

**Response to The Financial Stability Board's
Consultative Document:
Strengthening Oversight and Regulation of Shadow
Banking**

A Policy Framework for Strengthening Oversight and
Regulation of Shadow Banking Entities

By:

Casey Campbell, London

Tamar Joulia – Paris, Brussels

www.CreditUtility.eu

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Introduction

There is much to praise in this consultative document's proposed approach to shadow banking ("SB"), most notably the adoption of functional regulation¹ as well the overall objectives.

However, we are concerned that, as described, this framework will fall short of its objectives and will ultimately

- I. prove confusing and difficult to implement consistently across multiple regulatory jurisdictions;
- II. prompt questions and resistance within the financial industry;
- III. most critically, do little to improve financial network resilience and stability.

This is because the framework's perspective is too narrow and over-simplified.

We also believe that a more robust response to the systemic risk monitoring challenge is needed. Effective market monitoring is an essential pre-requisite for SB oversight.

To explain and propose solutions to these concerns, this reply is organised into:

- 1) A response to Q1 noting some issues with the proposed approach
- 2) A response to Q2 presenting suggested modifications to the approach
- 3) A response to Q3 setting out information requirements for this alternative approach
- 4) A response to Q4 which discusses relevant regulatory tools for this alternative approach
- 5) A response to Q5 which discusses the contrasting cost and data issues between the original and modified approach

The materials presented remain at a high level and are illustrative only. As such, they outline opportunities for improved efficiency and effectiveness in delivering the targeted outcomes. In need, the presented framework may be implemented without material delay or market disruption. Our underlying assumption is that if these ideas are of interest, further dialogue will follow.

In conjunction with this response, we are also submitting a separate, parallel response to the FSB's Securities Lending and Repo consultation.

¹ Appendix B summarises items which we see as particularly desirable in the FSB's approach
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Q1. Do you agree that the high-level policy framework effectively addresses shadow banking risks (maturity/liquidity transformation, leverage and/or imperfect credit risk transfer) posed by non-bank financial entities other than MMFs? Does the framework address the risk of regulatory arbitrage?

While we strongly support functional regulation as an approach, we do not agree with this assertion. Our concern is that the proposed framework will prove ineffective with regard to managing the systemic risks posed by SB activities.

Specifically, as a high-level description, we feel that the presented framework confuses functional regulation with entity regulation. It also fails to adequately explain how functional regulation will respond to the systemic risks experienced during the 2007/8 global financial crisis. And it is unclear how this framework will identify and respond to other risks that might emerge in the future. As such, material ambiguities remain around what is being proposed, its practical application and how the regulatory effort might be co-ordinated².

I. Sources of confusion and ambiguity

a) Fragmented and incomplete functional descriptions

The Financial Stability Board (“FSB”) framework describes its purpose as ensuring “... that shadow banking is subject to appropriate oversight and regulation to address bank-like risks to financial stability emerging outside the regular banking system while not inhibiting sustainable non-bank financing models that do not pose such risks”. It then goes on to concentrate “on those activities that are material to the system” and WS3 identifies five “economic functions” posing financial stability risks from shadow banking³.

Reading the consultation document, it appears that the second step of narrowing the FSB’s focus has relied upon a bottom-up analysis of granular, non-regulated financial network participants (i.e. SBs) and their activities in order to define the target economic functions⁴. The resulting functional descriptions are, in our view, fragmented and difficult to follow. Their precision also invites arbitrage by allowing market participants to simply migrate their activities beyond the defined borders.

For instance “management of cash pools” in itself is a recognisable economic function. Adding “with features that make them susceptible to runs”⁵ to the description is confusing. Why is this qualification needed? What is being included and excluded from this economic function as a result? How will the targeted activity be identified, monitored and managed?

Another example would be the distinction drawn between “facilitation of credit creation” and “securitisation and funding of financial entities”⁶. Again this raises boundary and scope questions: why are these activities being segregated? What does each include and what different economic purposes does each serve? Are they not both simply forms of market

² for instance, is the purpose of this framework’s consultation to define how functional regulation will work and be implemented or how to assess whether functional regulation is needed in a given jurisdiction?

³ see Pp 1, 2 & 8 in FSB 2012 and P 5 in FSB 2012a

⁴ see P 1 in FSB 2012a

⁵ see P 6 *ibid.*

⁶ see Pp 8 - 10 in FSB 2012a

financed credit intermediation?⁷ What are the links with and differences from the FSB's planned policies under item (iv) relating to "incentives associated with securitisation"?

To support systemic stability, a financial transaction's purpose should be clear and easily understood. The same holds true for economic function definitions. A functional approach should assess risks from an end-to-end process rather than entity perspective. In the above discussion, "management of cash pools" is an easily recognised end-to-end process.

Once a process has been examined and systemic concerns identified, functional regulation should target the undesirable activities within the process to mitigate the risks. This should happen regardless of whether what is undesirable originates from regulated or non-regulated participants. Attempting to regulate the activities of only some functional participants is akin to introducing air traffic control for only some of the aircraft flying.

Therefore, to implement functional regulation, the initial risk assessment step must consider all activity relating to that economic process, even if only one sub-component raises systemic risk concerns⁸. Such a broad first step provides essential context. This context allows regulators to identify both newly emerging risks and new participants. It also allows them to spot changes in already identified risk drivers. In this regard, regulators should assume that if a financial transaction's or a functional area's economic purpose remains unclear, even after clarification has been requested, it most probably has an undesirable purpose⁹.

