasons already discussed, cannot be effectively countered by ring fencing and the recovery and resolution mechanism. We have also argued that the dimensional problem exceeds the economic sphere due to the distortions that it produces in democratic decision processes. The only solution is to dismember banks that trespass a given size, let us say 100 billion €.

In order to keep the dynamics of bankarisation within the physiology of credit creation, the growth of bank assets (that in steady growth equals that of capital) should be constrained to roughly equate in the medium-term the sustainable average growth of NGDP. Because under the present proposal only banks can assume debt, this means that the leverage of the entire financial system is kept under control. As we have argued in Section 3, the result is also to exert a strong influence on the aggregate leverage of banks' counterparties. The long-term growth of bank assets depends on profitability, leverage and the retention ratio. Minsky proposed to impose a common ceiling to leverage and then use the retention ratio to discipline the asset growth of each bank. The more resilient configuration comes from reaching the desired growth objective with higher profitability and lower leverage. Given that in the long-term bank profitability is crucially linked to the growth of the economy, the coordination and not independence of fiscal, monetary and financial regulatory policies is called for. Under the present proposal for the monetary and fiscal policies of the euro area, the creation of a truly single financial market would decrease the rigidity coming from applying a common monetary policy to a diversified area. The residual rigidity would be matched by the acquired flexibility of national fiscal policies aided by the flexible Minskyan

macro prudential regulation applied at national and case-by-case level. Besides, the reflationary stance coming from these reforms would help banks' profitability. The single supervisory mechanism of the banking union would be called to enforce the above general principles, not the same specific rules to all member countries and to all banks. If, as we argue below, regulation should do away with risk-sensitive requirements, focusing instead on an un-weighted leverage, the SSM would became a macro prudential authority, a sort of European Systemic Risk Board (ESRB) for the EA, but with operative powers. Given that under our reform proposals for the EA the more relevant coordination would be between fiscal and regulatory policies at the national level, the single supervisory authority could be shifted from the ECB to the ESRB as a unit with independent operative powers.

The issue of the composition of bank assets should be seen in the Minskyan perspective that the fragility of banks also depends on the fragility of the positions that they finance. Because long-term investments are speculative and often Ponzi positions, the problem they pose is not just one of liquidity but of excessive credit risk. The US capital markets shows that, apart from some IPOs, they contribute marginally to finance industrial investments, so that we cannot expect too much from the proposed Single Capital Markets Union. However, experience shows that mortgages are the type of long-term investments that in most cases cause financial crises.[35] The previous rule on constraining the growth of bank assets could be partially ineffective if real estate bubbles cause NGDP booms, being the two politically difficult to contrast. The addition of simple macro prudential rules, as the ones currently discussed and sometimes applied on ceilings to debt/equity ratio and debt service/income ratio, would help to keep credit risk within acceptable limits. This strengthens the case for changing the SSM into a macro prudential authority.

Individual banks, reduced to non-systemic dimensions and backed by the deposit guarantee, but with short-term debt financing longer-term assets, should be submitted to limitations on risks of concentration and maturity transformation. With credit and liquidity creation part of the same function, the physiological hedging of the position requires first of all to limit those risks, not to leave them wide open and partly hedge them with capital and short-term liquidity. The previous Section has discussed the costly useless introduction of

the Basel liquidity coverage ratio. On the contrary, a simplified version of Basel's net stable funding ratio would help to limit maturity transformation, also by making more costly to finance long-term positions.

Finally, the issue of regulating bank capitalisation. As noted above, the level of minimum capital requirement should follow from dynamic considerations and take into account the medium-term profitability of banks. Higher capitalisation should be required for systems with more profitable banks. Creating the conditions for profitable banks means, by maintaining their growth in check, higher resilience also because of higher capitalisation. Hence, the need not to burden banks with useless and costly regulation. This leaves the issue of how to define and compute minimum capitalisation. The previous Sections have repeatedly argued against the current Basel risk-sensitive approach and in favour of an un-weighted leverage ratio, possibly based on core capital. The elimination of the current enormous regulatory costs, rigidity and complexity, especially high for smaller banks, would help to fill EU banks' depleted coffers and leave bankers free to add qualitative to quantitative risk evaluation. Experience abundantly shows the ineffectiveness and the distortions coming from the attempt of regulators and supervisors to meddle with industry-based concepts of risk measures and to follow risk-sensitive capitalisation. If we reduce banks to non-systemic entities, instead of producing standards the Basel Committee could usefully use deeply revised versions of its Core Principles for Effective Banking Supervision and Corporate Governance Principles for Banks to organise courses and seminars for both supervisors and bankers.

