January 19, 2011

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The Honorable Timothy F. Geithner
Secretary, US Treasury
Chairman, Financial Stability Oversight Council
United States Department of the Treasury
1500 Pennsylvania Avenue, NW
Washington, DC 20220

RE: Authority To Designate Financial Market Utilities as Systemically Important, Docket Number FSOC-2010-0003-0001

Dear Mr. Secretary:

In the attached comment, we respond to the December 21, 2010, Financial Stability Oversight Council’s (FSOC) Advance Notice of Proposed Rulemaking Regarding the “Authority To Designate Financial Market Utilities as Systemically Significant.”

The Pew Charitable Trusts is an independent nonprofit organization founded in 1948. Pew applies a rigorous, analytical approach to improve public policy, inform the public and stimulate civic life.

The Pew Financial Reform Project, formed in response to the 2008 financial crisis, brings a nonpartisan, fact-based approach to helping reform and modernize the financial sector. Over the past 18 months, the Project has commissioned scholarly papers, supported a bipartisan task force and in other ways facilitated debate on key aspects of reform. We worked to pass the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. We are now committed to contributing to the process of implementation.

As always, we are available to discuss this comment or any other aspect of our work at any time. Thank you for reviewing our comment.

Sincerely,

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www.pewfr.org

1 Advance Notice of Proposed Rulemaking: Authority to Designate Financial Market Utilities as Systemically Important, Vol. 75, No. 244, pg. 79982 (Dec. 21, 2010)
http://frwebgate2.access.gpo.gov/cgi-bin/PDFgate.cgi?WAISdocID=SduK3J/0/2/0&WAISaction=retrieve
This Advanced Notice of Proposed Rulemaking (ANPR) is the second one issued by the Financial Stability Oversight Council (FSOC or Council) in 2010 regarding the designation of systemically important financial institutions (SIFIs). It addresses financial market utilities (FMUs) and factors that might make an individual FMU systemically important. FMUs are organizations that facilitate individual trades and transactions, and support organized financial markets among financial institutions, non-financial businesses and households.\(^2\) The first Council ANPR (FSOC-2010-0001) addressed the same question with regard to non-bank financial intermediaries. At some point, the Council will have to consider what makes an activity within a financial institution systemically significant (Section 120 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the Act)).

The view of the Financial Reform Project is that the basic framework, criteria and thresholds used to answer all three questions should be broadly the same.\(^3\) Of course there will be large differences in the business relationships, structure and processes among non-bank intermediaries, banks and FMUs. As a result, elements in the framework that weigh heavily in determining the designation of one sort of institution may be relatively unimportant for another. But the framework, criteria and thresholds should not have to change, because for each institution

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\(^2\) Financial market utilities include a myriad of different types of organizations. The most recognizable FMUs are Visa and MasterCard, which support large numbers of often very small value payments between households and businesses globally. Another example of an FMU is the New York Clearing House, which clears large value dollar payments among banks in the United States. In general, FMUs act like hubs in the financial network helping different players transact and trade with one another by providing payment, clearing and settlement services and acting as depositories and registries for safe-keeping instruments and information about the financial system.

\(^3\) This ANPR specifically “does not address the designation criteria and analytical framework for payment, clearing or settlement activities carried out by financial institutions (as defined by Section 803(7) of the DFA, which the Council is considering separately.” However, no case is made that there is an intrinsic reason for treating them differently.
regulators need to assess the same issue: the likelihood that the institution or its activities could contribute to a systemic collapse through its material financial distress or failure. In the case of an FMU, this translates into the risk that “the failure, or disruption to [its] functioning … could create an increase in the risk of significant liquidity or credit problems spreading among financial institutions or markets and thereby threaten the stability of the financial system of the United States.”

This comment is organized in two parts:

- **Part I** relates FMUs to the framework and criteria that the Financial Reform Project originally described in its comment on the ANPR FSOC-2010-0001.
- **Part II** relates the framework to the first four specific questions in the ANPR.

As part of the definition of financial stability in the comment on the designation of non-banks, the Financial Reform Project suggested that the definition of a “systemic collapse” should be “the linked failure of more than one financial firm or market that causes a significant shock to GDP.” The Project also defined a SIFI as “a financial firm whose failure would be likely to cause or contribute to a systemic collapse if the system is fragile, unless there is exceptional official intervention.” Parts I and II of this comment use the same definitions.

