Policy proposal – Regulatory Architecture of the Securities Markets

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1. Introduction - Drivers of Regulatory Design

Highly technical legal matters, such as financial regulation, pose one of the largest challenges for policy makers in their attempts to devise a sustainable economic system. The challenge is even more arduous as different institutional choices inevitably shape distributional repercussions. Thus, in order to understand the challenge of achieving a commonly beneficial financial architecture, it is necessary to analyse the key drivers that underpin the process of institutional design, and the extent to which these drivers predetermine regulatory outcomes.

There are three key drivers of financial regulatory design: first, low salience of rules (general public’s low awareness of specific issues beyond overall financial stability); second, dependence on stakeholders who have vested interest in the final shape of regulation; and third, ever-increasing heterogeneity or regulatory preferences from business stakeholders, particularly since the Global Financial Crisis.

The first two drivers - salience and dependence on stakeholders’ expertise - tend to translate into unsatisfactory reality that private interest groups remain largely unopposed in devising the ‘rules of the game’ in self-serving ways (Ramanna, 2015a).

First, regulators (who are assumed to work in the public interest, although there is a scope for capture) need to rely on industry representatives’ expertise as their knowledge is tacit or implicit rather than codified or explicit. The information asymmetry is more pronounced in sectors more linked to financial innovations, such as esoteric finance. Consequently, it is easier for industry representatives to shape regulations according to their own interests. Furthermore, regulators can also be "behind the curve" as stakeholders quickly discover regulatory loopholes as a way of circumventing regulation/supervision within the existing legal framework, or even by engaging in regulatory arbitrage with other jurisdictions.

Second, the capture of regulations by special-interest groups is a threat in many areas of public governance, but a relatively higher awareness among the public of this possibility induces intermediaries such as politicians or the media to act as safeguards for the public interest. In line with broad academic consensus, poor financial regulation was one of the main culprits of the GFC.

However, the third driver - significantly increased heterogeneity of regulatory preferences and new non-bank financial/non-financial agents - provides a counterbalance to the unsatisfactory reality of mostly unopposed rules. In aftermath of the GFC, regulators and policy makers are presented with unique circumstances when major financial stakeholders more often compete among themselves for different regulatory outcomes rather than acting as a unified set of stakeholders. This in turn increases the scope for policy makers and regulators to capitalise on preference heterogeneity by imposing more stringent rules with a view of long-term economic stability and a sustainable financial architecture.

2. Increased Heterogeneity After the Global Financial Crisis (GFC)
In the case of the European Union (EU), it is worth understanding broader regulatory system through network analyses based on the European Securities Markets Authority (ESMA) comment submissions, which constitute a formal rule-making process. There are three most salient network insights: (i) stakeholders from the core financial subcategory (exchanges and trading systems, banks, core industry associations, and asset managers) are the most central nodes based on the degree centrality measure of the access to regulators; (ii) there is significant heterogeneity of financial stakeholders in the regulatory arena, rather than a unified group that could go under the umbrella of ‘Big Finance’; and (iii) the level of heterogeneity of stakeholders has only increased post the GFC.

<table>
<thead>
<tr>
<th>Network</th>
<th>Pre-crisis network</th>
<th>Post-crisis network</th>
<th>Whole network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of nodes (stakeholders)</td>
<td>282</td>
<td>536</td>
<td>769</td>
</tr>
<tr>
<td>Number of consultation submissions (mobilisation)</td>
<td>423</td>
<td>946</td>
<td>1369</td>
</tr>
<tr>
<td>Number of edges (links between mobilised nodes)</td>
<td>4,700</td>
<td>28,733</td>
<td>32,988</td>
</tr>
<tr>
<td>Density</td>
<td>0.0163</td>
<td>0.0996</td>
<td>0.1143</td>
</tr>
</tbody>
</table>

Figure 1: Summary statistics of the network based on 50 ESMA consultation procedures

Nodes or vertices are stakeholders in the regulatory process, who form edges (links or ties) by mobilising on the same consultation procedures. As per Figure 1, the observed network has 769 nodes who submitted 1,369 consultation letters, which resulted in 32,988 times (edges) on 50 consultation procedures. Given a size of the network, Figure 2 provides macro network visualisation of the three subcategories of stakeholders (core financial actors in the tones of yellow-red; non-financial stakeholders in blue shades, and non-business groups in green shades). Using degree centrality as the network-level statistical measure, the five most important stakeholders are IMA, EBF, DK, Euronext and LSE (larger dots with names in white letters).

The degree centrality measures the number of lines incident with a node in order to analyse a local structure of the network, which is theoretically supported by the plurality / mobilisation argument. The level of plurality is directly related to prospective influence that interest groups can achieve (Beyers and Kerremans, 2007; Rasmussen, Carroll and Lowery, 2014). A greater plurality of groups has the potential to dilute any individual stakeholder’s influence insofar as it implies the lower level of access to rule makers, who are being exposed to varied inputs.

