

The Regulatory Trajectory of Synthetic Securitization: A Breakdown of International Regulatory Environments

NICOLAS M. DILLAVOU*

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INTRODUCTION

The harmful effects on global financial stability that accompanied the 2007-2008 financial crisis (the “crisis”) were largely intensified by loose regulatory practices in the United States’ (U.S.) secondary mortgage market.¹ Accordingly, the harm suffered on a global level warrants a comparative perspective on international securities regulation.² This Article will examine several securitization methods in Europe and the U.S. and derive prospective solutions from these existing approaches that have the potential to address undue risks associated with asset-backed securities today.

The negative global effects of the subprime mortgage crisis led to a decrease in investor confidence and a widespread disapproval of the use of securitization in general, particularly within the secondary mortgage market.³ Contrary to what many believe, the secondary mortgage market has numerous benefits and is essential to the growth and stability of the global economy.⁴ Unfortunately, poor lending standards and accelerated credit extensions have mitigated such benefits.⁵ Moreover, the regulation and supervision of banking institutions were well behind fast-paced financial development.⁶ The U.S.’s regulatory structure allowed banks to increase their subprime lending rapidly without appropriate oversight.⁷ U.S. legislators must revamp regulatory practices to preserve the methods of securitization that are instrumental to economic development.⁸

1. Martin Neil Bailly et al., *The Origins of the Financial Crisis*, INITIATIVE ON BUS. & PUB. POL’Y BROOKINGS, Nov. 2008, at 8.

2. See INTERNATIONAL MONETARY FUND, GLOBAL FINANCIAL STABILITY REPORT: FINANCIAL STRESS AND DELEVERAGING 32 (2008).

3. See Thomas Hale, *Securitisations Industry Battles with Stigma*, FIN. TIMES (Mar. 23, 2016), <https://www.ft.com/content/84b7854e-ed2f-11e5-888e-2eadd5fbc4a4> [<http://perma.cc/E3YS-N6TH>].

4. See Miguel Segoviano et al., Staff Discussion Note, *Securitization: The Road Ahead*, INT’L MONETARY FUND (Jan. 2015), <https://www.imf.org/external/pubs/ft/sdn/2015/sdn1501.pdf> [<http://perma.cc/P5P8-2J5N>], for a discussion on the numerous benefits of securitization.

5. See Csaba Ruzsna, *The Use of Mortgage-Backed Securities in International Comparative Perspective: Lessons and Insights*, 43 VAND. J. TRANSNAT’L L. 823, 831 (2010).

6. See HELEN A. GARTEN, US FINANCIAL REGULATION AND THE LEVEL PLAYING FIELD 66 (2001).

7. See Anup Shah, *Global Financial Crisis*, GLOBAL ISSUES, <http://www.globalissues.org/article/768/global-financial-crisis> [<http://perma.cc/C8H4-JECE>].

8. See Segoviano et al., *supra* note 4.

The subprime mortgage crisis followed a sharp rise in defaults on those loans that underpinned mortgage-backed securities.⁹ The defaults were largely the result of increased leveraging and excessive risk-taking by banks and other financial institutions.¹⁰ Many of the world's most sophisticated banks bought mortgage-backed securities without adequate due diligence because of the high returns that were associated with unknown, and probably unknowable, risks.¹¹ International banks were generally more familiar with the securitization practices outside the U.S.; regardless, they were subject to the U.S.'s deficient practices because these mortgage-backed securities were supervised by U.S. authorities.¹²

U.S. policymakers responded to the subprime mortgage crisis with a large set of domestic and international financial reforms focused primarily on financial stability reviews and large-scale stress tests.¹³ This legislation has incorporated some effective tools. However, the legislation fails to address broader issues with respect to international market interactions, market failures, investor incentives, and externalities.¹⁴ For example, the banks that originated the mortgages, together with the financial institutions that repackaged them in the form of mortgage-backed securities, were usually able to completely externalize (i.e. transfer to others) the default risks.¹⁵

The U.S. should look outside its borders and evaluate aspects from securitization practices in countries like Germany, Italy, and the United

9. Manuel Adelino et al., *Loan Originations and Defaults in the Mortgage Crisis: The Role of the Middle Class*, 29 REV. FIN. STUD. 1635, 1637 (2016).

10. Stijn Claessens & Laura Kodres, *The Regulatory Responses to the Global Financial Crisis: Some Uncomfortable Questions* 6 (Int'l Monetary Fund, Working Paper No. 46, 2014), <https://www.imf.org/external/pubs/ft/wp/2014/wp1446.pdf> [<http://perma.cc/H774-JBL6>].

11. See Kenneth W. Dam, *The Subprime Crisis and Financial Regulation: International and Comparative Perspectives*, 10 CHI. J. INT'L L. 581, 582 (2010).

12. See *id.*

13. Kevin Young, *Financial Industry Groups' Adaptation to the Post-Crisis Regulatory Environment: Changing Approaches to the Policy Cycle*, 7 REG. & GOVERNANCE 460, 460 (2013); see also Rick Bookstaber et al., *Stress Tests to Promote Financial Stability: Assessing Progress and Looking into the Future* 3 (U.S. Dep't of Treasury: Office of Fin. Research, Working Paper No. 0010, 2013), https://bfi.uchicago.edu/sites/default/files/research/BookstaberCetinaFeldbergFloodGlasserman_StressTeststoPromoteFinancialStability.pdf [<https://perma.cc/FE2W-U6CF>].

14. See Claessens & Kodres, *supra* note 10, at 10.

15. FEDERAL HOUSING FINANCE AGENCY, OVERVIEW OF FANNIE MAE AND FREDDIE MAC CREDIT RISK TRANSFER TRANSACTIONS 2 (2015).

Kingdom.¹⁶ Securitization is common in the international market and plays an integral part in the sustainability and growth of housing markets in numerous countries.¹⁷ Although U.S. authorities have looked to European precedents for reform, the U.S. reforms following the subprime mortgage crisis focused primarily on internal banking procedures, which is contrary to the general system-wide approach to securities regulation in Europe.¹⁸

This Article will initially discuss the history and causes of the subprime mortgage crisis and then discuss the particular difficulties with the secondary housing market and mortgage-backed securities. This Article will then compare the different methods of securitization in several countries and illustrate how these methods may improve the functioning of the U.S.'s secondary mortgage market today.¹⁹

Next, this Article will review several countries' regulatory structures with respect to securities and bank regulations, and analyze the issues that have been addressed by U.S. and European legislators since the crisis. More specifically, this section will analyze the obstacles to financial stability that exist in global markets today.

Finally, this Article will propose potential solutions to identified regulatory shortcomings in order to enhance and thereby preserve a vital part of the global economy and housing market. A key conclusion of this Article is that a global perspective is essential when developing a response to a future financial crisis due to the interconnectedness of the global economy. Regulatory effects, domestic or global, will impact the world economy.

Future regulatory reforms must have the clear objective of reducing the risks and consequences of future systemic financial crises, such that overall economic growth is not adversely impacted. This Article urges policy makers to focus on the financial system as a whole when developing legislation intended to mitigate undue risk exposure. While policy makers have recognized the need for this broad approach to securities regulation, the United States' legislation post-crisis has failed to account for the interconnectedness of international economies. While economic systems necessarily differ according to specific needs and political imparities, the growth of technology and globalization in the twentieth century has created a worldwide interconnected and interdependent "system of systems." Coupled with this Article's proposed

16. See Yener Altunbas et al., *Securitisaton and the Banking Lending Channel* 9–12 (European Cent. Bank, Working Paper No. 838, 2007), <https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp838.pdf?1cf0a2a48e2127542110481651a395f8> [<http://perma.cc/2M2Y-E499>].

17. See *id.* at 10.

18. See *id.*

19. While this Article will comparatively examine each country's method of securitization, certain intricacies of individual complex financial instruments are beyond the scope of the Article and will not receive an in-depth analysis herein. However, they are taken into consideration in this Article's ultimate proposal.

broad approach, the latest financial crisis is a very useful exemplar, which policy makers can use to address issues that remain pertinent to global financial markets in order to avoid future crises.

I. WHAT WERE THE CAUSES OF THE U.S. SUBPRIME MORTGAGE CRISIS?

The issuing and trading of risky residential mortgage-backed securities led to the subprime mortgage crisis.²⁰ Mortgage-backed securities, specifically collateralized mortgage obligations (CMOs), are bonds secured by a pool of home and other real estate loans.²¹ This form of securitization began in the U.S. in 1968 when banks started pooling together large volumes of newly originated mortgages and selling them to certain investment market participants, particularly government-sponsored enterprises and private firms.²² Mortgage-backed securities held and issued by government-sponsored enterprises carried a government-backed guarantee on the securities' interest and principal payments.²³ Unlike privately-held mortgage-backed securities, the underlying loans in these mortgage-backed securities originated with credit-worthy homeowners.²⁴ However, the complexity of mortgage-backed securities and difficulty of accurately assessing the risk of large pools of mortgages led to the high ratings of privately-held mortgage-backed securities, thereby misleading investors.²⁵ Mortgage-backed securities issued by the government-sponsored enterprises are not rated because they are supported by a federal government guarantee.²⁶ Thus, credit rating agencies did not play

20. See Sewell Chan, *Financial Crisis Was Avoidable, Inquiry Finds*, N.Y. TIMES (Jan. 25, 2011), <http://www.nytimes.com/2011/01/26/business/economy/26inquiry.html> [<http://perma.cc/8245-6NND>].

21. *Mortgage-Backed Securities*, FINRA, <http://www.finra.org/investors/mortgage-backed-securities> [<https://perma.cc/2U9S-UMN8>]. See *Mortgage-Backed Security (MBS)*, INVESTOPEDIA, <https://www.investopedia.com/terms/m/mbs.asp> [<http://perma.cc/C8XJ-8VC8>], for a further explanation of a mortgage-backed security.

22. See John J. McConnell & Stephen A. Buser, *The Origins and Evolution of the Market for Mortgage-Backed Securities*, 3 ANN. REV. FIN. ECON. 173, 176–79 (2011).

23. *Id.*

24. See Wayne Passmore & Roger Sparks, *Putting the Squeeze on a Market for Lemons: Government-Sponsored Mortgage Securitization*, 13 J. REAL EST. FIN. & ECON. 27, 27 (1996).

