Capital markets union and the free flow of collateral

Daniela Gabor
University of the West of England

Jakob Vestergaard
Danish Institute for International Studies

FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES
FONDATION EUROPÉENNE D'ÉTUDES PROGRESSISTES

FEPS STUDIES
September 2016

FUNDACIÓN alternativas
DIIS
UWE Bristol University of the West of England

Capital markets union and the free flow of collateral

Daniela Gabor and Jakob Vestergaard

September 2016

Abstract

The Capital Markets Union (CMU) proposal marks two accomplishments. First, it reframes securitization (the pooling, repackaging and selling of loans) as a practice that can somehow be "simple, transparent and standardized" (STS), a shortcut to stimulating economic growth and job creation in Europe (Bavoso 2016, Engelen and Glassmacher 2016). Second, it reframes repo markets as crucial to (STS) market liquidity and monetary policy transmission, with little if any reference to their role as sources of excessive leverage and procyclicality (ESRB 2015, Gabor 2016, Gabor and Vestergaard 2016). The CMU proposals, we argue, marked a renewed political commitment to integrated European markets for repurchase agreements (repo), away from early post-crisis efforts to tax or regulate money market funding of capital market lending (Mehrling et al 2013). While we stress that a multiplicity of actors have interests at stake in integrated, non-regulated European repo markets, as the notion of a "repo bargain" implies (Gabor 2015), our empirical analysis focuses on the interventions of the private repo lobby, notably the European Repo Council (ERC), to confront and undermine an emerging discourse framing repo markets as sources of systemic risk, to be mitigated by regulatory measures such as minimum haircuts. The notion of collateral fluidity, promoted by the ERC in the Capital Markets Union agenda, became a conceptual cornerstone of the discursive trick that turned the tables.

Keywords: Capital markets union, repo, collateral, shadow banking, European integration

Contacts: Daniela Gabor, University of the West of England, email: Daniela.Gabor@uwe.ac.uk

Jakob Vestergaard, Danish Institute for International Studies, email: jve@diis.dk

“To think about the repo market in isolation no longer makes sense”

(ERC, 2014: 12)

Introduction

When the European Commission launched its plan to create a European Capital Markets Union (CMU) Commissioner Lord Hill described it as the “most significant EU proposal for the last 10 years”, a promise to deliver funding for SMEs, job creation and economic growth. Behind these promises, we argue, the importance of the CMU proposal is twofold (EC 2015a). First, it reframed securitization as practices of loan pooling, packaging and selling in slices that can somehow be “simple, transparent and standardized” – as well as potentially a shortcut to stimulating economic growth and job creation in Europe (Bavoso 2016, Engelen and Glassmacher 2016). Second, it marks the adoption by the Commission of a new framing of repo markets as crucial to market liquidity and monetary policy transmission, as opposed to sources of excessive leverage and procyclicality, the framing that had guided its Financial Transactions Tax plans (Gabor 2016, Gabor and Vestergaard 2016).

The CMU proposal should be understood, we suggest, as the culmination of sustained efforts to reconceptualise financial practices formerly known as “shadow banking”, with its connotations of systemic risk and inadequate oversight and regultion, as simply “market-based finance”, crucial to the stability, resilience and diversity of European financial systems.

Brexit has spurred much speculation about the fate of the CMU going forward (Brunsden and Barker, 2016; Kay 2016; Mooney 2016; Mullin 2016; Véron 2016,). Will the CMU initiative lose momentum, now that Britain is set to leave the European Union and with Commissioner Hill, its chief driver within the Commission, stepping down as a consequence? Or will Brexit, on the contrary, pave the way for an German-French alliance to use the CMU initiative to advance interests of continental European banking, with the support of the ECB, the Frankfurt-based central bank of the Eurozone? It is too soon to sketch the likely future course of the CMU, in light of Brexit, but much can be learnt from studying what can already be observed about the significance of the CMU vis-à-vis post-crisis regulatory initiatives.

We explicate how the CMU proposal was the culmination of concerted efforts to bury any misgivings that regulators and policymakers might entertain that money market funding of capital market lending (Mehrling et al 2013) was to be taxed or regulated in any way, apart from possibly introducing measures to enhance “transparency”. Put differently, the CMU marked a renewed political commitment to integrated European markets for repurchase agreements (repo), known as “the European repo bargain” that brought together the European Central Bank, the European Commission and a plethora of financial institutions involved in repo markets with large European banks at the helm (Gabor 2016). That capital markets integration cannot be achieved fully without integration of repo markets has been a cornerstone of financial policy in Europe since the inception of the Euro (ECB 2002, Gabor and Ban 2015), with a temporary reversal during the Baroso Commission and its plans for bank structural reform and the Financial Transaction Tax.

While we stress that a multiplicity of actors have interests at stake in integrated, non-regulated European repo markets, as the notion of a “repo bargain” implies, our empirical analysis focuses on the interventions of the European Repo Council (ERC) [1] to confront and undermine an emerging discouse framing repo markets as sources of systemic risk, to be mitigated by regulatory measures such as minimum haircuts.[2] In so doing, we aim to fill a gap in the critical literature on the CMU. Other contributions have focused on the attempted revival of securitization (Bavoso, 2016; Engelen and Glassmacher, 2016; Hübner, 2016; Thiemann, 2016), but few have engaged with the implications for European repo and collateral markets, echoing a trend in the post-crisis literature on the political economy of finance (Gabor 2015). At a time when it is becoming fashionable to downplay notions of “regulatory capture” (see for instance, Braun 2016), we set to examine closely the ERC strategies. As we demonstrate, the notion of collateral fluidity, invented by the ERC, became a conceptual cornerstone of the discursive trick that turned the tables.

The paper first discusses the origins of European repo integration (section 1) and then explicates the thesis that the global financial crisis was caused by a “run on repo” (Gorton and Metrick 2009, Adrian and Shin 2010), showing how such concerns informed regulatory initiatives by the Financial Stability Board and the European Commission (section 2). The paper then explores how the European Repo Council reacted to the new repo regulatory discourse in the early days after the “run on repo” thesis gained traction internationally (section 3). We document how critical initatives for repo regulation, the FSB’s minimum haircut framework and the European Commission’s two repo initiatives, the FTT on repos and the Securities Financing Transactions Regulation (SFTR), were significantly watered down (section 4). The return to the pre-crisis view of repo markets culminates with the CMU proposal, predicated upon the concept of “collateral fluidity”, an innovation of the private repo lobby. A few concluding remarks completes the paper (section 6).

A brief history of European capital markets and repo integration

In 1997, the little known but influential Giovanni Group published a report addressing *The Impact of the Introduction of the Euro on Capital Markets* (Giovanni et al 1997). The report had been commissioned by the European Commission to consider how the euro would affect capital markets in the European Union. Although the political project of integrating Europe’s capital markets dated back to the 1960s, with the Segré report (EEC 1966), Giovanni and his collaborators were painfully aware that three decades later Europe remained “only at the start of the process” of integrating European capital markets (Giovannini 1999).[3] Moloney notes that across the full period of European deliberations on capital market integration, the essential elements of this policy discourse have basically been the same: we must reduce European reliance on bank finance, a pan-European stock exchange, mobilize the household investor as risk capital supplier, and build a liberalized regulatory

[1] The European Repo Council (ERC) was established in 1999, as a council within the International Capital Markets Association (ICMA), as the industry representative body on issues pertaining to European repo markets. It changed its name in December 2015, to the European Repo and Collateral Council (ERCC). Most of the empirical material in this paper was published prior to this, so the ERC abbreviation is maintained here.

[2] Other contributions have engaged in more detail with the interests and engagements of the ECB and EU member states (Gabor 2016, Braun 2016).

[3] The eight members of the Giovanni Group, as well as 46 additional experts attending (some) meetings, all represented different segments of European finance. See Giovanni (1999: 61). On issues of cross-border settlement, see Giovanni (2001).

infrastructure (Moloney 2015). Key to the discourse is the notion that national differences, whether legal or in terms of market infrastructure, are impediments to the efficiency of capital allocation. "Many financial markets are designed to serve and function well within individual countries", Giovanni explained but in the Euro area, with its single currrency, "old rules and market architectures may be unsuited to the task" and thus may instead become "main obstacles to the attainment of a higher degree of efficiency" (ibid.):

The repo market is a perfect illustration of this problem. Repo markets are important both for the conduct of the single monetary policy and for the efficient use of collateral in the private sector. Yet, in Europe there are essentially 15 separate repo markets (Giovanni et al, 1999: 2).

