IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

METLIFE, INC., *Plaintiff*, v. FINANCIAL STABILITY OVERSIGHT COUNCIL, *Defendant*.	Civil Action No. 15-45 (RMC)

CONSENT MOTION FOR LEAVE TO FILE BRIEF
AS *AMICI CURIAE* IN SUPPORT OF DEFENDANT

Professors Viral Acharya, Robert Engle, Thomas Philippon, and Matthew Richardson hereby move for leave to file the accompanying Brief as *Amici Curiae* in Support of Defendant, which is attached as Exhibit A to this Motion. Both parties have consented to this Motion.

Whether to permit participation by *amici curiae* is within this Court's discretion. *See, e.g., Jin v. Ministry of State Sec.*, 557 F. Supp. 2d 131, 136-37 (D.D.C. 2008). Such participation should be permitted here because Movants have "unique information [and a] perspective that can help the court beyond the help that the lawyers for the parties are able to provide." *Id.* at 137 (internal quotation marks omitted). As set forth in more detail in the accompanying Brief, the Movants are professors of economics who study issues of systemic risk. They believe that their perspective may assist the Court by providing context, background, and support for the analysis and the action of the Financial Stability Oversight Council that are under review in this case.

A proposed order is attached as Exhibit B to this Motion.

Dated: May 22, 2015

Respectfully submitted,

/s/ Gregory G. Rapawy

Gregory G. Rapawy
KELLOGG, HUBER, HANSEN, TODD,
EVANS & FIGEL, P.L.L.C.
Sumner Square
1615 M Street, N.W., Suite 400
Washington, D.C. 20036
Phone: (202) 326-7900
Fax: (202) 326-7999

Exhibit A

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

METLIFE, INC., *Plaintiff*, v. FINANCIAL STABILITY OVERSIGHT COUNCIL, *Defendant*.	Civil Action No. 15-45 (RMC)

BRIEF OF PROFESSORS VIRAL V. ACHARYA, ROBERT ENGLE, THOMAS PHILIPPON, AND MATTHEW P. RICHARDSON AS *AMICI CURIAE* IN SUPPORT OF DEFENDANT

Gregory G. Rapawy
KELLOGG, HUBER, HANSEN, TODD, EVANS & FIGEL, P.L.L.C.
Sumner Square
1615 M Street, N.W., Suite 400
Washington, D.C. 20036
Phone: (202) 326-7900
Fax: (202) 326-7999

May 22, 2015

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page

STATUTES

LEGISLATIVE MATERIALS

OTHER MATERIALS

INTEREST OF *AMICI CURIAE*

Amici are professors of economics who study the problem of systemic risk. Their research addresses the conditions under which the failure or distress of financial institutions can cause damage to the economy as a whole and the types of regulation that can lessen the risk of such damage occurring. *Amici* have studied the causes and consequences of the global financial crisis of 2008 and have made recommendations to policymakers concerning measures that will both reduce the risk of similar adverse events in the future and mitigate the consequences of any that may occur. *Amici* have also given particular attention to the role of large insurance companies in creating systemic risk and the nontraditional activities of modern insurance companies that can contribute to such risk. From their studies, *amici* are familiar with the work of the Financial Stability Oversight Council ("FSOC") and the issues that Congress has directed the FSOC to address.

Amici research, write, speak, and testify on the topics of systemic risk and related regulatory measures. They consider it part of their role to ensure that legislatures, agencies, and courts have enough information on those sometimes technical subjects to make the best possible decisions. *Amici* believe that their perspective may help this Court by providing background, context, and corroboration for the determination of the FSOC under review.

Amici's individual affiliations, credentials, and some relevant activities are set forth below. Their affiliations are given for purposes of identification only and do not indicate that the institutions with which they are affiliated endorse the contents of this Brief.

Viral V. Acharya is the C.V. Starr Professor of Economics in the Department of Finance at New York University Stern School of Business ("NYU Stern"). He serves on the Economic Advisory Committee of the Financial Industry Regulation Authority, the International Advisory

Board of the Securities and Exchange Board of India, and the Advisory Council of the Bombay (Mumbai) Stock Exchange Training Institute; and is an Academic Research Council Member of the Center for Advanced Financial Research and Learning. He is also an Academic Advisor to the Federal Reserve Banks of Cleveland and New York. In the past, he has advised the Federal Reserve Banks of Chicago and Philadelphia, the Board of Governors, and the European Systemic Risk Board.

Robert Engle is the Michael Armellino Professor of Finance at New York University Stern School of Business. He was awarded the 2003 Nobel Prize in Economics for his research on the concept of autoregressive conditional heteroskedasticity. He is the Director of the Volatility Institute at the Stern School at NYU. In this role he has developed research tools to track risks in the global economy, which are publicly available on the V-LAB website. V-LAB publishes the NYU Stern Systemic Risk Rankings, which (as discussed in the body of the brief) measure the systemic risk contribution of financial firms and countries using innovative statistical and economic models. Those rankings reflect the current levels of capital shortfall of more than 1,000 firms widely watched by investors, academics, and regulators. Professor Engle is a member of the National Academy of Science and was a member of the Joint CFTC-SEC Advisory Committee on Emerging Regulatory Issues to investigate the "Flash Crash"; the Office of Financial Research Advisory Committee; and the International Advisory Panel of the Risk Management Institute RMI.

Thomas Philippon is a Professor of Finance at NYU Stern. His research involves the interaction of finance and macroeconomics, in particular on the design of optimal interventions during financial crises and on the links between financial markets and the real economy. Professor Philippon was named one of the "top 25 economists under age 45" by the International

Monetary Fund, and he has won the 2013 Bernácer Prize for Best European Economist under 40, the 2010 Michael Brennan & BlackRock Award, the 2009 Prize for Best Young French Economist, and the 2008 Brattle Prize for the best paper in Corporate Finance.

Matthew P. Richardson is the Charles E. Simon Professor of Applied Financial Economics at NYU Stern. He currently holds the position of the Sidney Homer Director of the Salomon Center for the Study of Financial Institutions, a leading financial research center. In addition, he is a Research Associate of the National Bureau of Economic Research. He recently co-edited three books on the financial crisis and co-authored another. *See Restoring Financial Stability: How to Repair a Failed System* (2009); *Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance* (2010); *Modernizing Insurance Regulation* (2014); *see also Guaranteed to Fail: Fannie Mae, Freddie Mac and the Debacle of Mortgage Finance* (2011).

INTRODUCTION AND SUMMARY

The FSOC has determined that, if MetLife were to experience material financial distress, it could threaten the financial stability of the United States. The economic concept of "systemic risk" – the extent to which a firm's activities contribute to the risk that the economy as a whole will suffer harm – is helpful to provide context and background for the FSOC's determination and to shed light on several aspects of the FSOC's analysis. In the view of *amici*, systemic risk arises when there is an aggregate capital shortfall of the financial sector. The role of a regulatory body is to ensure that stress on the financial system does not disrupt the overall functioning of the real economy. A growing body of literature – to which *amici* are contributors – recognizes that insurance companies, like other financial actors, can be systemically risky when they engage in activities that expose them to risk from distress elsewhere in the economy and when they are positioned to transmit to other actors in the economy any distress they experience. The FSOC's findings concerning MetLife are consistent with this literature; they are also supported by *amici*'s quantitative assessment of MetLife's systemic risk.

I. In general, a financial firm can be described as systemically risky if it has the potential under stress conditions to cause harm to the broader economy by contributing to an aggregate capital shortfall of the financial system. A conclusion that a firm is systemically risky is different from a conclusion that it is likely to go into financial distress: a firm can be systemically risky but healthy (or can be in poor health but not a significant source of systemic risk). A regulator concerned with systemic risk should ask whether a firm's financial activities could potentially contribute to a system-wide event such as the financial crisis that struck the U.S. economy in late 2008. That can happen when a firm is so positioned in the market that its distress is likely to cause distress in other firms – including its counterparties, creditors, or

customers. Such an understanding of systemic risk supports several aspects of the FSOC's reasoning here.