In its own interest, the EU should take the lead to propose internationally a profound revision of the existing regulatory framework along the previous lines. Vested interests and deeply rooted beliefs will certainly oppose, also inside the EU, such a radical revision.

6. CONCLUDING REMARKS

Starting from the need to clarify the direction to impress to the Union discussed in Section 2, our monetary, fiscal and financial reform proposals represent an attempt to force

attention to a unitary revision directed at making the entire framework consistent with its declared goals.

Political fragmentation counsels to keep monetary and fiscal reforms inside the constraints dictated by the existing treaties. Where, as for regulatory matters, such constraints do not exist, more radical departures from the existing (dis)order are possible, especially if they repatriate genuine interests, such as a less fragile finance serving national economies. Adding to an inconsistent application of the Maastricht treaty the homogenisation of financial rules irrespective of their results will finally increase centrifugal forces and political and institutional fragmentation. As the end of Minsky's excerpt reported in Section 5.2 reads, "Only as the inadequate performance of an economic and social order becomes evident and serious does it become necessary to engage in thorough-going reform. Such a time has arrived."

[1] See the case studies on the evolution of national regulations in Kattel, Kregel and Tonveronachi (2016).

[2] This has been partly recognized for the financial sector. For a discussion of this issue see Tonveronachi (2015b).

[3] The Union can only act in a policy area if: 1) the action forms part of the competences conferred upon the EU by the Treaties (principle of conferral); 2) in the context of competences shared with Member States, the European level is most relevant in order to meet the objectives set by the Treaties (principle of subsidiarity); 3) the content and form of the action does not exceed what is necessary to achieve the objectives set by the Treaties (principle of proportionality). http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV:ai0017

[4] For the structure of the international trade of the euro area see O'Neill and Terzi (2014). Buch (2000) confirms empirical evidence that banks tend to follow their customers abroad.

[5] Because of the evolution of the world geo-political framework the need of a united Europe to prevent the repetition of bloody intestine wars has disappeared.

[6] In obedience to the existing treaties, this amounts to recognize that the EU is a coalition of states lacking a sufficient feeling of belonging to the same community.

[7] What follows is mainly based on Minsky (1977, 1986).

[8] Although complexity rises with dimension, it has also to do with the mix of activities internalised by a single institution and with its external interconnections.

[9] Obviously, banks may grow at a higher pace by means of external recapitalisations. Long period profitability on which internal growth depends is, however, a fundamental driver of total growth. What follows builds on Montanaro and Tonveronachi (2012).

[10] Also note that given the leverage limit, the minimum capital requirement determines the minimum average risk weight. For example, with leverage at 33, the Basel III common equity Tier 1 requirements at 8.5% (inclusive of the conservation buffer) means that RW cannot be lower than 35%. Adding the extra capital requirement of 2.5% for extra large, complex and interconnected G-SIBs the minimum RW becomes 27%. More generally, increasing MCR permits banks' internal models to compute as in the recent past low levels

of RW, thus making the leverage limit the reference for large banks' strategy. This explains the discussions on the calibration of the leverage limit, for both its level and method of computation.

[11] We will discuss in Section 5.2 how to extend the control of leverage for the entire financial sector.

[12] For a discussion of the literature, see Laeven et al (2014) and Weelock and Wilson (2015).

[13] Changes in accounting standards may have contributed by shifting into the balance sheet items, especially derivatives, previously reported off balance sheet.

[14] The recognition of the relevant compliance costs for community banks coming from regulatory reforms is leading the US authorities to adopt for them a lighter approach to regulation and supervision.

[15] Tobin was induced to write his 1984 paper also by the powerful attraction exercised by the financial system on the most brilliant university students.

[16] See e.g. Igan et al (2009), Ignatowski et al (2015), Jenkins (2011), Sherman (2009), Wolf et al (2014).

[17] For a detailed quantitative analysis, we refer the reader to the cited work.

[18] As a consequence of it, and of the success in the international adoption of Basel I, the later releases of the capital standard refer to banks in general, providing stricter requirements for global banks.

[19] On these issues see Tonveronachi (2015b) and the contributions presented in Kattel et al (2016).

[20] The debate on the necessity to increase the minimum Basel capital requirement, mainly promoted by Admati et al (2010), suffers from the same shortcoming. Why regulation should not adopt a standard minimum capitalisation of, say, 80 percent if the Modigliani-Miller theorem on the irrelevance of capital/funding composition, which is their battlefield, is roughly correct?

[21] For a fuller discussion of the FSB's key attributes and the EU directive, see Tonveronachi (2015b).