So, after its report on European capital markets integration, the Giovanni group took a "long, hard look at repo transactions" (ibid.). The Group explained that in the repo market, a security (such as bond or equity), known as collateral "is purchased or exchanged for cash and, at the same time, the parties agree that the seller will repurchase… the equivalent security at a date in the future" (Giovanni et al 1999: 7). "The economic value of this market for the financial sector as a whole is clear", the report noted (ibid.). "The repo market supports liquidity in the securities markets", "encourages efficiency in the arbitrage of securities", and "allow investors to shift easily between their preferences for cash or securities" (ibid.)

The Group took point of departure in the observations that European repo markets are "essential to the operation of both the cash markets and the securities markets" and that the European System of Central Banks already "focuses on repo transactions as the main instrument of monetary policy" (Giovanni 1999: 5). Although a range of Single Market developments were transforming repo trading such that it was becoming increasingly cross-border in nature, there were significant further benefits to reap from constructing a truly "unified repo market in the EU" (ibid.). To overcome legal and institutional obstacles to repo unification, the Giovanni Group made recommendations for market participants as well as for national and EU authorities. Market participants were advised to "adopt sound risk management practices", such as daily mark-to-market arrangements and standardized documentation of collateral, and to "strive to standardize market systems for trading, netting and settlement" (Giovanni 1999: 5-6). Daily mark-to-market accounting was to ensure that the market value of collateral received would be equal to the cash lent. Whenever the two diverged, margin calls would restore the equivalence. In so doing, collateral promised the certainty of a lending arrangement that could withstand the default of either the lender or the borrower.

The appeal of collateral went beyond the lender-borrower relationship. It also held promises for the issuers of collateral, from governments to banks issuing bonds or packaging loans in securitisation. Once an asset become attractive as collateral for repo transactions, its 'tradability' or liquidity increases. For instance, ease of entry and exit in government bond markets depends on a well functioning repo market, allowing financial institutions to short (a special repo) or raise funding (funding repo).

The multifaceted nature of the repo/collateral nexus was critical to the emergence of the "European repo bargain" (Gabor 2015). Member states, the Commission and the European Central Bank (ECB) joined forces in encouraging the growth of a unified European repo market to achieve three things in parallel: further financial integration, more effective monetary policy and higher liquidity in asset markets where repo traders sourced collateral (including government bond markets).

The ECB saw European repo integration as an opportunity to improve the conditions under which it could fulfill its price stability mandate, upon which its political legitimacy depended. An integrated repo market could greatly accelerate the creation of a single financial space for the Eurozone, the ECB contended (ECB 2002: 64).[4] For Ministries of Finance across Europe, the notion that a European repo market governed by private rules would accelerate financial integration by making asset markets across the EU more liquid was particularly appealing, since liquidity is typically associated with low and stable interest rates on public debt.

But to fully appreciate the political drive behind the repo bargain, one should not underestimate the role of the Euro's global ambitions. If policymakers had any hesitations on the repo integration project, they evaporated when research suggested that if the euro were to compete with the dollar, Europe would need an integrated repo market, which joined its money markets to its government bond markets (MacCauley 1999: 20).

So it took just two years for the Giovanni recommendations to make their way into EU legislation, in the form of the Collateral Directive (2002/47/EC). The Directive provided the unified legal framework for the crossborder use of collateral that Giovanni and his peers had called for, while gracefully refraining from introducing any EU-level regulatory interventions or supervisory oversight.

The market-building agenda of the European repo bargain re-shaped European finance: by 2008, the European repo market was roughly as large as the US repo market, and treated Greek and German government bonds as equivalent collateral, just as the ECB had envisaged (Hordahl and King, 2008). Less than a decade after the launch of the Giovanni report, the European repo bargain had cemented an increasingly symbiotic relationship between repo markets, states and the ECB, as repo markets had become the largest money market segment for cross-border liquidity flows (Gabor 2015: 926).

The post-crisis discourse on repo

The notion that the global financial crisis was a crisis of shadow banking rendered systemic by a run on repo markets first gained traction in the US. Gorton and Metrick were particularly influential exponents of the "run on repo" thesis (Gorton and Metrick 2009, Pozsar et al 2010):

What makes this bank run special is that it did not occur in the traditional-banking system, but instead took place in the "securitized-banking" system. A traditional-banking run is driven by the withdrawal of deposits, while a securitized-banking run is driven by the withdrawal of repurchase ("repo") agreements. Hence, we describe the crisis as a "run on repo" (Gorton and Metrick 2009: 1).

By the notion of "securitized banking", Gorton and Metrick understood the combination of securitization and repo financing. The term denoted the practice by which financial institutions created structured bonds on the basis of different types of bank loans (mortgages, car credit etc.), which were then used as collateral in repo trading, to obtain cash on the basis of which new loans could be extended.

[4] Although the ECB does not control repo markets, or regulate repo risk practices (such as haircuts or margin calls), it uses repos to lend to banks and steer interest rates on the unsecured interbank money market, where banks trade reserves without collateral.

When the US subprime mortgage market started weakening early in 2007, Gorton and Metrick observed, buyers of repo got increasingly nervous about collateral quality, about potential margin calls and about increasing haircuts on new repo deals. With mortgage prices declining, some market participants were forced to sell the underlying collateral, which triggered a cycle of declining asset values and increasing haircuts.

Analogous to a "traditional" banking crisis, the 2008 crisis was characterized by cascading "withdrawals" from repo trading, in the form of "unprecedented high repo haircuts and even the cessation of repo lending on many forms of collateral" (ibid.). The chain of operations that constitute "securitized banking" came under double pressure. At one end, the equity capital of banks were shrinking, as a result of increasing haircuts, and at the other end, collateral values were spiraling downwards. This process made the crisis a "systemic event", Gorton and Metrick argued, as the US banking sector at this point had become "effectively insolvent for the first time since the Great Depression" (ibid.).

Policy deliberations of the Financial Stability Board (FSB) and the European Commission

At the Seoul Summit, in November 2010, G20 leaders tasked the Financial Stability Board (FSB) with developing recommendations to strengthen the oversight and regulation of the shadow banking system. A year later, at the Cannes summit in 2011, the G20 leaders approved the first report of the Financial Stability Board (FSB) on measures to mitigate systemic risk from shadow banking. The FSB stressed that "developments in repo and other secured lending markets played a crucial role in the crisis of autumn 2008, with procyclical increases in margin/haircuts contributing to the collapse in liquidity and in asset values" (FSB 2011: 23). It highlighted the option of introducing "minimum margin or haircuts" as a measure to "mitigate procyclicality" that should be "considered further"(ibid.).

In November 2012, the FSB published a consultative document with proposed policy recommendations that came out of five work streams, jointly setting out the FSB's overall approach to addressing the financial stability issues associated with shadow banking (FSB 2012a). The FSB's work took point of departure in the overall observation that "like banks, a leveraged and maturity-transforming shadow banking system can be vulnerable to "runs" and generate contagion risk, thereby amplifying systemic risk" (FSB 2012b: ii).

The workstream addressing systemic risks arising from securities lending and repo markets (WS5) identified thirteen policy recommendations, two of which explicitly addressed minumum haircuts (FSB 2012b: 11-13). "Minimum regulatory haircuts for repos and securities financing transactions (whether bilateral, tri-party or CCP) may limit the build-up of excessive leverage and reduce procyclicality", the FSB noted, "via the financing of risky assets, in particular by entities not subject to prudential regulation" (ibid.). Therefore, there was a case for "introducing a framework of binding numerical haircut floors on securities financing transactions", said the FSB, "especially for instruments with a potentially procyclical feature (e.g. corporate bonds and securitisation products)" (FSB 2012b: 13). The FSB put forward two approaches for setting numerical floors on haircuts: a high level and a backstop level. Short-term government bonds would carry a 0.5% haircut requirement in the high-level scenario, compared to 15% on main index equities and 25% on other equities. For both specifications of the framework, the overall objective would be the same, namely "to set a floor on the cost of secured borrowing against risky assets in order to limit the build-up of excessive leverage" (ibid.). In brief, there was to be a limit to how cheap secured borrowing, and hence leverage, could become.