It is also important to recognise that desirable economic activities can simultaneously foster systemic risk. End-to-end process (i.e. functional) monitoring should scan for aggregated risk build-ups amidst desirable activity¹⁰. Similarly, granular activities that are acknowledged as serving a useful purpose may also be applied in undesirable ways. Part of the regulatory framework's role is to delineate between desirable and undesirable activities on an ongoing basis¹¹.

b) Too narrow and simple a perspective of the financial network

As drafted, the framework appears to focus upon compartmentalising SB losses and ensuring that any associated contagion remains outside the regulated banking sector. Critically, some readers may misconstrue this, along with the FSB's discussion of "spill-over effects" and indirect regulation¹². In this case they may conclude, mistakenly, that SB's systemic risks can be contained as long as they remain segregated from regulated banking.

The simplicity of this containment proposal is appealing. However, it only holds true if SB remains relatively insignificant within the overall financial network. As soon as SB's participation rate becomes material, any pronounced SB asset price instability will have broad repercussions. This is because losses are losses and once they reach a critical

⁷ see P 2 in Comotto and Pp 4 – 6 in Claessens

⁸ P 1 in FSB Nov 2012a appears to recognise this but the rest of the document does not

⁹ see also framework description in Appendix A. We believe that the onus should lie with the transaction originators to explain a complex transaction's purpose rather than for the regulator to have to request this.

¹⁰ for instance, herd behaviour in structuring and pricing transactions

¹¹ we provide examples of desirable and undesirable shadow banking on Pp 2 - 4 in Joulia-Paris.

¹² see P 8 in FSB Apr 2011 as well as P i in FSB Nov 2012a; section 4.2(i) on P 15 of FSB Jun 2012; P 2 in FSB Apr 2012; and section 2.1(vii) on P 6 in the FSB Oct 2011

volume, market feedback loops set in which are indifferent as to who the owners of the affected asset are.

Attempts to segregate regulated banking and SB also ignore the fact that regulated banks have themselves been active SB participants rather than mere suppliers of credit¹³. The conclusion to be drawn is that functional regulation should focus upon asset price stability and monitor both regulated banks and SB at the same time.

Similarly, functional policy tools will and must impact all participants in an economic function, not just SBs. Amongst other objectives; these tools should foster a level playing field within and across economic functions and regulatory jurisdictions.

c) Framework confuses process regulation with entity regulation

The drafting of this consultation is striking for its reliance upon an entity regulation rather than a process risk management (functional) approach¹⁴. The distinction made between regulated and unregulated entities is also surprising. This is because a functional perspective focuses upon end-to-end processes, their economic purpose and their potential to yield both desirable and undesirable effects. As such, functional regulation should not be defined in terms of the kinds of entities that engage in the process. Rather, it needs to highlight how the process adds value and the risks that may emerge in the pursuit of such value creation. Functional regulation should also discuss what, specifically, regulation will change so as to reduce systemic risk.

As drafted, the proposed framework gives the impression that the difference between atomistic and functional regulation has yet to be recognised¹⁵

To correct this, the descriptions of the targeted functions must be broadened to cover end-to-end economic activities that are recognisable by the general public. That is, they must describe a financial function that either serves some easily understood purpose or describe the undesirable behaviours that the regulator is trying to discourage¹⁶. Our modified end-to-end economic process targets appear in our response to Question 2.

II. Points likely to trigger questions and resistance

We expect the above ambiguities¹⁷ to prompt industry resistance. Specifically around:

a) Regulatory complexity and excess

With rising disintermediation, the distinction between regulated banking, SB and regulated insurance is becoming more blurred. At some point, regulated institutions may well challenge what they may characterise as over-regulation¹⁸. They may then go on to question the whole logic of allowing SB disintermediation to take place.

¹³ the response to Question 2 below expands upon this.

¹⁴ see Pp 1, 3 - 5 and 10 - 12 in FSB Nov 2012, all of which focus upon entity classification. Similarly the FSB's principles rely upon entity oriented language

¹⁵ see P 21 in Haldane 2009 and Pp 8 - 12 in Joulia-Paris

¹⁶ We particularly like Claessens' P 4 observations that "The definition of shadow banking is not yet settled" and "To formulate a policy response to shadow banking, one needs to understand its operations and drivers."

¹⁷ as well as lingering definitional concerns – see P 4 in Claessens and P 2 in Comotto

¹⁸ possibly using arguments put forward by regulators themselves – see Haldane Aug 2012

In proposing seemingly parallel regulation for SB and regulated banks, the proposed framework raises the spectre of considerable further complexity. Such parallel regulation will create persistent alignment issues. It will also be inefficient, as discussed in our response to Question 5 below.

Efforts to manage this complexity will be necessary beyond a given regulatory jurisdiction. Specifically, global regulators will need to watch that systemically risky activities do not migrate between rival and potentially competing regulatory jurisdictions. Countries should also be encouraged to avoid encouraging such dynamics. And co-ordination will be needed with other FSB policy areas¹⁹.

Finally, the blurring of boundaries raises questions about how the proposed functional and entity regulation frameworks will be aligned. And about when and how bank licensing laws should be enforced both on new entrants and existing, regulated entities (i.e. threatening to withdraw the license) if warranted.

b) Reporting duplication and compliance costs

As drafted, all market participants are bound to resist any incremental reporting and compliance obligations. Regulated banks will be particularly sensitive to any regulatory overlap between SB and existing micro-prudential regulations²⁰. This is because reporting systems are especially costly for banks to build and maintain unless they can be leveraged to generate revenue or enhance internal risk management systems.

c) Unsubstantiated claims of being forward looking

The policy framework claims to be forward looking and adaptable²¹. We have yet to find much support for this claim in the circulated materials²².

