October 16, 2018

Notice and Explanation of the Basis for the Financial Stability Oversight Council's Rescission of Its Determination Regarding Prudential Financial, Inc. (Prudential)

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Note: Redactions of confidential information submitted to the Council by Prudential Financial, Inc. or its regulators are indicated by "[•]".

1. OVERVIEW

Section 113(d) of the Dodd-Frank Act requires the Financial Stability Oversight Council (Council) not less frequently than annually to reevaluate its determination that material financial distress at Prudential could pose a threat to U.S. financial stability and that Prudential shall be subject to supervision by the Board of Governors of the Federal Reserve System (Board of Governors) and enhanced prudential standards. In conducting its analysis of Prudential, the Council relied on the information and materials cited herein, including written materials submitted by Prudential, a meeting between Prudential and staff on the Nonbank Financial Company Designations Committee (Nonbank Designations Committee), and consultations with the New Jersey Department of Banking and Insurance (NJDOBI), the Connecticut Insurance Department (CID), the Arizona Department of Insurance, the Federal Reserve Bank of Boston, the Board of Governors, and the Federal Deposit Insurance Corporation (FDIC). For the reasons described herein, the Council has rescinded its final determination that material financial distress at Prudential could pose a threat to U.S. financial stability and that Prudential shall be supervised by the Board of Governors and be subject to enhanced prudential standards.

2. INTRODUCTION

2.1 Annual Reevaluation Process

Pursuant to section 113 of the Dodd-Frank Act, on September 19, 2013, the Council made a final determination that material financial distress at Prudential could pose a threat to U.S. financial stability and that Prudential shall be subject to supervision by the Board of Governors and enhanced prudential standards. The Council also determined that Prudential was predominantly engaged in financial activities and therefore eligible for a final determination by the Council.[1] The Council is required to review a final determination not less frequently than annually and rescind the determination if the Council, by a vote of not fewer than two-thirds of the voting members then serving, including an affirmative vote by the Chairperson of the Council, determines that the nonbank financial company no longer meets the statutory standards for a determination.[2]

This reevaluation was conducted in accordance with the Dodd-Frank Act, the Council's rule and interpretive guidance regarding nonbank financial company determinations (Rule and

[1] The Council is authorized to determine that a "nonbank financial company" will be subject to supervision by the Board of Governors and enhanced prudential standards if either of the two statutory standards established in section 113 of the Dodd-Frank Act is satisfied. A "nonbank financial company" includes a company that is incorporated or organized under the laws of the United States or any state and that is predominantly engaged in financial activities. 12 U.S.C. § 5311(a)(4)(B). A company is "predominantly engaged in financial activities" if at least 85 percent of the company's and its subsidiaries' annual gross revenues are derived from, or at least 85 percent of the company's and its subsidiaries' consolidated assets are related to, "activities that are financial in nature" as defined in section 4(k) of the Bank Holding Company Act of 1956, as amended (Bank Holding Company Act). See Dodd-Frank Act section 102(a)(6), 12 U.S.C. § 5311(a)(6); see also 12 C.F.R. part 242.
[2] Dodd-Frank Act section 113(d), 12 U.S.C. § 5323(d).

Interpretive Guidance),[3] and the Council's Supplemental Procedures Relating to Nonbank Financial Company Determinations (Supplemental Procedures).[4]

On May 26, 2016, the Council sent a letter to Prudential informing the company that the Council was conducting its annual reevaluation of the company. Prudential was notified that it could request to meet with staff on the Nonbank Designations Committee to discuss the scope and process for the review and to present information regarding any change that may be relevant to the threat the company could pose to U.S. financial stability. Prudential was also invited to submit any written materials to the Council to contest the determination by July 11, 2016; at Prudential's request this deadline was extended to August 26, 2016. On July 19, 2016, staff on the Nonbank Designations Committee met with Prudential, at Prudential's request, to discuss the annual reevaluation. Prudential made a submission to the Council with respect to the Council's annual reevaluation on August 26, 2016 (2016 Prudential Submission), in which Prudential notified the Council that it was contesting the Council's determination. In addition, on August 26, 2016, [•].

On November 17, 2016, Prudential sent a letter to the Council requesting that the Council either wait until after the U.S. Court of Appeals for the District of Columbia Circuit issued a ruling in *MetLife, Inc. v. Financial Stability Oversight Council*[5] before making a determination with respect to the Prudential reevaluation or, in the alternative, toll the period in which Prudential could challenge the Council's determination in its annual reevaluation of Prudential in court until 30 days after the circuit court's ruling.

On November 10, 2017, Prudential sent a letter to the Council requesting that the Council resume its reevaluation of Prudential. On January 22, 2018, the Office of Financial Research (OFR), on behalf of the Council, sent a letter to Prudential requesting certain additional nonpublic information from the company that would assist in the Council's reevaluation analysis. On June 5 and June 27, 2018, the Council sent additional information requests to the company. Between March 8 and July 16, 2018, Prudential submitted its responses to the Council's requests. Additional letters were submitted to the Council by [•]. The Arizona Department of Insurance submitted a letter to the Council on May 31, 2018. On July 16, 2018, Prudential provided an additional submission in which the company requested that the Council rescind its determination (2018 Prudential Submission).

2.2 Summary of Council Basis

In making a final determination regarding Prudential in 2013, the Council evaluated the extent to which material financial distress at Prudential could be transmitted to other financial firms and markets and thereby pose a threat to U.S. financial stability through the following three transmission channels: (1) the exposures of creditors, counterparties, investors, and other market participants to Prudential; (2) the liquidation of assets by Prudential, which could trigger a fall in

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[3] Council, Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies, 12 C.F.R. part 1310.
[4] Council, Supplemental Procedures (Feb. 4, 2015), available at https://www.treasury.gov/initiatives/fsoc/designations/Documents/Supplemental%20Procedures%20Related%20to%20Nonbank%20Financial%20Company%20Determinations%20-%20February%202015.pdf.
[5] 177 F.Supp.3d 219 (D.D.C. Mar. 30, 2016).

asset prices and thereby could significantly disrupt trading or funding in key markets or cause significant losses or funding problems for other firms with similar holdings; and (3) the inability or unwillingness of Prudential to provide a critical function or service relied upon by market participants and for which there are no ready substitutes. The Council considered each of the statutory factors set forth in section 113 of the Dodd-Frank Act.

As explained in the Notice of Final Determination and Statement of the Basis for the Financial Stability Oversight Council's Final Determination Regarding Prudential Financial, Inc. issued September 19, 2013 (Council Basis),[6] the Council determined that the threat to U.S. financial stability posed by Prudential's material financial distress arose primarily from the exposure and asset liquidation transmission channels, and that the critical function or service transmission channel could exacerbate the extent to which the negative effects of the company's material financial distress could be transmitted to the financial system and the broader economy. The Council Basis also stated that Prudential's complexity and the potential difficulty to resolve Prudential could exacerbate the risks posed by the company's material financial distress across all three transmission channels.[7] The Council Basis contains a detailed explanation of the Council's analysis and conclusions in making a final determination regarding Prudential. This memorandum summarizes certain key considerations described in the Council Basis and is not intended to summarize all of the relevant factors, analyses, or conclusions addressed in the Council Basis.

2.2.1 Exposure Transmission Channel

The Council analyzed the exposures of large corporate and financial entities to Prudential through Prudential's retirement and pension products, bank-, corporate-, and trust-owned life insurance (BOLI, COLI and TOLI, respectively), and other group insurance products. In addition, the Council assessed exposures to Prudential through the capital markets, including exposures of derivatives counterparties, creditors, debt and equity investors, and securities lending and repurchase agreement counterparties.[8]

The Council found that, although counterparties' direct exposures to Prudential may be small relative to their capital, the aggregate exposures across multiple markets and financial products were significant enough that Prudential's material financial distress could aggravate losses to large, leveraged financial firms and contribute to material impairment in the functioning of key financial markets or the provision of financial services by Prudential's counterparties. The Council therefore determined that the negative effects of Prudential's material financial distress could be transmitted to other financial firms and markets through the exposure channel, which could cause an impairment of financial intermediation or financial market functioning sufficiently severe to impose significant damage on the broader economy.[9]

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[6] For a summary of the Council Basis, <u>see</u> https://www.treasury.gov/initiatives/fsoc/designations/Documents/Prudential%20Financial%20Inc.pdf.
[7] Council Basis, p. 8.
[8] Council Basis, p. 32-75.
[9] Council Basis, p. 34.

2.2.2 Asset Liquidation Transmission Channel

In evaluating the potential threat that material financial distress at Prudential could pose to U.S. financial stability through the asset liquidation transmission channel, the Council considered the extent to which Prudential held financial assets that, if liquidated quickly, could significantly disrupt financial markets or the broader economy. The Council determined that if Prudential were to experience material financial distress, the company could experience increased redemption and withdrawal requests with regard to its life insurance and annuity products, which could in turn result in a forced liquidation of a significant amount of assets at fire sale prices in order to satisfy the company's obligations.[10] The Council identified other potential triggers of asset liquidation, including collateral calls on derivatives and a refusal to renew contracts in securities lending and repurchase borrowings. The Council concluded that such a forced liquidation of assets could cause significant disruptions to key markets, including corporate debt and asset-backed securities markets, particularly during a period of overall stress in the financial services industry and in a weak macroeconomic environment.[11]

2.2.3 Critical Function or Service Transmission Channel

In evaluating Prudential, the Council determined that Prudential was a leader in several of its key markets and products, including life insurance, annuity, retirement, asset management, and commercial mortgage servicing.[12] The Council determined that, while certain factors could aggravate the transmission of stress through this transmission channel, Prudential's share in these generally fragmented and competitive markets did not appear large enough to cause a significant disruption in the provision of services if the company were to experience material financial distress and were unable or unwilling to provide these services.[13]

2.2.4 Complexity and Resolvability

The Council also evaluated Prudential's legal, funding, and operating structure; cross-border operations; intercompany arrangements; and legal resolution framework.[14] The Council determined that Prudential's complexity and the potential difficulty to resolve the company could aggravate the risk that the company's material financial distress could materially impair financial intermediation and financial market functioning.[15]

2.3 Summary of Annual Reevaluation Conclusion

Prudential is the largest life insurance organization in the United States, and its material financial distress could pose challenges to market participants, counterparties, and regulators. These challenges are especially important considering Prudential's high correlation with equity markets, which suggests that distress at Prudential could occur at the same time as weakness in financial markets. Certain aspects of Prudential's business and activities have not changed

[10] Council Basis, p. 75-110.
[11] Council Basis, p. 76-77.
[12] Council Basis, pp. 110-115.
[13] Council Basis, pp. 110-111.
[14] Council Basis, pp. 123-134.
[15] Council Basis, pp. 134.

materially since the Council's final determination regarding the company in 2013. However, the Council has identified factors regarding Prudential that materially affect the Council's conclusions with respect to the extent to which Prudential's material financial distress could pose a threat to U.S. financial stability. Following are the Council's key conclusions regarding the potential for material financial distress at Prudential to pose a threat to U.S. financial stability through the exposure, asset liquidation, and critical function or service transmission channels.

With respect to the exposure transmission channel:

- Prudential's aggregate capital markets exposures do not appear to have changed significantly. Prudential's outstanding long-term debt and its advances from Federal Home Loan Banks (FHLBs) have decreased, and its repurchase agreements and securities lending activities have increased. Prudential's gross notional amount of derivatives and derivatives liabilities have increased, [•]. The notional amount of credit-default swaps (CDS) for which Prudential is the reference entity has decreased.
- The aggregate exposures of global systemically important banks (G-SIBs) and other large bank holding companies to Prudential have [•], and most individual exposures [•].
- Exposures related to Prudential's institutional insurance products are [•]. While Prudential's material financial distress could impose losses on pension plan sponsors, retirement plan participants, and pension plan participants, the products do not appear to contribute significantly to the threat that the company's material financial distress could pose to U.S. financial stability.

With respect to the asset liquidation transmission channel:

- Prudential has [•] of U.S. general account liabilities that allow policyholders to withdraw cash from the company upon demand.[16] Under the terms of the policies, approximately [•] of these liabilities can be immediately surrendered for [•] in cash upon demand by policyholders, compared to [•] that could be surrendered for [•] in cash in 2012. The remaining [•] of U.S. general account liabilities can be surrendered for [•], but [•] of these liabilities are not payable within 90 days, and therefore do not contribute significantly to Prudential's asset liquidation risk.[17]
- Counterparties' capital markets transactions with Prudential—particularly Prudential's short-term debt, repurchase agreements, securities lending, and derivatives transactions—could increase the volume of Prudential's forced asset sales. Prudential has total liabilities of $20 billion arising from these activities.

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[16] A life insurance company's invested assets are held in two types of accounts: the general account and one or more separate accounts. An insurer's general account assets are obligated to pay claims arising from its insurance and annuity policies, debt, derivatives, and other liabilities. Separate accounts consist of funds held by a life insurance company that are maintained separately from the insurer's general assets. Assets in the general account support contractual obligations providing guaranteed benefits and are subject to claims by the insurer's creditors, with policyholders given prioritization over unsecured creditors, in the event the insurer becomes insolvent. By contrast, for separate accounts, the investment risk is passed through to the contract holder; the income, gains, or losses (realized or unrealized) from assets allocated to the separate account are credited to or charged against the separate account. Therefore, holders of non-guaranteed separate account liabilities are not generally directly exposed to the insurer's credit risk, because they are insulated from claims of creditors of the insurance company.
[17] Prudential Response to OFR Request B.1 (General Account) (Jan. 22, 2018), p. 17.

- Prudential also has $307 billion of separate account liabilities from individual variable annuities, retirement, and other products as of year-end 2017, compared to $253 billion at year-end 2012.
- With respect to Prudential's assets that could be liquidated in the event of increased liquidity needs at Prudential, the company's U.S. general account investment portfolio has grown from [•] to [•], including an increase in highly liquid assets from [•] to [•].
- Although there is significant uncertainty in estimating Prudential's liquidity needs in the event of its material financial distress, the analysis presented below, which includes examples that are severe compared to historical evidence of retail and institutional investor and policyholder behavior, indicates that there is not a significant risk that a forced asset liquidation by Prudential would disrupt trading in key markets or cause significant losses or funding problems for other firms with similar holdings.
- A fire-sale impact analysis suggests that relative to other large financial institutions, the market impact of a downward shock to the net worth of Prudential has decreased since 2012, largely due to a decrease in Prudential's leverage ratio and increased holding of highly liquid assets. As of December 31, 2017, Prudential ranked 11th among large financial institutions for an asset shock and 16th for an equity shock.

With respect to the critical function or service transmission channel:

- Prudential's market share in its key businesses has been stable since the Council's final determination regarding Prudential.
- The company is a leading provider of insurance and retirement products, but these are highly competitive markets. Prudential has larger market shares in pension risk transfers and stable value products, but the provision of these services by Prudential is not critical to the functioning of the U.S. economy or financial system.

Prudential's legal structure remains complex, with hundreds of legal entities. Prudential and its subsidiaries continue to exhibit a significant amount of operational and financial interconnectedness and inter-dependencies. These complexities continue to present obstacles to the resolvability of the firm. Prudential has identified certain actions it has taken, as well as certain changes in its regulatory framework that may impact its complexity and resolvability. These include internal organizational changes; the creation and dissolution of captive reinsurance companies; the restructuring of its closed block business; changes in the firm's capital and liquidity management; and the restructuring of its internal debt.

A number of changes in Prudential's regulation by the NJDOBI have occurred since 2012. The NJDOBI is the group-wide supervisor of Prudential under New Jersey law; it has implemented several new authorities, including powers to conduct and coordinate assessments of enterprise risk, examinations of Prudential and affiliates with respect to risks to Prudential's insurance company subsidiaries, and powers to impose measures designed to assure that Prudential can recognize and mitigate material risks to the insurers in the group. Changes in New Jersey law also authorize the NJDOBI to conduct other group-wide supervisory activities as NJDOBI considers appropriate.

For the reasons described herein, the Council has rescinded its final determination that material financial distress at Prudential could pose a threat to U.S. financial stability and that Prudential shall be supervised by the Board of Governors and be subject to enhanced prudential standards.

2.4 Summary of Prudential's Submissions to the Council

In Prudential's submissions to the Council during this reevaluation, the company argues that internal changes in Prudential's operations and business and external changes affecting Prudential, including regulatory reforms, demonstrate that material financial distress at Prudential would not significantly harm the U.S. economy and that the Council's continued determination regarding Prudential is no longer necessary or appropriate. Prudential stated that it had made a number of internal changes since the Council's determination, including stating that it:

- enhanced its capital and liquidity management by implementing and refining policies and internal procedures;
- decreased its leverage;
- decreased its use of senior debt and increased its use of junior subordinated hybrid securities and other financial instruments that provide loss absorbency in the event of material financial distress;
- simplified its corporate structure, and reduced its capital needs and the exposure of certain financial institutions to Prudential, by restructuring its closed block business;
- de-risked its annuity business and products, including by mitigating risks in existing products, developing new product designs, eliminating captive reinsurance arrangements for managing living benefit guarantee risk, increasing transparency and simplifying corporate structures in its annuity business, and using more external reinsurance; and
- refined and optimized its pension and retirement-related risk transfer business.

Prudential's submissions also highlight regulatory developments since the Council's determination that, among other things, include:

- The implementation of new provisions of New Jersey law that authorize NJDOBI to act as group-wide supervisor;
- Holding company act amendments in Connecticut and Arizona;
- Supervisory colleges and crisis management groups; and
- Initiatives of the National Association of Insurance Commissioners (NAIC) to strengthen the U.S. state-based system of insurance regulation.

Prudential also argues that the Council's previous analyses regarding the scale of potential insurance policyholder withdrawals and the potential for a resulting fire sale of assets were flawed. In addition, Prudential stated that the district court's opinion in *MetLife, Inc. v. Financial Stability Oversight Council* supported the company's argument that the determination regarding Prudential should be rescinded. [•]

3. LEGAL FRAMEWORK FOR ANNUAL REEVALUATIONS OF DETERMINATIONS

3.1 Scope of Reevaluation

Section 113(d) of the Dodd-Frank Act provides that the Council shall, not less frequently than annually, reevaluate each final determination regarding a nonbank financial company and rescind that determination if the Council determines that the company no longer meets the statutory standards for a determination.[18] The Council made its final determination with respect to Prudential under the first standard for a determination under section 113(a) of the Dodd-Frank Act—that material financial distress at Prudential could pose a threat to U.S. financial stability.[19] Pursuant to the second standard under section 113(a), the Council may determine that the nature, scope, size, scale, concentration, interconnectedness, or mix of the activities of a nonbank financial company could pose a threat to the financial stability of the United States. The Council may subject a nonbank financial company to Board of Governors supervision and prudential standards if either the first or second determination standard is met.[20]

Consistent with the statutory text, the Council described its process for annual reevaluations of determinations when it adopted the Rule and Interpretive Guidance implementing its authority under section 113. The Council has stated that it expects that its reevaluations "will focus on any material changes with respect to the nonbank financial company or the markets in which it operates since the Council's previous review."[21] In addition, the Interpretive Guidance states that for purposes of considering whether material financial distress at a nonbank financial company could pose a threat to U.S. financial stability, the Council intends to assess the impact of the company's material financial distress "in the context of a period of overall stress in the financial services industry and in a weak macroeconomic environment." This analysis summarizes certain key findings from the Council Basis and focuses both on material changes since the Council's prior annual reevaluation and on the cumulative effect of any changes since the Council's final determination regarding Prudential.

Certain developments in Prudential's business are described herein to provide an understanding of the current state of the company and to respond to the items raised in Prudential's submissions. In this annual reevaluation, the Council has relied on the information and analysis set forth or cited herein.

3.2 Prudential's Status as a Nonbank Financial Company

The Council's determination that Prudential was a "U.S. nonbank financial company" was made on the basis of the company's assets and revenues, as explained in the Council Basis.[22] Although only one of the two tests for being "predominantly engaged in financial activities" is required to be met for a U.S. company to be a "U.S. nonbank financial company," the Council determined

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[18] Dodd-Frank Act section 113(d), 12 U.S.C. § 5323(d); see also 12 C.F.R. § 1310.23.
[19] Council Basis, p. 11.
[20] Dodd-Frank Act section 113(a), 12 U.S.C. § 5323(a).
[21] 77 Fed. Reg. 21650 (April 11, 2012).
[22] Council Basis, pp. 22-28.

that both tests had been met. The Council specifically found that: (1) more than 85 percent of the revenues of Prudential and its subsidiaries are derived from activities that are financial in nature, and (2) more than 85 percent of the assets of Prudential and its subsidiaries are related to activities that are financial in nature.[23] In submissions related to the Council's final determination, Prudential stated that it [•].[24]

In light of the developments at Prudential since the Council's final determination, no changes have been identified that would affect the Council's determination that Prudential is predominantly engaged in financial activities under both the revenue test and asset test cited above, based independently on (1) more than 85 percent of the revenues of Prudential and its subsidiaries being derived from activities that are financial in nature under section 4(k)(4) of the Bank Holding Company Act, including subparagraphs (B) and (I), and (2) more than 85 percent of the assets of Prudential and its subsidiaries being related to[25] activities that are financial in nature under section 4(k)(4) of the Bank Holding Company Act, including subparagraphs (B) and (I).[26] This conclusion is based on an evaluation of Prudential's balance sheet and income statement, which reveal that nearly all of the company's U.S. and foreign revenues are derived from its insurance activities and that nearly all of its assets are related to its insurance activities.