[22] The case-by-case supervisory assessment does not contradict the one-rule-fit-all paradigm because it follows the latter's risk sensitive rules on eventually raising capital requirements.

[23] The reference model seems to be the US system. In the EU, banking assets are around 300% of GDP, compared with 70% in the USA, and non-financial firms receive 80% of their finance from banks and around 20% from capital markets, compared with a roughly reversed proportion in the USA (Davies, 2015).

[24] For example and independently from the merit of the question, the General Court of the European Court of Justice recently judged in favour of the UK opposing the ECB's decision to supply liquidity to central counterparties with significant euro-denominated business only if based in the euro area. One of the UK arguments was that the rule goes against the principle of equality in the single market because rules would not apply equally to firms incorporated in different EU member states. As discussed before, the Court has followed the EU treaties' confusion between the effective and desired singleness of the EU financial market.

[25] The detailed analysis presented in Borio (2007) shows that the evolution discussed in the text has gone uninterrupted up to the beginning of the recent crisis.

[26] Kregel (2012) offers a detailed discussion of the liquidity links between banks and nonbanks.

[27] In the same page, Kregel recalls Minsky's statement that "every time the Fed protects a financial instrument it legitimizes the use of this instrument to finance activity; it thus prepare the way for the next expansion of liquidity and the next financial crisis".

[28] The micro approach to regulation had in the past induced regulators to play with the notion that higher capital could be a substitute for higher liquidity. As experience repeatedly shows, no sensible amount of capital or liquidity reserves is capable of avoiding the failure of an institution heavily exposed to short-term debt. That is why only the second Basel liquidity requirements make sense.

[29] The recent proposal by Persaud (2015) to base regulation on what he calls risk capacity would impose regulatory disincentives for holding risks where there is not natural capacity

for holding them. If we assimilate Persaud's natural capacity to the physiology of basic functions, the same risk would require different regulatory charges when held by institutions with different physiology. If regulatory disincentives were strong enough they would promote functional specialisation. A further implication is that supervisors should control that each basic function is carried out according to its physiology.

[30] The specialisation of the three European Supervisory Authorities and of US supervisors is coherent with the production of sectoral regulation. The recent changes adopted in the UK, institutionally separating prudential from conduct supervision, although not mending the way in which regulation is approached at the international and regional level could help supervisors to produce feedbacks on the overall regulatory consistency.

[31] The flexibility of universal banks to adjust to regulation discussed in Appendix 1 is just an example.

[32] For a detailed presentation of the proposal, see Tonveronachi (2015a).

[33] As far as we know, the second principle was first proposed by Tonveronachi and Montanaro (2009).

[34] The effect of the reform for non-leveraged institutions would be to decrease the amount of their financial operations, although not necessarily the amount of funds that they administer. In the new conditions created by the present proposal, regulation outside the leveraged sector would not imply measures significantly different from the ones currently discussed, mainly related to strengthen market liquidity.

[35] On this point, see Goodhart and Jensen (2015) and the literature they cite.

APPENDIX

This Appendix offers a schematic analysis of some pre-crisis indicators for Deutsche Bank in order to give a quantitative feeling of the arguments developed in the paper on the growth of banks assets and the influence exercised by the Basel regulation.

Table 1 refers to the pre-crisis period, from 1995 to 2007, a period characterised by the implementation of the so-called Basel I.5.

TABLE 1* – DEUTSCHE BANK

	1995	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*
RR	57,69	59,42	6,18	65,26	71,22	94,07	-379,0	-90,4	39,56	62,58	63,56	67,02	67,39
ROA	0,296	0,252	0,098	0,278	0,297	1,456	0,018	0,052	0,170	0,294	0,356	0,387	0,362
ROE	7,414	7,321	3,117	9,638	10,363	26,927	0,415	1,324	4,840	9,543	11,716	18,439	17,736
L	25,05	29,06	31,70	34,64	34,88	18,49	22,83	25,28	28,49	32,43	32,94	47,67	48,96
L/TA	55,45	51,32	49,10	44,40	41,52	29,60	28,32	22,06	18,04	16,23	15,26	11,53	10,33
RW	0,55	0,50	0,44	0,41	0,35	0,32	0,33	0,31	0,27	0,26	0,25	0,18	0,17
Ga	4,3	4,4	0,2	6,3	7,4	25,3	-1,6	-1,2	1,9	6,0	7,4	12,4	12,0

* Lev is leverage, computed as total assets/capital, L/TA loans/total assets and G_a the observed growth of total assets. In 2006, Deutsche Bank migrated from the US GAAP to the IFRS. The availability of both standards for 2006 only permits partial adjustments to the above variables. The adoption of the US GAAP standard for most of the period produces a significant undervaluation of leverage (in 2006 L= 47.67 for IFRS and L=31.88 for GAAP). Data source: Bankscope.