Needless to say, concerns about the systemic risks of shadow banking were grappled with by regional bodies too, not least by the European Commission. The Commission's Green Paper on shadow banking, published in February 2012, was the first indication of the European take on these issues.

After singing the obligatory praise of some of the advantages of shadow banking,[5] the Commission lists a number of risks that "shadow banking entities and activities" may create: First, "deposit-like funding structures may lead to "runs", with many activities "financed by short-term funding" (such as repo) and hence "prone to risks of sudden and massive withdrawals of funds by clients". Second, the build-up of high leverage "can increase the fragility of the financial sector and be a source of systemic risk", with activities not only "highly leveraged", but also funded with collateral that is "churned several times, without being subject to the limits imposed by regulation and supervision" (a repo reference). Third, shadow banking activities may be "used to avoid regulation or supervision applied to regular banks by breaking the traditional credit intermediation process in legally independent structures dealing with each other", creating a risk of a "regulatory "race to the bottom" for the financial system as a whole". Finally, shadow banking activities are often closely linked to the regular banking sector, which is why "any failures" in the shadow banking sector may quickly lead to "important contagion and spill-over effects".

Apart from this general diagnosis of the perils of shadow banking, the Green Paper remained vague on repo markets and potential policy measures to mitigate leverage and procyclicality in and through these markets. The section on securities lending and repo (7.3), was little more than a few paragraphs. But it did say explicitly that that repo "can be used rapidly to increase leverage" and is a "key source of funds used by some shadow banking entities" (ibid.). And it did stress that ongoing regulatory deliberations in the FSB, and under the auspices of the Commission itself, should aim to ensure that "supervisors have accurate information to assess leverage, *the tools to control it* and to avoid its excessive procyclical effects" (ibid., emphasis added).

In defense of repo

As this new regulatory discourse on shadow banking took shape, with its more or less explicit ramifications for international capital and repo markets, the International Capital Markets Association (ICMA) set to challenge the framing of repo markets as deeply implicated in cycles of credit booms and busts.

[5] To cite, "they provide alternatives for investors to bank deposits"; "they channel resources towards specific needs more efficiently due to increased specialization"; "they constitute alternative funding for the real economy, which is particularly useful when traditional banking or market channels become temporarily impaired"; and, "they constitute a possible source of risk diversification away from the banking system" (EC 2012).

In the span of just a few months in early 2012, ICMA's European Repo Council (ERC) produced two research papers: one, published in February, on "haircuts and initial margins in the repo market", followed by another, in March, on "shadow banking and repo" (ERC 2012a, 2012b). These two papers became the backbone of the ERC's efforts to resist repo regulation. The papers would inform its official response to the FSB policy proposals on securities lending and repo, and its online resource on Frequently Asked Questions (FAQ) on repo (ICMA 2016a), targeted at policymakers and the financial press.

Thus, when the FSB published its Interim Report on "Securities lending and repo" in April 2012 (FSB 2012b), the ERC was prepared and reacted swiftly. Just a few weeks later, the ERC submitted its official response. "Recognising that shadow banking is currently the subject of scrutiny by regulators and that the repo product is part of this process" the ERC sought to "ensure" that policy-makers and regulators "understand how repo and repo market works" (ibid.) This, hopefully, would help clarify to them "the role repo plays in traditional banking, as well as in supporting the efficiency and stability of the financial system", the ERC explained (ibid.).

The first of these, on "Haircuts and initial margins in the repo market", the ERC explains, "questions the popular view of the role played by collateral haircuts in the recent crisis", whereas the other "elaborates on a number of other key points about the repo market in context of the shadow banking debate" (ibid.). In the ERC's view, "both of these papers are essential contributions to the current consideration of repos and their role in shadow banking", and the ERC therefore kindly "requests that these two papers be reviewed thoroughly and treated as fully integral elements of this response letter" (ibid.). While referring regulators to the full papers, the ERC uses the remainder of the letter, and its thirteen pages of appendices, to summarize and layout its positions.

First of all, the ERC argues, policymakers and regulators should be aware that "the repo market is one of the largest and most active sectors in today's money markets, providing an efficient source of money market funding and an essential tool for use by central banks" (ibid.). If regulatory measures are adopted that risk curtailing "this vital source of funding", one must realize that there would be "consequent impacts on economic activity as market users are forced to fall back on other limited sources of funds" (ibid.). One of the regulatory measures considered by the FSB that could very likely have such effects is the proposed minimum haircuts framework. The ERC stresses that it is by no means "intrinsically against the use of haircuts", but worry that "the imposition of mandatory haircuts" is a step that would have serious repercussions and should under no circumstances be taken "until there has been full and careful consideration, including open discussions amongst users of repo markets, including central banks, the regulatory authorities and any other appropriate parties" (ibid.).

The ERC then notes that there are a range of parallel regulatory initiatives, under the G20 agenda of rebuilding a safe and sound financial system, which actually increase demands for collateral significantly. Examples include increased collateral use "stipulated through the promotion of central counterparty (CCP) clearing for standardised OTC contracts", "improved risk management of residual OTC activity" and "new bank liquidity buffer requirements" (ibid). "The achievement of these goals will be ill served", the ERC warns, "if constraints on the operation of the repo market impair its ability to efficiently mobilise suitable fixed income collateral to meet these needs" (ibid.).

The ERC stresses the "many and complex interactions between the different existing and incoming regulations", and refers specifically to the leverage ratio introduced through the Basel 3 agreement. This measure may well prove "to have a marked effect upon the procyclicality of the financial system", the ERC contends, leaving in doubt the "extent of incremental concerns about the possible specific contribution of repo to leverage and procyclicality" (bid). At the very least, the ERC says, further moves to regulate repo "need to be subjected to continued open debate and thorough impact assessment", taking into account parallel regulatory developments pursuing similar objectives (ibid.).

From the letter and the annexes, it seems that the ERC's main concern is the FSB's proposed framework for mandatory haircuts. The ERC summarizes its objections to the proposal in eight main points (see ERC 2012c, third page of Annex):

First, market data and qualitative analysis "clearly show that big changes in haircuts were not significantly widespread to have had a systemic impact". Second, "haircuts of credible magnitude would suck an enormous volume of liquidity from the market, causing serious financing difficulties for the financial system as a whole, as well as raising the price and reducing the liquidity of the underlying securities". Third, introducing haircuts "risks being a self-fulfilling prophecy". Fourth, introducing haircuts as a "macroprudential lever to be activated at the top of a cycle, not only risks being a self-fulfilling prophecy, but would also be incredibly difficult to calibrate". Fifth, such haircuts would be "too crude to reflect the variation in the risk/return characteristics of underlying securities, hence they would therefore distort relative pricing and market activity". Sixth, "deep mandatory haircuts on collateral would artificially reduce the price differential between secured and unsecured funding, potentially and perversely making riskier unsecured funding relatively more attractive". Seventh, "mandatory haircuts would fail to stop the withdrawal of credit in a crisis, as lenders would resort to other defences such as the reduction of credit lines and the contraction of terms – the capacity to absorb exogenous shocks is better created at firm level, through the use of capital and liquidity buffers". Eight, "if collateral prices fall below even the mandatory haircut, there will be a massive "cliff effect" – in effect, the haircut might simply dam up trouble, which then breaks all at once".

These were arguments to be repeated again and again, in the ERC's various public consultation responses, whether to the FSB or other bodies engaging in regulatory iniatives with implications for repo. When the ERC next commented on the FSB policy recommendations for shadow banking, in late November 2013, much of the response thus repeated points made in its initial response. After an opening salute proclaming that securities lending and repo trading are *not*, technically speaking, shadow banking, as it is already subject to various forms of prudential regulation, the ERC addresses the FSB haircut framework head-on, once again. "In terms of haircut policy we remain unconvinced", the ERC said, "that haircut practices in the repo and securities lending markets contributed materially to the crisis" and "believe that overly stringent regulation in this area might deter market participants from using these secured forms of transactions" (ERC 2013). Once again they make the argument that "the withdrawal of funding from some weakened institutions largely took the form of the withdrawal of credit lines and certain types of collateral becoming ineligible" (ibid.). Therefore, a "mandatory through-the-cycle haircut" may do little "to prevent pro-cyclicality in another crisis", they stress (ibid.). The ERC assures that they have no issue with the intent of the FSB's proposals, but have "major concerns" about the "scope and application of the proposals", which could "cause serious disruption to the repo and securities lending markets" (ibid.).