Emerging risks are often discernible from:

- changes in market participation levels and business mix by principals and intermediaries;
- difficult to explain movements in price, volume and duration metrics;
- stress testing results, particularly as scenario plausibility increases

It is not clear how the proposed framework will capture this, particularly if it only monitors some transactions and participants within an economic function. Similarly, it is not clear how non-registered market participants and their activities will be identified. Presumably there is an assumed reliance upon micro-prudential regulation for this. Further specifics along these lines would be useful.

d) Confidentiality concerns

Some industry participants may resist added monitoring on the grounds of protecting client confidentiality as well as protecting competitive advantage. Such sensitivities are

¹⁹ notably (i), (iv) and (v) on P i in FSB 2012a

²⁰ See P 19 in EC Dec 2012

²¹ see P 2 in FSB Nov 2012 and Pp 5 & 6 in FSB 2012a

²² beyond the claims made on Pp 5 & 21 in FSB (Nov 2012), there are no elaborations on how, exactly, regulators will identify emerging risks.

often re-enforced by local banking laws which protect client confidentiality. These concerns can not be dismissed out of hand. Nonetheless, it is possible to respect them and still collect granular data, as further explained in Appendix A.

III. Opportunities to improve financial network resilience and stability

a) Correcting the loss of supporting capital

With the introduction of modern liquidity and risk management techniques, risk supporting capital tends to fall away when financial risks are transformed and transferred. This is particularly the case with transfers beyond the regulated sector.

The aggregate implications of this arbitrage also appears to be one of the less appreciated and systemically significant realities of risk transformations²³. There is significant potential for contagion if regulators and market participants lose sight of where risks have migrated to in the economy and how much capital supports those risks.

Accordingly, one of the monitoring challenges is to track both how risks migrate within the financial network and how much capital remains in place to support those migrated risks once they have stopped moving.

b) Allowing banks to manage their own balance sheets

The presented framework appears to ignore regulated banks' need to manage their own balance sheet. This is necessary as a driver for financial sector flexibility as well as for idiosyncratic risk profile management and regulatory compliance reasons. We also note that such flexibility is a form of resilience in that it allows banks and economies to

- manage their exposures in the face of evolving market conditions;
- offer diversified real-economy investment assets to long term investors.

c) Fixing past oversight weaknesses and anticipating the market's evolution

The draft framework touches upon several issues that became plain during the 2007/8 financial crisis and which are likely to recur²⁴. It is less clear about the transparency issues that kept regulators and market participants alike from understanding where credit risks had migrated to within the market, how much capital supported these transferred risks and how interconnectedness had developed within the financial network²⁵.

We also question whether the proposed approach would have allowed regulators to identify and respond to:

- runs on wholesale funding
- oversight failures (e.g. the US sub-prime crisis – arguably a micro-regulation issue)
- the Too Big To Fail issues (and Lehman's critical role in the financial network)
- entry by new, unmonitored market participants (e.g. the AIG phenomena)
- the challenges relating to efficient and adequate data monitoring

²³ the response to Question 1 I.b) refers

²⁴ see P ii in FSB 2012a

²⁵ see P 5 in Campbell and P 7 in Joulia-Paris for further elaboration of this point

- the escalating European sovereign credit risks
 - rising levels of inter-connectedness
- in the run-up to the most recent crisis.

d) Regulatory and network simplification

There is a strong need to simplify the financial network's operations and regulation. This includes monitoring consistency (timing, definitional, etc. etc.) across jurisdictions as well as an ability to pro-actively manage emerging risks. There is also a need to be able to de-construct data while still preserving granular confidentiality commitments.

Similarly, the introduction of functional regulation as a macro-prudential tool should not erode the role and application of entity-specific bank regulation. Functional regulation should ultimately simplify such micro-regulation by providing incremental data and insight on risk flows and interconnectedness.

Q2. Do the five economic functions set out in Section 2 capture all non-bank financial activities that may pose shadow banking risks in the non-bank financial space? Are there additional economic function(s) that authorities should consider? If so, please provide details, including the kinds of shadow banking entities/activities that would be covered by the additional economic function(s).

As proposed in the FSB's framework, an approach to functional regulation might rely upon three steps:

Step 1 – Filter economic activities for systemic significance

Step 2 – Delineate between desirable and undesirable behaviour amongst the identified significant activities

Step 3 – Apply regulatory tools to constrain and sanction undesirable behaviour while supporting desirable behaviour in the targeted area

Steps 1 and 2 correspond to the “casting the net wide” and “narrowing the focus” steps described in the FSB's approach.

Crucially, by only monitoring some of the functional participants the FSB's proposed five economic functions miss two key determinants of what is systemically significant:

a) what proportion of the activity causing concern is occurring in the shadows and how material is this to the network as a whole?

and

b) who and where are the “super-spreaders” within the functional area?²⁶

The offered framework also ignores the reality that significant “SB activities”²⁷ originated from within and were maintained by regulated banks. An approach oriented exclusively towards non-regulated entities will therefore miss similarly undesirable behaviour by regulated banks. It is not clear that entity regulation will respond to this issue nor is it surprising that the offered “economic function” definitions are difficult to follow.