4. OVERVIEW OF PRUDENTIAL

Prudential was founded as the Prudential Insurance Company of America, a New Jersey mutual life insurance company, in 1875. In 2001, Prudential Insurance Company of America, the top holding company insurer of the insurance group, demutualized, and the group reorganized under a new holding company, Prudential Financial, Inc., a publicly traded corporation. Prudential is headquartered in Newark, New Jersey. One of the largest financial services companies in the United States, it is also internationally active, with operations in more than 40 countries, covering the Americas, Asia-Pacific, Europe, the Middle East, and Africa.[27] Through its subsidiaries, Prudential provides a wide array of financial services, including life insurance, annuities, retirement-related services, mutual funds, and asset management. As of December 31, 2017, Prudential had roughly $3.7 trillion of gross life insurance in-force,[28] and approximately $1.4 trillion in assets under management, including general account assets, separate account assets, and off-balance-sheet assets managed for third-party retail and institutional investors.[29] Much of its revenues are generated from, and a large portion of its assets are located, outside the

[23] Id. [•]
[24] Prudential, Memorandum Concerning the Notice of Proposed Determination (July 13, 2013), p. 15.
[25] The "related to" assets-based test, set forth in section 102(a)(6)(B) of the Dodd-Frank Act, 12 U.S.C. § 5311(a)(6)(B), is broader in scope than the "derived from" revenues-based test, set forth in section 102(a)(6)(A) of the Dodd-Frank Act, 12 U.S.C. § 5311(a)(6)(A).
[26] 12 U.S.C. § 1843(k).
[27] "Prudential Fact Sheet," http://news.prudential.com/presskits/prudential-financial-fact-sheet.htm (Feb. 16, 2018); "Global Presence," https://www.prudential.com/links/about/worldwide-locations/.
[28] "Prudential Fact Sheet," http://news.prudential.com/presskits/prudential-financial-fact-sheet.htm (Feb. 16, 2018).
[29] Prudential Annual Report on Form 10-K for the year ended December 31, 2017, p. 3.

United States—particularly in Japan.[30] As of January 31, 2018, Prudential's market capitalization was $50 billion.[31]

4.1.1 Balance Sheet Overview

As of year-end 2017, Prudential had total assets of $832 billion ($211 billion of which were international), a 17 percent increase from year-end 2012.[32] Since year-end 2012, Prudential's total investments increased 16 percent, from $406 billion to $470 billion, and its separate account assets increased 21 percent, from $253 billion to $307 billion.[33] During that period, Prudential's use of leverage—measured by its ratio of either debt to equity or total assets to total equity—has decreased, primarily due to a decrease in its outstanding long-term debt and an increase in equity. While total liabilities increased 16 percent, from $670 billion to $778 billion, long-term debt decreased 31 percent, from $25 billion to $17 billion.[34] Total equity increased 38 percent, from $39 billion to $54 billion.[35] (See Appendix A for Prudential's consolidated balance sheet).

Table 1: Select Financial Information

	12/31/2012	06/30/2015	12/31/2017
Total Assets	709.3	762.7	831.9
Total Debt	28.8	31.3	20.1
Total Revenue	84.8	57.4	59.7
Debt-to-Equity Ratio	0.7x	0.7x	0.4x
Leverage Ratio	11.6x	11.0x	9.7x
Short-Term Debt Ratio	2.7%	3.3%	2.7%

Source: Prudential Annual Report on Form 10-K for the years ended December 31, 2012, December 31, 2014, and December 31, 2017; Prudential Quarterly Report on Form 10-Q for the quarters ending June 30, 2014, and June 30, 2015.

Note: Total debt excludes repurchase agreements and securities lending. The leverage ratio is calculated as total assets (excluding separate account assets) divided by total equity. The short-term debt ratio is calculated as short-term debt (comprising the current portion of long-term debt, commercial paper, securities lending payable, and repurchase agreements) divided by total assets (excluding separate account assets, which increased from $253 billion in 2012 to $307 billion in 2017).

4.1.2 Comparison to Peers

Table 2 compares Prudential to the largest bank holding companies and other large insurers, sorted by total assets. Prudential's ranking on this list has risen one spot since 2012, due in part

[30] Prudential Annual Report on Form 10-K for the year ended December 31, 2017, p. 12.
[31] Prudential had 422 million shares outstanding and a market price of $118.82 per share. Prudential Annual Report on Form 10-K for the year ended December 31, 2017, p. 1.
[32] Prudential Annual Reports on Form 10-K for the years ended December 31, 2012, p. 206, and December 31, 2017, p. 152.
[33] Prudential Annual Reports on Form 10-K for the years ended December 31, 2012, p. 206, and December 31, 2017, p. 152.
[34] Prudential Annual Reports on Form 10-K for the years ended December 31, 2012, p. 206, and December 31, 2017, p. 152.
[35] Prudential Annual Reports on Form 10-K for the years ended December 31, 2012, p. 206, and December 31, 2017, p. 152.

to the decrease in the total assets of MetLife, Inc. (MetLife) from $837 billion to $720 billion. However, since 2012, Prudential's total debt has decreased from $29 billion to $20 billion, the notional amount of credit-default swaps (CDS) outstanding for which the company is a reference entity has decreased from $11 billion to $6.6 billion, and its leverage ratio has decreased from 11.6x to 9.7x.

Table 2: Prudential Compared to Largest Bank Holding Companies and Insurers ($ Billions)

Company	Total Assets	Total Liabilities	Total Debt	Sec Lending/ Repo	Derivatives (notional)	CDS Ref.	Lev. Ratio
JPMorgan Chase	2,533.6	2,277.9	362.0	156.9	48,386.0	15.2	9.9x
Bank of America	2,281.2	2,014.1	260.1	176.9	29,485.1	13.0	8.5x
Wells Fargo & Co.	1,951.8	1,743.7	239.4	88.3	7,593.0	8.7	9.4x
Citigroup	1,842.5	1,640.8	281.1	156.0	46,063.1	13.7	9.1x
Goldman Sachs	916.8	834.5	289.4	99.5	48,865.3	14.7	11.1x
Morgan Stanley	851.7	773.3	203.9	70.0	31,560.0	12.9	10.9x
Prudential	**831.9**	**777.6**	**20.1**	**12.8**	**315.1**	**6.6**	**9.7x**
MetLife	720.0	661.0	20.4	20.5	275.9	14.0	8.7x
Berkshire Hathaway	702.1	350.1	102.6	0.0	28.8	20.5	2.0x
AIG	498.3	432.6	31.6	4.5	152.6	6.1	6.2x
US Bancorp	462.0	412.4	48.0	0.9	354.9	N/A	9.3x
PNC	380.8	333.2	56.9	2.2	418.6	N/A	8.0x
Capital One	365.7	317.0	59.7	0.6	339.6	3.6	7.5x
BNY Mellon	371.8	330.0	34.1	10.2	1,082.6	N/A	8.9x
New York Life	337.1	297.8	5.7	1.3	117.6	N/A	7.5x

Source: Company SEC filings as of December 31, 2017; The Depository Trust & Clearing Corp. (DTCC) Trade Information Warehouse as of December 29, 2017.
Note: Total debt includes FHLB advances but excludes securities lending and securities sold under agreements to repurchase. "Sec Lending/Repo" includes net amounts of liabilities as reported on the consolidated balance sheet. "CDS Ref." is gross CDS outstanding for which the company is a reference entity; includes companies that are reported as a top 1,000 reference entity in DTCC's Trade Information Warehouse Data. Leverage ratio is calculated as total assets (excluding separate account assets) divided by total equity.

4.1.3 Key Recent Business Developments

Pension Risk Transfer (PRT) Business

PRT business transactions aggregate and transfer credit risk from individual pension providers to Prudential. Prudential's PRT products consist mainly of general and separate account group annuities in the U.S. and general account longevity reinsurance contracts outside the United States for active pensioners. While the annual sales volumes have fluctuated for the company's two primary PRT products (U.S. funded group annuity buyout and UK longevity reinsurance contract accounts), as of 2017 the contract account values totaled [•].[36] As of 2013, these volumes were [•].[37]

Since 2011, the company's PRT has expanded to cover over 730,000 retirees and over 300 pension plans in the U.S. and UK, representing 11 companies.[38] Prudential's notable transactions in the U.S. PRT market since 2012 include Motorola Solutions ($3.1 billion),[39] Bristol-Myers Squibb ($1.4 billion),[40] Kimberly-Clark ($1.3 billion),[41] WestRock ($2.5 billion),[42] United Technologies ($0.8 billion),[43] The Hartford ($1.6 billion),[44] International Paper ($1.3 billion),[45] and Raytheon ($0.9 billion).[46]

Prudential ranks [•] in annual U.S. PRT sales, with a market share of [•] percent as of September 30, 2017, [•].[47]

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[36] Prudential Response to OFR Request A.2 (Jan. 22, 2018), p. 4.
[37] Prudential Response to OFR Request A.2 (Jan. 22, 2018), p. 4.
[38] Prudential Financial, Inc. Debt Investors Update (March 2017), p. 17.
[39] Bloomberg, "Motorola Solutions Cuts Pension Benefit Burden by $4.2 Billion," https://www.bloomberg.com/news/articles/2014-09-25/motorola-solutions-moves-4-2-billion-in-pensions-to-prudential, (Sept. 25, 2014).
[40] WSJ, "Prudential signs pension transfer agreement with Bristol Myers Squibb," https://www.wsj.com/articles/bristol-myers-squibb-to-transfer-1-4-billion-in-u-s-pension-obligations-1412113382 (Sept. 30, 2014).
[41] Prudential, "Kimberly-Clark Corporation to Purchase Pension Annuity Contracts from Prudential, MassMutual," http://pensionrisk.prudential.com/insights/kimberly-clark-transaction.php (Feb. 23, 2015).
[42] Prudential, "WestRock signs $2.5 billion pension risk transfer agreement with Prudential," http://pensionrisk.prudential.com/insights/westrock-news.php (Sept. 9, 2016).
[43] Reuters, "United Tech to cut pension liabilities by $1.77 billion," https://www reuters.com/article/us-utc-pensions-idUSKCN1262OI (Oct. 6, 2016).
[44] Prudential, "The Hartford signs agreement with Prudential to help secure $1.6 billion in pension obligations," http://pensionrisk.prudential.com/insights/the-hartford-news.php (June 30, 2017).
[45] Reuters, "International Paper unloads $1.3 billion in pension liabilities" https://www reuters.com/article/us-intl-paper-pensions-prudential-finl/international-paper-unloads-1-3-billion-in-pension-liabilities-idUSKCN1C71CS (Oct. 2, 2017).
[46] Reuters, "Prudential Financial to take over $923 mln in pension benefits from Raytheon," https://www.reuters.com/article/prudential-finl-raytheon-pensions/prudential-financial-to-take-over-923-mln-in-pension-benefits-from-raytheon-idUSFWN1UM0YA (July 26, 2018).
[47] Prudential Response to OFR Request A.2 (Jan. 22, 2018), p. 3.

5. TRANSMISSION CHANNEL ANALYSIS

5.1 Overview

As described in the Interpretive Guidance, the Council has identified three transmission channels as most likely to facilitate the transmission of the negative effects of a nonbank financial company's material financial distress or activities to other financial firms and markets:[48]

- *Exposure*. A nonbank financial company's creditors, counterparties, investors, or other market participants have exposure to the nonbank financial company that is significant enough to materially impair those creditors, counterparties, investors, or other market participants and thereby pose a threat to U.S. financial stability.
- *Asset liquidation*. A nonbank financial company holds assets that, if liquidated quickly, would cause a fall in asset prices and thereby significantly disrupt trading or funding in key markets or cause significant losses or funding problems for other firms with similar holdings.
- *Critical function or service*. A nonbank financial company is no longer able or willing to provide a critical function or service that is relied upon by market participants and for which there are no ready substitutes.

In its final determination regarding Prudential in 2013, the Council concluded that the threat to U.S. financial stability posed by Prudential's material financial distress arose primarily from the exposure and asset liquidation transmission channels, and that under certain circumstances, the critical function or service transmission channel might exacerbate the extent to which the company's material financial distress could be transmitted to the broader financial system and economy.[49] The Council further concluded that Prudential's complexity and potential difficulty to resolve aggravate the risk that the company's material financial distress could materially impair financial intermediation and financial market functioning.[50]

Based on its analysis, the Council has identified significant developments and conducted additional analyses that materially affect the conclusions set forth in the Council Basis.

5.2 Exposure Transmission Channel

As noted above, under the exposure transmission channel, the Council considers the exposures that a nonbank financial company's creditors, counterparties, investors, or other market participants have to the nonbank financial company.[51]

At the time of the final determination, the Council determined that large corporate and financial entities had exposures to Prudential through Prudential's retirement and pension products, BOLI, COLI and TOLI, and other group insurance products. With respect to retail policyholders' exposures to Prudential, the Council focused on the potential for policyholders to withdraw from Prudential, which could, in turn force Prudential to liquidate assets to satisfy its obligations. As

[48] See Rule and Interpretive Guidance.
[49] Council Basis, p. 8.
[50] Council Basis, p. 8.
[51] See Rule and Interpretive Guidance.

a result, much of the Council's analysis regarding the exposures of retail policyholders related more to the potential transmission of risk through the asset liquidation transmission channel. Those potential asset liquidation risks are addressed in section 5.3 below. The Council also focused on the potential for state guaranty associations (GAs) to mitigate or exacerbate the risks arising from policyholders' exposures; the GAs are discussed below in section 5.2.3.

The Council Basis also analyzed the extent to which the financial system was exposed to Prudential through the capital markets, including as derivatives counterparties, creditors, debt and equity investors, and securities lending and repurchase agreement counterparties. The Council determined that individual exposures of firms to Prudential may be small relative to the firms' capital, but that the aggregate exposures were significant enough that Prudential's material financial distress could aggravate losses to financial firms and contribute to material impairment in the functioning of key financial markets or the provision of financial services by Prudential's counterparties, and that the resulting contraction in the availability of credit could damage the broader economy.

Based on the analysis below, aggregate capital markets exposures to Prudential appear little changed, but the exposures of G-SIBs and other large bank holding companies have decreased. Exposures arising from Prudential's insurance products do not appear to contribute significantly to the threat that the company's material financial distress could pose to U.S. financial stability through the exposure transmission channel. Key factors include the following:

- With respect to capital markets exposures, Prudential's outstanding long-term debt and its advances from FHLBs have decreased, and repurchase agreements and securities lending activities have increased. Prudential's gross notional amount of derivatives and derivatives liabilities have increased [•]. The notional amount of CDS for which Prudential is the reference entity has decreased.
- The aggregate exposures of G-SIBs and other large bank holding companies to Prudential have [•], and the exposures of most individual firms [•].
- Exposures related to Prudential's' institutional insurance products are generally [•] than in 2012. While Prudential's material financial distress could impose losses on pension plan sponsors, retirement plan participants and pension plan participants, the products do not appear to contribute significantly to the threat that the company's material financial distress could pose to U.S. financial stability.

5.2.1 Exposures Arising from Prudential's Capital Markets Activities

Direct and indirect exposures of financial market participants to a nonbank financial company experiencing material financial distress can impair those market participants or the financial markets in which they participate and thereby pose a threat to financial stability. Even if individual exposures are relatively small, the direct and indirect exposures can be large enough in the aggregate for a firm's material financial distress to have a destabilizing effect on financial markets. At Prudential, exposures arising through the capital markets include the company's outstanding securities, derivatives, repurchase agreements, securities lending activities, lines of credit, and commercial paper.

Aggregate exposures to Prudential through its capital markets activities do not appear to have changed significantly since the Council's original determination, but exposures of G-SIBs and other large bank holding companies to Prudential have decreased:

- Long-term debt decreased by $7.6 billion from 2012 to 2017, to $17 billion, while repurchase agreements and securities lending increased from $9.8 billion to $13 billion.
- The aggregate gross notional amount of Prudential's derivatives, which remain primarily composed of interest rate, equity, and foreign exchange derivatives, increased from $230 billion at year-end 2012 to $315 billion; the amount of uncleared derivatives [•].
- The gross notional amount of single-name CDS outstanding for which Prudential is the reference entity decreased by 38 percent, from $11 billion to $6.6 billion.
- Total estimated capital markets exposures of G-SIBs and other large bank holding companies to Prudential [•], and most individual exposures [•]. No G-SIB or large bank holding company had exposure to Prudential that exceeds [•] percent of the counterparty's equity.

Table 3: Summary Capital Markets Exposures ($ Billions)

	12/31/2012	**06/30/2015**	**12/31/2017**
Long-Term Debt	24.7	28.8	17.2
Derivatives (notional / fair value of liabilities)	230.0 / 5.2	381.9 / 5.8	315.1 / 6.0
Securities Lending Payable	3.9	3.8	4.4
Repurchase Agreements	5.8	7.8	8.4
CDS as a Reference Entity	10.6	8.4	6.6
Short-Term Debt	2.5	3.6	1.4

Sources: Prudential Annual Reports on Form 10-K for the years ended December 31, 2012 and December 31, 2017; Prudential Quarterly Report on Form 10-Q for the quarter ending June 30, 2015; DTCC Trade Information Warehouse.
Note: Notional and fair value of derivative liabilities are presented on a gross basis and exclude synthetic guaranteed investment contracts (GICs) and embedded derivatives. Derivatives liabilities reflects the gross fair value of derivatives liabilities, before taking into account netting effects of master netting agreements and collateral posted. Short-term debt includes commercial paper outstanding, short-term FHLB advances, and the current portion of long-term debt.

Table 4 compares an estimate of Prudential's aggregate capital market exposures to the largest U.S. bank holding companies and other large insurance companies as of December 31, 2017.

Table 4: Estimated Capital Market Exposures Among Large Bank Holding Companies and Insurance Companies ($ Billions)

Company	Exposures
JPMorgan Chase	572.2
Citigroup	501.2
Bank of America	484.3
Goldman Sachs	443.2
Wells Fargo	345.3
Morgan Stanley	313.5
Berkshire Hathaway	133.1
MetLife	112.5
Capital One	64.5
PNC	62.0
Prudential	**54.1**
BNY Mellon	52.9
US Bancorp	49.1
AIG	48.5

Sources: Company SEC filings; Federal Reserve FR Y-15 Banking Organization Systemic Risk Report filings; DTCC Trade Information Warehouse; as of December 31, 2017.
Note: Estimated capital market exposures represent the sum of financial debt outstanding, securities lending and repurchase agreement transactions reported as liabilities on the consolidated balance sheet, CDS outstanding for which the entity is the reference entity, derivatives liabilities after master netting agreements and cash collateral, credit facilities, FHLB advances, funding agreements, and other funding.

Debt

A nonbank financial company's outstanding debt provides a direct channel for the negative effects of the firm's material financial distress to be transmitted to counterparties immediately on a mark-to-market basis and could also result in losses on principal and interest in the event of default. Prudential's consolidated outstanding debt fell from $29 billion in 2012 to $20 billion as of year-end 2017,[52] causing Prudential to fall from third to fourth among the list of publicly traded insurance companies listed in Table 5.[53]

[52] Prudential Annual Reports on Form 10-K for the years ended December 31, 2012, p. 206, and December 31, 2017, p. 152. Consolidated debt includes long-term debt, short-term debt, and notes issued by consolidated variable interest entities, as presented on the company's balance sheet.
[53] SNL Financial; data as of December 31, 2012, and December 31, 2017.

Table 5: Debt of Publicly Traded U.S. Insurance Companies ($ Billions)

Company	Total Debt
Berkshire Hathaway	102.6
AIG	31.6
MetLife	20.4
Prudential	**20.1**
Allstate Corporation	6.4
Aflac Incorporated	5.3
Hartford Financial Services	5.0
Genworth Financial	4.6

Source: SNL Financial, as of December 31, 2017.
Note: Total debt as defined by SNL Financial (excluding repurchase agreements).