Extending on a theme that was first launched in its May 2012 letter, the ERC stresses that "a number of existing regulatory developments (such as Basel III and AIFMD in Europe) include provisions designed to directly limit the build-up of excessive leverage and thereby to reduce procyclicality" (ibid.). As a matter of principle, the ERC states, "we believe that appropriately calibrated regulation that tackles leverage directly, rather than indirectly through imposing minimum haircuts on financing transactions, is a better way to address concerns" (ibid.). Further, regulators are kindly reminded, again, that data collection and data analysis should precede any imposition of new regulatory measures. "Regulators should focus on developing transparency measures before looking to finalise and implement rules on haircuts", the ERC advises (ibid.).

Overall, the pressure exerted by the European Repo Council on policymakers was considerable. One particular telling incidence was the reaction of ICMA to a speech delivered by Lord Adair Turner, who was at the time Head of the UK's Financial Services Agency and acting Chairman of the FSB's Committee on Supervisory and Regulatory Co-operation. Lord Turner had given a talk in Washington on 25 April (2012), in which he suggested that leverage and maturity transformation, spawned by financial innovation, had caused the financial crisis and that financial innovation no longer was in the service of the welfare of society. ICMA was baffled and deeply worried. In a short essay, ICMA launched a counter-attack. "If this speech reflects the direction of the debate within the FSB", said Richard Commoto – the intellectual chieftain of the ERC – "then the wholesale financial markets can expect severe restrictions to be imposed by the G20" (ERC 2013c). "And special attention can be expected by the market in repos (which are agreements to lend in exchange for collateral, typically government bonds)", he warned (ibid.).

Commoto then summarized, once again, the main arguments put forward in his commissioned papers and in early concsultation responses to the FSB, but also added a new calculus to convey the scale of the impact of the mandatory haircuts considered by the regulatory community. "Andrew Haldance at the Bank of England has mentioned a figure of 20%", he noted (ibid.). With the "outstanding value of the combined US and European repo markets" in the range of EUR 15-20 trillion, a 20 % minimum haircut "would take EUR 4 trillion of liquidity out of the repo market, four times more than the ECB's 3-year LTROs", Commoto explained (ibid.). "The sheer scale of the potential consequences throws up a whole raft of questions", he protested:

How can banks replace such a dramatic loss of funding? The unsecured market is hardly a desirable alternative. How can the penalisation of collateralised funding be squared with the regulators' other agenda to encourage greater collateralisation of financial transactions, directly and through the mandated use of CCPs? What would such a drain on the liquidity of the primary and secondary securities markets do to the funding of the real economy? Would hard pressed governments be prepared to accept such a loss of liquidity and increase in cost in their own bond markets? And *how can such a flawed policy, with such seismic implications, be seriously considered in the face of so much contrary evidence*? (ICMA 2013c, emphasis added)

Resisting repo regulation

In parallel with these general efforts at questioning the wisdom of regulating repo markets, the private repo lobby engaged with the issues in the context of a number of specific regulatory initiatives. At the international level, the litmus test was the FSB's proposal to introduce a framework for minimum haircuts and in Europe the proposal to introduce a Financial Transaction Tax became the primary battlezone: should repo trading be regulated and taxed, to mitigate systemic risk, or exempted from any such encroachments, in the name of preserving market liquidity and efficient funding for capital market lending?

Taxing repo? The rise and fall of the European FTT

In 2009, the G20 instructed the IMF to propose a tax that would increase revenues and trigger structural changes in finance. In response, the IMF (2010: 5) dismissed a tax on financial transactions, proposing instead two types of institutions-based taxes, either a Financial Stability Contribution or a Financial Activities Tax (FAT). In October 2010, the European Commission issued a 'Communication' paper that considered the relative merits of FAT and FTT (EC 2010). The Commission did not share the IMF's view that the FTT was ill-suited to address systemic risk, vowing to pursue a global FTT agreement while supporting a FAT at the European level.

In February 2011, the Commission (EC 2011) initiated the consultation process, focusing on design issues, to clarify the pros and cons of a FAT, an FTT or other levies on liabilities, assets or systemic activities. With respect to the FTT, the Commission distinguished between a broad FTT "to tax stock, bond, currency and derivative transactions on exchanges as well as over-the-counter (OTC) traded instruments" and a narrow FTT "limited to stocks and bonds". Neither definition included repos and only one of the total 57 questions touched upon repo:

Some authors argue that overnight secured credit (through repos mainly) necessitates special treatment of those types of funding because of the cheap, but unstable funding leading to systemic risk. Do you agree to such an argument and if so, what treatment do you suggest?" (EC 2011b, question 52)

By including the repo question, the Commission questioned for the first time the European repo bargain: could European repo markets be disruptive in the same manner that US-based scholarship discussed the US repo market?

We saw in preceding sections the considerable efforts expended by the European Repo Council in destabilizing the notion that mandatory haircuts would mitigate procyclicality and reduce systemic risks. All these efforts would amont to little, if a European tax on repo was established. So the repo lobby mobilized against it. Once again, the European Repo Council (ERC) commissioned a study to establish a case against taxing repo, titled "Collateral damage: the impact of the FTT on European repo markets and its consequences for the financial markets and the real economy" (ERC 2013). Other private sector participants weighed in, echoing to large extent concerns voiced by the ERC.

Overall, two key strategies were deployed by the repo lobby (Gabor 2015). Firstly, it highlighted the additional costs that banks would have to bear in the already deeply uncertain climate of the European crisis. Governments should be concerned with the possibility that new initiatives would burden weak banks, raising again the spectre of defaults, the ERC felt. Goldman Sachs, one of the ERC members, produced startling estimates of the FTT impact on European banks in May 2013. Goldman estimated that the FTT would cost European banks around EUR170 billion, the bulk of which (EUR118 billion) came from banks' repo activities, far more than trading in derivatives, equities or government bonds. Only eight months after Draghi's "whatever it takes" promise, the Goldman numbers provided a stark warning to Germany and France that the FTT might well destabilize their banks again.

Secondly, the ERC stressed that a plurality of private sector actors, including financial institutions with long-term strategies and demonstrable social usefulness, would be affected by a tax intended to discourage short-term speculative activity. But the ERC's line of arguing went beyond simply establishing the shared interest of "socially useful" finance in well-functioning repo markets. It questioned the very distinction between private and public interests, reframing the repo market through the ideas of the European repo bargain: repo was key "to the provision of liquidity to markets, in bank lending activity and in the conduct of monetary policy as well as to the efficient movement of collateral in the markets" (European Banking Federation [EBF] 2013: 1).

The large banks and the ERC were not alone in lobbying against the FTT. The ECB weighed in on the matter too, arguing that Eurozone governments ought to abstain from taxing what was "a very liquid and efficient market" (FTT Working Party on Tax Questions-Indirect Taxation 2014). The ECB expressed concern that a tax on repo transactions could leave the ECB as the main intermediary of liquidity and collateral in the eurozone. The ECB thus chose to mobilize the repo lobby's ideas about the liquidity benefits of repo markets and downplay the systemic risk aspects. For the ECB, the pressing concern was not some commitment to efficient market ideologies, but rather that the repo-FTT threatened the most important market for the redistribution of liquidity in eurozone, and thus the transmission mechanism of monetary policy. Indeed, the uncollateralized interbank market – the market that the ECB targets in its monetary policy operations – contracted considerably in the crisis, as banks increasingly preferred collateralized lending. For an ECB eager to return to its pre-crisis framework, the repo market would take over liquidity provision and allocate the collateral that banks require to meet the new, collateral-intensive regulatory regimes.

Given the intensity of the lobbying and the powerfull alliance mobilized against an FTT that implicated repo, it was hardly surprising that as the FTT negotiations unfolded after 2013, European policy-makers became convinced that regulation, rather than direct taxation, would be more than enough to address repo fragilities.[6]

Thrown in the FSBin: the fate of universal minimum haircuts

In August 2013, less than two years after the it had published its first reflections on mitigating the systemic risks of shadow banking, the FSB launched its proposed policy framework, with changes reflecting both public consultation processes and quantitative impact studies (FSB 2013a). The revisions reflected in part "the results of a calibration exercise", the FSB explained, in which large financial intermediaries had provided "detailed historical data on haircut levels in 2006, 2008 and

[6] A narrow FTT is still under consideration, but the 11 Eurozone countries negotiating a deal have failed to deliver for several consecutive years.