II. Modern insurance companies increasingly engage in nontraditional activities that are more systemically risky than traditional insurance activities. Those activities include product offerings and investments that expose some insurers to risk from market movements; variable annuities that (unlike traditional insurance) leave insurers vulnerable to "runs" if their customers lose confidence; and other products and practices that make firms such as MetLife look relatively more like banks and relatively less like traditional insurers. Traditional insurance regulation, which does not address issues of systemic risk, is poorly suited to deal with these problems. Further, quantitative analysis of the insurance industry further supports the conclusion that at least some insurers are now more systemically risky than they have been previously. Insurers' key roles as financial intermediaries also suggest that distress they experience can be transmitted to other parts of the economy, such as through disturbances in the corporate bond market.

III. The FSOC's specific findings concerning MetLife support the conclusion that this particular insurance company engages in activities that increase systemic risk. MetLife's funding agreements, securities lending arrangements, guaranteed investment contracts, variable annuity products, derivatives portfolio, and withdrawable liabilities all highlight the risk that the company is creating through its business model. The agency's statutory findings are consistent with quantitative analyses of MetLife's contribution to systemic risk. Those independent analyses – based on market actors' estimate of MetLife's financial distress during the financial crisis and on *amici*'s measure of systemic risk using publicly available information – corroborate the agency's finding that MetLife's financial activities contribute to the risk of future systemic events and that regulatory measures are appropriate to reduce that risk.

ARGUMENT

I. SYSTEMIC RISK IS THE POTENTIAL EFFECT OF A FIRM'S FINANCIAL DISTRESS ON THE BROADER ECONOMY

This case is about the FSOC's determination that "material financial distress at [MetLife], if it were to occur, could pose a threat to U.S. financial stability," AR 744, with the result that MetLife will be supervised by the Federal Reserve's Board of Governors and will be subject to enhanced prudential standards. From an economic policy perspective, the FSOC's determination is a means of regulating and managing systemic risk associated with MetLife's financial activities. To evaluate that determination, it is important to bear in mind the risk that the FSOC is attempting to address and the harm it is attempting to avert. Considering the FSOC's actions as management of systemic risk helps to explain and support the agency's reasoning.

Systemic risk is also often described as the "systemic[] importan[ce]" of a particular company; it is typically defined to exist "if the failure of the firm to meet its obligations to creditors and customers would have significant adverse consequences for the financial system and the broader economy."[1] That formulation highlights two important ideas. *First*, systemic risk describes the broader consequences of a firm's difficulty in performing financial services *when it cannot meet its obligations* – that is, when it falls short of capital. *Second*, systemic risk concerns the potential effect of a firm's distress on the broader economy. Those consequences for the broader economy are the policy justification for administrative measures – such as the FSOC's action here – that mitigate the risks that a firm's financial activities create for participants in the economy other than its own employees and shareholders.

[1] Statement of Daniel K. Tarullo, Member, Board of Governors of the Federal Reserve System, at 4, Before the Sen. Comm. on Banking, Housing, and Urban Affairs, 111th Cong. (July 23, 2009), *available at* http://www.banking.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=a915ab53-be05-457e-8dc6-bf12d25d9d6f.

That general definition, although useful, is incomplete: it does not specify the conditions under which the distress[2] of an individual firm might have significant adverse consequences for the financial system and the broader economy. In our view, systemic risk arises only when there is an aggregate capital shortfall of the financial sector.[3] It follows that systemic risk is an issue only when there is a breakdown in *aggregate* financial intermediation – that is, the ability of financial firms in the economy as a whole to obtain funds from depositors or investors, and to provide financing to other firms. If one financial firm becomes unable to perform intermediation services, but all other financial firms continue to have ready access to capital, the consequences for the economy as a whole are likely to be minimal. Other firms can simply step into the breach. When capital is low in the aggregate, however, that is not possible. That is a scenario under which the troubles of a particular firm can have severe consequences for the broader economy, and it is the scenario with which the FSOC was necessarily concerned here.

A particularly extreme example of such an event occurred in the fall of 2008 and winter of 2009. At that time, a large part of the financial sector was funded with fragile, short-term debt and was hit by a common shock to its long-term assets, especially those related to real estate. As a result, large numbers of financial firms began to experience distress, disrupting intermediation to households and corporations. Full-blown systemic risk emerged when, in the early fall of

[2] The definition above describes the situation in which systemic risk materializes as a firm's "failure to meet its obligations." The FSOC describes that situation as "'material financial distress[,]' [which] exists when a nonbank financial company 'is in imminent danger of insolvency or defaulting on its financial obligations.'" AR 747 (Public Basis 5). *Amici* will use the term "distress" to avoid confusion. Whichever term is used, the context for a firm's distress can include not only formal processes such as bankruptcy, but also forced mergers or rescues that involve regulatory intervention when a firm can no longer function as a going concern.

[3] An aggregate capital shortfall of the financial sector occurs when the market value of the equity in the sector as a whole falls below a certain fraction of the market value of the assets of the sector as a whole. It can be described as financial firms generally being under stress.

2008, the market value of equity in Fannie Mae, Freddie Mac, Lehman Brothers, AIG, Merrill Lynch, Washington Mutual, Wachovia, and Citigroup, among others, went close to zero. Those firms were effectively insolvent and could no longer provide financial intermediation services. Their distress in turn created a contagious run on the broader financial system. Even solvent institutions could not access short-term funding; liquidity dried up throughout the system.

The systemic importance of a particular financial institution comes not from its individual risk of failure or distress *per se*, but from its contribution to the risk of a systemic (that is, system-wide) event. Systemic risk is about co-dependence, including factors such as:

- how much leverage a firm has when systemic risk is emerging elsewhere;
- whether it relies on short-term sources of liquidity or funding when other troubled firms rely on similar funding;
- whether its assets are likely to be relatively correlated, raising the possibility that they could all fall in value simultaneously under stress conditions;
- whether other firms would likely be able to step in to provide the services previously provided by a failing firm (i.e., the degree of substitutability); and
- whether its distress increases the likelihood of other firms' distress, or vice versa.

Academically, the importance of analyzing such interrelated factors has gained broad recognition.[4]

[4] *See, e.g.*, Christian Brownlees & Robert Engle, *SRISK: A Conditional Capital Shortfall Index for Systematic Risk Assessment* (Jan. 2015), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1611229; Viral V. Acharya, Lasse H. Pederson, Thomas Philippon & Matthew Richardson, *Measuring Systemic Risk* (May 2010), *available at* http://ssrn.com/abstract=1573171; Tobias Adrian & Markus Brunnermeier, Federal Reserve Bank of New York, Staff Report No. 348, *CoVaR* (Sept. 2008; rev. Sept. 2014), *available at* http://www.newyorkfed.org/research/staff_reports/sr348.pdf; Dimitrios Bisias, Mark Flood, Andrew W. Lo & Stavros Valavanis, Office of Financial Research, U.S. Dep't of the Treasury, Working Paper #0001, *A Survey of Systemic Risk Analytics* (Jan. 5, 2012), *available at* http://financialresearch.gov/working-papers/files/OFRwp0001_BisiasFloodLoValavanis_ASurveyOfSystemicRiskAnalytics.pdf; Monica Billio, Mila Getmansky, Andrew W. Lo & Loriana Pelizzon, Dep't of Economics, Ca' Foscari University of Venice, Working Paper No. 21/WP/2011, *Econometric Measures of Connectedness and Systemic Risk in the Finance and Insurance Sectors* (Nov.