The introduction by Basel I.5 of bank internal models for computing market risks led to lower risk-weights for the trading book with respect to the banking book and produced the observed negative and highly correlated trends for net loans/total assets and average risk-weight. It also led to an increase of leverage. As expected, the growth of assets is positively

related to leverage, profitability and retention ratio (table 2). Worth noting, the annual average rate of growth of assets is above 13 percent, despite the negative rates for 2001 and 2002 and despite the extremely low ROA with respect to the bank's international peers.

TABLE 2 - PEARSON CORRELATION COEFFICIENTS[35]

NL/TA - RW	0,96
RW - Lev	-0,54
Lev - Ga	0,38
ROA - Ga	0,20
RR - Ga	0,56

For the years in which data are available (2010-2014), a rough exercise permits to appreciate how the different Basel treatment for the banking and trading books affects the overall potential growth rate of the bank. We have attributed the *RWA* for credit risk to total loans, and the *RWA* for market risks to total securities. The leverage for each function is computed applying the minimum regulatory 9% of common equity.[35] Lacking specific book values for *ROA* and *RR* we attribute to each book their overall values. Table 3 shows for the average of the 2010-2014 period how each book would have performed in isolation and the result in term of the universal book.

TABLE 3 – DEUTSCHE BANK, AVERAGE 2010-2014

	A	***RWA***	***RW***	***Leverage at 9% of capitalisation***	***ROA %***	***RR %***	***Gp standalone %***	***Gp universal %***
Loans	404726	248305	0,61	18,11			0,13	
Securities	1194378	51255	0,04	258,92			1,93	
Total	1599104	299560	0,19	59,31	0,10	7,77		0,44

Source of data: Bankscope

Figure 1A shows the 2010-2014 path of the growth rates for the banking book (*Gb*), the trading book (*Gt*) and the universal book (*G*).

FIGURE 1

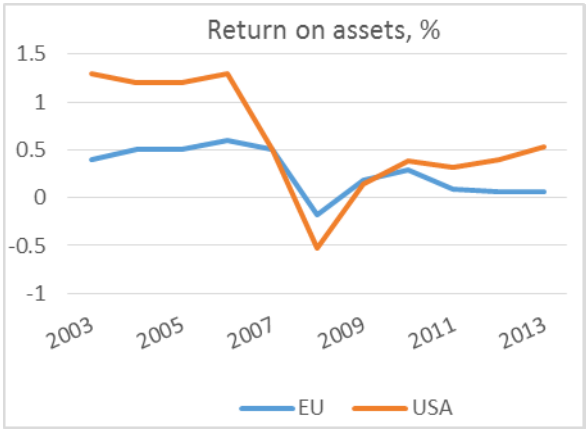
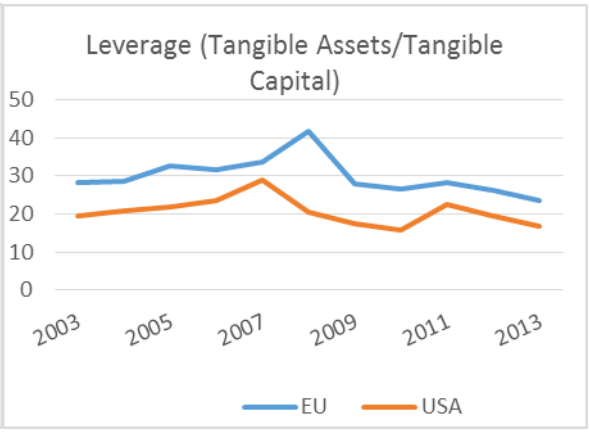
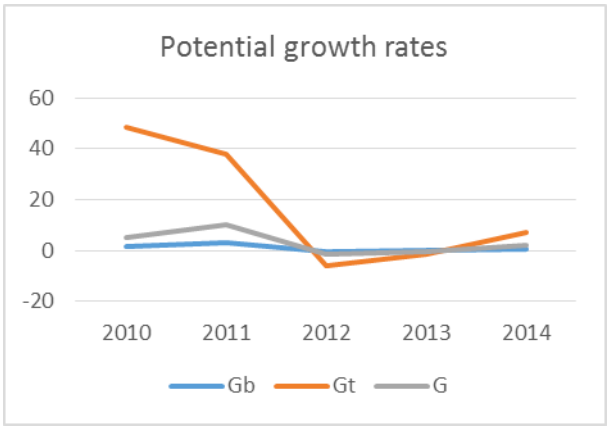