2012" (ibid.). As most ambitious regulatory initiatives negotiated at global level, the original FSB recommendations on minimum haircuts were now considerably watered down:

a framework of numerical haircut floors that will apply initially to non-centrally-cleared securities financing transaction in which entities not subject to regulation of capital and liquidity/maturity transformation receive financing from financial entities subject to such regulation against collateral *other than* government securities (FSB 2013b: 23, emphasis added).

The FSB invited a new round of public responses and undertook yet another quantitative impact study, before the final haircut framework was launched in October 2014 (FSB 2014a). In the final formulation of the scope of the haircuts, some further clarifications were made:

The framework of numerical haircut floors applies *to non-centrally-cleared securities financing transactions in which financing against collateral other than government securities is provided to non-banks*. Securities financing received by banks and brokerdealers subject to adequate capital and liquidity regulation on a consolidated basis is excluded from the scope of application of the numerical haircut floors because applying numerical haircut floors to those transactions may duplicate existing regulations. Non-centrally cleared securities financing transactions performed in any operation with central banks are also outside the scope of application (FSB 2014b: 7, emphasis in original).

As for the numerical haircut levels, the final results was not somewhere in between the high-level and the backstop levels originally proposed in 2012, but levels that were identifical to or lower than the original backstop levels, except for sovereigns for which haircuts were abandoned altogether (see Table 1 below). Not in one single case was a numerical haircut set even slightly higher than the originally envisaged backstop levels.

Table 1 FSB Haircut Framework, 2012 vs 2014 (in %)

	2012 (backstop level in parenthesis) vs 2014 (in %)		
Residual maturity of collateral	*Sovereign*	*Corporate and other*	*Securitized products*
≤ 1 year debt securities, and FRNs	0.5 (0.25) vs 0	1 (0.5) vs 0.5	2 (1) vs 1
> 1, ≤ 5 years debt securities	2 (1) vs 0	4 (2) vs 1,5	8 (4) vs 4
> 5, ≤ 10 years debt securities	4 (2) vs 0	8 (4) vs 3	16 (8) vs 6
> 10 years debt securities	4 (2) vs 0	8 (4) vs 4	16 (8) vs 7
Main index equities	15 (7,5) vs 6		
Other equities	25 (12,5) vs 10		

The insights from the FTT process can thus be extended to the FSB's haircut rules. Originally, the FSB envisaged universal minimum haircuts, including for government bond collateral, to reduce systemic repo risks, but by 2014, it had excluded repos with government collateral altogether. In fact, under the new haircut framework, the FSB excluded from its regulatory reach repos between banks (around 80% of overall volumes in Europe) and all repos with government collateral.[7]

That the FSB assigned government bonds a zero haircut suggests that rules for governing collateral practices were designed with specific concerns about preserving government bond market liquidity in mind. Had the FSB been guided by concerns about repo-fuelled leverage, it would have set significant haircuts on short-term government bond collateral, since this is the 'cheapest' collateral for repo-reliant financial institutions (Gabor 2016: 19)

While significant changes were made to the numerical haircuts, not least in terms of their scope and level, the accompanying discourse didn't change much. Notably, the notion of a "run" on securitized banking remained at the crux of the narrative. When launching its final report, the FSB again stressed that just "like banks, a leveraged and maturity-transforming shadow banking system can be vulnerable to "runs" and generate contagion risk, thereby amplifying systemic risk" (ibid.). But at this point the discourse on the systemic risks of securitized banking and collateralized lending was symbolic more than it was indicative of substantively new regulatory approaches. Yet, at the same time a subtle but significant reframing was going on in parallel. The latest of the FSB's report on securities lending and repo, the 2015 progress report, carried a new title: "Transforming shadow banking into resilient market-based finance" (FSB 2015), replacing the headline title of all the preceding reports, "Strengthening Oversight and regulation of shadow banking". In fact the shift in the umbrella title of the FSB report occurred in the autumn of 2014; its mid-October reports carried the old title, whereas the mid-November titles carried the new one. It is difficult to believe that Barnier's stepping down on 1 November, making way for Jonathan Hill as the new Commssioner on "Financial stability, financial services and capital markets union" was unrelated, merely coincidental. With Jonathan Hill in charge, the Commission could come full circle with its revised views on shadow banking – and lobby that this would be felt in its internatinoal deliberations too, including not least those of the Financial Stability Board.[8]

Enhancing transparency in securities financing transactions (SFTs)

When launching its proposal for "Enhancing transparency in securities financing transactions" (SFTR) in January 2014, the Commisssion stressed the need for better monitoring in order to deal with transactions that had been a source of contagion, leverage and procyclicality during the financial crisis. The new regulation would enhance transparency in three ways, the Commission explained. First, "it introduces the reporting of all SFTs … to central databases known as trade repositories"; second, investment funds will disclose "information on the use of SFTs… to investors in their regular reports"; and third, it introduces "minimum transparency conditions that should be met on the reuse of collateral, such as disclosure of the risks and the need to grant prior consent" (EC 2015b). These

[7] The margin-regulated repo space is estimated to amount to only 8.7% of the European repo universe (Gabor 2016).

[8] The first FSB report to carry the new reframed title was an overview and progress report from November 2014 (FSB 2014c). On the reframing of shadow banking, see also Engelen (2016).

new transparency measures would "allow supervisors to access detailed, reliable and comprehensive data to monitor risks originating in shadow banking and to intervene when necessary" (ibid.).

Later that year, in December 2014, the European Parliament suggested a number of amendments to the SFTR. The most significant was the proposal to adopt the FSB minimum haircuts framework. However, even in what was by then a seriously marginalized and diluted version, the FSB framework did not make it into the SFTR. The European Parliament was isolated. In March 2013, researchers at the European Systemic Risk Board (ESRB) had argued that repos "can be relatively low-risk transactions by themselves", even if "pervasive use may give rise to systemic risk" (ESRB 2013). Instead of outlining and assessing a range of regulatory options in dealing with these systemic risks, the ESRB proposed that authorities relied on transparency. What was needed, the ESRB suggested, was to identify the "information gap" so as to enable an assessment by regulators of "the financial stability risks associated with SFTs" on the basis of which a cost-benefit analysis could then be undertaken, comparing the different methods by which the desired transparency could be achieved (ibid.). [9]

Observers have noted that the new regulation will give regulators a "much better idea of the size and concentration of the repo market, since under its terms parties to repo transactions are required to report information, which is then published in aggregated form and made available to various European and national authorities" (Johnston 2016). But as Andrew Johnston observes, the regulation ultimately relies on the questionable assumption that "provided regulators have sufficient information and a clear instruction to consider the macro-prudential implications of patterns of leverage, they will be able to identify when leverage poses a threat to systemic stability" (ibid.). This in itself is a heroic assumption. Add to that, the considerable challenges of finding effective ways to intervene, and mobilizing (domestic) support for discretionary intervention, once leverage has taken off. While SFT transparency may shed much-needed light on systemic markets, the structural impact most likely will not be overwhelming.

Collateral fluidity and the green paper on capital markets union

When Jean-Claude Juncker made his first policy speech to the European Parliament, in July 2014, he launched the idea of establishing a European Capital Markets Union (CMU). Six months further down the road, the Commission released its Green Paper on the CMU (EC 2015a, Veron and Wolf, 2015). While the CMU Green Paper was rich in rhetoric but somewhat thin in substance, the direction was unmistakably to go in reverse on repo. Repo markets were no longer seen as a potential source of systemic risk. On the contrary, regulating repo markets was dangerous, itself a major risk to market liquidity and financial stability. The core concept underlying this argument was "collateral fluidity". To track the origins of this concept, and appreciate its significance, we must first take a few steps backwards.

[9] The ESRBs proposals on macroprudential regulation of shadow banks eventually have come to stand as the only significant regulatory initiative in Europe to grapple with repo systemic risk (ESRB 2016).