Some public data are available regarding the record holders of a portion of Prudential's outstanding debt securities, but little data are available regarding the identity of the beneficial owners of these securities, limiting the ability to assess the exposures of specific security holders.

Commercial Paper

Prudential's outstanding amount of commercial paper has not changed materially since 2012. Its maximum authorized commercial paper borrowing is unchanged since year-end 2012 at $10 billion, and the average amount of commercial paper outstanding was $1.1 billion in 2017, compared to $1.2 billion in 2012.[54] The weighted average maturity of outstanding Prudential's commercial paper is also largely unchanged, rising from 21 to 22 days.[55]

Repurchase Agreements and Securities Lending

Prudential stated that it primarily uses repurchase agreements and securities lending to [•].[56] Material financial distress at Prudential could cause losses to these counterparties if Prudential has insufficient liquidity to repay cash due to the counterparties. Further, if Prudential could not return the cash collateral in full, its counterparties may be forced to liquidate the pledged securities, which could result in losses to the counterparties.

The fair value of securities pledged by Prudential under repurchase and securities lending transactions has increased from $9.7 billion in 2012 to $13 billion in 2017.[57] Prudential's policy is to collateralize its securities lending transactions at a minimum of 102 percent of the fair value of the loaned securities, and to collateralize its repurchase agreements at a minimum of 95

[54] Prudential Annual Reports on Form 10-K for the years ended December 31, 2012, p. 275, and December 31, 2017, p. 210.
[55] Prudential Annual Reports on Form 10-K for the years ended December 31, 2012, p. 275, and December 31, 2017, p. 210.
[56] Prudential Response to OFR Request A.13 (Jan. 22, 2018), p. 2.
[57] Prudential Annual Reports on Form 10-K for the years ended December 31, 2012, p. 206, and December 31, 2017, p. 152.

percent of the fair value of the securities sold.[58] These securities are marked to market daily, and margin calls are made to maintain the collateral amounts. Prudential stated that investments purchased with the cash received in these transactions are **[•]**.[59] The credit quality of the investments purchased with cash collateral, measured by the weighted average rating of the collateral, has [•].[60] In addition, as of December 31, 2017, Prudential [•].[61]

Prudential's counterparties in repurchase and securities lending transactions are a mix of G-SIBs and asset managers, and [•]. The largest counterparties in which Prudential is a borrower of cash are shown in Table 6.

Table 6: Top Repurchase Agreement and Securities Lending Counterparties to Prudential ($ Millions)

Company	Average Collateral Received
[•]	[•]

Source: Prudential Response to OFR Request A.13 (Jan. 22, 2018), pp. 5-7.
Note: Average monthly balances as of 2017; counterparty entities and funds are aggregated by parent entity or fund sponsor.

Derivatives

Prudential's derivatives activity is another source of capital markets exposure to the company. Some of Prudential's equity and interest rate derivatives activity is a result of its asset-liability management strategy to hedge the liability associated with living benefit guarantees in the annuities segment, as well as its capital hedge program to hedge its individual annuities business from more severe equity market impacts.[62] In addition, Prudential uses foreign exchange derivatives primarily to hedge earnings volatility associated with its Japanese and Korean insurance operations.[63] The majority of Prudential's derivatives counterparties are other large financial intermediaries that are interconnected with one another and the financial sector. Exposures of these counterparties to Prudential could result in direct losses to those firms in the event of Prudential's material financial distress.

Prudential's gross notional amount of derivatives outstanding has increased from $230 billion in 2012 to $315 billion in 2017, and its derivatives liability increased from $5.2 billion to $6.0 billion.[64] Prudential's largest derivatives counterparties are shown in Table 7. The share of the gross notional amount of derivatives outstanding associated with the top 10 counterparties [•] from [•] percent as of September 30, 2012, to [•] percent as of year-end 2017.[65]

[58] Prudential Annual Report on Form 10-K for the year ended December 31, 2017, p. 168.
[59] Prudential Response to OFR Request A.13 (Jan. 22, 2018), p. 2.
[60] Council Basis, p. 94; Prudential Response to OFR Request E.7-E.9 (Oct. 31, 2012), p. 8; Prudential Response to OFR Request A.12 (Jan. 22, 2018), p. 2.
[61] Prudential Response to OFR Request A.13 (Jan. 22, 2018), p. 1.
[62] Prudential Annual Report on Form 10-K for the year ended December 31, 2017, p. 132.
[63] Prudential Annual Report on Form 10-K for the year ended December 31, 2017, p. 56.
[64] Prudential Annual Reports on Form 10-K for the years ended December 31, 2012, p. 337, and December 31, 2017, p. 276.
[65] Prudential Response to OFR Request A.10 (Jan. 22, 2018), p. 3.

Table 7: Top 10 Bilateral Derivatives Counterparties ($ Millions)

Counterparty	Gross Notional	Net Fair Value	Net Exposure
[•]	**[•]**	**[•]**	**[•]**
Total (Top 10 Counterparties)	**[•]**	**[•]**	**[•]**
Prudential Total Outstanding	**[•]**	**[•]**	**[•]**

Source: Prudential Response to OFR Request A.10 (Jan. 22, 2018), p. 3.
Note: Top 10 excludes [•] in gross notional derivatives cleared through [•]. Net exposure is calculated as net fair value minus total collateral. A Prudential submission to the Council reported [•] of gross notional derivatives outstanding (see Prudential Response to OFR Request A.10), while Prudential's annual report on Form 10-K for the year ended December 31, 2017, p. 276, reported $315 billion of gross notional derivatives outstanding, excluding synthetic GICs.

According to Prudential, its derivatives portfolio consists [•].[66] As shown in Table 8, most of the company's derivatives portfolio consists of [•]. Prudential's derivatives portfolio also includes total return swaps, interest rate options, foreign currency options, foreign currency swaps, and equity options.

Table 8: Prudential's Derivatives By Gross Notional Amount ($ Millions)

Derivative Type	Cleared	Uncleared	% of Total Gross Notional
Interest Rate	[•]	[•]	[•]
Foreign Exchange	[•]	[•]	[•]
Total Return	[•]	[•]	[•]
Credit	[•]	[•]	[•]
Equity	[•]	[•]	[•]
Treasury Futures	[•]	[•]	[•]
Commodity Futures	[•]	[•]	[•]
Total	**[•]**	**[•]**	**[•]**

Source: Prudential Response to OFR Request A.11 (Jan. 22, 2018), p. 2.

Cleared derivatives represented [•] percent of Prudential's total notional derivatives outstanding at year-end 2017, [•].[67] Prudential clears its interest rate swaps and CDS through futures commission merchants, including subsidiaries of [•].[68]

[66] Prudential Response to OFR Request A.11 (Jan. 22, 2018), p. 1.
[67] Prudential Response to OFR Request A.10 (Jan. 22, 2018), p. 1; Prudential Response to OFR Request A.11 (Jan. 22, 2018), p. 2.
[68] Prudential Response to OFR Request A.11 (Jan. 22, 2018), p. 2.

Prudential also stated that its derivatives positions are collateralized with high-quality, liquid, and non-volatile collateral.[69] Over [•] percent of the collateral Prudential has posted to counterparties is in the form of cash and government securities; however, the other [•] percent is corporate bonds, which impose greater risk on the counterparty.[70]

CDS as Reference Entity

Like many financial institutions, Prudential is a reference entity on CDS contracts. For some CDS contracts with Prudential as a reference entity, risk is merely being transferred between counterparties. However, in cases in which protection buyers do not hold Prudential's securities, a new exposure to Prudential is created, so these transactions are relevant to the exposure transmission channel analysis even though Prudential is not a party to these CDS contracts. Outstanding single-name CDS referencing Prudential has fallen from $11 billion to $6.6 billion as of year-end 2017.[71]

Arrangements with Federal Home Loan Banks

FHLB borrowing has become a common source of liquidity for many financial institutions. Prudential Retirement Insurance and Annuity Company (PRIAC) is a member of the FHLB of Boston, and the Prudential Insurance Company of America (PICA) is a member of the FHLB of New York. Membership provides Prudential with access to collateralized advances (classified as short-term debt or long-term debt, depending on the maturity date of the obligation). Prudential is generally subject to the risk that the FHLB lender will declare all advances due and payable or increase the level of haircuts assigned to pledged collateral.

Prudential's outstanding advances from FHLBs [•].[72] Prudential's total volume of eligible securities that can be pledged is an indication of the scale of additional FHLB advances the company could seek, and therefore of the FHLBs' potential exposures to Prudential; this amount has [•].[73] If Prudential were to take significant advances against eligible collateral and subsequently default on its obligations to the FHLBs, the FHLBs would bear the risks associated with the pledged securities.

Capital Markets Exposures of Top Counterparties to Prudential

The exposures of other large financial institutions to a nonbank financial company could serve as a mechanism by which its material financial distress could be transmitted to those firms and to financial markets more broadly. Table 9 summarizes the exposures of G-SIBs and large bank holding companies to Prudential through various types of capital markets transactions. Total exposures of G-SIBs and other large bank holding companies to Prudential [•], and most

[69] Prudential Response to OFR Request A.10 (Jan. 22, 2018), p. 1.
[70] Prudential Response to OFR Request A.10 (Jan. 22, 2018), p. 3.
[71] DTCC Trade Information Warehouse.
[72] Prudential Response to OFR Request A.14 (Jan. 22, 2018), p. 1.
[73] Prudential Response to OFR Request A.14 (Jan. 22, 2018), p. 2; includes securities already pledged for outstanding advances.

individual exposures [•].[74] No G-SIB or large bank holding company had exposure to Prudential that exceeds [•] percent of the counterparty's equity.[75]

Most categories of capital market exposures among these counterparties have [•] since 2012. Securities lending and repurchase agreements exposure [•]; debt exposure [•]; commercial paper exposure [•]; and credit lines and letters of credit exposure [•].[76] [•][77]

Table 9: Capital Market Exposures of G-SIBs and Other Large Bank Holding Companies to Prudential ($ Millions)

Firm	Derivatives Net Liab. + Potential Exposure	Sec Lend/ Repo Net Liab. + Potential Exposure	Debt	Lines/ Letters of Credit	Total	% of Total Counterparty Equity or AUM 12/31/2017	% of Total Counterparty Equity or AUM 09/30/2012
[•]	[•]	[•]	[•]	[•]	[•]	[•]	[•]

Sources: Prudential Response to Council's Notice of Consideration (Feb. 8, 2013), p. 28; Prudential Response to OFR Request A.8 (Jan. 22, 2018), pp. 6-7.
Note: [•]

5.2.2 Exposures to Prudential's Insurance Products

The impact of Prudential's material financial distress could include the losses on pension investments or institutional insurance products for institutional customers, and the loss of insurance protection or retirement savings for individual policyholders. As of December 31, 2017, Prudential had approximately $412 billion of general account insurance liabilities, compared to $358 billion as of December 31, 2012.[78] Prudential's institutional products comprise [•] of this amount.[79]

Exposures of Institutional Policyholders and Annuity Contract Holders

Prudential offers various institutional insurance products, including guaranteed interest accounts and other stable value products, funding agreements, GICs, synthetic GICs, group annuity and life insurance products, and BOLI/COLI/TOLI products. Prudential provides retirement products and many of its insurance products to employee benefit retirement plans sponsored by various types of institutions, including large corporations, state and local governments, and unions. Generally, the retirement plans or the plan participants, not the sponsoring institutions, have direct exposures to Prudential. Prudential's BOLI/COLI/TOLI policies are held directly by institutions, and most are separate account products providing the owners with the option to

[74] Prudential Response to Council's Notice of Consideration (Feb. 8, 2013), p. 28; Prudential Response to OFR Request A.8 (Jan. 22, 2018), pp. 6-7.
[75] Prudential Response to Council's Notice of Consideration (Feb. 8, 2013), p. 28; Prudential Response to OFR Request A.8 (Jan. 22, 2018), pp. 6-7.
[76] Prudential Response to Council's Notice of Consideration (Feb. 8, 2013), p. 28; Prudential Response to OFR Request A.8 (Jan. 22, 2018), p. 7.
[77] Prudential e-mail, "Re: Information submission" (April 13, 2018). [•]. Prudential Response to OFR Request A.7 (Oct. 31, 2012), p. 12.
[78] Prudential Annual Reports on Form 10-K for the years ended December 31, 2012, p. 206, and December 31, 2017, p. 152.
[79] Prudential Response to OFR Request A.1 (Jan. 22, 2018), p. 1.

surrender the policies in exchange for the market value of the separate account assets; the institutional counterparties are exposed to Prudential's material financial distress only to the extent that the market value of these assets is less than any guarantees provided by Prudential.

Exposures of institutional policyholders arising from Prudential's general account insurance products are generally slightly higher than in 2012. While Prudential's material financial distress could impose losses on pension plan sponsors, retirement plan participants, and pension plan participants, financial institutions' exposures to Prudential from these products do not appear to be significant, and the products do not appear to contribute significantly to the threat that the company's material financial distress could pose to U.S. financial stability.

Guaranteed Interest Accounts and Other Stable Value Products (on Balance Sheet)

These contracts generally serve as a fixed-rate guaranteed investment option for defined contribution plans in the United States. They involve group annuity contracts supported by assets in Prudential's general account, or in some cases, by assets in a separate account. Under these contracts, funds are generally accumulated under individual employee "accounts" that are tracked on an internal recordkeeping system. The benefit for each participant is limited to the accumulated value in the participant's account. Policyholders would face losses if Prudential were to default on its guarantee.

As of December 31, 2017, Prudential had [•] of general account balances and [•] of separate account balances associated with guaranteed interest accounts, compared to [•] as of September 30, 2012.[80]

Table 10: Retirement Plans Owning Guaranteed Interest Accounts and Other On–Balance Sheet Stable Value Contracts with Liabilities Over $500 Million ($ Millions)

Client	Liability
[•]	[•]

Source: Prudential Response to OFR Request A.1 (Jan. 22, 2018), p. 3.

Guaranteed Investment Contracts

Through GICs, Prudential provides a guaranteed rate of return over a specified period (typically three to five years) in an investment contract and is obligated to pay the principal upon contract termination. Prudential issues GIC contracts to tax-qualified pension and profit sharing plans. As of December 31, 2017, Prudential had [•] of general account balances associated with GICs, compared to [•] as of September 30, 2012, with [•] contract holders having an exposure over [•].[81]

[80] Prudential, Response to OFR Data Request K.10 (2013), p. 3; Prudential Response to OFR Request 1 (June 27, 2018), p. 2.
[81] Prudential, Response to OFR Data Request K.10 (2013), p. 3; Prudential Response to OFR Request 1 (June 5, 2018), p. 1; Prudential Response to OFR Request A.1 (Jan. 22, 2018), p. 1.

Funding Agreements

Funding agreements are investment products issued out of the general account of an insurer into the institutional market. In a funding agreement-backed note program, typically an insurance company issues a funding agreement out of its general account to a special-purpose vehicle; the special-purpose vehicle issues notes to third-party investors that provide the note holders with a security interest in the funding agreement. Prudential had [•] of funding agreements outstanding as of December 31, 2017, [•] as of September 30, 2012.[82] Of the outstanding amount, [•] were related to funding agreement-backed notes ([•] as of September 30, 2012), [•] were issued to the FHLB of New York as collateral for advances ([•] as of September 30, 2012), and [•] was other funding agreements ([•] as of September 30, 2012).

Group Annuities

Prudential offers both participating and non-participating group annuity products. Non-participating annuities are essentially fixed annuity products. Participating annuities provide a minimum guarantee but allow the plan sponsor to retain investment and actuarial risks. These products can be structured in two ways: (1) the plan sponsor can maintain the group annuity as a plan asset; or (2) the plan sponsor can transfer its legal obligation to Prudential. In the former case, losing the benefit of Prudential's guarantee in the event of the company's insolvency, or even facing the potential of losing the guarantee, would change the risk characteristics of the plan's assets and could cause plan sponsors to take action to reduce their risk, either by pulling back activity in other areas or selling assets to reduce risk. In the case of a plan sponsor that transfers its obligation to Prudential, the risk is borne by the individual policyholder, subject to any state GA protection.

As of December 31, 2017, the company had [•] of participating annuity separate account balances and [•] of non-participating general account balances, compared to [•] as of September 30, 2012.[83]

Synthetic GICs

Synthetic GICs provide an insurer's client retirement plans with a minimum interest rate guarantee on their investments and a guarantee related to the excess of the contract value over the market value of the account assets. Unlike other GICs, the underlying reference assets are owned and controlled by the plan rather than by Prudential; the assets are not consolidated onto Prudential's balance sheet. Prudential is required to make payments if the underlying assets are insufficient to pay a guaranteed benefit. Further, if Prudential were to experience material financial distress, the retirement plan contract holders could suffer losses through the forced write-down of their assets from book to market value. As of December 31, 2017, Prudential had [•] of assets underlying synthetic GICs, compared to [•] as of September 30, 2012.[84]

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[82] Prudential, Response to OFR Data Request K.10 (2013), p. 3; Prudential Response to OFR Request 2 (June 5, 2018), p. 1.
[83] Prudential Response to OFR Request 3 (June 5, 2018), p. 1; Council Basis, p. 38.
[84] Prudential Response to OFR Request A.1 (Jan. 22, 2018), p. 1; Council Basis, p. 40.

Table 11: Retirement Plans Owning Synthetic GICs with Underlying Account Balances Over $500 Million ($ Millions)

Client	Account Balance
[•]	[•]

Source: Prudential Response to OFR Request A.1 (Jan. 22, 2018), pp. 3-4.

BOLI/COLI/TOLI

Prudential offers BOLI, COLI, and TOLI products. These are group life insurance products used by employers to fund retiree medical benefits, supplemental executive retirement plans, non-qualified deferred compensation plans, and other non-qualified benefits. These policies are held directly by institutions, and most are separate account products providing the owners with the option to surrender the policies in exchange for the market value of the separate account assets; holders are directly exposed to losses arising from Prudential's material financial distress only to the extent that the market values of these assets are less than any guarantees provided by Prudential.

As of December 31, 2017, Prudential had [•] of BOLI/COLI/TOLI separate account balances and [•] of general account liabilities associated with these contracts, with the top 10 institutional customers having an aggregate separate account balance of [•].[85] In comparison, as of September 30, 2012, Prudential had [•] of separate account balances and [•] of associated general account liabilities, and the top 10 customers had an aggregate balance of [•].[86] As of December 31, 2017, Prudential had [•] of separate account balances associated with BOLI/COLI/TOLI variable life policies and [•] of general account liabilities associated with BOLI/COLI/TOLI whole life policies, [•] from year-end 2012.[87]

Table 12: Ten Largest Group Life Insurance BOLI/COLI/TOLI Contract Holders ($ Millions)

Client	Separate Account Balance
[•]	[•]

Source: Prudential Response to OFR Request A.1 (Jan. 22, 2018), p. 4.

As shown in Table 13, Prudential also offers term group life insurance and accidental death and disability policies to employee benefit plans. Other insurance products include short- and long-term disability and long-term care insurance.

[85] Prudential Response to OFR Request A.1 (Jan. 22, 2018), pp. 2-3; Prudential Response to OFR Request 1 (June 27, 2018), p. 2.
[86] Prudential Response to OFR Request A.3 (Oct. 31, 2012) pp. 22-23.
[87] Prudential Response to OFR Request 1 (June 27, 2018), p. 2; Council Basis, p. 42.

Table 13: Prudential's Other Group Insurance Product Offerings ($ Millions)

Product	09/30/2012	12/31/2017
Group Term Life Insurance & Accidental Death and Disability	[•]	[•]
Group Universal Life (UL) & Group Variable Universal Life (VUL)	[•]	[•]
Long-Term Disability	[•]	[•]
Short-Term Disability	[•]	[•]
Long-Term Care Insurance	[•]	[•]

Sources: Prudential Response to Follow-Up Request K.10 (2013), p. 3; Prudential Response to OFR Request 1 (June 27, 2018), p. 2.
Note: Figures are general account liabilities under GAAP.

5.2.3 Exposures of Retail Policyholders and State Guaranty Associations

Following is an analysis of exposures of retail policyholders and the state GAs to Prudential.