The FSOC's analysis, of course, is based on a statutory standard (set forth by Congress) rather than a purely economic one. *See* FSOC Br. 7 (quoting 12 U.S.C. § 5323(a)(2)). Nevertheless, an understanding of systemic risk supports several aspects of the agency's position. For one thing, it was reasonable for the FSOC to focus not on the current probability that MetLife will experience distress, but instead on the likely consequences *if* MetLife were to experience distress at a time of broader weakness in the financial sector. *See* FSOC Br. 31-35; AR 365-67, 746.[5] That approach is necessary to measure a company's contribution to systemic risk if problems were unexpectedly to emerge elsewhere in the sector. Such unexpected problems could not be predicted in a "threshold inquiry into MetLife's vulnerability," Compl. ¶ 8, as MetLife urges this Court to require, and therefore such an inquiry would fail to address meaningful issues of systemic risk. For another thing, it was reasonable for the FSOC to give substantial weight to MetLife's size, risk characteristics, and interconnectedness as factors in its analysis, as well as on ways in which distress at MetLife could be transmitted to other financial institutions. *See* FSOC Br. 23-24; AR 405-583, 748-67. Those are the types of considerations that regulators should weigh as they consider whether additional safeguards are needed to mitigate a company's contribution to the risk that the economy as a whole will suffer harm.

2011), *available at* http://www.argentumlux.org/documents/billio_etal.pdf; Olivier De Jonghe, National Bank of Belgium Working Paper No. 167, *Back to the basics in banking? A micro-analysis of banking system stability* (June 2009), *available at* https://www.nbb.be/doc/oc/repec/reswpp/wp167en.pdf; Miguel A. Segoviano & Charles Goodhart, IMF Working Paper WP/09/4, *Banking Stability Measures* (Jan. 2009), *available at* http://www.imf.org/external/pubs/ft/wp/2009/wp0904.pdf; Xin Huang, Hao Zhou & Haibin Zhu, Finance and Economics Discussion Series, Divisions of Research and Statistics and Monetary Affairs, Federal Reserve Board of Washington, D.C., No. 2009-37, *A Framework for Assessing the Systemic Risk of Major Financial Institutions* (May 2009), *available at* http://www.federalreserve.gov/pubs/feds/2009/200937/200937pap.pdf.

[5] This brief cites portions of the record containing the previously nonpublic basis for the FSOC's final determination regarding MetLife, which was provided to *amici* by the FSOC on May 13, 2015, with redactions that had been made by MetLife.

II. INSURANCE COMPANIES CAN BE IMPORTANT SOURCES OF SYSTEMIC RISK

Large insurance companies such as MetLife can be sources of systemic risk – that is, can be systemically important – because they are vulnerable to capital shortfalls during periods of market weakness and because they play a significant role as financial intermediaries in the financial sector. Those characteristics of large insurance companies are relatively new and result primarily from products and services distinct from traditional insurance activities. Economists continue to debate the significance of insurance companies' nontraditional activities and the adequacy of traditional insurance regulation to address them.[6] *Amici* believe that the better-reasoned view, and the one that better fits the available evidence, is that such nontraditional activities do contribute to systemic risk in ways not addressed by traditional regulation.[7]

A. Modern Insurance Companies Are Exposed to Significant Risk from Market Movements, Runs, and Macroeconomic Events

One useful way to consider the relative systemic risk of insurance companies is to compare them to banks. Banks have certain characteristics that make them relatively systemically risky. One such characteristic is that banks' assets tend to include loans and securities with values that correlate to the performance of the economy as a whole, or to the economic performance of a specific region, industry, or line of business. Put simply, borrowers are more likely to default on a bank loan when times are hard. Another relevant characteristic is

[6] As an example of the literature arguing that insurance companies are *not* systemically risky, see Scott E. Harrington, "Designation and Supervision of Insurance SIFIs," *in Modernizing Insurance Regulation* ch. 8 (John H. Biggs & Matthew P. Richardson eds., 2014).

[7] That is not to argue that insurance companies cannot be a source of systemic risk through more traditional activities. For example, if such companies are sufficiently short of capital, and if they hold risky investments that are held elsewhere in the system and are important for financial intermediation – such as corporate bonds and asset-backed securities, *see infra* pp. 19-21 – then they may also add to the systemic risk of the financial system.

that banks' business model traditionally involves holding short-term liabilities, such as deposits that can be withdrawn on demand or repurchase agreements, that are more liquid than their assets, such as loans to be repaid on a fixed schedule or asset-backed security holdings. Banks are thus vulnerable to "runs" that occur when depositors or other creditors all withdraw funds at once.

Insurers, traditionally, did not share those characteristics with banks. The underwriting risks of traditional insurers' claim liabilities usually are better diversified than are the credit risks of banks' loan assets. Further, traditional insurers typically experience a loss of liquidity only when they make poor business decisions rather than as an inevitable result of their business model.[8] Traditional insurers tend to write insurance policies that require premiums to be received before claims are paid; have fairly high policy renewal rates; naturally link the insurers' assets and liabilities; and often require policyholders who cash out policies early to be subject to surrender charges or have the investment values of the policies paid out as annuities over prolonged periods. Insurers who issue only policies with those features are less vulnerable to runs and therefore less systemically risky. There are good reasons to think, however, that a significant part of the insurance industry is no longer traditional in the above sense and instead has become more similar to banking, and relatively more systemically risky.

Insurance companies are now exposed to more aggregate, nondiversifiable risk than would traditionally have been the case. That exposure comes both from their product offerings and from their investment decisions. As for product offerings, in the lead-up to the financial crisis, some large life insurers aggressively wrote investment-oriented life insurance policies

[8] An exception occurs when insurers experience rare and extremely adverse underwriting outcomes. For example, epidemics that kill large numbers of people in short periods of time are rare – the last significant one in the United States was the Spanish flu in 1918-1919 – but, when they occur, they can devastate life insurers.

with minimum guarantees and other features that exposed them to risk from movements in equity and other investment markets.[9] Such nontraditional policies can lead to large losses when markets decline – and therefore make the companies more systemically risky.

The investments of insurance companies also appear to include more exposure to the risk of market movements than would traditionally have been the case. If such risks materialize (and the risks by nature are more likely to do so during conditions of financial and economic stress), then insurance companies collectively will suffer investment losses. Recent studies suggest that life insurers' holdings are sensitive to interest rates[10] and include exposures to mortgage-backed securities.[11] Such findings suggest life insurers now invest in ways that leave them exposed to risk based on the poor performance of the economy as a whole.

The observed behavior of credit default swap ("CDS") premiums in the fall of 2008 strongly suggests that the financial markets believed that large life insurance companies were exposed to risk from a downturn in the economy. A CDS premium is the cost of buying protection against default on a debt. If it increases, that reflects a belief in the market that default has become more likely. Figure 1, below, compares the behavior of the average CDS premium for the senior subordinated debt of 20 large insurance companies[12] to the behavior of average

---

[9] *See* Viral V. Acharya, John Biggs, Hanh Le, Matthew Richardson & Stephen Ryan, "Systemic Risk and the Regulation of Insurance Companies," *in Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance* 241, 242 (Viral V. Acharya, Thomas F. Cooley, Matthew Richardson & Ingo Walter eds., 2010).

[10] *See* Elijah Brewer III, James M. Carson, Elyas Elyasiani, Iqbal Mansur & William L. Scott, *Interest Rate Risk and Equity Values of Life Insurance Companies: A GARCH-M Model*, 74 J. Risk & Ins. 401-23 (2007).