To complete step 2 above, we believe that the regulatory framework needs to delineate between

A. functions oriented towards most “real economy” counter-parties /customers. These should serve an easily understood economic purpose, like cash management (function1), lending (function 2) and providing access to capital markets (function 3). These first three functions are comparable to the first three FSB economic functions. They do not create financial transformation nor do they materially expand the chain-of-claims within the financial network;

and

B. functions oriented towards servicing either clients within the financial network (whether regulated or not) (function 4) or the originating financial institution's own

²⁶ See Pp 4 & 25 in Haldane 2009

²⁷ i.e. activities that remain undisclosed and fall outside the regulatory net.

needs (function 5). In both cases these activities relate to balance-sheet optimization efforts. Both also transform risk and thereby create interconnectivity and dimensionality within the financial network. As such these activities contribute to the chain-of-claims and market complexity. They also tend to be kept confidential and unreported.

Such segmentation is possible by focusing upon transaction complexity and identifying who the ultimate transaction principals are²⁸. Monitoring should also track collective behaviour patterns and generate aggregate metrics for controlled publication.

Each of our proposed five functions above is further described in the table hereunder. The table also covers each function's purpose, indicative activities and products, typical entities that supply such services and products, as well as related systemic concerns, change targets and proposed regulatory toolsets.

The current FSB proposal does not include the last (fifth) function of own balance-sheet efficiency management by financial institutions.

²⁸ i.e. who is selling and who is buying and retaining the transaction's main risks?

Activity-based Systemic Risk Assessment Framework (for shadow banks, investment funds, regulated banks, insurers etc.)					
Target client	Real economy counterparties (including, in relatively few instances, financial institution acting as an end-user counterparty)			Financial institutions	
Service orientation	External clients and/or counterparties				Internal (own) performance management
Function	Function 1	Function 2	Function 3	Function 4	Function 5
	Cash management services	Lending	Capital market services	Client balance sheet optimisation	Proprietary balance-sheet optimisation
Economic purpose	Transfer of financial risks (credit, liquidity, maturity) between principals, with limited or no risk transformation			Transformation of financial risks (credit, liquidity, maturity) and partial financial risk transfer to investors	
Impact on market complexity (systemic risk)	Limited or no expansion to the chain-of-claims			Expands the chain-of-claims	
Description	Custody, discretionary investment and transmission of cash;	Lending (including extensions of credit in the form of loans or guarantees);	Structuring, underwriting and execution of capital markets transactions;	Advisory and market access services using capabilities developed in functions 1 - 3 and oriented towards transforming client's liquidity and/or credit risk profiles. Advisor may assume some transformed or secured lending risks;	Operating control (including surplus asset or liability management); Regulatory compliance (with capital/leverage and liquidity requirements);
Indicative activities and products	Deposit and payment collections (retail and wholesale); Cash pooling; Liquidity (counter-party and instrument) risk management; Cross-border cash transmission;	Secured and unsecured lending (including leasing and vendor financing); Structured credit (tail) risk management (including non-funded, contingent liabilities such as stand-by liquidity support, guarantees and credit substitution);	Servicing client's balance sheet funding (e.g. securities issuance) and simple hedging needs (whether funded or not);	Balance sheet risk profile transformation (proprietary trading, ALM and credit portfolio hedging, loan warehousing, off balance sheet structuring, securitisation etc); Liquidity servicing (including repo's, securities lending, ABCP); Prime brokerage;	ALM and treasury services (covered bond programmes, securities lending, repos and re-hypothecations, IRR hedging); Proprietary trading and investment; Credit (loan) portfolio risk management (including risk transfers using hedging, syndications and securitisations);

	Activity-based Systemic Risk Assessment Framework (for shadow banks, investment funds, regulated banks, insurers etc.)				
Target client	Real economy counterparties (including, in relatively few instances, financial institution acting as an end-user counterparty)			Financial institutions	
Service orientation	External clients and/or counterparties				Internal (own) performance management
Function	Function 1	Function 2	Function 3	Function 4	Function 5
	Cash management services	Lending	Capital market services	Client balance sheet optimisation	Proprietary balance-sheet optimisation
Purpose	Safe keeping and expert liquidity positioning to maximise returns	Transfer real economy driven financial risks (liquidity, credit, market risks) from client to financial provider's balance sheet;	Service real economy counterparties' capital markets access needs;	Financial risk transformation (balance sheet management); Market based funding of proprietary trading and investment;	
Typical non-regulated entities also active in this area	Investment (mutual) funds; Trusts; Short duration ETFs; Hedge funds; Securities broker-dealers; Specialist FX service providers;	Finance companies; Leasing companies; Credit investment funds; Hedge funds; Insurers (as investors);	Prime brokers and securities broker-dealers; ETFs; Private equity funds; Hedge funds; Commercial Paper programmes; Insurers and guarantee providers;	Conduits (e.g. loan warehousing); Securities broker-dealers; Asset managers, hedge and private equity funds; Insurers and guarantee providers; Special purpose vehicles (including securitisation entities); Finance and trust companies;	Special purpose, non-consolidated & off-shore vehicles; Insurers and pension funds (both as service providers and investors);
Systemic risk concerns	Excessive and hidden leverage; Pro-cyclical liquidity strategies (risk of runs);	Excessive and hidden leverage; Aggregate risk concentrations;	Financial network inter-connectedness;	Excessive and hidden leverage; Regulatory and accounting arbitrage; Pro-cyclical liquidity & funding strategies; Private money creation; Financial network interconnectedness; Imperfect credit risk transfers; High-risk (speculative) investment incorporating public sector puts; Risk of runs and aggregated risk concentrations;	
Target change	Real time monitoring of liquidity levels, interconnectedness and vulnerability to runs; Ability to signal regulatory concerns and manage contagion;	Real time monitoring of aggregate market risk parameters (including rising leverage, average prices, risk concentrations and inter-connectedness); Ability to signal regulatory concerns and manage contagion;	Real time monitoring of aggregated volumes; Sustained market access in times of stress; Clear labelling of real-economy oriented vs. speculative activity; Ability to signal regulatory concerns and manage contagion;	Real time monitoring; Clear delineation of risk management vs. speculative activity; Ability to signal regulatory concerns and manage contagion;	Real time monitoring (including aggregated ALM shifts, material risk transfer activity fluctuations and risk transfer pricing levels); Ability to signal regulatory concerns and manage contagion;