Retail Policyholders

As of year-end 2017, Prudential's life and retirement subsidiaries reported 30 million policies in force, compared to 35 million policies in 2012.[88] In the Council Basis, the discussion of retail policyholders' exposures to Prudential focused on the potential for policyholder concerns about the potential losses they could incur in the event of Prudential's material financial distress to lead policyholders to withdraw from Prudential, which in turn could force Prudential to liquidate assets to satisfy its obligations. As a result, that discussion included an analysis of the potential for state GAs to mitigate the risks arising from policyholders' exposures and an evaluation of the potential for stress to be transmitted to other life insurance companies if the GAs were required to assess premiums on other life insurance companies to fund GA liabilities associated with Prudential's insolvency. For purposes of this reevaluation, the potential asset liquidation risk arising from policyholder withdrawals is addressed in section 5.3 below. Apart from the potential risks related to the state GAs, discussed below, it appears that the exposures of retail policyholders to Prudential do not contribute significantly to the risks that material financial distress at the company could pose to U.S. financial stability through the exposure transmission channel, based on the size and product mix of Prudential's retail insurance business, the long-term nature of these liabilities, and the protection offered by the GAs.

Impact on State Guaranty Association Capacity

State GAs for U.S. life insurance companies protect holders of certain insurance and annuity products in the event of insolvency of the insurance company issuing those products. Upon the filing of a court order of liquidation against an insurer in its state of domicile, the GA of each state where the insolvent insurer's policyholders reside is then triggered to provide coverage of

[88] SNL Financial. Calculated as the sum of all in-force life, annuities, and accident and health contracts and certificates. Prudential had 9.7 million total policies in force, excluding group life and annuity certificates, in 2017, compared to 10.5 million in 2012.

claims of the failed insurer's policyholders in that state to the extent the insurer's existing assets cannot satisfy policyholder liabilities, up to statutorily prescribed limits.[89, 90]

Obligations under certain products are not protected by state GAs, either because the products are not eligible for coverage or because a portion of the policy value exceeds the coverage limit provided under the laws of a particular state. For example, many state GAs do not provide coverage for GICs or most commercial policies.[91] Other institutional products, particularly unallocated annuities issued to benefit plans, may be covered by state GAs, but the coverage is dependent on how the annuity is issued. To the extent that Prudential's policies are not protected by the GAs and are obligations of the company (as opposed to unguaranteed separate account products where the policyholder bears the risk), the policyholders will experience losses if Prudential is unable to satisfy its obligations.

Insurers are required to be members of the GAs in the states where they are licensed to transact insurance business. To provide funding for payments of covered claims, each GA may, on an after-the-fact basis, assess all licensed insurance companies doing business in that state and those companies writing policies in the same lines of business as the insolvent insurer. Assessments may continue for a number of years, as necessary, to fund the GA for its payments of covered claims. Assessments are typically based on a percentage of each solvent insurer's average annual premium in each state during the three calendar years prior to the year of insolvency, subject to a 2 percent annual cap.[92]

If Prudential were to become insolvent, the various GAs' funding needs would depend on the shortfall of assets to cover policyholder liabilities, and on the timing of claims over the life of the company's liquidation.[93] In the event of the insolvency of one or more of Prudential's insurers, assessments would be paid by other insurers in response to claims that come due over time. Given the size and scope of Prudential's insurance operations, GA assessment commitments could contribute to industry stress at a time when insurers may already be capital constrained. However, assessments are typically limited to 2 percent of annual premiums written by insurance companies writing covered lines of business within the state. An additional potential mitigant to the impact on other life insurance companies is that many states allow insurers to offset guaranty assessments against premium tax liabilities in varying degrees. These

[89] The various GAs are not activated until a receivership of an insurer results in a state court placing the insurer's estate into liquidation based upon a finding that the insurer is insolvent (i.e., it cannot pay its obligations as they become due or its assets are inadequate to meet its liabilities). The GAs may also be activated prior to insolvency if a state court finds that an insurer is impaired and places the insurer into rehabilitation or conservation. This subsection addresses the implications of insolvency at Prudential or its significant subsidiaries in order to consider certain potential effects of the company's failure.

[90] See "The Life & Health Insurance Guaranty Association System: The Nation's Safety Net," National Organization of Life and Health Guaranty Associations (NOLHGA) (2016), pp. 3-4, available at https://www.nolhga.com/resource/code/file.cfm?ID=2515.

[91] See American Council of Life Insurers, "Insurance Guaranty Associations: Frequently Asked Questions" (accessed May 9, 2018), available at https://www.acli.com/-/media/ACLI/Public/Files/PDFs-PUBLIC-SITE/Public-Public-Policy/guarantee-associations-FAQ.ashx

[92] See NAIC Life and Health Insurance Guaranty Association Model Act, Section 9, available at http://www naic.org/store/free/MDL-520.pdf

[93] See J. David Cummins and Mary A. Weiss, "Systemic Risk and the U.S. Insurance Sector," Journal of Risk and Insurance volume 91, issue 3 (2014), pp. 489-527, 508.

tax offsets enable the other insurance companies to recoup a portion of the assessments contributed to their state GA.

Concerns about guaranty fund capacity could be more acute to the extent that policyholders are concentrated in certain states. Each state's guaranty fund exists only to protect the residents of its state up to the guarantee limits in that state. If the insolvency funding needs in one state exceeded that state's 2 percent per year assessment maximum, the assessment would extend into subsequent years until the GA obligations are fully funded.

In the event of the liquidation of Prudential's insurers, any remaining assets of the insolvent insurers would be available to make payments to Prudential's policyholders. The GAs would only be obligated to make up any shortfalls if these assets were insufficient to fully satisfy covered obligations to policyholders up to the statutory GA limits. Applying historical asset-to-liability shortfalls to these exposures in each state is useful to more accurately assess the extent to which Prudential's insolvency could transmit stress directly to the GAs and indirectly to other insurers through potential GA assessments. Typical shortfalls for previous life insurer liquidations have ranged from 5 to 15 percent.[94] The GAs have never experienced the insolvency of a life insurance company with the size and scope of Prudential's subsidiaries, and any ranges are indications of potential outcomes rather than estimates of the shortfall that could occur in an Prudential insolvency.

As shown in Table 14, GAs' potential obligations with respect to Prudential's liabilities associated with annuities, taking into account the statutory limits on amounts covered by the individual GAs, is [•] (approximately [•] percent of the statutory liabilities), and the amount covered by the GAs related to Prudential's life insurance liabilities is [•].

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[94] Joint Comments of NOLHGA and the National Conference of Insurance Guaranty Funds in Response to the Federal Insurance Office's Request for Public Input, December 16, 2011, p. 5, available at https://www.nolhga.com/pressroom/articles/NOLHGA-NCIGF%20FIO%20SUBMISSION.PDF.
In one case, the resolution of Executive Life Insurance Company and its affiliate Executive Life Insurance Company of New York, the shortfall was an estimated 54 percent of GA-covered obligations. However, there have also been significant changes to the regulatory environment for insurance companies since this example occurred, including risk-based capital requirements that penalize insurers for owning higher-risk investments; risk-focused regulatory examination procedures; and the Own Risk and Solvency Assessment project, described in Section 7.

Table 14: Potential State Guaranty Coverage ($ Millions)

Business Segment	Products	Greater of Statutory Reserves or Cash Surrender Value	Capped by State GA Limit	Capped %
Individual Life	UL/VUL	[•]	[•]	[•]
Individual Life	Whole Life/Term	[•]	[•]	[•]
Individual Life	Alliance Account	[•]	[•]	[•]
Group Life	Alliance Account	[•]	[•]	[•]
Life Total		**[•]**	**[•]**	**[•]**
Annuities	Variable Annuity	[•]	[•]	[•]
Retirement	PRT	[•]	[•]	[•]
Retirement	Structured Settlements	[•]	[•]	[•]
Retirement	Non-Particp. Annuity	[•]	[•]	[•]
Annuity Total		**[•]**	**[•]**	**[•]**
Grand Total		**[•]**	**[•]**	**[•]**

Source: Prudential Response OFR Information Request A.9 (State GA Coverage) (Jan. 22, 2018), p. 6.
Note: Statutory reserve is a proportion of the death benefit amount capped by a state limit. Cash value is capped by the state limit. The final capped amount is the greater of the two.

Over [•] percent of the state GAs' annuities exposure is concentrated in 10 states, with the largest annuities guaranty fund exposure, assuming no assets are available from the insolvent insurers, of [•].[95] In the event of a 15 percent shortfall, the aggregate annuities obligations of the GAs would be [•], and the obligations of the 10 GAs with the largest annuities exposures would range from [•] to [•] times their annual assessment obligations.[96] However, these obligations are highly unlikely to come due in a single year given the long-term nature of these Prudential products.[97] In addition, as stated above, GAs' assessments to fund GA obligations are limited to 2 percent of the premium volume of the other life insurance companies doing business in each state where the affected insureds reside. Such assessments would be made in succeeding years until all of the GA annuities obligations are fully funded. Lastly, in this regard, GAs maintain credit facilities and can borrow funds secured against future assessments if necessary.

With respect to state GAs' life insurance obligations, payments would come due over time in response to life insurance claims filed upon the deaths of individual insureds. In the event of a

[95] Prudential Response to OFR Data Request A.9 (State GA Coverage) (Jan. 22, 2018), pp. 6-7.
[96] Prudential Response to OFR Data Request A.9 (Jan. 22, 2018), pp. 6-7; NOLHGA, State Capacity, Assessments Called and Refunded Summary, available at https://www nolhga.com/resource/file/capacity/R4/ALL%20States.pdf. The New York GA's [•], but it is excluded from these comparisons because its assessment capacity is not currently calculable in a manner comparable to other states.
[97] Prudential Response to OFR Data Request A.9 (Jan. 22, 2018), p. 6. [•] Unlike the remainder of this analysis, in order to indicate the scope of exposures to Prudential, the quantitative estimates in this paragraph are calculated based on the failure of all Prudential's U.S. insurance subsidiaries.

15 percent shortfall in the remaining assets of the insolvent insurers, the aggregate life insurance obligations of the GAs would be [•].[98] In 2016, the nationwide annual assessment capacity of the life GA system was $3.2 billion, and a 10-year forecast indicates over $30 billion of system capacity assuming that assessable premiums remain at 2016 levels, although the elimination of Prudential from the assessment base in the event of the company's failure would decrease the aggregate annual GA assessment capacity.[99]

5.2.4 Reinsurance

Reinsurance is insurance purchased by an insurance company to cover portions of risk of insurance policies issued by that company. The use of captive reinsurance may allow for otherwise non-admitted assets to support reserves of certain life insurance products, which could lower the quality of capital available for policyholders, creditors, and other customers, and potentially increase their exposure to loss if Prudential were to experience material financial distress. Prudential's captive programs involve (1) reinsurance to isolate the business in a captive, and (2) financing structures to obtain assets to back the liabilities reinsured. To the extent applicable, these transactions are subject to regulatory actuarial guidelines (in the case of captives, actuarial guideline 48). Further, as of January 1, 2017, states adopted principles-based reserving in an effort to better calibrate reserving requirements with the risks posed by life and annuity products, which may reduce incentives to use captive reinsurers.[100]

As of December 31, 2017, total assets in Prudential captives was [•].[101] According to Prudential, "the reserve levels held for the business reinsured to the captives, plus those reserves retained at the ceding company, are, in the aggregate, at least equal to the reserves that would be held had there been no reinsurance with the captive."[102]

5.3 Asset Liquidation Transmission Channel

The second channel identified by the Council through which the negative effects of a nonbank financial company's material financial distress could be transmitted to other firms or markets is the asset liquidation transmission channel.[103] Under the asset liquidation transmission channel, the Council considers whether a nonbank financial company holds assets that, if liquidated quickly, could significantly disrupt the operation of key markets or cause significant losses or funding problems for other firms with similar holdings. During a period of overall stress in the financial services industry and in a weak macroeconomic environment, deterioration in asset prices or market functioning resulting from a rapid liquidation of assets could pressure other financial firms to sell their holdings of affected assets in order to maintain adequate capital and liquidity. This, in turn, could produce a cycle of asset sales that could lead to further market disruptions.

98 Prudential Response to OFR Data Request A.9 (State GA Coverage) (Jan. 22, 2018), pp. 6-7.
99 NOLHGA Nationwide Capacity, Assessment Called and Refunded Summary, available at https://www.nolhga.com/resource/file/capacity/R1.pdf.
100 Prudential Response to OFR Data Request A.6b (Jan. 22, 2018), p. 1.
101 Prudential Response to OFR Data Request A.6a (Jan. 22, 2018), pp. 2-4; Council Basis, p. 48.
102 Prudential Response to OFR Data Request A.4 (Jan. 22, 2018), p. 2.
103 See Rule and Interpretive Guidance.

The two key factors in assessing the potential for a nonbank financial company's asset liquidation to pose risks to other firms or markets are the amount and the nature of the assets the company may be forced to sell. In evaluating these factors, relevant considerations include the liquidity risk of the company's liabilities; the size and composition of the company's asset portfolio that would be liquidated; and any fire-sale discount, which depends on the liquidity of the assets. All other things being equal, the liquidation of larger or less-liquid asset portfolios poses a greater risk of disrupting financial markets than does the liquidation of smaller or more-liquid asset portfolios. In addition, asset sales over a relatively short period of time that lead to larger price discounts would be more likely to disrupt financial markets than asset liquidations over a longer period of time that lead to smaller discounts. More-leveraged firms may be forced to liquidate more assets in a shorter time than less-leveraged firms. Finally, sales of assets that are widely held or that are commonly used as collateral by large financial intermediaries in critical funding markets would generally be more disruptive than sales of assets that are held or used less widely.

In the event of material financial distress, Prudential could be forced to liquidate assets to satisfy its obligations to counterparties, contract holders, policyholders, and others. The greatest source of potential liquidity strains that could cause or contribute to such a forced asset liquidation by Prudential is the company's life and retirement liabilities. At the same time, there are important mitigants to the potential for Prudential to conduct a fire sale of assets, including that policyholders have contractual, tax, and other disincentives associated with early withdrawals; Prudential's insurance company subsidiaries have the contractual right to defer payments on certain products; and Prudential's state insurance regulators can impose stays on discretionary policyholder withdrawals. However, as discussed below, there could be broader negative consequences if a deferral or stay were imposed on withdrawals or surrenders.

At the time of the final determination, the Council determined that although Prudential's life insurance and annuity products are generally considered to be long-term liabilities, some of these liabilities were available for discretionary withdrawal within seven days and with little or no penalty and therefore could, in practice, have characteristics of short-term liabilities. The Council further determined that in the event of Prudential's material financial distress, a rapid liquidation of assets could occur. A forced liquidation of a significant portion of Prudential's assets as a result of policyholder surrenders or withdrawals could cause significant disruptions to key markets, including corporate debt and asset-backed securities (ABS) markets, particularly during a period of overall stress in the financial services industry and in a weak macroeconomic environment. Moreover, the fact that the investment portfolios of many large insurance firms contain similar assets could amplify the severity of the disruption caused by a forced liquidation of Prudential's assets, which could result in significant reductions in asset values and losses for those firms. Significant outflows from Prudential also could put other large life insurers at risk of similar outflows if they are also perceived as vulnerable. This potential erosion of capital and de-leveraging could cause fire sales that could result in significant losses or funding problems for other firms with similar holdings. The Council also analyzed other potential triggers of asset liquidation.[104]

[104] Council Basis, pp. 76-77.

Additional consideration of incentives and disincentives for retail policyholders to surrender policies, including analysis of historical evidence of retail and institutional investor behavior, indicate that there is not a significant risk that asset liquidation by Prudential would disrupt trading in key markets or cause significant losses or funding problems for other firms with similar holdings. Relevant factors in this determination include the following:

- Prudential has [•] of U.S. general account liabilities that allow policyholders to withdraw cash from the company upon demand. Under the terms of the policies, approximately [•] of these liabilities can be immediately surrendered for [•] in cash upon demand by policyholders, compared to [•] that could be surrendered for [•] in cash on September 30, 2012.[105] Prudential also has [•] of separate account liabilities from individual variable annuities, retirement and other products as of year-end 2017, compared to [•] at year-end 2012. Additional consideration of the effects of incentives and disincentives for retail policyholders to surrender policies, including analysis of historical evidence of retail and institutional investor behavior, indicate that there is not a significant risk that a forced asset liquidation by Prudential would disrupt trading in key markets or cause significant losses or funding problems for other firms with similar holdings.
- Counterparties' capital markets transactions with Prudential—particularly short-term debt, repurchase agreements, securities lending, and derivatives transactions—could increase the volume of Prudential's forced asset sales. Prudential has total liabilities of $20 billion arising from these activities. While counterparties could terminate or refuse to roll over a significant portion of these liabilities, the resulting effect on the amounts of assets Prudential could be forced to sell still appear to be manageable.
- With respect to Prudential's assets that could be liquidated in the event of increased liquidity needs at Prudential, the company's U.S. general account investment portfolio has [•], including [•] in highly liquid assets from [•] to [•].
- A fire-sale impact analysis suggests that relative to other large financial institutions, the market impact of a downward shock to the net worth of Prudential has decreased since 2012, largely due to a decrease in Prudential's leverage ratio and increased holding of highly liquid assets. As of December 31, 2017, Prudential ranked 11th among large financial institutions for an asset shock and 16th for an equity shock.

5.3.1 Liquidity of Prudential's Liabilities

As noted above, a key factor in assessing the risks posed by a company's liquidation of assets is the liquidity characteristics of the company's liabilities. Liabilities that may be terminated by the counterparty in the event of Prudential's material financial distress, such as insurance products that allow policyholders to withdraw cash value from the company, could impose liquidity strains on Prudential that would force the company to sell assets to satisfy its obligations. In contrast, Prudential products such as term life insurance policies do not accumulate cash value that a policyholder can withdraw and therefore do not contribute to the risk of asset liquidation.

[105] Council Basis, p. 83.

General Account Liabilities

Prudential’s general account liabilities include (1) contractual obligations coming due and (2) liabilities that may be withdrawn at the discretion of the counterparty or policyholder, subject to applicable restrictions and limitations.

With respect to contractual obligations coming due, as of year-end 2017, the current portion of Prudential’s long-term debt was $0.8 billion.[106] In addition, terminations of Prudential’s outstanding capital markets arrangements could contribute to liquidity pressures at Prudential. In particular, Prudential has fair value derivative liabilities of $6.0 billion, $4.4 billion of securities lending payable, $8.4 billion of repurchase agreements, and $0.6 billion of commercial paper.[107]

As of December 31, 2017, Prudential had [•] of U.S. insurance liabilities, which has [•] from [•] as of September 30, 2012.[108] These liabilities represented a mix of reserves for future policy benefits on insurance contracts, account balances on annuity and other products, and payables for accrued dividends. To assess Prudential’s liabilities that may be withdrawn by policyholders, the withdrawal risk associated with Prudential’s life insurance and annuity products can be grouped into three categories: (1) not surrenderable; (2) policies and contracts available for surrender but not immediately payable; and (3) policies and contracts with a cash surrender value available for immediate withdrawal (within seven days). The following table details the surrender or withdrawal features of nearly all of Prudential’s U.S. liabilities subject to discretionary withdrawal or surrenders, based on these three categories. It includes products that have account balances, such as annuities, stable value and other retirement products, and life insurance policies with cash value. The table shows [•] of Prudential’s [•] of U.S. insurance liabilities. Other U.S. liabilities not shown in the table include future policy benefits on life and annuity policies that have no or minimal cash surrender value or are not subject to discretionary withdrawal.

[106] Prudential Annual Report on Form 10-K for the year ended December 31, 2017, pp. 194, 210, 276.
[107] Prudential Annual Report on Form 10-K for the year ended December 31, 2017, p. 210.
[108] Council Basis, p. 78; Prudential Response to OFR Request B.1 (General Account) (Jan. 22, 2018), p. 17.

Table 16: Total Cash Surrender Value of U.S. General Account Liabilities ($ Millions)

	Balance	**Cash Surrender Value**
<u>Liabilities with no or minimal surrender value</u>		
GICs, funding agreements, and other stable value products	[•]	[•]
Closed block business policyholder dividends accrued, not paid	[•]	[•]
Total – no or minimal surrender value for liabilities	**[•]**	**[•]**
<u>Liabilities with cash surrender value</u>		
Liabilities with surrender not immediately payable		
Stable value products	[•]	[•]
Group insurance policy balances	[•]	[•]
Total – not immediately payable	**[•]**	**[•]**
Liabilities with cash surrender value immediately payable (within 7 days)		
Closed block business	[•]	[•]
Closed block policyholder account balances	[•]	[•]
Individual Annuities	[•]	[•]
BOLI/COLI/TOLI and VUL and UL fund values	[•]	[•]
Total retained assets	[•]	[•]
Individual whole life policies	[•]	[•]
Total – immediately payable	**[•]**	**[•]**
Total Payable	**[•]**	**[•]**

Source: Prudential Response to OFR Request B.1 (General Account) (Jan. 22, 2018), pp. 7-16.