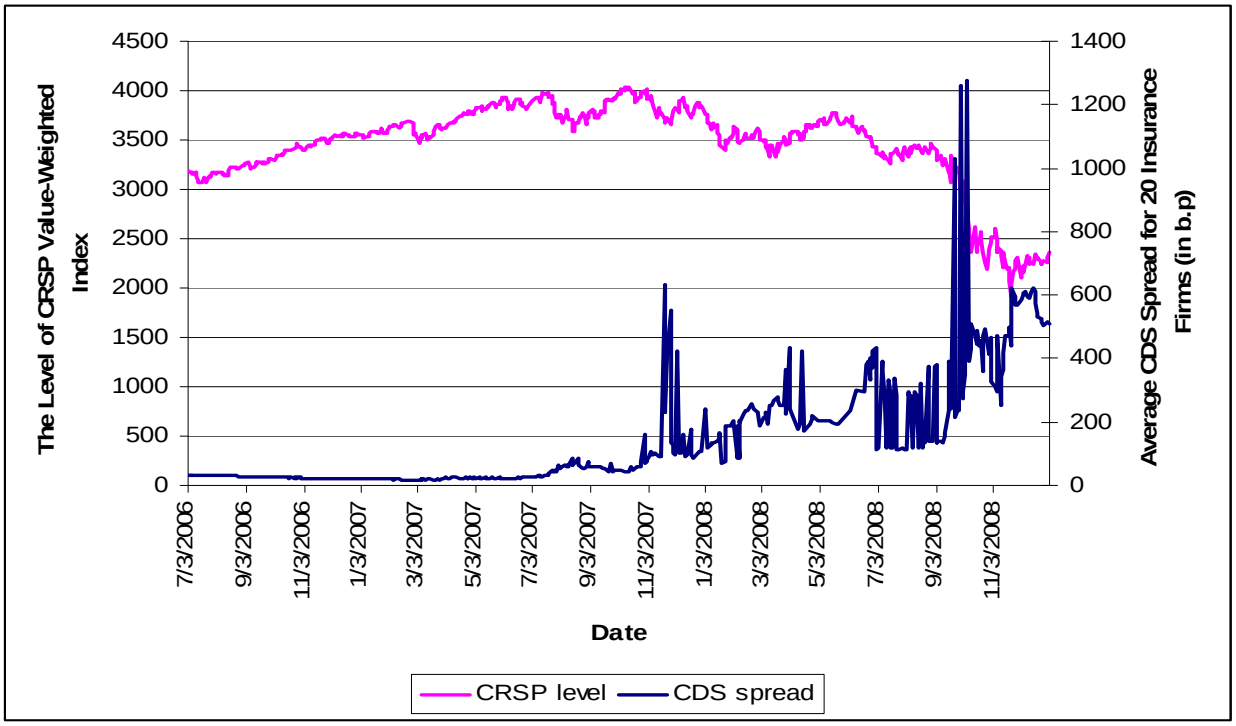
[11] *See* Etti G. Baranoff & Thomas W. Sager, *The Impact of Mortgage-Backed Securities on Capital Requirements of Life Insurers in the Financial Crisis of 2007-2008*, 34 Geneva Papers on Risk & Ins. 100-18 (2009).

[12] Figure 1 includes all insurance companies with a market capitalization in excess of $5 billion and with CDS outstanding as of June 2007.

stock prices[13] during the period of the financial crisis. It shows that, as the stock market collapsed in the fall of 2008, CDS premiums for those companies rose dramatically – well above 500 basis points, and indeed for some brief periods over 1000 basis points. Market participants would have paid such extraordinary premiums for CDS swaps only if they thought that large insurance companies were at a heightened risk of default.

FIGURE 1

CDS Spreads of the Insurance Sector



In addition, insurance companies are now vulnerable to runs – that is, to the withdrawal of funds by policyholders who lose confidence in a particular insurer or in insurers generally. That vulnerability comes in part from a rapid rise in the sale of annuities, particularly variable annuities, which are purchased as withdrawable investment accounts. A recent study provides a detailed analysis of this issue, including evidence that approximately 54 percent of insurers'

[13] The measurement for average stock prices is derived from historical data provided by the Center for Research in Security Prices ("CRSP").

liabilities are in moderately to highly liquid categories.[14] The study further estimates that 43 percent of the life insurance industry's total general-account liabilities would likely be withdrawn in an environment of "extreme stress," and 31 percent in an environment of "moderate stress."[15] In a distress situation where the potential for such runs becomes a reality, life insurers' ability to serve as financial intermediaries could be adversely affected.

Over the past few decades, some insurers have also deviated from the traditional insurance business model by providing so-called insurance or similar financial products protecting against loss due to macroeconomic events and other nondiversifiable risks. For example, in the years leading up to the financial crisis, the monoline insurers[16] and American International Group ("AIG") wrote financial guarantees on structured financial products tied to subprime mortgages. If such nontraditional insurers become distressed, as they did during the most recent financial crisis, then their losses can be passed on to their counterparties, thus causing possible contagion throughout the financial sector at large.

More broadly, the line between insurance companies and other financial services companies has become blurred over time. For example, some insurance companies, in particular AIG, ran large securities lending businesses. Securities lending is a form of shadow banking[17] –

---

[14] *See* Anna Paulson, Thanases Plestis, Richard Rosen, Robert McMenamin & Zain Mohey-Deen, "Assessing the Vulnerability of the U.S. Life Insurance Industry," *in Modernizing Insurance Regulation* 61, 67-68 & tbl. 6.3 (John H. Biggs & Matthew P. Richardson eds., 2014) ("Paulson et al., *in Modernizing Insurance Regulation*").

[15] The "extreme" and "moderate" scenarios respectively assume that 20 percent and 10 percent of total life insurance reserves face withdrawals. *Id.* at 69-70 & tbl. 6.4.

[16] A "monoline" insurer is one that specializes in providing only a single type of insurance, such as financial guarantees.

[17] Shadow banking is a system of financial institutions that resemble banks, or transactions that resemble bank services, because they provide the liquidity or maturity transformation services provided by banks. Shadow banking typically involves borrowing

lightly regulated and subject to significant liquidity and run risks when underlying security or counterparty risks materialize. Another example is detailed in a 2013 study that shows that some large life insurance companies are now using reinsurance to move liabilities from operating companies that sell policies to less regulated (that is, less capitalized) "shadow insurers" in regulation-friendly U.S. States (such as South Carolina and Vermont) and offshore locales (such as Bermuda and the Cayman Islands).[18] Such arrangements – which are increasingly widespread – functionally resemble the special-purpose vehicles used by large complex banks during the financial crisis. Similarly, another 2013 study documents that a reform of capital requirements for U.S. insurers in 2009 and 2010 led those insurers to reduce sharply (from 90 percent to less than 50 percent) the share of their mortgage-backed securities that were rated investment-grade, choosing instead to purchase riskier ones.[19] Such risk-seeking again parallels the behavior of banks in purchasing residential mortgage-backed securities before the financial crisis.

Individually and together, such developments signal that traditional insurance regulation can no longer account for the full risk created by large insurance companies engaging in nontraditional activities. Against this background, the FSOC's conclusion that "numerous risks" created by MetLife's activities are "not fully addressed by MetLife's existing regulation," FSOC Br. 28, is more than reasonable on its face, as is the agency's finding that "additional regulatory and supervisory tools focused on financial stability," AR 770-71, are appropriate for regulating

---

short-term in rollover debt markets, using significant leverage, and lending to or investing in longer-term and illiquid assets.