**Part I: General Comment: The Framework**

As in the case of designating non-bank financial intermediaries as SIFIs, the starting point is a general numerical measure of systemic significance built up from factors that cover key considerations, including those described in the Act and the ANPR. This measure can be used to designate any FMU if its systemic significance exceeds a numerical threshold that is set by the Council.

Designation depends on the same three broad component measures of systemic significance:

- Fragility of the FMU;
- Exposure of its financial firm members to its failure;⁵ and
- Fragility of those members.

The approach discussed here (as well as in the Project’s previous comment on non-bank designation) is to add together the exposures of the major firms connected to the FMU, using

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⁴ ANPR Summary; page 79982, Federal Register, Vol. 75, No. 244.

⁵ To access an FMU, a household or a firm must become a member. Household and firm qualification thresholds for retail FMUs can be relatively simple, as in the case of credit-card utilities. By contrast, wholesale FMUs usually have to meet stringent standards for financial strength, for certain operational processes, for providing capital during normal times and for providing additional funds during times of stress. Only members are directly exposed to FMUs, so that most, if not all, of the systemic risks created by FMUs are transmitted through its members.
their individual estimates of firm fragility as weights. This will yield a number measured in dollars, which can be scaled with respect to GDP. As noted before, designation requires collecting information on a larger set of firms than those that are ultimately designated. This larger set of “heightened reporting financial firms” includes FMUs that are possible candidates for designation. However, that set has to be defined and information on their fragility has to be collected anyway in order to implement this part of the Dodd-Frank Act.

One issue that falls outside this framework is the appropriate treatment of an FMU that is very important to a large number of small firms and individual households but not so important to other heightened reporting firms. The failure of such an FMU might have little direct impact on the rest of the financial system. However a sustained operational or financial failure of such an FMU could have a significant direct GDP impact—and perhaps an indirect and significant impact on overall confidence in the financial system if the volume and value of the payments that it facilitated were large enough. It is unclear to us whether that should result in designating an FMU as systemically significant. However, there is no doubt that ensuring the robust and resilient operation of such ubiquitous FMU systems is a legitimate policy concern.

The framework described here involves seven steps:

1. **Heightened Reporting Firms**: define a set of heightened reporting financial firms;
2. **Factors**: identify a set of factors that can affect systemic significance (including those specified in the Act); develop measures for each of them; and then divide them into factors that affect fragility and factors that affect exposure of firms to FMUs;
3. **Fragility**: estimate the fragility of every heightened reporting financial firm that is a member of each candidate FMU -- including other FMUs;
4. **Exposure**: estimate the exposure of members to every FMU;
5. **System Vulnerability**: for each candidate FMU, create a single measure of the system’s vulnerability to it by adding up the measures of exposure of all of the heightened reporting member financial firms to the candidate FMU, weighted by their fragility estimates;

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6 The global dollar volume handled by MasterCard was more than 15 percent of US GDP in 2008. US GDP was $14.4 trillion (BEA: [http://www.bea.gov/national/index.htm#gdp](http://www.bea.gov/national/index.htm#gdp)) and the global dollar volume handled by MasterCard was $2.5 trillion (Barron’s: [http://online.barrons.com/article/SB124848545719280723.html#articleTabs_panel_article%3D1](http://online.barrons.com/article/SB124848545719280723.html#articleTabs_panel_article%3D1))

7 The Act requires regulators to take into account the potential direct impact of a failure on vulnerable populations and on state and local governments when designating a non-bank financial firm. This was addressed by the seventh of eight steps in the framework proposed for non-bank financial firm designation by the Pew Financial Reform Project in its last comment letter. The Act does not impose any similar requirement for FMUs so that step is excluded here.
6. **Estimate of Systemic Significance**: multiply this measure of systemic vulnerability by the candidate FMU’s measure of fragility and divide by GDP to create a measure of systemic significance; and

7. **Threshold**: apply the same universal threshold to the candidate FMUs as for all other financial institutions to determine which FMUs should be designated.

The rest of this section describes these seven steps in more detail.

**Step 1: Heightened Reporting Firms.** The set of heightened reporting firms should be defined to include all FMUs except those with a de minimis average daily volume and value of transactions. Thus, all automated clearing houses and central counterparties together with the major retail product clearing firms, such as MasterCard and Visa, should be subject to heightened reporting.\(^8\)

**Step 2: Factors.** The first column of Table 1 lists five factors that affect individual FMU fragility and six factors that affect systemic exposure.\(^9\) The second column describes possible measures.