Activity-based Systemic Risk Assessment Framework (for shadow banks, investment funds, regulated banks, insurers etc.)					
Target client	Real economy counterparties (including, in relatively few instances, financial institution acting as an end-user counterparty)			Financial institutions	
Service orientation	External clients and/or counterparties				Internal (own) performance management
Function	Function 1	Function 2	Function 3	Function 4	Function 5
	Cash management services	Lending	Capital market services	Client balance sheet optimisation	Proprietary balance-sheet optimisation
Tools (long term incentives)	Encourage the creation of HQLA	Expand the scope of acceptable liquidity (HQLA) assets; Differentiate capital requirements by asset type; Broaden the definition of acceptable assets at the central bank discount window;	Expand the scope of acceptable liquidity (HQLA) assets; Differentiate capital requirements by asset type; Broaden the definition of acceptable assets at the central bank discount window;	Not applicable	Expand the scope of acceptable liquidity (HQLA) assets; Differentiate capital requirements by asset type; Broaden the definition of acceptable assets at the central bank discount window;
Tools (periodic signalling)	Impose regulation (including liquidity buffers and capital requirements); Restrict maturity of portfolio assets; Limit leverage; Limit asset concentrations; Limit investment in illiquid assets; Liquidity buffers; Redemption restrictions for real-economy investors; Restrict the use of client assets;	Impose regulation (including liquidity buffers and capital requirements) on deposit taking lenders; Limit lenders' asset and counterparty concentrations;	Limit the scale and scope of a business; Enhanced risk management practices to capture tail risks; Mandatory risk sharing regimes; Limit lender investments in certain liability types (securities);	Restrict fund redemptions by non-real economy investors; Require enhanced risk management practices to capture tail risks; Limit business scale and scope; Limit inter-connectedness (require the use of a CCP); Introduce mandatory risk sharing regimes; Restrict eligible collateral and maturity/liquidity transformation; Adjust eligibility criteria for certain assets at the discount window; Adjust "bail-in" triggers	Limit covered-bonds as a % of balance sheet; Mandatory risk sharing regimes; Impose leverage limits for lenders; Restrict lenders' ALM positions; Adjust eligibility criteria of certain assets at the discount window; Adjust "bail-in" triggers; Restrict bonus pools, dividend distributions etc.
FSB proposal	Management of client cash pools	Loan provision	Intermediation of market activities	Securitization and funding of financial activities; Facilitation of credit creation	Not covered

We expect most regulatory jurisdictions will only complete Step 1 for functions 1-5 above before concluding that their systemic risks from these activities are limited. A few may continue on to Steps 2 and, occasionally, 3. This would particularly be the case if extended chains-of-claims emerge around functions 1 - 3 and when functions 4 and 5 generate significant risk transformation, interconnectivity and network complexity.

Risk transformations and transfers can also be a material source of regulatory arbitrage. They therefore warrant additional scrutiny to distinguish between “plain vanilla” and more complex and potentially sensitive transactions. If ambiguities exist around whether an activity is systemically risky, the evaluation should consider whether:

- i) the activity/transaction involves third-party intermediaries, facilitators or otherwise expands the chain of claims?

and/or

- ii) a financial risk transformation is taking place?

If either of the above holds true, the activity should fall under function 4 above, even if a “real economy” client is involved.

Some possible functional regulation objectives would include:

- monitoring and regulating the volume and nature of maturity transformation (lending) to understand what is being financed by whom as well as how much capital supports the risks assumed
- monitoring total ALM in the market and how diversified this mis-match is across large participants
- monitoring the nature and type of financial risk transformation and risk retention taking place in the market. This would focus upon risk transfer flows, recognising that regulated entities (banks) may take on an agency role rather than a principal role, depending upon the profit and regulatory capital pressures they face
- as noted in Question 1, III. a) above, when risks transfer or are transformed, the location and amount of supporting capital often becomes obscured. This is particularly the case with securities lending and repos. Functional regulation might initially concentrate upon monitoring and regulating such activity.

And tool deployment under Step 3 should be oriented towards

- changing behaviour
- managing the activity’s influence upon and criticality to the financial network
- encouraging a level playing field

A basis for measuring functional regulation’s effectiveness is to measure its ability to identify and anticipate emerging risk concentrations and its ability to limit undesirable behaviour and dynamics with minimal disruption or constraint to desirable economic contributions.

Q3. Are the suggested information items listed in the Annex for assessing the extent of shadow banking risks appropriate in capturing the shadow banking risk factors? Are there additional items authorities could consider? Would collecting or providing any of the information items listed in the Annex present any practical problems? If so, please clarify which items, the practical problems, and possible proxies that could be collected or provided instead.