[18] *See* Ralph S. J. Koijen & Motohiro Yogo, NBER Working Paper 19568, *Shadow Insurance* (Oct. 2013). Because the liabilities transferred through shadow insurance arrangements stay within the insurer's holding company, there is not the usual risk transfer between the insurer and reinsurer. *See id.* at 2. According to Koijen and Yogo, this type of regulatory arbitrage grew from $11 billion to $364 billion between 2002 and 2012. *See id.*

[19] *See* Bo Becker & Marcus Opp, NBER Working Paper 19257, *Regulatory Reform and Risk-Taking: Replacing Ratings* (July 2013).

MetLife. Further, the agency's specific findings concerning MetLife's nontraditional activities provide an ample basis for concluding that this particular large insurance company is subject to the risks *amici* have discussed. *See infra* Part III.

B. Quantitative Analysis Further Supports the Conclusion that Insurance Companies Are Relatively Systemically Risky

The increased risk to large insurance companies during a period of financial stress becomes a problem for the economy as a whole because the insurance sector is an important part of the economy-wide financial intermediation process. As a result, a significant shortfall of capital in the insurance sector would have effects that would go beyond that sector and could contribute to a shortfall of capital in the economy as a whole.

NYU Stern's Systemic Risk Rankings published by NYU's Volatility Institute – with which some *amici* are affiliated – provide estimates of the expected capital shortfall of global financial firms under stress conditions.[20] The Systemic Risk Rankings attempt to answer the question: *How much capital would a financial institution need to raise in order to function normally under stress conditions?* That amount (referred to as "SRISK") should be approximately equal to the extent to which a firm's market value of equity falls below a fraction of that firm's total assets.[21] The SRISK measurement is analogous to regulatory stress tests, to the extent that both methodologies are trying to estimate the amount of capital required to ensure that the financial firm not only can survive, but also can continue to intermediate and provide financial services to the real economy. Although SRISK is not part of the statutory standard that

[20] *See* http://vlab.stern.nyu.edu/welcome/risk/.

[21] The Appendix of this brief provides the relevant formula. Mathematically, SRISK is a function of the size of the firm (*i.e.*, total assets), its assets-to-equity ratio (*i.e.*, its "leverage"), and its risk (*i.e.*, equity losses under certain stress conditions).

the FSOC is required to apply, and the FSOC 's analysis discusses it only briefly, *see* AR 687 n.1454, *amici* consider it a useful way to describe and illustrate systemic risk.[22]

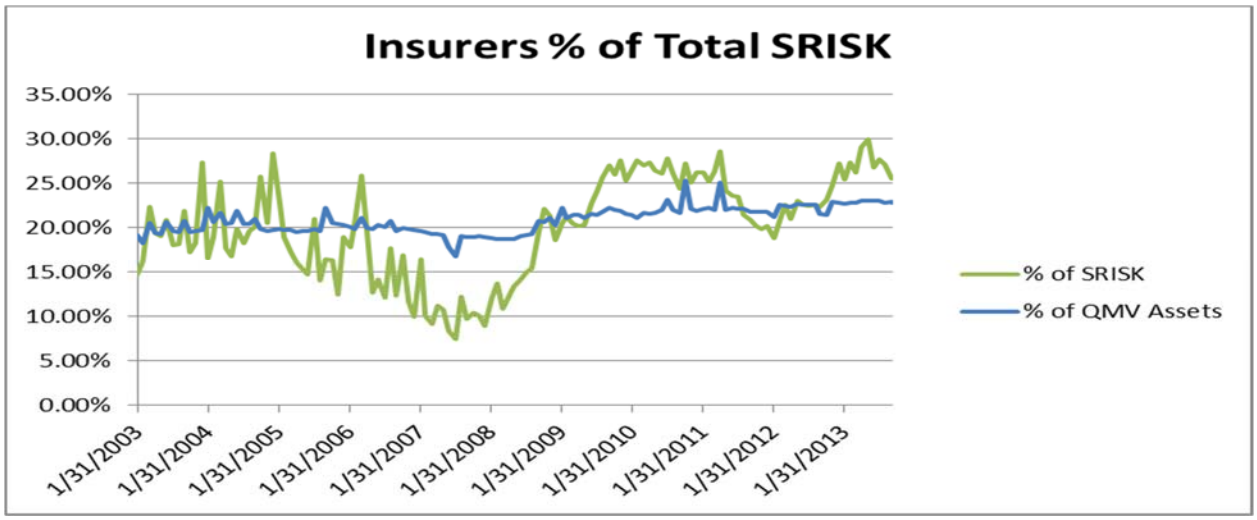
Figure 2 below shows the insurance subsector's percentage of the U.S. financial sector's total quasi market value ("QMV") of assets and total SRISK during the period from 2003 to 2013. Before the crisis, both shares were approximately 20 percent. In other words, the insurance subsector's SRISK was commensurate with its share of total assets. Starting in 2005 and going through the financial crisis, the insurance sector's share of SRISK was less, reaching a low of 10 percent. That relatively low share suggests that – despite the insurance companies' breakthrough into nontraditional lines of business, and despite the high-profile role of specific insurers such as AIG – the role of the insurance subsector was relatively small compared to that of the banking subsector. By the spring of 2009, however, insurance had become – on a relative basis, in terms of its total assets – a more systemically risky financial subsector. That is, whether due to regulation or to voluntary risk reduction in the aftereffect of the crisis, the banking subsector had become (and, since that time, has generally remained) *better* capitalized and *less* risky relative to the insurance subsector. At present, the insurance subsector's percentage contribution to overall systemic risk is generally between 25 and 30 percent, well above its fairly steady 22 to 23 percent share of overall assets.

---

[22] In the academic literature, SRISK has become one of the benchmark measures of systemic risk. *See, e.g.*, Christian Brownlees, Ben Chabot, Eric Ghysels & Christopher Kurz, Federal Reserve, Working Paper, *Back to the Future: Backtesting Systemic Risk Measures During the Great Depression and Historical Bank Runs* (Mar. 2015); J. David Cummins & Mary A. Weiss, "Systemic Risk and Regulation of the U.S. Insurance Industry," *in Modernizing Insurance Regulation* ch. 7 ("Cummins & Weiss, *in Modernizing Insurance Regulation*"); Markus K. Brunnermeier, Gang Dong & Darius Palia, Working Paper, Princeton University, *Banks' Non-Interest Income and Systemic Risk* (Jan. 2012), *available at* http://scholar.princeton.edu/sites/default/files/paper_2012_01_31_0.pdf; Linda Allen, Turan G. Bali & Yi Tang, *Does Systemic Risk in the Financial Sector Predict Future Economic Downturns?*, 25 Rev. Fin. Stud. 3000 (2012).

FIGURE 2

Relative Systemic Risk of the Insurance Sector



A recent study relates particular insurance characteristics to SRISK and finds that increased systemic risk is more likely to show up in nontraditional insurance activities.[23] That tends to support the argument that such activities lead to greater systemic risk on the part of insurers.

There are a number of different scenarios under which insurance companies could contribute to a shortfall of capital in the economy as a whole. For example:

- if insurance companies have little equity capital underlying their assets but are exposed to market risks, *see supra* pp. 11-12, a large shock to the economy could trigger a shortfall;
- if insurance companies and other financial firms are exposed to a highly interconnected firm, the distress of that firm could likewise trigger a shortfall – as, for example, AIG did during the financial crisis;
- if a large insurance company fails and its assets are liquidated at fire-sale prices, that could lead to funding problems at other firms (including insurance companies); or
- if there is a run on one insurance company that encounters any sort of trouble, *see supra* pp. 13-14, that could lead to a general loss of policyholder confidence that could trigger runs on other insurance companies.

[23] *See* Cummins & Weiss, *in Modernizing Insurance Regulation* at 110-21, 126-28.