25. McConnell & Buser, *supra* note 22, at 182.

26. *Id.* at 183.

a role in the issuance of mortgage-backed securities until the late 1990s and early 2000s when the volume of private label securities expanded.²⁷

A. Mortgage-Backed Securitization and Its Pre-Crisis History

The “traditional” method of securitization, specifically asset-backed securitization, structures debt securities in tranches, where loans are pooled together and then divided based on maturity and risk.²⁸ Leading up to the crisis, issuers pooled together subprime mortgage loans (i.e. high-risk loans) with high quality loans to offer investors attractive, high-yield mortgage-backed securities with high ratings that masked underlying risk exposures.²⁹ Credit rating agencies helped private issuers package their mortgage-backed securities so that issuers could achieve high ratings for lesser quality, higher-interest securities.³⁰ Investors all over the world relied on these ratings and sought mortgage-backed securities because they were highly rated and offered substantial returns.³¹

The mortgage-backed security is the best method for banks to dispose of the risks associated with lending.³² Once the mortgages are packaged and issued into the secondary market,³³ the entirety of the risk is externalized to investors.³⁴ Coupled with the high ratings that masked the risks transferred to investors, this led to a demand for more mortgages to create new securities,³⁵ and lenders began offering home loans to just about anyone, regardless of

27. *Id.*

28. See *What is a Tranche?*, FIN. WEB, <https://www.finweb.com/loans/what-is-a-tranche.html> [<https://perma.cc/WY6D-SWHK>], for a detailed explanation on how mortgage-backed securities are divided into tranches.

29. See Jeff Brown, *Why Investors Own Private Mortgage-Backed Securities*, U.S. NEWS (July 18, 2016, 9:59 AM), <https://money.usnews.com/investing/articles/2016-07-18/why-investors-own-private-mortgage-backed-securities> [<https://perma.cc/8QCQ-T9EZ>].

30. McConnell & Buser, *supra* note 22, at 182.

31. See Rusznak, *supra* note 5, at 849–50; see also Brown, *supra* note 29 (noting that trillions of dollars’ worth of mortgage-backed securities were issued leading up to the crisis because they were so appealing to investors).

32. *Protecting Homeowners: Preventing Abusive Lending While Preserving Access to Credit: Hearing Before the Subcomm. on Fin. Insts. & Consumer Credit and the Subcomm. on Hous. & Cmty. Opportunity of the Comm. on Fin. Servs.*, 108th Cong. 118 (2003) (prepared statement of Cameron L. Cowan, Partner, Orrick, Herrington, and Sutcliffe, LLP) (“[L]enders had the option to move any interest rate risk associated with mortgages off of their balance sheet.”).

33. The Nasdaq defines the secondary market as the market in which securities are traded after they are initially offered in the primary market. *Secondary Market*, NASDAQ, <http://www.nasdaq.com/investing/glossary/s/secondary-market> (last visited Jan. 30, 2019).

34. See FEDERAL HOUSING FINANCE AGENCY, *supra* note 15.

35. Carl Levin, *Wall Street and the Financial Crisis: The Role of Investment Banks*, HILL (Apr. 27, 2010, 3:19 PM), <http://thehill.com/blogs/congress-blog/campaign/94549-wall-street-and-the-financial-crisis-the-role-of-investment-banks-sen-carl-levin> [<https://perma.cc/ZU2T-KLFS>].

their credit history, because lenders were able to sell subprime loans before they went bad.³⁶

Consequently, in the years leading up to the crisis, housing prices had risen sharply—nearly doubling between 1996 and 2006.³⁷ However, the spike constituted a “housing bubble,” which would inevitably burst.³⁸ In 2006, when housing prices dropped significantly and millions of mortgages defaulted, the bubble burst.³⁹ The risky lending practices, permissible under the U.S.’s loose regulatory scheme at the time, provided an artificial incentive for people to enter the housing market who otherwise could not afford to do so.⁴⁰ The increase in housing prices did not actually represent a genuine increase in consumer demand, and the high demand for mortgage-backed securities was not based on a reasonable valuation.⁴¹ When housing prices dropped excessively, it was virtually impossible to ascertain the value of the various tranches of mortgage-backed securities because the underlying mortgages did not reflect the actual current market values of mortgage-backed securities.⁴²

B. Effects of the Crisis

The burst of the housing bubble resulted in the global financial crisis and the financial turmoil experienced around the world.⁴³ The institutional and individual investors that purchased and traded mortgage-backed securities

36. See Floyd Norris, *Banks Again Avoid Having Any Skin in the Game*, N.Y. TIMES (Oct. 23, 2014), <https://www.nytimes.com/2014/10/24/business/banks-again-avoid-having-any-skin-in-the-game.html> [<https://perma.cc/5283-9SAU>].

37. Kathryn J. Byun, *The U.S. Housing Bubble and Bust: Impacts on Employment*, MONTHLY LAB. REV. 7, (Dec. 2010), <https://www.bls.gov/opub/mlr/2010/12/art1full.pdf> [<https://perma.cc/H3ZB-BUVQ>].

38. *Bubble*, INVESTOPEDIA, <https://www.investopedia.com/terms/b/bubble.asp> [<https://perma.cc/L9NN-LY2U>].

39. *Id.*

40. See Edward J. Schoen, *The 2007–2009 Financial Crisis: An Erosion of Ethics: A Case Study*, 146 J. BUS. ETHICS 805, 811 (2017).

41. See Kimberly Amadeo, *Asset Bubble, With Examples, Its Causes, and How to Protect Yourself*, BALANCE, <https://www.thebalance.com/asset-bubble-causes-examples-and-how-to-protect-yourself-3305908> [<https://perma.cc/5S78-DMQ9>], for a descriptive illustration of the causes of the housing bubble.

42. *See id.*

43. See Stijn Claessens et al., *Introduction*, in FINANCIAL CRISES: CAUSES, CONSEQUENCES AND POLICY RESPONSES xiii, xx (Stijn Claessens et al. eds., 2014).

were not the only ones who suffered.⁴⁴ Many individuals lost their homes and declared bankruptcy as a result of the crisis.⁴⁵ Many individuals also faced unemployment; deflated consumer confidence and the associated reduced consumption caused profits to plummet and firms to lay people off.⁴⁶ Unemployment rose sharply in the U.S. and Europe after the crisis.⁴⁷

Issuers of credit default swaps, financial instruments that acted as insurance against potential defaults of the underlying mortgages, also suffered.⁴⁸ For example, American Insurance Group (AIG) issued billions of dollars' worth of credit default swaps, including \$400 billion to Lehman Brothers, and needed a federal reserve bailout when the mortgage default rates spiked harshly at the onset of the crisis and the insurer lacked sufficient funds to clear the debt.⁴⁹

Many other large financial institutions were in desperate need of assistance following the deterioration of mortgage-backed securities.⁵⁰ Merrill Lynch merged with Bank of America to avoid bankruptcy.⁵¹ Bear Stearns merged with JP Morgan for the same reason.⁵² Lehman Brothers went bankrupt.⁵³ Many of the largest banks that were integral to global economic support were heavily invested in mortgage bonds.⁵⁴ When default rates began to increase, the crisis became inevitable, imminent, and catastrophic.⁵⁵ Regulators were

44. See Viktoria Ney, *Many Americans Ended Up Homeless During the Real Estate Crisis 10 Years Ago—Here's Where They Are Now*, BUS. INSIDER (Aug. 7, 2018, 9:43 AM), <https://www.businessinsider.com/heres-where-those-who-lost-homes-during-the-us-housing-crisis-are-now-2018-8> [<https://perma.cc/DK29-8XQL>].

45. *Id.*

46. See Mary Hall, *Unemployment & Recession – What's the Relation?*, INVESTOPEDIA, <https://www.investopedia.com/ask/answers/032515/why-does-unemployment-tend-rise-during-recession.asp> [<https://perma.cc/4XMW-LMRU>].

47. Jens Manuel Krogstad & Antonio Flores, *After Nearly a Decade, the EU's Unemployment Rate Is Returning to Pre-Recession Levels*, WORLD ECON. F. (July 23, 2018), <https://www.weforum.org/agenda/2018/07/eu-unemployment-rate-falls-to-near-pre-recession-low> [<https://perma.cc/5R6D-ZJ35>].

48. Before the crisis, the value of credit default swaps was roughly \$45 trillion. In 2010, the value was nearly \$20 trillion lower. *Credit Default Swap*, CORP. FIN. INST., <https://corporatefinanceinstitute.com/resources/knowledge/finance/credit-default-swap-cds/> [<https://perma.cc/F44K-CJU9>].

49. *Id.*

50. See Nick Mathiason, *Three Weeks That Changed the World*, GUARDIAN (Dec. 27, 2008, 7:01 PM), <https://www.theguardian.com/business/2008/dec/28/markets-credit-crunch-banking-2008> [<https://perma.cc/9P9G-XBC6>].

51. *Id.*

52. *Id.*

53. *Id.*

54. See Levin, *supra* note 35.

55. See *id.*

unable to prevent the crisis and attempted to mitigate the crisis by bailing out big banks and orchestrating mergers.⁵⁶

According to the International Monetary Fund (IMF), in 2008, the U.S. and Europe incurred around \$267 billion in losses attributable to the subprime mortgage crisis.⁵⁷ The IMF estimated that the U.S. and Europe would sustain another \$92 billion worth of subprime-related losses following 2008.⁵⁸

Resulting legislation⁵⁹ has many shortcomings, and experts have continued to express concerns over the potential harm a future crisis would cause.⁶⁰ Professor David Skeel, who has written extensively on the financial crisis, stated, “The longer we go without firm controls in place, the more dangerous it is.”⁶¹ Ten years later, it still remains an issue whether the damage done to financial systems and economies can be overcome.⁶² To avoid such crises in the future, U.S. legislators should look at the causes of the global financial crises as well as the ways in which other countries have avoided such. More specifically, European countries have implemented alternative methods of securitization that may be useful for the U.S. to consider in designing its regulatory scheme to address the persistent transparency, incentive, and externality issues that still exist today.

II. ALTERNATIVE METHODS OF SECURITIZATION

European countries such as Germany have implemented various forms of “synthetic” securitization to combine the advantages of credit derivatives and conventional asset-backed securities.⁶³ Synthetic securitization is defined by Article 242 (11) of the Capital Requirement Regulation as a form of securitization where “the transfer of risk is achieved by the use of credit

56. See Mathiason, *supra* note 50.

57. INT'L MONETARY FUND, GLOBAL FINANCIAL STABILITY REPORT: CONTAINING SYSTEMIC RISKS AND RESTORING FINANCIAL SOUNDNESS 52 (2008).

58. *Id.*

59. See *infra* Section III.A.

60. See Ben Hallman, *Four Years Since Lehman Brothers, 'Too Big to Fail' Banks, Now Even Bigger, Fight Reform*, HUFFINGTON POST (Sept. 15, 2012, 9:29 AM), https://www.huffingtonpost.com/2012/09/15/lehman-brothers-collapse_n_1885489.html [<https://perma.cc/QP6J-47KW>].