As shown in Table 16, Prudential has [•] in general account insurance liabilities that can be surrendered or withdrawn for a cash surrender value of [•] of the general account insurance liabilities, of which [•] can be surrendered or withdrawn immediately for [•] in cash surrender value.

In comparison, on September 30, 2012, Prudential had [•] of liabilities that could be surrendered or withdrawn for a cash surrender value of [•], of which [•] represented immediately payable cash surrender value.[109] As discussed below, there are a number of factors to consider in assessing the extent to which policyholders that can surrender or withdraw would do so.

[109] Council Basis, p. 80.

Assessing the Potential for Policyholders to Withdraw from Prudential

Many factors may affect the magnitude of withdrawals from Prudential in the event of the company's material financial distress, and there are substantial uncertainties regarding the extent to which policyholders might withdraw cash value from or surrender their policies. Due to this uncertainty, at the time of the final determination the Council considered the total cash value of all of Prudential's annuity contracts and life insurance policies that could be surrendered immediately pursuant to their contractual terms. The Council also considered a 30-day stress calculation based on an adapted version of an A.M. Best liquidity stress model.

This reevaluation of the Council's determination regarding Prudential includes additional analyses related to the potential for policyholders to rapidly withdraw cash value or surrender their policies from Prudential if the company experienced material financial distress. Based on factors described below, it is highly unlikely that the full amount of [•] in cash surrender value immediately available would be withdrawn. In order to consider the scale of potential withdrawals, for purposes of this reevaluation, the Council has conducted additional analysis compared to the analysis in the Council Basis regarding the effects of incentives and disincentives for retail policyholders to surrender their policies in the event of Prudential's material financial distress, including analysis of historical evidence of retail and institutional investor behavior in order to assess a broader range of potential outcomes.

Purpose of product. The withdrawal incentives of Prudential's general account liabilities vary by product type or marketing line. Most individuals or entities that purchase life insurance products do so with the expectation that they will hold the product as a long-term investment in order to accumulate assets for savings or retirement or to pay death benefits in the event of the death of the insured. A significant disincentive is that early withdrawal from certain products results in the loss of insurance coverage or the loss of equivalent product guarantees, which may be contrary to these products' purposes. A policyholder can mitigate this loss by seeking a replacement policy from another provider, but economic benefits of the original product could be lost, and in some cases the replacement of insurance coverage or product guarantees may be costly or impossible. In particular, with respect to insurance coverage with an underwriting component (for example, where the policyholder's health has diminished or credit has deteriorated), a policyholder may become uninsurable or may have to pay substantially higher premium rates.

However, loss of coverage is only a compelling disincentive for insurance products with an underwriting component, such as universal or whole life insurance. Fixed deferred annuity products, for example, have little or no underwriting component and can be readily replaced with other annuities or financial market products.

In some previous cases, retail policyholders have submitted withdrawal requests at a slower pace and in smaller numbers than institutional owners of financial products in stressed market conditions. For example, in 2008, institutional investors withdrew funds from money market mutual funds more quickly than retail investors.[110] However, retail annuity products have been marketed by Prudential and other life insurance companies as financial assets with guaranteed liquidity and other features that allow policyholders to access the funds in times of need.[111] These features may attract customers who have shorter investment time horizons or greater needs for liquidity.

With respect to Prudential's products that are held for investment purposes, if Prudential's policyholders were to lose confidence in the ability of Prudential to satisfy their obligations, they may prefer to surrender their policies instead of risking potentially larger losses. Moreover, if policyholders wanted to keep their life insurance policies in effect, they could take out policy loans (as described below), which could also subject Prudential's life insurance subsidiaries to a liquidity strain.

Contractual and economic incentives. Contractual and other disincentives may act as a deterrent to policyholder surrenders and withdrawals. Factors that may influence withdrawal decisions include a product's contractual claim or benefit features (for example, a waiting period may be involved before a contract holder may elect an action) and the condition of the issuing insurer and the broader financial system. Prudential includes surrender charges in certain of these products.[112] In general, policyholders may be more likely to withdraw cash value from Prudential or surrender their policies if there are no or minimal withdrawal penalties than if the withdrawal would trigger a moderate or significant penalty.

However, in the event of a company's material financial distress, these disincentives could be overridden by a policyholder's desire for perceived safety and liquidity with financial products offered by another insurance company, a bank, or another type of financial institution, especially where there is no meaningful surrender penalty. If policyholders have doubts about Prudential's ability to satisfy its obligations due to the company's material financial distress, policyholders would need to weigh the certainty of return of cash value (inclusive of any applicable penalties or tax consequences) against an uncertain and contingent future benefit due from a company that is in material financial distress.

Tax penalties. Tax penalties provide another potential disincentive for early withdrawal, especially for annuity contract holders who are under 59.5 years of age. In the event of a surrender (before the age of 59.5), annuity contract holders and retirement plan participants generally are subject to a 10 percent penalty on the taxable portion of any amount withdrawn. However, unlike annuities, life insurance products that accumulate cash value (e.g., whole life or universal life) are not subject to the 10 percent tax penalty and offer various withdrawal options

[110] See Patrick E. McCabe, "The Cross Section of Money Market Fund Risks and Financial Crises," Federal Reserve Board, Finance and Economics Discussion Series (Sept. 12, 2010), available at https://www.federalreserve.gov/pubs/feds/2010/201051/201051pap.pdf.

[111] For example, Prudential's marketing materials note that its annuities offer "guaranteed protection against market loss and the opportunity to grow your money," "the option of withdrawing a portion of your funds," and benefits "that essentially insure your future income, without giving up total control of your money." See https://www.prudential.com/personal/annuities/products, https://www.prudential.com/personal/annuities/education/myths-misconceptions, https://www.prudential.com/personal/annuities/education/create-retirement-income.

[112] Prudential Annual Report on Form 10-K for the year ended December 31, 2017, p. 129.

that mitigate the ordinary income tax disincentives on withdrawal. Withdrawals and other distributions from life insurance products (as opposed to annuities) are generally treated first as a tax-free recovery of basis and then as taxable income. Policyholders may have the ability to avoid certain income tax disincentives through partial cash value surrenders up to the policyholders' tax basis (typically paid-in premium less withdrawals). Moreover, policyholders may be able to withdraw an even larger portion of the cash value of a policy by taking a partial cash value surrender up to the policy's tax basis and then policy loans thereafter. In addition, policyholders can avoid tax consequences if they exchange their life insurance policy or annuity for a policy or contract issued by another insurer, although this decision may slow the rate of surrenders.

Stays on withdrawals; potential contagion. Another potential mitigant of a forced liquidation of assets due to policyholder surrenders may be the imposition of a stay on discretionary withdrawals. In many cases, Prudential's insurance company subsidiaries have the contractual right to defer payouts on the immediately payable cash surrender value for up to six months from the time of each individual withdrawal request. Such deferrals could slow or terminate the company's asset liquidation and thereby largely eliminate the potential for a fire sale of Prudential's assets. However, this action, if taken at a time when the company is experiencing material financial distress but has not been placed into liquidation, could send a negative signal to counterparties, policyholders, and investors, thereby creating concern and market uncertainty about the current health and future of Prudential and resulting in significant negative effects for the broader industry. Actions to restrict customer access to withdrawable policies could cause concern about access to funds at other insurance companies with similar asset and product profiles, especially in a time of financial market stress.

In addition to the company's contractual right to defer payments, state insurance commissioners have authority to impose a temporary stay on policyholder withdrawals and surrenders (except in situations where a policyholder faces a hardship), to limit outflows from the general account. A stay imposed by a state insurance commissioner would delay the payment of insurance and annuity benefits and cash surrenders to policyholders and contract holders (notwithstanding certain hardship exceptions).[113] While invoking a suspension on surrenders or withdrawals from one of the largest insurance companies might address liquidity concerns, it could potentially undermine confidence in the broader life insurance industry and spread uncertainty to the customers of other insurance companies with similar products, particularly during a period of financial stress and macroeconomic weakness.

An additional mechanism for the spread of contagion in this manner is a nonbank financial company's interconnectedness with other market participants as a result of the company's capital markets activities, because capital market participants may engage in protective behavior such as reducing exposures to counterparties and customers or ceasing certain activities to increase

[113] Stays could also be imposed by the courts during a receivership process. See NAIC Insurer Receivership Model Act, section 108 (Oct. 2007), available at http://www naic.org/store/free/MDL-555.pdf. Section 108A of the Receivership Model Act provides that the state court handling the insurance receivership may issue orders as necessary, including stays. Section 108C of the Receivership Model Act provides that the commencement of a receivership proceeding operates as a stay.

liquidity in anticipation of a potential shock.[114, 115] Given the relatively low level of Prudential's capital markets activities, there is little risk of contagion arising through this mechanism in the event of Prudential's material financial distress.

Historical analysis. Little data exists regarding policyholder withdrawal behavior in the context of the material financial distress of a company the size of Prudential absent government intervention. In light of the paucity of data from comparable examples, the Council Basis described historical examples of policyholder withdrawals but did not include any estimates based on case studies of historical insurance failures. However, applying the available historical policyholder withdrawal rates to Prudential is useful for analyzing Prudential's liquidity risk because it provides context for the range of potential life insurance and annuity policyholder withdrawals that could occur from an insurer experiencing material financial distress. Therefore, the following discussion includes information the Council considered at the time of its determination regarding Prudential in 2013 as well as additional examples applying historical policyholder withdrawal rates to Prudential.

At the time of the Council's determination, Prudential stated that it "has historically experienced consistently low surrender rates, including during and after the financial crisis."[116] However, its surrender experience in 2008 and 2009 may not indicate what it would be in the event of the company's material financial distress in a period of overall stress in the financial services industry and a weak macroeconomic environment. For example, AIG saw significant increases in surrenders after it was downgraded by Standard & Poor's in September 2008.[117] For AIG Domestic Retirement Services, surrender rates on all products were about twice as high in the fourth quarter of 2008 compared to the fourth quarter of 2007. AIG experienced significant increases in surrender rates in other business units as well. The usefulness of this example is limited due to the government intervention in September 2008 that helped to prevent AIG's disorderly failure; in the absence of such intervention, surrender rates likely would have been higher. Nonetheless, AIG's experience underscores the potential for increased surrender rates as a reaction to questions about the parent company's financial strength.[118]

Other historical examples provide additional insight into policyholder withdrawal behavior, but their direct applicability to Prudential may be somewhat limited given that the failed insurers were substantially smaller than Prudential and their failures did not occur during a period of overall stress in the financial services industry. During the late 1980s, a number of U.S. life insurance companies reacted to higher interest rates by investing heavily in high-yield assets to

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[114] See Hal Scott, "Interconnectedness and Contagion, Financial Panics and the Crisis of 2008" (Nov. 20, 2012), available at http://ssrn.com/abstract=2178475; see also Scott G. Alvarez, General Counsel, Board of Governors, Remarks at the American Enterprise Institute Conference on Professor Hal Scott's Paper on Interconnectedness and Contagion (Feb. 8, 2013), available at http://www.aei.org/files/2013/02/08/-scottalvarez-remarks_163346998313.pdf.
[115] See Ricardo J. Caballero, "Macroeconomics After the Crisis: Time to Deal with the Pretense-of-Knowledge Syndrome," Journal of Economic Perspectives volume 24, issue 4 (2010), pp. 85-102.
[116] Council Basis, p. 86.
[117] Council Basis, p. 86.
[118] Council Basis, p. 87.

cover the high rates paid to policyholders.[119] The failures of First Executive (the parent of Executive Life Insurance Company and Executive Life Insurance Company of New York) and First Capital in 1991 resulted in significant increases in policyholder withdrawal rates.[120] First Executive policyholders withdrew at an estimated quarterly rate of 20.3 percent of annuities and 9.5 percent of life insurance policies during the first quarter of 1990, and First Capital policyholders withdrew at an estimated quarterly rate of 15.6 percent during the second week of May 1991.[121] Regulatory stays were imposed at Executive Life that stopped any further runs. In another example, over a six-week period in June and July of 1991, pension liabilities were withdrawn from Mutual Benefit at a rate of 37.7 percent per quarter.[122] Given its size and prominence, if Prudential were to experience material financial distress during a period of overall stress in the financial services industry and in a weak macroeconomic environment, there could be a more significant policyholder response.[123] However, there have also been significant changes to the regulatory environment for insurance companies since these examples occurred, including risk-based capital requirements that penalize insurers for owning higher-risk investments; risk-focused regulatory examination procedures; and the ORSA, which requires larger insurers to report annually on material risks and how the company's capital planning is adequate to satisfy those risks.[124]

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[119] See Richard L. Fogel, "Insurer Failures: Regulators Failed to Respond in Timely and Forceful Manner in Four Large Life Insurer Failures," GAO/T-GGD- 92-43 (Sept. 9, 1992), p. 2, available at http://www.gao.gov/assets/110/104752.pdf.

[120] When First Executive announced a significant loss on its bond portfolio in early 1990, its policyholders withdrew a total of about $4 billion in that year. According to GAO testimony to Congress, the subsequent takeover of Executive Life by regulators spurred policyholder runs at two unrelated institutions. In testimony to Congress in 1992 regarding the findings of a GAO review, the Assistant Comptroller General stated, "According to regulators, the April 1991 takeovers of Executive Life and Executive Life of New York spurred policyholder runs on junk bond laden First Capital and Fidelity Bankers." Richard L. Fogel, "Insurer Failures: Regulators Failed to Respond in Timely and Forceful Manner in Four Large Life Insurer Failures," GAO/T-GGD-92-43 (Sept. 9, 1992), p. 6, available at http://www.gao.gov/assets/110/104752.pdf.

[121] See Harry DeAngelo, Linda DeAngelo, and Stuart Gilson, "The Collapse of First Executive Corporation: Junk Bonds, Adverse Publicity, and the 'Run on the Bank' Phenomenon," Journal of Financial Economics volume 36, issue 3 (Dec. 1994), pp. 287-336; Executive Life Insurance Company Annual Statement for the year ended December 31, 1990, available at https://www.caclo.org/perl/index.pl?document_id=317042a38288ea7a2e49fda53fe5e746; Harry DeAngelo, Linda DeAngelo, and Stuart Gilson, "Perceptions and the Politics of Finance: Junk Bonds and the Regulatory Seizure of First Capital Life," Journal of Financial Economics volume 41, issue 3 (July 1996), pp. 475-511. Withdrawal rates at individual insurance companies can be significantly higher. For example, the annuity portfolio of Executive Life Insurance Company experienced a surrender rate of 42 percent for annuities (excluding single premium immediate annuities), and more than 40 percent of its annuities were single premium immediate annuities or structured settlements with no cash value. The text above cites the surrender rates for First Executive as a consolidated organization in order to compare it to Prudential as a consolidated organization.

[122] Laurie Cohen and Charles Storch, "The Run that Shook Mutual Benefit," Chicago Tribune (August 11, 1991), available at http://www.chicagotribune.com/news/ct-xpm-1991-08-11-9103270714-story html; Eric N. Berg, "Mutual Benefit Backs State Control," The New York Times (July 16, 1991), available at https://www.nytimes.com/1991/07/16/business/mutual-benefit-backs-state-control.html.

[123] The year before its failure, Executive Life had $13 billion in assets and was the 33rd largest life insurer in the United States. See "The Collapse of Executive Life Insurance Co. and its Impact on Policyholders," hearing before the House Committee on Government Reform, 107th Congress (2002), available at https://www.gpo.gov/fdsys/pkg/CHRG-107hhrg83976/pdf/CHRG-107hhrg83976.pdf.

[124] In addition, the Council Basis considered data from the NAIC, based on insurance company statutory filings. These data show that, for general account liabilities, aggregate industry life and annuity surrenders, as a percentage

A.M. Best calculates a short-term (30-day) stress liquidity ratio to evaluate the overall liquidity strength of life insurance companies. This test assumes that 15 percent of life policies and 50 percent of general account fixed annuities are surrendered in one month, several multiples higher than the historical examples cited above.[125]

Table 17 below applies this range of sample surrender rates to Prudential's current life and retirement portfolio, and also presents the aggregate amount of Prudential's surrenderable life insurance and annuity liabilities. The second column applies the surrender rates experienced by AIG in 2008; the third column applies the withdrawal rates from the smaller insurance companies that failed in 1991; and the fourth column applies the assumptions in the A.M. Best liquidity model. The amount of surrenders based on these rates ranges from [•] in one quarter to [•] in one month. Given the absence of comparable experiences to the material financial distress of a company the size of Prudential and the differences in size, products, and regulatory environment among these examples, these figures are best viewed as potential outcomes, or as context for the range of potential life insurance and annuity policyholder withdrawals that could occur from an insurer experiencing material financial distress, rather than estimates of likely withdrawals from Prudential.

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of net policy reserves, were actually slightly lower in 2008 and 2009 than in 2007. The decline in the surrender rate may have been due, in part, to the general decline in interest rates over the same period, as well as the effect of a declining stock market on variable annuities. There was significant variation across the largest institutions, however, as some experienced increased surrenders. [•] Council Basis, pp. 87-88.

[125] See A.M. Best, "A.M. Best's Stress Liquidity Ratio for U.S. Life Insurers," October 13, 2017, available at http://www3.ambest.com/ambv/ratingmethodology/OpenPDF.aspx?rc=197655. On a call with staff on June 8, 2017, A.M. Best analysts did not cite specific data or historical examples that were used to support the A.M. Best liquidity model assumptions, but did note that the company provides industry with periodic opportunities to comment on its model, which may indicate that industry participants view the model's assumptions as reasonable. A.M. Best's stress liquidity ratio does not include assumptions for separate account products, given that a company's equity and debt holders do not have a legal claim on separate account assets.

Table 17: Policyholder Surrenders in Various Short-Term Stress Examples ($ Millions)

	Cash Surrender Value Available Immediately	AIG Q4 2008 Rates	1990-91 Insurer Failure Rates*	A.M Best Liquidity Model Rates
		(90 days)	*(90 days)*	*(30 days)*
Liabilities with no or minimal surrender value				
GICs, funding agreements, and other stable value products	[•]	[•]	[•]	[•]
Closed block business policyholder dividends accrued, not paid	[•]	[•]	[•]	[•]
Total no or minimal surrender value for liabilities	**[•]**	[•]	[•]	[•]
Liabilities with cash surrender value				
Liabilities with surrender not immediately payable				
Stable value products	[•]	[•]	[•]	[•]
Group insurance policy balances	[•]	[•]	[•]	[•]
Total not immediately payable	**[•]**	[•]	[•]	[•]
Liabilities with cash surrender value immediately payable (within 7 days)				
Closed block business	[•]	[•]	[•]	[•]
Closed block policyholder account balances	[•]	[•]	[•]	[•]
Individual Annuities	[•]	[•]	[•]	[•]
BOLI/COLI/TOLI, VUL, and UL fund values	[•]	[•]	[•]	[•]
Total retained assets	[•]	[•]	[•]	[•]
Individual whole life policies	[•]	[•]	[•]	[•]
Total immediately payable	**[•]**	**[•]**	**[•]**	**[•]**
Total Surrender Values	**[•]**	**[•]**	**[•]**	**[•]**
% Surrenderable / U.S. General Account Insurance Liabilities	**[•]**	**[•]**	**[•]**	**[•]**

Note: AIG Q4 2008 surrender rates are based on quarterly data. Based on available data, the 1990-91 insurer failure rates are based on varying periods (one year for First Executive, one week for First Capital, and six weeks for Mutual Benefit). Surrenders may occur more heavily near the start of the relevant period, which may indicate that the 90-day withdrawal rate for First Executive is underestimated and the 90-day withdrawal rates for First Capital and Mutual Benefit are overestimated. Additional data on these historical withdrawal rates are not available. Cash surrender values of variable annuities includes only general account liabilities.
* Figures in this column were calculated by applying the withdrawal rates experienced by First Executive, First Capital, and Mutual Benefit to Prudential's general account liabilities, respectively.

The levels of Prudential's forced asset sales could be more or less than shown below in Table 20, but these figures provide indicative amounts. Among the additional factors that could affect the volume of Prudential's asset sales are its policyholder loans (described below) and $20 billion of capital markets transactions that Prudential's counterparties could terminate or refuse to roll over in a short period.

Capital Market Transactions

As discussed in section 5.2.1, the value of securities pledged by Prudential to counterparties in securities lending and repurchase agreements is $13 billion. In addition, Prudential has derivatives liabilities of $6.0 billion and $1.4 billion of short-term debt that is subject to rollover risk. In the event of Prudential's material financial distress, counterparties seeking to reduce exposures to Prudential would have a strong incentive to terminate securities lending, repurchase agreement, and derivatives transactions, and to refuse to roll over Prudential's short-term debt, resulting in additional withdrawals that could contribute to asset liquidation risks.