Collateral fluidity: the plumbing and the pump

In late 2012, the Collateral Initiatives Coordination Forum (CICF) had released the first of what was to become a series of reports organized in and around the concept of "collateral fluidity" (CICF 2012).[10] The report observed that the financial crisis had accelerated the demand for collateral as market participants became more risk averse and sought to secure their credit risk exposures. The increased demand for collateral was further reinforced by various regulatory initiatives aiming to make markets more robust and resilient by requiring financial institutions to hold higher quality collateral. With European government bond markets experiencing a series of downgradings of sovereign debt, ICMA saw a structural problem developing, namely that demand for high quality collateral would "significantly oustrip" supply. Therefore, "it is essential that efforts be made to ensure that collateral is able to flow as efficiently as possible, matching sources and uses" (CICF 2012: 1). From this vantage point, the CICF's report set out to "articulate a vision regarding what is necessary to achieve desirable improvements in collateral fluidity" (ibid.).

In making its policy recommendations, it reached back to a 2010 progress report by the ERC. The ERC White Paper "provides a benchmark description of the European repo market and highlights certain specific needs for reform of the market infrastructure", it explained and stressed that "continued progress to close these gaps" would be an "essential precursor for the establishment of an efficient EU single financial market" (CICF 2012: 15). In the CICF's analysis, the two key dimensions of efforts to enhance collateral fluidity are improvements in cross-border settlement and improvements in collateral harmonisation and utilisation. Add to this a third aspect, namely that broader efforts to enhance post-trade and market infrastructure efficiency were also seen to potentially benefit cross-border collateral flows.

Over the next few years, ICMA's European Repo Council (ERC) continued its work and lobbying on issues of collateral fluidity and in April 2014, just a few months before the Juncker Commission took office, it released a study that took a further step in bringing home to policymakers and regulators just how important the free flow of collateral is to preserving the liquidity and stability of Europe's financial system. "Collateral is the new cash", said the headline title of the report, with the subtitle warning against "the systemic risks of inhibiting collateral fluidity" (ERC 2014). If the first phase of the ERCs lobbying against regulation of collateral and repo markets had focused on confronting a discourse with counter-arguments and counter-evidence (in the spirit of *refutatio*), now the emphasis was on providing a new, positive narrative – on dislocating the regulatory discourse on repo and collateral by advancing a new noble cause for policymarkers and regulators. As the culmination of these efforts, the ERC's 2014 report used the metaphor of "collateral fluidity" as the overarching symbol of its new approach and mobilizied two further metaphors as guiding heuristics in conveying the importance of unregulated collateral and repo markets; 'plumbing' and 'the pump':

When thinking of collateral fluidity, there are two key considerations. Firstly, the market infrastructure needs to be in place to ensure the efficient and uninhibited flow of collateral through the system and between various market participants, depositaries, settlement systems, and jurisdictions. We can think of this as 'plumbing'. Secondly, efficient collateral fluidity requires a

[10] The Collateral Initiatives Coordination Forum (CICF) was established at the beginning of 2012, as a "joint trade associations' body, in order to facilitate appropriate coordination across the private sector of all collateral-related initiatives" (ICMA 2016b).

functioning market mechanism to mobilize collateral through this system. This is the 'pump' (ERC 2014: 11).[11]

Structuring the discourse on collateral and repo markets using the fluidity, plumbing and pump metaphors marked a significant recasting in terms of making the "anti-repo regulation" argument more compelling to policymakers, regulators and the financial press. For collateral to flow smoothly through the system, an "integrated and cohesive infrastructure for settling trades" was necessary, the ERCsaid (ibid.). "Unfortunately, this infrastructure remains very underdeloped in the Eurozone", ERC surmised, "despite fifteen years of monetary union" and intense and prolonged efforts to establish a "unified financial market" (ibid.):

Essentially, the plumbing that is supposed to support the pan-European financial markets, and the free flow of liquidity and collateral, remains largely fragmented and rooted in pre-Euro legacy infrastructures. Many of the barriers to efficient cross-border settlement identified by the Giovanni report… remain unaddressed. Accordingly, the plumbing supporting collateral fluidity in Europe is a mish-mash of bespoke designed and poorly connected pipes and fittings (ibid.)

After listing key impediments to the efficient flow of collateral in Europe, ICMA identifies the two main "regulatory and market driven initiatives" that seek to address the "various challenges that currently inhibit the efficient movement of collateral", namely the Target2-Securities system (T2S) and the Central Securities Depository (CCSD) regulation (ERC 2014: 12).

Launched in 2008 and made operational seven years later, in 2015, the T2S platform was negotiated between and signed by 20 national, central securities depositories (CSDs). CSDs are a crucial element in securities market infrastructure, providing the service of registering, safekeeping and settling securities, as well as processing securities transactions in financial markets. Having traditionally relied on physical exchange of paper, securities markets now can entrust to CDS the important role of ensuring that transfer of securities that exist mainly electronically is undertaken in a safe and efficient manner. Given their location at the very end of the post-trading process, CSDs "witness all the settlement fails occurring during the settlement period", and hence can potentially be "a key element in ensuring settlement discipline" (EC 2016). "T2S itself is not a CSD", the ECB explains, rather "it is a platform which enables CSDs to increase their competitiveness" (ibid). The T2S standardizes crossborder settlement and creates a centralized delivery-versus-payment settlment system for the pan-European market (ERC 2014:12). The T2S is run by the Eurosystem which enables settlement in central bank money, widely considered "a very important feature" of the arrangement because it eliminates settlement risk, a function that can only be offered by central banks (ECB 2016).

The ECB notes that the T2S is one of the largest infrastructure projects to have been launched by the Eurosystem, and stresses that it brings "substantial benefits to the European post-trade industry": it reduces the costs of securities settlement in Europe; it deepens market integration by harmonizing post-trade practices across Europe, and it helps banks optimize their collateral and liquidity management by creating a single pool, "essentially ensuring that collateral is not blocked in local markets but can quickly be moved to where it is needed" (ECB 2016).

[11] The use of the plumbing metaphor is found elsewhere in the finance literature (see, for instance, Singh 2014), but letting it take center stage in the collateral and repo discourse was new. The 2012-report by the ERC had two sentences with references financial plumbing (ERC, 2012: 10, 14), but no systematic, structuring use as in the 2014-report.

An integral element of the gradual move towards T2S is the EU's Central Securities Depository Regulation (CSDR). The CSDR aims to harmonize settlement periods, trade recording, and conduct of business and prudential requirements across all CSDs, CCPs and trading venues. Both the migration towards the T2S system and the required harmonization of CSD pratices is in full motion, with both processes expected to be completed by September 2017; by then, all 20 CSDs are expected to have fully migrated to the T2S platform.

While initiatives such as the T2S and the CSDR are crucial to improve "the plumbing" of European securities markets, and hence essential for "collateral fluidity", this can only ever by half the story, the ERC stressed. It is commonplace, said ICMA, to forget that collateral doesn't move by itself. "The efficient sourcing, pricing and mobilization of collateral is a market function", ERC explained, taking place primarily in funding markets, "with bank funding desks acting as the primary intermediaries between various collateral users and takers" (ERC 2014: 12). Without the activities of bank funding desks, collateral would simply not move through the system, and hence investors would be "forced to rely on unsecured bank loans and deposits", the ERC notes (2014: 14). This, in turn, could create "cliff-effect risks" and would make central bank monetary policies much more difficult, since these rely on repo as the primary policy tool.

The new metaphors of collateral fluidity, plumbing and pumping established an intuitive appeal to the ERC's analysis, which in combination with its praise of the Commission's T2S and CSDR initiative, amounted to a positive spin as opposed to a merely or main defensive strategy of quarelling with certain literatures and resisting specific proposals.

Collateral fluidity and the new take on the role of regulation

On the basis of its outline of the two dimensions of collateral fluidity – the "plumbing" ensured by smooth crossborder settlement infrastructures and the "pumping" ensured by creating the best possible conditions for banks' funding desks to source and circulate collateral – ICMA asseses a number of "market and regulatory initiatives" as to whether they would likely have a positive or a negative impact. Regulatory measures or proposals such as the Basel 3 leverage ratio, the Basel 3 net stable funding ratio (NSFR), the financial transaction tax and minimum haircuts were all found to have a negative effect on collateral fluidity, whereas market initiatives such as new practices of collateral management were found to have a positive effect. As for the question of minimum haircuts, the engagement of ICMA's report with the literature on the systemic risks associated with repos was not exactly comprehensive. But the message was clear. "It is questionable", said the ERC, "whether prescribing mandatory minimum haircuts for repo transactions reduces procyclicality, and a number of studies suggest that the case for mandatory haircuts may be flawed" (ERC 2014: 17). So the concept of collateral fluidity was mobilized to undermine a wide range of regulatory initiatives, from the Basel 3 leverage ratio to the minimum haircuts framework originally proposed by the FSB. But in addition to such specific, targeted applications, the concept of collateral fluidity was evoked to make a general case against any and all forms of regulation of repo markets. This came to full fruition in the Capital Markets Union proposal.