Information items and data tend to attract limited interest as subjects. Yet they are, arguably, the biggest challenge. Data selection and use determines regulatory effectiveness and market efficiency. Data's importance is also evident in how it is repeatedly referred to as essential²⁹. Interestingly, the discussion then usually moves quickly on to other topics. A similar "light touch" approach emerges when the preservation of SB's desirable characteristics is referred to³⁰.

The following provides some brief comments in the hope of expanding general interest in this area. A specific monitoring infrastructure proposal also appears in Appendix A.

a) Snapshot vs. flow data

A snapshot data strategy responds to data volume and alignment challenges and limits monitoring costs. It is a useful approach for relatively static risk environments, such as banking's historical "buy-and-hold" operating context. The information listed in the annex appears to be oriented towards a static, snap-shot approach. This could be used to assess (and later restrict) the intensity of risk transformations relating to credit, maturity, liquidity and leverage objectives.

However, the listed data will not enable an analysis of these transformations's systemic risks. This is because the identified information does not consider and provide links to the underlying credit assets being transformed. Underlying assets will be a primary volatility driver in times of stress. A static approach also struggles to identify non-regulated market participants and to keep pace with the way exposure movements can generate sub-category risk concentrations.

Similarly, a static approach does not trace transformed risk flows (e.g. transfer volumes by asset type, associated price levels, transfer source and destination, supporting risk capital etc). And it does not enable financial network mapping. Linking underlying assets with chains-of-claims and monitoring risk flows are important enablers of systemic risk monitoring and management capabilities.

We believe that the crisis has shown that the financial network has outgrown its existing regulatory infrastructure. A stronger (but not necessarily more elaborate) leash appears to be needed.

b) Collapsing market dimensionality and simplification

Andrew Haldane at the Bank of England and various associates have published pioneering research into questions of monitoring complex, adaptive networks; regulating

²⁹ See P 6 in FSB Apr 2011, Pp 4 & 17 in FSB Nov 2012a, P 5 in EC Mar 2012 and Pp 3 & 6 in EC Dec 2012; an interesting exception occurs in Ali where the paper considers this issue in considerable depth.

³⁰ See P 3 in FSB Nov 2012a, P 5 in EC Mar 2012, P 12 in EC Dec 2012

when the rational expectations assumption breaks down; as well as the potential for data standardisation within financial services³¹. Their arguments are persuasive and have been incorporated within the modified framework set out in both the response to Question 2 above and Appendix A below. We also note that the trend towards ever increasing disclosure may prove counter-productive. Too much data, particularly poorly structured and/or inconsistent data, can obscure rather than reveal.

c) New vs. existing data collection capabilities

Some argue that a new systemic risk monitoring regime is not needed. A variety of reasons are given for this. These include regulatory burden/cost and the inherent difficulties of introducing a new measurement apparatus. Others argue that extending existing micro-prudential data collection tools will be sufficient to address systemic risks³².

We disagree with these perspectives. Our view is that systemic/macro prudential regulation focuses upon strengthening the financial network's resilience, while micro prudential regulation focuses upon strengthening the "nodes" within the network. As such, each should have its own monitoring processes and infrastructure. Common data should be shared, of course, but not for the sake of false economies and if doing so compromises effectiveness.

The commentary around snapshot vs. flow data in a) immediately above also highlights some of the issues around extending an entity oriented monitoring framework for systemic risk management purposes. Other major issues include the potential for:

- crippling complexity and alignment costs
- data communication delays (coupled with rapid data value decay rates)
- measurement distortions, gaps and inconsistencies
- incremental compliance burdens and barriers to SB sector entry

Finally, we would like to emphasise that monitoring infrastructure and risk management processes should be developed in tandem. For instance, the SB monitoring data's structure should anticipate stress testing for each functional area.

³¹ See Haldane 2009, Ali 2012 and Haldane Aug 2012

³² See Pp 4, & 6 in FSB Oct 2011 and Pp 16 & 23 in EC Dec 2012)

Q4. Do you agree with the policy toolkit for each economic function to mitigate systemic risks associated with that function? Are there additional policy tool(s) authorities should consider?

The proposed policy toolkit focuses upon restricting excessive risk transformation or risk taking. Presumably this seeks to limit regulatory arbitrage and leverage. It also assumes a harmonised approach across jurisdictions.

It is not clear how the presented tools and regulatory approach will change behaviours or market dynamics, let-alone support desirable market activity. We also note that tools 7 and 8 under “managing lending that relies upon short-term funding” are both information items. While monitoring and disclosure mechanisms can encourage stability if the collected information is shared, nothing has been said about aggregate data disclosure³³.

As noted in our response to Question 1, we believe that a broader and clearer policy framework is needed. This modified framework should focus upon transformed risk flows within the financial network (i.e. functions 4 and 5 in our response to Question 2 above).

³³ Also, a toolkit implies the selective use of instruments in response to market developments.

Q5. Are there any costs or unintended consequences from implementing the high-level policy framework in the jurisdiction(s) on which you would like to comment? Please provide quantitative answers to the extent possible.

As noted in the response to Question 1 II b), demanding new disclosures from regulated and non-regulated entities will prove controversial and expensive to them. The discussion in Appendix A below offers a modified approach that should limit these concerns. This relies upon the introduction of a not-for-profit trade repository (public good) to collect, structure and store the required data.