Any of these scenarios could occur alone, or more than one could occur at the same time.[24]

Importantly, although all of the scenarios sketched above are made *worse* if a particular insurance company is undercapitalized, most of them could occur even to an insurance company that had previously appeared to be healthy. The distress of a highly interconnected counterparty, a fire-sale of assets by another company, or a loss of confidence resulting in a subsector- or sector-wide run are all types of shocks that could occur in a stress situation and that could damage the health of an insurance company even though – looking at the assets of that company alone – it would not have been immediately obvious that the company was exposed to such a risk. That possibility reinforces the conclusion the FSOC should not be required to find that a firm appears likely to experience distress before it can impose regulatory measures to mitigate systemic risk. *See* FSOC Br. 31-35; *supra* p. 9.

C. Insurance Companies Can Transmit Risk to Other Parts of the Economy by Withdrawing from Their Financial Intermediation Role

The exposure of insurance companies to various forms of risk, and their potential to contribute to a broader shortfall of capital in the financial sector, gives them the further potential to cause impacts on the real (that is, nonfinancial) economy. Life insurance companies are one of the largest investors in the U.S. capital markets and therefore an important source of funding for the U.S. economy.[25] The American Council of Life Insurers ("ACLI") estimates that, at the end of 2013, life insurers held $5.6 trillion in total assets; were "the largest institutional source of bond financing for American business, holding 20% of all U.S. corporate bonds"; and were

[24] The second and third scenarios are comparable to the "exposure transmission channel," *see* AR 432-98, and "asset liquidation transmission channel," *see* AR 499-583, described by the FSOC in its analysis; the fourth one bears similarities to the "contagion" scenario discussed by the FSOC as a subcategory of exposure transmission, *see* AR 492-98.

[25] *See* Cummins & Weiss, *in Modernizing Insurance Regulation* ch. 7; Paulson et al., *in Modernizing Insurance Regulation* ch. 6.

a significant player in the commercial mortgage market, "financing more than $286 billion, or one-eighth, of U.S. commercial mortgages."[26]

The possibility that so large a source of financing could be withdrawn or significantly impaired is a significant systemic risk; and, of course, the possibility of fire sales of corporate bonds (causing corporate bond prices to fall sharply) is an even greater risk. Distress in the insurance subsector could make it prohibitively expensive for even AA-rated and AAA-rated firms to issue corporate bonds. There is evidence, for example, that the liquidity of the corporate bond market dropped after the onset of the financial crisis in 2008.[27] Further, there are plausible scenarios in which trouble in the corporate bond market could spread to the banking subsector. Firms unable to obtain financing by issuing bonds would likely draw down on their bank lines of credit as a form of last-resort financing. In doing so, they would trigger massive liabilities for their relationship banks. Healthier banks with adequate capital and deposit bases might be able to meet the sudden drawdowns of credit lines. Moderately risky ones could experience distress. Weakened banks could well run aground.[28]

Historically, it is an open question what role financial disintermediation on the part of distressed insurers played in the credit crunch in the corporate bond market in the fall of 2008. More research examining this issue directly would be important for understanding the transmission of insurance-sector distress to the real economy. Nevertheless, the impact of the

---

[26] ACLI, *Assets and Investments in America's Economy*, https://www.acli.com/Tools/Industry%20Facts/Assets%20and%20Investments/Pages/Default.aspx.

[27] *See* Jens Dick-Nielsen, Peter Feldhutter & David Lando, *Corporate Bond Liquidity Before and After the Onset of the Subprime Crisis*, 103 J. Fin. Econ. 471-92 (2012).

[28] *See, e.g.*, Viral Acharya, Heitor Almeida, Filippo Ippolito & Ander Perez, *Credit Lines as Monitored Liquidity Insurance: Theory and Evidence*, 112 J. Fin. Econ. 287 (2014); Victoria Ivashina & David Scharfstein, *Bank Lending During the Financial Crisis of 2008*, 97 J. Fin. Econ. 319 (2010).

insurance sector's inability to participate in the corporate bond market is now well-documented, even outside the context of a common shock to the economy.[29] It is natural to conclude that such effects would be even stronger if the insurance subsector was distressed; if at the same time there were a wave of downgrades in the economy; and especially if the banking subsector was also in severe distress – a scenario that, as a whole, deserves the title of "systemic risk."[30]

The FSOC has appropriately urged this Court to defer to the agency's "predictive, economic judgment" concerning the likely consequences of MetLife's potential financial distress, including the extent to which such distress might lead to contagion or otherwise spread outside the insurance subsector. *See* FSOC Br. 25-26. The consequences of a major insurer such as MetLife finding itself in distress are indeed difficult to predict. Based on the available evidence, however, *amici* believe the concerns raised by the FSOC – including its concern that a "forced liquidation" of MetLife's "substantial holdings of . . . fixed-income corporate securities and [asset-backed securities]" could lead to "severe disruptions" in "[m]arkets for these relatively illiquid assets," AR 503 – are legitimate.

[29] For example, a 2010 study showed that, when insurance companies are required by regulation to sell downgraded corporate bonds, those bonds show significant price declines. *See* Andrew Ellul, Chotibhak Jotikasthira & Christian T. Lundblad, *Regulatory Pressure and Fire Sales in the Corporate Bond Market*, 101 J. Fin. Econ. 596-620 (2011).

[30] Negative effects on the real economy could also follow directly from insurance companies' unwillingness or inability to supply insurance products, which could cause higher prices and an overall loss of economic welfare. There is growing evidence that capital-constrained financial firms, including insurance companies, may reduce the supply of capital in the face of losses. *See*, *e.g.*, Kenneth A. Froot, *The Market for Catastrophe Risk: A Clinical Examination*, 60 J. Fin. Econ. 529-71 (2001); Kenneth A. Froot & Paul G. J. O'Connell, "The Pricing of U.S. Catastrophe Reinsurance," *in The Financing of Catastrophe Risk* ch. 5, at 195-232 (Kenneth A. Froot ed., Univ. of Chicago Press 1999); Mark J. Garmaise & Tobias J. Moskowitz, *Catastrophe Risk and Credit Markets*, 64 J. Fin. 657-707 (2009). It is an open question, however, whether these supply shocks extend beyond the catastrophe insurance area.

III. METLIFE'S CHARACTERISTICS SUGGEST IT IS A SOURCE OF SYSTEMIC RISK

In this brief, *amici* have focused primarily on discussing the concept of systemic risk and explaining why that concept applies to modern insurance companies that undertake nontraditional activities that expose them to greater degrees of systemic risk – risk that insurance companies can then transmit to the real economy through their role as financial intermediaries. That discussion is intended to place the FSOC's designation of MetLife in its appropriate context and to explain why the designation of a large life insurance company as systemically important is unsurprising in view of the responsibility and authority that the FSOC has been given by Congress. The FSOC's specific use of its authority to designate MetLife is consistent with that general framework and is supported by several of the concerns previously discussed.

The agency's findings show that MetLife engages in activities that increase the systemic risk of a large insurance company. Those findings include:

- MetLife makes extensive use of funding agreements ("FAs") and related products, including funding-agreement-backed notes ("FABNs") and funding-agreement-backed commercial paper ("FABCP"). *See* AR 751-52, 763 (as of September 2014, MetLife had about $52.3 billion of outstanding FAs and approximately $35 billion of FABN and FABCP); *see also* AR 406-10. It also engages in extensive securities lending. *See* AR 752-53 (as of September 2014, MetLife was liable for cash collateral of about $30 billion in connection with securities lending). Those activities would not be considered traditional insurance pursuits. Moreover, FABCP and securities lending fall into the category of shadow-banking activities, which can particularly contribute to systemic risk because of the possibility of runs. *See supra* pp. 14-15 & n.17.