When the Juncker Commission's Green Paper on the CMU was released there was much fanfare about SME, jobs and economic growth inspeeches and press releases. But underneath the veneer of those very general policy objectives, the CMU Green Paper was visibly informed by the ERC's discourse on collateral fluidity. More specifically, the Green Paper took point of departure in the notion that collateral fluidity in the European Union was seriously impeded, "preventing markets from operating efficiently" (EC 2015). The twin concept to collateral fluidity – namely, "the free flow of collateral" – was also explicitly deployed in the Green Paper, to denote an ideal state where no barriers inhibit the flow of collateral in European repo and securities lending markets.

Despite mentioning (in passing) the systemic risks associated with collateral reuse, and despite committing to seek views on "an appropriately regulated flow of collateral", the Commission ma no attempt to propose or ponder what "appropriate regulation" might be. The CMU Consultation questions are visibly more concerned with proposing ideas and eliciting views on how collateral fluidity can be improved. The anchoring of the CMU in the concept of collateral fluidity was remarkable because it reversed the Commission's prior stance on repo markets and securities financing (EC 2012, 2013), and disregarded a body of knowledge established in the first years after the crisis, that established unregulated repo markets as key catalysts of excessive leverage and procyclicality, and hence key sources of systemic risk (Gabor and Vestergaard 2015, Engelen et al 2016).

There is much speculation on the future course of the CMU, following Brexit – and following a potential Nexit and Frexit in coming years. While efforts to harmonize legislation for Europe's markets in capital, repo and collateral across EU member states may slow down considerably, there is little prospect that any taxes, or 'hard' regulatory measures, such as minimum haircuts, will be introduced. The narrative that has linked collateral fluidity and market liquidity, including STS markets – through integrated repo markets – has become firmly established amongst key policy makers and regulators, making the adoption of any such measures unlikely in the foreseeable future.

Concluding remarks

When Commissioner Hill stepped down, following Brexit, speculation about the future fate of the Commission's capital markets union (CMU) proposal immediately intensified. What was now to become of that much lauded plan, allegedly the "most significant EU proposal for the last 10 years"? While there is considerable uncertainty as to the course of direction that the CMU proposal will take in coming years, we argue that it has already served its main purpose: it has adopted as the Commission's official policy, a new framing of the role of colllateral and repo markets in the financial system – invented and propagated by the European Repo Council – and by extension effectively put a nail in the coffin on a regulatory discourse that had framed practices formerly known as "shadow banking" as a source of systemic risks, in dire need of new regulatory interventions.

Whereas the CMU proposal may at first seem to be mainly concerned with SME growth and job creation (through a reinvigoration of securitization) we suggest that the deeper, intended outcomes are different ones. The CMU aimed, first, to change a predominantly negative regulatory discourse on shadow banking; second, to resurrect repo trading as driver of European financial integration (which ultimately aims to ensure cheapest possible leverage, on a 'secured' basis); and last but not least, in so doing, to contribute to the further derailing of a range of other (alledgedly misguided) regulatory initiatives (such as the FTT, bank structural reform, etc.)

After years of deliberations on how to mitigate the systemic risks arising from shadow banking, and their detrimental effects on the real economy, the emerging consensus that growth in Europe requires *more* rather than *less* market-based finance is remarkable. The European Commission argue that banks are still repairing balance sheets and are facing new regulatory regimes that will likely increase their costs and make lending to SMEs and other businesses more expensive. Therefore, the only way forward is to allow banks to engage more in capital market lending via securitisation, and to fund it in short-term money markets. Only a reinvigoration of securitized banking can improve lending conditions in Europe, the Commission reasons.

For their market-making activities, banks rely on collateralized funding markets, where borrowing against collateral makes leverage cheapest. So when the CMU speaks of the importance of "collateral fluidity", it is essentially saying that we should ensure that collateral based funding for large banks remains unregulated – irrespective of compelling evidence since the global financial crisis that banks run on each other in wholesale funding markets.

While this rationale can be problematized in multiple ways (Gabor and Vestergaard 2015, 2016), we have stressed one feature of the discourse as particularly telling. The CMU Green Paper notes that "the fluidity of collateral throughout the EU is currently restricted, preventing markets from operating efficiently" (EC 2015: 23)**.** The concept of "collateral fluidity" was initially an invention by ICMA's European Repo Council (ERC), as we've seen. It refers to the absence of barriers inhibiting the flow of collateral in repo and securities lending markets. The Commission's view that markets operate less efficiently where collateral is not "fluid" echoes the ERC position that regulation "inhibiting collateral fluidity" poses systemic risks. The tables have turned, in other words: systemic risk now resides not in repo markets, but in efforts to regulate them.

It should be noted that although the CMU remains a proposal, and that it faces an uncertain future after Brexit, it can already celebrate a number of achievements of a secondary nature, in the form of spillover effects on other regulatory initiatives. First, the amendments proposed by the European Parliament in December 2014 to introduce the FSB mandatory haircut framework in the Transparency of SFTs Regulation didn't square with a CMU predicated on the idea of freely flowing collateral. Hence it was unsurprising to see the haircut framework disregarded in the final SFT Regulation, launched in late October 2015. Second, since the launch of the Liikanen report in October 2012, regulators in Europe have contemplated banking separation reforms to address the problem of too-big-to-fail banks. But as Europe reframes and revives securitization, large banks will likely become larger still, as they will play key roles both as issuers and market-makers. Any momentum that might be left in bank separation reforms as well as in the ever-limping European FTT negotiations is likely to slowly but surely dissipate over the next few years, as the CMU regains its momentum.

Last but not least, any new regulatory initiative one might conceive of in the foreseeable future, to address systemic risks arising from collateral and repo markets, will have to overcome the discourse on collateral fluidity, with its plumbing and pumping functions as the key prerequisites for smoothly functioning, resilient financial systems, and anything that impedes those functions as inherently a systemic risk and a threat to financial stability.

Bibliography

Adrian, T. and Shin, H.S. (2010). Liquidity and leverage. Journal of Financial Intermediation, 19 (3): 418-37.

Bavoso, V. (2016). Simple, transparent and standardized securitization: business as usual? *FEPS Study, September 2016, Brussels, Foundation for European Progressive Studies.*

Braun, B. (2016). The financial consequences of Mr Draghi? Infrastructural power and the rise of market-based (central) banking. *FEPS Working Paper*.

Brunsden, J. and Barker, A. (2016). City to be sidelined by capital markets union plan. *Financial Times*, June 29, 2016.

CICF (2012). *Collateral fluidity*. A White Paper prepared by the Collateral Initiatives Coordination Forum (CICF), November 2012.

CGFS (1999). Recommendations for the design of liquid markets. *CGFS Publications*, No. 13, October 1999. Geneva: Committee on the Global Financial System.

EBF (2013). Joint letter to Michael Noonan, Minister of Finance of the Republic of Ireland. European Banking Federation, available at http://www.ebf-fbe.eu/uploads/EBF_001984-Associations%20Joint%20Letter%20FTT_M_Noonan-Irish%20Presidency.pdf

EC (2010). Taxation of the Financial Sector, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *COM (2010) 549*, available at http://ec.europa.eu/taxation_customs/resources/documents/taxation/com_2010_0549_en.pdf

EC (2011). *Consultation paper*, 11 February 2011, European Commission, available at http://ec.europa.eu/taxation_customs/resources/documents/common/consultations/tax/financial_sector/consultation_document_en.pdf

EC (2012). Green paper on shadow banking, 19 March 2012. Brussels: European Commission. http://ec.europa.eu/finance/bank/docs/shadow/green-paper_en.pdf

EC (2013). Shadow banking: addressing new sources of risk in the financial sector. *Communication from the Commission to the Council and the European Parliament*, available at http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013DC0614&from=EN

EC (2015a). Building a capital Markets Union, *Green paper*, 18 February 2015. European Commission, available at http://ec.europa.eu/finance/consultations/2015/capital-markets-union/docs/green-paper_en.pdf

EC (2015b). *Regulation on securities financing transactions and of reuse*: http://europa.eu/rapid/press-release_MEMO-15-5931_en.htm

EC (2016). *Central Securities Depositories*. http://ec.europa.eu/finance/financial-markets/central_securities_depositories/index_en.htm

ECB (2002). Main features of the repo market in the Euro area. *Monthly Bulletin*, October, pp. 45-67.