FIGURE 2



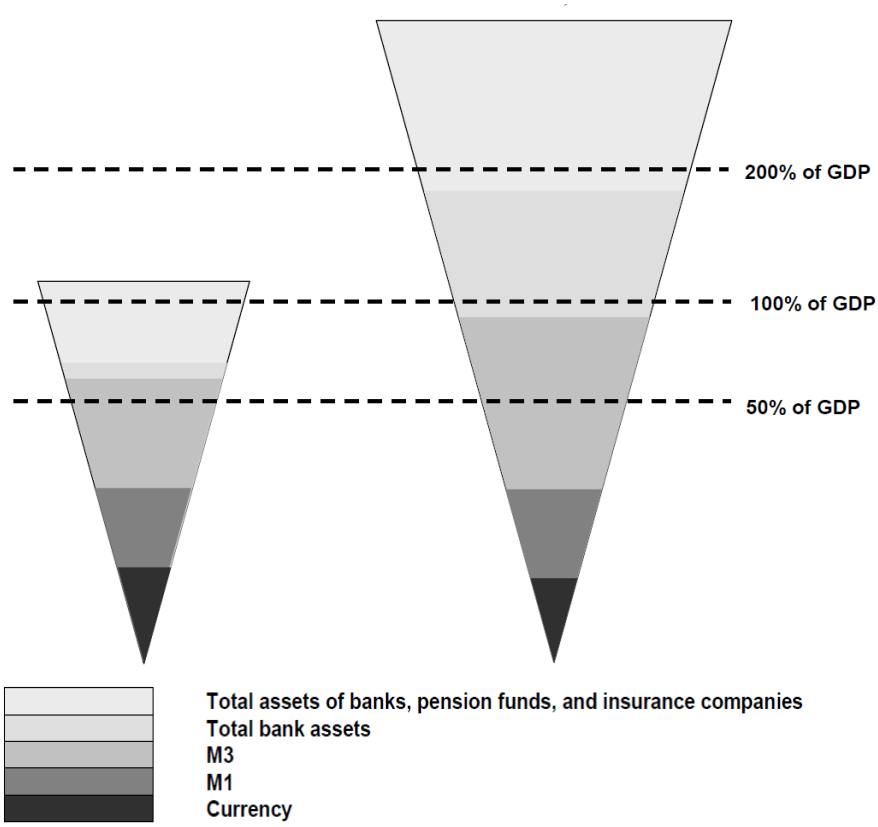
For both figures, our elaboration on Mediobanca R&S data.

FIGURE 1A – DEUTSCHE BANK



Remembering that in a steady path the growth rates of the two books are equal, the extremely low risk-weight of the trading book boosts the overall leverage, thus permitting a higher growth rate of the banking book. On the other hand, when in bad times, as in 2012 and 2013, dividends exceed net profits the lower leverage of the banking book smooths the decrease of the overall potential growth rate.

FIGURE 3 – INVERTED FINANCIAL PYRAMIDS



Source: Schinasi (2007)

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THE ABSTRACT OF THE PROJECT IS:

The research programme will integrate diverse levels, methods and disciplinary traditions with the aim of developing a comprehensive policy agenda for changing the role of the financial system to help achieve a future which is sustainable in environmental, social and economic terms. The programme involves an integrated and balanced consortium involving partners from 14 countries that has unsurpassed experience of deploying diverse perspectives both within economics and across disciplines inclusive of economics. The programme is distinctively pluralistic, and aims to forge alliances across the social sciences, so as to understand how finance can better serve economic, social and environmental needs. The central issues addressed are the ways in which the growth and performance of economies in the last 30 years have been dependent on the characteristics of the processes of financialisation; how has financialisation impacted on the achievement of specific economic, social, and environmental objectives?; the nature of the relationship between financialisation and the sustainability of the financial system, economic development and the environment?; the lessons to be drawn from the crisis about the nature and impacts of financialisation? ; what are the requisites of a financial system able to support a process of sustainable development, broadly conceived?'

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3	School of Oriental and African Studies	UK
4	Fondation Nationale des Sciences Politiques	France
5	Pour la Solidarite, Brussels	Belgium
6	Poznan University of Economics	Poland
7	Tallin University of Technology	Estonia
8	Berlin School of Economics and Law	Germany
9	Centre for Social Studies, University of Coimbra	Portugal
10	University of Pannonia, Veszprem	Hungary
11	National and Kapodistrian University of Athens	Greece
12	Middle East Technical University, Ankara	Turkey
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