- MetLife issues substantial quantities of guaranteed investment contracts ("GICs"), including both traditional GICs and separate-account products (such as one it calls the "Met Managed GIC"). *See* AR 753-54 (as of December 31, 2013, MetLife had about $6 billion of outstanding traditional GICs and $42 billion of "separate account liabilities with guarantees, some of which are separate account GICs"); *see also* AR 414-18 (further describing MetLife's GIC liabilities). If unhedged, GICs expose MetLife to risk from market downturns. *See supra* pp. 11-12, 14.

- MetLife has written large quantities of variable annuities. *See* AR 755-56 (as of September 30, 2014, approximately $100 billion); *see also* AR 424-26. Variable

annuities can expose an insurance company to market risk (depending on the company's hedging policy) and redemption risk (that is, potential runs). *See supra* pp. 13-14.

- Partly as a hedge against variable annuity guarantees, MetLife holds significant quantities of derivatives. *See* AR 761 (as of September 30, 2014, more than $400 billion); *see also* AR 477 (noting that MetLife's derivatives exposure is significantly greater than that of other large insurers). The hedge reduces MetLife's market risk, but the sheer size of its derivatives book increases its interconnectedness to the financial sector and counterparty risk. The risk most likely remains in the financial system.

- "[O]f the $308 billion in general account liabilities of MetLife's U.S. insurance operating companies," the FSOC reports that "approximately $49 billion may be withdrawn with little or no penalty." AR 764 (Public Basis 22). The potential for such withdrawals, again, creates the potential for a run under adverse financial conditions.[31]

In sum, MetLife engages in many financial activities outside of traditional insurance, and those activities tend to increase its systemic risk.

As for MetLife's assets, the FSOC reports that MetLife's largest category of assets is U.S. corporate fixed income securities, of which it held "over four days of average daily trading volume." AR 766; *see also* AR 544 (as of December 31, 2013, approximately $106.5 billion of U.S. corporate debt). Those large holdings expose MetLife to both market risk (the risk that the securities could default) and liquidity risk (the risk that MetLife, in a stress situation, could not sell its securities instantaneously at market price). Similarly, MetLife holds "over 12 days" of average daily trading volume in asset-backed securities. AR 766; *see also* AR 544 (as of December 31, 2013, approximately $15.6 billion). If MetLife were to face financial distress and liquidate its holdings in either of those areas, it would almost certainly need to sell them at fire-sale prices – resulting in losses that would spread to other financial firms. *See supra* pp. 18, 20.

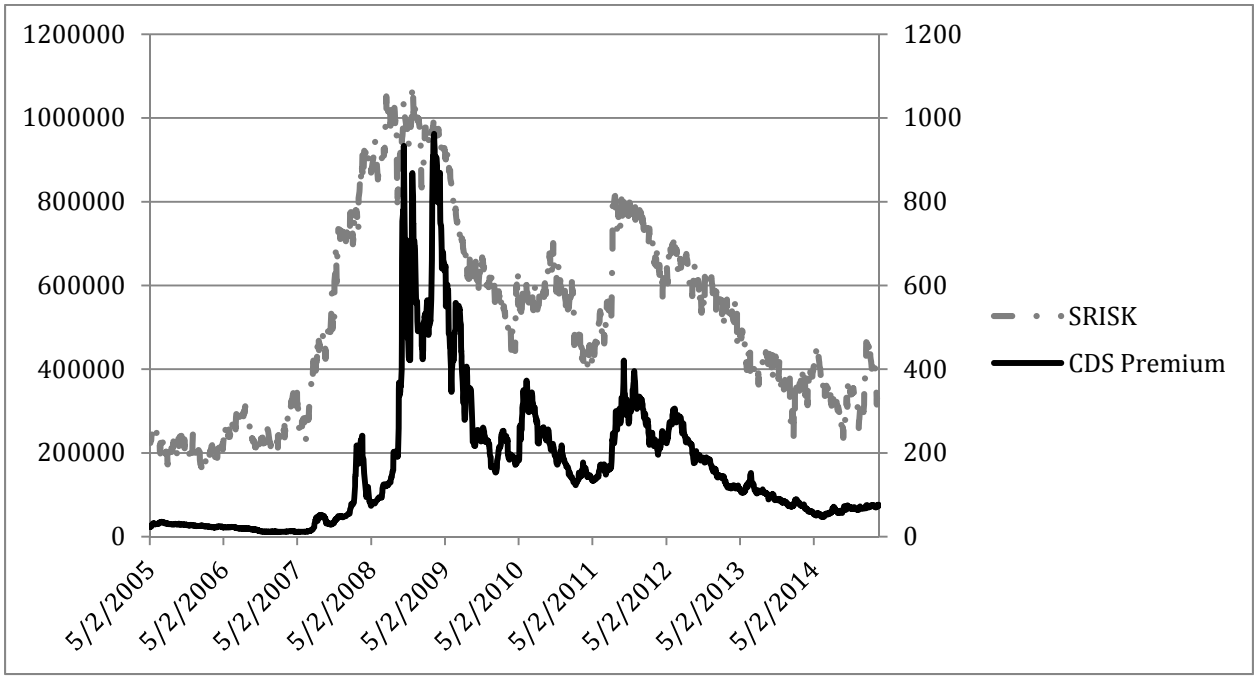
[31] Moreover, more than $200 billion of MetLife's separate account liabilities can also be potentially withdrawn or transferred, although the FSOC correctly notes that this scenario is less likely because "separate account contract holders generally have . . . disincentives" to withdraw or transfer assets. AR 765.

To corroborate the FSOC's analysis, *amici* have also analyzed the CDS premium for MetLife's five-year unsecured debt over the last 10 years. As previously explained, *see supra* pp. 12-13, the CDS premium reflects the market's perception of MetLife's financial distress. From September 30, 2008, through June 1, 2009, the spread never fell below 400 basis points. For comparison purposes, over the last 20 years, the median spread of high-yield (so-called junk) bonds has been 560 basis points. Accordingly, one can infer that the market believed MetLife's credit was under considerable pressure during the crisis.

As a benchmark, Figure 3 also graphs the SRISK of the U.S. financial sector. This SRISK represents the estimate of the financial sector's undercapitalization in a stress situation. There is a remarkable relation between MetLife's CDS and the financial sector's SRISK throughout the 10-year period. That suggests MetLife's financial distress is at its highest when the estimate of aggregate capital shortfall is high – as one would expect from a systemically risky firm.