<table>
<thead>
<tr>
<th>Table 1: Factors and Measures in Designating FMUs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors in Individual FMU Fragility</strong></td>
</tr>
<tr>
<td>Leverage (L)</td>
</tr>
<tr>
<td>Free assets/capital, where assets includes off-</td>
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<tr>
<td>balance sheet assets and capital is measured as</td>
</tr>
<tr>
<td>Tangible Common Equity(^10)</td>
</tr>
<tr>
<td>Liability &amp; short term funding (LM)</td>
</tr>
<tr>
<td>Index of liquidity mismatch</td>
</tr>
<tr>
<td>Concentration/Diversification (D)</td>
</tr>
<tr>
<td>Index based on number of business lines that</td>
</tr>
<tr>
<td>contribute more than 10 percent of revenues,</td>
</tr>
<tr>
<td>number of global regions which contribute</td>
</tr>
<tr>
<td>more than 20 percent of revenues and portfolio</td>
</tr>
<tr>
<td>diversity</td>
</tr>
</tbody>
</table>

\(^8\) Automated clearing houses are FMUs that facilitate check clearing and other payments between banks. Central counterparties reduce the riskiness of trading in many markets by taking on some of the key responsibilities from member firms to make good on their trades.

\(^9\) The comparable table for non-bank financial intermediaries included a sixth factor affecting individual financial institution financial fragility – off-balance sheet exposures – and a third factor influencing direct economic impact – the breadth of retail ownership of the institution. Neither of these applies to FMUs. It also includes a third section of factors affecting the potential direct economic impact of a failure on state and local governments and on households including the dependence of different vulnerable household populations on the institution in question. This is a concern specifically built into the Act for the designation of non-bank financial intermediaries.

\(^10\) “Free” assets are defined as assets that belong to a financial institution that would be available for conversion into cash or collateral and that could be used for any purpose in the event of the material financial distress of said institution. See Pew’s comment on the “Advance Notice of Proposed Rulemaking Regarding Authority To Require Supervision and Regulation of Certain Nonbank Financial Companies,” Docket Number FSOC-2010-0001, November 5, 2010.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk management quality (RM)</td>
<td>Index based on supervisory score</td>
</tr>
<tr>
<td>Complexity (CO)</td>
<td>Index based on the number of affiliates, countries of operation, products, and strategies</td>
</tr>
</tbody>
</table>

### Factors Affecting System Vulnerability

<table>
<thead>
<tr>
<th>Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit exposure of other firms (CE)</td>
<td>Credit exposure report estimates (in dollars)</td>
</tr>
<tr>
<td>Liquidity risk to the rest of the system (LR)</td>
<td>Estimated exposure that each heightened reporting firm has to the candidate FMU candidate firm for clearing and settlement (in dollars)</td>
</tr>
<tr>
<td>Ownership exposure of other firms (PE)</td>
<td>The size of equity investments in a candidate firm by other financial firms (in dollars)</td>
</tr>
<tr>
<td>Fire-sale costs (FS)</td>
<td>Estimated effect of fire sale during a failure on asset values in financial markets on each heightened reporting firm (in dollars)</td>
</tr>
<tr>
<td>Contestability</td>
<td>[Captured in fire-sale cost estimates]</td>
</tr>
<tr>
<td>Interconnectedness</td>
<td>[Captured in the other measures that contribute to system vulnerability]</td>
</tr>
</tbody>
</table>

**Step 3: Fragility**

For the candidate FMU, fragility will depend on measures of leverage (L_C) and liquidity mismatch (LM_C), concentration/diversification (D_C), risk management quality (RM_C) and institutional complexity (CO_C). Leverage can be quite high for FMUs if capital is measured, as it should be, to exclude stand-by arrangements with members that may not work during periods of systemic stress. For most FMUs, liquidity mismatch is low in normal times because funding and requirements cycle daily, but it should be assessed against the potentially extraordinary requirements needed during times of stress. The FMU’s management of risk should be taken into account in determining fragility, although compared with other SIFIs, FMU’s operational risk should be given a larger weight than financial risk given the importance of operations for all FMU. The basic formula for financial fragility remains:

\[
F_C = L_C \times LM_C \times D_C \times RM_C \times CO_C
\]  

(1)

F_C is a pure number, since every estimate on the right hand side of (1) is a pure number.