61. *Id.*

62. *A Decade After the Great Recession, Is the Global Financial System Safer?*, KNOWLEDGE@WHARTON (Sept. 11, 2018), <http://knowledge.wharton.upenn.edu/article/ten-years-great-recession-global-financial-system-safer/> [<https://perma.cc/2X65-T64L>].

63. MARTIN BÖHRINGER ET AL., CONVENTIONAL VERSUS SYNTHETIC SECURITISATION—TRENDS IN THE GERMAN ABS MARKET 1 (Deloitte & Touche Germany eds., 2001).

derivatives or guarantees, and the exposures being securitized remain exposures of the originator institution.”⁶⁴ In other words, synthetic securitization transfers the credit risk of securitized assets without transferring the ownership of them.⁶⁵

The transfer occurs through a transaction where a guarantor and an originator enter into an agreement, known as a credit protection agreement.⁶⁶ The guarantor assumes the risk of the underlying assets without owning the actual securitized assets and makes money by insuring the risk of loss. This process is unlike traditional securitization, where the underlying exposures are transferred off the originator’s balance sheet and investors receive the money that the asset generates.⁶⁷ The assets underlying the synthetic security remain on the originator’s balance sheet, along with the assets’ underlying exposures, such as a mortgage’s default risk.⁶⁸ Guarantors contractually agree to insure the losses suffered by the owner of the underlying assets, up to a pre-agreed maximum amount, if a credit event occurs in relation to those assets.⁶⁹ Credit events are “those events that trigger credit protection payments from the [guarantor] to the [originator] within a credit protection contract.”⁷⁰ For insuring the potential losses, guarantors receive a premium based on the perceived probability of credit events occurring.⁷¹

Synthetic securitization is still very similar to traditional securitization in regard to the nature of the underlying assets and the way risks and returns are separated in tranches.⁷² They mainly differ in the way they transfer risk from originator to investor. Traditional securitization involves the effective legal transfer of the assets to the issuer of the securities and the underlying assets are removed from the originator’s balance sheet.⁷³ The investor in traditional securitization becomes entitled to the cash flows that are generated by those underlying assets, whereas the investor in synthetic securitization simply receives payments for the risk the investor is assuming.⁷⁴

64. *A Closer Look at Synthetic Securitization*, WSBI-ESBG (May 25, 2016), <https://www.wsbi-esbg.org/press/latest-news/Pages/A-closer-look-at-synthetic-securitization.aspx> [<https://perma.cc/K2CZ-N66T>].

65. EUROPEAN BANKING AUTH., *THE EBA REPORT ON SYNTHETIC SECURITISATION* 7 (2015).

66. *Id.*

67. *Id.*; see also *A Closer Look at Synthetic Securitization*, *supra* note 64.

68. Angelos Delivorias, European Parliament, Members’ Research Serv., *Synthetic Securitization: A Closer Look*, EUR. PARL. DOC. PE 583.848 (June 22, 2016), [http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/583848/EPRS_BRI\(2016\)583848_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/583848/EPRS_BRI(2016)583848_EN.pdf) [<https://perma.cc/R6L3-8P68>].

69. EUROPEAN BANKING AUTH., *supra* note 65.

70. *Id.* at 25.

71. *Id.* at 7.

72. *Id.*

73. Delivorias, *supra* note 68.

74. *Id.*

A. The History of Synthetic Securitization in Europe

European banks have implemented synthetic securitization to increase regulatory capital, account for varying costs of capital, increase investor demand, respond to regulatory shortfalls, and address the inability to transfer assets.⁷⁵ The issuance of synthetic securitization in Europe peaked during 2004-2005, with over € 180 billion (\$220 billion) of volume, reflecting the transition between Basel I and Basel II.⁷⁶ After the subprime mortgage crisis and the worldwide crash of the securitization market, European banks altered their synthetic securitization issuances to the lower tranches “with the aim of achieving regulatory capital relief and de-risking.”⁷⁷ While the synthetic securitization market in the U.S. came to a halt in 2007, it has recently gained popularity again in Europe.⁷⁸ Synthetic securitization’s popularity is evident through the actions of large European institutional investors, such as pension funds, which began bypassing the middleman brokers and making the synthetic securitization trades themselves.⁷⁹ These institutional investors have shifted risks associated with complex securities to outside investors in order to meet the European Commission’s stricter capital requirements.⁸⁰ The securitization market in Europe has been slow to recover from the financial crisis and the use of synthetic securitization is an example of Europe’s attempt to free up capital for economic growth.⁸¹

Before this recent spike in popularity, efforts to stimulate Europe’s securitization market were sparse.⁸² Although European securitized assets were affected by the financial crisis, it was primarily “guilt by association” that affected the European markets.⁸³ More specifically, the high-profile

75. Gordon Kerr & Marcello Bonassoli, *European Synthetic Securitisation: Presentation Slides*, DBRS (Mar. 29, 2017), <http://www.dbrs.com/research/307861/european-synthetic-securitisation-presentation-slides.pdf> [<https://perma.cc/996P-HLUS>].

76. EUROPEAN BANKING AUTH., *supra* note 65, at 11; *see infra* p. 420 (Basel I, II).

77. EUROPEAN BANKING AUTH., *supra* note 65, at 11.

78. *Id.* at 15; Daniel N. Budofsky, *A Resurgence of Synthetic Securitizations*, PILLSBURY (June 20, 2017), <https://www.pillsburylaw.com/en/news-and-insights/a-resurgence-of-synthetic-securitizations.html> [<https://perma.cc/2PNC-VHKW>].

79. Julie Segal, *In Search for Yield, Asset Owners Take on Bank Risks*, INSTITUTIONAL INV. (June 2, 2017), <https://www.institutionalinvestor.com/article/b1505pyc27yrjr/in-search-for-yield-asset-owners-take-on-bank-risks> [<https://perma.cc/J6AD-6LMJ>].

80. *Id.*

81. Budofsky, *supra* note 78.

82. *See Europe’s Securitisation Market Remains Stunted*, ECONOMIST (Feb. 23, 2017), <https://www.economist.com/finance-and-economics/2017/02/23/europes-securitisation-market-remains-stunted> [<https://perma.cc/RRW8-3NZH>].

83. *Id.*

defaults in the U.S. during the crisis have shaped a negative perception overseas towards securitization and its associated risks.⁸⁴ The demand for insuring losses on certain securitized assets, especially mortgages, was significantly less as a result.⁸⁵ In Europe, however, the credit quality of the synthetically securitized assets did not deteriorate as it did in the U.S.⁸⁶ The European Union's (EU) securitization market was more robust than its U.S. counterpart's securitization market during the crisis, and its defaults were significantly lower.⁸⁷ The revitalization of the popularity of synthetic securitization in Europe comes after years of attempts at revival by European regulators since the crisis.⁸⁸ For example, the European Central Bank (ECB) attempted to illustrate securitization's ability to spread risks in 2013.⁸⁹ The ECB, together with the Bank of England, published a rare joint in 2014 arguing for a "better-functioning [securitization] market in the EU."⁹⁰

B. *The German Pfandbrief*

An example of synthetic securitization is the German Pfandbrief.⁹¹ As a critical part of Germany's real estate financing market, Pfandbriefs have been issued by German banks for over two centuries in order to fund its mortgage lending.⁹² Pfandbriefs are regulated by BaFin. BaFin is a regulatory agency that supervises German business and transactions.⁹³ BaFin oversees German securities, banking, and insurance and ensures the German financial system's stability and integrity.⁹⁴ BaFin periodically reports on the state of the assets securing the mortgage bonds and oversees the banks issuing Pfandbriefs.⁹⁵ BaFin requires that the loan to value ratio of all German

84. Orçun Kaya, *Synthetic Securitisation: Making a Silent Comeback*, DEUTSCHE BANK RES. (Feb. 21, 2017), https://www.dbresearch.com/PROD/RPS_ENPROD/PROD0000000000441788/Synthetic_securitisation%3A_Making_a_silent_comeback.pdf [<https://perma.cc/C42Z-P6ZV>].

85. See *Europe's Securitisation Market Remains Stunted*, *supra* note 82.

86. See EUROPEAN BANKING AUTH., *supra* note 65, at 18.

87. Kaya, *supra* note 84.

88. *Europe's Securitisation Market Remains Stunted*, *supra* note 82.

89. *Id.*

90. *Id.*

91. See Rusznak, *supra* note 5, at 838.

92. See *id.*

93. *Id.* at 839.

94. See Marvin Fechner & Travis Tipton, *Securities Regulation in Germany and the U.S.*, COMP. CORP. GOVERNANCE & FIN. REG., Spring 2016, at 1, 8.

95. BUNDESVERBAND ÖFFENTLICHER BANKEN DEUTSCHLANDS & ALLEN & OVERY, *THE NEW GERMAN PFANDBRIEF ACT: STRENGTHENING GERMANY AS A FINANCIAL CENTER* 8–9 (2005), <https://www.yumpu.com/de/document/read/4059490/das-neue-pfandbriefgesetz-the-new-german-pfandbrief-act> [<https://perma.cc/97KD-AYQN>] (last visited Mar. 21, 2019).

securities be equal to the bond value.⁹⁶ Several years after the global financial crisis, the German Parliament passed the Pfandbrief Act to further protect investors and consolidate the regulation of the Pfandbrief into one comprehensive law.⁹⁷

The Pfandbrief is an example of a security that meets investors' needs for security and transparency, even in times of troubled capital market phases.⁹⁸ These advantageous qualities of the German Pfandbrief stem from its legal basis.⁹⁹ In July 2014, the European Banking Authority published a report naming Germany's legal framework the best of various European covered bond legislations.¹⁰⁰ Like the U.S., there has been a continued positive development of commercial real estate markets, which led to the increase in issuances of Pfandbriefs from 2010 to 2017.¹⁰¹

The German Pfandbrief Act exemplifies a successful regulatory framework for countries all over the world to follow in order to avoid future crises. The Association of German Pfandbrief Banks has referred to its country's most successful form of synthetic securitization as follows:

Quality by Tradition: even in troubled times, the Pfandbrief is an especially sound investment. Its first-class quality and stable returns on investment are valued by investors in Germany and abroad and, thanks in particular to the stringent German Pfandbrief Act, it will remain the benchmark in the covered bond market.¹⁰²

This excerpt identifies the most important attribute of the German Pfandbrief—its ability to endure financial turmoil.