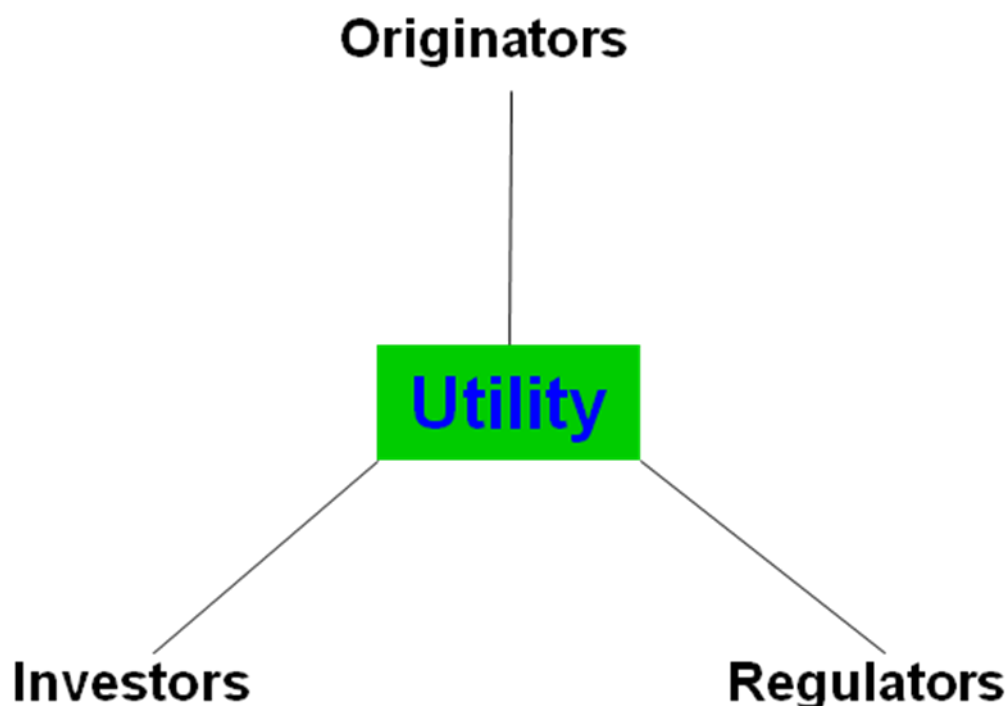
This modified framework may be implemented relatively quickly. It should also prove more efficient and effective in enabling functional regulation.

Appendix A - Discussion of data and monitoring

As noted in the commentary for Question 3 above, data capture is, arguably, the most critical challenge. To enable systemic risk management, regulatory monitoring must focus on flows within the financial network rather than on static entity information. Without such flow data, effective macro prudential regulation is very difficult.

What the targeted functional areas presently lack is appropriate monitoring and aggregation infrastructure to capture and analyse this flow data. At the same time, responding to this infrastructure need with incremental reporting from existing regulatory systems is both inefficient and undesirable. What's more, most of the granular data required is already being generated and communicated. It simply is not being shared with the regulatory community!

To correct this, infrastructure should be introduced to ensure that the targeted information reaches the regulator and that aggregate data is also made available to the market. A trade repository (TR), structured as a not-for-profit utility and operating as a public good³⁴, appears to offer the most promising response to these issues. Such a TR would exploit existing transaction data flows and thereby minimise the need for incremental reporting structures. Each jurisdiction's TR would remain small and focused. It would also collect, store and share data, under strict confidentiality provisions while assuming a neutral market position between originators, regulators and investors:



While some incremental data generation may be needed beyond what is presently already transmitted, any such additions are likely to be limited. The resulting TR data pool should then enable analysis of

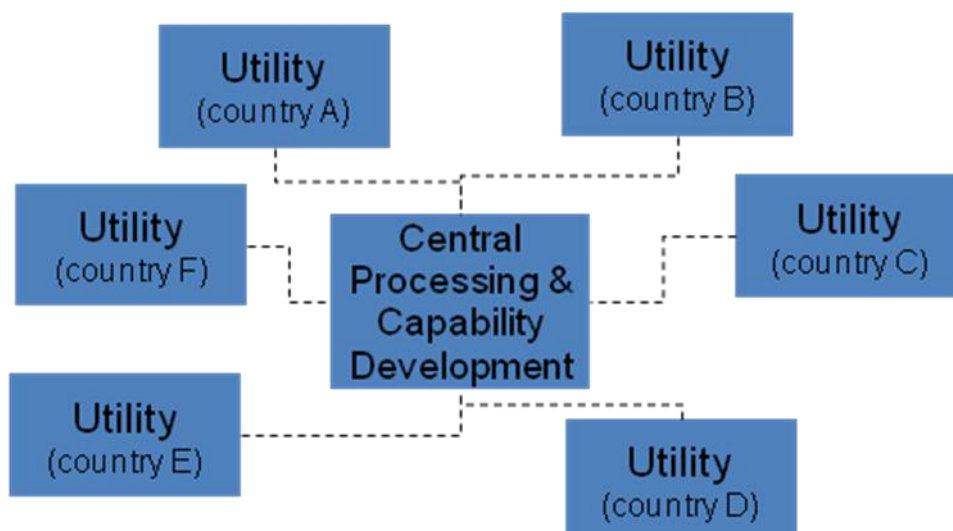
³⁴ Each described characteristic has a purpose. For instance, the not-for-profit characteristic reflects the need to avoid conflicts of interest with stakeholders. The public good description reflects the fact that the proposed service can only come about as a result of a policy initiative and that it must be structured so as not to displace any naturally occurring, market driven services. Andrew Haldane, Bank of England, has made similar proposals, most recently to the UK's Banking Standards Commission – see Haldane Nov 2012

- risk transformations
- underlying asset class linkages
- transfer flows (buyer, seller, purpose)
- supporting capital and liquidity buffers
- relative price movements

TR funding and governance would come from all three of the above stakeholders and reflect their usage of pre-defined and agreed standardised services.