Policyholder Loans

In addition to policyholder surrenders and withdrawals as described above, Prudential could face additional liquidity strain through the loan features that apply to many of its life insurance policies and annuity contracts. A sudden increase in loan requests by policyholders when the company is experiencing material financial distress could add to the liquidity strain.

As required under state law, life insurance products that accrue a cash value (e.g., universal and whole life insurance policies) offer policyholders loans against their outstanding policies.[126] Policy loans allow policyholders to borrow from the company using the cash value of their life insurance contract as collateral. Policy loans thereby offer policyholders the ability to access the full cash value of their policies in a manner that may not trigger the most significant disincentives associated with a full or partial surrender of their policies (such as income taxes or loss of benefits). Further, if policyholders have lost confidence in the ability of Prudential to perform on future payment obligations due to the company's material financial distress, disincentives such as being charged interest on their loan may be secondary to the incentive to quickly reduce exposure to Prudential. Policy loans may be an attractive first alternative to surrenders or may be used in combination with partial surrenders by policyholders who want to avoid or reduce the immediate consequences of an early surrender.

The maximum potential amounts policyholders may access in the form of loans is approximately [•] for Prudential's U.S. general account business, assuming generally [•] of the cash value is available for loans.[127] On [•], Prudential has rights to postpone loan availability by up to six months under the policy loan contract provisions. In addition, state regulators may, subject to approval by state courts, impose temporary moratoriums on policy loans.

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[126] See, e.g., 18 Del. C. 2911(a) (2014); N.J. Stat. Ann. 17B:25-8 (West 2014); N.Y. Ins. Law 3203(8)(A) (McKinney 2014).
[127] Prudential Response to OFR Request B.2 (Jan. 22, 2018), p. 3.

As of December 31, 2017, Prudential had [•] in policy loans outstanding with an average interest rate of [•] percent, [•] from 2012.[128]

Separate Account Liabilities

Prudential has $307 billion of separate account liabilities from individual variable annuity, retirement, and other products as of year-end 2017, compared to $253 billion at year-end 2012, and [•] of these liabilities can be surrendered or withdrawn immediately at or near market value.[129] However, with separate account products, the customer, not Prudential, retains most of the investment risk, and the company's equity and debt holders do not have a legal claim on separate account assets. As a result, separate account policyholders do not have the same incentives as general account policyholders to surrender their policies if the company experiences material financial distress. Prudential's separate account holders may have other disincentives, including surrender charges, loss of contractual guarantees or insurance coverage, or tax penalties, for surrendering policies.

[•] of Prudential's separate account liabilities are variable annuities with a general account guarantee.[130] These guarantees provide principal protection and a variety of guaranteed increases in values, including based on stated interest rates, account investment values, withdrawal amounts, and death benefits. These guarantees are covered by applicable state GAs up to statutorily prescribed limits. In the event of the company's liquidation in a receivership proceeding, the company's obligation to pay these guarantees would be pooled with other general account obligations to policyholders. In such circumstances, policyholders may receive less than what they might have recovered had the company not gone into liquidation. Thus, if Prudential were to experience material financial distress, it could increase the surrender incentives for policyholders. On the other hand, during a period of broader market stress, a decline in financial asset values would cause the nominal value of the general account guarantee on these variable annuity products to increase, which could decrease surrender rates.[131]

While the potential amount of surrenders or withdrawals from separate accounts that might occur if Prudential were to experience material financial distress is uncertain, any increase could lead to additional asset liquidations that could add to the effects of general account surrenders. However, that effect would be mitigated by the extent to which Prudential's separate and general account assets are invested in different asset classes. For example, [•] percent of Prudential's separate account assets are invested in equities, compared to [•] percent of general account assets.[132] Given the size and liquidity of the equity markets, asset liquidation related to the

[128] Prudential Response to OFR Request B.2 (Jan. 22, 2018), pp. 2-3; Council Basis, p. 96.
[129] Prudential Annual Reports on Form 10-K for the years ended December 31, 2012, p. 206, and December 31, 2017, p. 152; Prudential Response to OFR Request B.1 (Separate Account) (Jan. 22, 2018), pp. 3-6.
[130] Prudential Response to OFR Request B.1 (Separate Account) (Jan. 22, 2018), p. 3
[131] Peter Sun and Xiaohong Mo, "Variable Annuity Dynamic Lapse Study: A Data Mining Approach," Milliman Research Report (June 2011), available at http://us.milliman.com/uploadedFiles/insight/research/life-rr/variable-annuity-dynamic-lapse.pdf; Christian Knoller, Gunther Kraut, and Pascal Schoenmaekers, "On the Propensity to Surrender a Variable Annuity Contract: An Empirical Analysis of Dynamic Policyholder Behavior," Journal of Risk and Insurance volume 38, issue 4 (2016), pp. 979-1006.
[132] Prudential Response to OFR Prudential Request B.3 (Jan. 22, 2018), pp. 7-9.

separate accounts would be more easily absorbed by the market. In addition, separate account products could potentially be transferred to other insurance companies through the sale of a Prudential subsidiary or a block of business.

Third-Party Asset Management

Prudential had [•] of third-party assets under management as of December 31, 2017, a substantial increase from [•] as of September 30, 2012.[133] Third-party asset management customers differ from owners of variable annuities and certain other separate account products with contractual guarantees because they do not have potential claims on the general account assets of the company, and Prudential's debt and equity holders have no claims on its third-party assets under management. However, there is reputational risk to this business from distress emanating from other parts of the company. Prudential's third-party asset management business appears to be transferrable—it has low capital requirements, generates consistent fee income, and does not appear to engage in unusual or complex financial transactions—which could increase the potential for other market participants to purchase this business in the event of Prudential's material financial distress. The potential extent of investor withdrawals from this business depends on the mix of assets under management and the degree to which these assets are transferred to or reinvested with other asset managers in a timely manner.

5.3.2 Prudential Investment Portfolio

If Prudential were faced with a large volume of policyholder withdrawals or other liquidity demands, the company could be forced to liquidate some of its assets. Prudential's on-balance sheet assets include the company's investment portfolio, cash and cash equivalents, and separate account assets. As discussed above, separate account assets can generally be expected to experience less liquidation risk than the company's other assets.

Prudential's investment portfolio is diversified and predominantly investment grade. Factors affecting the liquidity of Prudential's bond portfolio include the type of security, the securities' credit ratings, and whether the securities are publicly traded (in which case they are generally more liquid than privately traded bonds). Approximately [•] percent of Prudential's U.S. general account asset holdings are investment grade, [•] percent are below investment grade, and the rest do not have a rating available.[134]

As shown in Table 18, Prudential's U.S. general account investment portfolio [•], of which liquid assets (cash, short-term investments, U.S. Treasury securities, U.S. agency securities, and non-U.S. sovereign debt) [•].

[133] Prudential Response to OFR Request 4 (June 27, 2018), p. 1; Council Basis, p. 95.
[134] Prudential Response to OFR Request 2 (June 27, 2018), p. 4.

Table 18: Prudential U.S. General Account Cash and Invested Assets ($ Billions)

	2012 (Total)		2017 (Total)	
Asset	**Amount**	**% of Total**	**Amount**	**% of Total**
Liquid				
Cash	[•]	[•]	[•]	[•]
Short-Term Investments/Others	[•]	[•]	[•]	[•]
U.S. Treasury Securities	[•]	[•]	[•]	[•]
U.S. Agency Securities and Agency Mortgage-Backed Securities	[•]	[•]	[•]	[•]
Foreign Government Bonds	[•]	[•]	[•]	[•]
Total Liquid Assets	**[•]**	**[•]**	**[•]**	**[•]**
Other Invested Assets				
Corporate Fixed Income Securities	[•]	[•]	[•]	[•]
Equities, Mortgages, and ABS	[•]	[•]	[•]	[•]
Other Assets	[•]	[•]	[•]	[•]
Total Cash and Invested Assets	**[•]**	**[•]**	**[•]**	**[•]**

Sources: 2012 estimates based on Council Basis, p. 97, and Prudential Annual Report on Form 10-K for the year ended December 31, 2012, pp. 142, 183; Prudential Response to OFR Request 2 (June 27, 2018), p. 4.

5.3.3 Potential Impact of Prudential Asset Liquidation

The broader market implications of asset liquidation depend on a number of factors, including the size and composition of the liquidated asset portfolio; any fire-sale discount, which depends on the risk and liquidity of the assets; and the extent to which other financial market participants may be forced or incentivized to sell similar assets. All other things being equal, the liquidation of larger or less-liquid asset portfolios poses greater risk of disrupting financial markets than the liquidation of smaller or more-liquid asset portfolios. In addition, fire sales of assets that are widely held, or commonly used as collateral in critical funding markets by large financial intermediaries, would generally have a greater impact on market function than fire sales of assets that are held or used more narrowly.

The order in which Prudential may liquidate assets in the event of its material financial distress is a factor in the extent of any fire-sale risk, but is subject to considerable uncertainties. Prudential could liquidate a significant portion of its highly liquid assets rapidly, reducing the likelihood that the company would be forced to liquidate illiquid assets in the event of its material financial distress. However, in the event of the company’s material financial distress, Prudential may also be expected to seek to maintain risk-based capital ratios and other requirements above the level at which state regulatory authorities would be legally obligated to intervene. Doing so might require Prudential to sell a mix of assets across a number of asset classes, rather than proceed with sales of assets in order from most liquid to least liquid. Further, in the event of a significant market disruption, there could be a meaningful first-mover advantage to selling less-liquid assets first. For example, markets for less-liquid assets, such as private and public corporate bonds and ABS, could be prone to disruption in the event that a forced seller liquidated a large portion of its portfolio of those assets. Given these potential discounts, in some circumstances Prudential may be incentivized to sell a portion of its less-liquid assets first and to hold U.S. government securities and agency mortgage-backed securities (MBS), which tend to increase in value during a period of market turmoil. Further, Prudential's holdings of liquid assets could be reduced before the company enters material financial distress.

To the extent that Prudential's highly liquid assets are encumbered, Prudential would need to sell less-liquid assets to support surrender payments and other liquidity needs. Securities pledged are investment securities Prudential owns that are pledged as collateral to unaffiliated parties, such as in securities lending, repurchase, derivative, or collateralized borrowing transactions. In addition, some of Prudential's assets are restricted because they are on deposit with governmental authorities or trustees, including certain restricted cash balances and securities, assets held in voluntary trusts, and securities restricted as to sale. Of the [•] of Prudential's U.S. general account assets that are encumbered or restricted, a large majority are pledged in connection with Prudential's securities lending, repurchase agreement, and derivatives transactions (see Appendix B for detail regarding Prudential's general account assets).[135]

One approach to assessing the potential fire-sale impact of a rapid liquidation of assets by Prudential is to compare the total amount of individual asset types in Prudential's bond portfolio to the average daily trading volume (ADTV) of those assets on a market-wide basis. This ratio provides insight into the ability of the market to absorb Prudential's assets if Prudential were forced to liquidate, or if the market were concerned that the company might liquidate, its entire bond portfolio. As shown in Table 19, changes in these ratios since 2012 [•].

Table 19: Prudential U.S. General Account Unencumbered Bond Portfolio Compared to ADTV ($ Billions)

	2012			2017		
Asset	**ADTV**	**General Account**	**General Account / ADTV**	**ADTV**	**General Account**	**General Account / ADTV**
CMBS & Non-Agency MBS	4.5	[•]	[•]	2.5	[•]	[•]
Non-Agency ABS	1.5	[•]	[•]	1.4	[•]	[•]
U.S. Investment Grade Corporates	11.9	[•]	[•]	16.8	[•]	[•]

Sources: Securities Industry and Financial Markets Association (2012 and 2017 ADTVs), available at https://www.sifma.org/resources/research/us-bond-market-trading-volume and https://www.sifma.org/resources/research/us-corporate-bond-trading-volume; Council Basis, p. 97; Prudential Response to OFR Request 2 (June 27, 2018), pp. 3, 5.
Note: The 2012 unencumbered asset allocations to individual portfolio types are estimates based on Prudential's 2017 allocations.

A refinement to this approach is to assess the potential effects if, as a result of policyholder withdrawals, Prudential sells a pro rata portion of certain segments of its bond portfolio, and compare the amount of each asset sold to the market-wide ADTV for that asset type. Less-liquid asset categories such as U.S. private placements and commercial mortgages are excluded because their relative illiquidity would make them more difficult to sell rapidly. Table 20 shows

[135] Prudential Response to OFR Request B.4 (Jan. 22, 2018), p. 1.

the assets that could be expected to be sold from Prudential's U.S. general account investment portfolio and the corresponding pro rata sales amounts under the various short-term stress scenarios.

Table 20: Pro Rata Sales of Prudential U.S. General Account Portfolio in Various Short-Term Stress Scenarios ($ Millions)

Asset	Total	[•] of Sales Over 90 Days (Q4 2008 AIG Rate)	[•] of Sales Over 90 Days (Historical Analysis Rate)	[•] of Sales Over 30 Days (A.M. Best Liquidity Model Rate)
Cash	[•]	[•]	[•]	[•]
U.S. Treasuries	[•]	[•]	[•]	[•]
Other Foreign Govt. Bonds	[•]	[•]	[•]	[•]
U.S. Agencies and Agency MBS	[•]	[•]	[•]	[•]
IG U.S. Public Corporates	[•]	[•]	[•]	[•]
IG Non-U.S. Public Corporates	[•]	[•]	[•]	[•]
Equities	[•]	[•]	[•]	[•]
CMBS and Non-Agency RMBS	[•]	[•]	[•]	[•]
Non-Agency ABS	[•]	[•]	[•]	[•]
Short-Term Investments/Others	[•]	[•]	[•]	[•]
Total	**[•]**	**[•]**	**[•]**	**[•]**

Source: Table 17; Appendix B.

As shown in Table 21, in the first example of [•] of total asset sales, the amounts of CMBS and non-agency MBS, non-agency ABS, and U.S. investment grade corporate bonds that Prudential would sell in this example are [•] ADTV in those markets. Using the middle example of [•], the highest ratio is [•], and in the [•] example, the highest ratio is [•]. It is important to note, however, that these ADTVs represent market activity in 2017; trading volumes could be significantly lower in a period of financial market stress.[136] In addition, the shorter the period over which assets are sold, the greater is the potential market impact.

[136] Securities Industry and Financial Markets Association, U.S. Bond Market Trading Volume, available at https://www.sifma.org/resources/research/us-bond-market-trading-volume; Securities Industry and Financial Markets Association, U.S. Corporate Bond Trading Volume, available at https://www.sifma.org/resources/research/us-corporate-bond-trading-volume. The ADTV for U.S. investment-grade corporate securities was $8.4 billion in 2008 and $12.1 billion in 2009. ADTV data for CMBS and non-agency MBS and non-agency ABS are not available before 2011. The lowest ADTV for CMBS and non-agency MBS was in 2017 at $2.5 billion. The lowest ADTV for non-agency ABS was in 2013 and 2016 at $1.3 billion.

Table 21: Example Pro Rata Sales of Prudential General Account Bond Portfolio Compared to ADTV ($ Billions)

	[•] of Sales Over 90 Days (Q4 2008 AIG Rate)		[•] of Sales Over 90 Days (Historical Analysis Rate)		[•] of Sales Over 30 Days (A.M. Best Liquidity Model Rate)	
Asset	**Amount**	**Amount / ADTV**	**Amount**	**Amount / ADTV**	**Amount**	**Amount / ADTV**
CMBS and Non-Agency MBS	[•]	[•]	[•]	[•]	[•]	[•]
Non-Agency ABS	[•]	[•]	[•]	[•]	[•]	[•]
U.S. Investment Grade Corporates	[•]	[•]	[•]	[•]	[•]	[•]

Sources: Securities Industry and Financial Markets Association (2017 ADTVs); Table 20.

Prudential has additional liquidity sources besides its highly liquid assets that could be used to satisfy some policyholder demands. The company has access to FHLB borrowing facilities. Prudential's outstanding advances from FHLBs total [•], but Prudential's total volume of eligible securities that can be pledged is [•].[137]

Another approach to analyzing the potential effects of the liquidation of assets by Prudential is to assess the relative impact that fire sales by various financial institutions could have on other financial institutions.[138] This analysis attempts to assess the price effect of a firm's fire sale on the balance sheet of other firms holding the same or similar assets. The analysis starts by assuming a downward shock to the net worth of a firm or group of firms (an "equity shock"). Such a shock would raise the firm's leverage and decrease the equity cushion protecting the firm's creditors. In attempting to return to the company's original leverage, the firm would have to rapidly sell assets. Such a fire sale of assets could directly affect the balance sheets of firms that hold the same or similar assets, thus spreading the negative effects of its distress to other firms. As a check on the strength of this analysis, it employs a second scenario, and assumes a downward shock to the value of assets of a firm or group of firms (an "asset shock").[139]

As noted above, a firm's asset size and leverage relative to other financial firms will affect the relative impact of a rapid liquidation of assets by that firm. For instance, a firm that is small relative to the market can sell a volume of assets that can be easily absorbed, but larger firms will necessarily sell larger volumes of assets that may not be so easily absorbed. In addition, the market impact of asset sales by a financial firm will also depend on the firm's asset profile because rapid fire sales of assets that are held by other financial firms would likely have a more pronounced effect on the financial system.

[137] Prudential Response to OFR Request A.14 (Jan. 22, 2018), p. 2.
[138] This analysis considers the framework proposed in: Robin Greenwood, Augustin Landier, and David Thesmar, "Vulnerable Banks," Journal of Financial Economics volume 115, issue 3 (March 2015), pp. 471-485.
[139] While more leveraged firms must sell more assets in both scenarios, the asset shock scenario requires leveraged firms to sell significantly more assets to return to their steady state.

As of December 31, 2017, Prudential ranked 11th and 16th, respectively, with respect to the impact of asset and equity shocks, out of a sample of financial companies, compared to 9th and 13th in 2012. (See Appendix C.)

The drivers of these changes in rankings are Prudential's decreased leverage ratio and increased holding of highly liquid assets; however, Prudential's general account assets have grown, increasing the amount of assets that would likely be liquidated in the event of Prudential's material financial distress. Prudential's rankings place it near MetLife (10th) and Pacific Mutual Holding Company (12th) for an asset shock and BB&T (15th) and SunTrust (17th) for an equity shock.

This analysis indicates that there is not a significant risk that asset liquidation by Prudential would disrupt trading or funding in key markets or cause significant losses or funding problems with other firms with similar holdings to an extent that would materially increase borrowers' costs of funds.

5.3.4 Other Analyses

There are a number of other analyses that market participants or researchers use for measuring the importance and impact of certain firms. For example, SRISK combines key characteristics of systemic risk, including size, leverage, and interconnectedness, and attempts to quantify the amount of capital a financial firm would need to raise in order to function normally in the event of a severe financial crisis. By this measure, Prudential ranks near the top among large U.S. financial institutions.

One reason for its high ranking is that Prudential has a relatively high market beta compared to other large financial institutions; that is, its returns are highly correlated with the market.[140] One explanation for this high correlation is that Prudential may have significant exposure to the equities market through, for example, general account guarantees on the company's variable annuity products and fee income generated by its large asset management business. Prudential uses derivatives to hedge its market risks, and in 2017 it introduced a capital hedge program in its Individual Annuities segment to further hedge equity market impacts.[141] In the event that these hedging strategies are insufficient, broader market stress may exacerbate Prudential's material financial distress. The high SRISK indicates that Prudential's material financial distress would be more likely to occur during a period of overall stress in the financial services industry, which could contribute to the effect the company's material financial distress could have on financial markets and firms.

It is important to note, however, that similar to other models, the use of SRISK alone has limitations, including that estimating the expected capital shortfall of a firm does not necessarily capture its interconnectedness with the broader financial markets. In addition, some have argued

[140] Since 2012, Prudential's SRISK has been consistently in the range of \$30 to \$40 billion. Federal Reserve Board staff analysis based on: Christian Brownlees and Robert Engle, "SRISK: A Conditional Capital Shortfall Model of Systemic Risk," Review of Financial Studies volume 30, issue 1 (2017), pp. 48-79.
[141] Prudential Response to OFR Request A.6a (Jan. 22, 2018), p. 2.

that SRISK does not fit the long-term nature of the insurance business model; rather than focus on market capitalization, they suggest that regulatory capital is a more appropriate measure of the solvency and financial strength of insurance companies.[142]

Prudential's Liquidity Stress Testing

Prudential uses a liquidity stress testing (LST) model that applies deterministic scenarios of market and insurance events to stress key activities that may expose Prudential to liquidity risk at the enterprise, legal entity, and business unit levels. [•][143] While these scenarios are not determinative for purposes of the Council's analysis, they are included here as context.