The German legislature has primarily focused on the risk inherent in credit institutions and has defined specific risk management requirements for Pfandbrief banks.¹⁰³ This is especially important in addressing the causes

96. *Id.*

97. *See* Pfandbriefgesetz [PfandBG] [Pfandbrief Act], May 22, 2005, BUNDESGESETZBLATT, TEIL I [BGBl. I] at 1373, last amended by Gesetz [G], Mar. 20, 2009, BGBl. I at 607, § 30 (Ger.), *translated in* The Pfandbrief Act, Verband Deutscher Pfandbriefbanken [Ass'n of German Pfandbrief Banks], https://www.pfandbrief.de/site/dam/jcr:38daf12b-9478-4ba3-adde-dfd0b4cfaf05/EN_PfandBG_01_2019_.pdf [<https://perma.cc/X8TF-FMAX>].

98. DG HYP, THE GERMAN PFANDBRIEF MARKET 2015 | 2016 2 (2015), https://www.dzhyp.de/fileadmin/user_upload/Dokumente/Ueber_uns/Marktberichte/2015_DG_HYP_The_German_Pfandbriefmarket.pdf [<https://perma.cc/W4E5-VG79>].

99. *Id.*

100. *Id.*

101. *See id.*

102. Verband Deutscher Pfandbriefbanken, *The Pfandbrief Roundtable 2015*, COVERED BOND REP., Sept. 2015, at 1, 12.

103. DG HYP, *supra* note 98, at 18.

of the financial crisis because one significant cause was the excessive risk-taking by large financial institutions.¹⁰⁴ There are a number of requirements that German Pfandbrief banks must satisfy with respect to default risks, interest and exchange-rate risks, and operational and liquidity risks.¹⁰⁵ Similar to recent U.S. bank regulation, German Pfandbrief banks must also satisfy minimum capital and general cover requirements to withstand stress tests.¹⁰⁶ The large U.S. banks that crashed in the midst of the global financial crisis would have failed stress tests long before the crisis happened.¹⁰⁷ The inability of U.S. banks to withstand such stress tests was previously inconceivable by regulators until the inevitable failures actually took place.¹⁰⁸ The German Pfandbrief Act is structured to avoid that exact situation from happening in the future.¹⁰⁹

In contrast to U.S. creditors, Pfandbrief creditors can rightfully put their faith in the due diligence of the refinancing institutions because of the rigorous rules set forth by the German legislature.¹¹⁰ Pfandbriefs lack complexity relative to many U.S. securities and have sufficient monitoring by the German BaFin.¹¹¹ The complexity of synthetic securities backed by syndicated mortgage loans¹¹² is also simplified by the German Pfandbrief Act.¹¹³ Syndicated loans are extremely complex as they exist across the globe, making it difficult for credit rating agencies to rate them.¹¹⁴

The German Pfandbrief Act also differs from U.S. securities regulations in that the Act does not have any rating rules for public sector debtors.¹¹⁵ The United States' Securities and Exchange Commission (SEC) implemented strict rating rules following the financial crisis and pinpointed credit agencies to attempt to fix the insurmountable credit default risks.¹¹⁶ The member institutions of German Pfandbrief banks account for credit quality in the evaluation of the security's underlying assets, which is outside the bounds

104. See Schoen, *supra* note 40, at 816.

105. DG HYP, *supra* note 98, at 18.

106. See *id.* at 17–18.

107. See Mark Gongloff, *Stress Tests: Citigroup, Three Other Major Banks Fail*, HUFFINGTON POST (Mar. 13, 2012, 4:58 PM), https://www.huffingtonpost.com/2012/03/13/stress-tests-citibank_n_1342928.html [<https://perma.cc/7UZZ-3DCW>].

108. See *id.*

109. DG HYP, *supra* note 98, at 33.

110. See *id.* at 25.

111. *Id.*

112. A syndicated loan is a loan offered by a group of lenders that work together to provide funds for a single borrower. *Syndicated Loan Definition*, INVESTOPEDIA, <https://www.investopedia.com/terms/s/syndicatedloan.asp> [<https://perma.cc/R85M-YUBR>].

113. See *id.*

114. For a detailed description of syndicated loans, see *id.*

115. See DG HYP, *supra* note 98, at 27.

116. See *infra* Section III.A.

of necessity in the regulation of Pfandbriefs.¹¹⁷ The U.S.'s focus on credit rating agencies is effective to an extent, but it mitigates the valuable incentives for institutional investors to increase the value of their assets and loans.¹¹⁸ For example, German Pfandbrief banks are inherently incentivized to issue mortgage-backed loans with higher credit to achieve higher value under Germany's synthetic securitization practices.¹¹⁹

Rating agencies such as Fitch, Moody's and S&P play a role in the investment decision-making process of Pfandbrief investors, just like they do for any other investor in global markets.¹²⁰ However, their importance and influence on risk premiums, if any, has declined in the last few years.¹²¹ Instead, investors have to rely on other aspects like the due diligence of refinancing institutions.¹²² Nevertheless, in June 2015, Moody's assessed German Pfandbriefs at higher ratings than they were before.¹²³ In 2016, seventy-five percent of Pfandbriefs were assigned Moody's top rating (Aaa).¹²⁴ S&P also had a very positive assessment of Pfandbriefs following its evaluation of the Pfandbrief legal framework.¹²⁵

Germany's synthetic securitization in the form of mortgage Pfandbriefs have strict requirements under the Pfandbrief Act so that they exhibit transparency and further investor incentives without inhibiting growth.¹²⁶ Similar to the U.S.'s regulatory framework, the Pfandbrief Act imposes loan-to-value requirements on mortgage loans.¹²⁷ However, mortgage Pfandbriefs must satisfy additional criteria to ensure sound practices, which results in less necessary oversight by agencies under BaFin.¹²⁸ Under the Act, only mortgages on certain types of property are permitted and the underlying properties must be insured.¹²⁹ Furthermore, the loan-to-value requirement is extended to require regular testing and overall reevaluations when sharp

117. See DG HYP, *supra* note 98, at 21.

118. Luis A. Aguilar, Public Statement, *Restoring Integrity to the Credit Rating Process*, U.S. SEC. & EXCHANGE COMMISSION (Aug. 27, 2014), <https://www.sec.gov/news/public-statement/2014-08-27-open-meeting-statement-nrsro-laa> [<https://perma.cc/33EK-S5VG>].

119. See DG HYP, *supra* note 98, at 2.

120. *Id.* at 12.

121. *Id.*

122. *Id.* at 18.

123. *Id.* at 13.

124. *Id.*

125. *Id.* at 14.

126. See *id.* at 16–30.

127. *Id.* at 27.

128. *Id.*

129. *Id.*

decreases in prices occur.¹³⁰ More specifically, when lending values for properties fall in certain regions, the lending values in those regions are reviewed and adjusted if necessary.¹³¹

C. *The Future of Synthetic Securitization in Europe*

In December 2015, the European Banking Authority issued a report on synthetic securitization that described the underlying risk exposures associated with loans remaining in the hands of originators and on their balance sheets.¹³² The report suggested that banks can securitize by acquiring the insurance they need while keeping the loans they generated.¹³³

This means that risks are realized through the risk transfer by means of credit protection, resulting in a genuine tradeoff between efficiency and stability.¹³⁴ The best ways to improve financial stability are exemplified through both this tradeoff and through the inherent improvement of incentives in the synthetic securities market, which is realized in synthetic securities such as the Pfandbrief.¹³⁵ S&P's performance data on lifetime defaults for different methods of securitization shows that synthetic securitization has outperformed traditional securitization in multiple German market indices.¹³⁶

A fundamental misalignment of financial incentives played a large part in the subprime mortgage crisis.¹³⁷ The U.S.'s traditional securitization allowed the originators, as well as the financial institutions that repackaged the mortgage-backed securities, to avoid internalizing risks associated with the underlying mortgages.¹³⁸ Thus, there was little incentive to properly monitor the creditworthiness of individual borrowers and mortgage-backed securities.¹³⁹

Synthetic securitization provides a model for U.S. securitization to address this incentive issue.¹⁴⁰ Originators externalize the risk to investors that are willing to take them on.¹⁴¹ Therefore, investors are incentivized to understand the underlying mortgage risks because they are essentially assuming the role of an insurance agent to the mortgage originators.¹⁴²

130. *Id.* at 28.

131. *Id.*

132. EUROPEAN BANKING AUTH., *supra* note 65, at 18.

133. *Id.* at 22.

134. *See* Claessens & Kodres, *supra* note 10, at 8.

135. *See id.* at 7.

136. EUROPEAN BANKING AUTH., *supra* note 65, at 18.

137. *See* Rusznak, *supra* note 5, at 834.

138. *Id.*

139. *Id.*

140. *See* Claessens & Kodres, *supra* note 10, at 7.

141. *See* Rusznak, *supra* note 5, at 831–32.

142. *See id.* at 835.

Synthetic securitization is also prevalent in other parts of world, including Italy and parts of Asia.¹⁴³ Risk realization and the allocation of incentives are just two of the several strengths demonstrated by synthetic securitization.¹⁴⁴ In Italy, traditional securitization is the more common practice, but synthetic securitization has become increasingly popular in the last few years.¹⁴⁵ European banks, such as Italy's Banca di Credito Popolare, have implemented this method to manage credit risk and improve their capital ratios.¹⁴⁶ The European Commission has named synthetic securitization as one of the main objectives in its Capital Markets Union project.¹⁴⁷

Germany's use of traditional securitization had been minimal, in comparison to its synthetic securitization practices, until about 2005, when German securities regulation began to better accommodate risk takers.¹⁴⁸ When traditional securitization increased in Germany, it became a valuable complement to the Pfandbriefs by appealing to the increased appetite for "risk-and-return" investors while maintaining a strong market for "risk-averse" investors.¹⁴⁹ However, the crisis halted traditional securitization in both the U.S. and Germany.¹⁵⁰ In the midst of the crisis, U.S. regulators clamped down on traditional securitization, opening the door for synthetic securitization in the country.¹⁵¹ Overall, lending and investing has been altered in many market environments due to a global consensus for increased transparency.¹⁵² This Article will examine this international consensus and compare legislation in several different countries, including the U.S. and Germany. Ultimately, the goal of legislation should be to balance incentives for growth in the securitization market.

143. *Id.* at 842–43.

144. Claessens & Kodres, *supra* note 10, at 11.

145. See Owen Sanderson, *EIF Securitizations Funnel Structural Funds to SMEs*, GLOBALCAPITAL.COM (Jan. 26, 2018), <https://www.globalcapital.com/article/b16n58kzptd526/eif-securitizations-funnel-structural-funds-to-smes> [<https://perma.cc/KZL5-ZET6>].

146. *See id.*

147. *A Closer Look at Synthetic Securitization*, *supra* note 64.

148. *See* Ruznak, *supra* note 5, at 841.

149. *See id.*

150. *See* Sumit Agarwal et al., *The Asset-Backed Securities Markets, the Crisis, and TALF*, FED. RES. BANK CHI. 101 (2010).

151. *See* Daniel K. Tarullo, Governor, Speech at the Federal Reserve Bank of Cleveland and Office of Financial Research 2016 Financial Stability Conference: Financial Regulation Since the Crisis (Dec. 2, 2016).

152. *See* Jay Clayton, Chairman, SEC, Speech at the PLI 49th Annual Institute on Securities Regulation: Governance and Transparency at the Commission and in our Markets (Nov. 8, 2017).

III. CURRENT STATE OF GLOBAL FINANCIAL STABILITY

Recent reforms across the globe have focused on improving the internal finances of financial institutions by implementing liquidity standards and capital requirements on all global systemically important financial institutions (G-SIFI's).¹⁵³ These aims are critical in addressing the factors that led to the insolvency of some of the world's largest banks.¹⁵⁴ Had these requirements been in place in 2006, the global financial crisis may never have happened, or at the very least, its effects would have been mitigated. The following sections discuss these various approaches by U.S. and European regulators and the effects of their intended and realized outcomes.

A. U.S. Legislation in Response to the Crisis

Toward the outset of the crisis in 2009, U.S. regulators and central bank experts began officially meeting as the Financial Stability Board to coordinate future regulatory plans for U.S. financial institutions and set international banking standards.¹⁵⁵ Although regulators have faced challenges in ascertaining effective tools for securities reforms, the task is not impossible.¹⁵⁶ Legislation focused primarily on the internal financial statements of institutional investors, however, has neglected to implement the effective, necessary tools for avoiding future crises.¹⁵⁷

The increase in "banking supervision" in the U.S. has prevented banks from taking excessive risks, such as lending to individuals lacking creditworthiness.¹⁵⁸ This is a reaction to the deficient underwriting standards leading up to the subprime mortgage crisis.¹⁵⁹ The underwriting standards led to a significant increase in the average loan to value of home mortgages between 2001 and 2006, as well as an extreme acceleration of loans involving

153. Wayne Passmore & Alexander H. von Hafften, *Are Basel's Capital Surcharges for Global Systemically Important Banks Too Small?*, FEDERALRESERVE.GOV (Feb. 27, 2017), <https://www.federalreserve.gov/econresdata/notes/feds-notes/2017/are-basels-capital-surcharges-for-global-systemically-important-banks-too-small-20170223.html> [<https://perma.cc/NZ9L-SAJZ>].

154. *Id.*

155. *Policy Development and Coordination*, FIN. STABILITY BOARD, <http://www.fsb.org/what-we-do/policy-development/> [<https://perma.cc/EP66-CRXC>].

156. *See id.*

157. *See* Claessens & Kodres, *supra* note 10, at 4.

158. *See* Sabine Lautenschläger, Vice-Chair, Supervisory Bd. of the ECB, Speech at the Institute of International and European Affairs: Walled Off? Banking Regulation After the Crisis (Mar. 13, 2017).

159. *Id.*

100 percent financing.¹⁶⁰ Consequently, U.S. legislators have focused much of their attention on underwriting standards.¹⁶¹

In response to increased mortgage defaults, Congress targeted the mortgage originators and enacted the Mortgage Reform and Anti-Predatory Lending Act to help ensure that loans were not being made in excess of the value of the property.¹⁶² Congress properly recognized that mortgage originators are part of the transparency problem, but failed to address the needs of investors and the lack of tools necessary to help investors make better-informed decisions about the future.¹⁶³ Similarly, the SEC targeted creditors, ignoring some financial tools that already exist that could potentially increase transparency for investors.¹⁶⁴

Addressing systemic risks has been the basis for much of the more recent financial policies.¹⁶⁵ This is a step in the right direction that will address many of the prominent issues that exist outside financial statements. The subprime mortgage crisis shed light on institutional infrastructure flaws and the interconnectedness of international markets.¹⁶⁶ However, Congress has continued to focus on protecting the millions of defaulted homeowners instead of focusing on systemic risks and more macro-prudential policies.¹⁶⁷ The fragmentation that exists in American banking today is an important aspect to note in the systemic risks that still exist.¹⁶⁸

160. Between 2001 and 2006 the average loan to value on home mortgages rose nearly 10 % and the share of mortgage loans that involved 100 percent financing rose about 30%. Presentation of *Why We Are Still in the Early Innings of the Bursting of the Housing and Credit Bubbles – And the Implications for MBIA and Ambac*, T2 PARTNERS LLC 4 (May 7, 2008), https://files.meetup.com/81427/T2_presentation_mortgagesbond_insurers.pdf [<https://perma.cc/FLG5-EZUZ>].

161. See Peter J. Wallison, *Underwriting the Next Housing Crisis*, N.Y. TIMES (Oct. 31, 2014), <https://www.nytimes.com/2014/11/01/opinion/underwriting-the-next-housing-crisis.html> [<https://perma.cc/7TYX-J8C9>].

162. See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 929-Z, 124 Stat. 1376, 1871 (2010) (codified at 15 U.S.C. § 78o).

163. DARRELL DUFFIE, EUR. CENT. BANK, FINANCIAL REGULATORY REFORM AFTER THE CRISIS: AN ASSESSMENT 41 (2016), https://www.gsb.stanford.edu/sites/gsb/files/publication-pdf/rp3440_financial_regulatory_reform_after_the_crisis.pdf [<https://perma.cc/6ZU3-S4R3>].

164. See Daniel M. Gallagher, Comm'r, SEC, Speech at the U.S. Chamber of Commerce: SEC Reform After Dodd-Frank and the Financial Crisis (Dec. 14, 2011).

165. See Janet L. Yellen, Vice Chair, Fed. Res., Speech at the American Economic Association/American Finance Association Joint Luncheon: Interconnectedness and Systemic Risk: Lessons from the Financial Crisis and Policy Implications (Jan. 4, 2013).

166. *Id.*

167. *See id.*

168. *See id.*

*B. Comparison of Current Regulatory Structures in the
U.S. and Europe*

Mortgage-backed securitization has exposed the weaknesses of the fragmented regulatory structure within the U.S.¹⁶⁹ The U.S. separates its financial regulatory structure by delegating certain regulatory responsibilities to different agencies that have overlapping authorities.¹⁷⁰ Consolidating the regulation of banking and securities may be appropriate, especially given the success of the British FSA, the German BaFin, and similar consolidated agencies in Europe.¹⁷¹ Securities markets have become increasingly interconnected, and the U.S.'s fragmentation of these markets has created regulatory challenges.¹⁷² Since the crisis, different agencies have been inconsistent in regulating entities that engage in similar activities.¹⁷³ In its June 2009 proposal, the Obama administration attempted to address the fragmentation issue by proposing to consolidate two government agencies, the Office of Thrift Supervision (OTS) and the Office of the Comptroller of the Currency (OCC).¹⁷⁴ However, because this still leaves federal regulation of state banks with the Federal Deposit Insurance Corporation (FDIC) and the Federal Reserve, securities and banking regulation remain separate in the U.S.¹⁷⁵ Germany's establishment of the BaFin federally preempted national banking and furthered oversight of banking functions.¹⁷⁶

Similarly, the EU has little to say about regulatory issues within European countries and does not divide authority within different countries.¹⁷⁷ The extent of the EU's authority over banking regulation is limited to cross-border banking.¹⁷⁸ Conversely, the U.S. delegates important and systematic

169. *See id.*

170. *Financial Regulation: Complex and Fragmented Structure Could Be Streamlined to Improve Effectiveness*, U.S. GOV'T ACCOUNTABILITY OFFICE (Feb. 25, 2016), <https://www.gao.gov/products/GAO-16-175> [<https://perma.cc/N8M7-G4S4>].

171. *See* Sabrina R. Pellerin et al., *The Consolidation of Financial Market Regulation: Pros, Cons, and Implications for the United States* 41–46 (Fed. Res. Bank. Richmond, Working Paper No. 8, 2009), https://www.richmondfed.org/~media/richmondfedorg/publications/research/working_papers/2009/pdf/wp09-8.pdf [<https://perma.cc/99LG-XL2P>].

172. *See* Yellen, *supra* note 165.

173. *See* Pellerin et al., *supra* note 171, at 29.

174. ELIZABETH F. BROWN, VOLCKER ALLIANCE, *PRIOR PROPOSALS TO CONSOLIDATE FEDERAL FINANCING REGULATORS* 172, https://www.volckeralliance.org/sites/default/files/attachments/Background%20Paper%201_Prior%20Proposals%20to%20Consolidate%20Federal%20Financial%20Regulators.pdf [<https://perma.cc/J9ER-HUU2>].

175. *See* Pellerin et al., *supra* note 171, at 14.

176. *Id.* at 45.

177. *See id.* at 42.

178. Lorenz Emter et al., *Cross-Border Banking in the EU Since the Crisis: What is Driving the Great Retrenchment?* 3–4 (European Central Bank, Working Paper No. 2130, 2018), <https://www.ecb.europa.eu/pub/pdf/scpwps/ecb.wp2130.en.pdf?78e19edfa90c63da12986751621a6340> [<https://perma.cc/T8MU-2ZD4>].

issues to the federal level.¹⁷⁹ European fragmentation exists at the EU level, although there have been efforts to increase EU member states' banking regulation.¹⁸⁰ Nevertheless, countries within the EU, such as Germany, have a more centralized regulatory environment that inherently applies control when necessary.¹⁸¹

C. International Securities Reforms Post-Crisis

In September 2015, the European Commission generated a legislative proposal package with two related securitization proposals.¹⁸² The first proposed a regulation adopting common rules for securitization and creating a European framework for simple, transparent and comparable ("STC") securitizations.¹⁸³ In this proposal, the European Commission permits "true sale" securitizations to qualify as STC securitizations, but not synthetic transactions.¹⁸⁴ The proposal has two components: (1) a regulation on securitization that would require due diligence, risk retention, and transparency with a set of criteria to identify STC securitizations; and (2) an amendment to the rules relating to the capital treatment of securitizations for banks and investment firms.¹⁸⁵

At the time of this first proposal, the international standard-setters, such as the Basel Committee on Banking Supervision ("BCBS"), the International Organization of Securities Commissions, and the European Banking Association ("EBA"), had not yet developed STC criteria for synthetic securitization.¹⁸⁶ There was also no consensus on the specifics of these organizations' inclusions in the STC framework, and no clarity as to which synthetic securities should be considered STC securities and under which conditions.¹⁸⁷ However, the European Commission left open the possibility that some synthetic securities would qualify as STC securities if they performed well during the financial crisis and can be characterized as

179. See Pellerin et al., *supra* note 171, at 4.

180. See EUROPEAN CENTRAL BANK, BANKING STRUCTURES IN THE NEW EU MEMBER STATES 28–29 (2005).

181. See Pellerin et al., *supra* note 171, at 41–43.

182. Delivorias, *supra* note 68.

183. *Id.*

184. *Id.*

185. Segal, *supra* note 79.

186. Delivorias, *supra* note 68.

187. *Id.*

simple, transparent and standardized securities.¹⁸⁸ The second proposal is similar to the Basel Committee's in that it deals with banks' capital requirements.¹⁸⁹

The BCBS has responded to the financial crisis with an agenda known as Basel III.¹⁹⁰ The BCBS previously established standardized approaches for assessing risks associated with bank securities, known as Basel I and Basel II.¹⁹¹ The BCBS created Basel III in an effort to address the causes of the global financial crisis as they relate to the "supervision and risk management of the banking sector."¹⁹²

Critics of Basel III claim the Basel Committee regulations discriminate against synthetic securitization.¹⁹³ The critics of the Basel regulatory framework believe the structure of the legislation is discriminatory because it favors traditional securitization.¹⁹⁴ Critics suggest that the risk weight in synthetic securitization should be calculated in a more favorable way than the Basel regulations impose.¹⁹⁵ The top tranches of a synthetic securitization structure are often guaranteed by a bank, thereby placing a repayment obligation in the company that borrowed the money, as well as the guarantor bank.¹⁹⁶ Basel only takes into account the guarantor's credit rating and does not account for additional factors in its calculation of risks.¹⁹⁷

Consequently, the BSBC revisited its financial agenda and revised its securitization framework, which it published in December 2014.¹⁹⁸ The BSBC's revision came into effect in January 2018 as part of its broader Basel III.¹⁹⁹ This follows the joint review of international securitization markets by BSBC and the International Organization of Securities

188. *Id.*

189. *Id.*

190. Matt Schlickemaier, *Basel III and Credit Risk Measurement: Variations Among G20 Countries*, 14 SAN DIEGO INT'L L.J. 193, 194 (2012).

191. *Id.* at 196.

192. *Id.* at 210.

193. INT'L SWAPS & DERIVATIVES ASS'N, ISDA'S COMMENT PAPER ON THE NEW BASEL ACCORD 105 (2001), <https://www.bis.org/bcbs/ca/isdaresp.pdf> [<https://perma.cc/KM87-B9HL>].

194. Mikael Harstad, *Legal Risks of Conventional and Synthetic Securitization*, UNIV. LUND (2006), <http://lup.lub.lu.se/luur/download?func=downloadFile&recordId=1558151&fileId=1564558> [<https://perma.cc/8Z2L-W88Q>].

195. See Melvyn Westlake, *Drive for Bigger Basel II Securitisation Changes*, GLOBAL RISK REGULATOR (Feb. 15, 2007), <https://www.globalriskregulator.com/Archive/Newsletter-Mar-2004-Drive-for-bigger-Basel-II-securitisation-changes> [<https://perma.cc/SS2L-V2SY>].

196. See Harstad, *supra* note 194.

197. *Id.*

198. *Basel III Document: Revisions to the Securitization Framework*, BASEL COMM. BANKING SUPERVISION (rev. July 2016), <https://www.bis.org/bcbs/publ/d374.pdf> [<https://perma.cc/2J6G-HEPH>].

199. *Id.*

Commissions (“IOSCO”).²⁰⁰ In July 2015, the BSBC and the IOSCO issued criteria to assist the financial industry’s development of simple, transparent and comparable (STC) securitization.²⁰¹ These revisions are guided by the BSBC’s effort to strike an appropriate balance between risk sensitivity, simplicity and comparability.²⁰² This is the latest international regulatory effort to consider whether, and how, STC criteria for synthetic securitization should be developed.²⁰³ The BSBC will then determine how to incorporate synthetic securitization in its Basel III revised securitization framework and how the various types of exposures will be treated.²⁰⁴

Since the financial crisis, synthetic securitization, namely credit default swap (CDS) trading, has declined significantly in the United States.²⁰⁵ An International Swaps and Derivative Association (ISDA) Quarterly Report in 2016 disclosed that the notional outstanding volume of these instruments had fallen by more than 75% since June 2008.²⁰⁶ A variety of factors have contributed to this decline, such as (1) changes in bank capital rules, (2) the significant decline in the synthetic CDO market, (3) uncertainty surrounding portfolio margining, and (4) generally less demand, likely due to hedging or speculative trading responsive to lower default rates following the crisis.²⁰⁷

German banks were among the countless foreign banks that bought subprime mortgage-backed securities without entirely knowing the risks.²⁰⁸ Large and small financial institutions across the world bought these securities because the prospective returns were relatively higher than almost every other investment opportunity.²⁰⁹ Also, the international Basel requirements encouraged these financial institutions to own mortgage-backed securities

200. *Id.*

201. *Id.*

202. *Id.*

203. *Id.*

204. *Id.*

205. For a discussion on market initiatives, see Gary Barnett, Deputy Director, SEC Div. of Trading & Mkts., Remarks at the ISDA Annual Legal Forum in New York (June 16, 2016), <https://www.sec.gov/news/speech/barnett-remarks-isda-annual-legal-forum-2016.html> [<https://perma.cc/XH37-RV84>].

206. *Id.*

207. *Id.*

208. See Frank Hornig et al., *American Mortgage Crisis Rattles German Banking Sector*, SPIEGEL ONLINE (Germany) (Aug. 10, 2007, 11:18 AM), <http://www.spiegel.de/international/business/bad-debts-american-mortgage-crisis-rattles-german-banking-sector-a-499160.html> [<https://perma.cc/3BLP-E5QY>].

209. See Dam, *supra* note 11, at 582.

rather than loans.²¹⁰ The magnitude of losses suffered outside the U.S. as a result of the crisis demonstrates the interconnectedness of the global financial world.²¹¹ It is now more evident than ever that financial stability in securitization markets must be achieved through a global perspective and macro-prudential policy.

IV. HOW CAN UNDUE RISKS BE AVOIDED, OR AT LEAST MITIGATED, IN THE FUTURE?

Risk is, by definition, an intrinsic characteristic of any risk-reward scenario. Risks are measures of uncertainty that investors must calculate and are typically directly proportionate to any reward—i.e. the greater the potential reward, the greater the risk. Substantial risks will always remain in global markets, including risks of future crises. Although risks of market failure have been mitigated by numerous regulatory practices following the subprime mortgage crisis, it is likely there are approaches yet to be devised that may further protect systems against catastrophic destabilizing.

The legislative proposal put forward by the BSBC is one example of an approach that reduces an overreliance on banks and promotes, instead, more reliance on simple, transparent securitization.²¹² On the other hand, U.S. regulation has predominantly focused on the internal practices of large financial institutions.²¹³ U.S. regulators have imposed capital requirements on commercial and investment banks to reduce the risks of insolvency.²¹⁴ They also have required all commercial banks to maintain certain minimum levels of deposit insurance from the FDIC to reduce depositors' incentives to demand withdrawals when liquidity issues occur.²¹⁵ Liquidity issues have been addressed by granting the Federal Reserve the authority to serve as a "lender of last resort" for these financial institutions.²¹⁶

The primary objective of U.S. regulators has been to reduce the risks and costs of future systemic financial crises in a manner that would have

210. See John Carney, *Why Banks Bought So Many Toxic Mortgage Bonds*, BUS. INSIDER (Aug. 7, 2009, 1:53 PM), <http://www.businessinsider.com/why-banks-bought-so-many-toxic-mortgage-bonds-2009-8> [<https://perma.cc/JJ78-475B>].

211. DEPOSITORY TR. & CLEARING CORP., UNDERSTANDING INTERCONNECTEDNESS RISKS TO BUILD A MORE RESILIENT FINANCIAL SYSTEM 12–15 (2015), <http://www.dtcc.com/news/2015/october/12/understanding-interconnectedness-risks-article> [<https://perma.cc/ZVZ9-MBWD>].

212. See *Europe's Securitisation Market Remains Stunted*, *supra* note 82.

213. See JAY B. SYKES, CONG. RESEARCH SERV., R45162, REGULATORY REFORM 10 YEARS AFTER THE FINANCIAL CRISIS: SYSTEMIC RISK REGULATION OF NON-BANK FINANCIAL INSTITUTIONS 9–10 (2018).

214. *Id.*

215. *Id.*

216. *Id.* at 10.

the smallest impact on overall economic growth.²¹⁷ As legislative attorney and Congressional researcher Jay B. Sykes explains, “[h]owever, as the 2007-2009 financial crisis has arguably demonstrated, sometimes these measures have proven insufficient to prevent financial institution failures.”²¹⁸ Thus, regulation and legislation with a more system-wide view, coupled with the present focus on internal banking systems, should be the target moving forward.

The somewhat newfound focus on systemic risk has facilitated a shift toward a more system-wide view. This was an implicit concern of the Obama administration’s proposal to merge federal agencies in an attempt to centralize the U.S. regulatory environment. However, fragmentation is not the primary issue. The problem remains that even systemic responses will be ineffective unless they address incentives, externalities, transparencies, and market failures.

Germany’s legislation established a financial instrument that encourages positive investor incentives and increases transparency through its legal framework. The German Pfandbrief provides investors with a degree of safety that is only offered by a select few countries across the world.²¹⁹ The Pfandbrief has been cited as one of the soundest instruments during a financial crisis like the 2008-2009 crisis.²²⁰ The EU acknowledged the success of the Pfandbrief, and implemented Germany’s strict safety requirements in EU regulations.²²¹ The EU included many aspects of Germany’s legal framework in its policy directives to investment companies (e.g., Art. 52 IV UCITS Directive), its Capital Requirement Directive, and its Preferential Treatment of Pfandbrief within the scope of the European Central Bank’s monetary policy operations.²²² The U.S. can learn much from foreign regulatory approaches, and implement practices such as Germany’s synthetic securitization in the form of Pfandbriefs and other international legislation already in place.

217. See *supra* Part I.

218. SYKES, *supra* note 213, at 10.

219. Orazio Mastroeni, *Pfandbrief-style products in Europe*, BANK FOR INT’L SETTLEMENTS 45, 51, <https://www.bis.org/publ/bppdf/bispap05b.pdf> [<https://perma.cc/256B-EZEE>].

220. *Id.* at 50–51.

221. *Id.*

222. *Id.*

A. Incentives & Externalities

Prior to securitization, mortgage originators had one incentive: to loan money to people that would pay it back, with interest. After securitization, and during the crisis, mortgage originators and those financial institutions responsible for packing the mortgages into securities lacked this incentive because default risks were transferred entirely to those investors who purchased mortgage-backed securities. Consequently, loans to risky borrowers increased significantly. Originators did not care that they were charging high interest rates to borrowers with bad credit because they made their money and never incurred losses when defaults occurred. In fact, mortgage originators had an incentive to pursue risky mortgages in order to offer higher returns (in the form of higher interest rates) to investors.

This is the first and most important issue that U.S. policy makers should address and incorporate into practices. This is because economists and many policy makers believe incentives are most effective in achieving desired financial solutions.²²³ Europe's widespread use of synthetic securitization is structured so that originators keep the mortgages on their books. Although mortgage originators can already issue securities that act as insurance policies, synthetic securitization restricts the externalization to the extent that risky lending will be more transparent and less likely to occur. The risks would be known to potential investors, who can then make an informed decision as to whether they are acceptable given the potential return on their investment. Thus, mortgage originators would be deterred from engaging in careless lending practices and extreme risk taking.

B. Transparency

The risks associated with mortgage-backed securities were extremely difficult to ascertain because credit rating agencies helped private issuers package their securities to obtain higher credit ratings. Unlike most securities, the critical information about mortgage-backed securities did not come from the market. Instead, the particular rating an agency would give a mortgage-backed security was typically the primary, if not the only, information available for investors to base their decisions on. The fact that so many of the world's largest banks purchased securities backed by subprime loans illustrates the lack of transparency that existed in the secondary mortgage market.

The absence of market information on mortgage-backed securities contributed to the extreme volumes of subprime mortgage-backed securities because investors relied on the credit agencies' prime ratings. Mortgage-backed

223. COMM. FOR ECON. DEV., REGULATION & THE ECONOMY: THE RELATIONSHIP & HOW TO IMPROVE IT (2017).

securities were very appealing because they yielded high interest rates and they were rated highly by reputable agencies, such as Standard and Poor's, Moody's and Fitch. Investors were largely unaware of the significant default risks that came along with the underlying subprime mortgages, hundreds of thousands of which would eventually go into default. These credit rating agencies likely had serious conflicts of interest in rating the securities that were assigned to them.

Large institutional investors certainly should have known enough about mortgage-backed securities to know that high interest rate loans are unlikely to back "top-rated" securities—this is simply counterintuitive. Just like buying high and selling low cannot be made up with volume, it is unlikely that bundling high risk mortgage loans (i.e., high interest rates) would result in an increased credit rating. Regardless, the lack of public information may have violated the Securities Exchange Act of 1934 for nondisclosure or fraudulent disclosure of certain information.

Transparency can be increased by implementing aspects of synthetic securitization in conjunction with the Securities and Exchange Commission's Regulation AB, established at the beginning of 2005, as the first inclusive set of regulations for traditional securitization.²²⁴ Regulation AB lays out the registration, disclosure, communication and periodic reporting practices required for asset-backed securities.²²⁵ The SEC revised certain disclosure and reporting requirements, and implemented several key areas of reform in response to the global financial crisis in its second edition of the regulation (Regulation AB II) in August 2014.²²⁶ U.S. legislators can further improve transparency by supplementing the disclosure requirements for asset-backed securities and including aspects of synthetic securitization, such as requiring public-style disclosure for the resale of structured finance products and privately-held asset-backed securities.²²⁷

Increases in transparency could also be realized by tailoring regulation to the aforementioned incentive and externality issues on a broad and systemic basis. These increases in transparency could be achieved by implementing the incentives in synthetic securitization: specifically, that

224. SEC. EXCH. COMM'N, RIN 3235-AF74, ASSET-BACKED SECURITIES (2004).

225. *Id.*

226. SEC. EXCH. COMM'N, RIN 3235-AK37, ASSET-BACKED SECURITIES DISCLOSURE AND REGISTRATION (2014).

227. *Regulation AB/Regulation AB II*, CHAPMAN AND CUTLER LLP: STRUCTURED FINANCIAL INSIGHTS, <https://www.structuredfinanceinsights.com/resources-17.html> [<https://perma.cc/X4M8-RZ7T>].

the agreement in a synthetic security transaction requires both parties to determine the risk of default for the underlying asset and the amount the buyer will pay for the risk of default that the seller is assuming. This way, both parties would have an incentive to fully investigate and understand the underlying assets as much as possible. This incentive affords more objective information about the underlying assets. The SEC's Regulation AB would likely provide significantly more transparency if it was coupled with this negotiation requirement.

The U.S.'s current regulatory framework will likely allow for complementary criteria issued by the BSBC and the IOSCO. Furthermore, U.S. regulators should focus on the financial industry's development of "simple, transparent and comparable securitizations."²²⁸ U.S. regulators can augment their focus on internal bank and creditor practices with a similar aim to the BSBC's effort to strike an appropriate balance between risk sensitivity, simplicity, and comparability.²²⁹ However, this would require a broader, systemic view of financial markets. The BSBC is in the process of defining criteria for "simple, transparent and comparable securitization" for synthetic securitization; as such, the time is now for U.S. regulators to consider the STC framework's applicability in the current regulatory scheme.²³⁰ U.S. regulators have already incorporated parts of the Basel Committee's agenda and can likely implement aspects of these foreign synthetic securitization practices as well.²³¹

C. Market Failures

This Article's proposal, although directed at U.S. reform, advocates for a more collaborative and globally inclusive approach to the regulation of the secondary mortgage market. Since the crisis, U.S. regulators targeted specific banking practices, without making any significant steps toward integrating with or including regulatory practices that have been found to work outside the U.S. However, the interconnectedness of today's financial markets warrants a broader view to foresee and respond to the systemic risks. Moreover, U.S. securities, in particular, are widespread and abundant across the globe, and as has been seen from the crisis, these securities have huge impacts on global economies.

Thus, an inclusive perspective is necessary in safeguarding mortgage-backed securities. U.S. regulation will better address market failures when it is done in conjunction with international institutions, especially those in

228. *See supra* Section III.C.

229. *Id.*

230. *Basel III Document: Revisions to the Securitization Framework, supra* note 198.

231. *Supra* Section III.C.

Europe where there is substantial economic overlap. Additionally, U.S. regulation will likely mitigate more of the risks associated with the crisis if it incorporates aspects of securitization methods used in Europe, especially aspects of Germany's Pfandbrief.

Current reform, which specifies liquidity and capital requirements for large banks, is past due for complementary reform that focuses on systemic risks in a manner which acknowledges more explicitly the interactions of global markets. Moreover, the synthetic securitization methods utilized outside the U.S. provide insight into how to overcome the structural problems of mortgage-backed securities.

D. Globalization

The interconnectedness of individual countries' economic systems is demonstrated by the globalization of markets.²³² Technological advances drove the world toward a commonality convergence, which in turn triggered the emergence of standardized global markets in the early 1980s.²³³ Technology enabled businesses to operate as if the world were a single entity by transforming communication, transport, and travel.²³⁴ "Daniel J. Boorstin, author of the monumental trilogy *The Americans*, characterized our age as driven by 'the Republic of Technology [whose] supreme law . . . is convergence, the tendency for everything to become more like everything else.'"²³⁵ Today, the world is witnessing the almost instantaneous interconnectedness of individuals and access to information enabled by computers, phones, and applications that proliferate across societies.

Technological forces have led businesses to sell standardized products in the same way all across the world.²³⁶ For example, agricultural commodities and equipment, banking and insurance services, and industrial and commercial construction have become more standardized since the midpoint of the twenty-first century.²³⁷ Since then, the most competitive businesses are able to offer superior quality and reliability by optimizing the best combinations

232. See Theodore Levitt, *The Globalization of Markets*, HARV. BUS. REV. (May 1983), <https://hbr.org/1983/05/the-globalization-of-markets> [<https://perma.cc/A34C-E3JB>].

233. *Id.*

234. *Id.*

235. *Id.*

236. *Id.*

237. *Id.*

of price, quality, reliability, and delivery for products that are globally identical with respect to design, function, and even fashion.²³⁸

In the several years following the Sarbanes-Oxley Act of 2002, influential voices in the political, business, and academic communities expressed growing concern that the U.S. capital markets were losing their competitive advantage.²³⁹ In 2008, the U.S. Department of Treasury warned about the “real and growing” threat to U.S. competitiveness in global markets and urged reforms “to protect the competitiveness of the U.S. public capital markets.”²⁴⁰ At the end of the crisis in 2009, the interconnectedness of global markets and the importance of a globally coordinated approach toward securities regulation became more apparent than ever.²⁴¹ With this in mind, the Obama Administration proposed financial regulatory reforms with the intent of strengthening international cooperation in raising international regulatory standards.²⁴² The bulk of these reforms focused predominately on increased oversight of the global financial markets, and the global financial firms in particular, whose instability caused significant damage to the global economy.²⁴³ These reforms were introduced during a time of increased doubts about the future of globalization.²⁴⁴

However, the bleak outlook for globalization following the global financial crisis was short-lived.²⁴⁵ Trade and foreign direct investment, which were hit hard during the financial crisis, have generally been positive and strong indicators of the state of globalization since 2009.²⁴⁶ According to data on international trade, capital, people and information flows, globalization slowed in 2015 but did not go into reverse.²⁴⁷ In 2016, globalization remained flat and may have even increased.²⁴⁸ The Obama Administration likely influenced the continuation of globalization through its repeated calls for

238. *Id.*

239. *See, e.g.*, U.S. CHAMBER OF COMMERCE: COMM’N ON THE REGULATION OF U.S. CAPITAL MKTS. IN THE 21ST CENTURY, REPORTS & RECOMMENDATIONS 4 (2007); Kate Litvak, *The Effect of the Sarbanes-Oxley Act on Non-US Companies Cross-Listed in the US*, 13 J. CORP. FIN. 196, 208–10 (2007).

240. Mallory Factor, *Capital Markets Reform—Now!*, FORBES (Dec. 5, 2006, 12:00 PM), https://www.forbes.com/2006/12/05/congress-capital-markets-reform-oped-cx_mf_1205mallory.html#395433835efe [<https://perma.cc/U393-K6LR>].

241. Barbara Black, *Introduction: The Globalization of Securities Regulation—Competition or Coordination?*, 79 U. CIN. L. REV. 461, 462 (2011).

242. *Id.*

243. *Id.* at 462–63.

244. *See* Pankaj Ghemawat, *Globalization in the Age of Trump*, HARV. BUS. REV. (July-Aug. 2017), <https://hbr.org/2017/07/globalization-in-the-age-of-trump> [<https://perma.cc/UZA8-XSYA>].

245. *See id.*

246. *Id.*

247. *Id.*

248. *Id.*

a more interconnected world.²⁴⁹ An example of President Obama's commitment to globalization was his response to the Brexit initiative in Great Britain in 2016, an event which created a fair amount of doubt as to the future of globalization, when he said that the "integration of national economies into a global economy" was omnipresent.²⁵⁰

The Economist published a cover story "The Retreat of the Global Company," in which it proclaimed that "the biggest business idea of the past three decades is in deep trouble" and that "the advantages of scale and . . . arbitrage have worn away."²⁵¹ Conversely, Jeffrey Immelt, previous chairman and CEO of General Electric, talked about the GE's "bold pivot" from globalization to localization.²⁵² These differing views are evidence that the issue is far from resolved.

Obama's presidential successor, Donald Trump, made apparent his substantial opposition to globalization during his presidential campaign in 2016.²⁵³ In the midst of Trump's campaign, President Obama argued that there was no turning back from an interconnected world.²⁵⁴ Toward the end of Obama's presidency in November 2016, he cautioned, "in the years and decades ahead, our countries have to make sure that the benefits of an integrated global economy are more broadly shared by more people, and that the negative impacts are squarely addressed."²⁵⁵

President Trump has continuously advocated for a new era of protectionism.²⁵⁶ For example, President Trump constantly discussed tariffs against China

249. See Perry Bacon Jr., *Trump's and Obama's Views on Globalization Reflect Broader Gap*, NBC NEWS (July 4, 2016, 9:56 AM), <https://www.nbcnews.com/meet-the-press/trump-s-obama-s-views-globalization-reflect-broader-gap-n601901> [<https://perma.cc/6FM5-ZVUG>].

250. Brian Naylor, *Obama: Globalization is 'Here' and 'Done'*, NPR: POL. (June 29, 2016, 6:41 PM), <https://www.npr.org/2016/06/29/484087513/obama-globalization-is-here-and-done> [<https://perma.cc/4L7M-WGDC>].

251. Ghemawat, *supra* note 244.

252. *Id.*

253. Bacon, *supra* note 249.

254. Juliet Eilperin, *Obama in Athens: 'The Current Path of Globalization Needs a Course Correction'*, WASH. POST (Nov. 16, 2016), https://www.washingtonpost.com/news/post-politics/wp/2016/11/16/obama-in-athens-the-current-path-of-globalization-needs-a-course-correction/?utm_term=.0370d95c5931 [<https://perma.cc/6JZP-S7TK>].

255. *Id.*

256. Joseph E. Stiglitz, *Rethinking Globalization in the Trump Era: US-China Relations 2* (June 2017) (working paper) (available at http://rooseveltinstitute.org/wp-content/uploads/2017/06/Stiglitz-The-Retreat-from-Globalization-and-its-Implications-for-China_M.pdf [<https://perma.cc/6NM7-4QDJ>]).

and Mexico and a renegotiation of NAFTA in his first year in office.²⁵⁷ On January 20, 2018, President Trump approved heavy tariffs on imports of washing machines and solar energy cells and panels, which was the first major step by the administration in implementing the trade barriers Trump frequently mentioned.²⁵⁸ President Trump’s “America First” approach is likely to also lead to additional trade measures related to steel, aluminum, and other Chinese products.²⁵⁹ However, the imposition of tariffs on China will likely not have significant impacts on China’s multilateral trade deficit because China will divert trade to other emerging markets.²⁶⁰ Additionally, the vast number of international institutions in place that help the world maintain an open yet regulated trading and financial system, such as the World Trade Organization (WTO) and the International Monetary Fund (IMF), are likely to limit the Trump presidency’s effects on globalization.²⁶¹

These international institutions have expanded their mandates and increased their oversight since they were put in place after World War II to prevent another Great Depression.²⁶² However, since the beginning of the twenty-first century, these institutions have become highly contested from both the left and right wings of the political spectrum.²⁶³ Right-wing critics view these institutions as detrimentally replacing market roles and restricting efficient, market-promoting policies.²⁶⁴ On the other hand, critics from the left believe these institutions are tools for the rich countries to dominate developing countries.²⁶⁵ Nevertheless, these international institutions have been largely beneficial for their member countries.²⁶⁶

Globalization has been a relevant topic of discussion amongst international policymakers at the beginning of 2018, one year after President Trump’s election.²⁶⁷ At the Asian Financial Forum on January 11, 2018, International

257. *Id.*

258. Brad Plumer & Ana Swanson, *Trump Slaps Steep Tariffs on Foreign Washing Machines and Solar Products*, N.Y. TIMES (Jan. 22, 2018), <https://www.nytimes.com/2018/01/22/business/trump-tariffs-washing-machines-solar-panels.html> [<https://perma.cc/B3DX-3G2B>].

259. *Id.*

260. *See* Stiglitz, *supra* note 256, at 4.

261. *Id.* at 2.

262. Helen V. Milner, *Globalization, Development, and International Institutions: Normative and Positive Perspectives*, 3 PERSP. ON POL. 833, 833 (2015).

263. *Id.*

264. *Id.*

265. *Id.*

266. *Id.* at 833–34.

267. *See generally* Jason Karaian, *At Davos, Cheerleaders for Globalization Puzzle Over How to Save It from Itself*, QUARTZ (Jan. 23, 2018) (describing the hot topic of globalization in talks at the annual World Economic Forum), <https://qz.com/1187219/davos-how-to-fix-globalization-with-chanda-kochhar-devin-wenig-mauricio-cardenas-minouche-shafik/> [<https://perma.cc/4S6G-8773>].

Monetary Fund First Deputy Managing Director David Lipton encouraged Chinese policymakers to loosen trade and investment restrictions in order to play a leading role in globalization.²⁶⁸ On January 24, 2018, a panel of distinguished business leaders, such as Blackstone CEO Stephen Schwarzman and Bank of America CEO Brian Moynihan, discussed the ways countries are gaining competitive advantages in the global market and how that is likely to affect the state of globalization.²⁶⁹ Europe has focused on making Germany and France more competitive because much of Europe's economic success stems from that region.²⁷⁰ The U.S. is trying to become more competitive through tax legislation and corporate deregulation.²⁷¹ President Trump's tax reform bill, which he signed into law at the end of 2017, makes the U.S. tax system more closely resemble those of other countries, which in turn drives more natural behavior within the global economy.²⁷²

The President and CEO of the Federal Bank of New York, William Dudley, also said the debate about the benefits and challenges of globalization was a hot topic, in his 2017 speech at the Bombay Stock Exchange.²⁷³ He stressed the importance of globalization's role in all economies across the world and said, "if support for liberalized trade and an integrated global economy were to suffer a significant setback, the consequence could be slower economic growth and lower living standards around the world."²⁷⁴ In discussing the pace of globalization, Dudley emphasized the dramatic increase in global economic integration, and argued for preserving globalization, because "economies have become more integrated and interdependent."²⁷⁵

If globalization were to suffer a setback during the Trump presidency, the world would nevertheless remain more globalized in terms of trade and

268. Enda Curran & Stephen Engle, *IMF Says China Must Fix Shortcomings to Lead Globalization*, BLOOMBERG (Jan. 14, 2018, 5:55 PM), <https://www.bloomberg.com/news/articles/2018-01-15/imf-says-china-must-address-shortcomings-to-lead-globalization> [<https://perma.cc/A22E-Q2B3>].

269. *Biz Leaders Talk 'Global Markets in a Fractured World'* (Fox Business broadcast Jan. 24, 2018), <https://video.foxbusiness.com/v/5718608069001/#sp=show-clips> [<https://perma.cc/2HHL-B7M6>].

270. *Id.*

271. *Id.*

272. *Id.*

273. William C. Dudley, President and Chief Executive Officer, Fed. Res. Bank of N.Y., Remarks at the Bombay Stock Exchange, Mumbai, India: Benefits and Challenges from Globalization (May 11, 2017).

274. *Id.*

275. *Id.*

foreign direct investment than it was in the entire nineteenth century.²⁷⁶ Additionally, international activity has not slowed significantly since the global financial crisis, notwithstanding the first year of Trump's presidency.²⁷⁷

Thus, it still stands unclear whether a retreat from globalization is on the horizon.²⁷⁸ The interconnectedness and interdependencies of global economies remains and will continue to remain for the foreseeable future—it is only a matter of degrees. Although a country's economic system will always have separate and distinct characteristics from others, policymakers in the U.S. and across the globe must take into account the fact that international economies are and will continue to be interconnected and interdependent. This will avoid, or at least mitigate, many of the issues that precipitated the global financial crisis.

V. CONCLUSION: WHY A GLOBAL PERSPECTIVE WORKS

Asset-backed securitization has proven to be a successful method of wealth generation all across the world. While global markets have recovered from the subprime mortgage crisis, the U.S. focused on preventative measures to avoid future economic collapse. The reform in response to the crisis has adequately addressed certain intra-bank practices that were causal in the economic downturn. However, undue systemic risks still exist. The interconnectedness of global markets, as well as certain securitization practices outside the U.S., have set the stage for additional reforms that must focus on international market interactions and market failures.

International regulatory structures, such as the one in Germany created by the German Pfandbrief Act, can be useful and applicable and inform further actions that are compatible with, and supplemental to, existing U.S. reforms that followed the financial crisis. The Basel Committee's agenda, which was established to be applied internationally, explicitly mentions its intent to consider including synthetic securitization in the upcoming Basel revision of Basel III. In order to address the obvious and persistent challenges of incentives, externalities, transparency, and market failures discussed in this Article, U.S. policymakers must seriously evaluate how to capture and implement those relevant aspects of synthetic securitization practices that have already proven successful. Much is still yet to be done!

The unity of effort to confront and solve these systemic challenges is a generational opportunity and responsibility. Left unattended, these very same, and still unresolved, challenges will predictably result in yet another

276. Ghemawat, *supra* note 244.

277. INT'L MONETARY FUND, GLOBAL FINANCIAL STABILITY REPORT: IS GROWTH AT RISK? 6–9 (2017).

278. Ghemawat, *supra* note 244.

global financial crisis—one with far greater consequences that could possibly result in political, institutional, and social collapse in the industrialized world.