ECB (2016). *What is T2S?* Available at http://www.ecb.europa.eu/paym/t2s/about/html/index.en.html

EEC (1966). *The development of a European capital market*. The European Economic Commission, Brussels.

Engelen, E. (2016). *How Shadow Banking became Non-Bank Finance: Blame the Conjuncture*. Unpublished manuscript, University of Amsterdam.

Engelen, E. and Glasmacher, A. (2016). "Simple, transparent and standardized": Narratives, law and the interest coalitions behind the European Commission's Capital Markets Union. *FEPS Working Paper*.

Engelen, E. et al (2016). There is nothing 'simple' about the European Commission's securitization proposal. Open letter to Members of the European Parliament.

ESRB (2013). Towards a monitoring framework for European securities financing transactions. *ESRB Occasional Paper Series*, No 2. European Systemic Risk Board.

ESRB (2015). *Report on the efficiency of margining requirements to limit procyclicality*. European Systemic Risk Board.

ESRB (2016). *Macroprudential policy beyond banking: an ESRB strategy paper*. European Systemic Risk Board.

ERC (2012a). *Haircuts and initial margins in the repo market*. European Repo Council, International Capital Markets Association (ICMA).

ERC (2012b). *Shadow banking and repo*. European Repo Council, International Capital Markets Association (ICMA).

ERC (2012c). *Response submission from the ICMA European Repo Council,* Basel, 22 May, 2012. European Repo Council, International Capital Markets Association (ICMA). Available at: http://www.fsb.org/wp-content/uploads/c_120806e.pdf

ERC (2013). *Collateral damage: the impact of the FTT on European repo markets and its consequences for the financial markets and the real economy.* European Repo Council, International Capital Markets Association (ICMA).

ERC (2014). *Collateral is the new cash: systemic risks of regulating repo*. European Repo Council, International Capital Markets Association (ICMA).

FSB (2011). *Shadow banking: strengthening oversight and regulation*. *Recommendations*. Basel: Financial Stability Board. http://www.fsb.org/wp-content/uploads/r_111027a.pdf?page_moved=1

FSB (2012a). Strengthening oversight and regulation of shadow banking. An integrated overview of policy recommendations. Basel: Financial Stability Board. Available at: http://www.fsb.org/wp-content/uploads/r_121118.pdf

FSB (2012b). Strengthening oversight and regulation of shadow banking. Securities lending and repo. Basel: Financial Stability Board. Available at: http://www.fsb.org/wp-content/uploads/r_121118b.pdf?page_moved=1

FSB (2013a). Strengthening oversight and regulation of shadow banking. Policy framework. 29 August 2013. Basel: Financial Stability Board. Available at: http://www.fsb.org/wp-content/uploads/r_130829c.pdf

FSB (2013b). Strengthening oversight and regulation of shadow banking. Policy framework for addressing shadow banking risks in securities lending and repos. 29 August 2013. Basel: Financial Stability Board. http://www.fsb.org/wp-content/uploads/r_130829b.pdf?page_moved=1

FSB (2014a). FSB publishes regulatory framework for haircuts on non-centrally cleared securities financing transactions. 14 October 2014, Basel: Financial Stability Board. http://www.fsb.org/2014/10/pr_141013/

FSB (2014b). Strengthening oversight and monitoring of shadow banking: regulatory framework for haircuts on non-centrally cleared securities financing transactions. Basel: Financial Stability Board. http://www.fsb.org/wp-content/uploads/r_141013a.pdf?page_moved=1

FSB (2014c). *Transforming shadow banking into resilient market-based financing. An overview of progress and roadmap for 2015.* Available at: http://www.fsb.org/wp-content/uploads/Progress-Report-on-Transforming-Shadow-Banking-into-Resilient-Market-Based-Financing.pdf

FSB (2015): Transforming shadow banking into resilient market-based finance: An overview of progress. Financial Stability Board. http://www.fsb.org/wp-content/uploads/shadow_banking_overview_of_progress_2015.pdf

Gabor, D. (2015). A step too far? The European financial transactions tax on shadow banking. *Journal of European Public Policy*, 23 (6): 925-945.

Gabor, D. and Ban, C. (2015). Banking on bonds: the new ling between states and markets. *Journal of Common Market Studies*, 54 (3): 617-635.

Gabor, D. (2016). The (impossible) repo trinity: the political economy of repo markets, *Review of International Political Economy*. DOI: http://dx.doi.org/10.1080/09692290.2016.1207699

Gabor, D. and Vestergaard, J. (2015). Capital markets union: the systemic issues buried deep in the markets infrastructure plans. *FEPS Policy Brief*, April 2015. Brussels: Foundation for European Progressive Studies.

Gabor, D. and Vestergaard, J. (2016). Towards a theory of shadow money. *INET Working Paper*. New York: Institute for New Economic Thinking.

Giovanni Group (1997).*The Impact of the Introduction of the Euro on Capital Markets* . July 1997, Brussels.

Giovanni Group (1999). *EU repo markets: opportunities for change.* October 1999, Brussels.

Giovanni Group (2001). *Cross border clearing and settlement arrangements in the European Union.* November 2001, Brussels.

Gorton and Metrick (2009). Securitized banking and the run on repo. *NBER Working Paper,* No. 15223. National Bureau of Economic Research.

Hordahl, P. and King, M. (2008). Developments in repo markets during the financial turmoil. *BIS Quarterly*, December.

Hübner, M. (2016). Securitization to the rescue: The European capital markets union project, the Euro crisis and the ECB as 'macroeconomic stabilizer of last resort'. *FEPS Working Paper.*

ICMA (2016a). *Frequently Asked Questions on repo*. International Capital Markets Association (ICMA). Available at: http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/repo-and-collateral-markets/frequently-asked-questions-on-repo/ (last accessed 11 September 2016).

ICMA (2016b). Collateral Initiatives Coordination Forum. Available at: http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/collateral-initiatives-coordination-forum/

IMF (2010). *Financial sector taxation. The IMF's report to the G20 and background material*. Washington DC: International Monetary Fund.

Johnston, A. (2016). Ducking uncertainty: the EU's regulation of the repo market, *SPERI comment: political economy blog*. Sheffield University.

Kay, J. (2016). A setback to capital markets union – a glimpse of silver lining in the Brexit cloud. Available at http://www.johnkay.com/2016/07/13/

McCauley, R.N. (1999). The Euro and the liquidity of European fixed income markets, in BIS (1999). *Market liquidity: research findings and selected policy implications.* Basel: Bank of International Settlements.

Mehrling, P., Pozsar, Z, Sweeney, J. and Neilson, D. (2013). Bagehot was a shadow banker. Shadow banking, central banking and the future of global finance.

Moloney, N. (2015). Capital markets union: "ever closer union" for the EU financial system. *European Law Review*, 41 (3). pp. 307-337.

Mooney, P. (2016). Fears grow Brexit will slow Capital Markets Union. *Financial Times*, July 17, 2016.

Mullin, K. (2016). The impact of Brexit on capital markets regulation. *International Financing Review* (IFR), August 2016. Available at, http://www.ifre.com/Uploads/2016/08/08/f/l/h/Brexit-Conclave-FINAL-2.pdf

Pozsar. Z, Adrian,T., Ashcraft, A. and Boesky, H. (2010). Shadow banking. The New York Federal Reserve Bank, *Staff Report No 458*. New York.

Thiemann, M. (2016). Capital Markets Union and the threat of regulatory competition. *FEPS Working Paper.*

Véron, N. and Wolf, G.B., (2015). Capital markets union: A vision for the long term. *Bruegel Policy Contribution*. Issue 2015/05, April 2015

Véron, N. (2016). A post-Brexit opportunity Europe shouldn't miss. *Bloomberg*, July 14, 2016.