**Step 4: Exposure**

This step creates an estimate of the exposure of every other heightened reporting member firm (E_HR) to the candidate FMU. This is made up of credit exposure (CE_HR), liquidity exposure (LR_HR), portfolio exposure (PE_HR) and fire-sale risk exposure (FS_HR) estimates for each of these firms.
Under the Act, firms subject to heightened prudential standards, including SIFIs and non-SIFI bank holding companies with over $50 billion in assets, must report their credit exposures. To apply this framework, FMUs will also have to do so. This will create a complete set of estimates of CE_{HR}.

Liquidity exposure (LR_{HR}) depends on the importance of FMU activity to its heightened reporting member firms. For major utilities, this can be high because the markets they support can be important and they are often monopolies. Portfolio exposure (PE_{HR}) should reflect the equity investment in the candidate FMU by heightened reporting member firms and their contingent obligations to fund the FMU when under stress. For some FMUs, fire-sale risk exposure (FS_{HR}) could be interpreted as the vulnerability heightened reporting member firms might have to margin calls by the FMU that might have to be funded through asset sales at distressed prices during a period of stress. The basic formula for the exposure of each heightened reporting firm to the FMU is then:

\[ E_{HR} = CE_{HR} + LR_{HR} + PE_{HR} + FS_{HR} \] (2)

Since all four elements on the right hand side of (2) are measured in dollars, E is also.

**Step 5: System Vulnerability** The estimate of vulnerability of the system and the economy (SV_C) to a candidate FMU is given by:

\[ SV_C = \Sigma(E_{HR} * F_{HR}) \] (3)

where system vulnerability is the sum of fragility weighted by exposures across all heightened-reporting (HR) firms. SV_C is measured in dollars.

**Step 6: Estimate of Systemic Significance** The estimate of systemic significance of the candidate FMU (SS_C) is then:

\[ SS_C = F_C * SV_C / GDP \] (4)

where F_C is the fragility of the FMU, SV_C is the vulnerability estimate of the system to the FMU’s failure, and GDP is gross domestic product. SS_C is a pure number.

**Step 7: Threshold** The last step is to compare this measure with the universal threshold that the Council determines, so that if systemic significance (SS_C) exceeds threshold (T), then it leads to designation:

\[ SS_C > T \Rightarrow \text{leads to designation.} \] (5)
Part II: Specific Comments on Questions\textsuperscript{11}

1.a What quantitative and qualitative information should the Council use to measure the factors it is required to consider in Section 804(a)(2) when making determinations under Section 804 of the DFA?

See table 1.

1.b How should quantitative and qualitative considerations be incorporated into the determination process?

See part I of this comment.

2.a Can the considerations listed in section 804(a)(2) be broken down into easily measured factors that the Council should use to determine whether financial market utilities are systemically important?

Section 804(a)(2) directs the Council to take into account five considerations:
(A) The aggregate value of transactions processed;
(B) The exposure of the utility to its counterparties;
(C) The relationships among FMUs;
(D) The potential effect of failure on critical market activities, SIFIs and the broader financial system; and
(E) Other factors the Council deems appropriate.

Aggregate transaction values and counterparty exposure can be measured by credit exposure (CE), as defined in Table 1. The relationships among FMUs are captured in the framework outlined here because all FMUs (other than any de minimis FMUs) are heightened reporting firms. And the whole framework captures the potential effect of failure on critical market activities, SIFIs and the broader financial system.

Proper measurement of the Table 1 factors, however, will take a good deal of expertise and in some cases, professional judgment. For example, risk quality management (RM\textsubscript{C}) should account for the competence, effectiveness, comprehensiveness, governance and approach of the firm’s risk management systems—and the level of attention that firm’s senior management and its board gives to risk management matters.

2.b Are there certain levels of quantitative measures (\textit{e.g.}, for value and exposure) or qualitative characteristics (\textit{e.g.}, registered clearing agencies versus exempt clearing agencies) that should trigger a review for systemic importance by the Council?

\textsuperscript{11} Questions from the ANPR are in bold.
All FMUs should be counted among heightened reporting firms unless they are both small and insignificant from the point of view of the US financial system as a whole. For example, a small clearing system supporting a small local stock exchange may not need to be subject to heightened reporting if the system had only a few, small members or if they had larger members, the value of their activity and positions in the clearing system was small in relation to their total capital.