From the specific node perspective, greater access to regulators make them more visible, and there is also higher probability that they would be able to influence the regulatory procedure more (i.e. promote their own regulatory preferences). As it stems from Figure 2, stakeholders from the core financial subcategory (exchanges and trading systems, banks, core industry associations, and asset managers) are the most central nodes (yellow to red colour scheme).
Figure 2: Macro network analyses of the three subcategories of stakeholders (core financial actors in the tones of yellow-red; non-financial stakeholders in blue shades, and non-business groups in green shades) with the five most active stakeholders named in white colour (IMA, EBF, DK, Euronext and LSE).
As per Figure 3, the trend of proliferation of new stakeholders has become particularly prominent after the GFC, when the regulatory network has almost doubled in terms of newly mobilised stakeholders who submitted two or more consultation procedures, which would make them relevant for the centrality of the network. Furthermore, the post-crisis network has become significantly denser (interconnected). More specifically, the pre-crisis network has the edge density of 0.0156, while the post-crisis is almost seven times higher at 0.0999.

The second important insight from the regulatory landscape is the increasing level of heterogeneity of stakeholders. In other words, there are multiple groups of actors who have different regulatory preferences rather than a unified group that could constitute ‘Big Finance’. From the business stakeholders’ perspective, an increase in heterogeneity of stakeholders decreases their capacity to exercise power over a regulatory procedure.

The heterogeneity and relative importance of specific subgroups can be observed through heatmaps (Figure 4), which are valued on the number of stakeholders (left - red) and consultation submissions (right - blue), proportionally normalised within an entity (i.e. dividing the value of an entity in each category by the sum of values of the entity in all categories) with the filter of two percent (grey cells). As normalisation is done on the entity level, it is possible to observe three iterations: pre-crisis, post-crisis, and the entire period (i.e. the time overlap between different entities does not distort the visualisation). Industry associations are the darkest, which indicates the highest proportionality value (i.e. the level of involvement in the rule-making procedures).
3. Key Stakeholders in European Securities Markets Landscape

The heatmap visual observations are further assessed through the micro-level analyses of the regulatory network (Figure 5). The top five most active industry associations (IMA – Investment Management Association, Die DK – German Banking Industry Committee, EBF – European Banking Federation, EFAMA – European Fund and Asset Management Association, and ESBG - European Savings Banks Group) are also among the top seven stakeholders overall by the number of written submissions to ESMA, while the remaining two positions are occupied by the London Stock Exchange and Euronext.

The industry associations submitted 39% of the total number of comments, followed by other business (21%), such as consulting firms (PwC, KPMG and Ernst & Young); insurance, pension and asset managers or so-called buy-side investor (9%), such as Amundi, State Street and BlackRock; regulated markets, exchanged and trading systems (8%); and non-financial corporations. Interestingly, regulated banks account for only five percent of all comment submission as they primarily express their positions through industry associations. The joint submissions by multiple regulated banks through industry associations are an attempt to collectively defend banks’ interests, and shape regulation in their favour. Conversely, other non-bank agents (e.g. non-financial corporations, other business) have a more heterogeneous profile, and usually do not issue joint submissions. This may end up weakening non-bank agents bargaining power with regulators, opening an opportunity for authorities to expand their regulatory framework.
## Overall

<table>
<thead>
<tr>
<th>Industry associations</th>
<th>Other Business (i.e. legal / consultancies)</th>
<th>Insurance, pension &amp; asset management</th>
<th>Regulated markets, exchanges &amp; trading systems</th>
<th>Non-financial corporations</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMA - Investment Management Association</td>
<td>IMA - Investment Management Association</td>
<td>PWC</td>
<td>Amundi</td>
<td>LSE - London Stock Exchange</td>
</tr>
<tr>
<td>Die DK - German Banking Industry Committee</td>
<td>Die DK - German Banking Industry Committee</td>
<td>KPMG</td>
<td>State Street</td>
<td>Euronext</td>
</tr>
<tr>
<td>LSE - London Stock Exchange</td>
<td>EBF - European Banking Federation</td>
<td>Ernst &amp; Young</td>
<td>BlackRock</td>
<td>Deutsche Borse</td>
</tr>
<tr>
<td>Euronext</td>
<td>EFAMA - European Fund and Asset Management Association</td>
<td>Markit</td>
<td>Aviva Investors</td>
<td>CME Group</td>
</tr>
<tr>
<td>EBF - European Banking Federation</td>
<td>ESBG - European Savings Banks Group</td>
<td>SWIFT</td>
<td>Union Asset Management</td>
<td>London Metal Exchange</td>
</tr>
<tr>
<td>EFAMA - European Fund and Asset Management Association</td>
<td>Regulated banking</td>
<td>Other Non-Business</td>
<td>Government regulatory &amp; enforcement</td>
<td>Press</td>
</tr>
<tr>
<td>ESBG - European Savings Banks Group</td>
<td>Deutsche Bank</td>
<td>ETC-Group</td>
<td>Comisión Nacional del Mercado de Valores</td>
<td>Thomson Reuters</td>
</tr>
<tr>
<td>AFG - Association Française de la Gestion Financière</td>
<td>Barclays</td>
<td>Financial Services Consumer Panel</td>
<td>Cayman Islands Monetary Authority</td>
<td>ENPA – the European Newspaper Publishers’ Association</td>
</tr>
<tr>
<td>AIMA - Alternative Investment Management Association</td>
<td>UBS</td>
<td>Better Finance</td>
<td>Financial Services Agency Japan</td>
<td>Bloomberg</td>
</tr>
</tbody>
</table>