Table 22: Prudential Assumptions for LST

Scenario	**Description**	**[•]**	**[•]**	**[•]**	**[•]**	**[•]**	**[•]**
[•]	[•]	[•]	[•]	[•]	[•]	[•]	[•]

Source: Prudential Response to OFR Request B.7 (Jan. 22, 2018), p. 14. [•].

[•]

Table 23: Prudential Estimate of Asset Liquidation Under LST Scenarios ($ Billions)

Legal Entity	**[•]**
PICA	[•]
PLAZ	[•]
PRIAC	[•]
PLIC	[•]
GUL Re/UPARC	[•]
PIISC	[•]
Total	**[•]**

Source: Prudential Response to OFR Request B.7 (Jan. 22, 2018), p. 10. The entities included in this table are Prudential Insurance Company of America (PICA), Pruco Life Insurance Company (PLAZ), Prudential Retirement Insurance and Annuity Company (PRIAC), Prudential Legacy Insurance Company of New Jersey (PLIC), Gibraltar Universal Life Reinsurance Company/Universal Prudential Arizona Reinsurance Captive Company (GUL Re/UPARC), and Prudential International Insurance Service Company, LLC (PIISC).

5.4 Critical Function or Service Transmission Channel

Under the critical function or service transmission channel, the Council considers whether a nonbank financial company may no longer be able or willing to provide a critical function or service that is relied upon by market participants or customers and for which there are no ready substitutes.[144] The Council Basis noted that Prudential is a leader in several of its markets and products but concluded that it did not appear that Prudential had a large enough share of any of these markets to cause a significant disruption in the provision of services if it experiences material financial distress and is unable or unwilling to provide services.

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142 Hal S. Scott, Kristin Ricci, and Aaron Sarfatti, "SRISK as a Measure of Systemic Risk for Insurers: Oversimplified and Inappropriate" (Sep. 28, 2016), available at https://ssrn.com/abstract=2837784.
143 Prudential Response to OFR Request B.7 (Jan. 22, 2018), p. 8.
144 See Rule and Interpretive Guidance.

Prudential's market share of its key businesses and products has been relatively stable since 2013, as seen in Table 24 below. The company has dominant market shares of two businesses—pension risk transfers and stable value products— but Prudential's provision of these services is not critical to the functioning of the U.S. economy or financial system. Therefore, it appears that Prudential does not provide a critical function or service whose termination could contribute meaningfully to a threat to U.S. financial stability through this transmission channel.

Table 24: Prudential Market Share of Key Businesses

	9/30/2012		9/30/2017	
Line of Business	**Market Share**	**Rank**	**Market Share**	**Rank**
Group Life Insurance	[•]	[•]	[•]	[•]
Annuities	[•]	[•]	[•]	[•]
Japan Life Insurance	[•]	[•]	[•]	[•]
Group Long Term Disability	[•]	[•]	[•]	[•]
Group Short Term Disability	[•]	[•]	[•]	[•]
Retirement*	[•]	[•]	[•]	[•]
U.S. Life Insurance	[•]	[•]	[•]	[•]
Asset Management – Open-End Mutual Funds	[•]	[•]	[•]	[•]
Retirement - Pension Risk Transfer	[•]	[•]	[•]	[•]
Retirement - Stable Value*	[•]	[•]	[•]	[•]

Source: Council Basis, p. 112; Prudential Response to OFR Request C.1 (Jan. 22, 2018), pp. 2-3.
* As of December 2016.

5.4.1 Core Insurance Products

Prudential is a leading provider of insurance and retirement products, commanding [•] market share in each of its core products. However, these are highly competitive markets, and Prudential has less than [•] percent market shares in all but two products. Its market share in all but one of its key insurance and retirement products [•].

Retirement—Pension Risk Transfer

Prudential's reported market share of the PRT market was [•] percent as of September 30, 2017, but this market is relatively small, with $23 billion of total buyout sales in 2017, and the provision of this service by Prudential it is not likely a critical function in the U.S. economy.[145] Prudential's reported market share may be somewhat misleading because of the nature of this particular market, where PRT transactions tend to vary considerably from year to year and market share can be skewed by large one-time transactions. Prudential asserted that a more accurate measure of market share is (1) the total amount of pension risk transferred that is currently under management by Prudential, compared to (2) the total pool of defined benefit

[145] Prudential Response to OFR Request C.1 (Jan. 22, 2018), p. 2; LIMRA Secure Retirement Institute, Group Annuity Risk Transfer Survey (2017, 4th Quarter), https://www.limra.com/Posts/PR/News_Releases/LIMRA_Secure_Retirement_Institute__U_S__Single_Premium_Pension_Buy-out_Sales_Nearly_Double_in_the_Fourth_Quarter.aspx.

liabilities potentially available for transfer to a third party; the differential between these amounts is over [•]. By this measure, Prudential commands [•] of the available market.[146] However, this approach likely significantly understates Prudential's importance to the PRT market by assuming that all pension risk may be transferred.

Retirement—Stable Value

Prudential reported that its market share of stable value products was [•] percent based on assets as of December 31, 2016. This includes a [•] percent market share of the stable value wrap business and a [•] percent market share for insurance company general and separate account stable value investment options.[147] According to the company, [•]. Stable value fund managers impose diversification limits that restrict the allocation to any individual wrap provider to [•].[148]

5.4.2 Asset Management

Prudential has a third-party asset management business that offers open-end mutual funds, but the total assets under management are small in comparison to the broader market. Prudential had [•] of assets under management as of December 31, 2017, compared to [•] as of September 30, 2012.[149] Prudential's mutual fund business is [•] largest in the industry and manages [•] percent of the assets under management in the industry.[150] Prudential ranks [•] by global assets under management.[151] This is a highly competitive market, with many large participants that could easily absorb capacity created by distress at Prudential. For example, the five largest asset managers represent [•] of global assets under management.[152] As stated in the Council Basis, [•] Prudential's assets under management are held in external third-party custody accounts and could be transferred to a new investment manager if Prudential experienced material financial distress.[153]

5.4.3 Mortgage Servicing

Prudential continues to play an important role in the commercial mortgage business as one of the 10 largest servicers of commercial mortgages and one of the five largest servicers of Federal Housing Administration and Government National Mortgage Association (Ginnie Mae) loans in the United States. As was the case in 2012, the potential effects of Prudential's distress on these markets would likely be mitigated by the smaller size of its origination business and the transferability of its servicing business to other entities—despite being one of the 10 largest commercial mortgage servicers, Prudential services only 2 percent of the outstanding loans in

[146] Prudential Response to OFR Request C.1 (Jan. 22, 2018), p. 4.
[147] Prudential Response to OFR Request C.1 (Jan. 22, 2018), pp. 7-8.
[148] Prudential Response to OFR Request C.1 (Jan. 22, 2018), p. 7.
[149] Prudential Response to OFR Request 4 (June 27, 2018), p. 1; Council Basis, p. 5.
[150] Prudential Response to OFR Request C.1 (Jan. 22, 2018), p. 3.
[151] Prudential Response to OFR Request C.1 (Jan. 22, 2018), p. 3.
[152] Prudential Response to OFR Request C.1 (Jan. 22, 2018), p. 4.
[153] Council Basis, p. 112.

this market. Prudential's share of Federal Housing Administration and Ginnie Mae loans is only slightly higher, accounting for 4.5 percent of loans outstanding.[154]

Prudential serviced 4,631 commercial mortgage loans valued at $90 billion as of December 31, 2017, which ranked 10th by number of loans and sixth in dollar value.[155] This accounts for 2 percent of loans serviced and 3 percent by dollar value.[156] There are more than 40 competitors in the commercial loan servicing space, and the largest servicer services more than 10 times the number of loans serviced by Prudential, while the second-largest provider services more than five times the number of loans serviced by Prudential. Prudential's market share indicates that it is not a crucial participant in this market.

5.4.4 Provision of Credit to State and Local Governments

Prudential's holdings of state and local government obligations have [•]. As of December 31, 2017, Prudential held approximately [•] of investments in state and local government debt obligations in its general account and in the guaranteed portion of its separate accounts.[157] This is [•] of such investments in 2012 [•] of U.S. municipal debt outstanding.[158] [•] it does not appear that financial distress at Prudential would have a meaningful adverse impact on the availability of credit for these borrowers.

Table 25: Investments in State and Local Government Securities ($ Millions)

Entity		Investment
[•]	[•]	[•]

Source: Prudential Response to OFR Request C.2 (Jan. 22, 2018), p. 1.

5.4.5 Provision of Credit to Low-Income, Minority or Under-Served Communities

In 2017, Prudential Global Investment Management Real Estate Finance originated [•] in multifamily mortgages nationwide, or [•] percent of an estimated [•] of multifamily mortgages originated nationwide.[159] Prudential's volume has [•].[160] Only a small portion of this market represents low-income, minority, or under-served communities, and Prudential estimates that it provided [•] in credit to affordable apartments in 2017, representing [•] percent of the total credit

[154] Mortgage Bankers Association, "Mortgage Bankers Association Servicing Year End Survey" (2017), https://www.mba.org/2018-press-releases/february/mba-releases-2017-year-end-commercial/multifamily-servicer-rankings.
[155] Mortgage Bankers Association, "Mortgage Bankers Association Servicing Year End Survey" (2017), https://www.mba.org/2018-press-releases/february/mba-releases-2017-year-end-commercial/multifamily-servicer-rankings.
[156] Mortgage Bankers Association, Mortgage Bankers Association Servicing Year End Survey (2017), https://www.mba.org/2018-press-releases/february/mba-releases-2017-year-end-commercial/multifamily-servicer-rankings.
[157] Prudential Response to OFR Request C.2 (Jan. 22, 2018), p. 2.
[158] Prudential Response to OFR Request C.2 (Jan. 22, 2018), p. 2.
[159] Prudential Response to OFR Request C.3 (Jan. 22, 2018), p. 2.
[160] Council Basis, p. 114.

for multifamily affordable lending in these communities.[161] However, assuming Prudential does less affordable lending in target markets because Prudential is not subject to Community Reinvestment Act requirements, Prudential estimates that it originated [•] in multifamily credit in these communities, resulting in a market share of [•] percent.[162]

Prudential also has a [•] portfolio of social investments. At year-end 2017, the unit's investments in community development financial institutions totaled [•]. Prudential also participates in Treasury's Minority Banking Program, under which Prudential has invested [•].[163]

In sum, Prudential plays a small role in the provision of credit for low-income, minority, or under-served communities.

6. COMPLEXITY AND RESOLVABILITY

The Council Basis evaluated Prudential's complexity and resolvability.[164] The Council considered whether any threat that material financial distress at Prudential could pose to U.S. financial stability could be mitigated or aggravated by its complexity, the opacity of its operations, or the difficulty of resolving it. The Council concluded that the complexity and interconnectedness of Prudential, including its operations in all 50 states and numerous foreign countries, could increase the obstacles to the company's rapid and orderly resolution and delay or complicate steps to resolve Prudential in an orderly fashion that would minimize disruption to financial stability.[165] The Council also noted that a coordinated resolution of Prudential would require accommodations with local supervisory authorities, as well as cooperation among a number of home and host jurisdiction supervisory authorities and courts.

As noted above, Prudential is seventh on the list of largest bank holding companies and insurers in the United States, based on total assets.[166] It is the largest U.S. life insurance company, with $3.7 trillion of in-force life insurance[167] and the [•] asset manager worldwide.[168] As of December 2017, Prudential had [•].[169] Prudential continues to operate in all 50 states and through its subsidiaries provides services to institutional and individual customers in more than

[161] Prudential Response to OFR Request C.3 (Jan. 22, 2018), p. 2.
[162] Prudential Response to OFR Request C.1 (Jan. 22, 2018), pp. 7-8.
[162] Prudential Response to OFR Request C.3 (Jan. 22, 2018), p. 3.
[163] Prudential Response to OFR Request C.3 (Jan. 22, 2018), pp. 3-4.
[164] Council Basis, pp. 123-134.
[165] The Council Basis noted Prudential's operations in 35 countries (p. 123); currently Prudential has operations in more than 40 countries. Japan continues to represent a significant share of consolidated revenues (33 percent) and of insurance liabilities (31 percent) as of year-end 2017. Prudential's International Insurance division comprised 45 percent of total revenues in 2017. See section 7.2 below.
[166] See Table 2, which compares certain of Prudential's financial metrics to those of the largest bank holding companies and insurers.
[167] Prudential Fact Sheet (Aug. 1, 2018), available at http://news.prudential.com/presskits/prudential-financial-fact-sheet htm.
[168] Prudential Response to OFR Request C.1 (Jan. 22, 2018), p. 3.
[169] Prudential Response to OFR Request D.2 (Jan. 22, 2018), p. 2.

40 countries;[170] [•];[171] and it is subject to multiple regulatory regimes in each state and each country. The number of authorities and regimes that would be involved in the resolution of the firm remains unchanged. The Council Basis noted that [•].[172] In addition, the Council found that Prudential's subsidiaries [•][173] Prudential's legal structure [•].[174] Prudential and its subsidiaries [•].[175] In addition, as discussed in section 5.2.3, the failure of an institution the size of Prudential could stress the capacity of the state GAs and thereby transmit stress to other life insurance companies. These complexities continue to present obstacles to the resolvability of the firm.

Prudential has identified certain actions it has taken, as well as certain changes in its regulatory framework, that may impact its complexity and resolvability. These include internal organizational changes; the creation and dissolution of captive reinsurance companies; the restructuring of its closed block business; changes in the firm's capital and liquidity management; and the restructuring of its internal debt. Finally, Prudential (as well as its state regulators) highlighted various regulatory reforms.

Prudential has both created and eliminated captive insurers since 2013, with the result that the number of captive reinsurers remains seven.[176] However, it has taken steps to simplify the use of captives.[177] Prudential also notes that it restructured and simplified its closed block business, which has $61 billion in general account assets. [178] Prudential points to changes to its capital and liquidity management. Prudential also highlights the restructuring of some of its debt, by reducing its use of senior debt and increasing its use of junior subordinated hybrid securities as additional loss-absorbing capacity that may be available in the event of the company's material financial distress. [•][179]

In sum, Prudential remains a large and complex enterprise. Its multi-jurisdictional operations, the various regulatory regimes under which the organization conducts business, and its intercompany funding arrangements, continue to contribute to its complexity and could pose obstacles to its orderly resolution. However, in light of the conclusions set forth in section 5 regarding the transmission channel analysis, the difficulty to resolve Prudential and the potential for the company's disorderly resolution do not lead to a conclusion that Prudential's material financial distress could pose a threat to U.S. financial stability.

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[170] Prudential Fact Sheet (Aug. 1, 2018), available at http://news.prudential.com/presskits/prudential-financial-fact-sheet htm.
[171] [•]
[172] Council Basis, pp. 128-129.
[173] Council Basis, p. 124.
[174] [•]
[175] Prudential Response to OFR Request D.3, D.7 (Jan. 22, 2018).
[176] Council Basis, p. 48; Prudential Response to OFR Request A.4 (Jan. 22, 2018).
[177] Prudential Response to OFR Request D.1 (Jan. 22, 2018).
[178] Prudential Response to OFR Request D.1 (Jan. 22, 2018).
[179] See 2016 Prudential Submission, p. 13.

7. EXISTING REGULATORY SCRUTINY

Section 113 of the Dodd-Frank Act requires the Council to consider, as one of ten factors, the degree to which Prudential is already regulated by one or more primary financial regulatory agencies.[180]

7.1 Domestic Regulatory Developments

7.1.1 Federal

Prudential has been subject to supervision by the Board of Governors since the Council's determination regarding the firm, with supervision conducted by examiners at the Federal Reserve Bank of Boston. The Dodd-Frank Act gives the Board of Governors the authority to "require each nonbank financial company supervised by the Board of Governors and any subsidiary thereof, to submit reports under oath, to keep the Board of Governors informed as to the financial condition of the company or subsidiary, systems of the company or subsidiary for monitoring and controlling financial, operating, and other risks, and the extent to which the activities and operations of the company or subsidiary pose a threat to the financial stability of the United States."[181] In addition, the Dodd-Frank Act provides that "the Board of Governors may examine any nonbank financial company supervised by the Board of Governors and any subsidiary of such company" regarding any of the aforementioned matters[182] and take enforcement action against Prudential or any of its subsidiaries.[183]

The Federal Reserve Bank of Boston stated that it conducts both continuous supervision of Prudential, which is facilitated by the presence of several examiners on site at Prudential, and targeted reviews of particular areas.[184] The Federal Reserve Bank of Boston stated that it conducts approximately 10 to 12 supervisory events a year, such as reviews of resolution planning and capital planning. The Federal Reserve Bank of Boston also participates in the supervisory colleges sponsored by Prudential's state regulators, discussed below.

7.1.2 New Jersey

The NJDOBI, historically the lead state for state-based insurance supervision since the firm's inception, has been the group-wide supervisor of Prudential since February 2015. Prudential's insurance company subsidiaries are also subject to supervision by the Arizona Department of Insurance, the CID, and the Indiana Department of Insurance, and are subject to regulatory filing requirements, market conduct rules, and other consumer protection measures with regard to the

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180 12 U.S.C. § 5323(a)(2)(H).
181 Dodd-Frank Act § 161(a)(1), 12 U.S.C. § 5361(a)(1).
182 Id. § 161(b), 12 U.S.C. § 5361(b)(1).
183 Id. § 162, 12 U.S.C. § 5362. In 2016, the Board of Governors published several proposals for enhanced prudential standards under section 165 of the Dodd-Frank Act that, if adopted, would apply to Prudential, including: (1) an advance notice of proposed rulemaking inviting comment on conceptual frameworks for capital standards; (2) a proposed rule to apply enhanced prudential standards pursuant to section 165 of the Dodd-Frank Act; and (3) a reporting proposal to collect financial data on a consolidated basis. See 81 Fed. Reg. 24097 (April 25, 2016); 81 Fed. Reg. 38610 (June 14, 2016); 81 Fed. Reg. 38631 (June 14, 2016).
184 As of the time of the consultation, the Federal Reserve Bank of Boston stated that it had six examiners on site.

products sold in all 50 U.S. states, the District of Columbia, the five U.S. territories, and numerous foreign countries.

Overview of Current Authorities

As Prudential's group-wide supervisor, New Jersey law provides NJDOBI with the power to conduct and coordinate the following, among other things: (1) the assessment of enterprise risk within Prudential to ensure that the material financial condition and liquidity risks to the insurers in the group are identified by management and reasonable and effective mitigation measures are in place for the risks without regard to their source; (2) requests for information from any Prudential entity to assess enterprise risk including, but not limited to, information regarding governance, risk assessment and management, capital adequacy, and material intercompany transactions; (3) compelling the development and implementation of reasonable measures designed to assure that Prudential is able to timely recognize and mitigate material risks to the insurers in the group; and (4) other group-wide supervisory activities considered appropriate.[185]

New Jersey law provides that NJDOBI may examine any New Jersey-registered insurer "and its affiliates to ascertain the financial condition of the insurer, including the enterprise risk to the insurer by the ultimate controlling party, or by any entity or combination of entities within the insurance holding company system, or by the insurance holding company system on a consolidated basis."[186] In addition, New Jersey law provides that NJDOBI has the power to order any New Jersey-registered insurer "to produce such records, books, or other information papers in the possession of the insurer or its affiliates as shall be necessary to ascertain the financial condition of the insurer or to determine compliance with [New Jersey's insurance holding company statute]."[187] New Jersey law provides that, "[i]n the event such insurer fails to comply with such order, NJDOBI shall have the power to examine such affiliates to obtain such information."[188] Furthermore, New Jersey law provides that NJDOBI has "power to issue subpoenas, to administer oaths, and to examine under oath any person for purposes of determining compliance with [the examination statute]."[189] Additionally, New Jersey's insurance statute was amended, consistent with the NAIC's Solvency Modernization Initiative, to expand the scope of NJDOBI examinations, require the filing of an ORSA with NJDOBI, require enterprise-wide risk reporting to NJDOBI, and subject additional inter-affiliate transactions to prior approval by NJDOBI.[190]

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[185] N.J.S.A. § 17:27A-5.2.
[186] N.J.S.A. § 17:27A-5(a).
[187] Id.
[188] Id. See also N.J.S.A. § 17:27A-5(e).
[189] N.J.S.A. § § 17:27A-5(e). Under New Jersey law, affiliate includes any entity—insurer or non-insurer—that "directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with [the registered insurer]." See N.J.S.A. § 17:27A-1a. See also N.J.S.A. § 17:27A-1c (defining "control").
[190] See P.L. 2014. c. 81. (the "Solvency Modernization Act") § 3 (enterprise risk reporting, codified at N.J.S.A. § 17:27A–3(k)); § 4 (inter-affiliate transactions, codified at N.J.S.A. 17:27A–4(a)); § 6 (examination powers, codified at N.J.S.A. § 17:27A–5); § 50 (ORSA, codified at N.J.S.A. § 17:23–31). The Solvency Modernization Act also provided for group-wide supervision for certain international insurance groups. Id. § 8 (codified at N.J.S.A. 17:27A–5.2). It is pursuant to this provision that NJDOBI has acted as the group-wide supervisor of Prudential since 2015, as discussed above.