FIGURE 3

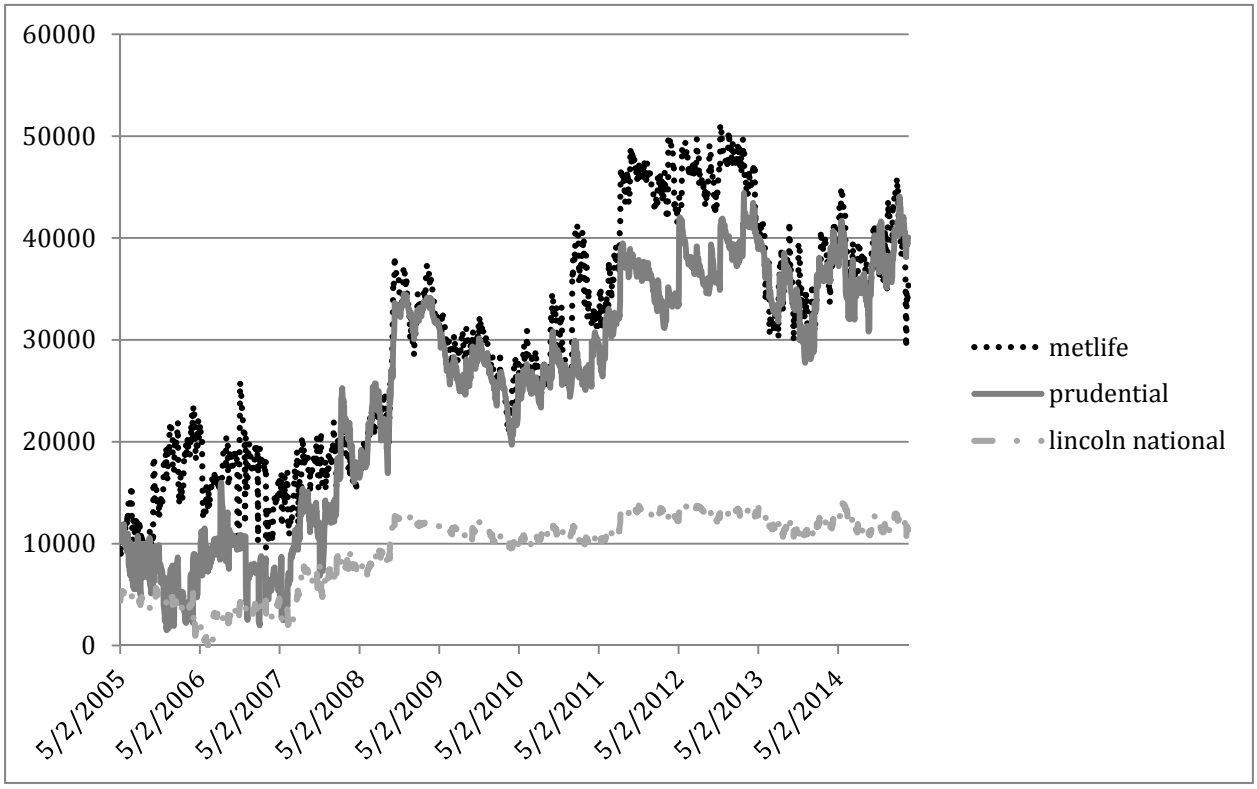
CDS Premiums of MetLife



It is also possible to estimate MetLife's systemic risk using the SRISK measure itself. Consider the three largest publicly traded writers of life insurance in 2014: MetLife, Prudential of America, and Lincoln National. Figure 4 graphs the SRISK of those firms over the last decade. MetLife and Prudential track each other quite closely; their SRISK is three to four times that of Lincoln National and jumps during the financial crisis. Finally, although SRISK in the aggregate has gradually declined over the past several years (as shown by Figure 3), the SRISK of MetLife and Prudential has not declined and, if anything, has increased since the crisis.

FIGURE 4

SRISK of Life Insurance Companies



To comment further on the SRISK of MetLife and Prudential, Table 1 below reports the 10 highest SRISKs across all U.S. financial firms as of the date of this brief. For each firm, the table provides the SRISK ranking, SRISK in billions of dollars, and MES (expected equity losses

associated with at least a 2 percent daily decline in the market). MetLife is ranked fifth with an SRISK of $30.35 billion. That SRISK is similar to that of the fourth-ranked firm (Citigroup, with an SRISK of $32.36 billion) and much higher than that of the sixth-ranked firm (Morgan Stanley, with an SRISK of $20.07 billion). *Amici* note that, since 2013, MetLife and Prudential have had SRISK values in the top 6 of all U.S. financial firms.

TABLE 1

SRISK of U.S. Financial Companies (May 14, 2015)

Institution	Ranking	SRISK ($ billions)	MES (%)
Bank of America Corp	1	43.85	2.19
JP Morgan Chase & Co	2	39.11	2.33
Prudential Financial Inc	3	34.40	2.19
Citigroup Inc	4	32.36	2.51
MetLife Inc	5	30.35	2.12
Morgan Stanley	6	20.07	2.99
Goldman Sachs Group Inc	7	14.50	2.93
Lincoln National Corp	8	10.80	2.92
Principal Financial Group Inc	9	8.54	2.86
Hartford Financial Services Group Inc	10	7.76	2.49

The graphs and table set forth above are purely quantitative: unlike the FSOC's statutory determination, they do not reflect or incorporate the specific qualitative considerations that Congress has required the agency to consider. *Amici* nevertheless believe that it is informative – indeed, telling – that these quantitative measures of risk strongly support the FSOC's conclusion that MetLife is systemically important.

CONCLUSION

Amici respectfully submit the foregoing analysis and argument for the consideration of the Court, and urge the Court to grant Defendant's Motion To Dismiss, or in the Alternative, for Summary Judgment.

Dated: May 22, 2015

Respectfully submitted,

/s/ Gregory G. Rapawy

Gregory G. Rapawy
KELLOGG, HUBER, HANSEN, TODD, EVANS & FIGEL, P.L.L.C.
Sumner Square
1615 M Street, N.W., Suite 400
Washington, D.C. 20036
Phone: (202) 326-7900
Fax: (202) 326-7999

APPENDIX

$$
\begin{aligned}
SRISK_{it} &= E_t\left(Capital\ \text{Shortfall}_i \middle| Crisis\right) \\
&= E_t\left(k\left(Debt_{it+n} + Equity_{it+n}\right) - Equity_{it+n} \middle| Crisis_{t+n}\right) \\
&\approx \left[k\frac{Debt_{i,t}}{Assets_{i,t}} - (1-k)\left(1 - LRMES_{i,t}\right)\frac{Equity_{i,t}}{Assets_{i,t}}\right] Assets_{i,t} \qquad (1)
\end{aligned}
$$

To define the terms in this chart:

$Debt_{it}$ is the book value of debt for firm *i* at time *t*

$Equity_{it}$ is the market value of equity for firm *i* at time *t*

$Assets_{i,t}$ is the quasi market-value of assets of firm *i* at time *t* (i.e., its market value of equity plus book value debt)

k is a prudential level of equity relative to assets*

$LRMES_{i,t}$ is the long-run marginal expected shortfall, i.e., the decline in equity values to be expected under specified financial stress conditions, calibrated to $MES_{i,t}$.

MES is the marginal expected shortfall associated with a market decline of at least c. The MES is computed by setting the value of the daily threshold equal to -2 percent, which corresponds approximately to the 5 percent quantile of the empirical unconditional market return distribution. This quantity is defined as:

$$MES_{it} = E_t\left[r_{it+1} \middle| r_{mt+1} \le c\right]$$

where r_{it} and r_{mt} are the returns on the firm and market, respectively.

We can estimate this measure econometrically using market data on equities and balance sheet data on liabilities. The advantage of this formula for a firm's systemic risk is that it is precise in nature. The measure of a firm's expected capital shortfall in a stress situation provides

* We choose a level of *k* equal to 8 percent of total assets and, importantly, we assume that this *k* is the same across firms, whether or not they are banks. While this is true, it is not clear whether *k* should be higher or lower for insurance companies. In practice, one could use varying *k* across different types of financial firms that would then aggregate to a weighted average of these *k* at the financial sector level.

regulators with a quantifiable measure of the relative importance of a firm's contribution to overall systemic risk. The measure also captures in one fell swoop many of the characteristics considered important for systemic risk such as size and leverage.

Exhibit B

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

METLIFE, INC., *Plaintiff*, v. FINANCIAL STABILITY OVERSIGHT COUNCIL, *Defendant*.	Civil Action No. 15-45 (RMC)

[PROPOSED] ORDER

Having considered the motion of *Amici* Viral Acharya, Robert Engle, Thomas Philippon, and Matthew Richardson for leave to file their Brief as *Amici Curiae* in Support of Defendant, it is hereby GRANTED.

IT IS SO ORDERED.

Dated: _____ __, 2015

_____
Rosemary M. Collyer
United States District Judge