Initially TR deployment would be limited to monitoring complex transactions originating from or sponsored by SIFI's. That is, the TRs would be deployed for functions 4 and 5 as set out in the response to Question 2 above³⁵. Regulators may subsequently broaden the TRs scope, as needed.

There would be one TR per regulatory jurisdiction, customisable to local practices. At the same time, core data collection routines, aggregation and reporting practices would be common across all jurisdictions to facilitate information exchange. Such an organisational structure might look something like this:



The above approach would allow for data standardisation, reporting consistency and monitoring co-ordination across jurisdictions. It should also be relatively easy to introduce to the marketplace.

At this point it may be helpful to mention some of the roles such a TR would not assume. Specifically, it would not be a:

- policy making or prudential management entity
- point of disclosure for commercially sensitive, transaction-specific data (which would effectively kill the market); e.g.
 - providing public access to data on individual counter-parties, their exposures, prices paid etc.
 - providing regulatory reporting on individual transactions (but it will provide aggregated data, as agreed with all stakeholders in advance)

³⁵ most likely to record repo and securitization transaction data

- serve as a substitute (and assuming corresponding liabilities) for investor due diligence
- policeman (i.e. an audit trail)
- channel for developing commercial ventures to displace or disadvantage existing or prospective commercial businesses

This is why we have referred to it as a utility and/or registry in previous presentations³⁶.

Others, including the European Parliament, have made similar TR suggestions³⁷. In the European Parliament's case, paragraph 7 of the relevant resolution³⁸ reads:

- “stresses, further, the need to obtain a fuller overview of risk transfers by financial institutions, including but not limited to transfers effected through derivative transactions, data for which will be provided under EMIR and MIFID/MIFIR, in order to determine who has purchased what from whom and how the transferred risks are supported;
- emphasises that it should be an objective to achieve real-time transaction mapping in all financial services and that this is aided by and can be automated via standardised messaging and data identifiers;
- invites the Commission, therefore, in consultation with the ESRB and international bodies such as the FSB, to include in its report on central data collection the current work on standardised messaging and data formats and the feasibility of setting up a central registry for risk transfers, which should be able to capture and monitor risk transfer data in real time, making full use of data provided under the reporting requirements of existing and future financial legislation and incorporating internationally available data”

The aim of this central registry would be to map and monitor material interconnectedness between financial institutions in real time. Its design should enable greater, aggregate transparency while respecting individual transaction confidentiality sensitivities.

³⁶ See <http://www.creditutility.eu/wp-content/uploads/2012/11/Abbreviated-problem-and-solution-statement1.pdf> and Campbell

³⁷ See also Haldane Nov 2012

³⁸ See European Parliament 2012

Appendix B - What we like in the FSB's approach

We would highlight the following as particularly useful with regard to strengthening the oversight and regulation of the shadow banking system:

- the focus areas and summary of the issues (Pp i, ii & 3 in FSB Nov 2012a)
- high-level risk descriptions for functions 1 - 5 (Pp 6 - 10 in FSB Nov 2012a)
- concept of looking through to the underlying functions and introduction of functional regulation (P 1 in FSB Nov 2012a)
- references to data needs & information sharing (P 4 in FSB Nov 2012a and P 7 in FSB Oct 2011)
- references to consistency and framework adaptation (Pp 5 & 6)
- overarching principles (Pp 11-12 in FSB Nov 2012a)

Appendix C – Biographies

Casey Campbell holds a BA in Administration from the University of Toronto, Canada and an MBA from Insead, France. From 2006 - 2011 Casey worked in Lloyds Banking Group leading teams responsible for balance sheet analysis, stress testing, loan portfolio optimisation and risk infrastructure re-design. Previously Casey was a consultant with Oliver Wyman, Frankfurt, where he provided risk advisory services to European and North American financial institutions. He also has extensive experience originating and underwriting large, cross-border loans and leases in the European market for GE Capital and for a specialised infrastructure financing subsidiary of the Bank of Tokyo-Mitsubishi.

Tamar Joulia-Paris holds various engineering & business management degrees from universities in Belgium and in France. After 10 years in the construction & manufacturing sectors, she joined banking in 1992 to start a new Credit Risk Management unit charged with developing risk infrastructure and management methodologies for the bank's lending & trading books. This included governance, risk appetite, stress testing, risk transfer and liquidity management solutions for the retail, SME and corporate loan portfolios.

Tamar also served on CEBS' consultative panel in 2010, and as an IACPM Board member from 2006 to 2011. She left banking mid-2011 to focus on her academic pursuits as well as senior risk, capital and balance-sheet advisory work in the financial industry. Tamar has authored many articles and is a regular speaker at conferences in the US and Europe.

Further background detail may be found on www.CreditUtility.eu.

Glossary

ABCP - Asset Backed Commercial Paper

ALM – Asset Liability Mismatch

CCP - Central Counterparty

ETF – Exchange Traded Fund

FSB - Financial Stability Board

FX – Foreign Exchange

HQLA – High Quality Liquid Assets

MMF - Money Market Fund

SB – Shadow Banking

SIFI – Systemically Important Financial Institution

TR – Trade Repository

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