Submissions from Prudential [•] and the Arizona Insurance Department

Prudential's submissions discussed developments in New Jersey's supervision and regulation of insurance companies that it argues supports rescission of the Council's determination.[191] Among other things, Prudential's submission describes New Jersey state law changes from 2014, referenced above, authorizing NJDOBI to act as the group-wide insurance supervisor for any international insurance group if the international insurance group's ultimate controlling person is domiciled in New Jersey or under certain other circumstances.[192] Prudential's submission also described the state law as enabling NJDOBI to monitor and assess risks of the entire Prudential enterprise, including risks and activities of the holding company and all of its insurer and non-insurer affiliates.[193] [•]

Based on the information received from [•] the Arizona Insurance Department, and Prudential, below is a description of the actions the NJDOBI is taking to implement its supervisory authorities with regard to Prudential.

Group-wide Financial Examination

[•][194]

Specific Supervisory Actions

[•][195] [•][196] [•][197] [•][198] [•][199] [•][200] [•][201] [•][202] [•][203]

Own Risk and Solvency Assessment

Prudential is required to file an ORSA. Under New Jersey law, an ORSA is a "confidential internal assessment, appropriate to the nature, scale, and complexity of an insurer or insurance group, conducted by that insurer or insurance group of the material and relevant risks associated with the insurer or insurance group's current business plan, and the sufficiency of capital

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191 2016 Prudential Submission, pp. 27-30; 2018 Prudential Submission, pp. 18–19, 34–36.
192 Id.
193 Id.
194 See Report on the Group-Wide Examination of Prudential Financial, Inc. as of Dec. 31, 2016 (filed June 1, 2018); Coordination Examination Report relating to the Condition of Prudential Insurance Company of America as of Dec. 31, 2016 (filed Jun. 1, 2018); Coordination Examination Report relating to the Condition of Pruco Life Insurance Company of New Jersey as of Dec. 31, 2016 (filed June 1, 2018); and Prudential Legacy Insurance Company of America as of Dec. 31, 2016 (filed June 1, 2018).
195 [•]
196 [•]
197 [•]
198 [•] XXX and AXXX policies are those required to be valued under Section 6 or 7 in the NAIC Valuation of Life Insurance Policies Model Regulation.
199 [•]
200 [•]
201 [•]
202 [•]
203 [•]

resources to support those risks."[204] According to the NAIC, the primary goals of an ORSA are to (1) foster an effective level of enterprise risk management at all insurers and (2) provide a group-level perspective on risk and capital, as a supplement to the existing legal-entity review.[205] Prudential submits an ORSA report annually to NJDOBI, supplemented by quarterly updates and in-person reviews with Prudential senior management. The report is required to include Prudential's self-assessment of its group-wide risk management framework; its process for assessing risk under various stress conditions; and its capital adequacy as compared to its identified risks on a going concern basis. [•][206] [•][207]

Supervisory Colleges and Crisis Management Groups

For U.S.-domiciled insurance holding companies with operations in multiple jurisdictions, state insurance regulators may convene "supervisory colleges" on a periodic basis. [•][208] The objective of the CMG is to enhance preparedness for, and facilitate the management and resolution of, a cross-border financial crisis affecting Prudential.[209] [•][210] Prudential argues that the supervisory college and CMG provide an effective forum for Prudential's principal regulators to cooperate and collaborate on regulatory and business issues affecting Prudential, as well as to identify, analyze, and mitigate any potential group-wide risks for Prudential.[211]

Resolution and Recovery

[•][212] [•][213]

Additional Authorities

[•][214] [•][215] [•][216] [•]

7.1.3 Connecticut and Arizona

Prudential states that Connecticut and Arizona have adopted amendments to their insurance holding company acts since 2013. Prudential states that these amendments require enterprise risk reporting and an ORSA and expressly authorize initiating and participating in supervisory colleges.[217] Prudential also states that the commissioners of the Connecticut and Arizona

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204 N.J.S.A. § 17:23-28.
205 NAIC, ORSA Guidance Manual, p. 1, available at http://www.naic.org/store/free/ORSA_manual.pdf.
206 [•]
207 [•]
208 [•]
209 2016 Prudential Submission, p. 31.
210 [•]
211 2016 Prudential Submission, p. 31.
212 [•]
213 [•]
214 [•]
215 [•]
216 [•]
217 2016 Prudential Submission, p. 30.

insurance departments have expressly recognized NJDOBI as the group-wide supervisor of Prudential and that the three state regulators are in regular communication with each other regarding Prudential's regulation and supervision.[218]

7.1.4 NAIC

Prudential states that since the Council's final determination regarding the company, the NAIC has made significant strides in modernizing the U.S. state-based system of insurance regulation, much of which has been implemented or is in the process of being implemented.[219] The reforms identified by Prudential include: (1) adoption of a reserving methodology applicable to insurers engaged in reinsurance captive transactions; (2) development of a framework to revise variable annuity regulations; (3) implementation of principles-based reserving; (4) development of a state-based group capital requirement; and (5) adoption of corporate governance and financial reporting standards.[220] [•][221] More recently, the NAIC has initiated a macroprudential project that includes enhancing the regulation of liquidity risk for large life insurance companies through stress testing and other measures. The NAIC has stated that the objective of this project is to evaluate existing regulatory tools and data relating to liquidity risk, identify any gaps, and propose enhancements.[222] Specific areas of focus in addition to liquidity stress testing include the liquidity characteristics of insurers' liabilities and liquidity risk management. This effort may ultimately lead to beneficial changes that enhance the regulatory oversight of liquidity risks at large life insurance companies. The Council intends to monitor the extent to which any resulting reforms address risks to U.S. financial stability.

7.2 Foreign Regulatory Developments

Prudential states that the Japan FSA has been recently working to develop and enhance the domestic supervisory framework to address risks associated with financial institutions in Japan, and to align domestic financial regulation with current international standards. This work has been undertaken by the Japan FSA in response to similar developments at the Financial Stability Board (FSB) and International Association of Insurance Supervisors (IAIS).[223]

Of the $60 billion of consolidated revenues generated by Prudential in 2017, $20 billion came from Prudential's operations in Japan.[224] Additionally, Prudential reported $159 billion in insurance liabilities and policyholder account balances in Japan at the end of 2017, representing 39 percent of Prudential's consolidated total insurance liabilities and policyholder account balances.[225] The bulk of these liabilities are predominantly composed of long-duration insurance

[218] 2016 Prudential Submission, p. 30.
[219] 2016 Prudential Submission, p. 32.
[220] 2016 Prudential Submission, p. 32.
[221] [•]
[222] NAIC, Financial Stability Task Force Proposal for Liquidity Assessment Subgroup, available at http://naic.org/meetings1708/cmte_ex_financial_stability_tf_2017_summer_nm_materials_3.pdf?150228654254.
[223] 2016 Prudential Submission, p. 33.
[224] Prudential Annual Report on Form 10-K for the Year Ended December 31, 2017, p. 289 and 292. Total Japanese operations include asset management.
[225] Id., pp. 50, 152.

products with fixed and guaranteed terms,[226] such as non-participating whole life and term life products, and endowment contracts.[227] [•]

7.3 Regulator Consultations

On October 31, 2016, the Nonbank Designations Committee consulted with staff from the Federal Reserve Bank of Boston with supervisory responsibilities for Prudential. On November 1, 2016, the Nonbank Designations Committee consulted with staff from the Board of Governors and the FDIC and discussed the resolution plan submitted by Prudential in December 2015. On November 3, 2016 and June 7, 2018, the Nonbank Designations Committee consulted with staff from NJDOBI, the CID, and the Arizona Department of Insurance regarding certain state regulatory and supervisory developments. On September 13, 2018, the Nonbank Designations Committee consulted with the Federal Reserve Bank of Boston regarding its supervision of Prudential. Matters raised during these consultations have been addressed herein where relevant.

8. CONCLUSION

Based on the Council's analysis of Prudential and on changes since September 2013 that could be material to the Council's conclusions, and in light of the statutory considerations, the Council has rescinded its final determination that material financial distress at Prudential could pose a threat to U.S. financial stability and that Prudential shall be supervised by the Board of Governors and be subject to enhanced prudential standards.

[226] Prudential Annual Report on Form 10-K for the Year Ended December 31, 2017, p. 50.
[227] Id., p. 62.

APPENDIX A: CONSOLIDATED BALANCE SHEET

(*$ Millions*)

As of:	**12/31/2012**	**6/30/2015**	**12/31/2017**
Fixed maturities, available-for-sale, at fair value	$301,336	$290,063	$346,780
Fixed maturities, held-to-maturity, at amortized cost	4,268	2,396	2,049
Trading account assets supporting insurance liabilities, at fair value	20,590	20,267	22,097
Other trading account assets, at fair value	6,328	12,749	5,752
Equity securities, available-for-sale, at fair value	8,277	9,901	6,174
Commercial mortgage and other loans	36,733	48,569	56,045
Policy loans	11,575	11,752	11,891
Other long-term investments	10,028	10,678	12,308
Short-term investments	6,447	5,669	6,775
Total investments	*405,582*	*411,944*	*469,871*
Cash and cash equivalents	18,100	17,038	14,490
Accrued investment income	3,127	3,117	3,325
Deferred policy acquisition costs	14,100	16,569	18,992
Value of business acquired	3,248	2,994	1,591
Other assets	11,887	14,728	17,035
Separate account assets	253,254	296,341	306,617
TOTAL ASSETS	**$709,298**	**$762,731**	**$831,921**
Future policy benefits	$216,050	216,555	$257,317
Policyholders' account balances	134,413	135,630	148,189
Policyholders' dividends	7,507	6,528	6,411
Securities sold under agreements to repurchase	5,818	7,863	8,400
Cash collateral for loaned securities	3,941	3,808	4,354
Income taxes	8,551	9,239	9,600
Short-term debt	2,484	3,621	1,380
Long-term debt	24,729	20,264	17,172
Other liabilities	11,683	13,135	16,619
Notes issued by consolidated variable interest entities	1,577	7,455	1,518
Separate account liabilities	253,254	296,341	306,617
TOTAL LIABILITIES	**$670,007**	**$720,439**	**$777,577**
Preferred stock	0	0	0
Common stock	6	6	6
Class B Stock	0	0	0
Additional paid-in capital	24,380	24,397	24,769
Common stock held in treasury, at cost	(12,163)	(13,398)	(16,284)
Accumulated other comprehensive income (loss)	10,214	13,404	17,074
Retained earnings	16,138	17,314	28,504
Noncontrolling interests	716	569	275
TOTAL EQUITY	**$39,291**	**$42,292**	**54,069**

Source: Prudential Annual Report on Form 10-K for the year ended December 31, 2012, p. 206; Prudential Quarterly Report on Form 10-Q for the quarter ended June 30, 2015, p. 1; Prudential Annual Report on Form 10-K for the year ended December 31, 2017, p. 152.

APPENDIX B: PRUDENTIAL'S U.S. GENERAL ACCOUNT ASSETS

($ Millions)

Asset	U.S. General Account	U.S. General Account Encumbered	U.S. General Account Not Encumbered
Sovereign Securities	**[•]**	**[•]**	**[•]**
Japanese Government Bonds	[•]	[•]	[•]
Other Foreign Government Bonds	[•]	[•]	[•]
U.S. Treasuries	[•]	[•]	[•]
U.S. Agencies and Agency MBS	[•]	[•]	[•]
Corporate Fixed Income Securities	**[•]**	**[•]**	**[•]**
U.S. Investment Grade Public Corporates	[•]	[•]	[•]
U.S. Non-Investment Grade Public Corporates	[•]	[•]	[•]
Non-U.S. Public IG Corporates	[•]	[•]	[•]
U.S. Private Placements	[•]	[•]	[•]
Equities, Mortgages and ABS	**[•]**	**[•]**	**[•]**
Equities	[•]	[•]	[•]
Commercial Mortgages	[•]	[•]	[•]
CMBS	[•]	[•]	[•]
RMBS	[•]	[•]	[•]
ABS	[•]	[•]	[•]
Other Assets	**[•]**	**[•]**	**[•]**
Non-U.S. Private Placements	[•]	[•]	[•]
Cash	[•]	[•]	[•]
Policyholder Loans	[•]	[•]	[•]
Short-Term Investments/Others	[•]	[•]	[•]
Other – Real Estate Related	[•]	[•]	[•]
Investments in Joint Ventures	[•]	[•]	[•]
Other	[•]	[•]	[•]
Total	**[•]**	**[•]**	**[•]**

Source: Prudential Annual Report on Form 10-K for the year ended December 31, 2017, p. 310; Prudential Response to OFR Request 2 (June 27, 2018), p. 4.
Note: All encumbered or restricted U.S. public corporates are assumed to be investment grade.

APPENDIX C: FIRE SALE MODEL DETAIL

The Council Basis included a supplemental analysis of the relative impact of negative shocks to the equity or assets of certain financial institutions on other financial institutions. For the purposes of the reevaluation of Prudential, the analysis has been updated as of December 31, 2017.[228] See section 5.3.3 for a discussion of this model in the context of the asset liquidation channel.

The analysis assumed that a negative shock to the net worth of a firm (or group of firms) can force the firm to rapidly liquidate assets. Such a shock would raise the firm's leverage and decrease the equity cushion protecting the firm's creditors. In order to quickly return to its original degree of leverage, the firm would have to rapidly sell assets. Such a fire sale of assets could directly affect the balance sheets of firms that hold a similar portfolio, thus spreading the negative effects of its distress to other firms.

A firm's asset size, leverage, and asset composition relative to other financial firms will affect the relative impact of a rapid liquidation of assets by that firm. For instance, a firm that is small relative to the market can sell a quantity of assets that can be easily absorbed, but larger firms will necessarily sell larger volumes of assets that may not be so easily accommodated. In addition, the market impact of asset sales will also depend on the firm's asset profile relative to other financial firms, since rapid fire sales of assets that are widely held by others would likely have a more pronounced effect on the financial system.

The results indicate that Prudential's fire-sale effect places it below the top ten largest effects among financial institutions in 2017, and that its ranking has slipped some since 2012. For a shock to equity, Prudential produces a fire-sale effect that ranks 16th among financial institutions, compared to 13th in 2012. For a shock to assets, Prudential's fire-sale effect places it at 11th among financial institutions, compared to 9th in 2012. A summary of the analysis of the relative impact on other financial institutions of negative shocks based on firms' equity and assets is shown in the table below.[229]

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[228] For this analysis, data on the asset holdings of the largest 50 bank holding companies and the largest 25 insurance companies were collected.

[229] The analysis considers the framework proposed in Robin Greenwood, Augustin Landier and David Thesmar (2015), "Vulnerable Banks," Journal of Financial Economics volume 115, issue 3 and extensions by Duarte and Eisenbach (2015), "Fire-Sale Spillovers and Systemic Risk," FRBNY Staff Report 645.

Mean Scores for the Magnitude of Firm's Fire-Sale Effects (2017)

	Equity Shock		Asset Shock	
Rank	**Firm**	**Mean Score (%)**	**Firm**	**Mean Score (%)**
1	JPMorgan Chase & Co.	98.5	JPMorgan Chase & Co.	99.7
2	Bank of America Corporation	95.7	Wells Fargo & Company	92.0
3	Wells Fargo & Company	95.6	Bank of America Corporation	83.7
4	Citigroup, Inc.	51.7	Citigroup, Inc.	48.2
5	Morgan Stanley	25.8	Morgan Stanley	28.6
6	U.S. Bancorp	25.4	Goldman Sachs Group, Inc., The	27.3
7	Goldman Sachs Group, Inc., The	24.2	Brighthouse Financial, Inc.	27.1
8	Berkshire Hathaway Inc.	23.4	U.S. Bancorp	24.3
9	PNC Financial Services Group, Inc.,	19.8	PNC Financial Services Group, Inc.	16.3
10	Brighthouse Financial, Inc.	17.2	MetLife, Inc.	14.3
11	MetLife, Inc.	16.0	**Prudential Financial, Inc.**	**12.6**
12	American International Group, Inc.	15.1	Pacific Mutual Holding Company	12.4
13	Capital One Financial Corporation	14.8	TD Group US Holdings LLC	11.8
14	TD Group US Holdings LLC	14.5	Capital One Financial Corporation	11.3
15	BB&T Corporation	14.0	BB&T Corporation	10.7
16	**Prudential Financial, Inc.**	**12.7**	SunTrust Banks, Inc.	10.1
17	SunTrust Banks, Inc.	12.0	Ally Financial Inc.	9.9
18	Pacific Mutual Holding Company	10.5	HSBC North America Holdings Inc.	9.6
19	Bank Of New York Mellon Corporation	9.9	American International Group, Inc.	9.6
20	Citizens Financial Group, Inc.	9.1	Bank Of New York Mellon Corporation	9.0
21	HSBC North America Holdings Inc.	9.1	MUFG Americas Holdings Corporation	7.8
22	MUFG Americas Holdings Corporation	9.0	Keycorp	7.4
23	Liberty Mutual Holding Company Inc.	8.7	Citizens Financial Group, Inc.	7.0
24	M&T Bank Corporation	8.5	State Street Corporation	6.9
25	Keycorp	7.9	Fifth Third Bancorp	6.8

Sources: Annual reports on form 10-K for the year ended December 31, 2017; Consolidated Financial Statements for Holding Companies on form FR Y-9C; Board of Governors calculations.

There are a number of changes at Prudential that have affected its relative ranking among other financial institutions. In particular, Prudential has decreased its leverage ratio, as measured by total general account assets to total equity, from 11.6x to 9.7x. All else equal, lower leverage means that a shock to the firm's balance sheet will erode less of the buffer protecting creditors, potentially requiring the company to sell fewer assets to rebuild some, or all, of that buffer. In addition, its holdings of highly liquid assets, defined as cash, Treasury securities, and Agency securities, have increased by 13 percent, from \$35.9 billion to \$40.6 billion; its holdings of other assets, including residential MBS, US corporate debt securities, and equity securities, have decreased by 25 percent, from \$179.0 billion to \$134.2 billion. On the other hand, Prudential has increased its general account assets by 15 percent since 2012, increasing the amount of assets that would likely be liquidated in the event of Prudential's material financial distress. In addition, its holdings of some assets, including U.S. state and municipal obligations, foreign debt securities, and loans, have increased by 83 percent, from \$129.8 billion to \$237.1 billion.

The major differences in the asset composition of Prudential's balance sheet relative to other financial holding companies tend to limit the spillover effects captured by this model. In particular, relative to bank holding companies, Prudential's balance sheet is much more heavily weighted toward securities than loans; between 40 percent and 50 percent of the average bank holding company's assets are loans, while only 13 percent of Prudential's assets are loans. In addition, the composition of its securities portfolio is very different from those of banks. For example, compared to the average bank holding company, Prudential holds a much larger share of its portfolio in "other domestic debt securities" and "foreign debt securities." "Other domestic debt securities," which are largely domestic corporate bonds, account for 32 percent of Prudential's securities portfolio; "foreign debt securities," which are largely foreign corporate bonds and foreign government debt, account for 41 percent of Prudential's securities portfolio. Each of these categories account for less than 5 percent of the average bank holding company's securities portfolio. On the other hand, Prudential holds significantly fewer Treasury and Agency securities and RMBS than bank holding companies, with only 8 percent of its portfolio invested in these securities, compared to over 50 percent at the average bank holding company. In short, while Prudential would likely be forced to sell greater quantities of illiquid securities, the fact that these securities are not widely held by other holding companies could reduce some of the impact.

There are elements that the fire sale model does not take into account that could affect the results. For example, separate accounts are not included in this model. Generally, variable annuities, which usually blend a tax-deferred investment and a guarantee on the investment's performance backed by the insurer's general account, are a substantial share of separate account assets. During a market downturn, these guarantees could potentially serve as a trigger for general account asset liquidation. Within its separate account, Prudential has [•] in variable annuity reserves, a large proportion of which have guarantees from the general account.[230]

[230] Prudential Response to OFR Request B.1 (Jan. 22, 2018), p. 4.