3.a Which of the considerations listed in section 804(a)(2) are most important for the Council to consider?

The fragility of an individual FMU will be affected by, among other things, its leverage (or capital structure) and the quality of its risk management. As with other financial institutions, capital structure should be tested against severely adverse scenarios. Risk management will be a combination of credit risk management and operational risk management. (Operational risk is likely to be more important than credit risk for most FMUs.) Very few, if any, FMUs are exposed to market, interest rate or currency risks.

3.b Should the application of the considerations differ depending on the type of FMU, and if so, how?

As noted above, the framework, criteria and thresholds should be consistent across all institutions, although the relative importance of different factors will depend on the type of utility. For example a wholesale utility may be systemic largely because of the scale of its exposure to other SIFIs, whereas a retail FMU may be systemic largely because it acts as a part of the retail payments system for households and its failure could have an impact on confidence that could be very damaging to other financial institutions during a period of general financial fragility.

4. How should the Council measure and assess the aggregate monetary value of transactions processed by financial market utilities?

   a. For each type of financial market utility (e.g., central counterparty, funds transfer system), what is the best approach for measuring value (e.g., notional values, margin flows, net versus gross values)?

The aggregate monetary value of transactions between an FMU and its members is a rough measure of the exposure (E_{HR}) of the rest of the financial system to a utility. The framework uses a more refined one, separating out credit exposure (CE_{HR}), liquidity exposure (LR_{HR}), portfolio exposure (PE_{HR}) and fire-sale risk exposure (FS_{HR}). The value of positions held in a depository, the value of credit lines open to support a central counterparty and the direct exposure to a central counterparty during the settlement process should all figure in the calculation of credit exposure (CE_{HR}) for other heightened reporting firms. The gross flow between an FMU and its members ought to be the predominant measure of liquidity (LR_{HR}) – since it is the gross flow that the utility facilitates for its members.
4.b. What time horizon/statistics should be used when assessing value (e.g., daily, monthly or annual averages; daily, monthly, or annual peaks)?

Annual peaks, calculated on the basis of the previous 365 days rather than the previous calendar year, would be most appropriate. These would be the most conservative estimates, since they would be maxima of daily and monthly peaks. Moreover, it is during periods of peak volume and value that systems are likely to be the most stressed.

4.c Should the Council consider historical values, projected future values, or both?

Projected credit exposures for option positions are important and should be taken into account for the evaluation of (CEₜₐₙₐₚ). Otherwise, historical values will largely suffice.

4.d Should different measures be applied to different types of financial market utilities based on their activities, products, or markets?

No. The same framework applies to all types of FMUs. Different factors will matter to different utilities but the framework, factors, criteria and thresholds should not change.

The only exception may be large volume retail FMUs such as credit card processors that are effectively a part of the retail payments system. As noted above, whether they are designated or not, ensuring their safe and sound operation during normal periods and periods of stress for the financial system is a legitimate public policy concern.

4.e What is the best approach for measuring potential aggregate monetary values for start-up financial market utilities?

Any start-up utility of potential consequence should be a heightened reporting financial institution, including any utility handling over-the-counter (OTC) derivatives clearing and settlement.

The case of a transaction registry is more complicated. If financial institutions depend on registry information for risk management purposes and, if the failure of a registry increased uncertainty significantly about those institution’s aggregate risks and those of their counterparties, regulators may wish to treat those registries as heightened-reporting institutions.

4.f Should certain payment systems that transfer relatively low aggregate values be considered by the Council for designation as systemically important given that the system’s failure or disruption could still cause widespread disruption, especially if there is no ready alternative means of making payments? For example, the failure or disruption of a system used extensively to make payments could leave a significant portion of the general public with unexpected overdrafts and/or lack of liquid funds. If so, what factors should the Council consider in making a determination of systemic importance for such systems?
It is unclear whether large retail FMUs should be designated systemically significant. The direct impact of the failure of such an FMU on the rest of the financial system might be small, because they act primarily as a shared IT system, but the effect of the failure of a retail FMU on the economy could be direct and significant—and could reduce confidence in the financial system as a whole, particularly if it was already in a fragile state. Such a decline in confidence in the financial system could exacerbate or, potentially, even precipitate a systemic event. Whether or not such FMUs are designated systemically significant, there is no doubt that ensuring the robust and resilient operation of such ubiquitous FMU systems is a legitimate policy concern.