Figure 5: The most active stakeholders in ESMA sample of 50 rules and 769 unique stakeholders

### 4. Conclusions and Policy Implications

In a nutshell, this is a story how internal dynamics in the market itself actually influence external outcomes of regulatory changes. Despite exponentially increased level of complexity in financial regulation, the augmented number of new stakeholders in financial governance and heterogeneity of their preferences present a new opportunity for policy makers and regulators. In order to gain a better understanding of this potential, it is worth briefly reflecting on the notion of ‘thin markets’.

According to Ramanna (2015a, 2015b), there are two key underlying features of thin markets: first, low salience of rules (general public’s low awareness of specific
issues beyond the general concept of financial stability); and second, regulators’
dependence on stakeholders who have vested interest in the final shape of
regulation (an information asymmetry between stakeholders and regulators allows
stakeholders to shape regulation according to their own interests).

These two characteristics tend to translate into unsatisfactory reality that private
interest groups remain largely unopposed in devising the ‘rules of the game’ in self-
serving ways. However, there is an important third factor, which has the potential to
change the equilibrium in ‘thin markets’; namely – augmented number of financial
stakeholders with heterogenous preferences. In other words, increased
heterogeneity of regulatory preferences and new non-bank financial /non-financial
agents provide a counterbalance to the unsatisfactory reality of mostly unopposed
rules. In aftermath of the GFC, regulators and policy makers are presented with
unique circumstances when major financial stakeholders compete among
themselves for different regulatory outcomes rather than acting as a unified set of
actors.

If regulators are to implement regulation that will increase investor protection
and achieve long-term sustainability of financial markets, it is vital that they analyse
competition in the regulatory preferences in the market itself. In other words, regulators’ chances of success are much higher when there is a regulatory
competition between multiple stakeholders with distinct profile, while regulators’
activities are significantly limited when faced with a unified opposition, particularly
from a business community. Thus, given an ever-increasing heterogeneity of
stakeholders in financial rule-making arena, it is essential that regulators and policy
makers devote significantly more time to understanding all stakeholders and their
business models as a pre-requisite for achieving well-functioning capital markets.

This would mean that regulatory/supervisory frameworks have to evolve in
tandem with financial markets. Regulatory/supervisory authorities have to increase
their presence in the non-bank financial/non-financial sector, where diversity and
complexity has grown considerably. Instead of relying on regulatory/supervisory
frameworks based on entities and a segmented view, it is essential to promote
changes in these frameworks in order to focus them on specific activities, whilst
acknowledging systemic implications. This would allow that the riskier activities are
avoided (independently of which entity performed it), and to address the build up of
imbalance
tions with systemic proportions.

In the case of the European Union, and considering the forthcoming
implementation of the Capital Markets Union, this could be achieved in the following
three ways: i) by increasing the harmonisation of regulation within EU member
states; ii) by granting more enforcement powers for supranational authorities (e.g.
ESMA, EIOPA, ESRB), especially in measures to curb financial stability risks coming
from the non-bank financial/non-financial sector with systemic consequences; and iii)
by enhancing coordination between supranational authorities and national
regulatory/supervisory institutions. These improvements could pave the way for more
resilient financial stability frameworks in the European Union (where our examples
were based) and beyond.
Finally, in the interest of clarity, focusing on prospective activities for regulators does not relieve business leaders from their responsibility in supporting sustainable capitalism, particularly in thin markets, through, for example, decennial public reviews or professional oaths with the key emphasis on responsible leadership (Ramanna, 2015b). Such activities fit into a wider academic movement to foster a shift in corporate ideology from maximising shareholder value towards ‘company-centred’ management model (Bower, Leonard and Paine, 2011; Bower and Paine, 2017). The optimal social outcomes can be achieved by marrying demand side from responsible business executives with the supply side with forward-looking regulators, who know how to capitalise on heterogeneity of regulatory preferences.

References: