Annual Report on the Insurance Industry

FEDERAL INSURANCE OFFICE, U.S. DEPARTMENT OF THE TREASURY

Completed pursuant to Title V of the Dodd-Frank Wall Street Reform and Consumer Protection Act

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GLOSSARY

2020 Program Effectiveness Report	....	FIO, *Report on the Effectiveness of the Terrorism Risk Insurance Program* (2020)
ABA	....	Activities-Based Approach
ACRSM	....	Advisory Committee on Risk-Sharing Mechanisms
A&H	....	Accident and Health
Aggregation Method	....	A group capital methodology under development by the United States and other interested jurisdictions as an alternative to the ICS
2019 Annual Report	....	FIO, *Annual Report on the Insurance Industry* (2019)
ART	....	Alternative Risk Transfer
BBA	....	Building Block Approach
CDC	....	Centers for Disease Control and Prevention
CISA	....	Cybersecurity and Infrastructure Security Agency
CLO	....	Collateralized Loan Obligation
CMBS	....	Commercial Mortgage-Backed Securities
CML	....	Commercial Mortgage Loan
ComFrame	....	IAIS Common Framework for the Supervision of IAIGs
D&O	....	Directors and Officers
Dodd-Frank Act	....	Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010
DOL	....	U.S. Department of Labor
EBA	....	Entity-Based Approach
EIOPA	....	European Insurance and Occupational Pensions Authority
E&O	....	Errors and Omissions
ERISA	....	Employee Retirement Income Security Act of 1974
ExCo	....	IAIS Executive Committee
FACI	....	Federal Advisory Committee on Insurance
FCTF	....	IAIS Financial Crime Task Force
Federal Reserve	....	Board of Governors of the Federal Reserve System
FEMA	....	Federal Emergency Management Agency
FIO	....	Federal Insurance Office
FIO Act	....	Federal Insurance Office Act of 2010
FSAP	....	IMF Financial Sector Assessment Program
FSB	....	Financial Stability Board
FSOC	....	Financial Stability Oversight Council
FSTF	....	NAIC Financial Stability Task Force

GAAP	....	Generally Accepted Accounting Principles
GAAP Plus	....	Generally Accepted Accounting Principles with adjustments
GCC	....	Group Capital Calculation
GCCWG	....	NAIC Group Capital Calculation Working Group
GDP	....	Gross Domestic Product
GME	....	IAIS Global Monitoring Exercise for the Holistic Framework
G-SII	....	Global Systemically Important Insurer
Holistic Framework	....	IAIS Holistic Framework for the Assessment and Mitigation of Systemic Risk in the Insurance Sector
IAIG	....	Internationally Active Insurance Group
IAIS	....	International Association of Insurance Supervisors
iCBCM	....	FSB Cross-Border Crisis Management Group for Insurers
ICP	....	IAIS Insurance Core Principle
ICS	....	IAIS Insurance Capital Standard
ILS	....	Insurance-Linked Securities
ILW	....	Industry Loss Warranty
IMARA	....	Insurance Marketplace Aggregate Retention Amount
IMF	....	International Monetary Fund
Insurance EO Report	....	Treasury, *A Financial System That Creates Economic Opportunities: Asset Management and Insurance* (2017)
InsurTech	....	The innovative use of technology in connection with insurance
IPO	....	Initial Public Offering
IPPC	....	OECD Insurance and Private Pensions Committee
L&H	....	Life and Health
LIBOR	....	London Interbank Offered Rate
LTCI	....	Long-Term Care Insurance
LTCI Task Force	....	Federal Interagency Task Force on Long-Term Care Insurance
LTCI Task Force Report	....	Treasury, *Long-Term Care Insurance: Recommendations for Improvement of Regulation—Report of the Federal Interagency Task Force on Long-Term Care Insurance* (2020)
M&A	....	Mergers and Acquisitions
MBS	....	Mortgage-Backed Securities
MitFLG	....	Mitigation Framework Leadership Group
NAIC	....	National Association of Insurance Commissioners
NBCR	....	Nuclear, Biological, Chemical, and Radiological

NFIP	....	National Flood Insurance Program
NYDFS	....	New York Department of Financial Services
OECD	....	Organisation for Economic Co-operation and Development
P&C	....	Property and Casualty
RBC	....	Risk-Based Capital
Regulation BI	....	SEC Regulation Best Interest
Report	....	FIO, *Annual Report on the Insurance Industry* (2020)
ReSG	....	FSB Resolution Steering Group
ReWG	....	IAIS Resolution Working Group
RILA	....	Registered Index-Linked Annuities
RMBS	....	Residential Mortgage-Backed Securities
S&P 500	....	Standard and Poor's 500 Index
S&P Global	....	S&P Global Market Intelligence
SAP	....	Statutory Accounting Principles
SEC	....	U.S. Securities and Exchange Commission
Secretary	....	Secretary of the Treasury
SECURE Act	....	Setting Every Community Up for Retirement Enhancement Act of 2019
SMI	....	Solvency Modernization Initiative
SOFR	....	Secured Overnight Financing Rate
Team USA	....	FIO, Federal Reserve, NAIC, and state insurance regulators
Treasury	....	U.S. Department of the Treasury
TRIA	....	Terrorism Risk Insurance Act of 2002, as amended
TRIP	....	Terrorism Risk Insurance Program
UBI	....	Usage-Based Insurance
U.S.-EU Covered Agreement	....	Bilateral Agreement between the United States of America and the European Union on Prudential Measures Regarding Insurance and Reinsurance
U.S.-UK Covered Agreement	....	Bilateral Agreement between the United States of America and the United Kingdom on Prudential Measures Regarding Insurance and Reinsurance

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I. INTRODUCTION

This Report is submitted by the Federal Insurance Office (FIO) of the U.S. Department of the Treasury (Treasury) pursuant to Section 502(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act), which requires the annual submission by FIO of a report to the President, the Committee on Financial Services of the House of Representatives, and the Committee on Banking, Housing, and Urban Affairs of the Senate "on the insurance industry and any other information as deemed relevant by the [FIO] Director or requested by such Committees."[1]

A. The Structure of this Report

This Report begins with an overview of FIO's statutory responsibilities, then summarizes FIO's key activities since those described in its 2019 *Annual Report on the Insurance Industry*.[2] Section II discusses the financial, operational, and regulatory implications of the COVID-19 pandemic. Sections III through VI of this Report are organized around four key themes:

1) the proper evaluation of systemic risk;
2) ensuring effective regulation and government processes;
3) rationalizing international engagement; and
4) promoting economic growth and informed choices.[3]

Each section presents developments in domestic and international insurance policy, regulation, and markets corresponding to that section's theme. This Report concludes in Section VII with a discussion and analysis of the insurance industry's financial performance in calendar year 2019 and its financial condition as of December 31, 2019. The other sections of this Report, which are less dependent on year-end financial data, generally contain analysis through the first half of the current calendar year.

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[1] Federal Insurance Office Act of 2010 (FIO Act), 31 U.S.C. § 313(n)(2).

[2] FIO, *Annual Report on the Insurance Industry* (2019), https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/2019_FIO_Annual_Report.pdf (*2019 Annual Report*).

[3] These themes are from: Treasury, *A Financial System That Creates Economic Opportunities: Asset Management and Insurance* (2017), https://www.treasury.gov/press-center/press-releases/Documents/A-Financial-System-That-Creates-Economic-Opportunities-Asset_Management-Insurance.pdf (*Insurance EO Report*). Treasury issued the Insurance EO Report in response to Executive Order No. 13772. *See* FIO, *Annual Report on the Insurance Industry* (2018), 7-13, https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/2018_FIO_Annual_Report.pdf (*2018 Annual Report*) (summarizing the Executive Order, its Core Principles for Financial Regulation, and the Insurance EO Report recommendations).

B. Federal Insurance Office

1. Insurance Regulation and the Federal Insurance Office

In the United States, the primary regulators of the business of insurance are the fifty states, the District of Columbia, and the five U.S. territories.[4]

The federal government also plays an important role in the insurance industry.[5] Title V of the Dodd-Frank Act established FIO within Treasury.[6] In addition to advising the Secretary of the Treasury (Secretary) on major domestic and prudential international insurance policy issues and having its Director serve as a non-voting member of the Financial Stability Oversight Council (FSOC), FIO is authorized to:

- monitor all aspects of the insurance industry, including identifying issues or gaps in the regulation of insurers that could contribute to a systemic crisis in the insurance industry or the U.S. financial system;
- monitor the extent to which traditionally underserved communities and consumers, minorities, and low- and moderate-income persons have access to affordable insurance products regarding all lines of insurance, except health insurance;
- recommend to FSOC that it designate an insurer, including the affiliates of such insurer, as an entity subject to regulation as a nonbank financial company supervised by the Board of Governors of the Federal Reserve System (Federal Reserve);
- assist the Secretary in the administration of the Terrorism Risk Insurance Program (TRIP), as established in Treasury under the Terrorism Risk Insurance Act of 2002, as amended (TRIA);
- coordinate federal efforts and develop federal policy on prudential aspects of international insurance matters, including representing the United States, as appropriate, in the International Association of Insurance Supervisors (IAIS) and assisting the Secretary in negotiating covered agreements;
- determine whether state insurance measures are preempted by covered agreements;

[4] State regulation of the insurance industry is coordinated through the National Association of Insurance Commissioners (NAIC), a voluntary organization whose membership consists of the chief insurance regulatory officials of the 50 states, the District of Columbia, and the five U.S. territories.

[5] *See* Treasury, *Insurance EO Report*, 82-90.

[6] FIO Act, 31 U.S.C. § 313(a). Title V also designates the Secretary as advisor to the President on "major domestic and international prudential policy issues in connection with all lines of insurance except health insurance." *Id.* at § 321(a)(9).

- consult with the states (including state insurance regulators) regarding insurance matters of national importance and prudential insurance matters of international importance; and
- perform such other related duties and authorities as may be assigned to FIO by the Secretary.[7]

In addition, before the Secretary may make a determination as to whether to seek the appointment of the Federal Deposit Insurance Corporation as receiver of an insurer under Title II of the Dodd-Frank Act, the Secretary must first receive a written recommendation from the FIO Director and the Federal Reserve.[8] Also, FIO and the Federal Reserve coordinate on the performance of annual analyses of nonbank financial companies supervised by the Federal Reserve, particularly with respect to stress testing, to evaluate whether such companies have the capital, on a consolidated basis, necessary to absorb losses as a result of adverse economic conditions.[9]

The Economic Growth, Regulatory Relief, and Consumer Protection Act directs the Secretary and the Federal Reserve Chairman (or their designees) to submit an annual report to Congress on their efforts with respect to global insurance regulatory or supervisory forums.[10] The Act also requires the Secretary and Federal Reserve Chairman (or their designees) to report to Congress on their efforts to increase transparency at IAIS meetings.[11] In addition, the Act requires that, before supporting or consenting to the adoption of any final international insurance capital standard, the Secretary, the Federal Reserve Chairman, and the FIO Director must complete a study and submit a report to Congress on the impact of any such standard on consumers and U.S. markets.[12]

2. FIO Activities

FIO's key activities since those reported in its 2019 Annual Report (some of which are further detailed later in this Report) are summarized below.

On September 5, 2019, Treasury and the NAIC hosted a regional cybersecurity tabletop exercise in Kansas City, Missouri, in which FIO participated. Insurance industry cybersecurity, and related FIO activities, are discussed in Section IV.C.2.

[7] FIO Act, 31 U.S.C. § 313(c)(1).

[8] Dodd-Frank Act, 12 U.S.C. § 5383(a)(1)(C).

[9] 12 U.S.C. § 5365(i)(1)(A).

[10] Economic Growth, Regulatory Relief, and Consumer Protection Act, Pub. L. No. 115-174, § 211(c)(1)(A), 132 Stat. 1296 (2018) (Economic Growth, Regulatory Relief, and Consumer Protection Act).

[11] Economic Growth, Regulatory Relief, and Consumer Protection Act, § 211(c)(4).

[12] Economic Growth, Regulatory Relief, and Consumer Protection Act, § 211(c)(3)(A).

On September 6, 2019, Treasury published for public comment proposed technical changes to TRIP regulations that address the calculation and notification to the public of TRIP's insurance marketplace aggregate retention amount (IMARA) under TRIA.[13] On November 15, 2019, Treasury issued a final rule to implement the technical IMARA changes proposed for public comment in September.[14] On December 18, 2019, Treasury issued a Federal Register notice advising that the IMARA for 2020 would be $40,878,630,900.[15] TRIP is discussed in Section IV.B.

On September 6, 2019, Treasury and the Federal Reserve submitted to Congress their first annual joint report on their efforts with respect to global insurance regulatory and supervisory forums.[16] The report—which is required under the Economic Growth, Regulatory Relief, and Consumer Protection Act and covers activities within the IAIS, the Financial Stability Board (FSB), and the Organisation for Economic Co-Operation and Development (OECD)—generally addresses the period between May 24, 2018 (when the Act became law) and December 31, 2018.

On September 12, 2019, the U.S. Senate's Banking, Housing and Urban Affairs Committee held a hearing, "Developments in Global Insurance Regulatory and Supervisory Forums."[17] FIO Director Steven Seitz appeared on the witness panel, together with Federal Reserve Associate Director Thomas Sullivan and Maine Superintendent of Insurance Eric Cioppa on behalf of the NAIC.

The Federal Advisory Committee on Insurance (FACI), a panel of outside experts which is tasked with making recommendations to FIO in performing its duties and authorities, convened on September 23, 2019; December 5, 2019; February 21, 2020; and June 4, 2020. These meetings addressed a variety of topics, including recommendations and status updates on FACI's work on various international issues, natural catastrophe mitigation, data privacy, and disparate

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[13] IMARA Calculation Under the Terrorism Risk Insurance Program, 84 Fed Reg. 46907 (September 6, 2019), https://www.federalregister.gov/documents/2019/09/06/2019-18728/imara-calculation-under-the-terrorism-risk-insurance-program.

[14] IMARA Calculation Under the Terrorism Risk Insurance Program, 84 Fed. Reg. 62450 (November 15, 2019), https://www.federalregister.gov/documents/2019/11/15/2019-24801/imara-calculation-under-the-terrorism-risk-insurance-program.

[15] IMARA Calculation for Calendar Year 2020 Under the Terrorism Risk Insurance Program, 84 Fed. Reg. 69462 (December 18, 2019), https://www.federalregister.gov/documents/2019/12/18/2019-27279/imara-calculation-for-calendar-year-2020-under-the-terrorism-risk-insurance-program.

[16] Secretary Steven T. Mnuchin and Chair Jerome H. Powell, *Efforts of the U.S. Department of the Treasury and the Board of Governors of the Federal Reserve System with Respect to Global Insurance Regulatory or Supervisory Forums in 2018* (September 2019), https://home.treasury.gov/system/files/311/Treasury_FRB_Report_2019.pdf.

[17] *Developments in Global Insurance Regulatory and Supervisory Forums*, Before the Senate Committee on Banking, Housing, and Urban Affairs, 116th Cong. (September 12, 2019), https://www.banking.senate.gov/hearings/developments-in-global-insurance-regulatory-and-supervisory-forums.

impact (i.e., unintentional discrimination).[18] In addition, FACI formed a COVID-19 subcommittee in response to the pandemic. FACI is discussed in more detail in Section IV.A.3.

FIO released its 2019 Annual Report on September 30, 2019. That same day, FIO also released its 2019 Preemption Report, pursuant to the FIO Act, noting that during the year ending September 30, 2019, FIO did not take any action regarding the preemption of any state insurance measures that were inconsistent with a covered agreement.[19] Covered agreements are discussed in Section V.B.

On October 3, 2019, FIO hosted a stakeholder event to discuss certain current IAIS activities, including the Insurance Capital Standard (ICS) and the Holistic Framework for the Assessment and Mitigation of Systemic Risk in the Insurance Sector (Holistic Framework). The ICS and Holistic Framework are discussed in Section III.B.

On October 9-10, 2019, FIO attended the annual meeting of the International Forum of Terrorism Risk (Re)Insurance Pools, which discussed, among other issues, terrorism risk modeling, cyber terrorism insurance, and the application of insurance-linked securities (ILS) to terrorism risk.

On October 23, 2019, Treasury's Surety Bonds Branch, a component of the Office of Fiscal Service, conducted a stakeholder event about the federal government's surety bond program.[20] In December 2019, the Office of Fiscal Service, in consultation with FIO, published a Request for Information about potential updates to the surety regulations.[21] FIO collaborated with the Surety Bonds Branch on the stakeholder event and Request for Information, and is continuing to support the Surety Bonds Branch as it considers potential updates to program regulations.

On November 1, 2019, Secretary Mnuchin and Indian Finance Minister Nirmala Sitharaman issued a Joint Statement on the India-U.S. Economic and Financial Partnership.[22] The United States and India previously had signed a Memorandum of Understanding for "cooperation, coordination, consultation and exchange of information relating to the Regulation of the

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[18] More information on FACI—including its meeting agendas, minutes, and presentations—is available on FIO's website. *See* "Federal Advisory Committee on Insurance (FACI)," Treasury, https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/federal-insurance-office/federal-advisory-committee-on-insurance-faci.

[19] Treasury, *2019 Preemption Report – Federal Insurance Office* (September 30, 2019), https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/2019_FIO_Preemption_Report.pdf.

[20] Background on the surety bond program, including links to the relevant statutory and regulatory references, are available at "Surety Bonds," Treasury, last updated June 30, 2020, https://fiscal.treasury.gov/surety-bonds/.

[21] Treasury, Fiscal Service, Surety Companies Doing Business with the United States; Request for Information, 84 Fed. Reg. 72138 (December 30, 2019), https://www.federalregister.gov/documents/2019/12/30/2019-28193/surety-companies-doing-business-with-the-united-states-request-for-information.

[22] Secretary Mnuchin and Indian Finance Minister Sitharaman, Joint Statement on the India-U.S. Economic and Financial Partnership (November 1, 2019), https://home.treasury.gov/news/press-releases/sm819.

Insurance Sector."[23] FIO negotiated and signed the Memorandum of Understanding on behalf of the United States. FIO continues to coordinate with its colleagues in India on insurance issues of mutual interest.

On December 20, 2019, the President signed into law the reauthorization of the Terrorism Risk Insurance Program until December 31, 2027. Under the reauthorization, FIO will continue to assist the Secretary in administering the program. The TRIP reauthorization provisions require FIO to provide an analysis of the availability and affordability of terrorism risk insurance for places of worship in addition to its pre-existing reporting requirements related to TRIP.[24]

FIO began monitoring developments relating to the COVID-19 pandemic and the insurance sector in early 2020. FIO's efforts to monitor and assess the effects of the COVID-19 pandemic intensified during 2020. FIO has been advising the Secretary on the pandemic's effects on the insurance industry and has been working with Treasury leadership to engage with Congress concerning such effects. FIO also has been engaging with stakeholders on a variety of issues related to the effects of the COVID-19 pandemic. As noted above, FIO's advisory committee, FACI, formed a new COVID-19 subcommittee focused on the effects of the COVID-19 pandemic on the insurance industry. FIO also has been participating in the efforts of international organizations to monitor and analyze the effects of the COVID-19 pandemic on both U.S. and global insurance markets. FIO's monitoring and analysis of the COVID-19 pandemic's effects on the insurance industry are discussed in Section II.

The Advisory Committee on Risk-Sharing Mechanisms (ACRSM) held its first meeting of 2020 on February 5, 2020. The ACRSM also met on May 11, 2020, and released its initial report on its findings concerning TRIP and recommendations to FIO for further study and work on TRIP.[25] The ACRSM is discussed in connection with TRIP in Section IV.B.

In February 2020, FIO engaged with colleagues in the United Kingdom about the next steps for the U.S.-UK Insurance Dialogue Project. On March 3, 2020, the EU-U.S. Insurance Dialogue Project—of which FIO is a founder and Steering Committee member—published three summary reports by each of its three working groups: the Insurer Cybersecurity Working Group, the Cyber Insurance Working Group, and the Big Data Working Group.[26] Both projects are discussed in Section V.C.

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[23] For more information on the Memorandum of Understanding, see FIO, *2019 Annual Report*, 67.

[24] Terrorism Risk Insurance Program Reauthorization Act of 2019, Pub. L. No. 116-94, 133 Stat. 2534 (2019).

[25] "Advisory Committee on Risk-Sharing Mechanisms (ACRSM)," Treasury, https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/federal-insurance-office/terrorism-risk-insurance-program/advisory-committee-on-risk-sharing-mechanisms-acrsm.

[26] EU-U.S. Insurance Dialogue Project, *Insurer Cybersecurity Working Group February 2020 Summary Report* (March 2020), https://www.eiopa.europa.eu/sites/default/files/publications/eu-us-project-cybersecurity-wg-feb-2020.pdf; EU-U.S. Insurance Dialogue Project, *The Cyber Insurance Market Working Group February 2020 Summary Report* (March 2020), https://www.eiopa.europa.eu/sites/default/files/publications/eu-us-cyber-insurance-wg-feb-2020.pdf;

Between March 16, 2020 and May 15, 2020, FIO conducted its annual data call in connection with TRIP, as required under TRIA.[27] All insurers participating in TRIP were required to submit information, subject to certain reporting exemptions.

In June 2020, FIO coordinated with the NAIC and the states in connection with their data call on business interruption coverage for policyholders affected by the COVID-19 pandemic. Business interruption coverage is further discussed in Section II.B.1.a, and state regulatory responses, including data calls, are discussed in Section II.D.3.

On June 30, 2020, FIO published its *Report on the Effectiveness of the Terrorism Risk Insurance Program*.[28] The report is based principally upon mandatory data calls in 2018, 2019, and 2020 and its conclusions are discussed in Section IV.B.

On July 14-15, 2020, FIO participated in the EU-U.S. Financial Regulatory Forum where European Union and U.S. financial authorities exchanged views on topics of mutual interest as part of their ongoing regulatory dialogue and in light of the COVID-19 pandemic.[29]

During 2019 and 2020, FIO continued to provide expertise to other Treasury offices and other federal agencies. For example, FIO provided technical assistance to the Federal Emergency Management Agency (FEMA) in connection with FEMA's transfer of $1.33 billion of risk from the National Flood Insurance Program (NFIP) to the private reinsurance market on January 2, 2020, and the related February 20, 2020 capital markets placement.[30] The NFIP is discussed in Section IV.A.2.b. In addition, FIO, as a member of the Mitigation Framework Leadership Group (MitFLG), continued to participate in MitFLG's quarterly meetings and assist in the MitFLG's implementation of its National Mitigation Investment Strategy, as discussed in Section IV.A.2.a. FIO also participated in the Federal Interagency Task Force on Long-Term Care Insurance (LTCI), which is discussed in more detail in Section VI.A.

Since FIO's last Annual Report, FIO staff participated in various FSOC committee meetings, including the Systemic Risk Committee, and discussed issues affecting the insurance industry.

EU-U.S. Insurance Dialogue Project, *Big Data Working Groups February 2020 Summary Report* (March 2020), https://www.eiopa.europa.eu/sites/default/files/publications/eu-us-big-data-wg-feb-2020.pdf.

[27] TRIA § 104(h); 2020 Terrorism Risk Insurance Program Data Call, 85 Fed. Reg. 15036 (March 16, 2020), https://www.federalregister.gov/documents/2020/03/16/2020-05299/2020-terrorism-risk-insurance-program-data-call.

[28] FIO, *Report on the Effectiveness of the Terrorism Risk Insurance Program* (June 2020), https://home.treasury.gov/system/files/311/2020-TRIP-Effectiveness-Report.pdf (*2020 Program Effectiveness Report*).

[29] Treasury, "Joint Statement on the EU-U.S. Financial Regulatory Forum," news release, July 17, 2020, https://home.treasury.gov/news/press-releases/sm1066.

[30] *See* "National Flood Insurance Program's (NFIP) Reinsurance Program," FEMA, last updated September 15, 2020, https://www.fema.gov/nfip-reinsurance-program; FEMA, "FEMA Continues Its Reinsurance Program to Manage Future Flood Risk," news release, January 2, 2020, https://www.fema.gov/news-release/20200220/fema-continues-its-reinsurance-program-manage-future-flood-risk.

The FIO Director attended all meetings of FSOC principals during this period. FSOC is discused in Section III.A.5.

Internationally, FIO has remained engaged in the Insurance and Private Pensions Committee (IPPC) at the OECD. The OECD serves as a source of public policy advice and analyses for global and regional forums, including the G20, as well as the general public, and collects and publishes statistical data and analyses on assorted topics.[31] FIO's work with the OECD is discussed in Section V.E.

From the fall of 2019 through July 2020, the International Monetary Fund (IMF) conducted its Financial Sector Assessment Program (FSAP) in the United States. The FSAP is a comprehensive review and assessment of a member country's system of financial regulation, and is carried out in a member country once every five years. Treasury coordinated U.S. agency engagement with the FSAP process, which, for insurance, included FIO, other offices within Treasury, the Federal Reserve, the NAIC, and various state regulators. The FSAP process culminated with the August 2020 publication of the IMF's findings in its Financial Sector Stability Assessment.[32]

In addition, throughout 2019 and 2020, FIO continued to fulfill its statutory role representing the United States in the IAIS and elsewhere on prudential international insurance measures. In November 2019, FIO participated in the IAIS committee meetings and annual meeting. FIO continued its involvement in IAIS work in developing the Common Framework of Internationally Active Insurance Groups (ComFrame), ICS, and the Holistic Framework. FIO also continued its involvement and leadership roles with working groups and task forces at the IAIS on a variety of other issues, including matters relating to resolution of insurers, financial crimes, cybersecurity, and advancing effective corporate governance in the insurance industry, as discussed in Section V.A.

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[31] *See* OECD, *OECD Secretary-General's Report to Ministers 2020* (2020), 22, https://read.oecd.org/10.1787/27007c6c-en?format=pdf.

[32] IMF, *United States: Financial System Stability Assessment* (August 10, 2020), https://www.imf.org/en/Publications/CR/Issues/2020/08/07/United-States-Financial-System-Stability-Assessment-49651. For the various FSAP findings with respect to the insurance sector, see *id.* at 71-73. For technical analysis and detailed information underpinning the FSAP findings, see IMF, *United States: Financial Sector Assessment Program: Technical Note—Insurance Supervision and Regulation* (August 10, 2020), https://www.imf.org/en/Publications/CR/Issues/2020/08/07/United-States-Financial-Sector-Assessment-Program-Technical-Note-Insurance-Supervision-and-49653.

II. THE COVID-19 PANDEMIC AND THE INSURANCE INDUSTRY

This section analyzes the effects of the COVID-19 pandemic on the U.S. insurance industry. Broadly speaking, the U.S. insurance industry includes three sectors: (1) Life and Health (L&H) (including insurers who offer life insurance, annuities, and accident and health (A&H) products), (2) Property and Casualty (P&C), and (3) Health (which includes insurers who are licensed solely as health insurers or health maintenance organizations).[33] For the L&H sector, this section focuses on insurers that issue life insurance and annuity products, although statistics and figures may incorporate insurers who also offer A&H products.[34]

This section provides FIO's preliminary financial analysis and other observations, focusing on key coverage and financial issues that merit continued monitoring by FIO. This section also discusses insurers' responses to the COVID-19 pandemic, and concludes with an overview of the responses of U.S. states and international insurance regulators to the pandemic.[35]

In March 2020, as the COVID-19 pandemic intensified in the United States, the insurance industry acknowledged significant concerns regarding the effect of the pandemic on operating results and financial conditions for a broad range of insurers. Some of these immediate concerns eased later in the spring as U.S. financial markets began to stabilize. The pressure on insurers' investment portfolios and equity-linked product exposures, in particular, eased following actions taken by the Federal Reserve to support the economy and stabilize the financial markets in late March.[36]

Based on information through June 30, 2020, COVID-19-related insurance losses appear manageable for most insurers.[37] The outlook for the U.S. insurance industry, however, appears

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[33] Given the statutory restrictions on FIO with respect to health insurance, this section generally does not address COVID-19's implications for, and impact on, health insurers.

[34] Unless otherwise indicated, data cited in this section are derived from S&P Global Market Intelligence (S&P Global). As noted above in Section I.A, this section—like all other sections except Section VII—generally includes analysis through the first half of the current calendar year.

[35] In past years, the Annual Report has included a "Domestic Insurance Market Outlook," which was a brief supplement to its discussion of the year-end insurance industry financials, previewing the current year financial results, based on the first two quarters of data and financial trends available at the time the report was being prepared. This year, such observations are incorporated in this section.

[36] Since March of 2020, the Federal Reserve has taken a number of steps to stabilize the financial markets. *See* Jane Ihrig, *et al.*, *COVID-19's Effects on the Economy and the Fed's Response* (August 10, 2020), https://research.stlouisfed.org/publications/page1-econ/2020/08/10/covid-19s-effects-on-the-economy-and-the-feds-response. *See also* "The CARES Act Provides Assistance to Worker and their Families," Treasury, https://home.treasury.gov/policy-issues/cares/assistance-for-american-workers-and-families.

[37] *See, e.g.*, Swiss Re Institute, *World Insurance: Riding Out the 2020 Pandemic Storm* (July 2020), https://www.swissre.com/dam/jcr:d50acbcd-ce5c-4ee9-bc60-a3c1e55f8762/sigma-4-2020-en.pdf; Tracy Dolin, *et al.*, *Robust Capitalization Makes the COVID-19 Fallout Manageable for North American Property/Casualty Insurers and Reinsurers* (March 25, 2020), https://www.spglobal.com/ratings/en/research/articles/200325-robust-capitalization-makes-the-covid-19-fallout-manageable-for-north-american-property-casualty-insurers-and-11404978. For most insurers the COVID-19 pandemic has had an offsetting claims impact in several areas tied to

to be negative compared to trends observed in 2019. As discussed further below, first-half 2020 results for P&C and L&H insurers were pressured on multiple fronts by the COVID-19 pandemic. Through the second quarter, both sectors experienced year-over-year declines in net income that reduced top-line results and led to meaningful reserve charges.

Moreover, the COVID-19 pandemic's ultimate impact on insurers remains uncertain. P&C insurers will likely continue to see elevated claims frequency in certain lines and might also incur adverse reserve charges depending on the outcomes of judicial rulings and legislative actions on business interruption and workers' compensation insurance coverages, and potentially other lines. L&H insurers with older blocks of LTCI policies could also continue to incur reserve charges as actuarial assumptions are revisited. Additionally, the ongoing low interest rate environment coupled with elevated market volatility could pressure the capital and solvency levels of those L&H insurers with alternative investments and capital-intensive product offerings, such as products with interest rate and equity market guarantees.

In short, given the uncertainty in both the magnitude of potential losses and also the macroeconomic environment resulting from the COVID-19 pandemic, insurers may face pressure on earnings, capital, and potentially liquidity through the remainder of 2020. Over the longer term, the COVID-19 pandemic may have a significant and broad-based impact on industry metrics, which FIO will continue to monitor and report on in next year's Annual Report.

A. The COVID-19 Pandemic and the U.S. L&H Sector

Some L&H insurers have stated that they expect the pandemic to be mostly an "earnings event," affecting the sector's profits for a limited number of quarters.[38] However, the ultimate financial impact from the COVID-19 pandemic remains to be seen, and the pandemic could have an effect on some L&H insurers' capital and liquidity positions, affecting both the asset and liability sides of insurers' balance sheets.[39] On the asset side, L&H insurers could be impacted mainly by the effects of the financial markets and commercial real estate on investment portfolios. On the liability side, L&H insurers may incur losses, see higher claims and claims severity, and face balance sheet pressure from equity market volatility as well as shifts in policyholder behavior. The COVID-19 policy response from Treasury and the Federal Reserve to support the U.S. economy and financial markets has lowered interest rates to near record levels and may have

decreases in economic activity, social distancing measures, and natural hedges between some exposures (e.g., mortality and longevity risk).

[38] *See, e.g.*, Lincoln National Q12020 Earnings Transcript (May 7, 2020), 10, https://www.lfg.com/wcs-static/pdf/1Q2020%20Earnings%20Transcript.pdf ("The impacts [of] . . . COVID-19 are primarily a near-term earnings headwind."); Lananh Nguyen, "MetLife Post Quarterly Profit, Sees 'Modest' Virus Impact," *Bloomberg*, May 7, 2020, https://www.bloombergquint.com/onweb/metlife-posts-quarterly-profit-sees-modest-impact-from-virus.

[39] *See, e.g.*, AM Best, *Stress Testing Rated Companies for COVID-19* (May 18, 2020), 13, http://news.ambest.com/PressContent.aspx?altsrc=172&refnum=29377.

recalibrated expectations with respect to the future path of key interest rates.[40] Lower interest rates may not only act as a substantial headwind to the L&H sector's earnings growth, but may also result in increases in reserve requirements and reserve charges for in-force blocks (i.e., outstanding insurance obligations), which in turn could reduce risk based capital (RBC) ratios for certain insurers. Moreover, the COVID-19 pandemic may affect sales volumes and pricing for various L&H insurance products in the near future.

The discussion below covers the following key risks relating to the L&H sector's exposure to the COVID-19 pandemic: (1) L&H insurers' potential asset exposure from the COVID-19 pandemic; (2) the potential impact of the COVID-19 pandemic on L&H insurance underwriting results; (3) the effects of the low-interest rate environment; and (4) the general potential effect of the COVID-19 pandemic on sales and distribution. The discussion concludes with a more detailed evaluation of variable annuities.

1. L&H Insurers' Potential Asset Exposures from the COVID-19 Pandemic

L&H insurers generally carry significant asset leverage—defined as the ratio of assets to Generally Accepted Accounting Principles (GAAP) equity or statutory surplus—and are exposed to market and credit risk from their investment holdings.[41] The L&H sector's financial position therefore can be affected by the combined impacts of price volatility, widespread downgrades, and elevated investment defaults. In particular, the sector's large holdings of corporate debt (particularly BBB-rated bonds), commercial real estate, alternative investments (e.g., joint ventures, limited partnerships, and private equity investments), and collateralized loan obligations (CLOs)—all of which have expanded in recent years—are susceptible to weakening credit conditions brought on by the COVID-19 pandemic.[42]

[40] The Federal Reserve has cut its benchmark rate by 150 basis points since March 3, 2020, and implemented or resumed several open market operations to support and facilitate the "smooth functioning of financial markets." Forward guidance given by the Federal Reserve indicates accommodating interest rate policies to last "for many years." Federal Reserve, *Minutes of the Federal Open Market Committee June 9-10, 2020*, 3 https://www.federalreserve.gov/monetarypolicy/files/fomcminutes20200610.pdf; Lorie K. Logan, "The Federal Reserve's Market Functioning Purchases: From Supporting to Sustaining" (speech, SIFMA Webinar, July 15, 2020), https://www.newyorkfed.org/newsevents/speeches/2020/log200715.

[41] *See* "Best's Special Report: Corporate Bond Holdings Pose Risk to Insurers' Balance Sheets," *AM Best*, August 18, 2020, http://news.ambest.com/newscontent.aspx?AltSrc=97&refnum=227502.

[42] *See* S&P Global Ratings, *COVID-19 Credit Update: The Sudden Economic Stop Will Bring Intense Credit Pressure* (March 17, 2020), https://www.spglobal.com/ratings/en/research/articles/200317-covid-19-credit-update-the-sudden-economic-stop-will-bring-intense-credit-pressure-11392437.

a) Corporate Debt

U.S. L&H insurers are significant holders of investment-grade public and private corporate bonds. In 2019, U.S. L&H insurers held over $3 trillion in long-term bonds, including approximately $2 trillion in corporate fixed-income securities (U.S. and foreign).[43] If the COVID-19 pandemic results in widespread credit downgrades and higher default rates, L&H insurers' corporate bond portfolios could see increased capital pressure. While L&H insurers generally hold broadly-diversified corporate bond portfolios, only a small amount of which are below-investment-grade (i.e., rated below BBB -) relative to total investments, overall portfolio credit quality had already declined somewhat even prior to the COVID-19 pandemic.

Nearly $1 trillion of U.S. L&H insurers' corporate bond holdings were BBB rated in 2019 (approximately 23 percent of total cash and investments held on balance sheet), up from approximately $600 billion in 2009 (approximately 19 percent of total cash and investments held on balance sheets).[44] As some insurers have "reached for yield," the growth of the industry's BBB rated corporate bond holdings outpaced growth of the BBB segment of the overall corporate bond market over the last decade. Even before the start of the COVID-19 pandemic, observers highlighted the downgrade risk for BBB corporate bonds.[45] Market reports have concluded that BBB rated bonds are especially prone to downgrades because the credit quality of issuers has declined further due to the economic effects of the pandemic.[46] For example, as of June 2020, 2.5 percent ($88 billion) of bonds rated BBB by Standard & Poor's had been downgraded to a high-yield category (i.e., below investment grade) since the beginning of 2020.[47]

[43] *See* "Facts + Statistics: Life insurance," Insurance Information Institute, https://www.iii.org/fact-statistic/facts-statistics-life-insurance. *See also* NAIC & The Center for Insurance Policy and Research (CIPR), *U.S. Insurers' Cash and Invested Assets Reach Almost $7 Trillion at Year-End 2019* (2020), https://www.naic.org/capital_markets_archive/special_report_200701.pdf.

[44] S&P Global (FIO analysis). Figures reflect BBB rated corporate bond holdings held at U.S. insurance operating entities.

[45] *See, e.g.*, Vito J. Racanelli, "Where the Bond Market's Next Big Problem Could Start," *Barron's*, August 17, 2018, https://www.barrons.com/articles/where-the-bond-markets-next-big-problem-could-start-1534536183.

[46] *See, e.g.*, Blackrock, *Lessons from COVID-19: U.S. BBB Bonds and Fallen Angels* (July 2020), https://www.blackrock.com/corporate/literature/whitepaper/policy-spotlight-lessons-from-covid-19-us-bbb-bonds-and-fallen-angels-july-2020.pdf.

[47] *See* Hong Xie, "BBB Bond Downgrades Added USD 88 Billion to the High-Yield Bond Market YTD," *S&P Global*, June 25, 2020, https://www.spglobal.com/en/research-insights/articles/bbb-bond-downgrades-added-usd-88-billion-to-the-high-yield-bond-market-ytd. *See also* Peter Brennan, "Global 'Fallen Angel' Debt on Track to Reach Record High in 2020 – S&P," *S&P Global Market Intelligence*, September 2, 2020, https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/global-fallen-angel-debt-on-track-to-reach-record-high-in-2020-8211-s-p-60173177.

The regulatory capital charge for insurers increases more than three-fold for a bond that falls from "investment grade" to "below investment grade."[48] If the pace of credit downgrades increases over the next 12 to 24 months, the L&H sector could see risk-based capital ratios decline, with the attendant necessity for insurers to allocate an increasing amount of capital towards downgraded corporate bonds held by L&H insurers.

L&H insurers' investment portfolios also may face losses from elevated defaults in certain industries stressed by the COVID-19 pandemic, such as leisure and lodging, food services, energy, retail, and transportation. Defaults might also be elevated in U.S. private placement debt because these securities are issued from many non-public middle-market-sized firms with limited alternative financing options that may have been significantly affected by the COVID-19 pandemic.[49]

b) Real Estate Investments

The COVID-19 pandemic may affect the credit quality of L&H insurers' commercial mortgage lending portfolios and other real estate investments. In particular, insurance companies may be exposed to elevated credit risk through their investments in non-agency or private-label residential mortgage backed securities (RMBS); commercial mortgage loans (CML); commercial mortgage-backed securities (CMBS); commercial properties owned; and alternative real estate investments.[50] As of December 31, 2019, L&H insurance companies held over $1 trillion in real estate assets, as shown in Figure 1.[51]

The L&H insurance sector's holdings of commercial real estate assets could also be pressured by the COVID-19 pandemic.[52] As shown in Figure 1, U.S. L&H insurers have exposure to commercial real estate through their CML holdings and CMBS investments.[53] CMLs that are extended to office, multifamily, and retail properties could be vulnerable to sharp declines in

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[48] *See* NAIC, *Investment RBC Charges* (March 12, 2018), https://content.naic.org/sites/default/files/inline-files/committees_e_capad_investment_rbc_wg_related_irbc_factors.pdf.

[49] Traditional (non-144A securities) U.S. private placements are fixed-income securities exempt from Securities Exchange Commission (SEC) registration. *See, e.g.*, Voya, *Introduction to Investment Grade Private Credit* (2020), https://institutional.voya.com/document/whitepapers/whitepaper-introduction-investment-grade-private-credit.pdf (providing overview of the private placement market).

[50] The insurance industry also has commercial real estate exposure through affiliates who originate and invest in mortgages and from bond and equity investment holdings of real estate investment trusts.

[51] Direct Real Estate is measured net of debt and other encumbrances so that the market price risk on real estate holdings is in fact greater than the net amount. Life insurance companies hold nearly 81 percent of the insurance industry's total real estate holdings, with P&C insurance companies holding just over 19 percent. S&P Global (FIO analysis).

[52] *See* Conor Dougherty and Peter Eavis, "Tenants' Troubles Put Stress on Commerical Real Estate," *The New York Times*, June 5, 2020, https://www.nytimes.com/2020/06/05/business/economy/coronavirus-commercial-real-estate.html.

[53] For more information on L&H insurers' CML holdings, see Section VII.A.2.

operating income and values if trends observed during the pandemic so far continue.[54] L&H insurers are also large holders of lodging-related CMBS, which may experience elevated loan defaults due to cash flow disruptions stemming from the reduction in spending on travel.

Figure 1: Life Insurance Companies' Real Estate Exposure as of December 31, 2019

	Exposure ($ millions)	Share of Total (%)	Share of Cash/ Investments (%)
Commercial Mortgage Loans[55]	$ 534,380	49.9	12.3
Agency CMBS	50,712	4.7	1.2
Agency RMBS	165,290	15.4	3.8
Non-Agency CMBS	145,099	13.5	3.3
Non-Agency RMBS	73,619	6.9	1.7
Alternative RE Investments	47,924	4.5	1.1
Residential Mortgage Loans	31,434	2.9	0.7
Direct Real Estate (net of debt)	23,013	2.1	0.5
Total	**$ 1,071,471**	-	-

Source: S&P Global.

The Federal Reserve has supported the agency mortgage-backed securities (MBS) market through its asset purchase program.[56] However, as noted, insurers also hold non-agency RMBS and CMBS, which are excluded from the Federal Reserve's asset purchase program and for which other temporary programs provide little or no support.[57]

c) Collateralized Loan Obligations

A small number of major U.S. L&H insurers have exposure to leveraged loans through holdings of CLOs.[58] Significant attention has been paid to stress in the CLO markets due to the COVID-19 pandemic. As of July 2020, S&P had downgraded and/or placed on negative watch roughly

[54] "Best's Special Report: U.S. Life/Annuity Insurers' Commercial Mortgage Loans Increasing, Credit Quality Decreasing," *AM Best*, June, 25, 2020, http://news.ambest.com/newscontent.aspx?AltSrc=97&refnum=226245.

[55] Commercial mortgage loans include loans made to farm properties.

[56] *See* Federal Reserve, "Federal Reserve Announces Extensive New Measure to Support the Economy," news release, March 23, 2020, https://www.federalreserve.gov/newsevents/pressreleases/monetary20200323b.htm.

[57] Under the Federal Reserve's Term Asset-Backed Securities Loan Facility, highly rated legacy agency commercial mortgage-backed securities are considered eligible collateral. "Term Asset-Backed Securities Loan Facility," Federal Reserve, last updated September 8, 2020, https://www.federalreserve.gov/monetarypolicy/talf.htm.

[58] Life insurance sector holdings of CLOs are concentrated and many of the top investors are private equity-backed insurers. *See, e.g.*, NAIC & CIPR, *U.S. Insurer CLO Exposure at Risk of Ratings Downgrade* (May 13, 2020), https://www.naic.org/capital_markets_archive/hotspot_200513.pdf. For more information on private equity-backed insurers, see Section VII.A.2.c. For more information on CLOs, see Box 5.

500 out of the 1,500 rated obligors held in U.S. broadly-syndicated CLOs.[59] Defaults of the underlying institutional leveraged loans used as collateral in CLOs have risen sharply: during the second quarter of 2020, U.S. leveraged loan defaults totaled $23 billion—the highest quarterly volume since the 2008 financial crisis.[60]

To the extent L&H insurers hold senior and higher-rated CLO tranches, they are better protected against defaults compared to those holding lower-rated tranches.[61] Moreover, widespread CLO credit downgrades by the rating agencies have largely not occurred to date.[62] However, an increase in CLO ratings downgrades in the wake of the COVID-19 pandemic, should it occur, could require insurers to hold additional capital against lower rated credits (similar to the potential effects on L&H insurers' bond portfolios). In general, insurers' CLOs holdings receive the same regulatory capital treatment as corporate bonds, incurring meaningfully higher risk weight from downgrades in addition to increased default risk.[63]

2. The Potential Impact of the COVID-19 Pandemic on L&H Insurance Underwriting Results

In the event that mortality and morbidity rates resulting from the COVID-19 pandemic dramatically increase from current trend lines, the earnings and capital of L&H insurers could be impacted.[64]

Mortality Claims. Based on mortality sensitivity estimates from the first half of 2020, several publicly-traded L&H insurers have indicated that virus-related mortality claims cost will be a

[59] Daniel Hu, *et al.*, "CLO Spotlight: U.S. CLO Exposure to Negative Corporate Rating Actions (As of July 12, 2020)," *S&P Global Ratings*, July 12, 2020, https://www.spglobal.com/ratings/en/research/articles/200714-clo-spotlight-u-s-clo-exposure-to-negative-corporate-rating-actions-as-of-july-12-2020-11574780.

[60] Rachelle Kakouris, "US Leveraged Loan Defaults Total $23B in Q2, the Most Since 2009," *S&P Global Market Intelligence*, July 6, 2020, https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/us-leveraged-loan-defaults-total-23b-in-q2-the-most-since-2009-59301227. The "2008 financial crisis" refers to the crisis which, according to the National Bureau of Economic Research, began in December 2007 and lasted until June 2009. *See* "U.S. Business Cycle Expansions and Contractions," National Bureau of Economic Research, http://nber.org/cycles/.

[61] *See* NAIC & CIPR, *Collateralized Loan Obligations—Stress Testing U.S. Insurers' Year-End 2019 Exposure* (2020), 7-8, https://naic.org/capital_markets_archive/special_report_200618.pdf.

[62] *See* Daniel Hu, *et al.*, "CLO Spotlight: U.S. CLO Ratings Actions And Exposure To Negative Corporate Rating Actions (As of Aug. 9, 2020)," *S&P Global Ratings*, August 9, 2020, https://www.spglobal.com/ratings/en/research/articles/200811-clo-spotlight-u-s-clo-rating-actions-and-exposure-to-negative-corporate-rating-actions-as-of-aug-9-2020-11610720; Cezary Podkul, "Expected Surge of CLO Downgrades Slow to Arrive," *The Wall Street Journal*, August 28, 2020, https://www.wsj.com/articles/expected-surge-of-clo-downgrades-slow-to-arrive-11598653875.

[63] *See* NAIC, *Investment RBC Charges*.

[64] Mortality-related losses could be mitigated by the complementary nature of longevity-sensitive business lines (e.g., annuities, LTCI, and pension risk transfer obligations).

manageable underwriting loss event.[65] Such expectations are largely based on the assumption that COVID-19 will result in lower fatality rates for the insured population versus the general population because of the average younger age and better health of insured individuals.[66] The ultimate effects of the L&H sector's mortality experience from COVID-19 is still to be determined.[67]

Morbidity Claims. Much of the morbidity (illness) exposure of the L&H sector relates to extended absences of individuals from work for medical reasons covered under disability insurance. L&H insurers may potentially see elevated short-term and long-term disability claims experience from employees who fall ill due to the virus, although to date the sector's morbidity exposure has not resulted in significant claims related to the COVID-19 pandemic.[68] In addition, there is historical evidence that an uptick in group disability claims has occurred during and following recessions.[69]

LTCI. Longer-term illnesses resulting from the COVID-19 pandemic may also affect claims experience under LTCI. Individuals who live in a nursing home or long-term care facility face increased risk of infection and severe illness from the COVID-19 pandemic.[70] According to the Centers for Medicare & Medicaid Services and the Centers for Disease Control and Prevention (CDC), as of August 2020, COVID-19 infections in long-term care facilities constituted eight percent of total reported cases in the United States, and COVID-19-related deaths in such

[65] Certain L&H insurers provided their mortality claim cost sensitivity to COVID-19 related deaths in the U.S. during first-quarter and second-quarter 2020 earnings releases. Many of those estimates were updated in the second-quarter of 2020 and projected even lower mortality claims cost relative to COVID-19 related U.S. population deaths. *See, e.g.*, Prudential Financial, Second-Quarter 2020 Earnings Presentation, August 5, 2020, 13, http://s22.q4cdn.com/600663696/files/doc_financials/quarterly_reports/2020/Q2/2Q20-Earnings-Call-Presentation_vFinal2.pdf; Reinsurance Group of America, Inc., Second-Quarter 2020 Earnings Presentation, August 5, 2020, 13, https://reinsurancegroupofamericainc.gcs-web.com/static-files/d5f7fac8-4f72-493a-ac47-de36383502cb.

[66] *See, e.g.*, Munich Re, First-Quarter 2020 Earnings Call Transcript, May 7, 2020, https://www.yahoo.com/news/edited-transcript-muv2-earnings-conference-201223531.html ("so the demographic makeup of our portfolio as well as age structure as well as social demographic facts in our portfolio, they are different to the general population").

[67] *See* Alwyn Scott, "U.S. Insurers' Coronavirus Costs Are Less Than Feared So Far," *Reuters*, August 11, 2020, https://www.reuters.com/article/us-health-coronavirus-insurers/u-s-insurers-coronavirus-costs-are-less-than-feared-so-far-idUSKCN2572RV.

[68] *See, e.g.*, Hartford Financial Services Group Inc., Second-Quarter 2020 Earnings Call Transcript, July 31, 2020, https://news.yahoo.com/edited-transcript-hig-n-earnings-211815032.html.

[69] *See, e.g.*, Unum Group, Form 10-K (2015), 42, https://www.sec.gov/Archives/edgar/data/5513/000000551316000045/unm12312015-10xk.htm ("We have historically experienced an increase in our group long-term disability morbidity claim incidence trends during and following a recessionary period, particularly in our Unum US operations."); Hartford Financial Service Group Inc., Second-Quarter 2020 Earnings Call Transcript ("it's clearly a watch area as historically, when unemployment rises, disability claims tend to go up").

[70] "Nursing Homes & Long-Term Care Facilities," Centers for Disease Control & Prevention, last updated September 11, 2020, https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-in-nursing-homes.html.

facilities accounted for over 42 percent of the country's pandemic fatalities.[71] The full effects of the COVID-19 pandemic on LTCI will emerge over time. In particular, the COVID-19 pandemic may affect LTCI through its impact on policy lapses, the incidence of claims, and utilization of benefits. Long-term care reserves reflect best estimates of future obligations to policyholders. Reserves are based on assumptions regarding future morbidity, premium rate increases, persistency (i.e., measuring the degree to which policyholders continue to pay premiums), policy benefit offsets, and interest rates, among other factors. The COVID-19 pandemic may challenge some of the assumptions upon which LTCI insurers have set their reserves.[72]

3. Effects of the Low Interest Rate Environment

Low interest rates have emerged again as a significant concern for the life sector in the wake of the COVID-19 pandemic. The sustained low interest rate environment has been an ongoing challenge for insurers in general because it lowers investment returns, raises the value of future obligations, and complicates asset-liability matching. L&H insurers with products that are highly sensitive to market movements—such as variable and fixed annuities, LTCI, and universal life insurance—are likely to feel the effects even more deeply.[73]

Interest rates are a key consideration for life insurers when estimating insurance reserves that align with their long-term policyholder obligations. Through the discounting process, lower interest rates increase the present value of insurance liabilities, potentially leading to reserve shortfalls during statutory asset adequacy testing.[74] Interest rate assumptions are also among the assumptions used to determine how much regulatory capital is required to be held for certain life insurance products. Changes in interest rates may cause a mismatch between an insurer's assets and liabilities, which could affect their regulatory capital requirements.[75]

[71] CMS/CDC, COVID-19 Nursing Home Dataset, last accessed August 27, 2020, https://data.cms.gov/Special-Programs-Initiatives-COVID-19-Nursing-Home/COVID-19-Nursing-Home-Dataset/s2uc-8wxp.

[72] For more information on LTCI, see Section VI.A.

[73] Certain insurers use derivatives to mitigate interest rate risk. *See, e.g.*, NAIC & CIPR, *U.S. Insurers' Derivative Exposure Increased 9% in 2018* (2019), https://www.naic.org/capital_markets_archive/special_report_191217.pdf.

[74] Although interest rates used in discounting reserves are prescribed under statutory accounting principles, life insurers must complete asset adequacy testing as part of their statement of actuarial review required in annual regulatory filings. Reserve adequacy is determined by calculating the difference between invested assets and the present value of future premiums, less the present value of future claims under various interest rate path scenarios. *See, e.g.*, American Academy of Actuaries, *Asset Adequacy Analysis* (September 2017), https://www.actuary.org/sites/default/files/files/publications/Asset_Adequacy_PN_092517.pdf.

[75] American Academy of Actuaries, *Report of the American Academy of Actuaries' C3 Life and Annuity Capital Work Group On RBC C3 Requirements for Life Products* (September 2009), 4-6, https://naic-cms.org/sites/default/files/inline-files/committees_e_capad_lrbc_AAA_0909_report_rbc.pdf.

Relatedly, publicly-traded life and annuity writers may also need to recalibrate long-term interest rate assumptions used to set up GAAP reserves and other balance sheet items.[76] Though reserve assumptions vary among insurers, most generally assume mean reversion under GAAP accounting. This means that interest rates are assumed to gradually rise over time to their long-term averages, implying that interest rates will remain at their current levels only near-term.[77] Over the last decade, life insurers have gradually lowered their long-term rate assumptions and adjusted their reserves significantly, which in turn has negatively affected earnings and GAAP equity (capital and surplus) positions.

Short-term rates are now near zero percent and the 10-year Treasury yield reached historic lows in 2020.[78] In the current environment, low interest rates will likely further pressure the insurance industry's earnings as maturing investments and recurring premiums are reinvested at lower rates. Currently, L&H insurers have portfolio yields that are above rates that could be earned from new investments and may continue to face spread compression and slower growth in investment income. Also, recalibrated long-term interest rate assumptions may result in balance sheet and regulatory capital charges.

4. Sales and Distribution

During the first half of 2020, the COVID-19 pandemic presented challenges to life insurance and annuity distribution. For example, the shift to virtual sales platforms impeded insurance agents' ability to market permanent life insurance policies and annuities.[79] Moreover, many L&H insurers tightened underwriting standards and reduced or suspended sales of certain capital-intensive product offerings.[80] In addition, the low interest rate environment has led some L&H insurers to reprice nearly their entire suite of products and to introduce redesigned products.[81] Also, the decline in interest rates reduced the appeal of the savings feature associated with permanent life insurance and reduced fixed annuity crediting rates, and volatility in the

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[76] GAAP reserves and intangible assets are based around a set of assumptions that includes interest rate projections. Insurers periodically review and update interest rate assumptions, which can lead to significant balance sheet charges.

[77] *See* S&P Global, *Assessing the Top Risks COVID-19 Poses to North American Life Insurers* (March 26, 2020), https://www.spglobal.com/ratings/en/research/articles/200326-assessing-the-top-risks-covid-19-poses-to-north-american-life-insurers-11404668.

[78] The 10-Year Treasury yield is used as a benchmark for a wide range of debt securities.

[79] Personal communication is widely viewed as the most effective way to sell complex and high-valued life insurance products.

[80] *See, e.g.*, John Hilton, "Prudential Tips 'First Domino' By Suspending GUL Product: Analyst," *InsuranceNewsNet*, July 7, 2020, https://insurancenewsnet.com/innarticle/prudential-tips-first-domino-by-suspending-gul-product-analyst.

[81] *See* Leslie Scism, "Some Americans Are Being Turned Away Trying to Buy Life Insurance," *The Wall Street Journal*, May 10, 2020, https://www.wsj.com/articles/some-americans-are-being-turned-away-trying-to-buy-life-insurance-11589103002; *see also* LIMRA, "Survey: Insurance Companies Making Changes to New Business in Light of Covid-19," news release, May 12, 2020, https://www.limra.com/en/newsroom/industry-trends/2020/survey-insurance-companies-making-changes-to-new-business-in-light-of-covid-19/.

equity markets reduced demand for variable annuities.[82] These factors contributed to declines in new premiums and sales volumes for most retail life insurance and retirement products, including universal life and whole life products.[83]

In view of the macroeconomic environment, sales of some institutional products have declined; this was particularly reflected in significantly reduced pension risk transfers transactions volumes in the first half of 2020.[84]

L&H sales could decrease across a wide range of insurance products and result in a premium contraction for the industry in 2020 as compared to 2019.[85] With interest rates near record lows, the L&H sales volumes could be challenged by broad-based institutional and retail product repricing actions across the industry.[86]

Over a longer horizon, market reports suggest that the COVID-19 pandemic could incentivize an increase in individual and group life insurance ownership, especially for younger generations.[87] Indeed, the L&H sector has already seen an increase in sales volumes and policy face values for term life following the onset of the pandemic.[88]

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[82] According to LIMRA, total variable annuity sales in the second quarter of 2020 hit their lowest quarterly level since 1996, falling 20 percent to $20.5 billion after four consecutive quarters of growth. Variable annuity sales were $46.5 billion in the first half of 2020, down four percent as compared to the first half of 2019.

[83] *See* LIMRA, "LIMRA: U.S. Life Insurance Policy Sales Increase 2% in Second Quarter Driven by Direct-to-Consumer," news release, September 9, 2020, https://www.limra.com/en/newsroom/news-releases/2020/limra-u.s.-life-insurance-policy-sales-increase-2-in-second-quarter-driven-by-direct-to-consumer/.

[84] *See, e.g.*, LIMRA, " Secure Retirement Institute: Falling Nearly 50 Percent, U.S. Single-Premium Pension Buy-Out Sales Total $2.3 Billion in the Second Quarter 2020," news release, September 2, 2020, https://www.limra.com/en/newsroom/news-releases/2020/secure-retirement-institute-falling-nearly-50-percent-u.s.-single-premium-pension-buy-out-sales-total-$2.3-billion-in-the-second-quarter-2020/; Athene Holding, First Quarter 2020 Earnings Call Transcript, May 8, 2020, 6, https://s1.q4cdn.com/886888837/files/doc_financials/2020/q1/q1-2020-call-transcript.pdf; Swiss Re Institute, *sigma extra: World Insurance: Regional Review 2019, and Outlook* (April 2020), 1, https://www.swissre.com/dam/jcr:902131c5-31f6-42f0-bbe3-bace1f5d0f8e/sigma-4-2020-extra-us-and-canada.pdf.

[85] Total premium and annuity considerations for the U.S. Life insurance industry increased eight percent in the first-quarter of 2020 to $169B. *See* AM Best, *First Look: 3-Month 2020 Life/Annuity Financial Results* (June 8, 2020), http://www3.ambest.com/ambv/sales/bwpurchase.aspx?record_code=297933.

[86] As of July 28, 2020, the yield on the benchmark 10-year Treasury yield was at 59 basis points.

[87] *See, e.g.*, MIB Group, "U.S. Life Insurance Activity Soars in July Reports the MIB Life Index," news release, August 7, 2020, https://www.mibgroup.com/riskanalytics/pdf/lipr_2020_07.pdf.

[88] *See* LIMRA, "LIMRA: U.S. Life Insurance Policy Sales Increase 2% in Second Quarter."

5. Variable Annuities

Variable annuities present different challenges to insurers than other insurance products, since variable annuities allow policyholders the ability to invest in a variety of investment options of their choice, subject to certain limitations.[89] Because stock investments have become the largest component of variable annuities, the variable annuity business has increased insurers' exposure to equity markets.[90] Revenues move in tandem with the broader market indices and in times of adverse price movements, the cost to insurers of embedded guarantees can spike significantly, pressuring reserve margins and available capital.

The combination of sustained low interest rates, rising credit stresses, and mortality rates potentially exacerbated by the COVID-19 pandemic may be material for some variable annuity writers.[91] These companies face the challenge of adjusting their reserve assumptions appropriately while identifying (and mitigating) potential hedging inefficiencies, in order to fulfill annuity contracts' payment guarantees. The size of variable annuity guarantees can be considerable and may amplify pressures for variable annuity writers under stressed market conditions.[92] A study by Federal Reserve Bank of Chicago economists found that for the 10 largest issuers of variable annuity guarantees as a group, reserves ranged from less than 10 percent of capital before the financial crisis at year-end 2007 to as high as 52 percent during the financial crisis at year-end 2008.[93] This correlation can be material for variable annuity writers because it indicates the need for funding in times of market uncertainty. Although the insurance industry has taken actions to de-risk these products since the 2008 financial crisis, insurers with exposure to variable annuities with guaranteed living and death benefits may be subject to increased financial pressure in the current environment.

Several variable annuity writers have substantially increased reserves, to cover potential gaps between policyholder account values and promised guarantees, in response to widening credit spreads and declining interest rates that resulted from the market disruption caused by the

[89] The Federal Reserve Bank of Boston, *Variable Annuities: Underlying Risks and Sensitivities* (April 9, 2019), https://www.bostonfed.org/-/media/Documents/Workingpapers/PDF/2019/sra1901.pdf. Variable annuities are insurance contracts sold by insurance companies in which the insurer provides income payments (either as a single payment or in a series of payments at regular intervals) in exchange for premiums (also called contributions, in the context of annuities) paid by the policyholder (known, for annuities, as the "annuitant"). *See, e.g.*, "Annuities," NAIC & CIPR, last updated September 3, 2020, https://content.naic.org/cipr_topics/topic_annuities.htm. In addition to receiving state oversight, variable annuities are regulated at the federal level by the U.S. Securities and Exchange Commission and the Financial Industry Regulatory Authority. Anyone selling variable annuities must carry a securities license. *See* Treasury, *Insurance EO Report*, 111.

[90] Alejandro H. Drexler, *et al.*, "How Much Risk Do Variable Annuity Guarantees Pose to Life Insurers?" *Chicago Fed Letter Number 384* (2017), https://www.chicagofed.org/publications/chicago-fed-letter/2017/384.

[91] *See* Drexler, *et al.*, *Chicago Fed Letter Number 384*.

[92] According to data from S&P Global, the amount at risk for guaranteed death benefits and amounts guaranteed as annual income under living benefit contracts totaled $105.5 billion at year-end 2019 for the L&H sector or 25 percent of aggregate capital and surplus.

[93] Drexler, *et al.*, *Chicago Fed Letter Number 384*.

COVID-19 pandemic. Reserve increases related to variable annuity living benefit guarantees largely drove the increase in aggregate reserves across L&H insurers to significant levels and resulted in a pre-tax operating loss in the first quarter 2020—only the third quarterly pre-tax operating loss since 2002 for the U.S. L&H sector.[94]

While hedging programs can mitigate some reserve uncertainty for variable annuity writers, removing all risks is difficult. Imperfect hedging leads to risk mismatch (basis risk) that stresses an insurer's capital when the valuation of existing liabilities rises under deteriorating market conditions. In addition to sustained low interest rates and the stresses of volatile equity markets and uncertain mortality rates, the COVID-19 pandemic may also incentivize policyholders to exercise contractual living benefit guarantees at a time when benefit bases can exceed account values.[95] Accordingly, it is difficult to determine whether the extent of potential risk exposures is entirely captured in the level of reserves necessary to fund contracted guarantees.

B. The COVID-19 Pandemic and the U.S. P&C Sector

This section discusses effects of the COVID-19 pandemic on the P&C sector. The current environment may lead to accelerated rate increases across many P&C insurance product portfolios, such as commercial property and financial and professional liability. The effects of the pandemic, however, may also reduce volumes, resulting in lower premiums—or lower premium growth—for the sector as a whole in 2020. The commercial line segment has been in the midst of a "hardening" market since 2019, and this trend appears to be intensifying in part due to the COVID-19 pandemic. Further, the pandemic likely will increase P&C claims and losses in certain P&C lines, even with the presence of certain limiting language and exclusions in many policies. This impact may be offset to a limited extent by a decrease in claims frequency from a variety of factors related to the COVID-19 pandemic, such as social distancing measures.[96]

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[94] Tim Zawacki, "Massive Reserve Increase Led US Life Industry to Unprecedented Q1 Pretax Loss," *S&P Global Market Intelligence*, June 15, 2020, https://platform.marketintelligence.spglobal.com/web/client?auth=inherit#news/article?id=58926994.

[95] Indeed, guaranteed living benefits may pose greater risk for insurers than guaranteed death benefits, as they are linked to market conditions and can create potentially larger future obligations. Death benefits return the funds contributed by the policyholder and are paid at the time of the annuitant's death. Living benefits, on the other hand, not only include the funds contributed but they also factor in a guaranteed accumulated growth rate. Moreover, living benefits can be triggered at the discretion of the policyholder.

[96] For example, the reduced operation of automobiles on account of COVID-19 has led many auto insurers to issue premium rebates in anticipation of reduced claims activity. *See, e.g.*, Lyle Adriano, "Insurers Offering $10.5 Billion in Rebates – But Who Is Offering What?," *Insurance Business America*, April 13, 2020, https://www.insurancebusinessmag.com/us/news/breaking-news/insurers-offering-10-5-billion-in-rebates--but-who-is-offering-what-219397.aspx.

1. Specific P&C Line Impact

This section considers specific lines of P&C insurance, with particular focus on business interruption coverage.

a) Business Interruption Coverage

Business interruption coverage addresses lost profits and continuing operating expenses (such as payroll and rent) during the period that a policyholder's operations are suspended. It is typically issued in association with other property coverages, and business interruption is usually covered only when the suspension of operations results from physical damage to the policyholder's property (or, for contingent business interruption coverage, the property of a supplier that results in the suspension of the policyholder's operations), resulting from a covered cause of loss. Business interruption coverage may be subject to a deductible, in the form of a waiting period after operations are suspended before benefits are triggered, and also can be subject to time limits on the period of suspension for which benefits will be paid, as well as to policy sub-limits of liability. In addition, since 2006, many (but not all) policies providing coverage for business interruption have a virus or communicable disease exclusion.[97] Business interruption coverage is comparatively expensive, and not all U.S. policyholders take up the coverage.[98]

The full scope of insured business interruption losses from the COVID-19 pandemic are unknown, as reflected in the wave of coverage litigation that has emerged over the existence and extent of insurers' obligations for business interruption losses.[99]

For those policyholders that purchased business interruption coverage, most insurers have responded to coverage demands by stating that pandemic-related business interruption losses are not covered. Insurers assert that this is because under typical policy language: (1) the "property damage" to covered premises is not satisfied by the existence of COVID-19 generally in the environment, and (2) the virus or communicable disease exclusions in policies also preclude coverage. The NAIC reports that information it has collected shows that 83 percent of all

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[97] *See* ISO, "New Endorsements Filed To Address Exclusion of Loss due to Virus or Bacteria," Commercial Property LI-CF-2006-175 (Circular July 6, 2006), https://www.propertyinsurancecoveragelaw.com/files/2020/03/ISO-Circular-LI-CF-2006-175-Virus.pdf; *see also* Endorsement, Commercial Property CP 01 40 07 06 (Exclusion of Loss Due to Virus or Bacteria), https://northstarmutual.com/UserFiles/File/forms/policyforms/Current/CP%2001%2040%2007%2006.pdf. Insurance Services Office, or ISO, is an advisory service for insurance companies that, among other things, prepares uniform policy forms that insurers may elect to use in their own operations.

[98] Based upon surveys; premium data associated with business interruption coverage is not reported for state purposes in such a way as to permit a take-up rate calculation. *See, e.g.*, "66% of Small Businesses Lack Business Interruption Coverage: Survey," *Insurance Journal*, September 2, 2015, https://www.insurancejournal.com/news/national/2015/09/02/380367.htm.

[99] *See, e.g.*, Susanne Sclafane, "COVID Business Interruption Suits Top 700. Yep, That's A Lot," *Insurance Journal*, August 3, 2020, https://www.insurancejournal.com/news/national/2020/08/03/577444.htm.

business interruption policies (across all policyholder size categories combined) have a virus exclusion, and 98 percent of such policies include a property damage requirement.[100]

Some policyholders dispute the contention that the property damage requirement is not satisfied by the COVID-19 pandemic, particularly where state and local governments' stay-at-home orders have prevented policyholders from conducting business.[101] Whether the presence of the virus itself constitutes physical damage to property is a question that plaintiffs have raised in lawsuits against insurers.[102] There is likely no one-size-fits-all resolution, because all policies are not the same, and coverage interpretations may vary state-by-state or case-by-case.[103]

In light of the coverage issues presented by business interruption claims arising from the COVID-19 pandemic, a number of state legislatures have introduced legislation that would retroactively change the terms of insurance contracts to expand coverage for COVID-19-related business interruption losses, notwithstanding existing (and state-approved) policy language.[104] Under most versions of these bills, insurers could potentially submit claims for recovery of

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[100] The percentages vary by size of policyholder category. *See* NAIC, *COVID-19 Property & Casualty Insurance Business Interruption Data Call (Part I: Premiums and Policy Information)* (June 2020), 3, https://content.naic.org/sites/default/files/inline-files/COVID-19%20BI%20Nat%27l%20Aggregates.pdf (data as of December 31, 2019).

[101] *See, e.g.,* Mark Goldburd, *COVID-19, Business Interruption Coverage, and the "Physical Loss or Damage" Requirement* (April 10, 2020), https://www.milliman.com/en/insight/COVID-19-business-interruption-coverage-and-the-physical-loss-or-damage-requirement (identifying coverage arguments).

[102] *See* David J. Marmins and Rebecca Lunceford Kolb, "Big Win for Business Interruption Policyholders as Courts Start Issuing COVID-19 Decisions," *American Bar Association*, August 14, 2020, https://www.americanbar.org/groups/litigation/committees/real-estate-condemnation-trust/articles/2020/covid-19-studio-417-v-cincinnati-insurance-company/. Where there is clearly direct physical damage to the covered premises, resulting damages (such as rebuilding costs) are typically covered by property insurance. This could be the case, for example, when vandalism occurs in the context of civil disturbances. If business operations are disrupted by the physical damage, business interruption coverage (if included in the policy) may be implicated. Such claims could be further complicated, however, if the business were already impacted by the COVID-19 pandemic stay-at-home orders.

[103] Trade associations have stated that insurers' business interruption exposure related to the pandemic should be limited due to virus exclusion and physical damage requirements embedded in most policies, and plan to contest claims for coverage and to challenge legislative actions to impose liability retroactively. *See, e.g.*, American Property Casualty Insurance Association, "APCIA: Insurance Perspective on COVID-19," news release, March 26, 2020, http://www.pciaa.net/pciwebsite/cms/content/viewpage?sitePageId=59762. They also have argued that pandemic losses are, and should be, uninsurable. *See, e.g.*, Robert Hartwig and APCIA, *Uninsurability of Mass Market Business Continuity Risks from Viral Pandemics* (May 2020), http://www.pciaa.net/docs/default-source/default-document-library/apcia-white-paper-hartwig-gordon.pdf.

[104] Such legislation has been introduced in California (AB 1552), the District of Columbia (B23-0750), Louisiana (S.B. 477), Massachusetts (SD 2888), Michigan (HB 5739, HB 5928), New Jersey (A3844), New York (Assembly Bill A10266), Ohio (House Bill 589), Oklahoma (SB 553), Pennsylvania (House Bill 2372), Puerto Rico (HB 2469), Rhode Island (H 8064), and South Carolina (SB 1188). Legislatures in the District of Columbia, Louisiana and Oklahoma already have rejected the bills. Other states legislatures are considering the issue, although legislation has not yet been introduced. *See, e.g.*, "If Passed, Bills to Nullify BI Exclusions Could Prove Disastrous: AM Best," *Carrier Management*, May 6, 2020, https://www.carriermanagement.com/news/2020/05/06/206363.htm.

required claims payments through a specified mechanism, although usually the funding would ultimately be borne by insurers. As of September 1, 2020, no state has enacted any of the proposed business interruption coverage bills. The NAIC also issued a statement cautioning against the retroactive imposition of coverage liability for COVID-19-related "business interruption claims that insurance policies do not currently cover."[105]

Relatedly, members of Congress have introduced legislation to address the availability of business interruption insurance for future pandemics. A mechanism modeled on TRIP under which insurers would retain some amount of risk exposure, dubbed the Pandemic Risk Insurance Program, was introduced and referred to the House Financial Services Committee.[106] One large P&C insurer has proposed a hybrid program that also involves the retention of some amount of risk by private insurers for different types of business interruption insurance vehicles, depending upon the size of the policyholder.[107] Also, three insurance trade associations have proposed an alternative approach, under which insurers would administer business interruption benefits that would be wholly funded by the federal government.[108]

Treasury looks forward to working collaboratively with Congress, the states, the NAIC, and other stakeholders in determining how best to move forward in addressing the role of insurers regarding pandemic risk and related policy proposals. In this context, Treasury has noted that while insurers should pay legitimate claims, measures to compel coverage of current COVID-19-related business interruption losses by imposing retroactive changes to insurance contracts fundamentally conflict with bargained-for contract rights and could have troubling implications for insurance markets.[109]

b) Workers' Compensation Insurance

Workers' compensation insurance covers costs related to medical care and treatment, rehabilitation, loss of wages, and other financial consequences encountered by workers resulting from workplace injuries or occupational diseases. Every state, with the exception of Texas, requires employers to obtain some form of workers' compensation coverage to benefit employees who become ill because of or are injured on the job.[110] Most states also permit

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[105] NAIC, "NAIC Statement on Congressional Action Relating to COVID-19," news release, March 25, 2020, https://content.naic.org/article/statement_naic_statement_congressional_action_relating_covid_19.htm.

[106] Pandemic Risk Insurance Act of 2020, H.R 7011, 116th Congr. (2020), https://www.congress.gov/bill/116th-congress/house-bill/7011.

[107] *See* Chubb, *Pandemic Business Interruption Program* (July 8, 2020), https://www.chubb.com/us-en/_assets/doc/pandemic-business-interruption-program.pdf.

[108] *See* American Property Casualty Insurance Association, "Insurance Trades Unveil Federal Pandemic Solution," news release, May 21, 2020, http://www.pciaa.net/pciwebsite/Cms/Content/ViewPage?sitepageid=60933.

[109] Treasury Assistant Secretary Bimal Patel, "Remarks" (speech, Exchequer Club, Washington, D.C., May 20, 2020), https://home.treasury.gov/news/press-releases/sm1018.

[110] In most states, mandatory workers' compensation coverage does not apply to the self-employed or to independent contractors. Additionally, in some states, mandatory coverage does not extend to some employees in certain sectors, such as farm and domestic workers. In Texas, an employer (subject to certain exceptions) can decline to obtain

self-insurance of workers' compensation exposures. Many states have limiting language in their workers' compensation statutes, however, confirming that "ordinary diseases of life" to which the general population is subject are not occupational diseases subject to compensation.

The "ordinary diseases of life" restrictions could call into question the availability of benefits for an employee that contracts COVID-19 during a period of time when he or she works during the COVID-19 pandemic in situations that could promote exposure to the virus.[111] As a result, a number of states have undertaken regulatory and legislative actions that deem COVID-19 to be an occupational disease subject to compensation under workers' compensation laws for at least certain categories of employees.[112] These actions have varied in terms of the categories of employees subject to their provisions, as well as the effect of the statutory presumptions.[113]

Loss experience associated with COVID-19 workers' compensation claims continues to develop. Modeling estimates reflect that the impact of the COVID-19 pandemic on workers' compensation insurers, as amplified by recent state statutory and regulatory initiatives, could vary significantly depending upon the assumptions employed.[114] As in other areas, however, reduced economic activity—resulting in fewer on-the-job injuries—may offset these losses to some extent.[115]

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workers' compensation insurance entirely or otherwise qualify as a self-insurer for the exposure. However, where a Texas employer elects to remain outside of the workers' compensation system, it also remains subject to common law actions for employment-related injuries. *See* Texas Labor Code, Title 5 (Workers' Compensation), Chapter 401 *et seq*. In addition, although Wyoming only requires workers' compensation coverage for workers in "extra-hazardous" occupations, most occupations in Wyoming are so designated under the Wyoming workers' compensation laws. *See* Elaine Weiss, *et al.*, *Workers' Compensation: Benefits, Coverage, and Costs* (October 2019), 6, https://www.nasi.org/sites/default/files/nasiRptWkrsComp201710_31%20final(1).pdf.

[111] *See* Jay Patel, *Workers' Compensation and COVID-19: Pandemic Highlights Disparities across States, Injuries vs. Illnesses* (May 2020), https://www.nasi.org/sites/default/files/research/Pandemic%20highlights%20disparities%20-%20Final.pdf (citing Virginia statutory language as typical).

[112] "State Activity: COVID-19 WC Compensability Presumptions," National Council on Compensation Insurance (NCCI), last updated September 22, 2020, https://www.ncci.com/Articles/Documents/II_Covid-19-Presumptions.pdf (summarizing state provisions presuming compensability of COVID-19).

[113] *See* "State Activity: COVID-19 WC Compensability Presumptions."

[114] *See* NCCI, *COVID-19 and Workers Compensation: Modeling Potential Impacts* (April 2020), https://www.ncci.com/Articles/Pages/Insights-COVID-19-WorkersComp-Modeling-Potential-Impacts.pdf; "COVID-19 Hypothetical Scenarios Tool," NCCI, last updated May 2020, https://www.ncci.com/SecureDocuments/COVID-19-Scenarios.html.

[115] *See* Matt Sheehan, "AM Best Warns Against COVID-19 Workers' Compensation Laws," *Reinsurance News*, June 23, 2020, https://www.reinsurancene.ws/am-best-warns-against-covid-19-workers-compensation-laws/ (observing that "general claims declined noticeably over the last few months in large part because of the pandemic and the forced shuttering of businesses," and that "the current claims environment is generally manageable").

c) Auto Insurance

Auto insurance is available to individual consumers (through personal lines) and businesses (through commercial lines). Automobile usage is interconnected with auto insurance claims and premiums. Auto insurers have benefited from lower claims frequency during the pandemic because of fewer miles driven due to the stay-at-home orders and the adoption by many businesses of work-at-home policies. Some estimates put the reduction in miles driven at approximately 50 percent between mid-March and late-April.[116] In the first half of 2020, personal auto insurance lines results were favorable due to lower claims experience, while commercial auto insurance lines results continued a decade-long trend of worsening underwriting results.[117] Any benefit to personal lines insurers was partially offset by recent premium reductions for policyholders.[118] Strong underwriting results in personal auto insurance lines could continue depending on the path of the virus and socioeconomic trends going forward. As a result of changes in the driving public's behavior, a recent J.D. Power survey found that 55 percent of consumers think that their miles driven will remain lower for a significant time following the COVID-19 pandemic.[119]

The J.D. Power survey also showed that 50 percent of consumers surveyed were interested in usage-based insurance (UBI).[120] UBI (or pay-per-mile insurance) tracks more data than just miles driven: it relies on telematics to provide data on behaviors such as speeding, hard stops, and cellular phone use. UBI may reward safer driving behaviors as well as low mileage and is typically priced with a lower base rate (versus fixed-cost policies) plus a per-mile rate. Several national auto insurers offer UBI products, but they may not be available in all states.[121] The J.D. Power survey also indicated that, by April 2020, 40 percent of consumers were more willing to use UBI, up from 10 percent at the beginning of the pandemic, and consumers that reported already using such a product doubled to 20 percent.[122]

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[116] Jason Metz, "We've Cut Our Driving in Half. Is It Time for Pay-Per-Mile Insurance?" *Forbes*, April 27, 2020, https://www.forbes.com/sites/advisor/2020/04/27/we-cut-our-driving-in-half-is-it-time-for-pay-per-mile-insurance.

[117] Despite strong growth in premiums, loss adjustment expenses have grown faster, driven by costlier litigation of claims. *See, e.g.*, "U.S. Commercial Auto Insurers Report Worst Losses in Decade: AM Best," *Insurance Journal*, June 30, 2020, https://www.insurancejournal.com/news/national/2020/06/30/573912.htm.

[118] For more information on premium relief, see Section II.C.1 and Section II.D.1.

[119] Kyle Schmitt, J.D. Power, *Auto Insurance During COVID-19: Premium Relief: Consumer Impact and Outlook* (April 16, 2020), 3, https://cdn2.hubspot.net/hubfs/4239280/Files/COVID-19/20200416_PULSE%20Insurance%20During%20COVID19_Distribution.pdf.

[120] Schmitt, *Premium Relief: Consumer Impact and Outlook*, 3.

[121] *See, e.g.*, Metz, "We've Cut Our Driving in Half."

[122] Schmitt, *Premium Relief: Consumer Impact and Outlook*, 23. Individual insurers that offer UBI products have confirmed an increase in take-up rates of such policies. For example, Allstate Corp. reportedly experienced a 30 percent increase in sales of its Milewise telematics-based product—which prices premiums primarily according to miles driven—in some of the states in which it is offered during the first quarter of 2020. Calvin Trice, "Allstate Sees Demand for Pay-Per-Mile Car Insurance Jump with Pandemic," *S&P Global Market Intelligence*, May 6, 2020,

The ultimate impact of the COVID-19 pandemic on auto use—and auto insurance—remains to be seen. Early data suggests that both miles driven and accident frequency have declined, and may remain lower than prior to the pandemic.

d) Event Cancellation Insurance

Event cancellation insurance, subject to its terms, conditions, and exclusions, generally provides "[c]overage for financial loss because of the cancellation or postponement of a specific event due to weather or other unexpected cause beyond the control of the insured."[123] The coverage can extend to lost revenues and costs associated with the cancellation, including rescheduling costs. Covered perils can include adverse weather, terrorism, active shooter, cancelled speaker, venue cancellation, and communicable diseases, although many policies expressly exclude coverage for communicable diseases.[124] The terms of such insurance tend to be highly customized and can vary significantly from policy to policy.[125]

The amount of premiums collected for this insurance product is relatively small in light of the size of the commercial P&C market generally.[126] The validity of some COVID-19-related claims may depend on policy wording. Nevertheless, the total amount of coverage available under such policies may result in significant losses, given the widespread effects of the COVID-19 pandemic and the existence of some coverage that extends to pandemic-caused cancellations.[127] For example, some high-profile events may have insurance coverage for some of the financial losses associated with their cancellations due to the COVID-19 pandemic.[128]

https://platform.marketintelligence.spglobal.com/web/client?overridecdc=1&auth=inherit#news/article?id=58483219.

[123] NAIC, Uniform Property & Casualty Product Coding Matrix, Effective Jan. 1, 2020, https://www.naic.org/documents/industry_pcm_p_c_2020.pdf (see Filing Code 9.0008, Event Cancellation).

[124] *See, e.g.*, "Coronavirus and Event Cancellation Insurance," Office of the Insurance Commissioner Washington State, https://www.insurance.wa.gov/coronavirus-and-event-cancellation-insurance ("Coverage for communicable disease outbreaks, such as a coronavirus, is typically not included in a standard event cancellation insurance policy.").

[125] *See* AM Best, "Best's Commentary: Event Cancellation Insurance Losses Amid COVID-19 Outbreak May Hinge on Contract Wordings," news release, March 25, 2020, https://www.businesswire.com/news/home/20200325005406/en/Best%E2%80%99s-Commentary-Event-Cancellation-Insurance-Losses-COVID-19.

[126] Event cancellation insurance is a product reported under the Inland Marine line of insurance, which in total (including many other coverages) represents only about 3.7 percent of total P&C industry premiums. *See* S&P Global (2019 data as of August 6, 2020).

[127] *See, e.g.*, Robert Mazzouli, *et al.*, *Commercial Insurance Market is Hardening*, 2 (May 7, 2020), https://www.fitchratings.com/research/insurance/commercial-insurance-market-is-hardening-07-05-2020 (Fitch Ratings report opining that event cancellation and travel insurance lines, among others, will experience high pandemic-related losses).

[128] *See* Heather Turner, "Wimbledon's Pandemic Insurance Coverage Results in $141M Payout," *NU PropertyCasualty360*, April 10, 2020, https://www.propertycasualty360.com/2020/04/10/wimbledons-pandemic-insurance-coverage-results-in-141m-payout, "Swiss Re Has $250M Cancellation Exposure for Tokyo Olympics," *Business Insurance*, March 20, 2020,

Some observers believe reinsurers (mostly based in Europe) have the greatest exposure due to retention limits.[129] Going forward, insurers will likely consider COVID-19 to be a pre-existing condition not subject to coverage under most new event cancellation policies.[130]

e) Travel Insurance

Travel insurance generally covers "financial loss due to trip cancellation/interruption; lost or damaged baggage; trip or baggage delays; missed connections and/or changes in itinerary; and casualty losses due to rental vehicle damage," subject to the policy's other terms, conditions, and exclusions.[131] In 2018, total premiums associated with travel insurance were approximately $3.8 billion.[132] Products available prior to the emergence of the COVID-19 pandemic varied in scope, including policies providing "cancel for any reason" coverage. However, most travel insurance policies incorporated a variety of exclusions, including for losses associated with epidemics or viruses.[133]

Travel insurers have received numerous claims associated with travel disruptions because of the COVID-19 pandemic, as well as requests for the transfer of policies to cover future, rescheduled trips. As in the case with event cancellation insurance, the COVID-19 pandemic has resulted in a tightening of terms and conditions of policies, including reduced loss payouts and other limitations on recovery under new policies. In particular, claims arising out of the COVID-19 pandemic now will likely be deemed foreseeable and not within the coverage of most newly-issued policies.[134]

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https://www.businessinsurance.com/article/00010101/NEWS06/912333630/Swiss-Re-has-$250M-cancellation-exposure-for-Tokyo-Olympics.

[129] *See* Laura J. Hay, *Do Insurers Have COVID-19 Covered?* (March 2020), https://home.kpmg/xx/en/home/insights/2020/03/do-insurers-have-covid-19-covered.html.

[130] *See* ASAE Business Solutions, *Event Cancellation Insurance FAQ* (March 2020), 2, https://www.asaebusinesssolutions.org/pdf/Event_Cancellation_Insurance_FAQ_March_2020.pdf ("To our knowledge at this time, providers of event cancellation insurance consider the Coronavirus COVID-19 a pre-existing condition, and it is therefore excluded from event cancellation policies from late January 2020 onward.").

[131] NAIC, Uniform Property & Casualty Product Coding Matrix, Effective Jan. 1, 2020, https://www.naic.org/documents/industry_pcm_p_c_2020.pdf (see Filing Code 9.0009, travel coverage).

[132] Elaine Glusac, "Travel Insurance: Is It Worth It?" *The New York Times*, June 17, 2020, https://www.nytimes.com/2020/06/17/travel/travel-insurance-pandemic.html.

[133] Ben Finley, "Pandemic Exposes Gaps in Travel Insurance Coverage," *Claims Journal*, April 29, 2020, https://www.claimsjournal.com/news/national/2020/04/29/296797.htm.

[134] *See* "Coronavirus (COVID-19) and Travel Insurance FAQs," New York Department of Financial Services (NYDFS), https://www.dfs.ny.gov/consumers/coronavirus/travel_insurance_faqs (noting that coverage under a travel insurance policy for COVID-19 is unlikely to be provided if COVID-19 was foreseeable at the time the policy was issued).

f) Credit Insurance

Credit insurance—also known as trade credit insurance—is coverage "purchased by manufacturers, merchants, educational institutions, or other providers of goods and services extending credit, for indemnification of losses or damages resulting from the nonpayment of debts owed to them for goods or services provided in the normal course of their business."[135] Typically, suppliers can purchase commercial trade credit insurance up to a pre-determined amount, based on the financial strength of a given buyer. In the United States, reportedly more than 60 percent of credit insurance policyholders are small- and medium-size businesses.[136] Such insurance enhances the ability of suppliers to use their accounts receivable as collateral for commercial bank, working capital financing.

In times of economic stress, however, credit insurers face reductions in premium receipts coupled with increased claims activity, which typically leads them to scale back the credit limits they offer in order to avoid risk to their own balance sheets.[137] COVID-19-related economic dislocations have reportedly resulted in a significant reduction of available capacity for credit insurance.[138] In some countries, government backstops or public reinsurance facilities have been enacted to enable the credit insurance market to function without reduced limits despite the uncertainty from the COVID-19 pandemic. In the United States, manufacturing and retail sector stakeholders have proposed creating a temporary federal reinsurance backstop to restore capacity in the commercial credit insurance market, so that new orders can be placed and new business can be conducted during the pandemic.[139] A recent study concluded that with less U.S. trade credit insurance coverage, "insured companies will be less able to meet rising demands for their goods and services as consumer demand generally picks up and also will have reduced credit lines from banks that rely on companies having [trade credit insurance] policies, thereby reducing the strength of the recovery from the recession."[140]

[135] NAIC, Uniform Property & Casualty Product Coding Matrix, Effective Jan. 1, 2020, https://www.naic.org/documents/industry_pcm_p_c_2020.pdf (see Filing Code 28.1, Credit—Credit Default).

[136] James Daly, "The Case for a Partnership between Trade Credit Insurers and the U.S. Government," *CFO Magazine*, May 21, 2020, https://www.cfo.com/risk-management/2020/05/the-case-for-a-partnership-between-trade-credit-insurers-and-the-u-s-government/.

[137] *See* Mohamed Benkhalfa, *COVID-19: Trade Credit Insurance Expectations* (April 2020), 2, https://milliman-cdn.azureedge.net/-/media/milliman/pdfs/articles/3125ldp_credit-risk_20200501.ashx.

[138] *See* James Daly, "The Case for a Partnership between Trade Credit Insurers and the U.S. Government."

[139] Alexander Bitter, "Retail, Manufacturer Trade Groups Seek Federal Backstop for Credit Insurance," *S&P Global Market Intelligence*, June 23, 2020, https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/retail-manufacturer-trade-groups-seek-federal-backstop-for-credit-insurance-59166198.

[140] Robert Litan and Yong Xu, *A Strong Recovery Requires a Healthy Trade Credit Insurance Industry* (July 9, 2020), 3, https://www.econone.com/wp-content/uploads/2020/07/A-Strong-Recovery-Requires-a-Healthy-Trade-Credit-Insurance-Industry.pdf. *See also id.* at 6 ("the cutbacks in [trade credit insurance] coverage threaten to inhibit

g) Liability Claims

Various lines of business addressing third-party liability could be implicated in response to claims for damages related to the COVID-19 pandemic. For example, Directors and Officers liability coverage (D&O) insures for liability arising out of the performance by directors and officers of their professional duties on behalf of a corporation. Errors & Omissions liability coverage (E&O) insures for liability arising out of the performance of professional or business-related duties, such as by physicians, brokers, or accountants. Many other forms of commercial liability coverage are available as well. Claims for alleged breaches of duty of care typically lag the underlying event.[141] Whether such claims relating to the COVID-19 pandemic will materialize, and the degree to which they will be successful, is not clear.[142] As a means to facilitate economic recovery, the business community has proposed liability exemptions.[143]

2. P&C Sector's Asset Exposures from the COVID-19 Pandemic

P&C insurers typically operate with much lower asset leverage and invest in higher quality and shorter duration securities compared to L&H insurers.[144] Although a prolonged low interest rate environment generally has greater ramifications for the L&H sector, the drop in government and corporate bond yields could have a more immediate impact on the investment income results of P&C insurers, pressuring the sector's earnings in 2020. Compared to L&H insurers, P&C insurers have higher asset turnover and investment income contributes to a larger percentage of earnings. As a result, P&C insurance investment portfolios are vulnerable to the downturn in the macroeconomic environment caused by the COVID-19 pandemic and generally are exposed to some of the same credit risks (if to a lesser extent) as L&H insurers. One area of focus for certain P&C insurers is their increased asset allocation to equity investments, which typically carry more risk than fixed income securities. Also, P&C insurers are major investors in municipal bonds, an asset class for which the economic fallout from the COVID-19 pandemic has heightened cash flow concerns in certain municipalities and segments (e.g., airport, hospital, and tax-funded securities). Finally, the P&C sector over the last decade has increased its allocation to more complex and non-traditional assets (e.g., CLOs, private equity funds, and joint ventures), which may have exposed insurers to increased investment risk as a result of the COVID-19-related economic dislocation.

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sales by affected policyholders by an estimated $46 billion in gross output, and thus prevent the creation of approximately 155,000 jobs at supplier firms.").

[141] Sean Bissey, *Learning from NatCats: Is the Onslaught of Cases Yet to Come*? (July 14, 2020), https://cclt.law.upenn.edu/2020/07/14/learning-from-natcats-is-the-onslaught-of-cases-yet-to-come/.

[142] *See, e.g.*, Axis Capital Holdings, Second-Quarter 2020 Earnings Call Transcript, July 29, 2020. https://www.fool.com/earnings/call-transcripts/2020/07/30/axis-capital-holdings-axs-q2-2020-earnings-call-tr.aspx.

[143] *See, e.g.*, U.S. Chamber of Commerce, *Why Temporary Coronavirus Liability Relief is Needed for American Businesses* (2020) https://www.uschamber.com/report/why-temporary-coronavirus-liability-relief-needed-american-businesses (advocating for a limited liability "safe harbor").

[144] The effects on insurer investments are discussed in greater depth above, in connection with the L&H sector. For more information on P&C investments, see Section VII.A.3.a.iii.

C. Insurer Responses to the COVID-19 Pandemic

The COVID-19 pandemic has caused insurers to make a variety of adjustments to their practices with respect to policyholders and to their own internal operations. This section first surveys some of the forms of relief offered to policyholders (and in some instances required by regulators), including premium credits, non-cancellation of policies, and premium payment deferrals. The section then discusses insurers' approaches to operational resilience during the pandemic.

1. Policyholder Relief

Insurers have taken numerous actions to provide relief to policyholders—sometimes voluntarily, sometimes because of regulatory requirements—in response to the COVID-19 pandemic.[145] For example:

Grace Periods and Fee Waivers. Many insurers have relaxed due dates for premium payments, extended grace periods for late payments, and waived late fees and penalties. State insurance regulators encouraged—and sometimes ordered—such relief measures.[146] In response to CARES Act provisions, several L&H insurers provided participants with easier access to emergency funds via retirement accounts by waiving withdrawal penalties and plan sponsor fees to amend plans, and also provided guidance to help customers and financial planners assess their options.[147]

Auto Insurance Credits. As the number of miles driven decreased substantially due to stay-at-home orders across most states, accident frequency also fell. As a result, many insurers—including all of the top 15 auto insurers—provided some level of premium reduction to their personal auto insurance customers.[148] While a number of these steps were taken

[145] For more information on state insurance regulator responses to COVID-19, see Section II.D.

[146] *See, e.g.*, State of Alabama Department of Insurance, Bulletin No. 2020-05 (March 30, 2020), https://www.aldoi.gov/pdf/legal/ALDOI%20Bulletin%20No.%202020-05.pdf (addressing "cancellation or non-renewal recommendations due to COVID-19 pandemic" for "all commercial and personal lines of insurance, including property, casualty, disability, accident and health, and life insurance policies").

[147] *See, e.g.*, Susan Neeley, "A Lifeline for COVID-19 Financial Hardship," *IMPACT*, April 9, 2020, https://impact.acli.com/a-lifeline-for-covid-19-financial-hardship/. The Coronavirus Aid, Relief, and Economic Security (CARES) Act allows eligible participants in some tax-advantaged retirement plans to take an early distribution of up to $100,000 during 2020 without paying the 10 percent penalty tax imposed on most early withdrawals; it also suspends the mandatory 20 percent tax withholding for early distributions from 401(k) or other workplace retirement plans. Plans may also permit loans up to the higher of $100,000 or 100 percent of the retirement account value with repayments deferred for up to one year. CARES Act § 2202, Pub. L. No. 116-136 (2020).

[148] Tim Zawacki, "Auto Insurer's Smaller May Credit Reflects Uptick in Driving," *S&P Global Market Intelligence*, May 12, 2020, https://platform.marketintelligence.spglobal.com/web/client?auth=inherit#news/article?id=58568104.

voluntarily, some were in response to regulatory actions.[149] By one estimate, as of May 1, 2020, auto insurers collectively had committed to returning $10.5 billion to their policyholders through premium credits, premium percentage discounts, and added coverage.[150] Consumer groups praised such efforts but viewed them as insufficient, noting that most credits were around 15 percent of March and April premiums although some data showed automobile accidents down 50 percent.[151]

Extended Coverage for Delivery Services. In the face of dine-in restrictions under state and local stay-at-home orders, many restaurants expanded their take-out and delivery options. Other businesses similarly expanded delivery services. In response, many insurers waived the commercial use exclusion in personal auto insurance policies for employees making deliveries for restaurants and other essential businesses. Other insurers expanded restaurants' general liability insurance at no additional cost to include coverage for hired drivers and non-owned autos. These coverage extensions were encouraged by some state insurance regulators and required by others.[152]

2. Insurer Continuity Planning and Practices

Continuity plans form a key component of risk management strategies but they are generally designed to respond to short-term disruptions of limited geographic scope, resulting from events such as natural hazards, infrastructure damage, terrorist attacks, and cyber attacks or other network outages. State insurance regulators review insurers' business continuity plans as part of the annual financial condition examination process with attention to whether the continuity plan, when activated, will minimize financial loss, ensure continued service to policyholders (particularly with respect to prompt payments of claims), and mitigate the negative effect of disruption to the insurer's operations.[153]

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[149] *See, e.g.*, California Department of Insurance, "Commissioner Lara Orders Insurance Companies to Refund Premiums to Drivers and Businesses Affected by the COVID-19 Emergency," news release, April 13, 2020. http://www.insurance.ca.gov/0400-news/0100-press-releases/2020/release038-2020.cfm.

[150] Laura Adams, "How COVID-19 May Affect Future Auto Insurance Premiums," *NU PropertyCasualty360*, May 1, 2020, https://www.propertycasualty360.com/2020/05/01/how-covid-19-may-affect-future-auto-insurance-premiums/. Some insurers also began moving to reduce rates going forward. *See also* "State Farm Adds $2.2B of Auto Rate Cuts to $2B of Coronavirus Credits," *Best's Insurance News & Analysis*, May 18, 2020, http://news.ambest.com/newscontent.aspx?AltSrc=104&RefNum=225326.

[151] Center for Economic Justice & Consumer Federation of America, *Personal Auto Insurance Premium Relief in the COVID-19 Era* (May 2020), https://consumerfed.org/wp-content/uploads/2020/05/Auto-Insurance-Refunds-COVID-19-Update-Report-5-7-20.pdf.

[152] *See, e.g.*, Wisconsin Office of the Commissioner of Insurance, "Governor Evers, Insurance Commissioner Order Insurers to Assist Restaurants Offering Delivery During COVID-19 Public Health Crisis," news release, March 23, 2020, https://oci.wi.gov/Pages/PressReleases/20200323RestaurantsCOVID-19.aspx.

[153] *See* NAIC, *NAIC Financial Condition Examiners' Handbook*, Section I.III.D (Business Continuity) (2018).

At the outset of the pandemic, many states designated financial services, including insurance, as essential services exempted from stay-at-home orders, which aligned with federal guidance.[154] Many of these orders also required essential businesses to determine how to conduct essential operations while protecting the health and safety of both staff and customers. For insurers, the COVID-19 pandemic demonstrated the need to develop and be ready to implement contingency plans, generally involving remote working, for several months or longer.

The insurance industry needed not only to adapt operations to conform to state and local stay-at-home orders, but also to consider guidance from state health departments and the CDC. Many insurance companies closed their offices and continued to provide essential insurance services remotely, while those that remained open sought to maximize remote work options, stagger work hours, maintain social distancing measures in the office, and undergo additional hygiene and sanitation protocols. As part of this process, insurers had to identify critical suppliers, consider potential weaknesses in the supply chain, and develop alternative options to address these challenges.

Insurers engaged in remote operations also needed to address cybersecurity as another critical area of operational resilience. Reports show that cyber criminals have tried to take advantage of the large number of people working remotely and prey on people's fears about the pandemic.[155] Ransomware attacks increased by nearly 150 percent between February and March 2020, while the number of U.S. networks experiencing malicious activity doubled between January and March 2020.[156]

The need for remote operations, the threat of malicious activity, and the overall increased demands on networks have served as a critical test case for investment in technology. Insurers that have demonstrated a commitment to modernization and made InsurTech investments over the past few years were better positioned to respond to the pandemic.[157] Such insurers were able to modify existing operations by relying on recent technological developments, such as conducting claims investigations using photographs or video from mobile phones. However,

[154] *See, e.g.*, Illinois Exec. Order in Response to COVID-19 (March 21, 2020), https://www2.illinois.gov/IISNews/21288-Gov._Pritzker_Stay_at_Home_Order.pdf (deeming "essential businesses and operations" to include "[p]rofessional services, such as legal services, accounting services, insurance services, [and] real estate services (including appraisal and title services)"). In including insurance as essential, such orders were consistent with federal guidance. *See* Treasury, "Statement by Secretary Steven T. Mnuchin on Essential Financial Services Workers," news release, March 24, 2020, https://home.treasury.gov/news/press-releases/sm956; Cybersecurity & Infrastructure Security Agency, *Guidance on the Essential Critical Infrastructure Workforce* (March 19, 2020; last updated August 18, 2020), https://www.cisa.gov/publication/guidance-essential-critical-infrastructure-workforce.

[155] *See, e.g.*, Venky Anant, *et al.*, "A Dual Cybersecurity Mindset for the Next Normal," *McKinsey & Company*, July 7, 2020, https://www.mckinsey.com/business-functions/risk/our-insights/a-dual-cybersecurity-mindset-for-the-next-normal.

[156] Joseph Menn, "Hacking Attacks Against Corporations Double as Employees Work from Home," *Insurance Journal*, April 17, 2020, https://www.insurancejournal.com/news/national/2020/04/17/565185.htm. For more information on insurer cybersecurity generally, see Section IV.C.2.

[157] For more information on InsurTech generally, see Section VI.D. *See also* FIO, *2019 Annual Report*, 75-98.

observers have noted that transitioning workforces to a virtual environment created challenges and additional expenses for insurers, particularly those with legacy systems.[158] While modernization measures were previously seen as offering a competitive advantage, technological adaptation now appears to be a necessity for insurers to maintain operational resilience and to promptly pay claims. Some insurers have even suggested that adoption of alternate work arrangements and an additional emphasis on technology created cost efficiencies, expressing an intent to permanently modify their operations going forward.[159]

Although most state stay-at-home orders have expired, many within the insurance industry continue to allow, encourage, or require remote work and other forms of social distancing, and remain cautious about returning to a pre-pandemic state of operations. Whether the COVID-19 pandemic will result in long-term changes to the way the insurance industry operates—such as a permanent shift to remote work—is unclear. Given future uncertainties, insurers should see digitalization efforts as essential, and continue to test and improve their information technology capabilities to prepare for a sustained virtual work environment and increased online activity by policyholders. Continuous review and testing of continuity plans are also important, and FIO anticipates that supervisors will encourage insurers to consider a variety of adverse scenarios so that they are prepared to respond to uncertainties during times of crisis.

D. State Insurance Regulatory Responses to the COVID-19 Pandemic

This section describes the state insurance regulatory responses to the COVID-19 pandemic.[160] Since March 2020, state insurance regulators have issued materials providing guidance and relief related to policyholder coverage and premiums, as well as insurer operations, licensing, and accounting. In addition, state insurance regulators also have sought information from insurers to better understand the pandemic's potential scope, policyholders' benefits, and coverage issues.[161] State regulators themselves also moved to contingency operations plans.[162]

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[158] Stonybrook Capital, "The Implications of COVID-19 on the Insurance Industry," news release, March 16, 2020.

[159] *See, e.g.*, Nationwide, "Nationwide Announces Permanent Shift in Workplace, Work-From-Home Strategy," news release, April 29, 2020, https://news.nationwide.com/nationwide-announces-permanent-shift-in-workplace-work-from-home-strategy/.

[160] *See* NAIC, *A Report of the NAIC on the State Insurance Regulatory Response to COVID-19: Update 1/January 1-May 31, 2020*, https://content.naic.org/sites/default/files/inline-files/naic_covid_19_report_1.pdf.

[161] NAIC, *A Report of the NAIC on the State Insurance Regulatory Response to COVID-19*, 11.

[162] For more information on insurer continuity plans and practice, see Section II.C.2.

1. Guidance and Relief for Policyholders

Many state insurance regulators provided guidance to their policyholders in their states on COVID-19-related insurance issues. They issued consumer alerts, press releases, and other forms of guidance discussing the COVID-19 pandemic and travel insurance, business interruption coverage, and life insurance, among other topics.[163] Most U.S. state insurance regulators also required, or in some cases just encouraged, insurers in their jurisdictions to provide various forms of relief to policyholders.

These actions included:

- extending grace periods to defer payment of insurance premiums;
- issuing moratoriums on cancellations, non-renewals, or termination of policies due to nonpayment;
- waiving late payment fees, reinstatement fees, or other penalties; and
- extending deadlines for submitting claims or other documents.[164]

The measures listed above are similar to those taken by state insurance regulators after natural hazards and severe weather-related events like hurricanes or floods. State insurance regulators also requested (and sometimes required) that insurers provide partial rebates or discounts for certain coverage lines affected by reduced economic activity and stay-at-home orders, most notably for auto insurance premiums.[165]

[163] *See, e.g.*, Connecticut Insurance Department, "Connecticut Insurance Department Provides Tips on Travel Insurance Amid Coronavirus Outbreak," news release, March 6, 2020, https://portal.ct.gov/CID/News-Releases/Press-Releases/Press-Releases-20200306; Idaho Department of Insurance, "DOI Publishes Bulletin and FAQ on Business Interruption Coverage," news release, April 27, 2020, https://doi.idaho.gov/DisplayPDF?Id=7793; New Hampshire Insurance Department, "Information for NH Residents Who Have Employer-Sponsored Life Insurance Plans," news release, April 10, 2020, https://www.nh.gov/insurance/media/pr/2020/documents/press-release-life-insurance-unemployment-04-10-20.pdf. *See also* NAIC, *A Report of the NAIC on the State Insurance Regulatory Response to COVID*-19, 9 (noting that "supporting the efforts of U.S. insurance regulators in managing the impact of the COVID-19 pandemic [is] its 'Priority One,'" with a focus on: (1) protecting insurance consumers and (2) ensuring the ongoing stability and operation of our nation's insurance industry, among other things).

[164] The NAIC has maintained a comprehensive list of state bulletins and guidance, including actions related to insurer operations. *See* "NAIC Coronavirus Resource Center," NAIC, https://content.naic.org/naic_coronavirus_info.htm.

[165] For more information on policyholder relief measures by insurers—including estimates of the amount of relief provided and criticism of insurer measures—see Section II.C.1.

2. Guidance and Relief for Insurers

Nearly all states also issued guidance to insurers related to the COVID-19 pandemic, most frequently related to operational relief, accounting relief, and continuity plans.[166]

Operational Relief. State insurance regulators generally have responded to the pandemic by providing regulatory flexibility to insurers while emphasizing the importance of continued timely processing and payment of policyholder claims. Many state regulators extended deadlines for insurers' mandatory financial filings with the state.[167] Many state regulators also postponed or canceled scheduled insurance licensing exams, or allowed online licensing examinations for agents and producers.[168] Nearly all states issued guidance to their regulated entities confirming that certain regulatory requirements would be temporarily waived during the pandemic. For example, some states began permitting e-signatures and electronic document delivery of policy documents and/or allowed virtual property inspections.[169] Some states initially implemented these regulatory flexibilities as temporary modifications but are now reevaluating some of them as permanent changes. As states re-opened in May and June 2020, some states rescinded their COVID-19-related bulletins and notified insurers that normal regulatory operations had resumed.[170]

Accounting Relief. The NAIC considered several adjustments to statutory accounting principles (SAPs) for insurers that provided relief to borrowers and policyholders impacted by the pandemic.[171] By July 2020, the NAIC adopted four interpretations granting temporary exceptions from certain SAP accounting rules and granting insurers relief from incurring adverse accounting charges:

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[166] *See* "NAIC Coronavirus Resource Center," NAIC.

[167] For example, in May, Maine issued notice to all insurers that allowed a 30 to 60 day extension on regulatory filings in limited circumstances. Also, in April, South Carolina and Arizona offered to all insurers a 30 to 60 day extension on certain regulatory filings. "NAIC Coronavirus Resource Center," NAIC (State Bulletins and Alerts tab).

[168] *See, e.g.,* Georgia Office of Insurance and Safety Fire Commissioner, Bulletin 20-EX-6: Waiving of In-Person Continuing Education Requirements (March 31, 2020), https://oci.georgia.gov/press-releases/bulletins; NYDFS, "Department of Financial Services Announces Remote Online Insurance Licensing Exam Option," news release, June 11, 2020, https://www.dfs.ny.gov/reports_and_publications/press_releases/pr202006111.

[169] *See, e.g.*, Idaho Department of Insurance, Bulletin No. 20-05: Waivers of Certain Requirements to Address COVID-19 – Property or Casualty (April 15, 2020), https://doi.idaho.gov/DisplayPDF?ID=7766; Florida Office of Insurance Regulation, Informational Memorandum OIR-20-04M (March 25, 2020), https://www.floir.com/siteDocuments/OIR-20-04M.pdf; NAMIC, "COVID-19 Discussion" (written submission, NAIC Property and Casualty Insurance Committee, June 10, 2020), https://content.naic.org/sites/default/files/call_materials/NAMIC%20Statement%20-%20C%20Committee%20061020.pdf.

[170] *See, e.g.,* Arkansas Insurance Department, Bulletin No. 20-2020: Recision of COVID-19-Related Bulletins Issued Under Executive Order 20-03 (May 11, 2020), https://insurance.arkansas.gov/uploads/resource/documents/20-2020.pdf.

[171] "Statutory Accounting Principles Working Group," NAIC, https://content.naic.org/cmte_e_app_sapwg.htm.

- Interpretation 20-02, which delayed the recognition of collecting insurance premiums in U.S. jurisdictions that are disrupted by the COVID-19 pandemic;
- Interpretation 20-03, which adopted CARES Act guidance on the approach to accounting for certain loan modifications in response to the COVID-19 pandemic; this interpretation permits insurers to extend grace periods for borrowers to make repayments on loans without reclassifying the loan as a troubled debt restructuring;
- Interpretation 20-04, which allowed borrowers of mortgage loans extra time to make mortgage payments without recording an impairment; and
- Interpretation 20-08, which allowed reporting premium refunds—outside of policy terms—as a reduction in premiums and not as expenses.[172]

Ongoing Supervision/Continuity Plans. Several states have issued bulletins directing regulated insurance entities to review their business continuity plans in response to the COVID-19 pandemic, and in some cases requiring submission of revised continuity plans for regulatory review.[173]

3. State Regulator Information Requests and Data Calls

In an attempt to coordinate potentially conflicting requests for information from the U.S. states, the NAIC developed a COVID-19 Information Request. The request had two sections focused on qualitative assessments. First, the section on "Operational Impact of COVID-19" asked about steps taken to implement an effective business continuity plan and/or COVID-19 response plan to support ongoing operations, including questions about the insurer's ability to maintain policyholder services and essential functions, communication plans, cybersecurity efforts, and the availability and oversight of third-party service providers. Second, the section on "Financial Impact of COVID-19" asked about company solvency and steps taken by the company both to assess its exposures and address any identified concerns.[174]

Separately, on May 1, 2020, the NAIC launched a set of data calls to collect premiums and claims data related to business interruption insurance for all 50 U.S. states, the District of Columbia, and the U.S. Virgin Islands. The goal of the NAIC's data call was to identify the largest U.S. business interruption insurance writers, the size of the market, and the extent of the exclusions potentially applicable to COVID-19-related losses.[175] Two states—New York and

[172] "Statutory Accounting Principles Working Group," NAIC (Related Documents tab).

[173] *See, e.g.*, Oklahoma Insurance Department, PC Bulletin No. 2020-01 (Amended) (March 20, 2020, updated April 29, 2020), https://www.oid.ok.gov/pc-bulletin-no-2020-01-amended/.

[174] *See, e.g.*, Burnie Burner, "NAIC/Texas Department of Insurance COVID Information Request Template," *JDSupra*, April 8, 2020, https://www.jdsupra.com/legalnews/naic-texas-department-of-insurance-38814/.

[175] Letter from NAIC on Behalf of Participating States, the District of Columbia and U.S. Territories to Property and Casualty Insurers Writing Business Interruption Coverage (May 1, 2020), https://content.naic.org/sites/default/files/inline-files/COVID_BI_Letter_FINAL_4.pdf (discussing the NAIC business interruption data call).

New Mexico—did not participate, as noted in the NAIC's release of its initial findings.[176] To assist FIO in carrying out its statutory functions, and particularly to assist the Secretary in considering any proposals concerning a potential federal role regarding "pandemic insurance," FIO consulted with the NAIC and the U.S. states concerning coordination on sharing the information obtained from these data calls.[177] Specifically, in June 2020, FIO requested the nationally aggregated data from the NAIC's business interruption insurance data call, including the initial premium data set and claims data set, and each of the subsequent claims data sets. FIO also requested the aggregated state level data for each jurisdiction for both the premium data call and the first and subsequent claims data calls.[178] As noted above, FIO's initial analysis of aggregate data showed that a high percentage of business interruption policies contained a virus exclusion, and nearly all contained a property damage requirement.[179]

E. International Insurance Supervisory Responses to the COVID-19 Pandemic

The COVID-19 pandemic and its corresponding financial and economic impacts are affecting the insurance industry worldwide. Around the globe, financial supervisors have recognized that insurance is an essential service and must remain operational and viable during times of uncertainty to help policyholders manage risk and withstand stress. Supervisory responses reflect that COVID-19-related impacts have manifested in a variety of forms in different jurisdictions due to variations in demographics, economies, markets, and supervisory structures. Nevertheless, insurance supervisory responses have shared similar objectives: collect information; provide operational relief (e.g., by relaxing regulatory deadlines); enhance operational continuity and resilience of insurers; promote prudence; and encourage working with policyholders throughout the COVID-19 pandemic. This section discusses the responses of two international standard setting bodies (IAIS and the FSB) and that of the European Union's insurance regulatory body, the European Insurance and Occupational Pensions Authority (EIOPA).

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[176] NAIC, *COVID-19 Property & Casualty Insurance Business Interruption Data Call – Part 1 – Premiums and Policy Information June 2020*, https://content.naic.org/sites/default/files/inline-files/COVID-19%20BI%20Nat%27l%20Aggregates_0.pdf.

[177] *See* FIO Act.

[178] *See* FIO Act, 31 U.S.C. § 313(e).

[179] For more information on business interruption coverage, see Section II.B.1.a.

1. IAIS Response

The IAIS is a voluntary, member-driven, non-profit organization of insurance supervisors that is the primary international insurance standard-setting body.[180] In response to the COVID-19 pandemic, the IAIS has:

Assessed COVID-19 Risk and Responses. The IAIS has repurposed existing or initiated new projects to monitor COVID-19-related risk and track the implementation of COVID-19-related policy measures and supervisory responses. In March 2020, the IAIS launched a survey of its members on the impact of the COVID-19 pandemic on the insurance industries in their respective jurisdictions and the different supervisory measures that have been put in place or were under consideration.[181] Later that month, the IAIS announced it would use its recently developed Global Monitoring Exercise framework to conduct a targeted assessment of the impact of the COVID-19 pandemic on the global insurance industry.[182]

Remained Committed to Information Sharing. The IAIS has remained committed to facilitating information sharing and cooperation among insurance supervisors. The IAIS Executive Committee (ExCo), for example, has held more frequent teleconference meetings in order to address COVID-19-related issues. IAIS subcommittees have also continued to meet and conduct their work, albeit virtually.

Extended Deadlines. In order to provide operational relief to supervisors, insurers, and other stakeholders, the IAIS decided that it would, in consultation with the FSB, review the 2020 timelines for the implementation of its Holistic Framework. The IAIS extended the timelines for the ICS and Aggregation Method data collections.[183] The IAIS also generally delayed public consultations on material such as Issues Papers and Application Papers by at least six months.[184]

Throughout, the IAIS has expressed confidence in the ability of the insurance "sector as a whole to withstand the shocks associated with COVID-19," while further noting that "[i]nsurance has an essential role to play during a pandemic event such as COVID-19, providing protections to individuals, households and businesses," and that insurance supervisors will "remain vigilant in

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[180] For more information on FIO's role in the IAIS, see Section V.A.1.

[181] IAIS, "The International Association of Insurance Supervisors (IAIS) is Closely Monitoring the Ongoing Coronavirus (COVID-19) Pandemic," news release, March 13, 2020, https://www.iaisweb.org/news/statement-from-jonathan-dixon-iais-secretary-general.

[182] *See* IAIS, "IAIS Executive Committee Takes Steps to Address Impact of COVID-19 on the Insurance Sector," news release, March 27, 2020, https://www.iaisweb.org/news/iais-executive-committee-takes-steps-to-address-impact-of-covid-19-on-the-insurance-sector. For more information on the Global Monitoring Exercise, see Section III.B.2.

[183] The Aggregation Method is a group capital methodology under development by the United States and other interested jurisdiction, as an alternative to the ICS. For more information on the ICS and the Aggregation Method, see Section III.B.1.

[184] *See* IAIS, "IAIS Executive Committee Takes Steps to Address Impact of COVID-19 on the Insurance Sector." For more information on the Holistic Framework, see Section III.B.2.

terms of the financial soundness and operational resilience of insurers, in support of the protection of policyholders and the maintenance of financial stability."[185] In May, the IAIS further highlighted the roles of insurers and insurance supervisors during the pandemic, emphasizing the need for insurers to pay covered claims in a prompt and efficient manner but cautioning against jurisdictions retroactively requiring insurers to cover COVID-19-related losses specifically excluded from insurance policies.[186]

2. FSB Response

The G20 established the FSB in 2009 as its financial regulatory reform implementation organization to promote the implementation of effective regulatory, supervisory, and other financial sector policies and to coordinate the work of international standard-setting bodies, including the IAIS.[187] The FSB has not addressed insurance specifically in connection with the COVID-19 pandemic, but has addressed financial services more generally, which includes insurance. The FSB stated that it is "actively cooperating to maintain financial stability during market stress related to COVID-19" while "representing a broad and diverse membership of national authorities, international standard setters and international bodies."[188] The FSB has "encourage[d] authorities and financial institutions to make use of the flexibility within existing international standards to provide continued access to funding for market participants and for businesses and households facing temporary difficulties from COVID-19, and to ensure that capital and liquidity resources in the financial system are available where they are needed."[189] In addition, the FSB has supported its members as they have taken actions to increase the amount of assets available to insurers and taken additional actions to support market functioning and accommodate business continuity plans. The FSB noted the need for financial services firms to continue to operate critical functions, including insurance services.[190]

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[185] IAIS, "IAIS Executive Committee Takes Steps to Address Impact of COVID-19 on the Insurance Sector.," news release, March 27, 2020, https://www.iaisweb.org/news/iais-executive-committee-takes-steps-to-address-impact-of-covid-19-on-the-insurance-sector.

[186] *See* IAIS, "IAIS Facilitates Global Coordination on Financial Stability and Policyholder Protection During COVID-19 Crisis," news release, May 7, 2020, https://www.iaisweb.org/page/news/press-releases/file/89860/iais-media-release-financial-stability-and-policyholder-protection.

[187] *See* "About the FSB," FSB, https://www.fsb.org/about/. For more information on the FSB, see Section V.D.

[188] "Addressing Financial Stability Risks of COVID-19," FSB, https://www.fsb.org/work-of-the-fsb/addressing-financial-stability-risks-of-covid-19/.

[189] FSB, "FSB Coordinates Financial Sector Work to Buttress the Economy in Response to COVID-19," news release, March 20, 2020, https://www.fsb.org/2020/03/fsb-coordinates-financial-sector-work-to-buttress-the-economy-in-response-to-covid-19/.

[190] FSB, "FSB Members Take Action to Ensure Continuity of Critical Financial Services Functions," news release, April 2, 2020, https://www.fsb.org/2020/04/fsb-members-take-action-to-ensure-continuity-of-critical-financial-services-functions/.

3. EIOPA Response

EIOPA is an EU financial regulatory institution and an independent advisory body to the European Commission. It has issued several statements and recommendations in response to the COVID-19 pandemic. In March 2020, EIOPA advised insurers to prepare for the necessary steps to ensure business continuity during the pandemic, while advising EU member state insurance supervisors to be flexible about the timing of otherwise required reporting and disclosure.[191] On April 1, 2020, EIOPA strongly encouraged insurers to consider steps to mitigate the impact of the COVID-19 pandemic on consumers. At the same time, EIOPA signaled an aversion to retroactively imposing coverage of claims not contractually included in a policy, stressing that such an action "could create material solvency risks and ultimately threaten policyholder protection and market stability, aggravating the financial and economic impacts of the current health crisis." [192] On April 2, EIOPA urged insurers and reinsurers to temporarily suspend all discretionary dividend distributions and share buy backs.[193] EIOPA also has been analyzing the impact of the COVID-19 pandemic on the EU insurance industry. Among other things, EIOPA updated its Risk Dashboard to include COVID-19-related exposures.[194] It also supports enhanced monitoring of liquidity risks in the insurance industry in light of the pandemic.[195]

As have other supervisors, EIOPA has modified its operations and extended deadlines for a broad array of consultations as well as a data request.[196] For example, in coordination with the

[191] EIOPA, *EIOPA Statement on Actions to Mitigate the Impact of Coronavirus/COVID-19 on the EU Insurance Sector* (March 17, 2020), https://www.eiopa.europa.eu/content/eiopa-statement-actions-mitigate-impact-coronaviruscovid-19-eu-insurance-sector; EIOPA, *EIOPA Issues Recommendations on Supervisory Flexibility Regarding Deadlines of Supervisory Reporting and Public Disclosure by Insurers* (March 20, 2020), https://www.eiopa.europa.eu/content/eiopa-issues-recommendations-supervisory-flexibility-regarding-deadlines-supervisory.

[192] EIOPA, *Call to Action for Insurers and Intermediaries to Mitigate the Impact of Coronavirus/COVID-19 on Consumers* (April 1, 2020), https://www.eiopa.europa.eu/content/call-action-insurers-and-intermediaries-mitigate-impact-coronaviruscovid-19-consumers_en.

[193] EIOPA, *EIOPA Statement on Dividends Distribution and Variable Remuneration Policies in the Context of COVID-19* (April 2, 2020), https://www.eiopa.europa.eu/content/eiopa-statement-dividends-distribution-and-variable-remuneration-policies-context-covid-19_en.

[194] EIOPA, "European Insurers Face Increased Risk Exposures to COVID-19, But Market Perceptions and Imbalance Remained at Medium Level," news release, May 18, 2020, https://www.eiopa.europa.eu/content/european-insurers-face-increased-risk-exposures-due-covid-19-market-perceptions-and.

[195] EIOPA, *EIOPA Supports the ESRB's Call on Enhanced Monitoring of Liquidity Risks in the Insurance Sector* (June 9, 2020), https://www.eiopa.europa.eu/content/eiopa-supports-esrb-call-enhanced-monitoring-liquidity-risks-insurance-sector.

[196] *See* EIOPA, "Update on Other Measures Impacted by COVID-19 Pandemic," news release, April 2, 2020, https://www.eiopa.europa.eu/content/update-other-measures-impacted-covid-19-pandemic.

European Commission, EIOPA has announced the delay of its advice to the Commission related to the Solvency II Review from the end to June to the end of December, 2020.[197]

Box 1: The World Bank Cat Bond and Alternative Risk Solutions for Pandemics

The COVID-19 pandemic has spurred exploration by policymakers into the potential of catastrophe (cat) bonds to ameliorate the economic impact of pandemics.[198] The largest cat bond for pandemics—the World Bank's 2017 effort—was created in the wake of an Ebola pandemic, and was designed to provide emergency benefit payments to developing countries impacted by a pandemic.[199] The World Bank cat bond consists of $320 million in bonds and $105 million in swaps, each structured into two risk tranches covering different types of viral outbreaks for a 5-year period, with payments based on a set of parametric triggers including minimum number of deaths in at least eight countries and an exponential rate of growth of contagion.[200] The 2018 Ebola outbreak, however, did not trigger any benefit payments. For the COVID-19 pandemic, the World Bank cat bond allocated payments that equaled 100 percent ($150 million) from one tranche, but only 16.7 percent (about $46 million) from the second tranche, because only part of that tranche was designed to pay for a COVID-type virus.[201] Additionally, the COVID-19 pandemic did not meet all of the trigger parameters until May 31, 2020. As a result, some have criticized the World Bank program for its delayed benefit payments as well as its high cost, insufficient size, design complexity, and stringent trigger mechanism.[202] For future pandemics, researchers have suggested a variation on the World Bank model that could be issued by EU member countries through parametric cat bonds of up to €50 billion.[203]

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[197] EIOPA, "EIOPA Revises Its Timetable for Advice on Solvency II Review Until End December 2020," news release, April 30, 2020, https://www.eiopa.europa.eu/content/eiopa-revises-its-timetable-advice-solvency-ii-review-until-end-december-2020.

[198] For more information on alternative risk transfer products, see Section VII.B.2.

[199] World Bank, "World Bank Launches First-Ever Pandemic Bonds to Support $500 Million Pandemic Emergency Financing Facility," news release, June 28, 2017, https://www.worldbank.org/en/news/press-release/2017/06/28/world-bank-launches-first-ever-pandemic-bonds-to-support-500-million-pandemic-emergency-financing-facility.

[200] World Bank, *Prospectus Supplement dated June 28, 2017*, http://pubdocs.worldbank.org/en/882831509568634367/PEF-Final-Prospectus-PEF.pdf; World Bank, *Fact Sheet: Pandemic Emergency Financing Facility* (April 27, 2020), https://www.worldbank.org/en/topic/pandemics/brief/fact-sheet-pandemic-emergency-financing-facility.

[201] World Bank, *Fact Sheet: Pandemic Emergency Financing Facility*.

[202] *See, e.g.*, "World Bank Pandemic Bond Instrument Fails in COVID-19 Response," *Bretton Woods Project*, April 7, 2020, https://www.brettonwoodsproject.org/2020/04/world-bank-pandemic-bond-instrument-fails-in-covid-19-response/; Euan Ritchie and Mark Plant, "A Good Idea Executed Badly: Why the World Bank Should Not Renew the Pandemic Emergency Facility Insurance Window," *Center for Global Development*, April 9, 2020, https://www.cgdev.org/blog/good-idea-executed-badly-why-world-bank-should-not-renew-pandemic-emergency-facility-insurance.

[203] Helmut Gründl and Fabian Regele, *Pandemic Insurance Through Pandemic Partnership Bonds: A Fully Funded Insurance Solution in a Public Private Partnership* (May 2020), https://safe-frankfurt.de/policy-center/policy-publications/policy-publ-detailsview/publicationname/pandemic-insurance-through-pandemic-partnership-bonds-a-fully-funded-insurance-solution-in-a-public.html.

III. SYSTEMIC RISK AND SOLVENCY

This section describes selected domestic developments in the insurance industry relating to systemic risk and solvency, including updates on the NAIC Group Capital Calculation, the Federal Reserve's Building Block Approach, the NAIC Macro Prudential Initiative, and FSOC designations and interpretive guidance. The section then discusses international developments relating to systemic risk and solvency, including the IAIS's development of an ICS and a Holistic Framework.[204] As detailed below, Treasury is committed to continued engagement in international forums to ensure the U.S. regulatory framework is appropriately reflected and that U.S. interests are appropriately advanced in these forums.

A. Domestic Developments

1. NAIC Group Capital Calculation

The NAIC initiated its Group Capital Calculation (GCC) efforts in April 2016, when it charged its Financial Condition Committee to (1) construct a GCC using a Risk Based Capital (RBC) aggregation methodology, and (2) liaise with the NAIC's ComFrame Development and Analysis Working Group on international capital developments and consider insurance group capital developments by the Federal Reserve.[205] The NAIC then formed the Group Capital Calculation Working Group (GCCWG), charging it with constructing a GCC as an assessment tool for state regulators in providing a baseline quantitative measure of capital across an insurance group.[206] The NAIC intends for the GCC to be an analytical tool that provides supervisors with a baseline quantitative measure for group risks.[207] The NAIC does not plan to have supervisory intervention points in the GCC.[208]

The NAIC's field testing of the GCC started in May 2019, with voluntary participation from 33 U.S.-based insurers across 15 states, including P&C, L&H, and health insurers. The NAIC completed almost all field testing by year-end 2019.[209] During 2020 the GCCWG moved forward on several areas of the GCC's development. The GCCWG held a meeting in May 2020

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[204] FIO's other international engagement is discussed in Section V.

[205] *See, e.g.*, NAIC, *2016 Proceedings of the National Association of Insurance Commissioners: Spring Volume I* (April 2016), 2-21, 2-32, https://www.naic.org/prod_serv/PRC-ZS-2016_combined.pdf. The NAIC's ComFrame Development and Analysis Working Group proposed this charge in October 2015. *See* NAIC, *NAIC Group Capital Calculation Recommendation: Adopted by the ComFrame Development and Analysis (G) Working Group Oct. 30, 2015, Adopted by the International Insurance Relations (G) Committee – Nov. 19, 2015* (2015), https://www.naic.org/documents/committees_e_grp_capital_wg_related_cap_calc_reccomendation.pdf.

[206] *See* NAIC, *2016 Proceedings of the NAIC*, 2-21, 2-32.

[207] NAIC, "Field Testing for NAIC Group Capital Calculation Underway," news release, June 18, 2019, https://www.naic.org/Releases/2019_docs/field_testing_for_naic_group_capital_calcuation_underway.htm.

[208] *See* NAIC, *NAIC Group Capital Calculation (E) Working Group Meeting Materials* (July 29, 2020), 11-12, https://content.naic.org/sites/default/files/national_meeting/GCCWG%20Agenda%20%26%20Materials.pdf.

[209] NAIC, *NAIC Group Capital Calculation Post Field Testing Staff Input* (May 19, 2020), https://content.naic.org/sites/default/files/national_meeting/01.pdf.

at which the NAIC provided initial suggested revisions to the draft GCC instructions and to an accompanying GCC calculation template.[210] The NAIC made suggestions for resolving issues around several facets of the GCC calculation which remain under consideration.[211]

The proposed GCC template includes a sensitivity analysis intended to be used by the lead state regulator for informational purposes, but which would not be included in the GCC ratio. Data collected in the sensitivity analysis might also be used to inform future development of the GCC.[212] The GCCWG explained that it also intends to continue exploring other potential methods for scalars for foreign insurance regimes in the GCC, in conjunction with the work on the Aggregation Method at the IAIS.[213]

In June 2020, the GCCWG released for public comment draft amendments to the Model Insurance Holding Company System Regulatory Act and instructions, which would incorporate the GCC into the model law.[214] The revised model, which is expected to become an NAIC accreditation requirement once finalized, would (among other requirements) call for applicability of the GCC to U.S. insurance groups with insurance operations in jurisdictions subject to the current covered agreements with the United States.[215] The NAIC has drafted initial guidance, to be incorporated into its *Financial Analysis Handbook*, to address how state regulators would use the GCC as a tool to augment their financial analysis of insurance groups.[216] As of September 1, 2020, a final decision as to how guidance for the GCC will be implemented has not yet been announced, and comments from stakeholders were still under consideration.[217]

2. Federal Reserve Building Block Approach

Following the passage of the Dodd-Frank Act in 2010, the Federal Reserve became the consolidated supervisor of certain insurance holding companies, including those determined by FSOC to be systematically important and depository institution holding companies that are

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[210] NAIC, *Group Capital Calculation (E) Working Group Meeting Materials* (May 19, 2020), Attachment B-1, https://content.naic.org/sites/default/files/call_materials/GCCWG%205.19.2020%20Materials.pdf.

[211] Open issues with the GCC calculation include the scope of the group, qualifying capital resources (debt), capital treatment on entities not subject to RBC or other capital requirements, and scalars for foreign insurance regimes. See, NAIC, *Group Capital Calculation (E) Working Group Meeting Materials* (July 29, 2020), Attachments 1a, 1b, and 1c, https://content.naic.org/sites/default/files/national_meeting/GCCWG%20Agenda%20%26%20Materials.pdf.

[212] See NAIC, *NAIC Group Capital Calculation Post Field Testing Staff Input.*

[213] *See* NAIC, *NAIC Group Capital Calculation Post Field Testing Staff Input*.

[214] Model Insurance Holding Company System Regulatory Act (NAIC draft 2020), Model Insurance Holding Company System Model Regulation with Reporting Forms and Instructions (NAIC draft 2020), https://content.naic.org/cmte_e_grp_capital_wg.htm (under Exposure Drafts tab).

[215] For more information on covered agreements, see Section V.B.

[216] *See* NAIC, *Group Capital Calculation (E) Working Group Agenda & Materials*, (May 19, 2020), 77, https://content.naic.org/sites/default/files/call_materials/GCCWG%205.19.2020%20Materials.pdf.

[217] *See* NAIC, 2*019 Fall National Meeting, Group Capital Calculation (E) Working Group Agenda & Materials*, 1, https://content.naic.org/sites/default/files/national_meeting/GCCWG%20NM%20Agenda%20%26%20Materials_1.pdf.

significantly engaged in insurance activities. Insurance companies under the Federal Reserve's supervision currently only consist of savings and loan holding companies. The Dodd-Frank Act also requires that an enterprise-wide minimum group risk-based capital requirement standard be established for these firms.

In June 2016, the Federal Reserve published an Advance Notice of Proposed Rulemaking on Capital Requirements for Supervised Institutions Significantly Engaged in Insurance Activities.[218] For these institutions, the Federal Reserve invited comment on an aggregated capital framework known as the "Building Block Approach" (BBA) that would leverage existing insurance and bank legal entity capital requirements to develop an enterprise level capital requirement.[219]

In October 2019, the Federal Reserve issued a Notice of Proposed Rulemaking for Regulatory Capital Rules: Risk-Based Capital Requirements for Depository Institutions Holding Companies Significantly Engaged in Insurance Activities.[220] The Federal Reserve's proposed rulemaking would establish an enterprise-wide capital requirement for depository institution holding companies with significant insurance activities. The Federal Reserve also launched a Quantitative Impact Study of the BBA.[221]

As explained in the October 2019 Notice of Proposed Rulemaking, the BBA is the Federal Reserve's proposed insurance group risk-based capital requirement pursuant to its authority granted under the Home Owners' Loan Act and the Dodd-Frank Act.[222] The proposed BBA would group entities within the holding company by their applicable capital frameworks and assign certain regulated companies and material entities without an existing capital framework their own blocks, i.e., grouped entities that are covered under the same capital framework.[223] Certain adjustments would be made to place available capital and the capital requirement of each block on a comparable basis, and to avoid double counting of available and required capital of

[218] Capital Requirements for Supervised Institutions Significantly Engaged in Insurance Activities; Proposed Rule, 81 Fed. Reg. 38631 (June 14, 2016), https://www.federalregister.gov/documents/2016/06/14/2016-14004/capital-requirements-for-supervised-institutions-significantly-engaged-in-insurance-activities.

[219] 81 Fed. Reg. 38631.

[220] Regulatory Capital Rules: Risk-Based Capital Requirements for Depository Institutions Holding Companies Significantly Engaged in Insurance Activities; Notice of Proposed Rulemaking, 84 Fed. Reg. 57240 (October 24, 2019), https://www.federalregister.gov/documents/2019/10/24/2019-21978/regulatory-capital-rules-risk-based-capital-requirements-for-depository-institution-holding.

[221] Federal Reserve, "Federal Reserve Board Invites Public Comment on Proposal to Establish Capital Requirements for Certain Insurance Companies Supervised by the Board," news release, September 6, 2019, https://www.federalreserve.gov/newsevents/pressreleases/bcreg20190906a.htm. *See also* Regulatory Capital Rules, 84 Fed. Reg. 57240.

[222] The Home Owners' Loan Act, 12 U.S.C. § 1461); Dodd-Frank Act § 113. The Home Owners' Loan Act is a federal statute that provides for the chartering and regulation of thrifts and thrift holding companies.

[223] The resulting BBA ratio of available to required capital would be based on equivalent values because the scalars would adjust for variations between state-based insurance capital requirements and bank capital requirements.

each block during the aggregation process. Each block would be translated into a common standard—the U.S. RBC—with the use of scalars before stacking the blocks to arrive at an aggregate enterprise level of available capital and required capital.

Additionally, since the Federal Reserve's current population of supervised insurance groups has no material international insurance operations, it has only developed scalars for domestic application.[224] Notably, the Federal Reserve proposed an adjustment to reverse all state-permitted and prescribed practices. The Federal Reserve stated that this proposed adjustment provides for a consistent representation of financial information across all companies in a jurisdiction.[225] As of September 1, 2020, the Federal Reserve had not issued a final rule regarding the BBA.[226]

3. Distinctions between GCC and BBA

The NAIC's draft GCC and the Federal Reserve's proposed BBA— if and when they are finalized—would likely play an important role in the U.S. advocacy at the IAIS for an aggregation approach to a capital standard that can be deemed comparable to the ICS.[227] Both the BBA and the GCC build on existing state-based insurance capital standards, and are conceptually similar in this regard.[228] Treasury noted in the Insurance EO Report that the group capital initiatives by the NAIC, the states, and the Federal Reserve should be harmonized to the extent possible.[229] While the NAIC has not yet finalized the design of the GCC, it has provided information on several distinctions that could emerge between the proposed BBA and draft GCC.[230] FIO will continue to monitor the development of the BBA and the GCC.

4. NAIC Macro Prudential Initiative

In August 2017, the NAIC commenced its Macro Prudential Initiative through its Financial Stability Task Force (FSTF). This initiative focuses on monitoring financial stability by focusing

[224] Federal Reserve, *Comparing Capital Requirements in Different Regulatory Frameworks* (2019), 1, https://www.federalreserve.gov/newsevents/pressreleases/files/bcreg20190906a1.pdf.

[225] Regulatory Capital Rules, 84 Fed. Reg. at 57256.

[226] The BBA assessment will be informed by the Quantitative Impact Study and input from commenters. Regulatory Capital Rules, 84 Fed. Reg. at 57270.

[227] *See, e.g.*, Treasury, *Insurance EO Repor*t, 100 (recommending that the group capital initiatives by the NAIC, the states, and the Federal Reserve should be harmonized, to the extent possible, to mitigate duplicative and unnecessary regulatory burdens for U.S. insurers); Randal K. Quarles, "Insurance Supervision and International Engagement" (speech, American Council of Life Insurers Executive Roundtable, Naples, FL, January 9, 2019), 3, https://www.federalreserve.gov/newsevents/speech/files/quarles20190109a.pdf. For more information on the ICS, see Section III.B.1.

[228] For more information on the GCC, see Section III.A.1.

[229] *See, e.g.*, Treasury, *Insurance EO Repor*t, 100.

[230] *See* NAIC, *GCC vs BBA*, https://content.naic.org/sites/default/files/inline-files/GCC%20vs.%20BBA.docx; NAIC, *NAIC Group Capital Calculation Post Field Testing Staff Input*; Regulatory Capital Rule, 84 Fed. Reg. 57240.

on four key areas: (1) liquidity assessment; (2) stress testing of capital requirements; (3) resolution and recovery measures; and (4) counterparty exposure.[231] As a first step, the FSTF established the Liquidity Assessment Subgroup, which proposed modifications to NAIC annual financial statement reporting forms (also known as blanks) to address data gaps and concerns. The proposals were adopted and became part of the NAIC's accreditation program with their inclusion into the *Accounting Practices and Procedures Manual*.[232] Effective with 2019 statutory life annual statements, L&H insurers are now subject to additional liquidity-related reporting requirements.[233]

Following the update to the 2019 financial statement reporting forms, the FSTF began codifying its Liquidity Stress Test Framework. The Framework's objective is to complement other group supervisory modernization initiatives and would supplement, not replace, an insurer's internal liquidity risk management requirements. The Framework would be the part of a "more comprehensive framework, still to be developed," and may be used in coordination with the group capital calculation process.[234]

In December 2019, based on the recommendations of a subgroup comprised of NAIC staff, state regulators, and insurance groups, the FSTF released a draft Liquidity Stress Test Framework for a 60-day public comment period.[235] The draft Framework applies a cash-flow based approach to assessing liquidity under two separate hypothetical stress scenarios.[236] Details of the stress scenarios are determined by the NAIC and incorporate both prescribed and internal company assumptions for modeling purposes. In addition, the framework requests an insurer-specific most-adverse scenario. Entities that fall within the scope of the Framework include holding companies, life insurance entities, and material non-insurance entities.[237] Both an insurance entity and insurance group would be subject to the Framework if they both exceeded the threshold of any

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[231] NAIC, *NAIC Financial Stability (EX) Task Force Macro Prudential Initiative (MPI): A Proposed Framework* (August 1, 2017), 3-4, https://content.naic.org/sites/default/files/inline-files/cmte_ex_financial_stability_tf_macro_prudential_initiatives.pdf.

[232] NAIC, *NAIC Accounting Practices and Procedures Manual*, (March 2020).

[233] For more information on changes to NAIC financial statement reporting based on the Subgroup's work, see FIO, *2019 Annual Report*, 13.

[234] For more information on the GCC, see Section III.A.1.

[235] NAIC, *2019 NAIC Liquidity Stress Test Framework for Life Insurers Meeting the Scope Criteria* (Draft December 2019), https://content.naic.org/sites/default/files/inline-files/DRAFT%20LST%20FRAMEWORK%2011-27-2019%20clean.pdf.

[236] The first scenario follows similar market conditions experienced during the financial crisis with modifications. The second stress scenario emphasizes disintermediation risk and includes: a sharp rise in interest rate, a broad-based equity market decline, and adverse credit rating actions against the life insurance industry, with modifications. *See* NAIC, *2019 NAIC Liquidity Stress Test Framework for Life Insurers Meeting the Scope Criteria.*

[237] The definition of materiality could be contingent on the guidance an insurer's Own Risk and Solvency Assessment (ORSA). NAIC, *Draft Minutes of NAIC Financial Stability (EX) Task Force* (December 9, 2019), in *Financial Stability Task Force Summer National Meeting Materials* (August 5, 2020), 3, https://content.naic.org/sites/default/files/national_meeting/Materials_23.pdf.

six insurance activities associated with liquidity risk, subject to future modifications.[238] Using these criteria, only 23 insurance groups would have been subject to the Framework in 2019.[239] For 2019, the NAIC used its lead state examination authority to conduct its assessment. Going forward, the FSTF is exploring the possibility of "open[ing] the holding company models' provisions on regulatory authority and confidentiality protections."[240] The Framework is thus in the early stages of development, and the FSTF is still developing key aspects of its test design.

Other aspects of the FSTF and related work are dependent on the progress of other groups. The FSTF noted that the development of its capital stress testing is on hold until the GCC is implemented.[241] In 2020, the Receivership and Insolvency Task Force adopted a recommendation "to consider methods to encourage states to adopt provisions in receivership and guaranty fund laws that promote effectiveness and consistency, particularly with respect to receiverships of insurers operating in multiple states."[242] The FSTF's work on counterparty exposures has been postponed until the second quarter of 2021.[243]

5. Financial Stability Oversight Council Final Interpretive Guidance

FSOC's functions under the Dodd-Frank Act include: (1) identifying risks to the financial stability of the United States; (2) promoting market discipline; and (3) responding to emerging threats to the stability of the U.S. financial system.[244] The FIO Director is a non-voting member of FSOC.

On December 4, 2019, FSOC voted unanimously to issue final interpretive guidance regarding nonbank financial company designations.[245] Under the final guidance (and consistent with the

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[238] Framework scope criteria are based the following six activities and corresponding threshold: Fixed and Indexed Annuities ($25 billion); Funding Agreements and Guaranteed Investment Contracts ($10 billion); Derivatives (notional value $75 billion); Securities Lending ($2 billion); Repurchase Agreements ($1 billion); "Borrowed Money" ($1 Billion). *See* NAIC, *2019 NAIC Liquidity Stress Test Framework for Life Insurers Meeting the Scope Criteria*, 23.

[239] *See* NAIC, *2019 NAIC Liquidity Stress Test Framework for Life Insurers Meeting the Scope Criteria*, 9.

[240] *See* Model Insurance Holding Company System Regulatory Act (NAIC Liquidity Assessment Subgroup Draft August 28, 2020), 7, https://content.naic.org/sites/default/files/call_materials/Materials_18.pdf (deleting Section K which would expressly include regulatory authority and confidentiality protections in the Act).

[241] NAIC, *FSTF Macroprudential Updates, Summer National Meeting* (August 5, 2020), https://content.naic.org/sites/default/files/national_meeting/Materials_23.pdf.

[242] NAIC, *Draft Minutes of Receivership and Insolvency (E) Task Force* (January 8, 2020), in *Receivership and Insolvency (E) Task Force Summer National Meeting Materials* (August 7, 2020), 2, https://content.naic.org/sites/default/files/national_meeting/RITF%20Materials%20080720_updated.pdf.

[243] NAIC, *FSTF Macroprudential Updates, Summer National Meeting*.

[244] 12 U.S.C. § 5322(a)(1).

[245] Treasury, "Financial Stability Oversight Council Issues Final Guidance on Nonbank Designations," news release, December 4, 2019, https://home.treasury.gov/news/press-releases/sm844. The final interpretive guidance includes, in Section II, an overview of key changes from FSOC's 2012 interpretive guidance and its March 2019 proposed guidance. *See* Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies; Final Interpretive Guidance, 84 Fed. Reg. 71740 (December 30, 2019),

proposed guidance issued in March 2019), FSOC will prioritize an activities-based approach—rather than an entity based-approach (EBA)—to identifying and addressing potential risks to U.S. financial stability, while also enhancing the analytical rigor and transparency in the processes FSOC intends to follow if it were to consider making a determination to subject a nonbank financial company to supervision by the Federal Reserve.[246]

The final guidance replaces in its entirety FSOC's 2012 interpretive guidance regarding the manner in which FSOC makes determinations under Section 113 of the Dodd-Frank Act.[247] The final guidance is designed to "enhance the Council's engagement with companies, regulators, and other stakeholders" and "to provide the public with sufficient information to understand the Council's concerns regarding risks to financial stability, while appropriately protecting information submitted by companies and regulators to the Council."[248]

B. International Developments

1. Development of an International Insurance Capital Standard for Insurance Groups

For the last six years, the IAIS has been developing a global ICS, which aims to provide a common language for assessing the financial health of insurance groups that have cross-border operations.

a) Background

In October 2013, the IAIS announced its plan to develop a risk-based ICS, in response to a request by the FSB for the IAIS to create a comprehensive, group-wide supervisory and regulatory framework for Internationally Active Insurance Groups (IAIGs).[249] In 2014, the IAIS began to design this new regulatory framework, known as ComFrame, which would consist of both qualitative and quantitative supervisory requirements tailored to the complexity and international scope of IAIGs.[250] As the quantitative component of ComFrame, the ICS is intended to become a minimum harmonizing capital standard that supervisors can use to measure

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https://www.federalregister.gov/documents/2019/12/30/2019-27108/authority-to-require-supervision-and-regulation-of-certain-nonbank-financial-companies.

[246] For more information on the FSOC's proposed guidance and activities-based approach, see FIO, *2019 Annual Report*, 14-15 (describing the priorities reflected in the proposed guidance).

[247] *Compare* Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies; Final Rule and Interpretive Guidance, 77 Fed. Reg. 21637 (April 11, 2012) https://home.treasury.gov/system/files/261/Authority%20to%20Require%20Supervision%20and%20Regulation%20of%20Certain%20Nonbank%20Financial%20Companies%20%28April%2011%2C%202012%29.pdf (this 2012 interpretive guidance was replaced in its entirety by the December 2019 final interpretive guidance). For a high-level description of the procedural changes, see FIO, *2019 Annual Report*, 15-16.

[248] 84 Fed. Reg. at 71742.

[249] *See* FIO, *2019 Annual Report*, 17 n. 59.

[250] *See* FIO, *2019 Annual Report*, 17 n. 60.

an insurance group's financial safety and soundness.[251] The ultimate goal of the IAIS with regard to this project is a single ICS that includes a common methodology through which one ICS achieves comparable, i.e., substantially the same, outcomes across jurisdictions.

In November 2017, the IAIS agreed that group-wide supervisors would request annual confidential reporting of the reference ICS based on a market-adjusted valuation methodology with a single discounting approach, a standard method for calculating the capital requirement, and converged criteria for qualifying capital resources from participating insurance groups during the monitoring period.[252] The IAIS also agreed to implement the ICS in two phases—a five-year monitoring period from 2020 to 2024 during which the ICS will continue to be refined, followed by a second phase when the ICS will be implemented as a prescribed capital requirement in 2025. Further, the IAIS stated that it aims to be in a position by the end of the monitoring period to assess whether the Aggregation Method provides comparable—i.e., substantially the same (in the sense of the IAIS's ultimate goal)—outcomes to the ICS. If so, the Aggregation Method will be considered an outcome-equivalent approach for implementation of the ICS as a prescribed capital requirement.[253] The Aggregation Method is an alternative group capital approach to the ICS, under development by the U.S. and other interested jurisdictions.

b) ICS Status

The ICS project reached another milestone in November 2019, when the IAIS advanced version 2.0 of the ICS into a five-year monitoring period from 2020 through 2024.[254] The IAIS agreement consisted of three parts: (1) the design of the reference ICS being developed by the IAIS; (2) the parameters around the operationalization of the ICS monitoring period; and (3) the IAIS's approach to the comparability assessment of the Aggregation Method.[255] The IAIS also

[251] IAIS, *Risk-Based Global Insurance Capital Standard Version 2.0: Public Consultation Document* (July 31, 2018), https://www.iaisweb.org/page/consultations/closed-consultations/2018/ics-version-20.

[252] *See* IAIS, *Implementation of ICS Version 2.0*, 1 (November 2, 2017), https://www.iaisweb.org/file/69796/implementation-of-ics-version-20. IAIS standards are not self-executing in the United States. In the November 2017 agreement, the IAIS agreed for group-wide supervisors to require annual confidential reporting of the reference ICS during the monitoring period. In the November 2019 agreement, however, the IAIS agreed to make participation by IAIGs in the monitoring period as large as possible across different jurisdictions and business models, encouraging rather than mandating the reporting of the reference ICS from participating insurance groups. In addition, the IAIS's use of the term "mandatory" applies only within the context of IAIS member commitments, and not the U.S. insurance regulatory regime.

[253] IAIS, *Implementation of ICS Version 2.0*.

[254] For more on prior milestones, *see* FIO, *2019 Annual Report*, 16-20 (discussing key ICS milestones, including the adoption of ICS Version 1.0 in July 2017, the November 2017 announcement on implementation of the ICS, and the IAIS agreeing to assist in collection and analysis of data for the Aggregation Method).

[255] IAIS, "IAIS Adopts First Global Frameworks for Supervision of Internationally Active Insurance Groups and Mitigation of Systemic Risk in the Insurance Sector," news release, November 14, 2019, https://www.iaisweb.org/page/news/press-releases-prior-to-2014/14_November_2019_-_Media_Release_-_IAIS_adopts_first_global_frameworks_for_supervision_of_internationally_active_insurance_groups_and_mitigation_of_systemic_risk_in_the_insurance_sector.pdf.

released a five-year work plan for the ICS project that highlighted key deliverables and deadlines during the monitoring period.[256]

At the IAIS meetings in November 2019, FIO registered its official objection to the IAIS's advancement of version 2.0 into the five-year monitoring period.[257] FIO and Treasury also noted that the current form of the ICS could risk limiting U.S. consumers' access to important long-term savings products.[258] FIO has also noted that the IAIS agreement in November 2019 had some positive aspects for the United States. First, the ICS monitoring period would continue to be an iterative process that would allow for changes, including the completion of an economic impact assessment that would evaluate the market implications of potential implementation of the ICS. Second, the IAIS established clear timelines and next steps during the monitoring period for the important work on the comparability assessment of the Aggregation Method. FIO closely collaborated with the other members of Team USA during the ICS negotiations, and FIO will continue to work collaboratively with Team USA during the ICS monitoring period.[259]

The IAIS also agreed in November 2019 that group-wide supervisors would encourage annual confidential reporting of the reference ICS from participating insurance groups during the monitoring period.[260] Additional reporting of the ICS based on an alternative valuation methodology, Generally Accepted Accounting Principles with Adjustments (GAAP Plus), and other methods to calculate the capital requirement would be permitted at the option of group-wide supervisors. Optional reporting could also include the submission of results based on the Aggregation Method. Finally, in November 2019, the IAIS stated that it will be making decisions during the monitoring period on whether other approaches will be part of the final framework of the ICS, including the inclusion of GAAP Plus and other methods of calculating the ICS capital requirement such as with the use of internal models.[261]

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[256] IAIS, "Work Plan and Timeline 2020-24," news release, November 14, 2019, https://www.iaisweb.org/page/news/press-releases//file/87171/work-plan-and-timeline-2020-24.

[257] Treasury, "Readout on the International Association of Insurance Supervisors Annual Meeting," news release, November 14, 2019, https://home.treasury.gov/news/press-releases/sm830 ("U.S. insurers should not face pressure to participate in a reference ICS that is not expected to apply in the United States and does not fit our markets. The current form of the ICS could also risk limiting U.S. consumers' access to important long-term savings products.").

[258] Treasury, "Readout on the International Association of Insurance Supervisors Annual Meeting."

[259] Treasury, "Readout on the International Association of Insurance Supervisors Annual Meeting." The U.S. members of the IAIS—FIO, the Federal Reserve, the NAIC, and the state and territory insurance regulators who represent the individual sovereign jurisdictions within the United States—are informally known, collectively, as Team USA.

[260] IAIS, "High Level Messages: ICS Version 2.0 for the Monitoring Period and Comparability Assessment," news release, November 14, 2019. https://www.iaisweb.org/page/news/press-releases//file/87175/high-level-messages-ics-version-20-for-the-monitoring-period-and-comparability-assessment.

[261] IAIS, *Instructions for the April 2020 Insurance Capital Standard (ICS) Data Collection Exercise of the Monitoring Period Project* (June 30, 2020), https://www.iaisweb.org/page/supervisory-material/insurance-capital-standard//file/90757/public-2020-ics-data-collection-technical-specifications.

During the latter half of 2023, the IAIS also plans to issue a public consultation on the ICS and initiate an economic impact assessment intended to identify incentives and unintended consequences of ICS implementation.[262] The aim of the public consultation and economic impact assessment is to address those comments and findings in the final form of the ICS before implementation as a prescribed capital requirement.[263]

In 2020, the ICS project moved from a field testing phase into a monitoring period, marked by ICS confidential reporting to group-wide supervisors and discussion in supervisory colleges. During this period, supervisors will be able to discuss and evaluate the reference ICS, including comparing ICS results against existing group capital standards and calculations or those under development.[264] While the COVID-19 pandemic resulted in the cancellation of ICS discussions at supervisory colleges in 2020 as well as the Global Roundtable in January 2021, the IAIS is still asking group-wide supervisors to monitor the ICS.[265]

The IAIS's five-year plan for the ICS monitoring period also outlines the next steps and process for the comparability assessment of the Aggregation Method to the ICS. This work began in late 2018 when the IAIS issued a survey to its members, asking for their views on what constituted appropriate criteria for evaluating comparable outcomes to the ICS. At its 2019 annual meeting, the IAIS reached an agreement on the definition of comparable outcomes and the overarching guidelines to govern the comparability assessment during the monitoring period.[266] The next step in the IAIS's work on the comparability assessment for the Aggregation Method will be to issue a public consultation on the high-level principles guiding the comparability assessment. Because of the COVID-19 pandemic, the IAIS postponed this consultation from July 2020 until a later date.[267]

Significant work remains for Team USA and the IAIS on the comparability assessment for the Aggregation Method. As outlined in the IAIS's five-year plan, the IAIS work includes: (1) establishing the high-level principles that will feed into the criteria for evaluating the Aggregation Method relative to the ICS; (2) issuing a public consultation on the definition of comparable outcomes and the high-level principles; (3) developing appropriate criteria; and (4)

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[262] IAIS, "Work Plan and Timeline 2020-24."

[263] IAIS, "Explanatory Note on the Insurance Capital Standard (ICS) and the Comparability Assessment," news release, November 14, 2019, https://www.iaisweb.org/page/news/press-releases//file/87173/explanatory-note-on-the-ics-and-comparability-assessment.

[264] IAIS, "Operationalisation of the Monitoring Period," news release, November 14, 2019, https://www.iaisweb.org/page/news/press-releases//file/87172/operationalisation-of-the-monitoring-period.

[265] The annual Global Roundtable is an opportunity for all interested supervisors to discuss the experience of assessing the reference ICS and additional reporting with fellow supervisors (home and host).

[266] IAIS, "Explanatory Note on the Insurance Capital Standard (ICS) and the Comparability Assessment."

[267] IAIS, *IAIS Executive Committee Takes Steps to Address Impact of COVID-19 on the Insurance Sector*, news release, March 27, 2020, https://www.iaisweb.org/news/iais-executive-committee-takes-steps-to-address-impact-of-covid-19-on-the-insurance-sector.

conducting the comparability assessment.[268] By leveraging the NAIC's and state regulators' GCC work and the Federal Reserve's proposed group capital requirement based on the BBA, the Aggregation Method is expected to be more reflective of the insurance regulatory framework and business practices in the United States.[269]

FIO and Team USA will continue working toward shaping the ICS in a manner that better accommodates the U.S. insurance market and promotes U.S. interests. During the ICS monitoring period, FIO will maintain its strong engagement at the IAIS on the ICS and the comparability assessment for the Aggregation Method.

2. IAIS's Activities-Based Approach and the Holistic Framework

Since 2017, the IAIS has been creating and refining an activities-based approach, or ABA, to monitoring and responding to potential systemic risks relating to the insurance sector and insurance activities.[270] The IAIS issued a consultation paper in December 2017, followed by a second consultation paper, *Holistic Framework for Systemic Risk in the Insurance Sector*, released in November 2018. In November 2019, with approval by the FSB, the IAIS finalized and adopted the Holistic Framework for implementation. Treasury supported the adoption and implementation of the Holistic Framework.

The Holistic Framework is comprised of three key elements—supervisory material, a global monitoring exercise (GME), and implementation assessment of related supervisory material—which are reflected in three related documents that the IAIS published in November 2019: the Holistic Framework, an Explanatory Note, and the Global Monitoring Exercise.[271]

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[268] IAIS, "Work Plan and Timeline 2020-24."

[269] *See* "Insurance Capital Standard (ICS)," NAIC, last updated March 6, 2019, https://content.naic.org/cipr_topics/topic_insurance_capital_standard_ics.htm. For more information on the GCC, see Section III.A.1. For more information on the BBA, see Section III.A.2.

[270] The IAIS issued a consultation paper in December 2017, followed by a second consultation paper, released in November 2018. IAIS, *Holistic Framework for Systemic Risk in the Insurance Sector: Public Consultation Document* (November 14, 2018), https://www.iaisweb.org/page/consultations/closed-consultations/2019/holistic-framework-for-systemic-risk-in-the-insurance-sector/file/77862/holistic-framework-for-systemic-risk-consultation-document (*2018 Holistic Framework Public Consultation*). For more background on the Holistic Framework, see FIO, *2019 Annual Report*, 20-22.

[271] IAIS, *Holistic Framework for Systemic Risk in the Insurance Sector* (November 2019), https://www.iaisweb.org/page/news/press-releases-prior-to-2014/file/87109/holistic-framework-for-systemic-risk (*Holistic Framework for Systemic Risk*); IAIS, *Explanatory Note on Holistic Framework for the Assessment and Mitigation of Systemic Risk in the Insurance Sector* (November 14, 2019), https://www.iaisweb.org/page/news/press-releases-prior-to-2014/file/87113/explanatory-note-on-holistic-framework-for-systemic-risk; IAIS, *Holistic Framework for Systemic Risk in the Insurance Sector: Global Monitoring Exercise* (November 2019), https://www.iaisweb.org/page/news/press-releases-prior-to-2014/file/87206/global-monitoring-exercise.

Supervisory Materials. The supervisory materials are "[a]n enhanced set of supervisory policy measures for macroprudential purposes, designed to increase the overall resilience of the insurance sector and help prevent insurance sector vulnerabilities and exposures from developing into systemic risk" and, when "a potential systemic risk is detected, supervisory powers of intervention that enable a prompt and appropriate response."[272] These supervisory materials can be found within the Insurance Core Principles (ICPs) and ComFrame, and will be further clarified in a series of IAIS application papers. In June 2020, the IAIS published the first of these papers: Application Paper on Liquidity Risk Management.[273]

GME. As part of the Holistic Framework, the IAIS established a GME of the activities and exposures of insurers on an individual insurer level and sector-wide level, culminating with a collective discussion within the IAIS and reporting to the FSB and public. The GME integrates "the development of an ABA with revisions to the EBA methodology"[274] through the sector-wide monitoring of activities enhanced by the monitoring of an individual insurers cohort. In addition, the EBA elements were further enhanced and contextualized through the new absolute assessment approach, cross-sectoral analysis, and liquidity metrics.[275] The IAIS has adjusted goals and policies for the GME data collections in response to the COVID-19 pandemic. The IAIS repurposed existing or initiated new projects to monitor risk on a more frequent and current basis. The IAIS delayed the formal 2020 GME until 2021, and leveraged the GME data collection and analysis apparatus to monitoring the COVID-19-related risks through the launch of two quarterly data collections—one for firms and one for supervisors. [276]

Implementation Assessment. The implementation assessment of related supervisory material will promote globally consistent and effective implementation, while building on existing methodologies. The "[a]ssessments will proceed in phases, beginning with a baseline assessment in 2020 and moving towards more intensive jurisdictional assessments in 2021, which will include targeted in-depth verification of supervisory practices."[277] In 2020, the IAIS initiated the first phase: a baseline assessment.

The IAIS has established next steps for Holistic Framework-related activity. In 2021, the IAIS plans to conduct the 2020 and 2021 GME, publish a consultation document and finalize an application paper on macro-prudential supervision, and publish the second consultation document on liquidity metrics. Building on results for the 2020 baseline, the IAIS will begin the second phase of the implementation assessment by conducting a series of more intense jurisdictional assessments. In 2022, the IAIS is scheduled to complete the outstanding implementation assessment items, finalize the assessment's findings, and conduct its third annual

[272] IAIS, *Holistic Framework for Systemic Risk*, 4.

[273] IAIS, *Application Paper on Liquidity Risk Management* (June 29, 2020), https://www.iaisweb.org/page/supervisory-material/application-papers/file/90720/application-paper-on-liquidity-risk-management.

[274] IAIS, *2018 Holistic Framework Public Consultation*, 9.

[275] *See* FIO, *2019 Annual Report*, 20-22 (further discussing EBA and the development of the Holistic Framework).

[276] For more information on the IAIS Response to COVID-19, see Section II.E.1.

[277] IAIS, *Explanatory Note on Holistic Framework*, 3.

GME (with collective discussion and related reporting). Finally, based on three years of implementation of the Holistic Framework, in November 2022, the FSB will, in consultation with the IAIS and national authorities, review whether to discontinue the determination of global systemically important insurers (G-SIIs). Significant work remains at the IAIS to further assess the implementation of the Holistic Framework.

IV. EFFICIENT REGULATION AND GOVERNMENT PROCESSES

This section addresses FIO's efforts to advance efficient regulation and government processes through coordination on insurance matters at the state and federal levels. The section first discusses natural hazards and insurance, including the activities of the MitFLG and reinsurance for the NFIP. The section then discusses FACI, which has provided recommendations over the past year on the protection gap for natural catastrophes and other topics. This section also discusses changes to the NAIC accreditation program used by the U.S. states. The section then turns to terrorism risk insurance, and concludes with a discussion of cyber insurance and insurer cybersecurity.

A. Role of State and Federal Regulation

1. FIO Engagement with Federal Agencies and the States

As the source of insurance expertise in the federal government, FIO continues to regularly consult with and advise federal agencies and entities on insurance-related matters. For example:

- FIO participated in the Treasury-led Federal Interagency Task Force on Long-Term Care Insurance, which also included members from the Department of Health and Human Services, the Centers for Medicare & Medicaid Services, the Internal Revenue Service, the Office of Management and Budget, the Department of Labor (DOL), and Treasury's Office of Tax Policy.[278]
- FIO worked with the U.S. Department of Veterans Affairs on issues arising under the Servicemembers' Group Life Insurance Program and other life insurance programs for the benefit of servicemembers, veterans, and their families.
- FIO had discussions with the Federal Reserve about its stress testing of nonbank financial companies, as required by the Dodd-Frank Act.[279]
- FIO continues to participate in the MitFLG, a national coordinating structure to organize mitigation efforts across the federal government, and its implementation of the National Mitigation Investment Strategy.[280]
- FIO assisted FEMA on reinsurance and alternative risk transfer instruments in connection with the NFIP.[281]

[278] *See* "Federal Interagency Task Force on Long-Term Care Insurance," Treasury, https://home.treasury.gov/policy-issues/economic-policy/economic-policy-reports-and-notices/federal-interagency-task-force-on-long-term-care-insurance. For more information on the Task Force and its recommendations, see Section VI.A.

[279] 12 U.S.C. § 5365(i)(1)(A).

[280] For more information on MitFLG and the National Mitigation Investment Strategy, see Section IV.A.2.a.

[281] For more information on the NFIP, see Section IV.A.2.b.

FIO leads regulatory coordination between the states and the federal government on the development of insurance-related policy and regulation. FIO regularly interacts with the states and the NAIC. For example, FIO has coordinated closely with the NAIC since 2018 to avoid duplicative federal-state data calls on terrorism risk insurance.[282]

In 2019 and 2020, Treasury coordinated U.S. agency engagement with the IMF FSAP, which, for insurance, included FIO, other Treasury offices, the Federal Reserve, and the NAIC and the U.S. states. The U.S. FSAP was completed in August 2020.[283] More generally, FIO continues to invite stakeholder input on a variety of insurance issues through FACI meetings, the ACRSM, and other stakeholder discussions.

2. Federal Agency Developments

a) MitFLG and Mitigation of Severe Weather and Other Natural Hazards

Millions of Americans have been affected by wildfires, hurricanes, floods, earthquakes and other natural hazards events in 2019 and 2020.[284] Global insured losses from weather-related events in 2019 were slightly lower than in 2018, but still totaled approximately $53 billion by one estimate.[285] 2019 was the sixth consecutive year in which 10 or more billion-dollar weather-related events impacted the United States, and the first six months of 2020 saw at least 80 deaths from 10 weather-related events which exceeded $1 billion in losses.[286]

Insurance is a critical financial resource for recovery from severe weather-related events and other natural hazards, providing direct benefits to policyholders.[287] The insurance industry also plays a key role in mitigation, which helps "the whole community keep hazards from turning into disasters" and improves resilience for more efficient, effective, and rapid recovery.[288] Risk reduction—including the purchase of insurance—has measurable benefits.[289] FIO therefore has

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282 For more information on terrorism risk insurance data calls, see Section IV.B.

283 *See* "Financial Sector Assessment Program (FSAP)," International Monetary Fund, last updated August 12, 2020, https://www.imf.org/external/np/fsap/fssa.aspx. For more information on the FSAP, see Section I.B.2.

284 *See, e.g.*, CoreLogic, *2019 Natural Hazard Report* (2019), https://www.corelogic.com/insights/natural-hazard-risk-summary-and-analysis.aspx.

285 "Natural Catastrophe Losses in 2019 Down 18% from Annual Average: Willis Re Report," *Insurance Journal*, January 23, 2020, https://www.insurancejournal.com/news/international/2020/01/23/556177.htm (also noting estimates of $52 billion and $71 billion).

286 "Billion-Dollar Weather and Climate Disasters: Overview," NOAA National Centers for Environmental Information, https://www.ncdc.noaa.gov/billions/.

287 *See* FIO, *2019 Annual Report*, 26.

288 MitFLG, *National Mitigation Investment Strategy* (August 2019), 1, https://www.fema.gov/media-library-data/1565706308412-19739d7deeca639415cc76c681cee531/NationalMitigationInvestmentStrategy.pdf.

289 *See, e.g.*, FEMA, "An Ounce of Prevention Could Save Billions: Reduce Your Flood Risks," news release, April 29, 2020,

and will continue to emphasize the importance of insurance and mitigation, both before and after disasters, including ongoing support of efforts to improve the availability of insurance and take-up of insurance.

Treasury, through FIO, participates in the MitFLG, a national structure to coordinate mitigation efforts across the federal government and with state, local, tribal, and territorial representatives. Among other initiatives, MitFLG released a National Mitigation Investment Strategy in August 2019 which provides a national, whole-community approach to improve the coordination and effectiveness of "mitigation investments," that is, risk management actions taken to avoid, reduce, or transfer risks from natural hazards such as floods, hurricanes, and wildfires.[290] To that end, the strategy outlines three goals: show how mitigation investments reduce risk; coordinate mitigation investments to reduce risk; and make mitigation investment standard practice. The strategy also has a series of high-level recommendations, including insurance-related recommendations, such as "Use and Expand Financial Products and Approaches to Reduce and Transfer Risk," including incentives to encourage those in hazard-prone areas to purchase insurance.[291]

The insurance industry has welcomed the recommendations in the National Mitigation Investment Strategy.[292] FACI recommended that FIO "adopt the full set of recommendations" from the National Mitigation Investment Strategy, as well as additional recommendations developed by its subcommittee. FACI also recommended that FIO use its convening authority to bring together stakeholders for further discussion on protection gap issues.[293]

Some states also have made progress with mitigation while addressing insurance and natural catastrophe issues more generally. For example, effective January 1, 2020, Alabama required insurers to offer policyholders an endorsement that, when their roof is damaged, they may

https://content.naic.org/article/news_release_ounce_prevention_could_save_billions_reduce_your_flood_risks.htm (noting natural hazard mitigation saves $6 on average for every $1 spent on federal mitigation grants).

[290] *See* MitFLG, *National Mitigation Investment Strategy*, 1.

[291] MitFLG, *National Mitigation Investment Strategy*, 20-21. *See also* FIO, *2019 Annual Report*, 26-27.

[292] *See, e.g.*, National Conference of State Legislatures, "NCSL Public-Private Partnership on Disaster Mitigation and Recovery," news release, July 27, 2019, https://www.ncsl.org/aboutus/ncsl-foundation-for-state-legislatures/ncsl-public-private-partnership-on-disaster-mitigation-and-recovery.aspx; U.S. Government Accountability Office, *Disaster Resilience Framework: Principles for Analyzing Federal Efforts to Facilitate and Promote Resilience to Natural Disasters* (2019), 2 n. 9, https://www.gao.gov/assets/710/702215.pdf (describing its framework as "compatible with and mutually reinforcing of" the recommendations in the MitFLG strategy).

[293] FACI's five mitigation recommendations were: (1) demonstrate how mitigation investments reduce risk through effective education; (2) coordinate investment in mitigation to reduce risk; (3) incorporate mitigation policies and investments into all aspects of governance; (4) provide financial and other incentives to implement mitigation measures; and (5) explore the efficacy of innovative industry solutions and products with increased transparency. Memorandum from Protection Gap Subcommittee to Federal Advisory Committee on Insurance (December 2019), https://home.treasury.gov/system/files/311/December2019FACI_ProtectionGapProposedRecs.pdf. For more information on FACI, see Section IV.A.3.

upgrade it to a more resilient roof.[294] In May 2020, the Alabama Department of Insurance created a Mitigation Resources Division dedicated to supporting risk reduction against natural disasters.[295] The California Earthquake Authority partnered with the California Department of Insurance to combat earthquake insurance misinformation.[296] Texas adopted stronger, updated building codes for coastal structures insured by the Texas Windstorm Insurance Association.[297]

FIO plans to continue to work closely with MitFLG to implement the National Mitigation Investment Strategy, engage with stakeholders on these issues, and coordinate with state insurance regulators and legislators in their efforts to improve national resilience to natural hazards.

Box 2: The Availability of Insurance for Natural Catastrophes

Homeowners' policies are available only when insurers offer them, and there have been recent signals of insurer reluctance to offer policies in certain areas at higher risk from natural hazards and weather-related events, such as in California after the 2019 wildfires. Actuarial considerations—ensuring that premiums are adequate to cover the cost of future losses—often are at the forefront of insurers' decision to offer coverage. If the actuarially-determined premium is too high, insurers may be unable to provide coverage. If the risk from natural hazards in certain areas were to increase, insurers might request large premium increases that insurance regulators might be unwilling to grant.[298] Even when rate increases are approved, homeowners may be unwilling or unable to pay the higher premiums. This can result in insurers declining to offer (or renew) policies in high-risk areas.[299]

[294] Alabama Department of Insurance, "ALDOI Establishes Endorsement for Fortified Roofs," news release, September 23, 2019, https://www.aldoi.gov/currentnewsitem.aspx?ID=1068.

[295] Alabama Department of Insurance, "ALDOI Creates New Division to Enhance Resiliency Efforts in Alabama," news release, May 14, 2020, https://www.aldoi.gov/currentnewsitem.aspx?ID=1115.

[296] California Department of Insurance, "Insurance Commissioner Ricardo Lara to Send Notice to Insurers regarding Earthquake Insurance Misinformation," news release, July 11, 2019, http://www.insurance.ca.gov/0400-news/0100-press-releases/2019/release053-19.cfm.

[297] Texas Department of Insurance, "TDI Extends Start of Updated Coastal Building Code," news release, April 3, 2020, https://www.tdi.texas.gov/news/2020/tdi04032020.html (noting that implementation postponed because of COVID-19 disruptions).

[298] *See, e.g.*, "In Wake of California Wildfires, Insurers Hike Rates, Exit Risk Zones," *Best's Insurance News and Analysis*, December 9, 2019, http://news.ambest.com/newscontent.aspx?altsrc=108&refnum=222027; Tim Zawacki, "Coastal North Carolina Property Rate Deal Provokes Adequacy Debate," *S&P Global Market Intelligence*, January 21, 2020, https://platform.marketintelligence.spglobal.com/web/client?auth=inherit#news/article?id=56576918.

[299] California Department of Insurance, "New Data Shows Insurance Is Becoming Harder to Find as a Result of Wildfires," news release, August 20, 2019, http://www.insurance.ca.gov/0400-news/0100-press-releases/2019/release063-2019.cfm. *See also* Laurie Goering, "Burned by Wildfire Losses, Insurance Industry Rethinks Risks," *Reuters*, January 22, 2020, https://www.reuters.com/article/us-wildfire-insurance-climate-change-ana/burned-by-wildfire-losses-insurance-industry-rethinks-risks-idUSKBN1ZL2RA.

Different tools and options may be used to address this problem. Some insurers, for example, increasingly are relying on risk modeling solutions to better gauge where risk lies.[300] Some regulators are paying increased attention to the insurers of last resort in the residual market.[301] For example, in the wake of numerous policy cancellations following several wildfires, the California Insurance Commissioner ordered the FAIR Plan, the California property insurer of last resort, to increase coverage options. The FAIR Plan then sued and obtained a preliminary injunction prohibiting the Commissioner from compelling the Plan to offer comprehensive homeowners' insurance policies. California legislators are considering alternate solutions to ensure the availability of homeowners' policies for consumers.[302]

b) Reinsurance for the National Flood Insurance Program

FEMA manages the NFIP, a federal flood insurance and risk management program.[303] Since 2016, FEMA has used reinsurance to reduce risks to the NFIP by transferring some of those risks to private reinsurers and the capital markets.[304] FIO has provided FEMA with technical insurance expertise concerning reinsurance and alternative risk instruments, beginning with the pilot reinsurance program in 2016 and continuing through its present efforts in 2020.[305] Figure 2 summarizes the NFIP's reinsurance program.[306]

The 2020 reinsurance program is substantially similar to past NFIP placements. As in prior years, the traditional reinsurance agreement for 2020 covers a proportional or "pro rata" share of losses in excess of $4 billion, with the proportionate share varying by tranche (layer). The coverage is provided on a per occurrence basis (that is, by event, rather than an annual aggregate), meaning that a single flood event must cause at least $4 billion in losses in order to trigger reinsurance coverage. Losses from multiple smaller floods cannot be added together to

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[300] Jim Sams, "Not All Homes in Wildfire Zones are Uninsurable. Here's How Insurers Can Tell." *Insurance Journal*, May 22, 2020, https://www.insurancejournal.com/news/national/2020/05/22/569684.htm.

[301] Residual markets generally serve as coverage of last resort for those who have been rejected by "voluntary" market insurers. *See* FIO, *Report Providing an Assessment of the Current State of the Market for Natural Catastrophe Insurance in the United States* (September 2015), 20-26, https://home.treasury.gov/system/files/311/Natural%20Catastrophe%20Report.pdf.

[302] *See* California Department of Insurance, "Growing Need for FAIR Plan Leads Insurance Commissioner to Order Increased Coverage Options," news release, November 14, 2019, http://www.insurance.ca.gov/0400-news/0100-press-releases/2019/release089-19.cfm; Don Jergler, "Backers of Controversial California Homeowners Insurance Bill Like Its Momentum, Timing," *Insurance Journal*, June 17, 2020, https://www.insurancejournal.com/news/west/2020/06/17/572626.htm.

[303] "Flood Insurance," FEMA, last updated August 25, 2020, https://www.fema.gov/flood-insurance.

[304] "National Flood Insurance Program's Reinsurance Program," FEMA, last updated September 15, 2020, https://www.fema.gov/flood-insurance/work-with-nfip/reinsurance.

[305] *See, e.g.*, FIO, *2019 Annual Report*, 27-29.

[306] "National Flood Insurance Program's Reinsurance Program," FEMA.

reach the $4 billion threshold. Twenty-seven reinsurers provide the 2020 reinsurance coverage.[307]

Figure 2: NFIP Reinsurance Program

	2018	2019	2020
Traditional Reinsurance	• $1.46 billion • 28 reinsurers • Premium: $235 million • Reinsurers cover proportionate share of losses above $4 billion: o 18.6% of losses $4-$6B o 54.3% of losses $6-$8B o No coverage above $8B • No reinsurance recoveries	• $1.32 billion • 28 reinsurers • Premium: $186 million • Reinsurers cover proportionate share of losses above $4 billion: o 14.0% of losses $4-$6B o 25.6% of losses $6-$8B o 26.6% of losses $8-$10B o No coverage above $10B • No reinsurance recoveries for 2019: no qualifying events	• $1.34 billion • 27 reinsurers • Premium: $205 million • Reinsurers cover proportionate share of losses above $4 billion: o 10.35% of losses $4-$6B o 34.7% of losses $6-$8B o 21.8% of losses $8-$10B. o No coverage above $10B • No reinsurance recoveries as of July 30, 2020
Catastrophe Bonds (3 year programs)	• $500 million • Premium: $62 million for year 1 • Agreement structured to cover: o 3.5% of losses $5B-$10B o 13% of losses $7.5B-$10B	• $300 million • Premium: $32 million for year 1 • Agreement structured to cover: o 2.5% of losses $6B-$8B o 12.5% of losses $8B-$10B	• $400 million • Premium: $50 million for year 1 • Agreement structured to cover: o 3.33% of losses $6-$9B o 30% of losses $9-$10B

Source: "National Flood Insurance Program Reinsurance Program," FEMA. 25 reinsurers in the 2017 traditional reinsurance program paid NFIP $1.042 billion to cover losses from Hurricane Harvey.

In 2020, FEMA also continued its FloodSmart program and transferred $400 million of its flood risk to the capital markets through the issuance of FloodSmart catastrophe bonds. As shown in Figure 2, the first issuance in 2018 reinsured $500 million in coverage, followed by the 2019 issuance of $300 million in coverage, and the 2020 issuance of $400 million in coverage. The three combined issuances now provide $1.2 billion in reinsurance coverage. Each of the bonds has a maturity of three years; the 2018 issuance matured on July 31, 2021.[308]

[307] "Summary of the January 2020 Traditional Reinsurance Placement," FEMA, last updated July 18, 2020, https://www.fema.gov/flood-insurance/work-with-nfip/reinsurance/january-2020.

[308] "Summary of the February 2020 Capital Markets Placement," FEMA, last updated July 18, 2020, https://www.fema.gov/flood-insurance/work-with-nfip/reinsurance/february-2020. For more information on alternative risk transfer, see Section VII.B.2.

The NFIP is subject to reauthorization by Congress, and has received several short-term extensions over the past few years. FEMA posts the NFIP's reauthorization status on its website.[309]

c) SEC Regulation of Insurance Products

Variable annuities and variable life insurance are complex products that, as securities, generally must be registered with the U.S. Securities and Exchange Commission (SEC) (or qualify for an exemption from registration) before they are marketed, offered or sold to investors.[310] On May 1, 2020, the SEC adopted a comprehensive, modernized disclosure framework for variable annuity contracts and variable life insurance policies that permits the use of summary prospectuses for both products, while making additional information available to investors online.[311] The SEC explained that the summary prospectus is designed to be a succinct summary of the contract's (or policy's) key terms and benefits and most significant risks, making it easier to read and more understandable for investors. The SEC described the summary prospectus as the cornerstone of a "layered disclosure framework" tailored to the unique features of the product and alerting investors to the availability of more detailed information in the statutory prospectus and other locations.[312] Adoption of the variable product summary prospectus rule is an important step in improving the efficiency and effectiveness of disclosure for insurance products under the SEC's jurisdiction. FIO encourages the SEC to maintain its focus on a regulatory framework tailored to the unique characteristics of insurance products and markets.

3. Federal Advisory Committee on Insurance

FACI, a federal advisory committee of insurance experts, was established in 2011 to provide FIO with nonbinding advice and recommendations and otherwise assist FIO in carrying out its duties and authorities. FACI includes a cross-section of members who represent the views of those having an interest in FIO's duties and authorities, including state insurance regulators, industry experts, and consumer advocates.[313]

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[309] *See* "Congressional Reauthorization," FEMA, last updated July 18, 2020, https://www.fema.gov/flood-insurance/rules-legislation/congressional-reauthorization.

[310] *See* Treasury, *Insurance EO Report*, 111-112 (Treasury recommended that the SEC prioritize annuity-related disclosure reform by adopting a rule permitting a variable annuity summary prospectus and a streamlined prospectus update, while continuing to provide appropriate disclosure to investors). For more information on variable annuities and the impact of COVID-19, see Section II.A.5.

[311] Updated Disclosure Requirements and Summary Prospectus for Variable Annuity and Variable Life Insurance Contracts; Final Rule, 85 Fed. Reg. 25964 (May 1, 2020), https://www.federalregister.gov/documents/2020/05/01/2020-05526/updated-disclosure-requirements-and-summary-prospectus-for-variable-annuity-and-variable-life. In updating requirements for variable annuities, the SEC drew upon its experience in developing a summary prospectus for mutual funds.

[312] 85 Fed. Reg. at 25968.

[313] *See* "FACI Members," Treasury, https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/federal-insurance-office/federal-advisory-committee-on-insurance-faci/faci-members.

FACI held a total of five public meetings between 2019 and the first half of 2020. In April 2019, FACI agreed to re-establish subcommittees. The subcommittees' goal is to facilitate FACI's ability to better provide advice and recommendations to FIO on insurance issues that FACI deems most important to FIO's activities and mandate. FACI created three subcommittees: the Availability of Insurance Products; FIO's International Work; and Addressing the Protection Gap Through Public-Private Partnerships and Other Mechanisms.

The Subcommittee on the Availability of Insurance Products focused on insurance product availability from a consumer perspective in 2019. The subcommittee discussed the effect of data privacy on insurance operations and considered the appropriate involvement of the federal government in developing data privacy legislation. The subcommittee also discussed the topic of disparate impact and the proposed final rule from the Department of Housing and Urban Development.[314] The task force began discussing LTCI-related matters following publication of the Federal Interagency Task Force on Long-Term Care Insurance's report in August 2020.[315]

In 2019, the Subcommittee on FIO's International Work focused on the development of the ICS and its impact on U.S. insurers, the ICS monitoring period and the IAIS Holistic Framework. In September 2019, FACI presented recommendations focused on the ICS and related issues. FACI also provided a second set of recommendations calling for a continued focus on five substantive themes related to development of the IAIS Holistic Framework.[316] In December 2019, FACI presented to FIO an additional set of recommendations from the subcommittee to help drive forward the work and collaboration needed to ensure timely execution of the ICS 2.0 milestones laid out at the November 2019 IAIS meetings. Finally, FACI provided several recommendations for FIO to address technical elements of the ICS and IAIS messaging.[317] During the first half of 2020, the subcommittee shifted its focus to market access issues for U.S. insurers operating in other countries, while continuing to monitor the IAIS for updates related to ICS 2.0. The subcommittee outlined eight preliminary topics for discussion, which it plans to convert into a white paper with draft recommendations for FACI's consideration in late 2020.[318]

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[314] For more information on the proposed rule on disparate impact from the U.S. Department of Housing and Urban Development, see FIO, *2019 Annual Report*, 24.

[315] For additional information on the Federal Interagency Task Force on Long-Term Care Insurance and its report, see Section VI.A.

[316] FACI, *Minutes of the Federal Advisory Committee on Insurance* (September 23, 2019), 14, 19, https://home.treasury.gov/system/files/311/September2019FACI_Minutes.pdf (adopting recommendations in Memorandum from FACI Subcommittee on FIO's International Work to Federal Advisory Committee on Insurance (September 23, 2019), https://home.treasury.gov/system/files/311/September2019FACI_Intl_Sub_Presentation.pdf).

[317] FACI, *Minutes of the Federal Advisory Committee on Insurance* (December 5, 2019), 11, https://home.treasury.gov/system/files/311/December2019FACI_Minutes.pdf (adopting recommendations in Memorandum from FACI Subcommittee on FIO's International Work to Federal Advisory Committee on Insurance (December 5, 2019), https://home.treasury.gov/system/files/311/December2019FACI_InternationalProposedRecs_0.pdf).

[318] *See* FACI, *Minutes of the Federal Advisory Committee on Insurance* (February 21, 2020) 10, https://home.treasury.gov/system/files/311/2-20-FACI-Minutes.pdf.

The Subcommittee on Addressing the Protection Gap Through Public-Private Partnerships and Other Mechanisms worked in 2019 to determine how the government and industry can best address protection gaps. At the December 2019 meeting, the FACI endorsed the National Mitigation Investment Strategy and presented three recommendations relating to the strategy.[319] FACI also presented two additional recommendations related to financial incentives for mitigation and insurance industry innovation.[320]

In early 2020, FACI created a fourth subcommittee to focus on topics related to the COVID-19 pandemic. The subcommittee intends to refine its focus and develop recommendations for FIO throughout the remainder of 2020.

4. Other State Developments: Accreditation Program

NAIC Model Laws are not self-executing: they have binding effect only when and to the extent that one or more state legislatures introduces and enacts conforming insurance laws.[321] The NAIC established its accreditation program in 1990 to develop and maintain uniform baseline standards in all states for the purpose of promoting effective insurance company financial solvency regulation.[322] The accreditation program is intended to "assure that an accredited state has sufficient authority to regulate the solvency of its multi-state domestic insurance industry in an effective manner."[323]

Through the NAIC, the states collectively introduce new accreditation requirements as needed, and the NAIC establishes a schedule for state adoption of those model laws which are part of the accreditation program.[324] The main criterion by which the NAIC reviews whether an individual state meets the accreditation standards is whether the state has adopted the required NAIC model laws or laws that are "substantively similar," meaning that they include the significant elements identified by the NAIC.[325]

[319] For more information on the National Mitigation Investment Strategy, see Section IV.A.2.a.

[320] FACI, *Minutes of the Federal Advisory Committee on Insurance* (December 5, 2019), 12, https://home.treasury.gov/system/files/311/December2019FACI_Minutes.pdf (adopting recommendations in Memorandum from Protection Gap Subcommittee to Federal Advisory Committee on Insurance, https://home.treasury.gov/system/files/311/December2019FACI_ProtectionGapProposedRecs.pdf).

[321] "Accreditation," NAIC, last updated June 23, 2020, https://www.naic.org/cipr_topics/topic_accreditation.htm.

[322] "Accreditation," NAIC.

[323] *See* NAIC, *Financial Regulation Standards and Accreditation Program* (April 2019), 7, https://www.naic.org/documents/cmte_f_frsa_pamphlet.pdf. Not all NAIC Model Laws are part of the accreditation program, and among those which are not, adoption by the states ranges from minimal to widespread.

[324] *See* "Financial Regulation Standards and Accreditation (F) Committee," NAIC, https://naic-cms.org/cmte_f.htm.

[325] *See* NAIC, *Financial Regulation Standards and Accreditation Program* (2019), 7, 19.

NAIC accreditation requirements that became effective January 1, 2020 include:

- 2014 Revisions to the Insurance Holding Company System Regulatory Model Law (Model 440);[326]
- Corporate Governance Annual Disclosure Model Act (Model 305) and Corporate Governance Annual Disclosure Model Regulation (Model 306);[327]
- 2014 Revisions to Annual Financial Reporting Regulation (Model 205);[328] and
- 2009 Revisions to the Standard Valuation Law (Model 820).[329]

No new NAIC accreditation requirements are listed as effective January 1, 2021.[330] The 2019 Revisions to Credit for Reinsurance Model Law (Model 785) and Credit for Reinsurance Model Regulation (Model 786) have been adopted as accreditation standards, effective September 1, 2022.[331]

B. Terrorism Risk Insurance Program

The September 11, 2001 terrorist attacks resulted in insurance industry losses of more than $45 billion (in 2019 dollars), which at the time was the largest insurance industry loss in history.[332] Following those attacks, insurers and reinsurers largely withdrew from the terrorism risk insurance market, threatening planned construction, property acquisition, business projects, and other economic activity.[333] In response, Congress enacted TRIA, creating TRIP within Treasury.[334] TRIP is a federal backstop for insurance losses arising from a certified act of terrorism, under which Treasury may reimburse insurers for a portion of their losses once certain financial thresholds have been met. TRIP was established primarily to incentivize the private market to offer insurance for terrorism risk, while providing a transitional period for the private

[326] *See* Insurance Holding Company System Regulatory Act (NAIC 2015), https://www.naic.org/store/free/MDL-440.pdf. This version's revisions relate to a state's authority to act as a group wide supervisor for an IAIG and for risk retention groups in a holding company that meet the definition of an IAIG, consistent with the IAIS's ComFrame. For more information on ComFrame, see Section V.A.2

[327] *See* Corporate Governance Annual Disclosure Model Act (NAIC 2014), https://www.naic.org/store/free/MDL-305.pdf; Corporate Governance Annual Disclosure Model Regulation (NAIC 2014), https://www.naic.org/store/free/MDL-306.pdf.

[328] *See* Annual Financial Reporting Model Regulation (NAIC 2015), https://www.naic.org/store/free/MDL-205.pdf

[329] *See* Standard Valuation Law (NAIC 2010), https://www.naic.org/store/free/MDL-820.pdf

[330] "Financial Regulation Standards and Accreditation (F) Committee," NAIC.

[331] For more information on the Credit for Reinsurance Model Law and Regulation, see Section V.B.

[332] *See* FIO, *2020 Program Effectiveness Report*, 3.

[333] TRIA § 101(a)(5). Because the provisions of TRIA appear in a note (15 U.S.C. § 6701 note), instead of references to sections of the U.S. Code, this Report identifies TRIA references by the sections of the Act.

[334] Terrorism Risk Insurance Act of 2002, Pub. L. No. 107-297, 116 Stat. 2322 (2002). For purposes of this Report, TRIP refers to the program as it is administered through current Treasury regulations. *See* Terrorism Risk Insurance Program, 31 CFR pt. 50 (2020).

market to resume pricing terrorism risk and build capacity to absorb future insurance losses.[335] Under the 2019 TRIP Reauthorization Act effective December 20, 2019, TRIP has been extended through December 31, 2027.[336]

1. 2019 TRIP Reauthorization

On December 20, 2019, President Trump signed extension legislation reauthorizing TRIP for an additional seven-year period, to December 31, 2027. The extension act is based upon the same program mechanics in place for calendar year 2020. The legislation added reporting requirements for FIO, relating to the availability and affordability of terrorism risk insurance, including specifically for places of worship, and for the Government Accountability Office, relating to cyber terrorism and associated issues.[337]

Prior to reauthorization, FIO and Treasury leadership met with a large number of stakeholders and interested parties in 2018 and 2019 in order to obtain views on the potential parameters of any reauthorization of TRIP.[338] Treasury evaluated the views and analysis expressed during these meetings, and continued to engage with stakeholders and policymakers as efforts in Congress to reauthorize TRIP took place.[339]

2. TRIP Data Collection

Under TRIA, Treasury is required to collect terrorism risk insurance information annually from insurers in order to analyze the overall effectiveness of TRIP.[340] Since the 2015 Reauthorization Act, FIO has conducted five data calls—a voluntary data call in 2016 and four mandatory data calls in 2017, 2018, 2019, and 2020, subject to a number of limited reporting exemptions for certain insurers.[341] FIO collects certain data elements through third-party workers'

[335] TRIA § 101(b).

[336] Terrorism Risk Insurance Program Reauthorization Act of 2019, Pub. L. No. 116-94, 133 Stat. 2534 (2019).

[337] Terrorism Risk Insurance Program Reauthorization Act of 2019, Pub. L. No. 116-94, 133 Stat. 2534 (2019).

[338] FIO, *2019 Annual Report*, 38.

[339] *See, e.g.*, *The Reauthorization of the Terrorism Risk Insurance Program*, Before the Senate Committee on Banking, Housing, and Urban Affairs, 116th Cong. (June 18, 2019), https://www.banking.senate.gov/hearings/the-reauthorization-of-the-terrorism-risk-insurance-program; *Protecting America: The Reauthorization of the Terrorism Risk Insurance Program*, Before the House Financial Services Committee, 116th Cong. (October 16, 2019), https://financialservices.house.gov/calendar/eventsingle.aspx?EventID=404481.

[340] TRIA § 104(h).

[341] *See* 2020 Terrorism Risk Insurance Program Data Call, 85 Fed. Reg. 15036 (March 16, 2020), https://www.federalregister.gov/documents/2020/03/16/2020-05299/2020-terrorism-risk-insurance-program-data-call.

compensation rating bureaus to minimize the burden on reporting insurers, and uses multiple reporting templates based on classification of the insurer's size and operations.[342]

Beginning with the 2018 data call, Treasury coordinated with state insurance regulators and the NAIC to develop a consolidated data call—with the same information reported to Treasury as well as to state regulators—in order to reduce the burden on participating insurers.[343] FIO estimates that an extremely high percentage of insurers required to participate in the 2017, 2018, 2019, and 2020 TRIP data calls provided the requested data.[344]

3. Program Effectiveness Report

TRIA requires Treasury to submit reports every other year to Congress concerning the effectiveness of TRIP.[345] For the report that Treasury submitted to Congress on June 30, 2020, FIO relied principally upon information from the 2018, 2019, and 2020 TRIP data calls, as well as on comments and information submitted by interested parties.[346]

In the 2020 Program Effectiveness Report, FIO concluded that TRIP has been effective in making terrorism risk insurance available and affordable in the insurance marketplace. The market for terrorism risk insurance remained relatively stable through the end of calendar year 2019, with few observable differences in the relevant benchmarks. Over time, there has been an increase in the amount of private reinsurance capacity for conventional terrorism risk exposure, but little or no increase in reinsurance capacity for non-conventional (i.e., nuclear, biological, chemical, or radiological (NBCR)) exposures.

Treasury did not observe any aspects of TRIP that discouraged or impeded insurers from providing P&C insurance in general, or terrorism risk insurance specifically. In particular, TRIP remains an important feature of the market for workers' compensation insurance, given the nature of insurance that must be provided for workers' compensation as a matter of state law. Treasury estimated that total premiums charged by insurers for terrorism risk insurance from 2003 to 2019 were approximately $43.2 billion (excluding amounts associated with captive insurers), which is less than two percent of the total premiums earned in the TRIP-eligible lines of insurance during that period.[347]

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[342] FIO, *2020 Program Effectiveness Report*, 9-10.

[343] Terrorism Risk Insurance Program 2018 Data Call, 82 Fed. Reg. 56328 (November 28, 2017), https://www.federalregister.gov/documents/2017/11/28/2017-25402/terrorism-risk-insurance-program-2018-data-call.

[344] For example, the non-small insurer response rate in the 2020 TRIP data call was at least 98.8 percent, and the small insurer response rate was at least 78.1 percent. *See* FIO, *2020 Program Effectiveness Report*, 12.

[345] TRIA § 104(h)(2). TRIA also requires Treasury to submit to Congress a report on the competitiveness of small insurers in the terrorism risk insurance marketplace every other year beginning in 2017; the next small insurer report under TRIA is due June 30, 2021. TRIA § 108(h).

[346] FIO, *2020 Program Effectiveness Report*.

[347] FIO, *2020 Program Effectiveness Report*, 2.

4. Advisory Committee on Risk-Sharing Mechanisms

The ACRSM is a federal advisory committee established by the Terrorism Risk Insurance Program Reauthorization Act of 2015.[348] It is statutorily required to provide FIO with advice, recommendations, and encouragement with respect to the creation and development of nongovernmental risk-sharing mechanisms to protect against losses arising from acts of terrorism.[349] ACRSM members include insurers, reinsurers, and capital market participants. Since its formation, it has met on 10 separate occasions, including a number of fact-finding meetings where the Committee received presentations from industry representatives on a variety of issues related to TRIP.[350]

At its May 11, 2020 meeting, the ACRSM adopted its first report providing recommendations to FIO.[351] In the report, the ACRSM made short-term recommendations addressing cyber risk, NBCR risk, and certification, as well as long-term recommendation covering the IMARA, recoupment, alternative carrier mechanisms, facilitation of risk transfer to private markets, and the availability and affordability of terrorism risk insurance for non-profit entities generally.[352] FIO will evaluate these issues as it continues to assist the Secretary in the administration of TRIP, and will continue to work with the ACRSM and to engage with stakeholders as it proceeds with its evaluation and work in these areas.

C. Cyber Insurance and Insurance Industry Cybersecurity

FIO continues to monitor developments related to the cyber insurance market and insurance industry cybersecurity, as discussed below.

1. The Cyber Insurance Market

U.S. insurers continued to report growth in the cyber insurance market in 2019, with approximately $2.5 billion in direct written premiums, an 11.1 percent increase over 2018's $2.2 billion—although this figure still amounts to less than one percent of the total U.S. P&C market. This year-over-year growth rate from 2018 to 2019 is an increase over 2018's growth rate (6.8

[348] Pub. L. 114-1, 129 Stat. 3 (2015).

[349] 2015 Reauthorization Act § 110.

[350] Meeting agendas and minutes, as well as additional committee information, are available through the ACRSM website: "Advisory Committee on Risk-Sharing Mechanisms (ACRSM)," Treasury, https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/federal-insurance-office/terrorism-risk-insurance-program/advisory-committee-on-risk-sharing-mechanisms-acrsm.

[351] Advisory Committee on Risk-Sharing Mechanisms, *Initial Report of the Committee* (May 11, 2020), https://home.treasury.gov/system/files/311/5-20-ACRSM-Report-Final.pdf (*ACRSM Report*).

[352] FIO, *ACRSM Report*, 6; *see also* FIO, *2020 Program Effectiveness Report*, 80-81.

percent) but remains significantly lower than the growth rate reported between 2015-2016, and 2016-2017 (27.4 percent and 31.9 percent, respectively).[353]

The number of insurers writing cyber insurance has increased from 322 in 2015, to 507 in 2017, to 580 in 2019.[354] Figure 3 shows that the cyber insurance market remains highly concentrated, with the top 10 cyber writers holding a combined market share of 63.9 percent in 2019, down slightly from 65.2 percent in 2018. [355]

Figure 3: P&C Insurance Groups by 2019 U.S. Cyber Direct Premiums Written

2018 Rank	**2019 Rank**	**Insurance Group**	2018 Direct Premiums Written ($000)	Share of Total (%)	**2019 Direct Premiums Written ($000)**	**Share of Total (%)**
1	1	Chubb Ltd.	$ 325,800	14.6	**$ 356,881**	14.4
3	2	American International Group, Inc.	238,367	10.7	**231,755**	9.3
2	3	AXA SA	255,875	11.5	**229,680**	9.3
4	4	Travelers Companies, Inc.	170,867	7.7	**202,777**	8.2
5	5	Beazley Plc	110,948	5.0.	**150,943**	6.1
8	6	AXIS Capital Holdings Ltd.	76,001	3.4	**97,305**	3.9
6	7	CNA Financial Corp.	83,357	3.7	**94,722**	3.8
7	8	Liberty Mutual Holding Co. Inc.	77,773	3.5	**80,222**	3.2
9	9	BCS Insurance Co.	69,505	3.1	**76,062**	3.1
15	10	Fairfax Financial Holdings Ltd.	38,218	1.7	**65,101**	2.6
		Combined Top 10	$ 1,455,989	65.2	**$ 1,585,449**	63.9
		Combined Top 25	$ 1,892,270	84.7	**$ 2,075,617**	83.7
		Combined Top 100	$ 2,198,021	98.4	**$ 2,436,123**	98.2
		Total U.S. Cyber Premiums	$ 2,234,008	100.0%	**$ 2,481,367**	100.0%

Source: S&P Global

[353] S&P Global.

[354] S&P Global.

[355] FIO received stakeholder feedback indicating that insurers may be reporting similar cyber policies differently due to varying interpretations of “standalone” and “package” policies. This Report therefore presents data for the top 10 writers based on total combined direct premiums written for standalone, package, and identity theft policies. *See* FIO, *2020 Program Effectiveness Report*, 57-58.

Stakeholders reported to FIO that the cyber insurance market has sufficient capacity available to meet customer demands.[356] Multiple stakeholders also noted that the market is hardening. Prices started to increase in late 2019 after increasingly severe ransomware attacks.[357] Concerns about profitability have increased as claims frequency has grown.[358]

Stakeholders reported to FIO in Spring 2020 that there is sufficient capacity in the reinsurance market, with multiple reinsurers available to support larger cyber coverage towers required by some policyholders. However, multiple stakeholders anticipated difficulty in obtaining reinsurance within the next two to five years as a result of continued growth in the primary market and risk accumulation concerns within the reinsurance sector.

Cyber is one of the fastest growing lines of insurance for captive insurers, with one estimate indicating that 15 percent of U.S. captives write cyber coverage, for premiums totaling $18.2 million in 2019.[359] 2019 also saw progress in the development of a cyber ILS market, with several smaller cyber placements closing.[360]

The insurance industry continues to address "non-affirmative" cyber risk.[361] In response to a UK regulatory requirement to address non-affirmative cyber risk, Lloyd's of London announced in July 2019 that Lloyd's underwriters would be required to affirmatively state, no later than July 2020, whether first-party property damage policies include or exclude cyber coverage, with third-party lines following by July 2021.[362] Notably, AIG also announced in September 2019 that it would explicitly cover or exclude cyber exposure by January 2020.[363] Observers noted

356 FIO consulted with P&C stakeholders in early 2020 to discuss the U.S. cyber insurance market and the cyber coverage within TRIA. These stakeholders included large direct insurers, reinsurers, brokers, and trade associations.

357 *See also* Suzanne Barlyn, "Insurers Look to Curb Ransomware Exposure as U.S. Cyber Rates Rise," *Reuters*, January 22, 2020, https://www.reuters.com/article/us-ransomware-insurance/insurers-look-to-curb-ransomware-exposure-as-u-s-cyber-rates-rise-idUSKBN1ZL1J2.

358 AM Best, *Best's Market Segment Report: Cyber Insurance: Profitability Less Certain as New Risks Emerge* (July 21, 2020), 3, http://www3.ambest.com/ambv/sales/bwpurchase.aspx?record_code=299463.

359 AM Best, *Cyber Insurance: Profitability Less Certain as New Risks Emerge*, 10-11. Captive insurers are insurers formed to insure the risk exposure of their policyholder owners and regulated by the captive insurance laws of a particular state or jurisdiction.

360 John Hewitt Jones, "Alternative Capital 'Getting More Comfortable' With Cyber: Markel Exec,'" *Inside P&C*, February 25, 2020, https://insuranceinsider.com/p-and-c/articles/131765/alternative-capital-getting-more-comfortable-with-cyber-markel-exec. For more information on ILS and other forms of alternative risk transfer, see Section VII.B.2.

361 "Non-affirmative" or "silent" cyber risk refers to the potential for exposure under policies that do not explicitly grant or exclude cyber coverage. FIO, *2019 Annual Report*, 39.

362 Lloyd's, *Providing Clarity for Lloyd's Customers on Coverage for Cyber Exposures (Market Bulletin Ref: Y5258)* (July 4, 2019), https://www.lloyds.com/~/media/files/the-market/communications/market-bulletins/2019/07/y5258.pdf; Lloyd's, *Update—Providing Clarity for Lloyd's Customers on Coverage for Cyber Exposures (Y5277)* (January 29, 2020), https://www.lloyds.com/~/media/files/the-market/communications/market-bulletins/2020/1/y5277-update--providing-clarity-for-lloyds-customers-on-coverage-for-cyber-exposures.pdf.

363 Catrin Shi, "AIG Tackles Silent Cyber Exposures Across Commercial Lines, *Inside P&C*, September 5, 2019, https://insuranceinsider.com/p-and-c/articles/128626/aig-tackles-silent-cyber-exposures-across-commercial-lines.

that litigation resulting from NotPetya malware attacks in 2017 has demonstrated the potential long tail of cyber events and "underscores the importance of managing silent cyber."[364]

At the international level, in 2019, the IAIS established a Cyber Underwriting Small Group to examine and report to the ExCo on current supervisory issues and approaches concerning sustainable underwriting of cyber insurance.[365] In May 2020, the IAIS established a workplan to develop a public paper in 2020 addressing cyber risk underwriting.[366] That work will focus, in part, on the need to develop approaches to shift to insuring cyber risks through affirmative coverages.

In the long-term, demand for cyber insurance is likely to continue growing, as the Internet of Things and other technologies are expanding the cyber attack surface, along with the frequency and severity of cyber incidents.[367] While the effects of the COVID-19 pandemic may increase demand for cyber insurance from current and new policyholders, market reports indicated that the pandemic could slow growth of the cyber insurance market if commercial policyholders face budget constraints and lowered profitability.[368]

2. Insurance Industry Cybersecurity

Studies report that financial institutions, including insurers, remain primary global targets for cyber incidents, although the financial services industry also ranks best in cyber preparedness.[369] While the number of cyber incidents decreased worldwide in 2019, more severe attacks, particularly ransomware, resulted in higher levels of loss, with one report citing median 2019 losses of nearly six times 2018 median losses.[370]

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[364] AM Best, *Cyber Insurance: Profitability Less Certain as New Risks Emerge,* 1. Here, "tail" refers to liabilities for losses that may be covered even though they manifest a long period (even years) after the initial event.

[365] IAIS, *Newsletter: February 2020* (February 24, 2020), 3-4, https://www.iaisweb.org/page/news/newsletter//file/88915/iais-newsletter-february-2020.

[366] IAIS, *Newsletter: April/May 2020* (May 29, 2020), 2, https://www.iaisweb.org/page/news/newsletter//file/90279/iais-newsletter-april-may-2020.

[367] The "Internet of Things" refers to "connected devices that are able to share data to increase efficiency." *See* Matt Burgess, "What is the Internet of Things? WIRED Explains," *WIRED*, February 16, 2018, https://www.wired.co.uk/article/internet-of-things-what-is-explained-iot.

[368] *See* Fitch Ratings, *U.S. Cyber Insurance Market Update (Recent Economic Disruption May Alter Growth and Loss Trends)* (April 29, 2020), https://www.fitchratings.com/research/insurance/us-cyber-insurance-market-update-recent-economic-disruption-may-alter-growth-loss-trends-29-04-2020.

[369] Hiscox, *Hiscox Cyber Readiness Report 2020* (2020), 7, 13, https://www.hiscox.co.uk/sites/uk/files/documents/2020-06/Hiscox_Cyber_Readiness_Report_2020_UK.PDF.

[370] Hiscox, *Cyber Readiness Report*, 7.

In 2020, experts reported that cybersecurity threats increased significantly, as more employees worked from home and attackers preyed on computer users' fears about the COVID-19 pandemic. One study reported a 148 percent increase in ransomware attacks between February 2020 and March 2020.[371]

a) Federal Cybersecurity Efforts

In September 2019, in partnership with the NAIC and the Missouri and Kansas Departments of Insurance, Treasury successfully held the second in several planned cyber tabletop exercises for small and regional insurers. Through this initiative, Treasury has leveraged its expertise in conducting cyber tabletop exercises to provide small and regional insurers with access to these cybersecurity resources.

Other federal efforts, which are not specific to the insurance industry, may foster cybersecurity improvements within the industry. In November 2019, the Cybersecurity and Infrastructure Security Agency (CISA) issued a *Cyber Essentials Guide*, which was followed by a series of toolkits to help businesses and government develop actionable responses to cybersecurity risk.[372] In April 2020, CISA also published best practices and guidance in response to the COVID-19 pandemic to help improve cybersecurity when teleworking.[373]

b) State Cybersecurity Efforts

Insurance regulators and legislators continue to act at the state level on insurance industry cybersecurity. On July 22, 2020, the NYDFS filed its first enforcement action under its cybersecurity regulation, against First American Title Insurance for its alleged exposure of "hundreds of millions of documents, millions of which contained consumers' sensitive personal information."[374]

Treasury continues to encourage prompt adoption of the NAIC's Insurance Data Security Model Law by the U.S. states.[375] As of June 30, 2020, eleven states—Alabama, Connecticut, Delaware, Indiana, Louisiana, Michigan, Mississippi, New Hampshire, Ohio, South Carolina, and

[371] Patrick Upatham and Jim Treinen, "Amid COVID-19, Global Orgs See a 148% Spike in Ransomware Attacks; Finance Industry Heavily Targeted," *VMWare Carbon Black*, April 15, 2020, https://www.carbonblack.com/blog/amid-covid-19-global-orgs-see-a-148-spike-in-ransomware-attacks-finance-industry-heavily-targeted/.

[372] CISA, "CISA Releases New Cyber Essentials Toolkit," news release, May 29, 2020, https://www.cisa.gov/news/2020/05/29/cisa-releases-new-cyber-essentials-toolkit.

[373] "Telework Guidance and Resources," CISA, https://www.cisa.gov/telework.

[374] NYDFS, "Department of Financial Services Announces Cybersecurity Charges Against a Leading Title Insurance Provider for Exposing Millions of Documents with Consumers' Personal Information," news release, July 22, 2020, https://www.dfs.ny.gov/reports_and_publications/press_releases/pr202007221.

[375] Insurance Data Security Model Law (NAIC 2017), https://www.naic.org/store/free/MDL-668.pdf.

Virginia—had adopted the NAIC's Insurance Data Security Model Law or a similar law.[376] If adoption and implementation of the model law by the states does not result in uniform data security regulations, Congress may need to act.[377] FIO will continue to monitor the states' adoption of this model law and its implementation.

[376] *See* Ala. Code §§ 27-62-1 – 12; Conn. Public Act No. 19-117, § 230; Del. Code tit. 18, §§ 8601-8611; Ind. Pub. L. 130 (2020); 2020 La. H.B. 614 (signed by Governor June 11, 2020); 2018 Mich. Pub. Acts 690; Miss. Code Ann. §§ 83-5-801 – 825; N.H. Rev. Stat. §§ 420-P:1 – P:14, Ohio Rev. Code Ann. §§ 3965.01 – 11; S.C. Code Ann. §§ 38-99-10 – 100; Va. Code Ann. §§ 38.2-621 – 629.

[377] Treasury, *Insurance EO Report*, 117.

V. INTERNATIONAL ENGAGEMENT

This section outlines FIO's international engagement, including representing the United States at the IAIS. The section begins by describing FIO's role within the IAIS and the significant milestones reached over the past year in the development of ICPs and ComFrame. The section then discusses the U.S.-EU and U.S.-UK covered agreements. FIO also has two insurance dialogue projects—one with the European Union and one with the United Kingdom—both of which are described in this section. Additionally, the section outlines Treasury's, including FIO's, work at the FSB on insurance. The section concludes by describing FIO's work within the OECD.

A. IAIS

1. FIO's Role Within the IAIS

FIO represents the United States at the IAIS.[378] Throughout 2019 and 2020, FIO has continued to fulfill its statutory role representing the United States in the IAIS through various IAIS committees and subcommittees, including working groups and task forces. FIO works collaboratively as part of Team USA in its engagement with the IAIS.[379]

The IAIS is a voluntary, member-driven organization of insurance supervisors. Its mission is "to promote effective and globally consistent supervision of the insurance industry in order to develop and maintain fair, safe and stable insurance markets for the benefit and protection of policyholders, and to contribute to global financial stability."[380] With over 210 members from jurisdictions accounting for 97 percent of worldwide premium volume, the IAIS is the international standard-setting body responsible for developing and supporting the implementation of principles, standards, and guidance for the supervision of the insurance industry.[381]

FIO is a permanent member of the IAIS ExCo. The ExCo provides strategic direction, appoints the Secretary General, manages the IAIS consistent with specific duties in the bylaws, and makes decisions necessary to achieve the IAIS mission.[382] Three policymaking committees report to the ExCo: the Implementation and Assessment Committee; the Macroprudential Committee;

[378] 31 U.S.C. § 313(c)(1)(E).

[379] For more information on Team USA, see Section III.B.1.

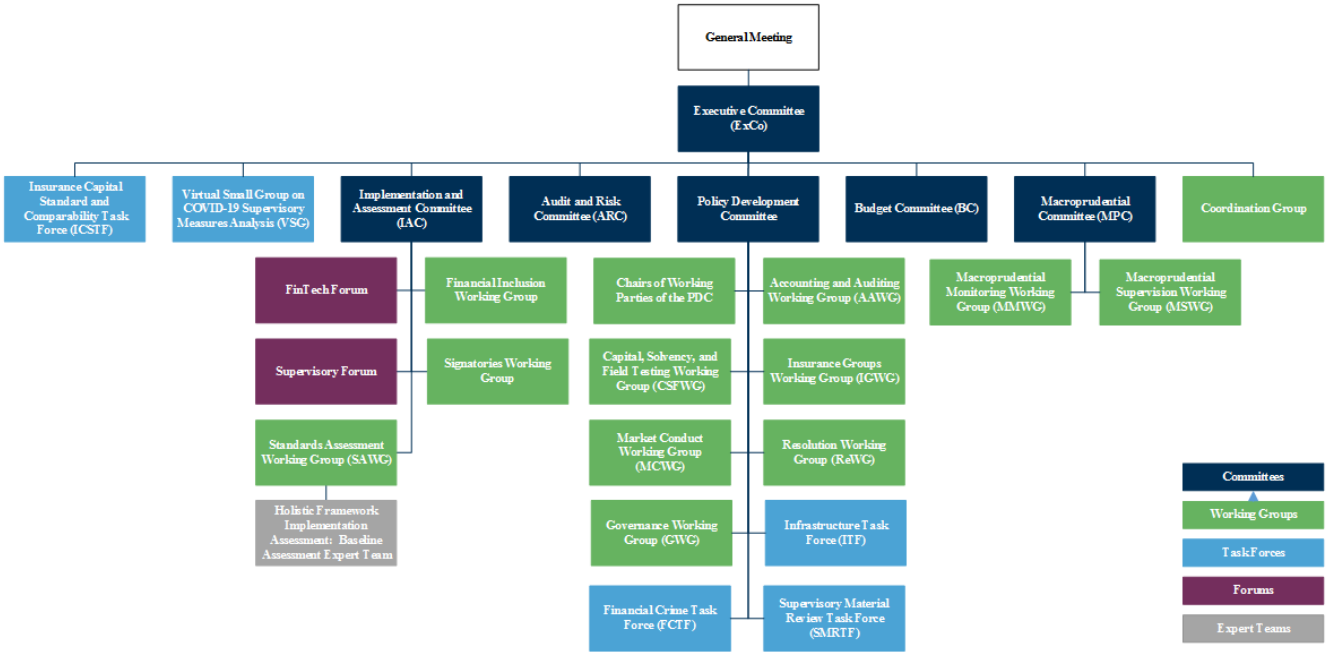
[380] IAIS, *IAIS Annual Report 2018* (2019), 8. https://www.iaisweb.org/page/about-the-iais/annual-report/file/87195/iais-2018-annual-report-single-page.

[381] *See* IAIS, *IAIS Annual Report 2018*, 6. *See also* IAIS, *IAIS Organisation Members* (September 20, 2019), https://www.iaisweb.org/list/iaismembers.

[382] IAIS, *IAIS Annual Report 2018*, 7.

and the Policy Development Committee.[383] FIO participates in all three of these policymaking committees. Figure 4 shows the IAIS's organizational structure as of January 2020.

Figure 4: IAIS Organizational Structure as of January 2020[384]



Source: FIO

Effective January 2020, the Macroprudential Policy Committee changed its subcommittee structure to "better align with the expected future activities" given the adoption of the new Holistic Framework.[385] The IAIS replaced three subcommittees—the Macroprudential Policy and Surveillance Working Group, the Systemic Risk Assessment Drafting Group, and the G-SII Analysts Working Group—with two new subcommittees: the Macroprudential Supervision Working Group (to address matters relating to macroprudential supervision); and the Macroprudential Monitoring Working Group (responsible for coordinating the annual global monitoring exercise and macroprudential assessment of trends, developments and risks to the financial stability of the global insurance industry).[386]

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[383] Two additional committees report to the ExCo: the Audit and Risk Committee and the Budget Committee. IAIS, *IAIS Annual Report 2018*, 7.

[384] *See also* "IAIS Organisational Structure," IAIS, https://www.iaisweb.org/page/about-the-iais/organisational-structure. Note that Figure 4 does not include all workstreams and expert teams.

[385] For more information on the Holistic Framework, see Section III.B.2.

[386] IAIS, *IAIS Newsletter: December 2019 – January 2020* (January 29, 2020), 5-6, https://www.iaisweb.org/page/news/newsletter/file/88456/iais-newsletter-december-2019-january-2020.

FIO continues to engage in the development of ICS Version 2.0 through the Insurance Capital Standard and Comparability Task Force, the Capital, Solvency & Field Testing Working Group, and the Infrastructure Task Force.[387] The Infrastructure Task Force, which was formed in 2020, will assess the appropriateness of a differentiated treatment of infrastructure and strategic equity assets for the calculation of the ICS capital requirement.

A FIO staff member chairs the IAIS Resolution Working Group (ReWG), and represents the IAIS at relevant FSB bodies such as the Resolution Steering Group (ReSG) and the FSB Cross-Border Crisis Management Group for Insurers (iCBCM). In 2019 and continuing into 2020, the ReWG has been developing an Application Paper on Resolution Powers and Planning, after adopting an Application Paper on Recovery Planning in 2019.[388]

Another member of FIO's staff chairs the IAIS Financial Crime Task Force (FCTF) and, in that capacity, chairs the IAIS delegation to the Financial Action Task Force. Following the adoption in 2019 of the revised ICP 22, which addresses anti-money laundering and combatting the financing of terrorism, the FCTF turned its attention in December 2019 to updating the IAIS Application Paper on Combatting Money Laundering and Terrorism.[389] The IAIS roadmap currently tracks this work for completion during 2020-21.[390]

FIO also participates in several other IAIS subcommittees: the Coordination Group; Financial Inclusion Forum; FinTech Forum; Governance Working Group; Insurance Groups Working Group; Macroprudential Monitoring Working Group; Macroprudential Supervision Working Group; Retirement Income and Pensions Forum; Strategic Plan and Financial Task Force; Standards Assessment Working Group; Supervisory Materials Review Task Force; and Virtual Small Group on COVID-19 Supervisory Measures. The IAIS committees and subcommittees have continued to work throughout the pandemic although the timelines for several projects have been extended.

[387] For more information on the ICS, see Section III.B.1.

[388] For more information on IAIS resolution work, see Section V.A.2. For more information on FSB resolution work, see Section V.D.

[389] IAIS, *Newsletter: December 2019 – January 2020*, 7. *See also* IAIS, *Application Paper on Combating Money Laundering and Terrorist Financing* (October 2013), https://www.iaisweb.org/page/supervisory-material/application-papers//file/34107/application-paper-on-combating-money-laundering-and-terrorist-financing. The revised ICP 22 is available at https://www.iaisweb.org/page/supervisory-material/insurance-core-principles/. For more information on the ICPs, see Section V.A.2.

[390] IAIS, *Newsletter: April/May 2020* (May 29, 2020), 2, https://www.iaisweb.org/page/news/newsletter//file/90279/iais-newsletter-april-may-2020.

2. Insurance Core Principles and ComFrame

The IAIS reached significant milestones in November 2019 with the adoption of the revised ICPs and ComFrame, Version 2.0 of the ICS, and the Holistic Framework.[391]

The adoption of the revised ICPs culminated several years of work across the IAIS during which nearly all of the individual ICPs were substantially revised.[392] Notably, the ICPs adopted by the IAIS in 2019 included significant revisions to ICP 12 (Exit from the Market and Resolution), and new material on recovery planning in ICP 16 (Enterprise Risk Management for Solvency Purposes).[393] Concurrent with the adoption of the ICPs and ComFrame, the IAIS also adopted an *Application Paper on Recovery Planning*, prepared by the ReWG, that provides guidance on the supervisory material in ICP 16 and its related ComFrame material.[394]

The adoption of ComFrame also marked the conclusion of many years of work across the IAIS, and provides a comprehensive, outcomes-focused framework of minimum supervisory requirements tailored to IAIGs.[395] The IAIS intends for ComFrame to lead to a more efficient supervisory environment for both supervisors and IAIGs.

Version 2.0 of the ICS, while a part of ComFrame, was adopted as a standalone document.[396] The ICS is intended to provide a common language for discussions of group solvency of IAIGs and improve global convergence of capital standards that regulators apply to insurance companies. November 2019 also marked the start of a five-year monitoring period, during which ICS results will not be the trigger for any supervisory actions, but through confidential reporting

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[391] IAIS, "IAIS Adopts First Global Frameworks for Supervision of Internationally Active Insurance Groups and Mitigation of Systemic Risk in the Insurance Sector," news release, November 14, 2019, https://www.iaisweb.org/page/news/press-releases-prior-to-2014//file/87183/media-release-iais-adopts-first-global-frameworks-for-supervision-of-internationally-active-insurance-groups-and-mitigation-of-systemic-risk-in-the-insurance-sector. International standards are not, in and of themselves, binding in the United States unless they are adopted as law through domestic processes at the state or federal level.

[392] IAIS, *Insurance Core Principles and Common Framework for the Supervision of Internationally Active Insurance Groups* (November 2019), https://www.iaisweb.org/page/supervisory-material/insurance-core-principles-and-comframe//file/89885/iais-icps-and-comframe-adopted-in-november-2019 (noting revisions, since 2011, to ICPs 1-10, 11 [deleted], 12-13, 15-16, 18-20, 22-25). *See also* FIO, *2018 Annual Report*, 40 (listing 2017 and 2018 public consultations on ICP revisions); FIO, *2019 Annual Report*, 51 (listing 2019 public consultations). A few individual ICPs remain subject to revision.

[393] IAIS, *Insurance Core Principles and Common Framework*, 125-142, 217-220.

[394] IAIS, *Application Paper on Recovery Planning* (November 18, 2019), https://www.iaisweb.org/page/supervisory-material/application-papers//file/87519/application-paper-on-recovery-planning. For more information on FIO's role in IAIS resolution work, see Section V.A.1.

[395] IAIS, *Insurance Core Principles and Common Framework.*

[396] *See, e.g.*, IAIS, *Instructions for the April 2020 Insurance Capital Standard (ICS) Data Collection Exercise of the Monitoring Period Project* (June 30, 2020), https://www.iaisweb.org/page/supervisory-material/insurance-capital-standard//file/90757/public-2020-ics-data-collection-technical-specifications.

will allow supervisors to provide feedback on its performance and design. Refinements and enhancements to the ICS may be made during this period.[397]

The IAIS revised the ICPs and ComFrame to comport with, and accommodate, the Holistic Framework. The Holistic Framework is a set of supervisory policies and powers, an annual IAIS global monitoring exercise and discussion of the outcomes, and implementation assessment.[398]

B. Covered Agreements with the European Union and with the United Kingdom

The Bilateral Agreement between the United States of America and the European Union on Prudential Measures Regarding Insurance and Reinsurance, generally known in the United States as the U.S.-EU Covered Agreement, was signed by the parties in September 2017.[399] It entered into force on April 4, 2018.[400] In anticipation of the withdrawal of the United Kingdom from the European Union, in 2018 the United States and the United Kingdom entered into a substantively similar agreement,[401] known as the U.S.-UK Covered Agreement.[402] The U.S.-UK Covered Agreement will enter into force upon the exchange of written notifications between the United States and the United Kingdom.

A "covered agreement" is an international bilateral or multilateral agreement on insurance or reinsurance that "relates to the recognition of prudential measures" and that "achieves a level of protection for insurance or reinsurance consumers that is substantially equivalent to the level of protection achieved" under U.S. state-based regulation.[403] The ability to negotiate covered agreements is a key authority of the FIO Director under the FIO Act.[404] The U.S.-EU Covered

397 For more information on the ICS, see Section III.B.1.

398 IAIS, *Holistic Framework for Systemic Risk in the Insurance Sector* (November 2019), https://www.iaisweb.org/page/supervisory-material/financial-stability//file/87109/holistic-framework-for-systemic-risk. For more information on the Holistic Framework, see Section III.B.2.

399 Treasury, "Treasury, USTR Sign Covered Agreement on Prudential Insurance and Reinsurance Measures with the European Union," news release, September 26, 2017, https://home.treasury.gov/news/press-releases/sm0164. For the agreement text, see "Bilateral Agreement between the United States of America and the European Union on Prudential Measures Regarding Insurance and Reinsurance," https://www.state.gov/18-404/. Background information and a collection of related documents are also accessible on Treasury's website: "U.S. and EU Covered Agreement," Treasury, https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/federal-insurance-office/us-and-eu-covered-agreement.

400 *See Notice Concerning the Entry into Force of the Bilateral Agreement between the European Union and the United States of America on Prudential Measures Regarding Insurance and Reinsurance*, 2018 O.J. (L 91), https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.091.01.0001.01.ENG&toc=OJ:L:2018:091:TOC.

401 *See* FIO, *2019 Annual Report*, 56-57 (comparing the two agreements).

402 Bilateral Agreement between the United States of America and the United Kingdom on Prudential Measures Regarding Insurance and Reinsurance (December 18, 2018), https://home.treasury.gov/system/files/136/20181218-US-UK-Covered-Agreement.pdf.

403 FIO Act, 31 U.S.C. § 313(r)(2).

404 The authority is exercised jointly with the United States Trade Representative.

Agreement was the first ever entered into by the United States and the U.S.-UK Covered Agreement is the only other covered agreement that the United States has entered into to date.

The background, purpose, and status of these agreements are discussed in detail in FIO's 2018 and 2019 Annual Reports.[405] In general, the agreements address three areas of prudential insurance supervision: group supervision; reinsurance, including reinsurance collateral; and exchange of information between supervisory authorities. These agreements resolve on a national basis longstanding concerns arising from both the prudential approach to credit for reinsurance[406] of U.S. states for insurers that cede business to EU and UK reinsurers, and the prudential approach of the UK and EU member states to U.S. insurance groups with operations in those jurisdictions.[407]

Full implementation of the covered agreements in the United States is highly dependent upon steps taken at the state level. As explained in last year's Annual Report:

> Because the business of insurance in the United States is principally regulated by the U.S. states, successful implementation of these covered agreements on a uniform national basis contemplates action by each of the states to conform relevant laws to the provisions of the agreements, particularly regarding the conditions for elimination of collateral requirements applicable to EU reinsurers accepting business from U.S. ceding insurers (and, similarly, applicable in the case of cessions to UK reinsurers once the U.S.-UK Covered Agreement enters into force). If that does not occur within the implementation periods set out in the agreements, state insurance measures that are inconsistent with the reinsurance provisions of the agreement may be preempted by the covered agreement in accordance with the FIO Act.[408]

FIO's preemption authority is the mechanism provided by the FIO Act to ensure that the United States is able to comply with its commitments under a covered agreement.[409] The covered agreements acknowledge the state role in insurance supervision, and FIO's preemption authority.

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[405] *See* FIO, *2018 Annual Report*, 41-55; FIO, *2019 Annual Report*, 54-64.

[406] "Credit for reinsurance" describes the degree to which, under U.S. statutory insurance accounting, ceding insurers are permitted to recognize transfers of risk to reinsurers as reductions of policy liabilities or as assets, thereby freeing up regulatory capital to support new and existing business. FIO, *The Breadth and Scope of the Global Reinsurance Market and the Critical Role Such Market Plays in Supporting Insurance in the United States* (2014), 11, https://www.treasury.gov/initiatives/fio/reports-and-notices/Documents/FIO%20-Reinsurance%20Report.pdf (*Reinsurance Report*).

[407] *See* FIO, *2018 Annual Report*, 41-45.

[408] FIO, *2019 Annual Report*, 58 (footnotes omitted).

[409] Subject to certain procedures, including providing notice and an opportunity for public comment, a state insurance measure shall be preempted by a covered agreement if the FIO Director determines that it results in less favorable treatment of a non-United States insurer domiciled in a foreign jurisdiction that is subject to a covered agreement than a United States insurer domiciled, licensed, or otherwise admitted in that state, and is inconsistent with the covered agreement. 31 U.S.C. § 313(f).

For example, under Article 9, Paragraph 4 of the U.S.-EU Covered Agreement, the United States is obligated to begin evaluating state laws for potential preemption not later than the first day of the month, 42 months after the date the agreement was signed, i.e., by March 1, 2021. The United States "shall complete any necessary preemption determination" not later than the first day of the month, 60 months after signature (September 1, 2022).[410]

1. NAIC Progress on Credit for Reinsurance Models

Through the NAIC, the U.S. states have been diligent in developing amendments to the relevant model legal texts to address credit for reinsurance in a manner intended to be consistent with the covered agreements.[411] An important milestone was achieved in 2019, when the NAIC adopted revisions to its Credit for Reinsurance Model Law (#785) and Regulation (#786) intended to "make the models consistent with provisions of covered agreements with the European Union and United Kingdom with respect to reinsurance collateral requirements."[412]

In November 2019, the NAIC's Reinsurance Task Force issued recommendations concerning adoption of the 2019 credit for reinsurance model amendments as state accreditation standards.[413] The NAIC's Reinsurance Task Force advised that while an accreditation recommendation was not expected to be formally adopted by the NAIC until its 2020 Spring National Meeting, the relevant NAIC Committee should recognize that states can and should begin immediately to adopt the revisions of state laws and regulations necessary to conform to the 2019 model revisions so as "to best avoid potential federal preemption."[414]

The Reinsurance Task Force memorandum emphasized "the recommendation of the Task Force that states adopt the 2019 revisions in close to identical form to the models."[415] And, notably, the Task Force highlighted the necessity for prompt action by the states.[416]

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[410] *See also* U.S.-EU Covered Agreement, Article 10, Paragraph 2(d).

[411] FIO, *2019 Annual Report*, 58-60.

[412] NAIC, "NAIC Updates to Credit for Reinsurance Model Law and Regulation," news release, June 25, 2019, https://www.naic.org/Releases/2019_docs/credit_reinsurance_model.htm. The NAIC maintains a compendium of its model laws and regulations on its website: "NAIC Model Laws, Regulations, Guidelines and Other Resources," NAIC, https://www.naic.org/prod_serv_model_laws.htm. *See also* NAIC: Reinsurance Task Force, Credit for Reinsurance Model Law—Redlined (July 15, 2019), https://naic-cms.org/sites/default/files/inline-files/MO785%20redlined%206-25-19.pdf; Credit for Reinsurance Model Regulation—Redlined (July 15, 2019), https://naic-cms.org/sites/default/files/inline-files/MO786%20redlined%206-25-19.pdf.

[413] For more information on the NAIC accreditation program, see Section IV.A.4.

[414] Memorandum from NAIC Reinsurance Task Force to Financial Regulation Standards and Accreditation Committee (November 19, 2019), https://content.naic.org/sites/default/files/inline-files/2019%20Revisions%20to%20785%20and%20786.pdf.

[415] Memorandum from NAIC Reinsurance Task Force.

[416] "To summarize, FIO may begin evaluating potential preemption 'determinations' 42 months after the signature of the Covered Agreement, or March 1, 2021. FIO must complete any necessary preemption determinations 60 months after signature, which they believe to be Sept. 1, 2022. In order to avoid potential federal preemption determinations

Based on the referral from the Reinsurance Task Force, on December 7, 2019, the NAIC Financial Regulation Standards and Accreditation Committee adopted updates to the Reinsurance Ceded accreditation standard encompassing the 2019 model amendments, as well as a procedural waiver to expedite the effective date of the standard to September 1, 2022. Echoing the Reinsurance Task Force recommendation, the Committee urged states to adhere closely to the text of the revised models.[417]

The NAIC completed voting on adding the terms of Model #785 and #786 to its Reinsurance Ceded accreditation standard by its Executive Committee and Plenary during its virtual Summer National meeting in August 2020, and the accreditation standard has now been adopted, to take effect September 1, 2022.[418]

Relatedly, acting on recommendations of the Reinsurance Financial Analysis Working Group, and after exposure and public input, on June 9, 2020, the Reinsurance Task Force adopted a new Uniform Checklist for Reciprocal Jurisdiction Reinsurers, to assist the states in administering the laws and regulations they are adopting to implement the covered agreements.[419]

2. U.S. State Progress on Credit for Reinsurance Laws

Since last year's Annual Report—and in consultation with the NAIC, state regulators, industry trade associations, and other stakeholders—FIO has been monitoring the progress of each of the states in passing legislation and adopting regulations consistent with the NAIC credit for reinsurance models. As Secretary Mnuchin stated in May 2019, and as FIO has emphasized for the past several years, "successful implementation of the U.S.-EU covered agreement contemplates action by each of the states to conform relevant laws to the provisions of the agreement."[420]

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by the FIO Director, each state should adopt the 2019 revisions to Model #785 and Model #786 in a timely manner." Memorandum from NAIC Reinsurance Task Force.

[417] "The Committee adopted the revisions to the standard on a "substantially similar" basis as recommended in the referral. However, it should be noted that the Dodd-Frank Wall Street Reform and Consumer Protection Act requires a state insurance measure to be "consistent" with the Covered Agreement in order to avoid federal preemption, which may be interpreted as a higher standard than simply "substantially similar." Therefore, states are encouraged to adopt the 2019 revisions in close to identical form to the models in order to best avoid the possibility of federal preemption." "Financial Regulation Standards and Accreditation (F) Committee," NAIC, last accessed August 26, 2020, https://content.naic.org/cmte_f.htm (related documents tab).

[418] NAIC, *Summer National Meeting Executive Committee & Plenary Agenda* (August 14, 2020), https://content.naic.org/sites/default/files/national_meeting/Ex_Plenary_DRAFT_2.pdf (item 16); Executive Committee and Plenary Meeting Materials (August 14, 2020), https://content.naic.org/sites/default/files/national_meeting/Materials_EXPlenary_asof_07-22.pdf (attachment 13).

[419] NAIC, *Reinsurance (E) Task Force Conference Call* (June 9, 2020), https://content.naic.org/sites/default/files/national_meeting/RTF%2008.2020%20Materials_0.pdf (attachment 1).

[420] Treasury, "Remarks by Treasury Secretary Steven T. Mnuchin at the National Association of Insurance Commissioners International Forum," news release, May 13, 2019, https://home.treasury.gov/news/press-releases/sm688.

According to the NAIC's Solvency Modernization Initiative (SMI) Dashboards, 11 states have passed laws based on the 2019 amendments to the NAIC Credit for Reinsurance Model Law, as of July 22, 2020.[421] Another 17 states have actions pending (e.g., bills on a legislative calendar).[422] The NAIC's SMI Dashboards indicate that fewer states have documented progress on adopting regulations based on the revised NAIC Credit for Reinsurance Model Regulation,[423] but in most states regulations can be adopted without additional legislative action once the laws to which they will apply are in place.

Treasury anticipates that states will build on their progress by continuing to adopt revisions to their credit for reinsurance laws and regulations. Treasury will continue engaging and cooperating with the states and NAIC on implementation of the covered agreements. FIO will begin evaluating progress of each of the states not later than March of 2021, as required under the covered agreement provisions relating to preemption.[424]

3. NAIC Progress on Group Capital Assessment

In connection with Article 4(h) of the U.S.- EU Covered Agreement, the United States has made additional progress towards development of the GCC. Notably, under the U.S.-EU Covered Agreement, if U.S. insurance supervisors do not develop and implement a group capital assessment applicable to U.S. groups with EU insurance operations, EU regulators would not be barred from imposing Solvency II group capital requirements on such groups.[425] State-level work on developing the GCC, and on related NAIC model law and regulation texts, intended to meet this undertaking, has continued.[426]

[421] NAIC, *SMI Dashboard*, available through "Financial Condition Committee," NAIC, https://content.naic.org/cmte_e.htm (related documents tab).

[422] NAIC, *SMI Dashboard.*

[423] According to the NAIC SMI Dashboard, as of July 21, 2020, one state has adopted the regulation, and three have action under consideration. NAIC, *SMI Dashboard.*

[424] "Provided that this Agreement has entered into force, on a date no later than the first day of the month, 42 months after the date of signature of this Agreement, the United States shall begin evaluating a potential preemption determination under its laws and regulations with respect to any U.S. State insurance measure that the United States determines is inconsistent with this Agreement and results in less favourable treatment of an EU insurer or reinsurer than a U.S. insurer or reinsurer domiciled, licensed, or otherwise admitted in that U.S. State. Provided that this Agreement has entered into force, on a date no later than the first day of the month 60 months after the date of signature of this Agreement, the United States shall complete any necessary preemption determination under its laws and regulations with respect to any U.S. State insurance measure subject to such evaluation." U.S.-EU Covered Agreement, Article 9, Paragraph 4.

[425] *See* FIO, *2018 Annual Report*, 47; U.S.-EU Covered Agreement, Article 10.

[426] For more information on the GCC, see Section III.A.1.

4. The Covered Agreement Joint Committees

The covered agreements each establish a "Joint Committee" to "provide the Parties with a forum for consultation and to exchange information on the administration of the Agreement and its proper implementation," and require the Parties to consult within the Joint Committee annually unless the Parties otherwise decide.[427] The Joint Committee under the U.S.-EU Covered Agreement met in Washington in April 2019.[428] For 2020, the committee is chaired by the EU, and the parties expect that the 2020 meeting will be held in the fall of this year.

EIOPA noted in June 2020 that it has been engaging with EU member state authorities on the implementation of the U.S.-EU Covered Agreement, with a focus on identifying any potential inconsistencies.[429] At the 2020 Joint Committee meeting, the U.S. side will look forward to a more detailed update on these steps and plans to engage with the European Union concerning the implementation progress of the United States.

C. Insurance Dialogue Projects

1. EU-U.S. Insurance Dialogue Project

FIO is continuing its work with the EU-U.S. Insurance Dialogue Project, a collaborative effort among U.S. and EU insurance authorities to increase mutual understanding and enhance cooperation between the United States and the EU in order to promote business opportunity, consumer protection, and effective supervision.[430] In addition to FIO, the members of the EU-U.S. Insurance Dialogue Project include state insurance commissioners, the Federal Reserve, the NAIC, EIOPA, the European Commission, and insurance regulators from France, Germany, Ireland, and the Netherlands.

In 2019, the EU-U.S. Insurance Dialogue Project used three working groups to engage on three topics: insurer cybersecurity; the cyber insurance market; and big data.

- **Insurance Cybersecurity.** The insurance cybersecurity working group continued to discuss the creation of a template for a supervisor-only exercise to help improve coordination of cross-border responses in the event of an international cybersecurity incident.

[427] U.S.-EU Covered Agreement, Article 7.

[428] *See* FIO, *2019 Annual Report*, 62. Because the U.S.-UK Covered Agreement has not entered into force, the Joint Committee thereunder is not yet operative.

[429] EIOPA, *Report on Supervisory Activities in 2019* (June 2020), 12-13, https://www.eiopa.europa.eu/sites/default/files/publications/supervisory_activities_2019.pdf.

[430] *See* EU-U.S. Dialogue Project, *EU-U.S. Dialogue Project: The Way Forward, Objectives and Initiatives for the Future* (December 2012), https://home.treasury.gov/system/files/311/eu_us_dialogue_wayforward_2012_1.pdf.

- **Cyber Insurance Market.** The cyber insurance market working group continued discussions with a focus on non-affirmative cyber risk, aggregation risk, cyber risk insurance and reinsurance challenges, and the availability of cyber insurance data.
- **Big Data.** The big data working group examined regulatory oversight of third-party vendors, including how to monitor data accuracy and new vendors, applicant and policyholder disclosures, opportunities for applicants and policyholders to correct potential errors, and the use of artificial intelligence models.

In March 2020, the working groups released summary reports providing updates on their work.[431] FIO expects that the next public forum will include discussions of key areas linked to the project initiatives addressing challenges and opportunities for the insurance industries in the European Union and the United States related to cybersecurity risks, the cyber insurance market, and the use of big data.

2. U.S.-UK Insurance Dialogue Project

Building on the EU-U.S. Insurance Dialogue Project and in light of the United Kingdom's withdrawal from the European Union, FIO has started a U.S.-UK Insurance Dialogue Project with U.S. and UK insurance authorities that will, among other things, explore commonalities and differences between U.S. and UK insurance supervision. In view of the critical role that these markets serve for commercial and individual policyholders, officials in both jurisdictions have a shared interest in maintaining continuity with respect to insurance supervisory matters as the United Kingdom completes its departure from the European Union.

D. Financial Stability Board

The G20 established the FSB in 2009 as its financial regulatory reform implementation organization to promote the implementation of effective regulatory, supervisory, and other financial sector policies and to coordinate the work of international standard-setting bodies, including the IAIS, "as they work toward developing strong regulatory, supervisory and other financial sector policies."[432] The FSB's membership includes authorities that are responsible for maintaining financial stability and consists of 68 institutions from 25 jurisdictions and 10

[431] EU-U.S. Dialogue Project, *EU-U.S. Dialogue Project: Insurance Cybersecurity Working Group February 2020 Summary Report* (February 2020), https://www.eiopa.europa.eu/sites/default/files/publications/eu-us-project-cybersecurity-wg-feb-2020.pdf; EU-U.S. Dialogue Project, *EU-U.S. Dialogue Project: The Cyber Insurance Market Working Group February 2020 Summary Report* (February 2020), https://www.eiopa.europa.eu/sites/default/files/publications/eu-us-cyber-insurance-wg-feb-2020.pdf; EU-U.S. Dialogue Project, *EU-U.S. Dialogue Project: Big Data Working Group February 2020 Summary Report* (February 2020), https://www.eiopa.europa.eu/sites/default/files/publications/eu-us-big-data-wg-feb-2020.pdf.

[432] *See* "About the FSB," FSB, http://www.fsb.org/about/#history. *See also* Treasury, *Insurance EO Report*, 57-59, 130; "History of the FSB," FSB, http://www.fsb.org/history-of-the-fsb/;

international organizations and standard-setting bodies, including the IAIS.[433] Treasury, the Federal Reserve, and the SEC are the FSB's U.S. members.[434] Treasury's Office of International Affairs represents Treasury at the FSB. FIO coordinates with the U.S. members on insurance matters discussed at the FSB.

In light of the progress that the IAIS made in developing the Holistic Framework, the FSB—in consultation with the IAIS and national authorities—decided not to engage in an identification of G-SIIs in 2018.[435] In November 2019, following the publication of the IAIS's Holistic Framework, the FSB decided to suspend G-SII identifications from the beginning of 2020.[436]

The FSB also oversees insurance resolution planning work for systemically important insurers through the iCBCM, which assists and supports regulatory authorities in the development and implementation of resolution-related policy measures for insurance. Specifically, the iCBCM works under the direction of the FSB's ReSG, and in coordination with the IAIS ReWG, to develop guidance for resolution powers and tools regarding G-SIIs as well as addressing issues relating to their application.[437] Building upon prior work, the FSB published a final version of the *Key Attributes Assessment Methodology for the Insurance Sector* in August 2020.[438] Additionally, the iCBCM conducted its annual Resolvability Monitoring Survey, the results of which will be published in the FSB's overall review of progress on resolution initiatives in the financial sector later in 2020.

[433] FSB, *5th Annual Report: 1 April 2017 – 31 March 2018*, 1, 31-38, https://www.fsb.org/2018/12/fifth-fsb-annual-report/.

[434] FSB, *5th Annual Report*, 13.

[435] FSB, "FSB Welcomes IAIS Proposed Insurance Systemic Risk Framework and Decides Not to Engage in an Identification of G-SIIs in 2018," news release, November 14, 2018, https://www.fsb.org/2018/11/fsb-welcomes-iais-proposed-insurance-systemic-risk-framework-and-decides-not-to-engage-in-an-identification-of-g-siis-in-2018/.

[436] FSB, *Finalisation of IAIS Holistic Framework for the Assessment and Mitigation of Systemic Risk in the Insurance Sector* (November 14, 2019), https://www.fsb.org/wp-content/uploads/P141119-1.pdf; "FSB Welcomes IAIS Proposed Insurance Systemic Risk Framework." For more information on the Holistic Framework, see Section III.B.2.

[437] FSB, *FSB 2019 Resolution Report: Eighth Report on the Implementation of Resolution Reforms: "Mind the Gap"* (November 2019), 16, https://www.fsb.org/wp-content/uploads/P141119-3.pdf. For more information on FIO's role in the ReWG, see Section V.A.1. For more information on IAIS resolution tools, see Section V.A.2.

[438] FSB, *Key Attributes Assessment Methodology for the Insurance Sector* (August 25, 2020), https://www.fsb.org/wp-content/uploads/P250820-1.pdf; *see also* FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions* (October 15, 2014), https://www.fsb.org/wp-content/uploads/r_141015.pdf.

Box 3: LIBOR Transition

Since the late 1980s, the London Interbank Offered Rate (LIBOR) has been a global benchmark for short-term interest rates (between overnight and one year in length) across many currencies. The Alternative Reference Rate Committee estimated that current outstanding contracts referencing U.S. dollar LIBOR, including corporate loans, adjustable rate mortgages, floating rate notes, securitized products, and derivative securities, totaled nearly $200 trillion.[439]

By 2013, due to secular declines in the transactions that are meant to underlie the index, regulators and supervisors questioned LIBOR's continued suitability. LIBOR was also proven to be susceptible to manipulation. The G-20 tasked the FSB with evaluating the possibility of replacing LIBOR; at the same time, FSOC flagged similar issues.[440] In line with the FSB's and FSOC's recommendations, in 2014 the Federal Reserve Board and the Federal Reserve Bank of New York jointly convened the Alternative Reference Rate Committee to recommend a benchmark interest rate to replace LIBOR for U.S. dollar-denominated financial instruments.[441] The Committee was initially charged with identifying risk-free alternative reference rates, identifying best practices for contract robustness, and creating an implementation plan with metrics of success and a timeline to support an orderly adoption. The Committee identified the Secured Overnight Financing Rate (SOFR) as its recommended alternate rate for use in certain new U.S. dollar denominated derivatives and other financial contracts, and published a plan with specific steps and timelines designed to facilitate that rate's adoption.[442] The Alternative Reference Rate Committee designed its paced transition plan to develop SOFR markets ahead of LIBOR's anticipated cessation in 2021.

In July 2020, the IAIS published its report, *Supervisory Issues Associated with Benchmark Transition from an Insurance Perspective*, based on the results of its survey.[443] The report noted that one feature of benchmark transition risk for insurers is its potential to impact both sides of the balance sheet. Key recommendations in the report include that supervisors are encouraged to strengthen efforts to facilitate insurers' transition away from LIBOR by: (1) enhancing identification of transition exposures and challenges; (2) supporting facilitation of LIBOR transition; and (3) stepping up supervisory cooperation and coordination. In addition, the report notes that the IAIS and its members are committed to supporting the FSB and the Basel

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[439] Alternate Reference Rate Committee, *ARRC Best Practices for Completing the Transition from LIBOR* ,2020), https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2020/ARRC-Best-Practices.pdf.

[440] FSB, *Reforming Major Interest Rate Benchmarks* (July 22, 2014), https://www.fsb.org/wp-content/uploads/r_140722.pdf; FSOC, *2014 Annual Report* (May 2015), 117-118, https://www.treasury.gov/initiatives/fsoc/Documents/FSOC%202014%20Annual%20Report.pdf.

[441] "About ARRC," Alternative Reference Rate Committee, https://www.newyorkfed.org/arrc/about.

[442] *See* "About ARRC." *See also* "Transition from LIBOR," Federal Reserve, https://www.newyorkfed.org/arrc/sofr-transition.

[443] IAIS, *Supervisory Issues Associated with Benchmark Transition from an Insurance Perspective* (July 9, 2020), https://www.iaisweb.org/page/supervisory-material/other-supervisory-papers-and-reports//file/90888/iais-report-on-supervisory-issues-associated-with-benchmark-transition-from-an-insurance-perspective. The IAIS report is also included as an annex to the larger, more comprehensive FSB report that covers the entire financial services sector.

Committee on Banking Supervision proposed next steps in further assessing transition progress and monitoring the evolving impact of the COVID-19 pandemic on benchmark transition.[444] While the transition from LIBOR is well underway, market participants have significant work to complete in 2021 to implement the transition.

E. OECD

FIO also participates in the IPPC at the OECD. The OECD is a multilateral organization with 37 members that serves as a source of public policy advice on various matters, and collects and publishes statistical data and analyses on assorted topics.[445] The U.S. delegation to the IPPC includes representatives from FIO, the U.S. Departments of Commerce and Labor, and the NAIC.

Over the past year, the IPPC has contributed to a number of OECD publications, including analyses of artificial intelligence; LTCI and healthcare insurance; the COVID-19 pandemic; and the insurance market.[446] In addition, the OECD Committee on Fiscal Affairs released *Transfer Pricing Guidance on Financial Transactions*, which includes a discussion of transfer pricing issues related to captive insurance arrangements.[447]

Over the next few years, the IPPC is expected to continue to address issues relating to, among other things, the COVID-19 pandemic; LTCI, disaster risk management and financing; digitalization and innovation; cyber insurance; and insurance regulatory practices. All of these issues relate to significant U.S. policy initiatives being led by Treasury, and therefore FIO plans to take a leadership role on insurance matters at the OECD.

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[444] IAIS, *Supervisory Issues Associated with Benchmark Transition*.

[445] *See* OECD, *OECD Secretary-General's Report to Ministers 2020*, 22.

[446] *See* OECD, *The Impact of Big Data and Artificial Intelligence (AI) in the Insurance Sector* (January 28, 2020), http://www.oecd.org/finance/Impact-Big-Data-AI-in-the-Insurance-Sector.htm; OECD, *Long Term Care and Healthcare Insurance in OECD and Other Countries* (February 10, 2020), http://www.oecd.org/finance/insurance/Long-Term-Care-Health-Care-Insurance-in-OECD-and-other-Countries.htm; OECD, *Initial Assessment of Insurance Coverage and Gaps for Tackling COVID-19 Impacts* (April 2020), http://www.oecd.org/finance/insurance/Initial-assessment-of-insurance-coverage-and-gaps-for-tackling-COVID-19-impacts.pdf; OECD, *Responding to the COVID-19 and Pandemic Protection Gap* (May 28, 2020), http://www.oecd.org/coronavirus/policy-responses/responding-to-the-covid-19-and-pandemic-protection-gap-in-insurance-35e74736/; OECD, *Insurance Markets in Figures* (June 2020), https://www.oecd.org/daf/fin/insurance/Insurance-Markets-in-Figures-2020.pdf.

[447] OECD, *Transfer Pricing Guidance on Financial Transactions: Inclusive Framework on BEPS: Actions 4, 8-10* (February 11, 2020), https://www.oecd.org/tax/beps/transfer-pricing-guidance-on-financial-transactions-inclusive-framework-on-beps-actions-4-8-10.pdf. *See also* Thomas A. Gick, *et al.*, "OECD Recognizes Legitimacy of Captive Insurance," *Eversheds Sutherland*, February 24, 2020, https://us.eversheds-sutherland.com/NewsCommentary/Legal-Alerts/229003/Legal-Alert-OECD-recognizes-legitimacy-of-captive-insurance.

VI. ECONOMIC GROWTH AND INFORMED CHOICES

This section first reviews regulatory developments in retirement income and LTCI, as well as the state of the LTCI industry. It then provides an update on regulatory developments at the federal and state levels relating to retirement income and the standards of conduct for retail sales of insurance and other financial products. The section concludes with a discussion of InsurTech.

A. Long-Term Care Insurance

The private market for traditional LTCI has been in steep decline over the last 20 years. The number of individual LTCI policies sold peaked in 2002, and has generally decreased in nearly every year since then.[448] In 2019, following seven consecutive years of negative growth, annualized new premium for individual LTCI policies rose one percent to $168 million; however, the estimated number of new policies sold fell to a record low of 55,000, a one percent decrease from 2018.[449] As an alternative to stand-alone LTCI policies, some insurers and consumers have turned to "combination" products, which combine a traditional life insurance policy or annuity with a long-term care benefit. Measured by new lives insured, combination products have eclipsed traditional LTCI, constituting more than 87 percent of the market for individual LTCI solutions in 2018.[450] Combination products generated $4.3 billion and $4.8 billion in premiums in 2018 and 2019, respectively, while new policy counts totaled 400,000 in 2018 and 461,000 in 2019.[451]

The financial performance of in-force LTCI policies remains an important issue for the insurance industry, investors, regulators, and policyholders. LTCI carriers continue to increase their reserves (i.e., the funds set aside to pay future claims), update their actuarial assumptions, and provide more detailed disclosures of their reserving methodologies.[452] One rating agency has estimated that, because LTCI is a long-duration liability, most insurers will not reach their peak

[448] Treasury, *Long-Term Care Insurance: Recommendations for Improvement of Regulation – Report of the Federal Interagency Task Force on Long-Term Care Insurance* (August 11, 2020), 15, https://home.treasury.gov/system/files/136/Report-Federal-Interagency-Task-Force-Long-Term-Care-Insurance.pdf (*LTCI Task Force Report*).

[449] LIMRA, *U.S. Individual Long-Term Care Insurance (2019 Annual Review)*. According to LIMRA data, during the five-year period from 2015 through 2019, annualized new premiums for standalone LTCI decreased by 60 percent, while the annual number of newly-issued policies decreased by 76 percent.

[450] Source: LIMRA.

[451] LIMRA, *2018 Individual Life Combination Products Annual Review*: LIMRA, *2019 Individual Life Combination Products Annual Review*.

[452] *See, e.g.*, Unum Group, "Unum Group Reports First Quarter 2020 Results," news release, May 4, 2020, https://investors.unum.com/file/103324/Index?KeyFile=403855793 (announcing phase-in of additional LTCI reserves over seven years in response to regulatory finding of $2.1 billion reserve deficiency as of December 31, 2018); Genworth Financial, "Genworth Financial Announces Fourth Quarter 2018 Results," news release, February 5, 2019, http://investor.genworth.com/investors/news-releases/archive/archive/2019/Genworth-Financial-Announces-Fourth-Quarter-2018-Results/default.aspx (largest issuer of in-force LTCI policies announces $327 million reserve increase based on annual review of assumptions and methodologies).

reserves for in-force business for another 10 to 15 years.[453] Accordingly, uncertainty about the profitability of in-force business will persist, and will be significantly dependent on the accuracy of actuarial assumptions. Concerns over LTCI writers' financial solvency and the potential impact of their insolvencies on state insurance guaranty associations will continue to be key considerations for the viability of the LTCI market.[454]

The NAIC identified the regulation of LTCI as a top regulatory priority in 2019, noting that the current LTCI environment posed significant issues to both consumers and the state-based system of insurance regulation. The NAIC formed a task force charged with developing "a consistent national approach for reviewing LTCI rates that results in actuarially appropriate increases being granted by the states in a timely manner and eliminates cross-state rate subsidization."[455] The NAIC also charged the task force with identifying options to provide choices for consumers regarding modifications to LTCI contract benefits where policies are no longer affordable due to rate increases.

In November 2019, the NAIC released a request for a proposal to retain an actuarial consultant to review and conduct an LTCI data call to support the task force's efforts[456] The NAIC hired a consultant and began a data call with 19 insurers.[457] In July 2020, the task force requested public comments on a document that would help develop principles for draft reduced benefit options for LTCI products.[458] In August 2020, the task force formed three subgroups: (1) LTCI Multi-state

[453] S&P Global Ratings, *Following the Trail of U.S. Insurers' Long-Term Care Assumptions* (2019), 1, https://www.spglobal.com/ratings/en/research/articles/190110-following-the-trail-of-u-s-insurers-long-term-care-assumptions-10827933.

[454] State insurance regulators initiated insolvency proceedings against at least two insurers with LTCI business in 2020: (1) The Wisconsin Insurance Commissioner sought to place an insurer into rehabilitation after determining that even a small adverse development in LTCI reserves would lead to the company's insolvency; and (2) Pennsylvania began rehabilitation of an insolvent LTCI company. Wisconsin Office of the Insurance Commissioner, "Insurance Commissioner Acts to Protect the Nearly 200,000 Policyholders of Time Insurance Company," news release, May 18, 2020, https://oci.wi.gov/Pages/PressReleases/20200518TimeInsurance.aspx; Allison Bell, "Pennsylvania Puts LTCI Issuer in Rehabilitation," *ThinkAdvisor*, February 6, 2020, https://www.thinkadvisor.com/2020/02/06/pennsylvania-puts-ltci-issuer-in-rehabilitation/. When an insurer is liquidated, certain remaining claims are paid by the state guaranty association system and funded by assessments on solvent insurers in the relevant states.

[455] "Long-Term Care Insurance (EX) Task Force," NAIC, https://content.naic.org/cmte_ex_ltci_tf.htm.

[456] NAIC, "NAIC Releases Request for Proposal for an Actuarial Consultant to Conduct LTCI Data Call," news release, November 11, 2019, https://content.naic.org/article/news_release_naic_releases_request_proposal_actuarial_consultant_conduct_ltci_data_call.htm.

[457] NAIC, *Conference Call Minutes* (July 2, 2020), 3, https://content.naic.org/sites/default/files/national_meeting/LTCI%28EX%29TF_080720_materials.pdf.

[458] NAIC, *Reduced Benefit Options Associated with Long-Term Care Insurance (LTCI) Rate Increases – Request for Public Comment* (July 2020), https://content.naic.org/sites/default/files/inline-files/RBO%20Principles%20Document%20and%20Introduction_031320.pdf.

Rate Review Subgroup; (2) LTCI Reduced Benefit Options Subgroup; and (3) LTCI Financial Solvency Subgroup.[459]

In recent years, FIO has commented on the growing social need for long-term care and the decline of the private LTCI market.[460] The Insurance EO Report identified the challenges of financing long-term care as a matter of national interest requiring a coordinated response from the federal government, and recommended that an LTCI Task Force be formed to develop policies complementing reforms at the state level relating to the regulation of LTCI. In July 2018, Treasury convened the Federal Interagency Task Force on Long-Term Care Insurance (LTCI Task Force) in response to recommendations in the Insurance EO Report.[461] On August 11, 2020, Treasury issued a report (the LTCI Task Force Report) presenting the recommendations of the LTCI Task Force for improving the regulation of LTCI in the United States.[462] The LTCI Task Force Report stated that implementation of the recommendations would remove barriers to innovation and increase regulatory efficiency and alignment, potentially making LTCI more affordable and accessible while allowing the market to continue shaping the evolution of this product line. The LTCI Task Force Report provided analysis and recommendations in four main subject areas:

- **Innovation and Product Development—**considering product development and other innovation in the private market, including recommendations concerning combination products, limited LTCI (i.e., policies that pay benefits for less than 12 months), group products, and "incidental" policy benefits such as home safety assessments, home modifications, or caregiver training.
- **Regulatory Efficiency and Alignment—**proposing improvements in regulatory efficiency and alignment with respect to LTCI, including inflation protection requirements, harmony between federal and state laws and regulations, and cross-state subsidization and other issues relating to state regulatory review and approval of premium increases.
- **Financial Literacy and Education—**addressing the appropriate federal role in financial literacy and education relating to long-term care needs and LTCI, including a recommendation that Treasury and other agencies, working through the Financial Literacy Education Commission, assess federal education resources on long-term care needs and planning, and modify, update, and supplement these resources as needed.

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[459] NAIC Long-Term Care Insurance Task Force, *Meeting Summary Report* (August 7, 2020), https://content.naic.org/sites/default/files/national_meeting/LTCI%28EX%29TF%20Summary_1.pdf.

[460] *See* Treasury, *Insurance EO Report*, 143; FIO, *2018 Annual Report*, 59-61; FIO, *2019 Annual Report*, 71-74.

[461] Treasury, *Insurance EO Report*, 144.

[462] Treasury, *LTCI Task Force Report*.

- **Tax Incentives—**discussing current tax law treatment of LTCI and proposals to provide additional tax incentives for the purchase and use of LTCI, including a recommendation to amend the Internal Revenue Code to eliminate the early withdrawal tax if funds from an IRA, 401(k), or 403(b) account are used to pay LTCI premiums.

The LTCI Task Force Report identified appropriate policymakers and other stakeholders to implement each recommendation. For example, the LTCI Task Force Report stated that FIO should coordinate an analysis by actuaries, academics, and other stakeholders of the impact of combination products on the market for LTCI risk protection. The Report also recommended that FIO continue to monitor and report on the development by the NAIC and the states of a consistent national approach to regulatory reviews of LTCI rate increase requests.[463] FIO plans to move forward on the recommendations specific to FIO.

B. Retirement Income

1. SECURE Act and Annuities

In December 2019, Congress passed, and President Trump signed into law, significant retirement legislation: the Setting Every Community Up for Retirement Enhancement (SECURE) Act of 2019.[464] In addition to other reforms, the SECURE Act has three provisions intended to facilitate the use of annuities in employer-sponsored retirement savings plans, as follows:[465]

- Section 109 (portability of lifetime income options) allows plans to directly transfer lifetime income investments in the form of a qualified distribution plan annuity to another employer-sponsored plan or individual retirement account;
- Section 203 (disclosure regarding lifetime income) requires plan benefit statements to include a lifetime income disclosure at least once during any 12-month period. The disclosure must illustrate the monthly payments the participant would receive if he or she converted the total account balance into a lifetime income stream; and
- Section 204 (fiduciary safe harbor for selection of lifetime income provider) creates a "safe harbor" from fiduciary liability when employers select an insurance company to provide annuity contracts under a plan.

[463] Treasury, *LTCI Task Force Report*, 26, 39.

[464] The SECURE Act was introduced in the House of Representatives as H.R. 1994 and enacted as part of the Further Consolidated Appropriations Act, 2020, Pub. L. No. 116-94 (2019).

[465] Under current law, U.S. employers may include annuities in defined contribution plans such as 401(k)s. However, a 2019 survey found that only 15 percent of employers that implemented some form of retirement income solution offered in-plan deferred annuities as investment vehicles, while another 15 percent offered third-party annuities as payout vehicles at the time of retirement. Willis Towers Watson, *Lifetime Income Solutions: Progress, with Work Ahead* (September 2019), 3, https://www.willistowerswatson.com/-/media/WTW/Insights/2019/09/lifetime-income-solutions-survey-report.pdf.

The condition for the safe harbor under section 204 focus on requirements that the employer or other responsible plan fiduciary must conclude that (1) at the time of the selection, the insurer is financially capable of satisfying its obligations under the annuity; and (2) the relative cost of the selected annuity is reasonable. The safe harbor also provides that the fiduciary will be deemed to satisfy its duty under the safe harbor with respect to the consideration of the financial condition of the insurer if it obtains written representations from the insurer on specified topics including its licensure, annual audit, and compliance with solvency requirements under state insurance laws.[466] The full impact of the SECURE Act on the availability and use of annuities in retirement plans will emerge over time.

2. Annuities and the 403(b) Market

Section 403(b) of the Internal Revenue Code permits certain educational institutions and tax-exempt organizations to establish retirement plans for their employees. A 403(b) plan (sometimes referred to as a "tax-sheltered annuity") is similar to a 401(k) in that it allows an employee to direct a limited amount of salary into individual accounts on a tax-deferred basis, with similar limits on contributions, vesting schedules, and withdrawal rules. However, the tax and regulatory treatment of 403(b) and 401(k) plans differ in some respects, such as the allowable investment options.[467] Because 403(b) plans were originally limited to annuities, L&H insurers have long played a major role in the 403(b) market.[468]

The 403(b) market has recently been subject to state and federal regulatory scrutiny. Beginning in late 2019, both state and federal regulators turned their attention to 403(b) plans, which are the second largest category of employer-sponsored defined contribution plans by asset size.[469] In October 2019, NYDFS sent letters to a dozen L&H insurers requesting information about sales practices in the 403(b) market.[470] During the same month, the SEC sent letters to companies that administer 403(b) plans and opened an investigation to determine whether violations of federal securities laws have occurred in plan administration.[471] On July 28, 2020, the SEC issued an

[466] The safe harbor extends only to the selection of the insurer. It does not protect sponsors from Employee Retirement Income Security Act of 1974 (ERISA) liability for other fiduciary acts such as the selection and monitoring of plan investments.

[467] 29 U.S.C. § 1003(b).

[468] In 1974, Congress extended the scope of permitted Section 403(b) arrangements to include certain custodial accounts in which contributions are invested in mutual funds. *See* Internal Revenue Code Section 403(b).

[469] As of the end of 2019, 403(b) plans held $1.1 trillion in assets compared to $6.2 trillion held by 401(k) plans. Investment Company Institute, *2020 Investment Company Fact Book*, 169, https://www.ici.org/pdf/2020_factbook.pdf.

[470] Leslie Scism and Anne Tergesen, "New York State Officials Open Probe on 403(b) Sales to Teachers," *The Wall Street Journal*, October 2, 2019, https://www.wsj.com/articles/new-york-state-officials-open-probe-on-403-b-sales-to-teachers-11570031322 (noting that the investigation will focus on "whether there are unfair and deceptive marketing practices" in the 403(b) market).

[471] Anne Tergesen and Gretchen Morgenson, "SEC Launches Investigation of Practices in Retirement Plans for Teachers, Government Employees," *The Wall Street Journal*, October 9, 2019,

Investor Bulletin to help teachers in public schools make informed investment decisions, including about 403(b) plans.[472] On the same date, an issuer of tax-sheltered annuities agreed to pay approximately $40 million to settle two actions brought by the SEC alleging disclosure failures in connection with the issuer's 403(b) program in Florida public schools.[473]

C. Standards of Conduct

Throughout 2019 and continuing into 2020, policymakers continued to focus on the appropriate standard of conduct for the sale of retail investment products in the wake of the 2018 Court of Appeals decision vacating the DOL fiduciary rule in its entirety.[474]

On June 5, 2019, the SEC adopted Regulation Best Interest (Regulation BI), which establishes a new standard of conduct for broker-dealers when making recommendations to retail customers of any securities transaction or investment strategy involving securities—including retirement plan rollover recommendations.[475] Regulation BI provides that broker-dealers and their associated persons have a duty to act in the best interest of the retail customer, without putting their own interests ahead of those of the retail customer.[476] In the insurance context, Regulation BI applies to broker-dealer firms and their associated persons making recommendations to retail customers of any transaction or investment strategy involving variable annuities, variable life insurance, and other insurance products that are registered as securities with the SEC. When it published Regulation BI, the SEC also published rules and interpretive guidance related to Regulation

https://www.wsj.com/articles/sec-launches-investigation-of-practices-in-retirement-plans-for-teachers-government-employees-11570651944; Greg Iacurci, "SEC probing compensation, sales practices in 403(b) plans for school districts," *InvestmentNews*, October 8, 2019, https://www.investmentnews.com/sec-probing-compensation-sales-practices-in-403b-plans-for-school-districts-2-170353. *See also* Karen Hube, "Annuity Sales to Teachers by AIG Are Reportedly the Subject of an SEC Probe," *Barron's*, October 30, 2019, https://www.barrons.com/articles/sec-looks-at-aigs-sales-of-annuities-to-teachers-51572426001.

[472] SEC, *Tips for Teachers: Investing for Retirement—Investor Bulletin* (July 28, 2020), https://www.sec.gov/oiea/investor-alerts-and-bulletins/tips-teachers-investing-retirement-investor-bulletin.

[473] SEC, "SEC Charges VALIC Financial Advisors with Failing to Disclose Payments to Promote Services to Florida Educators," news release, July 28, 2020, https://www.sec.gov/news/press-release/2020-164.

[474] *Chamber of Commerce of the United States of America v. United States Department of Labor*, 885 F.3d 360 (5th Cir. 2018).

[475] Regulation Best Interest: The Broker-Dealer Standard of Conduct, 84 Fed. Reg. 33318 (July 12, 2019), https://www.federalregister.gov/documents/2019/07/12/2019-12164/regulation-best-interest-the-broker-dealer-standard-of-conduct. For more information on the development of Regulation BI, see FIO, *2019 Annual Report*, 68-70.

[476] 84 Fed. Reg. at 33318. The regulation defines "retail customer" as "natural person, or the legal representative of such natural person, who: (i) Receives a recommendation of any securities transaction or investment strategy involving securities from a broker, dealer, or a natural person who is an associated person of a broker or dealer; and (ii) Uses the recommendation primarily for personal, family, or household purposes." 84 Fed. Reg. at 33492.

BI.[477] The SEC required broker-dealers to begin complying with Regulation BI by June 30, 2020.

Regulation BI applies to SEC-registered broker-dealers and their associated persons that make recommendations to retail customers of (1) products—including insurance products—that are "securities" and (2) investment strategies involving securities (including account recommendations). Regulation BI does not apply outside of these circumstances.

Some insurance representatives are also supervised persons of investment advisers.[478] The Investment Advisers Act of 1940 imposes a fiduciary duty on investment advisers and their supervised persons to serve the best interest of their clients and not subordinate their clients' interest to their own.[479] For insurance representatives that are also supervised persons of investment advisers, this fiduciary duty would apply when recommending insurance products to advisory clients depending on the facts and circumstances of the recommendation.

In circumstances where Regulation BI and the Investment Advisers Act of 1940 do not apply to the sale or marketing of insurance products, such sales and marketing interactions would still be subject to other relevant federal laws, state laws and insurance regulations.

In February 2020, the NAIC approved revisions to the Suitability in Annuity Transactions Model Regulation, clarifying that all recommendations by agents and insurers must be in the best interest of the consumer and that agents and carriers may not place their own financial interest ahead of the consumer's interest in making recommendations. The revised model regulation requires agents and carriers to act with "reasonable diligence, care and skill" in making recommendations. The model also provides that recommendations and sales of annuities made in compliance with "comparable standards," including Regulation BI, shall satisfy the requirements under the regulation.[480] The NAIC has stated that a high degree of harmonization for annuity standards of conduct across state, SEC, and Department of Labor regulatory

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[477] Form CRS Relationship Summary; Amendments to Form ADV; Final Rule, 84 Fed. Reg. 33492 (July 12, 2019), https://www.federalregister.gov/documents/2019/07/12/2019-12376/form-crs-relationship-summary-amendments-to-form-adv; Commission Interpretation Regarding Standard of Conduct for Investment Advisers, 84 Fed. Reg. 33669 (July 12, 2019), https://www.federalregister.gov/documents/2019/07/12/2019-12208/commission-interpretation-regarding-standard-of-conduct-for-investment-advisers; Commission Interpretation Regarding the Solely Incidental Prong of the Broker-Dealer Exclusion from the Definition of Investment Adviser, 84 Fed. Reg. 33681 (July 12, 2019), https://www.federalregister.gov/documents/2019/07/12/2019-12209/commission-interpretation-regarding-the-solely-incidental-prong-of-the-broker-dealer-exclusion-from.

[478] Section 202(a) of the Investment Advisers Act of 1940 defines a supervised person as "any partner, officer, director (or other person occupying a similar status or performing similar functions), or employee of an investment adviser, or other person who provides investment advice on behalf of the investment adviser and is subject to the supervision and control of the investment adviser." 15 U.S.C § 80b-2(a)(25).

[479] 84 Fed. Reg. at 33671.

[480] Suitability in Annuity Transactions Model Regulation (NAIC Spring 2020), https://www.naic.org/store/free/MDL-275.pdf?27.

platforms would be beneficial to consumers and the industry.[481] On May 11, 2020, Iowa became the first state to adopt the revised suitability model.[482] Arizona adopted the model on June 5, 2020.[483]

In the meantime, New York's Regulation 187—which imposes a best interest standard on the sale of both annuity and life insurance products in New York—became effective for annuity contracts on August 1, 2019 and for life insurance products on February 1, 2020.[484] The regulation places a duty on the producer (that is, the broker or agent; or, where there is no producer, the insurer) to ensure that a recommendation of an annuity or life insurance policy furthers the consumer's needs and objectives when taking into consideration only the interests of the consumer and without regard to the producer's or insurer's financial compensation or incentives. It is unclear whether and to what extent other states may choose to adopt the NAIC's revised Suitability in Annuity Transactions Model Regulation or to follow the example of New York's Regulation 187. FIO will continue to monitor the progress of state insurance regulators in implementing a consistent approach across the United States for standards of conduct in this context.

In July 2020, the DOL formally proposed a class exemption that would allow investment advice fiduciaries under both ERISA and the Internal Revenue Code to receive compensation—including as a result of advice to roll over assets from an employee benefit plan to an individual retirement account or annuity—that would otherwise violate the prohibited transaction provisions of ERISA and the Internal Revenue Code.[485] The exemption would apply to registered investment advisers, broker-dealers, banks, insurance companies, and their employees, agents, and representatives that are investment advice fiduciaries. The DOL noted that the approach in this proposal includes impartial conduct standards that are aligned with those of the SEC and state insurance regulators. In this way, according to the DOL, "the proposal is designed to promote regulatory efficiencies that might not otherwise exist under the [DOL's] existing administrative exemptions for investment advice fiduciaries."[486]

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[481] "Annuity Suitability & Best Interest Standard," NAIC, last updated July 29, 2020, https://content.naic.org/cipr_topics/topic_annuity_suitability_best_interest_standard.htm.

[482] Iowa Code § 507B.48 (2020). *See also* Iowa Insurance Division, "Iowa Insurance Division Adopts Final 'Best Interest' Rule," news release, May 11, 2020, https://iid.iowa.gov/press-releases/iowa-insurance-division-adopts-final-%E2%80%98best-interest%E2%80%99-rule.

[483] Arizona Senate Bill 1557 (2020).

[484] 11 N.Y. Comp. Codes R. & Regs. Tit. 11, § 224 (July 17, 2018).

[485] *See* U.S. Department of Labor, "U.S. Department of Labor Proposes to Improve Investment Advice and Enhance Financial Choices for Workers and Retirees," news release, June 29, 2020, https://www.dol.gov/newsroom/releases/ebsa/ebsa20200629; Improving Investment Advice for Workers & Retirees; Notification of Proposed Class Exemption, 85 Fed. Reg. 40834 (July 7, 2020), https://www.federalregister.gov/documents/2020/07/07/2020-14261/improving-investment-advice-for-workers-and-retirees.

[486] 85 Fed. Reg. at 40836.

D. InsurTech

In its 2019 Annual Report, FIO provided a comprehensive overview of InsurTech, which is the insurance analogue to "FinTech" and generally defined as the innovative use of technology in connection with insurance.[487] This section provides an update on the three InsurTech topics addressed in last year's report: (1) an overview of the InsurTech market; (2) the impact of innovation in the insurance industry; and (3) regulatory frameworks and reforms related to innovation and technology.[488] In addition, it discusses the role of InsurTech in responding to the COVID-19 pandemic.[489]

1. InsurTech Market Overview

InsurTech startups continue to receive significant investments and attention.[490] Global capital investments for InsurTech startups remained steady for the first three quarters of 2019 before reaching record levels in the fourth quarter. The fourth quarter of 2019 saw the announcement of 75 InsurTech investment rounds with a total value of $1.99 billion—the sixth straight quarter with over $1 billion in InsurTech funding.[491] Funding dropped sharply in the first quarter of 2020 as a result of the COVID-19 pandemic.[492]

Startups generally receive funding through multiple investment rounds occurring over a series of time.[493] Early-stage funding in 2019 decreased by 11 percent from 2018, although deal count experienced moderate growth of eight percent. Late-stage funding rounds saw increases in both number of deals and funding amounts between 2018 and 2019.[494] Despite the drop in funding in the first quarter of 2020, the number of deals rose to 96, demonstrating a "continuing trend of growing number of deals quarter-on-quarter."[495] The P&C sector continued to receive more significant amounts of early-stage funding relative to L&H insurers, collecting over 81 percent of the total in the first quarter of 2020.[496] Industry incumbents (established insurers, reinsurers,

[487] *See* FIO, *2019 Annual Report*, 75.

[488] *See* FIO, *2019 Annual Report*, 75-98.

[489] Topics on data and digitalization that relate to cyber insurance and cybersecurity are addressed in Section IV.C.

[490] For more information on InsurTech startups—including descriptions of full stack insurers, managing general agents, and technology service providers—see FIO, *2019 Annual Report*, 76-77.

[491] Willis Towers Watson, *et al.*, *Quarterly InsurTech Briefing Q4 2019*, 33, https://www.willistowerswatson.com/en-US/Insights/2020/01/quarterly-insurtech-briefing-q4-2019.

[492] Willis Towers Watson, *et al.*, *Quarterly InsurTech Briefing Q1 2020*, 6, https://www.willistowerswatson.com/en-gb/insights/2020/05/quarterly-insurtech-briefing-q1-2020.

[493] Seed funding occurs at the earliest stage of start-up investment, followed by early stage funding (Series A, Series B, and Series C) and late stage funding (Series D and later). *See* "New InsurTech Venture Capital Financings Dropped by Half in Q1," *Carrier Management*, April 3, 2020, https://www.carriermanagement.com/news/2020/04/03/205128.htm.

[494] Willis Towers Watson, *et al.*, *Quarterly InsurTech Briefing Q4 2019*, 1, 25.

[495] Willis Towers Watson, *et al.*, *Quarterly InsurTech Briefing Q4 2019*, 1, 58.

[496] Willis Towers Watson, *et al*., *Quarterly InsurTech Briefing Q1 2020*, 5.

agents, and brokers) continued to be active participants in this space, and strategic technology investments in the fourth quarter of 2019 reached 33 partnerships.[497]

2. Innovation and Its Impact, Including Responses to and Effects of the COVID-19 Pandemic

Over the past year, insurance industry innovation trends remained similar to those of recent years with continued growth in investments, an emphasis on distribution and marketing, additional partnerships between startups and incumbent insurers, and a focus on AI.[498] The importance of innovation for insurers was signaled by AM Best, which, in March 2020, began reviewing insurer innovation as part of its insurer evaluation process. The rating agency noted that a company's innovation score does not factor into credit ratings but serves as a benchmark for measuring innovation and competitiveness within the industry. AM Best now categorizes companies as a "leader, prominent, significant, moderate, or minimal" with respect to innovation. Its first report categorized 50 percent of rating units as moderate with another 17 percent as minimal.[499]

FIO's 2019 Annual Report noted that in addition to efforts to modernize and adopt new technology, "any transformation of the insurance sector will also be driven by external factors."[500] The emergence of COVID-19 in early 2020 demonstrated the importance of external factors, and recent InsurTech discussions have focused on the importance of technology in bolstering the insurance industry's response to the pandemic. Commentators have widely noted that the pandemic marked a turning point where investment in innovation is becoming a necessity, rather than simply a competitive advantage.[501]

Social distancing requirements and stay-at-home orders required insurers to modify their operations, with those insurers that have focused on investing in technology reportedly adapting better to remote operations.[502] For some insurers, cloud-based operations facilitated the

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[497] Willis Towers Watson, *et al.*, *Quarterly InsurTech Briefing Q4 2019*, 1, 25. For more information on the types of InsurTech startups and the role of industry incumbents in InsurTech, see FIO, *2019 Annual Report*, 75-80.

[498] FIO provided a comprehensive overview of innovation trends in the insurance industry in its 2019 Annual Report. *See* FIO, *2019 Annual Report*, 75-98.

[499] AM Best, *Best's Special Report: Understanding AM Best's Innovation Scoring* (March 10, 2020), http://www3.ambest.com/bestweek/purchase.asp?record_code=295274.

[500] FIO, *2019 Annual Report*, 82.

[501] *See, e.g.*, Terry Rowinski, "The Push to Digitize Insurance Amid COVID-19," *ThinkAdvisor*, May 4, 2020, https://www.thinkadvisor.com/2020/05/04/the-push-to-digitize-insurance-amid-covid-19/.

[502] *See, e.g.*, Prudential Financial Q2 2020 Earnings Call Transcript, August 5, 2020, 3, http://s22.q4cdn.com/600663696/files/doc_financials/quarterly_reports/2020/Q2/Prudential-Financial-Inc.(PRU)-Q2-2020-Earnings-Call-05-Aug-2020_rF.pdf (reporting that over 95 percent of U.S. employees transitioned to remote work in March 2020); Principal Financial Group 1Q 2020 Earnings Call Transcript, April 28, 2020, 3, https://s21.q4cdn.com/251671177/files/doc_financials/2020/1Q/Principal-Financial-Group-Q1-2020-Earnings-Call-Apr-28-2020.pdf (reporting that over 95 of its global workforce is working remotely).

transition from working at the office to working from home.[503] Similarly, online transactions and virtual claims adjustments increased as consumers were unable (or unwilling) to conduct face-to-face meetings with agents and brokers.

Changes in consumer behavior have also increased interest in innovative insurance products. The reductions in driving that prompted widespread premium relief has also prompted additional interest in usage-based insurance.[504] One insurance executive also noted that increases in unemployment have led consumers to be more budget-conscious, incentivizing insurers to use innovation as a method to quickly reduce costs and maintain market competitiveness.[505]

Box 4: Insurers and Quantum Computing

Quantum computing is an emerging technology that uses the principles of quantum mechanics to manipulate data.[506] Quantum computing may have the potential to provide significant scientific and technological advancements for insurers by speeding certain types of calculations; improving risk modeling by allowing consideration of more variables; and enabling faster and more secure data transfer.[507] The potential ability of quantum systems to run complex calculations, however, also threatens to render obsolete existing encryption systems for data protection, and potentially poses a cyber risk for insurers.[508] The federal government is coordinating its quantum research and development efforts through the Subcommittee on Quantum Information Science within the National Science and Technology Council.[509] FIO will monitor developments in quantum computing and its potential effects on the insurance industry.

[503] *See, e.g.*, Kevin Pilla, "COVID19 Highlights Value of InsurTech Platform Insurers Say; Profit Still Elusive," *AM Best*, May 5, 2020, https://news.ambest.com/newscontent.aspx?refnum=225027.

[504] Greg Donaldson, "COVID-19 Spotlights the Benefits of Usage-Based Insurance," *PropertyCasualty360*, April 16, 2020, https://www.propertycasualty360.com/2020/04/16/covid-19-crisis-spotlights-the-benefits-usage-based-insurance. For more information on UBI, see Section II.B.1.c.

[505] Renée Kiriluk-Hill, "Nationwide Exec: Innovation Accelerating to Meet Long-Term Consumer Needs Changed by Pandemic," *AM Best*, May 28, 2020, http://news.ambest.com/newscontent.aspx?refnum=225561. For more information on insurer responses to COVID-19, including premium relief, see Section II.C.

[506] *See, e.g.*, "Quick View: Quantum Computing to Have the Biggest Tech Impact, If It Really Exists," *Fitch Solutions*, October 24, 2019, https://www.fitchsolutions.com/corporates/telecoms-media-technology/quick-view-quantum-computing-have-biggest-tech-impact-if-it-really-exists-24-10-2019.

[507] Danni Santana, "Top 5 Insurance Quantum Computing Use Cases," *Digital Insurance*, https://www.dig-in.com/list/top-5-insurance-quantum-computing-use-cases.

[508] *See, e.g.*, Charlie Wood, "Quantum Computing a Potential Cyber Risk for Re/Insurers: Fitch," *Reinsurance News*, November 12, 2019, https://www.reinsurancene.ws/quantum-computing-a-potential-cyber-risk-for-re-insurers-fitch-analysts/. *See also* Hudson Institute, *The Executive's Guide to Quantum Computing and Quantum-Secure Cybersecurity* (March 2019), https://www.hudson.org/research/14930-the-executive-s-guide-to-quantum-computing-and-quantum-secure-cybersecurity.

[509] *See* National Quantum Initiative Act, Pub. L. No. 115-368 (2018); Exec. Order No. 13,895, 84 Fed. Reg. 57309 (Oct. 22, 2019),

3. Regulatory Frameworks and Reforms

Since the issuance of FIO's 2019 Annual Report, there have been several notable regulatory changes related to innovation, some of which were prompted by the COVID-19 pandemic.

Anti-Rebating Reform. FIO's 2019 Annual Report identified the need for state law reform with respect to anti-rebating laws which prohibit giving anything of more than *de minimis* value as an inducement for purchasing an insurance policy.[510] Such reforms could significantly influence insurers' ability to provide risk-reduction products to policyholders. For example, one study found that installing a "smart leak" detector in homes resulted in a 96 percent reduction in paid water claims over a one-year period.[511]

Several states have acted on anti-rebating reform in the past year, with states at different stages of reform.[512] In June 2020, the NAIC's Innovation and Technology Task Force proposed revisions to the Model Unfair Trade Practices Act, which would permit insurers and producers to provide "value added" products or services for no additional cost where related to the provided coverage and intended to minimize risk of loss.[513] The proposed model law revisions also would permit temporary pilot programs under specified conditions and allow state regulators to implement data protection regulations.[514]

E-Delivery. FIO's 2019 Annual Report also highlighted the potential benefits of using of electronic means to communicate with policyholders throughout the insurance transaction process. The COVID-19 pandemic has demonstrated the importance of flexibility in distribution, as social distancing restrictions significantly increased the use of digital distribution of products in early 2020. In response to the pandemic, many states issued notices or bulletins to

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https://www.federalregister.gov/documents/2019/10/25/2019-23525/presidents-council-of-advisors-on-science-and-technology.

[510] FIO, *2019 Annual Report*, 90-91. *See, e.g.*, Model Unfair Trade Practices Act (NAIC 2004), https://www.naic.org/store/free/MDL-880.pdf. California and Florida, with some exceptions, removed many anti-rebating restrictions in the 1980s. *See also* Jamie Parson, *et al.*, "Time to Dust Off the Anti-Rebate Laws," *Journal of Insurance Regulation* (Vol. 36, No. 7, 2017), 4-5, https://content.naic.org/sites/default/files/inline-files/2019_Library_Anti-Rebate%20Laws%20Brief_1.pdf.

[511] Ry Crist, "Smart Water Leak Detectors Could End Up Saving You More Than You'd Think," *CNET*, May 9, 2020, https://www.cnet.com/news/smart-water-leak-detector-insurance-study-flo-by-moen-lexisnexis/.

[512] *See, e.g.*, Florida H.B. 301 (enacted June 28, 2019) (permitting insurers and agents to provide free or discounted items of value for mitigation purposes); West Virginia Offices of the Insurance Commissioner, Informational Letter No. 205 (September 2019), https://www.wvinsurance.gov/Portals/0/pdf/pol_leg/info_letters/Informational%20Letter%20No.%20205.pdf (guidance clarifying when rebating is permitted); 03 Wash. Reg. 092 (January 13, 2020) (rulemaking to increase the permitted value of mitigation-related products).

[513] Section 4(H) of NAIC Model Unfair Trade Practices Act (Draft 2020), https://content.naic.org/sites/default/files/inline-files/UTPA_Section_4%28H%29_Exposure_Draft_for_Comment_1.pdf.

[514] Section 4(H) of NAIC Model Unfair Trade Practices Act (Draft 2020). FIO discussed the use of pilot programs (i.e., regulatory sandboxes) in its 2019 Annual Report. *See* FIO, *2019 Annual Report*, 92-94.

their regulated entities indicating that e-signatures and electronic transmission would be accepted, and industry stakeholders have encouraged regulators to make these modernizations permanent.[515]

Sandboxes, Pilot Programs, and Related Developments. State insurance regulators continue to use sandboxes and other programs to promote insurance industry innovation. Since the issuance of the 2019 Annual Report, the District of Columbia, Kentucky, New York, Utah, and Vermont all have instituted or advanced their innovation programs.[516]

Big Data, AI, and Data Use. Policy discussions over the appropriate use of data in insurance also continue, with regulators and policyholders continuing to address the need for a more consistent approach to data use at the state, national, and international levels. Key developments since the issuance of FIO's 2019 Annual Report include the following:

- In June 2020, the NAIC's Artificial Intelligence Working Group unanimously voted to adopt a set of "Principles for Artificial Intelligence," which were adopted by NAIC members at the 2020 NAIC Summer National Meeting.[517]
- In June 2020, the NAIC's Casualty Actuarial and Statistical Task Force issued for public comment a draft white paper on best practices for the regulatory review of predictive analytics in June 2020.[518] The paper's intent is to "identify best practices for the review of predictive models and analytics filed by insurers with regulators to justify rates and will provide state guidance for review of rate filings based on predictive models."[519]

[515] *See, e.g.*, Vikram Sidhu, Cheryl Yakey, and Jared Wilner, "COVID-19 and the Future of Insurtech," *Business Insurance*, June 1, 2020, https://www.businessinsurance.com/article/20200601/NEWS06/912334751/COVID-19-coronavirus-pandemic-and-the-future-of-insurtech-insurance-technology-i.

[516] *See, e.g.*, D.C. Department of Insurance, Securities and Banking, "Inaugural Meeting of District of Columbia Financial Services Regulatory Sandbox and Innovation Council Set for December 18," news release, December 17, 2019, https://disb.dc.gov/release/inaugural-meeting-district-columbia-financial-services-regulatory-sandbox-and-innovation; Kentucky Department of Insurance, "Insurance Innovation Application: Electronic Submission Now Available," news release, July 31, 2019, http://insurance.ky.gov/ppc/Documents/Insurance_Innovation.pdf; NYDFS, "Superintendent Lacewell Announces the Launch of New DFS Program to Drive Innovative Financial Services and Products for New Yorkers in the COVID-19 Era," news release, June 9, 2020, https://www.dfs.ny.gov/reports_and_publications/press_releases/pr202006091; H.B. 402 (Utah 2020) (creating insurance regulatory sandbox); Vermont Department of Financial Regulation, "DFR Regulatory Sandbox is Open and Ready to Accept Innovation Waiver Applications," news release, January 30, 2020, https://dfr.vermont.gov/press-release/dfr-regulatory-sandbox-open-and-ready-accept-innovation-waiver-applications.

[517] NAIC, "NAIC Unanimously Adopts AI Guiding Principles," news release, August 20, 2020, https://content.naic.org/article/news_release_naic_unanimously_adopts_artificial_intelligence_guiding_principles.htm.

[518] NAIC Casualty Actuarial and Statistical Task Force, *Regulatory Review of Predictive Models White Paper* (draft June 12, 2020), https://content.naic.org/sites/default/files/inline-files/CASTF%20-%20Predictive%20Model%20White%20Paper%206-12-20.docx.

[519] NAIC Casualty Actuarial and Statistical Task Force, *Regulatory Review of Predictive Models White Paper*, 2.

- On June 30, 2020, Florida's governor signed a bill to restrict life insurers and long-term care insurers from using genetic information data to set premiums and determine coverage.[520]
- The NAIC's Big Data Working Group is continuing to review the current regulatory framework for the oversight of insurers' use and need of consumer data.[521]
- FACI continues to discuss big data issues, with one of their areas of focus being diversity and inclusion.[522]

RegTech. "RegTech"—that is, exploring and promoting technology innovations to improve the effectiveness and efficiency of financial regulation—continues to get increased attention from state insurance regulators.

The COVID-19 pandemic significantly influenced state insurance regulators' RegTech efforts. Many state insurance regulators transitioned staff to work from home,[523] and encouraged consumers and regulated entities to use online services.[524] Some states also permitted the temporary use of technologies such as electronic signatures or online licensing examinations.[525] It remains to be determined the extent to which these modifications will be adopted on a long-term basis.

FIO will continue monitoring and evaluating InsurTech and conduct a more in-depth analysis of key topics described above and in the 2019 Annual Report, as well as the role that technology and innovation can play in responding to the COVID-19 pandemic and future crises.

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[520] Florida H.B. 1189 - Genetic Information for Insurance Purposes (signed June 30, 2020).

[521] "Big Data," NAIC, last updated March 27, 2020, https://www.naic.org/cipr_topics/topic_big_data.htm.

[522] For more information on FACI, see Section IV.A.3.

[523] *See, e.g.*, Texas Department of Insurance, "How our IT Team Pulled Off the Work From Home Transition," May 13, 2020, https://www.tdi.texas.gov/news/2020/tdi05132020.html.

[524] *See, e.g.*, Hawaii Department of Commerce and Consumer Affairs, "DCCA Encourages Use of Online Services," news release, March 19, 2020, http://cca.hawaii.gov/blog/release-dcca-encourages-use-of-online-services/.

[525] *See, e.g.*, Memorandum from John F. King, Georgia Insurance and Safety Fire Commissioner to All Licensed Insurance Companies in the State of Georgia (March 20, 2020), https://www.oci.ga.gov/ExternalResources/Announcements/Directive-3202020-1057.pdf. For more information on state insurance regulatory responses to COVID-19, see Section II.D.

VII. INSURANCE INDUSTRY FINANCIAL OVERVIEW

A. Domestic Insurance Marketplace Overview

As discussed above, the financial analysis in this section, consistent with prior FIO annual reports, focuses on the insurance industry's financial performance and condition through December 31, 2019, the latest date for which detailed, comprehensive, and definitive data is available.[526] The preceding sections, in contrast, provide preliminary financial analyses and coverage updates through approximately the first-half of 2020.

Over the past decade and through year-end 2019, the insurance industry remained resilient, generating growth and maintaining profitability. The industry's financial soundness during this period was supported by one of the longest economic expansions in U.S. history, which ended with the onset of the COVID-19 pandemic.[527] Strong economic conditions during this period contributed to enhanced balance sheets, providing insurers with increased financial flexibility to adapt to capital challenges and ensure solvency. The last decade was marked by positive earnings, steady leverage ratios, stable liquidity profiles, and healthy capital positions.

There were some signs in 2019 of potential weakening, however, in the financial health of both the L&H and P&C sectors. As a share of net premiums collected, benefit payments were close to or in excess of 100 percent for the L&H sector in the last three years, while surrenders averaged above 52 percent. For the P&C sector, growth rates in net premiums written and operating income dropped sharply in 2019. Finally, both sectors continued to reach for yield in a low interest rate environment, as investment portfolios continued to shift from traditional bond holdings to alternative investments, potentially heightening the industry's vulnerability to market volatility and economic shocks. A solid financial foundation, however, was built over the course of the last decade, which helped the insurance industry to generally withstand market disruption and significant loss events. Since the 2008 financial crisis, L&H insurers have pulled back or de-risked market sensitive product offerings and the P&C sector has benefited from a build-up of excess capital after years of favorable reserve development.

Since the 2009 low point for domestic insurance premiums (following the financial crisis), industry premiums grew in every year except in 2013. In 2019, total direct premiums written for the combined L&H and P&C sectors were $1.47 trillion, growing by more than four percent over 2018 levels and nearly 34 percent from 2010, as shown in Figure 5.

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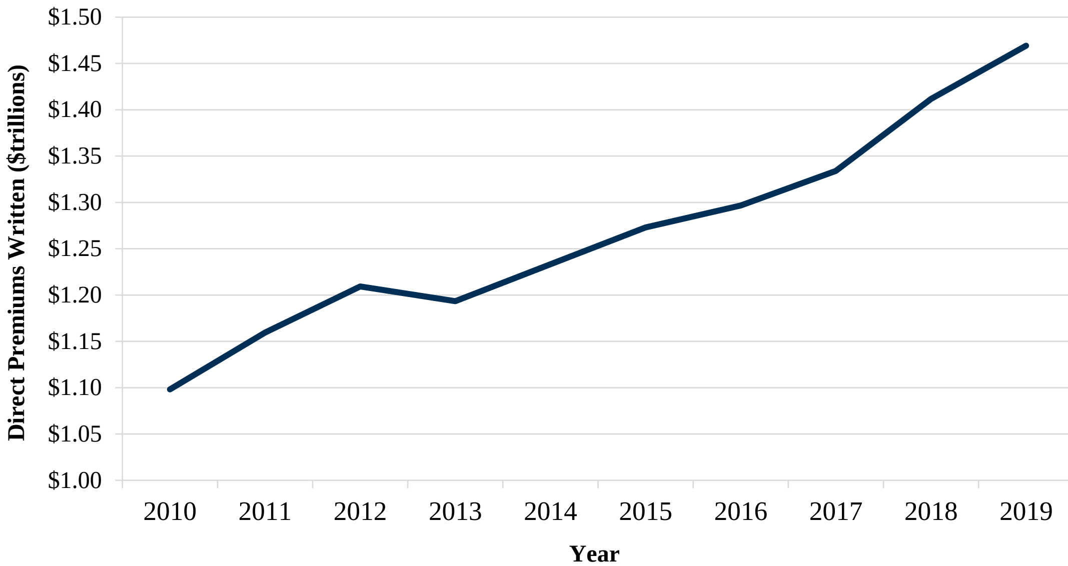
[526] Except as otherwise indicated, data cited in this section of the Report are as of December 31, 2019, as derived from S&P Global on May 12, 2020. These data are on a statutory accounting basis. S&P Global continuously updates its data for corrections in filings; 2019 data in this Report are based on updated data available as of May 12, 2020, and thus may be different in some respects from corresponding figures reported in FIO's *2019 Annual Report*. Due to certain conventions used by S&P Global for aggregation of industry data, some columns in the accompanying tables may not sum to the totals that have been separately accumulated by S&P Global from individual legal entity data. Some figures may not add to 100 percent due to rounding.

[527] The National Bureau of Economic Research calculated the recent expansion as lasting from June 2009 through February 2020. National Bureau of Economic Research, *Determination of the February 2020 Peak in US Economic Activity* (June 8, 2020), https://www.nber.org/cycles/june2020.html.

Figure 5: Total Direct Premiums Written for L&H and P&C Sectors ($ trillions)



Source: S&P Global

1. Financial Performance and Condition

This section focuses on the financial performance and condition of the 688 L&H insurers, the 2,626 P&C insurers, and the 1,223 health insurers licensed in the United States during 2019.[528] Insurers in the L&H sector offer products in two segments: (1) life insurance and annuities, which generally protect against the risk of financial loss associated with an individual's death and provide income streams for retirement, respectively; and (2) A&H products, which cover expenses for health and long-term care or provide income in the event of disability. Insurers in the P&C sector offer products that generally protect against the risk of financial loss associated with damage to property or exposure to liability for individuals and families (personal lines) or for businesses (commercial lines).

Net premiums written for the L&H sector were approximately $681 billion in 2019, or 33 percent of net premiums written for the combined L&H, P&C, and Health sectors.[529] For the P&C sector, net premiums written were approximately $634 billion, or 31 percent of net premiums written for the combined L&H, P&C, and Health sectors. The Health sector reported $747 billion of net premiums written for 2019, or 36 percent of the combined total for the three sectors.

[528] S&P Global. The L&H and P&C sectors are the primary insurance sectors in the United States. The Health sector includes companies licensed solely as health insurers or as Health Maintenance Organizations, but is not the focus of the remainder of this Report.

[529] Net premiums written means direct premiums written less net ceded reinsurance premiums.

At the end of 2019, the L&H sector held approximately $7.4 trillion of total assets (including $2.8 trillion held in separate accounts), the P&C sector held approximately $2.2 trillion, and the Health sector held approximately $451 billion. Capital and surplus in the L&H sector stood at approximately $423 billion as of December 31, 2019; the P&C sector reported policyholder surplus of approximately $865 billion; and the Health sector reported approximately $220 billion.

Figure 6 and Figure 7 present snapshots of the L&H sector market, showing the 10 largest L&H insurance groups measured by direct premiums written, and market share for life insurance (including annuities and other deposit-type contracts) and for A&H lines of business, respectively. Premiums shown in Figure 6 and Figure 7 aggregate all L&H sector products and all geographies of the United States.

Figure 6: L&H Insurance Groups by 2019 U.S. Life Insurance Lines Direct Premiums Written

2018 Rank	**2019 Rank**	**Insurance Group**	2018 Direct Premiums Written ($000)	Share of Total (%)	**2019 Direct Premiums Written ($000)**	**Share of Total (%)**
1	1	MetLife Inc.	$ 96,451,607	14.1	**$ 95,079,321**	13.0
2	2	Prudential Financial Inc.	53,148,550	7.8	**56,206,131**	7.7
8	3	AXA Equitable Holdings Co.	22,579,431	3.3	**44,721,302**	6.1
3	4	New York Life Insurance Co.	35,452,211	5.2	**33,425,321**	4.6
4	5	Massachusetts Mutual Life Insurance Co.	27,154,611	4.0	**30,375,127**	4.2
6	6	Lincoln Financial Corp.	25,804,565	3.8	**28,471,688**	3.9
7	7	Principal Financial Group Inc.	25,322,774	3.7	**27,038,400**	3.7
5	8	American International Group, Inc.	26,446,934	3.9	**25,684,294**	3.5
10	9	Jackson Holdings LLC	21,511,557	3.2	**23,056,675**	3.2
9	10	Transamerica Corp.	22,352,418	3.3	**22,360,111**	3.1
		Combined Top 10	$ 356,224,658	52.2	**$ 386,418,370**	52.8
		Combined Top 25	$ 540,697,303	79.2	**$ 585,268,702**	80.0
		Combined Top 100	$ 670,840,403	98.3	**$ 724,135,272**	98.9
		Total U.S. Life Insurance Lines	$ 682,291,102		**$ 732,109,644**	

Source: S&P Global (includes Life Insurance (No Annuity), Annuity Considerations, Deposit-type Contracts (State Page), Other Considerations (State Page))

The data presented in Figure 6 and Figure 7 for life and annuity business, and in the comparable figures that follow for other lines of business, are aggregated at a group level from filings made with state insurance regulators by individual legal entity insurers. For example, premiums shown for MetLife Inc. include premiums written by all of its insurance subsidiaries in the United States, but exclude business written by affiliated entities in other jurisdictions. Similarly, Jackson Holdings is foreign-owned, and the results shown include only U.S. operations.

The aggregate market shares of the top 10, 25, and 100 companies in 2019 were little changed compared to 2018.

Figure 7: L&H Insurance Groups by 2019 U.S. A&H Lines Direct Premiums Written

2018 Rank	**2019 Rank**	**Insurance Group**	2018 Direct Premiums Written ($000)	Share of Total (%)	**2019 Direct Premiums Written ($000)**	**Share of Total (%)**
1	1	UnitedHealth Group Inc.	$ 57,090,551	29.2	**$ 59,181,570**	29.1
2	2	CVS Health Corp.	32,621,384	16.7	**35,408,470**	17.4
3	3	Cigna Corp.	20,526,988	10.5	**22,479,764**	11.1
4	4	MetLife, Inc.	7,937,343	4.1	**8,352,302**	4.1
6	5	Unum Group	6,178,416	3.2	**6,425,091**	3.2
5	6	Aflac Inc.	7,905,196	4.1	**5,440,830**	2.7
7	7	Mutual of Omaha Insurance Co.	4,289,460	2.2	**4,648,741**	2.3
8	8	Guardian Life Insurance Co. of America	3,938,319	2.0	**4,044,781**	2.0
12	9	Sun Life Financial Inc.	2,193,316	1.1	**2,767,187**	1.4
9	10	Lincoln National Corp.	2,699,929	1.4	**2,754,927**	1.4
		Combined Top 10	$ 145,821,340	74.7	**$ 151,503,663**	74.5
		Combined Top 25	$ 172,217,718	88.2	**$ 179,469,957**	88.3
		Combined Top 100	$ 193,510,242	99.1	**$ 202,027,354**	99.4
		Total U.S. A&H Lines	$ 195,264,885		**$ 203,325,775**	

Source: S&P Global

Figure 7 shows A&H premiums written by insurers authorized to offer both life and health insurance; it excludes A&H premiums written by insurers authorized to offer only health insurance. Thus, for example, the data presented in Figure 7 for UnitedHealth Group do not reflect that insurer's total health insurance premiums on a consolidated basis, but only premiums written by its subsidiaries licensed to offer both life and health insurance. UnitedHealth Group also writes health insurance business through subsidiaries that offer only health insurance, and those premiums are reflected in Figure 9.

As noted above, P&C insurers underwrite a variety of products, generally categorized as either personal lines or commercial lines. Figure 8 reports market share information on a combined P&C sector basis; details for commercial lines and personal lines market shares are provided in the discussion below.

Figure 8: P&C Insurance Groups by 2019 U.S. Combined Lines Direct Premiums Written

2018 Rank	**2019 Rank**	**Insurance Group**	2018 Direct Premiums Written ($000)	Share of Total (%)	**2019 Direct Premiums Written ($000)**	**Share of Total (%)**
1	1	State Farm Mutual Automobile Insurance Inc.	$ 65,861,617	9.7	**$ 65,615,190**	9.3
2	2	Berkshire Hathaway Inc.	43,443,910	6.4	**46,106,971**	6.5
4	3	Progressive Corp.	33,754,923	5.0	**39,222,879**	5.5
3	4	Liberty Mutual Holding Co. Inc.	34,605,081	5.1	**35,600,051**	5.0
5	5	The Allstate Corp.	33,251,176	4.9	**35,025,903**	4.9
6	6	Travelers Companies, Inc.	26,244,172	3.9	**28,016,966**	4.0
7	7	Chubb Ltd.	22,125,338	3.3	**23,531,504**	3.3
8	8	United Services Automobile Association	21,984,970	3.2	**23,483,080**	3.3
9	9	Farmers Insurance Group of Companies	20,309,989	3.0	**20,643,559**	2.9
10	10	Nationwide Mutual Group	18,416,861	2.7	**18,442,145**	2.6
		Combined Top 10	$ 319,998,037	47.2	**$ 335,688,248**	47.4
		Combined Top 25	$ 446,375,931	65.8	**$ 467,866,511**	66.0
		Combined Top 100	$ 591,592,271	87.2	**$ 621,490,286**	87.7
		Total U.S. P&C Sector	$ 678,281,318		**$ 708,570,030**	

Source: S&P Global (includes all lines of business)

For both commercial lines and personal lines, there was little change in the aggregate market shares of the top 10, 25, and 100 companies in 2019.

The health market tightened somewhat at the top, with the aggregate market share of the top 10 writers increasing nearly two percentage points (to 58 percent) compared to 2018.

Figure 9: Health Insurance Groups by 2019 U.S. Health Lines Direct Premiums Written

2018 Rank	**2019 Rank**	**Insurance Group**	2018 Direct Premiums Written ($000)	Share of Total (%)	**2019 Direct Premiums Written ($000)**	**Share of Total (%)**
1	1	UnitedHealth Group Inc.	$ 100,589,323	14.0	**$ 107,481,328**	14.1
2	2	Anthem Inc.	67,215,601	9.4	**73,276,652**	9.6
3	3	Humana Inc.	55,848,935	7.8	**63,946,708**	8.4
4	4	Centene Corp.	52,256,719	7.3	**63,556,714**	8.3
5	5	HealthCare Services Corp.	37,655,147	5.2	**39,629,317**	5.2
6	6	CVS Health Corp.	23,465,746	3.3	**26,079,700**	3.4
7	7	Kaiser Permanente Health Plan, Inc.	19,279,172	2.7	**20,035,052**	2.6
8	8	GuideWell Mutual Holding Corp.	17,954,524	2.5	**18,661,884**	2.5
10	9	Independence Health Group Inc.	16,165,007	2.2	**17,859,403**	2.3
11	10	Blue Cross Blue Shield of Michigan Mutual Insurance Co.	14,165,208	2.0	**14,465,141**	1.9
		Combined Top 10	$ 406,646,314	56.6	**$ 444,991,901**	58.4
		Combined Top 25	$ 538,013,562	74.9	**$ 577,014,166**	75.8
		Combined Top 100	$ 693,970,345	96.6	**$ 737,282,114**	96.8
		Total U.S. Health Insurance Lines	$ 718,513,533		**$ 761,457,340**	

Source: S&P Global

Finally, as noted above, both the P&C and L&H sectors continue to search for yield in their investment portfolios, potentially increasing their vulnerability to market volatility and economic shocks. For example, volatility in energy prices can have an immediate impact on insurers' investment portfolios. As of year-end 2019, U.S. insurance companies (L&H, P&C, and title) held $102.5 billion in bonds and $10 billion in stocks issued by oil and gas companies. Together this amounted to 2.4 percent of the combined bond and stock portfolio of all U.S. insurance companies.[530]

2. Life and Health Sector

a) Performance

This section presents additional analysis of the financial performance of the L&H sector in 2019, and then assesses the L&H sector's overall financial condition as of December 31, 2019.

i. Net Premiums Written

Net premiums written is the sum of direct premiums written and reinsurance assumed, less reinsurance ceded. Direct premiums written is a principal measure of the size and growth of the insurance industry. Over 2019, direct written premiums of $761 billion for the L&H sector grew by almost four percent, somewhat less than the strong growth seen in 2018, but nonetheless, one of the highest annual growth marks over the past 10 years. After reinsurance transactions, L&H sector net premiums written were $681 billion in 2019, marking a very strong 13 percent increase from the $604 billion reported in 2018.

Annuity premiums and deposits increased by nearly 27 percent, while life insurance and A&H premiums were essentially flat compared to 2018. The recapture of a number of large retrocession reinsurance transactions that were executed in 2018 by American General Life Insurance Company, Hannover Life Reassurance Company, and United States Life Insurance Company in the City of New York drove the increase in annuity premiums and deposits.[531] For 2019, annuity premiums and deposits constituted 50 percent of total net premiums written, as shown in Figure 10. This significant share of the life insurance industry's premiums reflects strong growth trends in pension risk transfers (group annuities) and in fixed indexed annuities (individual annuities).

Net premiums written were 73 percent of total L&H sector revenues in 2019, marking a return to a level near the 10-year historical average of 71 percent, following a drop in 2018 to 67 percent. Sales of traditional life insurance products accounted for 21 percent of 2019 L&H sector net premiums written, while the remaining 28 percent was comprised almost entirely of A&H sector premiums.

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[530] Jennifer Johnson & Michele Wong, "Oil Futures Plunge Below Zero as Capital Markets Volatility Continues," *The Hot Spot*, April 21, 2020, https://www.naic.org/capital_markets_archive/hotspot_200421.pdf.

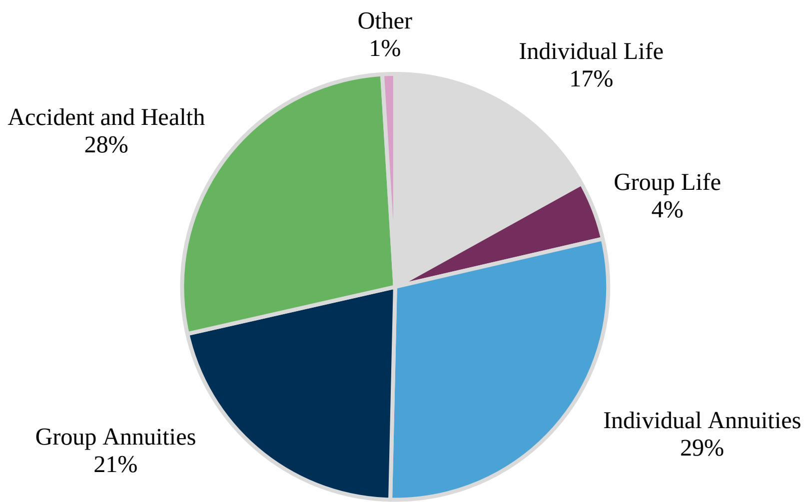
[531] AM Best, *Best's Special Report: First Look: 12-Month 2019 Life/Annuity Financial Results* (March 12, 2020), http://www3.ambest.com/industryresearch/DisplayBinary.aspx?TY=P&record_code=295354&URatingId=2562038.

Figure 10: L&H Sector Net Premiums, Considerations, and Deposits ($ thousands)

	2015	2016	2017	2018	2019
Life Insurance Premiums	$ 151,398,875	$ 115,034,222	$ 137,148,663	$ 145,090,526	$ 145,090,210
Annuity Premiums & Deposits	324,041,791	318,539,213	287,222,231	269,686,758	341,885,736
A&H Premiums	158,826,446	162,844,867	169,320,345	184,223,762	187,161,183
Credit Life & Credit A&H Premiums	1,379,933	1,261,511	1,261,969	1,314,045	NA
Other Premiums & Considerations	2,497,634	2,192,329	2,097,850	3,987,512	NA
Total	**$ 638,190,255**	**$ 599,872,141**	**$ 597,051,057**	**$ 604,302,603**	**$ 680,812,726**

Source: S&P Global

Figure 11: 2019 Composition of Net Premiums and Annuity Considerations for the L&H Sector



Source: S&P Global

ii. Policyholder Contract Benefits, Surrenders, and Other Expenses

Policyholder contract benefits are claims or obligations of L&H insurers under life insurance, annuity, and other contracts and policies. Contract surrenders occur when a policyholder or contract holder elects to cancel a policy or contract before the end of its contractual term and to receive its accumulated cash value (if any). Contract benefit payments and contract surrenders comprise the majority of total expenses for L&H insurers. Non-benefit-related expenses include general administrative and overhead expenses, expenses incurred in acquiring business (particularly producer commissions), and expenses related to payments made under contractual provisions of polices, including loss verification and adjustment expenses. Figure 12 shows aggregate L&H sector benefit payments, surrenders, reserve increases, and all other expenses for recent years.

Figure 12: L&H Sector Expenses ($ thousands)

	2015	2016	2017	2018	2019
Total Benefits Payments	$ 263,909,819	$ 271,355,287	$ 281,360,939	$ 290,368,216	$ 302,991,515
Total Surrenders	272,998,652	265,095,216	308,928,842	350,278,913	339,607,523
Total Increase in Reserves	80,546,645	133,139,152	106,352,393	143,358,245	120,613,773
Total Transfers to Separate Accounts	36,922,715	(38,046,582)	(65,770,433)	(89,648,289)	(71,995,355)
Commissions	55,501,271	64,569,458	58,001,783	58,358,066	61,213,028
General & Administrative Expenses	60,074,070	62,361,327	65,850,564	65,948,083	67,875,444
Insurance Taxes, Licenses and Fees	10,481,358	10,828,050	8,814,167	10,777,995	9,325,406
Other Expenses	(4,914,286)	(2,709,027)	(4,129,166)	11,349,432	14,424,529
Total	**$ 775,520,244**	**$ 766,592,880**	**$ 759,409,089**	**$ 840,790,661**	**$ 844,055,863**

Source: S&P Global

Total L&H sector expenses rose by less than one percent in 2019. Total contract surrenders decreased three percent in 2019, reserve increases dropped by 16 percent, while total benefits payments rose four percent. A 20 percent decrease in the net amount transferred from separate accounts was the only notable unfavorable change in 2019 expenses, and largely offset the decrease in reserve additions.

iii. Investment Income

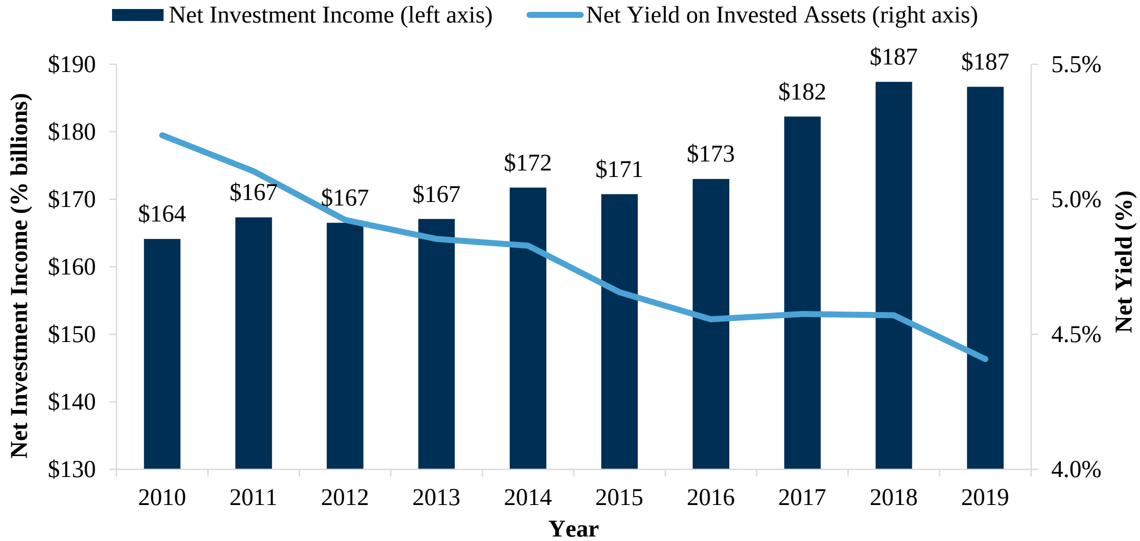
Net investment income represented about 20 percent of aggregate L&H sector revenues in 2019, continuing the modestly declining trend that began in 2018. Net investment income was essentially flat versus 2018, decreasing by less than one percent for the year. Figure 13 and Figure 14 show L&H sector net investment income from invested assets (excluding net realized gains and losses on the disposition of assets) and the net investment yield for recent years.

Figure 13: L&H Sector Annual Net Investment Income ($ billions) and Net Yield on Invested Assets (%)

	2015	2016	2017	2018	2019
Net Investment Income	$ 170,760,967	$ 173,025,713	$ 182,257,219	$ 187,407,117	$ 186,665,355
Total Cash & Investments	3,703,872,525	3,891,873,165	4,074,921,665	4,125,282,222	4,343,504,080
Net Yield on Invested Assets	**4.66%**	**4.56%**	**4.58%**	**4.57%**	**4.41%**

Source: S&P Global

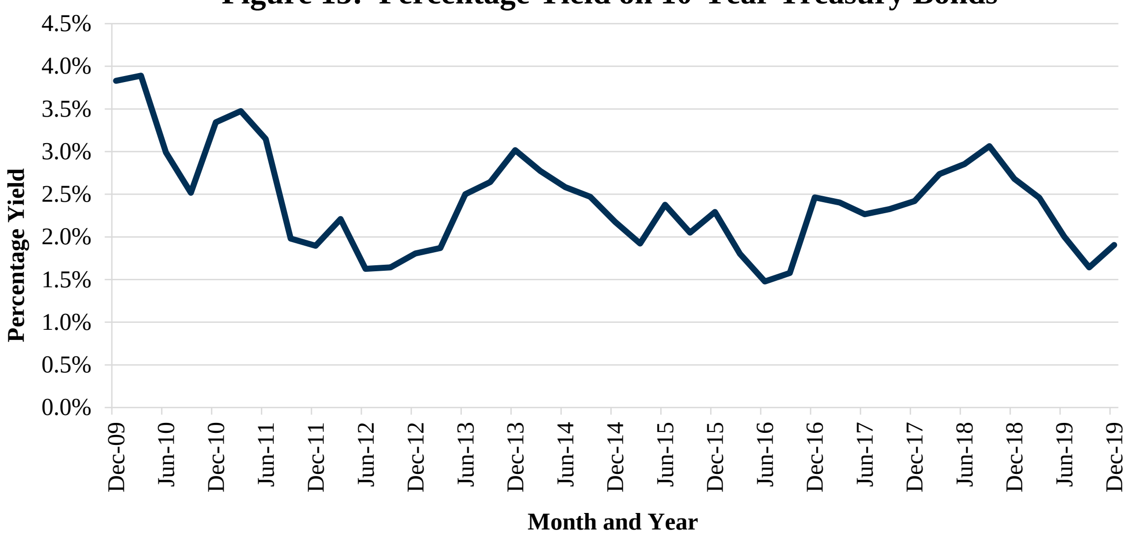
Figure 14: L&H Sector Annual Net Investment Income ($ thousands) and Net Yield on Invested Assets (%)



Source: S&P Global

Longer-term interest rates steadily declined over the first nine months of 2019, followed by a moderate recovery in the fourth quarter (see Figure 15); the net yield on invested assets fell to 4.41 percent from the 2018 result of 4.57 percent. The decline in net yield was primarily the result of a five percent increase in total cash and invested assets, coupled with flat net investment income. The general interest rate environment remained near historically low levels at the end of the year, and continued to present risks to the L&H sector.[532]

Figure 15: Percentage Yield on 10-Year Treasury Bonds



Source: S&P Global

[532] *See also* FIO, *2018 Annual Report*, 12.

In 2019, the L&H sector net realized capital losses increased to $6.9 billion from $4.7 billion in 2018, or nearly 45 percent. This followed a 45 percent decrease in realized capital losses experienced in 2018. The deterioration in 2019 appeared to be due to higher realized losses on affiliated investments. Losses on derivative securities (almost exclusively used for hedging transactions) were slightly lower compared to 2019.

iv. Net Income and Return on Equity

Figure 16 presents a summary income statement for the L&H sector. Total revenues in the L&H sector were $923 billion in 2019, an increase of two percent from the $905 billion reported in 2018. The significant ($62 billion) change in the reinsurance allowance, i.e., reserve adjustments on reinsurance ceded, from a $32 billion benefit in 2018 to a $30 billion expense in 2019, largely offset the 13 percent increase in net premiums written, and coupled with the flat net investment income, explains the slower gain in total revenues. Total expenses were essentially flat at $844 billion, leading to a 33 percent increase in pre-tax operating income. Net income increased by a slower 18 percent to $45 billion in 2019 due to the increase in net realized capital losses and a 45 percent increase in federal income taxes.

Figure 16: L&H Sector Net Income ($ thousands)

	2015	**2016**	**2017**	**2018**	**2019**
Premiums, Consideration & Deposits	$ 638,190,255	$ 599,872,141	$ 597,051,057	$ 604,302,603	$ 680,812,726
Net Investment Income	170,760,967	173,025,713	182,257,219	187,407,117	186,665,355
Reinsurance Allowance	(86,443,933)	(16,975,046)	(25,108,912)	32,044,503	(29,719,855)
Separate Accounts Revenue	35,197,929	34,652,744	36,551,982	37,271,230	36,754,163
Other Income	90,479,682	61,330,223	49,163,993	44,038,913	48,753,809
Total Revenue	**848,184,900**	**851,905,776**	**839,915,339**	**905,064,366**	**923,266,198**
Total Expenses	775,520,244	766,592,880	759,409,089	840,790,661	844,055,863
Policyholder Dividends	18,271,884	18,230,320	17,498,496	18,192,333	18,111,045
Net Gain from Operations before Tax	54,396,094	67,061,448	63,004,352	46,079,338	61,099,291
Federal Income Tax	10,566,280	16,282,427	12,360,768	3,423,453	9,455,725
Net Income before Capital Gains	43,832,635	50,782,390	50,645,915	42,657,393	51,643,566
Net Realized Capital Gains (Losses)	(3,543,569)	(11,384,798)	(8,554,343)	(4,742,726)	(6,860,568)
Net Income	**$ 40,285,063**	**$ 39,397,552**	**$ 42,094,584**	**$ 37,917,551**	**$ 44,782,998**

Source: S&P Global

Figure 17 shows key operating ratios for the L&H sector. The L&H sector's 2019 pre-tax operating margin increased to 6.6 percent from 5.1 percent in 2018. Similarly, the increase in operating income led to an increase in the sector's pre-tax operating return on average equity to 14.8 percent from the 11.6 percent recorded in 2018, and the return on average equity rose to 10.9 percent from 9.5 percent.

Figure 17: L&H Sector Operating Ratios

	2015	2016	2017	2018	2019
Pre-Tax Operating Margin	6.41%	7.87%	7.50%	5.09%	6.62%
Return on Average Equity	11.17%	10.54%	10.85%	9.53%	10.87%
Pre-Tax Operating Return On Average Equity	15.08%	17.93%	16.24%	11.58%	14.83%
Return on Average Assets	0.64%	0.61%	0.62%	0.55%	0.63%

Source: S&P Global

b) Condition

This section presents information on the 2019 financial condition of the L&H sector, noting certain financial indicators and trends in recent years and over the past decade, which provide some insight into the sector's financial safety and soundness.

i. Capital and Surplus

With year-over-year growth in its capital and surplus, the L&H sector has maintained a stable capital foundation for its operations over the past decade, as reflected in Figure 18 (illustrating the last five years). Underlying that healthy capital position has been steady annual growth in total assets, including separate accounts.[533] Total assets, made up primarily of cash and invested assets, have contributed to an average annual growth rate of 3.8 percent in the sector's capital base. Moreover, when removing capital contributions in the form of surplus notes, growth in capital and surplus has averaged slightly more, at four percent annually, reflecting the ability of L&H insurers to generate capital from organic sources—which provides further evidence of the sector's financial soundness.[534]

Figure 18: L&H Capital and Surplus Position ($ thousands)

	2015	2016	2017	2018	2019
Capital & Surplus	$ 367,249,564	$ 380,686,099	$ 395,024,290	$ 400,998,417	$ 422,898,928
Year-Over-Year Growth	3.8%	3.7%	3.8%	1.5%	5.5%
General Account Assets	3,912,020,651	4,117,531,087	4,301,459,820	4,359,735,817	4,584,453,664
Year-Over-Year Growth	2.0%	5.3%	4.5%	1.4%	5.2%
Capital & Surplus to General Account Assets	9.4%	9.2%	9.2%	9.2%	9.2%

Source: S&P Global

In reviewing the most recent five years in Figure 18, the L&H sector reported a significant boost in capital and surplus in 2019, after experiencing a slowdown in the previous year. The 5.5 percent year-over-year growth in capital and surplus to $422.9 billion in 2019 was the second highest annual growth rate in the last decade, surpassed only by year-over-year growth of 6.6 percent in 2014.

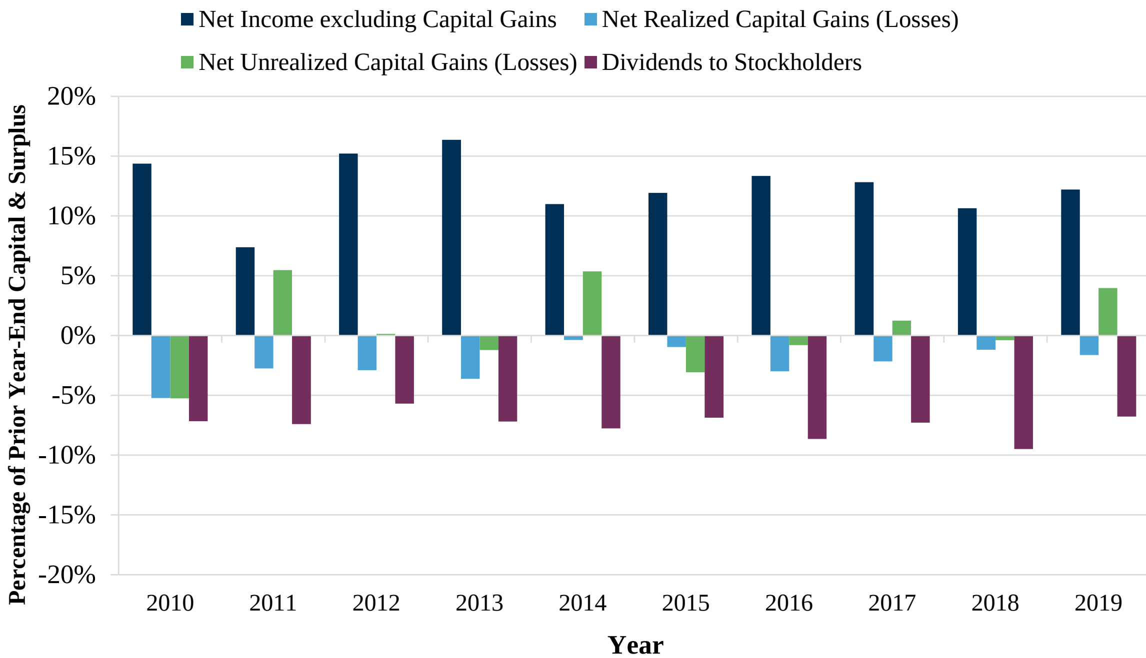
[533] In 2018, total assets declined by 2.7 percent from the prior year due to a drop in separate account assets.

[534] Growth in surplus notes averaged 2.6 percent annually over the past decade, pulling down overall growth in capital and surplus to 3.8 percent on average each year.

Averaging at 3.6 percent since 2010, annual growth in total general account assets has remained positive over the last 10 years. The ratio of capital and surplus to general account assets averaged 9.2 percent annually in the last five years and has remained relatively stable for the entire decade. The steady levels of available capital have further aided the L&H sector in meeting its obligations as they arise.

The L&H sector's capital position can largely be attributed to sustained positive earnings, before factoring in capital gains/losses, over the last decade. Net income before realized capital gains/losses contributed 13 percent to the previous year's capital and surplus on average since 2010. Figure 19 presents the primary drivers of capital and surplus for the L&H sector.

Figure 19: Primary Drivers of Capital and Surplus for the L&H Sector



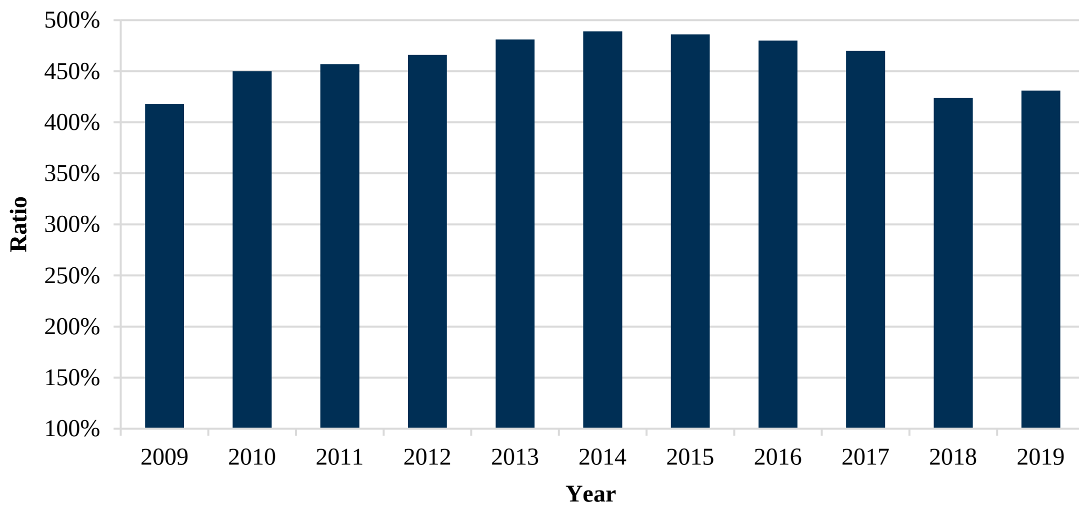
Source: S&P Global

Growth in the L&H sector's capital base can be observed more clearly by eliminating the effect of capital contributions in the form of surplus notes. Organic growth in capital and surplus has mainly been the result of consistently strong underwriting results that have enhanced net income. At $61.1 billion, the L&H sector's pre-tax operating income was nearly a third higher in 2019 compared to $46.1 billion in 2018.[535] Partially offsetting the growth in capital and surplus has been stockholder dividends. In 2019, stockholder dividends were $28.6 billion, dropping from a decade high of $38 billion in 2018. Overall, stockholder dividends have comprised 7.7 percent of prior year-end capital and surplus on average annually since 2010. Without stockholder dividends, growth in capital and surplus (including infusions from surplus notes) would have averaged 4.2 percent for the decade.

[535] Pre-tax operating income is before net realized capital gains/losses.

Figure 20 shows that the average risk-based capital ratio for the L&H sector declined significantly in 2018 compared to the previous years in the last decade before improving in 2019 when, on average, statutory capital and surplus was 4.31 times the level of required capital. The considerable reduction in the sector's average risk-based capital ratio in 2018 was largely due to the passage of the Tax Cuts and Jobs Act in December 2017, which reduced the corporate tax rate from 35 percent to 21 percent for life insurers and other corporate entities and affected the RBC factors used in the life RBC calculation.[536] The Tax Cuts and Jobs Act also included several provisions that were specifically directed at life insurance companies to further offset the tax rate decrease, such as changes in tax reserves, deferred acquisition cost tax, and the dividends received deduction.[537]

Figure 20: Average Risk-Based Capital Ratio for the L&H Sector[538]



Source: The American Council of Life Insurers Fact Book and S&P Global

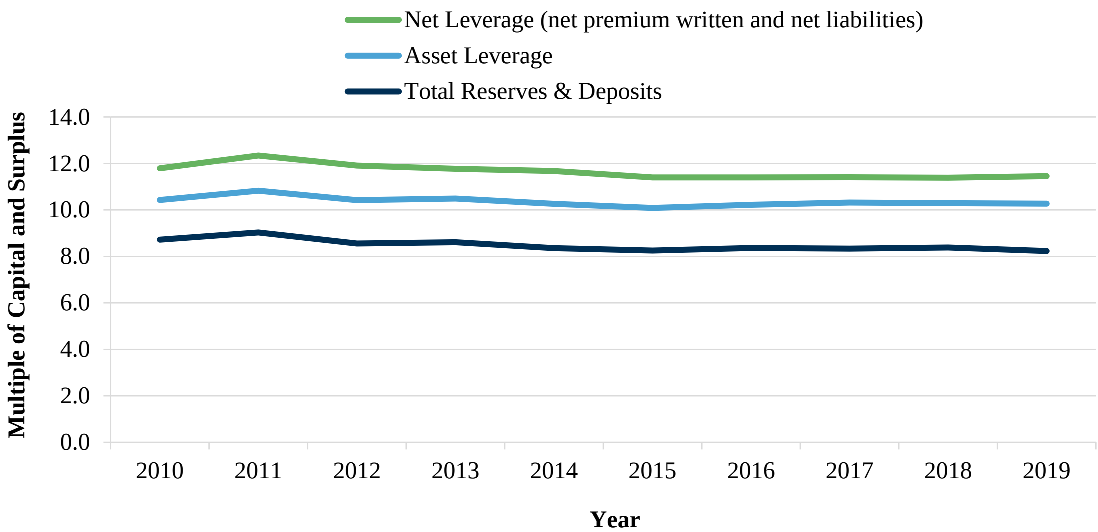
Ever since the sector's leverage peaked in 2008 with the onset of the financial crisis, L&H insurers have seen their balance sheet leverage ratios remain relatively steady. The greater financial flexibility afforded by expected and persistent leverage ratios has enabled insurers to better meet two significant goals in fulfilling policyholder obligations: (1) returning a profit by investing the premiums received from underwriting activities; and (2) limiting the risk exposure created by the policies underwritten. Insurers may also cede premiums to reinsurance companies in order to move some of the risks off their own balance sheets. As Figure 21 illustrates, general account leverage for the L&H sector has been relatively stable for the last 10 years.

[536] Individual Tax Reform and Alternative Minimum Tax, Pub. L. No. 115-97, 131 Stat. 2054 (2017). *See also* FIO, *2018 Annual Report*, 104-107.

[537] NAIC, Interpretation of 2018 Life Risk-Based Capital Results in Light of the 2017 Tax Cuts and Jobs Act, February 22, 2019, https://naic.org/documents/cmte_e_lrbc_190306_tax_guidance.pdf.

[538] Average RBC in 2019 was calculated with S&P Global data.

Figure 21: L&H Sector Leverage Ratios



Source: S&P Global

While the L&H sector experienced an uptick to 11.46 in its net leverage ratio at year-end 2019 compared to 11.39 in 2018, the ratio fell within the range observed for the 10-year period.[539] After four years of unwavering performance in the net leverage ratio, the L&H sector raised its risk exposure to underwriting activities in 2019. Net premiums, annuities, and considerations (collectively referred to as net premiums in the net leverage ratio) of $680.8 billion in 2019 rose by nearly 13 percent, while general account liabilities of $4.2 trillion rose by 5.1 percent from 2018. Both factors put upward pressure on the leverage metric, offsetting year-over-year growth in capital and surplus. Sales of life insurance and annuity products increased during 2019 compared to the previous year, in large part due to strong economic conditions. Increased life insurance sales were driven by universal life products, while annuities were led by indexed-linked products.[540] Also, sales of protection-oriented life insurance products were boosted ahead of the mandatory adoption of a new mortality table used to calculate reserves.[541]

As the net retention rate grew to 74.2 percent in 2019, cessions to reinsurers declined. Cessions accounted for 25.8 percent of gross premiums at year-end 2019, dropping from 31.1 percent at year-end 2018, and made up 23 percent of gross premiums on average for the decade. With the

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[539] Net leverage ratio is an indicator of the sector's exposure to pricing and estimation errors, determined by calculating total liabilities and net premiums, annuities, and considerations as a multiple of capital and surplus.

[540] LIMRA, *Premium Growth Rates Summary 4Q 2019*, https://www.limra.com/globalassets/limra/newsroom/fact-tank/sales-data/2019/q4/2019_4q_premiumgrowthrateschart-sales-results.pdf.

[541] "LIMRA, U.S. Individual Life Insurance Sales Increased 15% in Fourth-Quarter 2019," *Advisor Magazine*, September 23, 2020, https://www.lifehealth.com/limra-u-s-individual-life-insurance-sales-increase-15-fourth-quarter-2019/. The impact of the COVID-19 pandemic on the macroeconomic environment, as well as the continuing low interest rate environment, could affect the future sales of these products. For more information on the impact of the pandemic on the L&H sector, see Section II.A.

average annual growth rate of cessions sharply exceeding that of net premiums since 2010, it is not surprising that surplus relief has been on the rise. Surplus relief has slowly climbed to 5.49 percent at year-end 2019 from 3.72 percent at year-end 2014.[542]

Growing annually at three percent on average since 2010, total policy reserves and deposit-type contract reserves were $3.5 trillion at year-end 2019, up by 3.5 percent from $3.4 trillion at year-end 2018. The multiple of policy reserves and deposits to capital and surplus has held relatively firm over the last six years, ranging from a decade low of 8.23 at year-end 2019 to a high of 8.39 at year-end 2018. Prior years of the decade showed the ratio reaching a peak of 9.03 at year-end 2011. Overall and as demonstrated in Figure 21, the ratio has improved from the beginning of the decade and has leveled off, suggesting that the financial resources set aside by the sector have been in line with expected claims.

The asset leverage ratio aims at measuring the potential impact on the balance sheet arising from the volatility and credit quality of the sector's investment portfolio, reinsurance recoverables, and agents' balances, and is calculated as the sum of cash and invested assets plus reinsurance recoverables and agents' balances to capital and surplus. In the past decade, the L&H sector's asset leverage ratio has ranged between a low of 10.26 at year-end 2015 and a high of 10.99 at year-end 2011. At year-end 2019, the multiple was 10.48, not materially changed from 10.51 at year-end 2018 and 10.53 at year-end 2017. The steadiness of the asset leverage multiple over the last 10 years indicates that no substantial deviations have occurred in the sector's exposure to investment, interest rate, and credit risks.

The relatively stable pattern of these leverage ratios over the past decade has aided the L&H sector in alleviating capital strain and enhancing its financial flexibility.

ii. Asset Base

Bolstering the sector's stable capital base have been positive general account asset growth and investment allocations consistent with policyholder obligations. General account assets rose to $4.6 trillion in 2019 from $4.4 trillion in 2018, averaging an annual growth rate of 3.6 percent over the last decade. After a significant decline in 2018, separate account assets recovered in 2019, increasing by nearly 14 percent to $2.8 trillion. The annual growth rate of separate account assets has continued to exceed that of general account assets, averaging 5.8 percent over the past decade. Total L&H sector assets, including separate accounts, were $7.4 trillion and $6.8 trillion for the years ending 2019 and 2018, respectively.

Figure 22 describes the composition of the L&H sector's asset portfolio and distribution of cash and investments for the last five years. Of total asset holdings, general account assets have

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[542] The use of reinsurance for surplus relief is most common when an insurer begins to rapidly expand its volume of premiums written. The calculation in this Report involves the amount of surplus not yet reported as income from commissions and expense allowances on reinsurance ceded during the current year as a share of capital and surplus. It captures the amounts related to A&H business as well as life and annuity business for general and separate accounts.

averaged over 62 percent of the portfolio on a yearly basis over the last five years, while separate account assets have averaged close to 38 percent.

Figure 22: Composition of L&H Sector General Account Assets and Investment Portfolio

	2015	2016	2017	2018	2019
General Account Assets / Total Assets	61.8%	62.3%	61.3%	63.9%	62.1%
Separate Account Assets / Total Assets	38.2%	37.7%	38.7%	36.1%	37.9%
Bonds	73.8%	73.5%	73.0%	72.5%	71.1%
Preferred Stocks	0.3%	0.2%	0.3%	0.3%	0.3%
Common Stocks	2.0%	2.2%	2.3%	2.0%	2.1%
Mortgage Loans	10.9%	11.2%	11.7%	12.6%	13.0%
Real Estate	0.6%	0.6%	0.6%	0.5%	0.5%
Contract Loans	3.4%	3.3%	3.2%	3.1%	3.0%
Derivatives	1.5%	1.6%	1.4%	1.4%	1.8%
Cash & Short Term Investments	2.8%	2.6%	2.6%	2.5%	2.7%
Other Investments	4.7%	4.7%	5.0%	5.1%	5.3%
Total Cash & Investments	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Share of General Account Assets	**94.7%**	**94.5%**	**94.7%**	**94.6%**	**94.7%**

Source: S&P Global

As detailed in Figure 22, the structure of the sector's investment portfolio has remained generally consistent for the last five years. Cash and invested assets of $4.3 trillion continued to account for nearly 95 percent of the general account asset portfolio at year-end 2019, mirroring previous years in the decade. Bond holdings have constantly made up more than 71 percent of the L&H sector's investment portfolio since 2010, reflective of the significant role that life insurers play in the corporate bond market. The predictability of cash flows from bond investments serves to enhance insurers' ability to meet future policyholder obligations, making such investments a key feature of their business model. Of total bonds, over 96 percent have consistently been long-term in nature—in line with the long-term nature of obligations assumed under life policies and contracts. This concentration is indicative of insurer risk management practices that match asset and liability durations, aimed at mitigating the impact of interest rate fluctuations on capital and surplus and providing the ability to estimate cash flows in order to meet debt and policyholder obligations as they fall due.

Mortgage loans remain the second largest investment class held by the L&H sector, averaging nearly 11 percent of cash and invested assets annually over the last decade.[543] Mortgage loan holdings of $565.5 billion comprised 13 percent of the investment portfolio at year-end 2019, representing a peak for the decade. While mortgage loans accounted for a greater share of the sector's investment holdings in 2019, the allocation to bonds has gradually been on a decline from a high of 75.8 percent in 2010 to a low of 71.1 percent in 2019.

As Figure 22 indicates, the L&H sector has slowly reduced the allocation of its investment portfolio to bond holdings, falling by 57 basis points on average in each of the last five years.

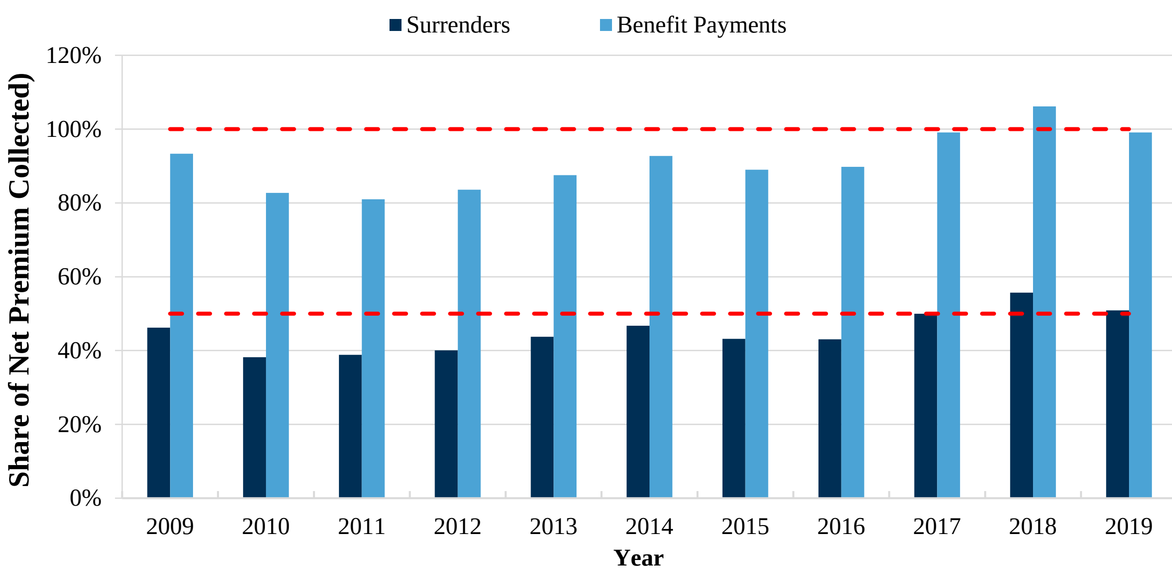
[543] L&H mortgage loans predominately consist of loans made to commercial properties.

Over the same time, the L&H sector raised its holdings of mortgage loans by 55 basis points on average. The reallocation is likely reflective of the continuing effects of the low interest rate environment, which began after the 2008 financial crisis and is expected to persist in the near to medium term, and the L&H sector's search for additional spread to mitigate the impact to investment earnings.

iii. Liquidity

The L&H sector's liquidity profile strengthened in 2019, even after two consecutive years of significant surrender activity and growth in benefit payments. Reaching decade highs in 2018, surrenders of $350.3 billion made up 55.7 percent of premiums collected, net of reinsurance, while benefit payments of $667.5 billion comprised 106.1 percent, as illustrated in Figure 23.[544] In 2019, surrenders and benefit payments declined to $339.6 billion and $661.5 billion, respectively. Though declining somewhat from 2018, surrenders were still slightly in excess of 50 percent of net premium receipts at 50.8 percent and benefit payments dropped just below a one-to-one ratio at 99.1 percent in 2019. Positive cash flows from operations, however, have been steady over the past decade, contributing to consistent growth in cash and invested assets and a stable current liquidity ratio, suggesting that the L&H sector continues to possess the capacity to fulfill its ongoing business needs and policyholder obligations in the normal course as they arise.

Figure 23: Cash Flows from Operations for the L&H Sector



Source: S&P Global

Net premium receipts were $667.5 billion in 2019, a 6.1 percent increase from $629 billion in 2018. In the last three years, benefit payments as a share of net premiums collected have been

[544] Premiums collected, net of reinsurance, are also referred to as net premium receipts.

close to or in excess of 100 percent. On average, benefit payments have consumed 91.1 percent of net premiums collected on a yearly basis over the past decade.

From 2010 to 2016, surrenders comprised 42 percent of net premium receipts on average each year as compared to 52.2 percent from 2017 to 2019, highlighting the change in surrender activity in recent years. Year-over-year growth in surrenders averaged 2.3 percent between 2010 and 2016, soaring to nine percent for the last three years. By contrast, the average annual growth rate for net premium receipts sank from 3.4 percent to 2.7 percent for those same periods, respectively.

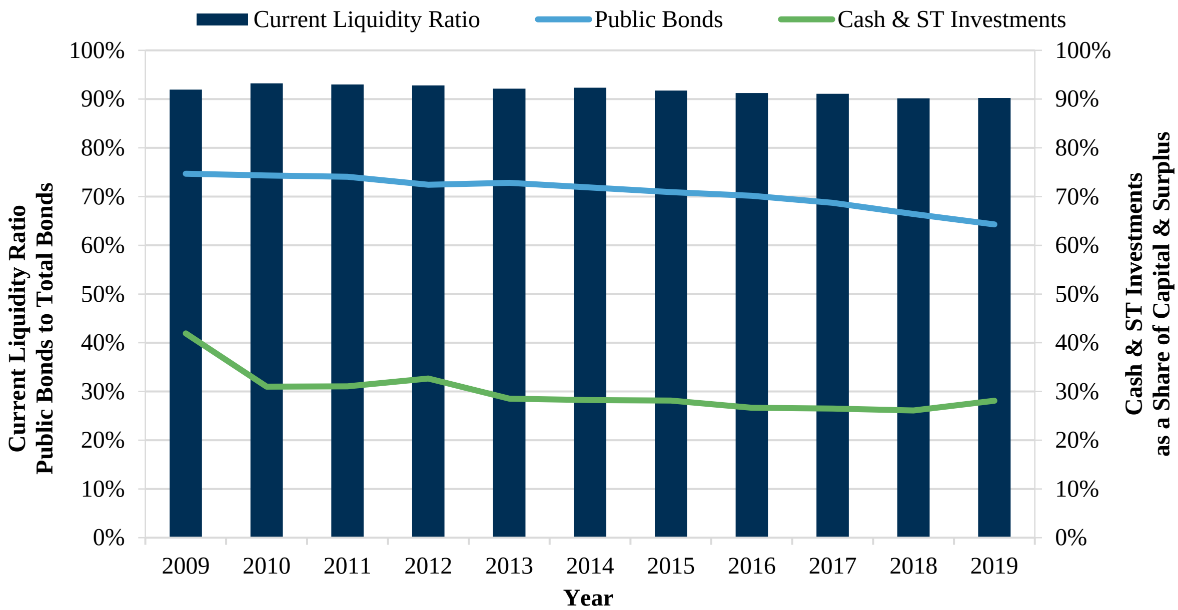
Several factors may have influenced the recent trends. The Federal Reserve raised interest rates in three separate moves in 2017, when surrenders rose by 16.5 percent from the year before. Another four interest rate hikes were made in 2018, at the height of surrenders for the decade. Thus, expectations of higher interest earnings may have driven market participants to seek out investment opportunities elsewhere during those years. With the Federal Reserve easing interest rates again in 2019, surrender activity slowed down, declining by three percent from 2018 levels. As would be expected of L&H insurers, claims related to death, disability, and annuity coverage have typically driven benefit payments and the increased spikes observed in recent years would align with the needs of an aging U.S. population.

With an average annual growth rate of 3.5 percent over the last decade, cash and invested assets were $4.3 trillion at year-end 2019, rising by 5.3 percent from the prior year-end and in direct correlation with the 5.1 percent year-over-year growth in general account liabilities. As a result, the ratio of general account liabilities to cash and invested assets has remained unchanged—at 95.9 percent as of year-end 2019 compared to 96 percent as of year-end 2018 and averaging at 95.9 percent yearly for the decade. As expected of the L&H sector, bonds have consistently made up the bulk of cash and investments, totaling $3.2 trillion at year-end 2019, up by 3.4 percent from the level at the previous year end.

Almost 30 percent of the bond portfolio had maturities that ranged between five and 10 years in 2019, not significantly changed from 2018. Another 37.8 percent, or $1.2 trillion of bonds, had maturities of greater than 10 years as of year-end 2019, little changed from year-end 2018. More than half of these bonds over the last decade have included bonds with maturities in excess of 20 years. In other words, nearly two-thirds of the entire bond portfolio have consistently been allocated to holdings that are medium to long term in duration in each of the last 10 years, supporting the longer time horizon of a life insurer's obligations. Moreover, the L&H sector has held 94 percent of its total bonds in investment-grade holdings on average each year since 2010, mitigating the sector's credit risk exposure.

Certain trends that have emerged since the 2008 financial crisis remain unabated, potentially weakening the quality of the L&H sector's investment portfolio, as reflected in Figure 24. The share of the bond portfolio allocated to public bonds continued to remain on a downward trajectory, falling by 10 percentage points since 2010 and by more than 11 percentage points from 75.5 percent at the height of the 2008 crisis. The current liquidity ratio has declined from a high of 93.2 percent in 2010 and is now comparable to the 90.2 percent observed in 2008. While cash and short-term investments rose to 28.1 percent of capital and surplus at year-end 2019 from 26.1 percent at year 2018, that share has generally dropped over the past decade. Finally, sustained low interest rates can erode investment yields as well as negatively affect the profitability of insurance products with guaranteed returns. This has led life insurers to increasingly turn to investments that offer higher returns but which tend to be less liquid.

Figure 24: A View of L&H Sector Liquidity



Source: S&P Global

As publicly-traded bond holdings have dropped, privately-placed bonds have accounted for a greater share of total bond holdings during the past 10 years, reaching a decade high at 35.7 percent at year-end 2019. Because most private-placement bonds are not assigned ratings by credit rating agencies, the amount of due diligence available to investors is limited. This reduced level of transparency makes the assessment of risk versus return comparatively difficult to determine. Private-placement bonds have gradually risen from a 2.1 multiple of capital and surplus at year-end 2010 to 2.7 at year-end 2019.

The ongoing low interest environment has led insurers to look to alternative investments to ease tight margins, potentially exposing them to increased liquidity risk. In particular, insurers have increased their holdings of CLOs. The exposure to leveraged lending makes these securities more vulnerable to significant ratings downgrades and defaults during times of market disruption, leading in such instances to increased capital charges for the insurers holding such assets. At year-end 2019, U.S. insurers had $158.3 billion in book/adjusted carrying value of CLO exposure, rising by 23 percent from $128.9 billion at year-end 2018. Of that total, L&H insurers held over 79 percent or $125.8 billion of CLO exposure at year-end 2019, up from 77.1 percent and $99.5 billion at year-end 2018. CLOs accounted for five percent of the L&H sector's bond portfolio as of year-end 2019, rising from four percent as of the prior year end.

According to one analysis, of the $158.3 billion in U.S. insurer CLO holdings at year-end 2019, less than four percent were at risk of rating downgrades.[545]

Box 5: CLO Update

CLO are structured securities that are collateralized primarily with leveraged loans.[546] Debt issued by the CLO is divided into a capital structure of tranches with different ratings and return expectations.[547] CLOs hold roughly half of the outstanding leveraged loan market, which has experienced rapid growth over the last decade, driven by private equity leveraged buyouts and the demand for high-yielding assets.[548] CLOs and similar instruments in the U.S. market reached $871.6 billion at year end 2019.[549]

At the end of 2019, U.S. insurers held $158 billion in CLOs, up from $27 billion at year-end 2011.[550] Insurers are also involved through their affiliates that serve as sponsors and investment advisors to funds that invest in CLOs. Most insurance company investments are in higher credit rated tranches such as AAA and AA, but they also include investments in riskier mezzanine and equity (i.e., "subordinate") securities.[551]

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545 NAIC & CIPR, *U.S. Insurer CLO Exposure at Risk of Ratings Downgrade*, 1.

546 *See, e.g.*, NAIC & CIPR, *The Rise in the U.S. Insurance Industry's Exposure to Collateralized Loan Obligations as of Year-End 2019* (May 2020), 7, https://www.naic.org/capital_markets_archive/special_report_200514.pdf. *See also* Emily Liu and Tim Schmidt-Eisenlohr, "Who Owns U.S. CLO Securities?" *FEDS Notes* (July 19, 2019), https://www.federalreserve.gov/econres/notes/feds-notes/who-owns-us-clo-securities-20190719.htm (noting that the use of leveraged loans has grown rapidly since the 2008 financial crisis, with an increasing share of such loans securitized into CLOs). *See also* "Leveraged Loan Primer," S&P Global, https://www.spglobal.com/marketintelligence/en/pages/toc-primer/lcd-primer. The Bank of England reports that gross issuance of leveraged loans reached pre-crisis levels in 2018, but subsequently slowed; it estimates that there are $3.2 trillion in leveraged loans outstanding globally. Bank of England Financial Policy Committee, *Financial Stability Report* (July 2019), 24, https://www.bankofengland.co.uk/-/media/boe/files/financial-stability-report/2019/july-2019.pdf. *See also* SIFMA, *Leverage Lending FAQ & Fact Sheet* (February 2019), https://www.sifma.org/wp-content/uploads/2019/03/Leverage-Lending-FAQ.pdf.

547 Guggenheim Partners, *Understanding Collateralized Loan Obligations*, (May 2019), 3, https://www.guggenheimpartners.com/perspectives/portfolio-strategy/collateralized-loan-obligations-clos.

548 FSB, *Vulnerabilities Associated with Leveraged Loans and Collateralised Loan Obligations* (December 19, 2019), 7, https://www.fsb.org/wp-content/uploads/P191219.pdf.

549 *See* "US ABS Issuance and Outstanding," SIFMA, https://www.sifma.org/resources/research/us-abs-issuance-and-outstanding/ (showing, via .xls download available through webpage, quarterly totals for combined CLO, CDO, Structured Finance, and other on "ABS Outstanding" tab); Joe Rennison and Robert Smith, "CLOs: Ground Zero for the Next Stage of the Financial Crisis?," *The Financial Times*, May 13, 2020, https://www.ft.com/content/f10eaaac-0f4e-46bc-8f78-0754028da46a.

550 NAIC & CIPR, *U.S. Insurer CLO Exposure at Risk of Ratings Downgrade*, 1; NAIC & CIPR, *U.S. Insurance Industry CDO/CLO Update* (June 11, 2012), https://www.naic.org/capital_markets_archive/120611.htm.

551 One report showed that roughly 75 percent of U.S. insurance company CLO holdings were in senior risk tranches, with P&C insurers holding approximately 17 percent of these senior risk tranche investments and life insurers holding approximately 80 percent. NAIC & CIPR, *Exposure to Collateralized Loan Obligations* (, 2.

One emerging trend is the growing proportion of the insurance industry's CLO holdings held by private equity-backed insurers. FIO's analysis revealed that private equity firms had some affiliation or involvement with six of the top-10 of the industry's largest holders of CLOs.[552] A recent Federal Reserve study stated that private equity-backed insurance operating entities held some of the riskiest portions of CLOs.[553]

In recent years, financial market supervisors have highlighted concerns about growing risk exposures in the CLO market.[554] Additionally, many rating agencies in recent years have noted the growing trend of CLOs issuances with fewer covenants (i.e., "covenant-lite") and looser structural protections.

Due to the more illiquid nature of affiliated holdings, significant growth in affiliated investments has the potential to adversely affect an entity's capital base. The L&H sector's affiliated holdings of cash and invested assets increased following the 2008 financial crisis, averaging an annual growth rate of 7.1 percent from 2010 to 2017, before declining in 2018. In 2019, affiliated holdings resumed its upward trend, rising by 9.1 percent to $192.0 billion from $176.0 billion in 2018—the only year in which the L&H sector reduced its affiliated investments. Affiliated cash and invested assets represented 45.4 percent of capital and surplus as of year-end 2019, up from 43.9 percent as of year-end 2018. The composition of the affiliated investment portfolio remained unchanged, with common stock accounting for 30 percent of the L&H sector's affiliated portfolio at year-end 2019, while other investments made up another 49.4 percent.[555] By comparison, affiliated common stock and affiliated other investments made up 29.3 percent and 48.2 percent of total affiliated holdings, respectively, at year-end 2018. Bonds continued to make up the third largest concentration of affiliated investments.

In addition, there has been a recent increase in holdings of structured securities. Structured securities are exposed to credit, market, and inflation risks and thus are susceptible to credit pressures and interest rate movements, especially in times of stress.[556] The L&H sector held total

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[552] FIO's analysis was limited to CLOs held at U.S. legal insurance entities, based on 2019 filings under SAP. For more information on private equity-backed insurers, see Section VII.A.2.c.

[553] Federal Reserve, *Capturing the Illiquidity Premiums* (February 2020), 3-4, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3534847.

[554] *See, e.g.*, FSOC, *2018 Annual Report* (rev. June 2019), 27, https://home.treasury.gov/system/files/261/FSOC2018AnnualReport.pdf (noting "increasing demand for securitized products, such as collateralized loan obligations . . . in the corporate debt market."); Mayra Rodriguez Valladares, "Rating Agencies Sound Alarm About Leveraged Loans and CLOs," *Forbes*, December 18, 2018, https://www.forbes.com/sites/mayrarodriguezvalladares/2018/12/18/rating-agencies-sound-alarm-about-leveraged-loans-and-clos/ (noting FSB letter to G-20 identified "riskier credit instruments," including leveraged loans, directly and through CLOs, as an emerging vulnerability).

[555] "Other" investments include, but are not limited to: surplus notes, limited partnerships, joint ventures, hedge funds, private equity funds, and direct investments.

[556] The degree and scope of the risks associated with these types of securities differ, depending on their structure. They are structured in ways to meet investors' risk appetites and can range from pass-throughs to complex tranching arrangements.

structured securities of $748.7 billion in 2019, up from $718.8 and $689 billion in 2018 and 2017, respectively. While average annual growth in MBS has turned negative since 2011, growth in other loan-backed and structured securities has been considerable, averaging 6.6 percent on a yearly basis.[557] Other loan-backed and structured securities accounted for almost 43 percent of total structured investments at year-end 2019, rising from nearly 28 percent at year-end 2011. MBS holdings, on the other hand, have dropped to 57.4 percent of the total from 72.2 percent over the same period.[558] Of the MBS portfolio, the share of residential mortgage-backed securities has gradually fallen over the years, ending at 55.7 percent as of year-end 2019 compared to 67.7 percent as of year-end 2011, while the allocation to commercial mortgage-backed securities has correspondingly risen.

While some negative trends in liquidity have surfaced, the L&H sector has also exhibited certain compensating strengths, contributing to the stability of its overall financial profile. First, despite the downward trend in cash and short-term investments, the current liquidity ratio has held relatively firm, in excess of 90 percent in each of the last 10 years, as shown in Figure 24, reflecting an expected capacity to satisfy the sector's on-balance sheet obligations. Second, publicly-traded bonds and private placements together have largely consisted of investment-grade bonds, averaging over 94 percent of the entire bond portfolio since 2010. In addition, when viewing CLOs on an aggregate basis, those at risk of rating downgrades made up 0.2 percent of the sector's bond investments and 1.4 percent of capital and surplus as of year-end 2019.[559] On an individual basis, however, risk exposures of CLO holdings and related vulnerabilities can vary across insurers. Third, affiliated cash and investments have averaged only 4.1 percent of total cash and invested assets annually since 2010. Finally, the bulk of unaffiliated investments is aligned with the L&H sector's asset/liability matching philosophy, with long-term bonds dominating more than three-quarters of unaffiliated holdings on average annually.

Unaffiliated cash and invested assets were $4.2 trillion at year-end 2019, up by 5.1 percent from $4.0 trillion at year-end 2018 and growing at an annual pace of 3.4 percent on average. The ratio of unaffiliated cash and invested assets to total general account liabilities has remained at a multiple of one in each of the last 10 years, while the contribution of unaffiliated investments to capital and surplus has remained steady and substantial. The level of unaffiliated investments has been nearly 10 times that of capital and surplus on average annually since 2010, further reinforcing the L&H sector's ability to support its policyholder and funding commitments as they come due.

The L&H sector plays an important role in housing finance and as a result, these insurers are eligible to borrow from the Federal Home Loan Banks. Since the 2008 financial crisis, insurers have increased their membership with the Federal Home Loan Bank system as an alternative

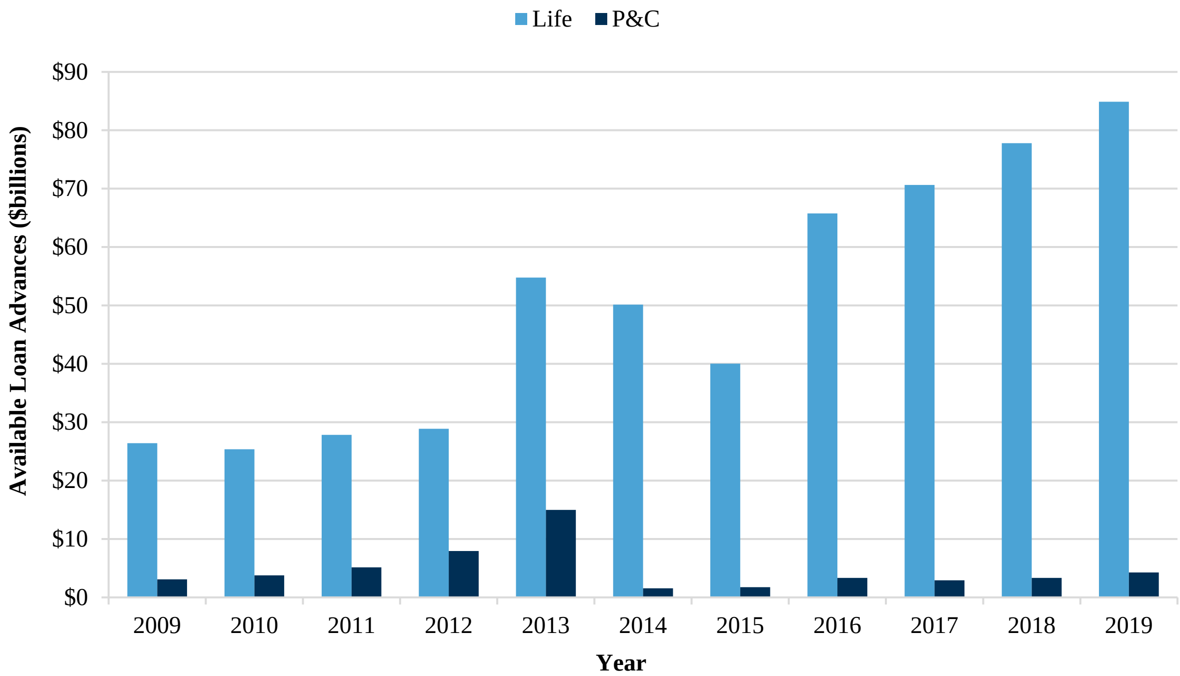
[557] Other loan-backed and structured securities can include car loans, student loans, and credit card debt; but do not include mortgage loans.

[558] S&P Global changed its reporting of data on structured securities; for consistency, the analysis on structured securities focuses on data for the years 2011 through 2019 and does not extend to 2010.

[559] CLOs at risk of rating downgrades refers to CLO investments in mezzanine and equity tranches.

source of liquidity. In 2019, Federal Home Loan Bank membership included 471 insurers that had access to $89 billion of Federal Home Loan Bank advances. Because the cash flows from mortgage loan holdings and mortgage-backed securities match those required to meet the long duration liabilities held by life insurers, the L&H sector's engagement with the Federal Home Loan Banks is of particular note and illustrated in Figure 25. By contrast, the P&C sector's Federal Home Loan Bank activities increased in 2013 before decreasing and staying at steady levels in recent years.

Figure 25: U.S. Insurance Industry Borrowing Capacity from Federal Home Loan Banks



Source: S&P Global

c) Private Equity-Backed Insurers

Since the 2008 financial crisis, private equity firms have been increasingly active participants in the life insurance M&A market by acquiring insurance entities and blocks of business, and by executing reinsurance transactions.[560] The life insurance companies owned by private equity firms are now some of the sector's larger providers of fixed annuities while also growing their presence in other product areas.[561] Starting from a very limited presence in the sector prior to 2009, private equity firms held eight percent of all life insurers' general account assets in

[560] Common reinsurance agreements have involved in-force block transactions as well as "flow" reinsurance where a ceding company cedes all or a portion of existing (in-force block) or new policies ("flow") to the reinsurer that is affiliated with a private equity firm.

[561] For example, Athene Holding Ltd, connected to the private equity firm Apollo Global Management, is one of the largest fixed annuity and fixed index annuity providers in the L&H sector.

2018.[562] Several noteworthy transactions in recent years include: (1) private equity firm CF Corporation's $1.8 billion purchase of Fidelity & Guaranty Life; (2) private equity-backed insurer Athene's $19 billion reinsurance deal with Voya Financial; and (3) private equity firm KKR's $4.4 billion acquisition of Global Atlantic.[563]

The interest of private equity in the L&H sector is, in part, because insurers can provide firms with a permanent and long-term capital base to leverage their sophisticated and non-traditional investment strategies. Policyholder premiums provide private equity firms a predictable and stable source of investment capital that is insulated from market fluctuations and investor redemptions.[564] Managers are able to deploy such capital towards more complex and higher yielding admitted assets—such as structured securities and alternatives—with the goal of earning investment returns greater than a typical L&H insurer's traditional investments. Some private equity firms also earn fees from managing the general accounts of their owned-insurance entities.

Private equity's entry into the L&H sector has coincided with a growing number of L&H insurers that have sought to divest their interest rate sensitive and low returning long-term liability businesses—predominately annuity blocks—as a result of the prolonged low interest rate environment and potentially mispriced product guarantees.[565] Private equity firms have capitalized on this dislocation in the sector by acquiring or reinsuring these entities or blocks at substantial discounts, often below book value. To that end, private equity's emergence in the insurance industry has increased competition among carriers and driven innovation in the fixed annuity market.

Based on FIO's analysis, L&H insurers backed by the larger private equity firms generally own more structured assets relative to capital as compared to traditional life insurers—particularly CLOs including lower tier tranches. At year-end 2019, five of the top-ten holders of CLOs in the U.S. L&H sector were affiliated with private equity firms, as shown in Figure 26.[566]

[562] Federal Reserve, *Capturing the Illiquidity Premium*. In 2009, fixed annuity sales from private equity-backed insurers accounted for an estimated three percent of total fixed-annuity sales. Divya Kirti and Natasha Sarin, "Private Equity Value Creation in Finance: Evidence from Life Insurance," *Faculty Scholarship at Penn Law* (2020), 2, https://scholarship.law.upenn.edu/faculty_scholarship/2154/.

[563] KKR's acquisition of Global Atlantic is expected to close in early 2021 pending regulatory approval.

[564] Kirti and Sarin, "Private Equity Value Creation in Finance: Evidence from Life Insurance," 1.

[565] See Athene, "Athene Investor Day" (presentation, Athene Investor Day, New York, NY, September 20, 2018), http://s1.q4cdn.com/886888837/files/doc_presentations/2018-09-20-Investor-Day-Presentation.pdf.

[566] Rankings based on FIO's analysis of identifiable CLOs filed on Schedule D of the annual SAP investment schedules. Values provided are estimates based on S&P Global statutory investment schedules. CLOs are not a standard reporting requirement and therefore can be difficult to identify. Individual company amounts may be understated.

Figure 26: The Top 10 Largest Holders of CLOs in the U.S. L&H Sector (Year-End 2019)

Rank	Company	Carrying Value ($ millions)	Share of L&H Group's Cash & Investments (%)	Share of L&H Group's Surplus (%)
1	Massachusetts Mutual Life Insurance Co.	**$ 7,151**	4%	38%
2	Sammons Enterprises Inc.*	**6,582**	8%	122%
3	Prudential Financial, Inc.	**6,525**	3%	40%
4	MetLife, Inc.	**5,559**	2%	32%
5	NZC Capital LLC*	**5,429**	18%	177%
6	Athene Holding Ltd.*	**5,019**	6%	325%
7	Global Atlantic Financial Group Ltd.*	**4,909**	8%	171%
8	American Equity Investment Life Holding Co.	**4,151**	7%	119%
9	New York Life Insurance Co.	**3,459**	1%	16%
10	Fidelity National Financial, Inc.*	**3,160**	12%	209%
	Average of Top 10	**$ 5,195**	**7%**	
	Combined Top 10	**57%**		

*indicates private equity involvement in those insurers

Source: S&P Global

Additionally, private equity-backed insurers have become significant investors in illiquid and macroeconomic sensitive assets such as CMLs and private placements, which are direct loans made to mostly private middle market domestic and foreign companies.[567]

Based on their investment holdings, private equity-backed insurers could potentially be more sensitive to downturns in the credit markets.

3. Property and Casualty Sector

This section presents additional analysis of the financial performance of the P&C sector in 2019, and then assesses the P&C sector's overall financial condition as of December 31, 2019.

a) Performance

i. Net Premiums Written

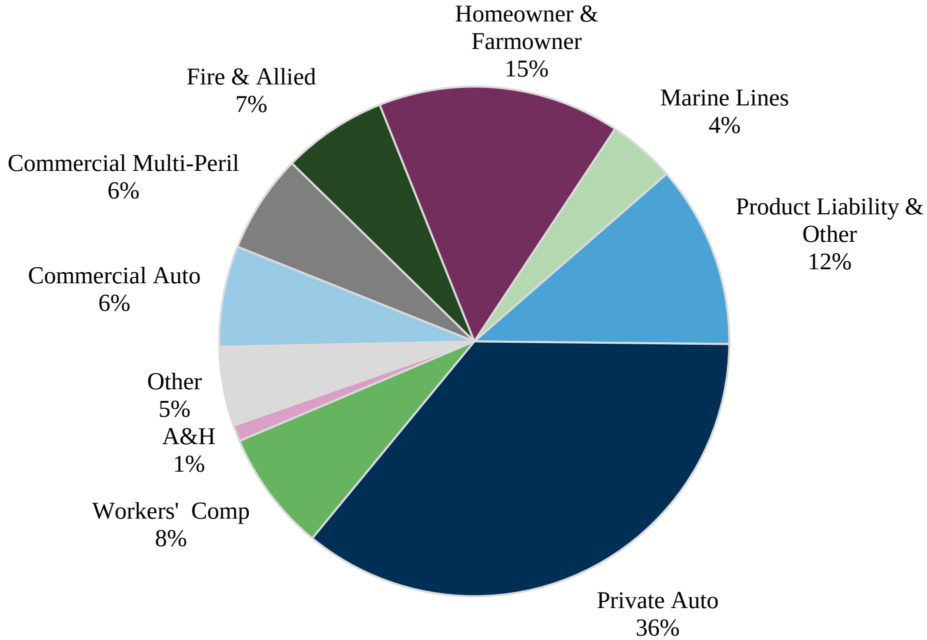
Figure 27 shows the 2019 composite of P&C sector direct premiums written by lines of business. Figure 28 shows a longer-term view of the level and composition of direct premiums written by major lines of business, and Figure 29 shows the corresponding dollar values and a reconciliation

[567] Federal Reserve, *Capturing the Illiquidity Premium*; Apollo, "Apollo Global Management 2019 Investor Day" (presentation, Apollo Global Management 2019 Investor Day, New York, NY, November 7, 2019), 146, https://www.apollo.com/~/media/Files/A/Apollo-V2/documents/events/2019/apollo-global-management-investor-day-presentation-2019.pdf.

to net premiums earned (i.e., direct premiums written less net reinsurance premiums ceded and the change in unearned premiums reserve).

For 2019, total P&C sector net premiums written reached a record level at $639 billion, marking a three percent increase over 2018 levels, but much slower than the 10 percent growth experienced in 2018. The premium growth in 2018 was unusually high, however, and largely the result of changes in many insurers' reinsurance programs in response to changes in the U.S. tax code.[568] The changes in reinsurance utilization in 2018 appeared to be related to the Base Erosion and Anti-Abuse Tax provision in the Tax Cuts and Jobs Act, which may have led insurers to reduce premiums ceded to non-U.S. affiliates due to possible tax implications.[569] Direct premiums written for personal lines of business grew by four percent in 2019, while direct premiums written for commercial lines of business increased by nearly six percent. Net reinsurance premiums ceded increased by 16 percent, or some $10 billion, slowing the growth in net premiums written. Economic growth in the United States and rate increases continued to drive direct premiums written growth, with solid increases in homeowners' and both personal and commercial automobile lines. In 2019, the majority of the direct premiums written by the P&C sector consisted of auto, home and farm-owners, and commercial insurance.

Figure 27: P&C Sector Composite of Direct Premiums Written

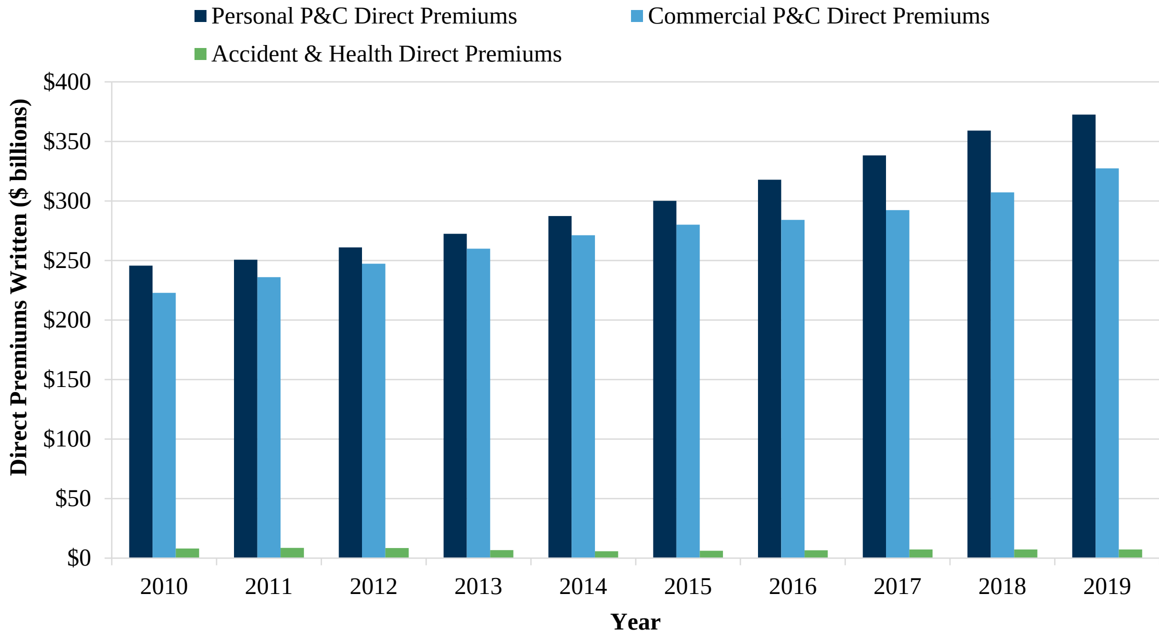


Source: S&P Global

[568] ISO and American Property Casualty Insurance Association, *Property/Casualty Insurance Results: 2019* (April 2020), 2, http://www.pciaa.net/pciwebsite/common/page/attachment/88979 (*2019 Property/Casualty Insurance Results*).

[569] *See* FIO, *2018 Annual Report*, 104-107; ISO and American Property Casualty Insurance Association, *2019 Property/Casualty Insurance Results*, 2.

Figure 28: P&C Sector Direct Premiums Written ($ billions)



Source: S&P Global

Figure 29: P&C Sector Direct Premiums Written ($ thousands)

	2015	2016	2017	2018	2019
Personal P&C Direct Premiums	$ 300,054,135	317,762,245	$ 338,252,174	$ 359,106,190	$ 372,456,544
Commercial P&C Direct Premiums	280,072,580	284,084,864	292,344,887	307,150,707	327,298,339
A&H Direct Premiums	6,142,327	6,565,978	7,222,990	7,306,903	7,300,858
Direct Premiums Written	**591,757,789**	**613,383,327**	**642,531,528**	**678,281,318**	**708,570,030**
Net Reinsurance Premiums	(71,247,200)	(79,397,787)	(84,086,607)	(59,997,519)	(69,749,274)
Net Premiums Written	**520,510,588**	**533,985,541**	**558,444,921**	**618,283,798**	**638,820,756**
Change in Unearned Premiums Reserve	8,400,547	4,801,796	12,093,908	18,547,320	12,122,216
Net Premiums Earned	**$ 512,110,041**	**$ 529,183,745**	**$ 546,351,012**	**$ 599,736,478**	**$ 626,698,540**

Source: S&P Global

ii. Underwriting Results

Figure 30 shows the P&C combined ratio and its construction for the past several years.[570]

Figure 30: P&C Sector Combined Operating Ratios

	2015	2016	2017	2018	2019
Loss Ratio	57.48%	60.68%	64.14%	60.71%	60.04%
Loss Adjustment Expense Ratio	11.83%	11.61%	11.76%	10.70%	10.99%
Loss and Loss Adjustment Expense Ratio	**69.31%**	**72.29%**	**75.91%**	**71.42%**	**71.03%**
Net Commission Ratio	10.55%	10.41%	10.29%	11.26%	11.00%
Salaries & Benefits Ratio	8.24%	8.32%	7.91%	7.38%	7.40%
Tax, License & Fees Ratio	2.55%	2.51%	2.47%	2.39%	2.34%
Administrative & Other Expense Ratio	6.72%	6.68%	6.67%	6.25%	6.45%
Expense Ratio	**28.05%**	**27.92%**	**27.34%**	**27.28%**	**27.20%**
Policyholder Dividend Ratio	0.59%	0.56%	0.61%	0.62%	0.78%
Combined Ratio	**97.95%**	**100.76%**	**103.85%**	**99.32%**	**99.01%**

Source: S&P Global

The combined ratio for the P&C sector decreased slightly to approximately 99.0 percent in 2019 from 99.3 percent in 2018, reflecting an improvement in underwriting profit. A combined ratio greater than 100 percent indicates that premiums did not cover losses and expenses in a given period (i.e., underwriting operations made a negative contribution to net income). Investment income, realized capital gains/losses, and income taxes are not considered in the combined ratio. Natural catastrophes were less severe in 2019 and contributed to the expansion in underwriting profits, and when coupled with larger favorable reserve development were the main drivers of the lower combined ratio.[571] Figure 31 shows losses from natural catastrophes in the United States over the last 10 years, and Figure 32 shows reserve development over the same period.[572] The expense ratio decreased very slightly in 2019 compared with 2018. Insured property losses dropped in the United States by roughly half in 2019 although the number of catastrophes in 2019 with a threshold of $25 million or more in insured losses was the highest in any year.[573] The P&C sector posted lower favorable reserve development in 2019 as the sector continued to feel the impacts from a worsening loss experience in many lines.

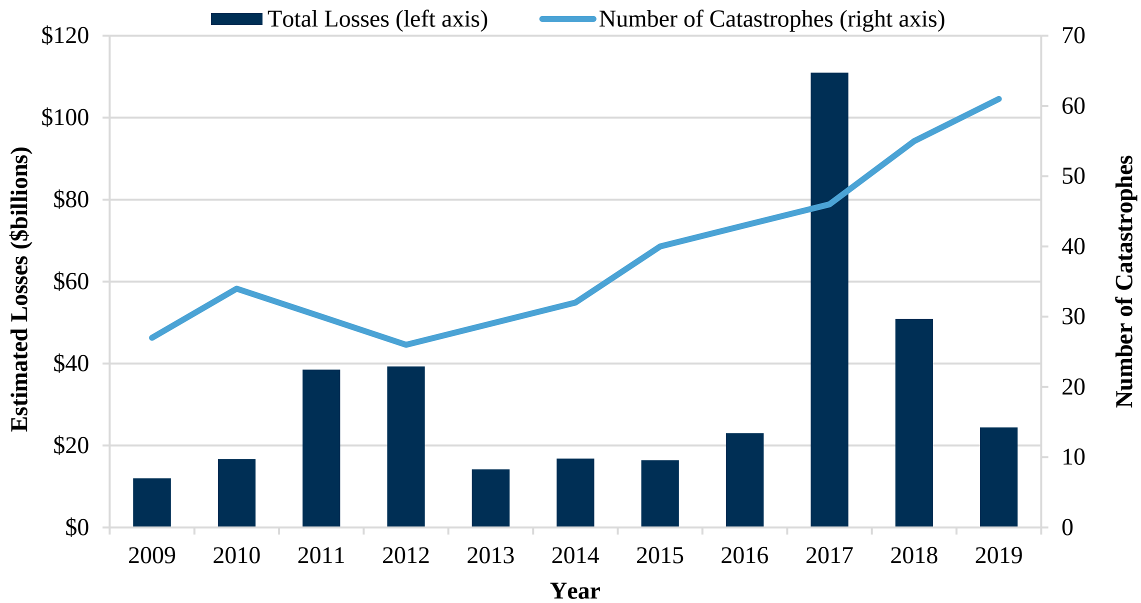
[570] S&P Global ratios include the policyholder dividend ratio for transparency because dividends represent a cash outlay.

[571] ISO and American Property Casualty Insurance Association, *2019 Property/Casualty Insurance Results*, 2.

[572] Favorable reserve development occurs when the current year estimates of losses arising from business written in previous years are less than the previous estimates.

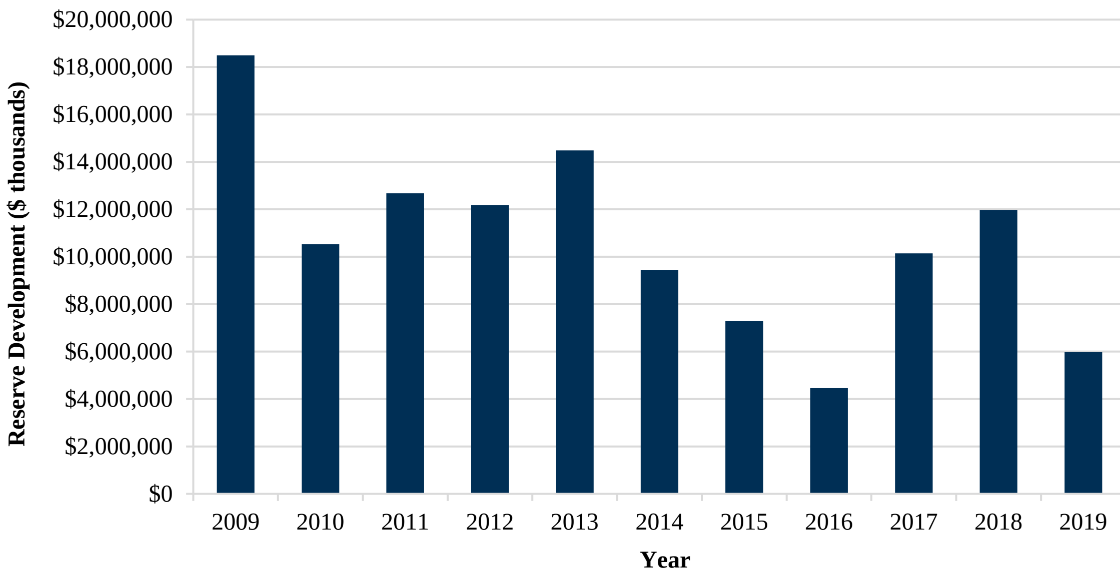
[573] "Facts + Statistics: U.S. Catastrophes," Insurance Information Institute, https://www.iii.org/publications/insurance-handbook/insurance-and-disasters/facts-statistics-us-catastrophes. For more information on insurance, natural hazards, and mitigation, see Section IV.A.2.a.

Figure 31: Estimated Insured Property Losses, U.S. Catastrophes, 2010-2019 [574]



Sources: Insurance Information Institute; Property Claim Services (PCS), a unit of ISO, a Verisk Analytics Company; U.S. Bureau of Economic Analysis

Figure 32: Total One Year Reserve Development for the P&C Sector ($ thousands), 2010-2019



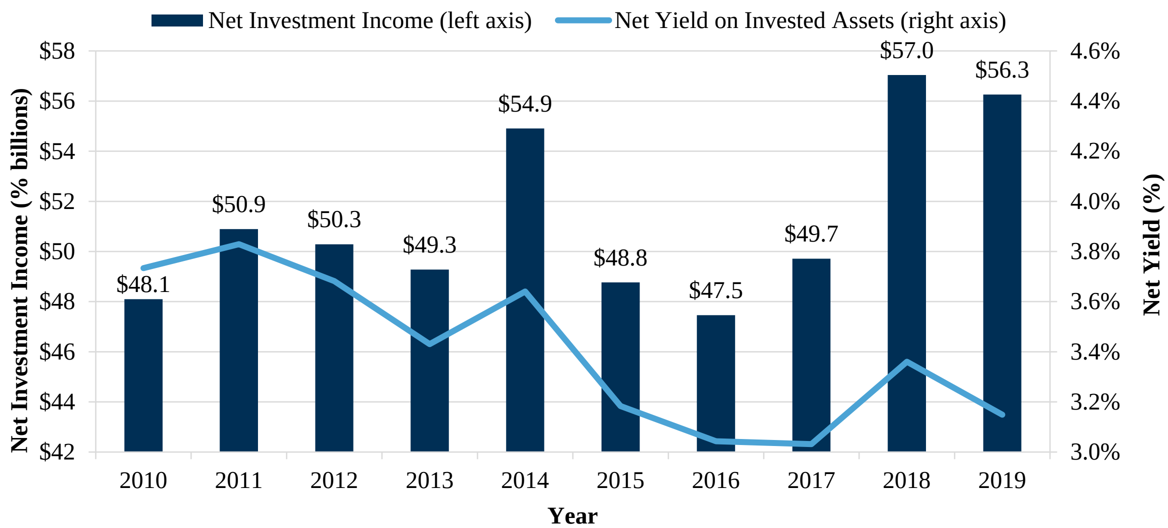
Source: S&P Global. Reflects total incurred net loss development for all accident years.

[574] Losses are adjusted for inflation through 2019 by the Insurance Information Institute using the GDP implicit price deflator.

iii. Investment Income

Net investment income for the P&C sector dropped slightly more than one percent to $56 billion in 2019, reversing the increasing trend experienced over the previous two years. Cash and invested assets balances increased by 10 percent over 2019 to $1.9 trillion; as a result, the net yield on invested assets dropped to 3.15 percent in 2019 from 3.36 percent in 2018. Figure 33 depicts a longer-term view of the trend in net investment income and net yield on invested assets for the P&C sector, and Figure 34 provides this data for the past five years. Realized capital gains and losses are reported separately and are not a component of net investment income. Because P&C insurers are less dependent than L&H insurers on net investment income to fund losses and expenses, net investment income accounted for about nine percent of total P&C sector revenues in 2019 (compared to 20 percent in the L&H sector).

Figure 33: P&C Sector Annual Net Investment Income ($ billions) and Net Yield on Invested Assets (%)



Source: S&P Global

Realized capital gains on investments also contributed to profitability in 2018, as the P&C sector recorded net realized capital gains of nearly $11 billion, marking a 45 percent decrease from 2017. Realized capital gains in 2018 were more in line with historical results. Lower gains on common stocks and net losses on bonds were the main drivers of the decrease in net realized capital gains.

Figure 34: P&C Sector Annual Net Investment Income ($ thousands) and Net Yield on Invested Assets (%)

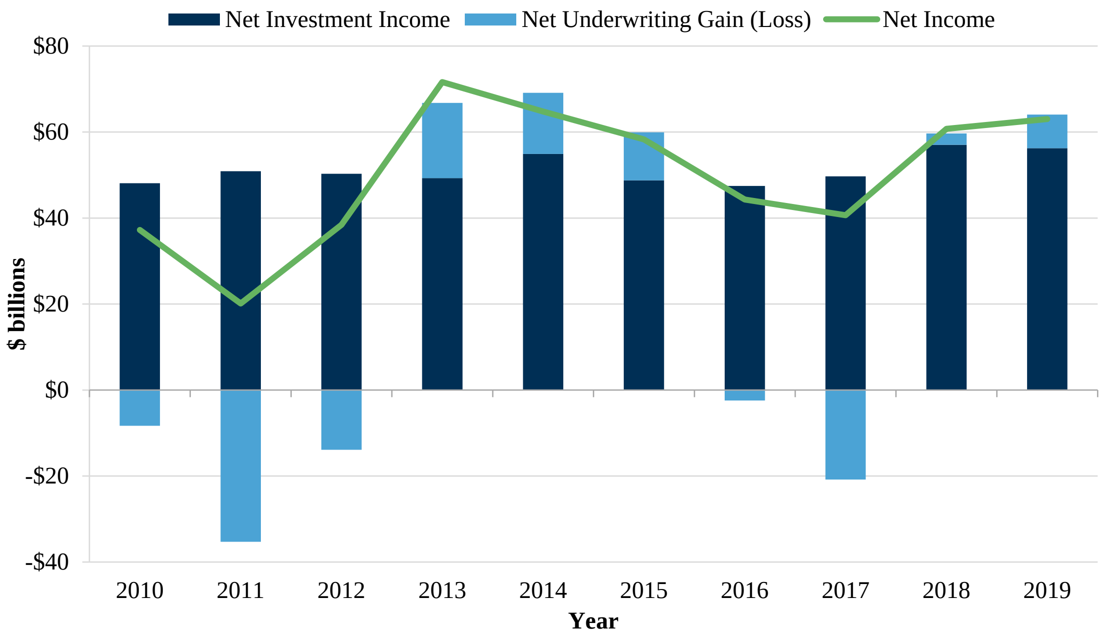
	2015	2016	2017	2018	2019
Net Investment Income	$48,765,011	$47,461,805	$49,709,970	$57,037,035	$56,258,555
Total Cash & Investments	1,531,415,182	1,587,837,614	1,691,629,655	1,703,062,854	1,869,951,353
Net Yield on Invested Assets	**3.18%**	**3.04%**	**3.03%**	**3.36%**	**3.15%**

Source: S&P Global

iv. Net Income

The P&C sector's net income increased a further four percent in 2019, following a strong rebound in 2018, rising to $63 billion from $61 billion reported in 2018, as shown in Figure 35. Thanks to the improvements in the combined ratio (noted above), underwriting profit nearly tripled in 2019, rising to $7.8 billion from $2.6 billion in 2018. The expansion in underwriting profit was muted by the decrease in net investment income and a significant increase in policyholder dividends. Nonetheless, pre-tax operating income increased by five percent to $72 billion in 2019 from $68 billion in 2018. A 17 percent increase in federal income taxes to $8.5 billion in 2019 limited the gain in net income to just under four percent. Figure 36 provides a summary income statement for the P&C sector.

Figure 35: P&C Sector Net Income ($ billions)



Source: S&P Global

Figure 36: P&C Sector Summary Income Statement ($ thousands)

	2015	2016	2017	2018	2019
Net Premiums Earned	$ 512,110,041	$ 529,183,745	$ 546,351,012	$ 599,736,478	$ 626,698,540
Losses and Loss Adjustment Expense Incurred	354,958,963	382,522,916	414,726,222	428,318,512	445,154,764
Other Underwriting Expense Incurred	145,136,437	148,009,926	151,095,360	167,668,693	172,266,025
Other Underwriting Deductions	857,268	1,073,235	1,572,203	1,026,092	1,468,154
Net Underwriting Gain (Loss)	**11,157,373**	**(2,422,331)**	**(20,802,833)**	**2,618,240**	**7,819,180**
Policyholder Dividends	3,016,579	2,943,624	3,308,785	3,709,994	4,884,684
Net Investment Income	48,765,011	47,461,805	49,709,970	57,037,035	56,258,555
Net Realized Capital Gains (Losses)	10,073,274	8,484,994	19,639,559	10,691,626	11,039,186
Finance Service Charges	3,333,008	3,452,738	3,625,986	3,725,717	3,829,827
All Other Income	(1,808,648)	(2,410,912)	(9,004,230)	(2,365,109)	(2,524,051)
Net Income After Capital Gain (Loss) Before Tax	**68,503,439**	**51,622,428**	**39,859,667**	**67,997,514**	**71,538,014**
Federal Income Tax	10,188,539	7,314,767	(784,873)	7,244,680	8,511,126
Net Income	**$ 58,314,974**	**$ 44,307,882**	**$ 40,644,540**	**$ 60,752,834**	**$ 63,026,888**

Source: S&P Global

Figure 37 displays key measures of returns for the P&C sector. The 2019 pre-tax operating margin improved slightly to 8.8 percent from 8.7 percent in 2018. The 2019 return on average equity of 7.8 percent was slightly below the 8.0 percent mark in 2018, and below the average of nine percent for the past 10 years.

Figure 37: P&C Sector Operating Ratios (%)

	2015	2016	2017	2018	2019
Pre-Tax Operating Margin	10.39%	7.47%	3.42%	8.71%	8.84%
Return on Average Equity (Capital & Surplus)	8.47%	6.33%	5.50%	7.98%	7.77%
Pre-Tax Operating Return on Average Equity	8.49%	6.16%	2.74%	7.53%	7.46%
Return on Average Assets	3.24%	2.40%	2.10%	3.02%	2.98%

Source: S&P Global

b) Condition

This section analyzes the financial condition of the P&C sector at the end of 2019, focusing on surplus, assets, and liquidity.

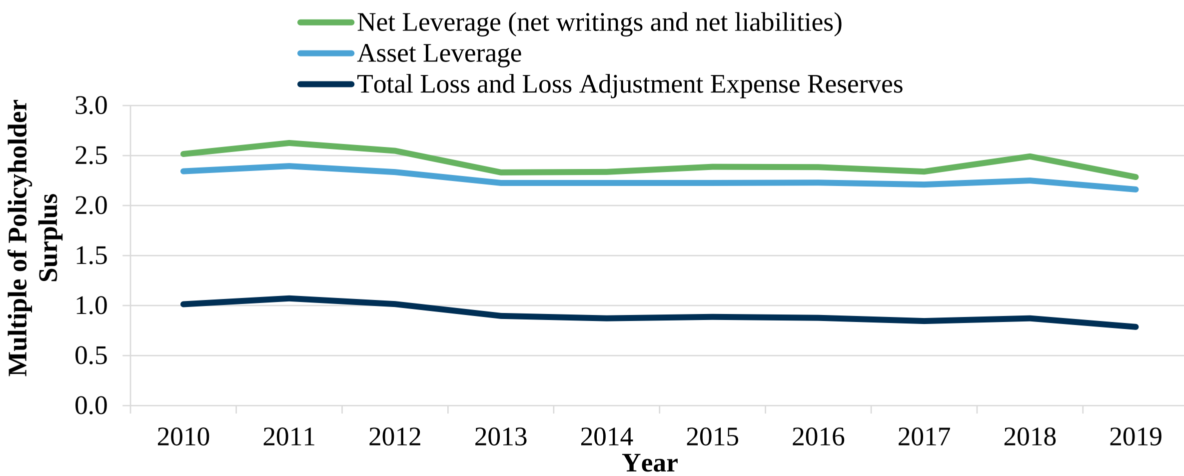
i. Surplus as Regards Policyholders

The P&C sector exhibited healthy developments in its capital base in 2019, bolstering its financial safety and soundness. Policyholder surplus for the P&C sector reached a peak in 2019, totaling $865.3 billion at year-end, a 14.3 percent increase from the prior year end and the greatest year-over-year growth over the past decade. Driven largely by net unrealized capital gains from a strong stock market, the boost in 2019 raised the sector's yearly average growth rate in surplus to 5.4 percent for the last 10 years.[575] Optimism for a continuing strong economy contributed to net unrealized capital gains of $85.5 billion in 2019, in stark contrast to the $45.4 billion in net unrealized capital losses reported in 2018 when stock market volatility in the fourth quarter of that year disrupted the marketplace. Net unrealized capital gains have contributed 2.4 percent to prior year-end policyholder surplus on average each year in the last decade.

Even with the elimination of capital infusions in the form of surplus notes, the average annual growth rate in policyholder surplus in the last decade did not materially change, and demonstrates the growth stemming from P&C insurers' core business. Organic surplus growth for the P&C sector can mainly be attributed to positive earnings including net realized and unrealized capital gains, offset in part by stockholder dividends. The P&C sector paid stockholder dividends of $35.7 billion and $32.1 billion in 2019 and 2018, respectively. As a share of prior year-end policyholder surplus, stockholder dividends have averaged five percent annually over the last decade, less than the L&H sector average due to the P&C sector's larger surplus base. The P&C sector has consistently generated capital year after year from net realized capital gains since 2010. As a share of prior year-end policyholder surplus, net realized capital gains have averaged 1.8 percent annually since 2010.

As shown in Figure 38, reduced leverage ratios in 2019 have enhanced the P&C sector's financial capacity. The recent improvement can primarily be attributed to the considerable growth in policyholder surplus, resulting in decade lows in 2019 for all of the ratios shown in the figure. Though they measure different exposures, the asset and net leverage ratios presented in Figure 38 were headed towards convergence before widening in 2018, when a decline in surplus combined with increased exposures adversely impacted the ratios. In 2019, these two ratios resumed a pattern of closely mirroring each other.

Figure 38: P&C Sector Leverage Ratios



Source: S&P Global

[575] Removing the highs and lows over the decade resulted in an average annual growth rate of 5.1 percent for the decade.

Balance sheet strength can be affected by the volatility and credit quality of the investment portfolio, reinsurance recoverables, and agents' balances.[576] The steadiness of the asset leverage ratio since 2013 along with the recent nine basis point yearly decline in 2019 has generated greater financial flexibility, enabling the P&C sector to use its capital more efficiently in mitigating such potential risk exposures as investment, interest rate, and credit. Over the past decade, the asset leverage ratio has ranged between a high of 2.55 in 2011 to a low of 2.31 in 2019, with an annual average of 2.4 over the decade.

The net leverage ratio is an indicator of the P&C sector's ability to handle above average losses and fulfill debt and policyholder obligations. Since 2011, the net leverage ratio has generally declined, enhancing the sector's capacity to support its business.[577] In particular, liabilities of $1.3 trillion at year-end 2019 were 1.55 times policyholder surplus compared to 1.67 at year-end 2018. Net premiums written were $638.8 billion in 2019, up from $618.3 billion in 2018, and made up 79 percent and 87 percent of policyholder surplus for same two years, respectively.

Reinsurance activity in the last two years has materially contributed to the performance of the net leverage ratio by impacting the net premiums written component. Net reinsurance premiums were $69.7 billion in 2019, up by 16.3 percent from $60 billion in 2018, when the level had dropped sharply from $84.1 billion in 2017. The annual decline in net reinsurance premiums in 2018 alone boosted the average growth in total net premiums written to 4.2 percent each year since 2010. When excluding 2018, the annual growth rate in net premiums written would have averaged 3.5 percent over the decade.

At year-end 2019, the ratio of loss and loss adjustment reserves to policyholder surplus was 0.79, decreasing from 0.87 at year-end 2018. Loss and loss adjustment reserves were $680.9 billion and $661.3 billion in 2019 and 2018, respectively. The ratio has averaged less than one annually over the last 10 years, demonstrating that the P&C sector in the aggregate has remained consistent in its estimation of reserves to cover potential liabilities arising from claims made on policies underwritten.

ii. Asset Base

Underlying the robustness of the P&C sector's capital position has been the growth and composition of asset holdings. Total assets of $2.2 trillion as of year-end 2019—rising by nearly nine percent from the previous year-end—have been growing at an annual rate of four percent on average over the last decade, helping the sector maintain a stable capital base relative to the risk exposure from its asset holdings. About 39.5 percent in policyholder surplus was available to cover the sector's asset holdings exposed to risk[578] as of year-end 2019, improving slightly from

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[576] Agents' balances refer to net admitted uncollected premiums and agents' balances in the course of collection, including direct and group billed uncollected premiums; amounts collected but not yet remitted to home office; accident and health premiums due and unpaid; life insurance premiums and annuity considerations uncollected on in-force business (less premiums on reinsurance ceded and less loading); and title insurance premiums and fees receivable. Reinsurance balances payable are not deducted.

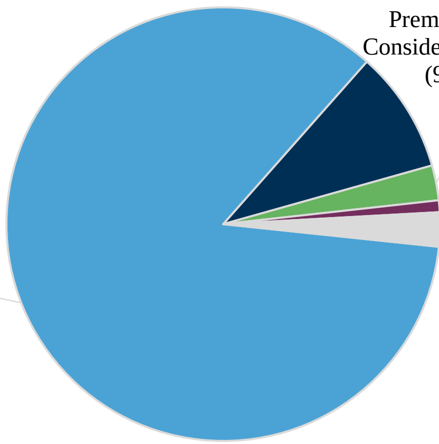
[577] All of the ratios experienced an uptick in 2018 due to a decline in surplus combined with heightened exposures.

[578] Assets exposed to risk refers to total assets less cash.

37.6 percent as of year-end 2018. In each of the last 10 years, the P&C sector has maintained nearly 38 percent in excess capital on average to meet unexpected losses, contributing to its financial wherewithal.

The configuration of the sector's asset portfolio has remained virtually constant for the last decade, with the bulk of holdings allocated to cash and investments. Figure 39 illustrates the composition of the P&C sector's assets at year-end 2019, which largely mirrors the distribution of assets in previous years.

Figure 39: 2019 Composition of Asset Portfolio for P&C Sector



Source: S&P Global

Averaging at nearly 85 percent annually, cash and invested assets have largely made up total assets, followed by premiums and considerations due with nearly nine percent on average each year over the decade. As Figure 40 below details, the P&C sector has allocated nearly 60 percent to bonds on average annually in recent years, while common stock holdings have averaged in excess of 23 percent of the sector's investment portfolio.

Figure 40: Composition of P&C Sector's Investment Portfolio

	2015	2016	2017	2018	2019
Bonds	62.1%	61.3%	57.9%	60.3%	57.0%
Preferred Stocks	0.9%	0.7%	0.3%	0.3%	0.8%
Common Stocks	21.1%	21.7%	24.2%	22.9%	25.9%
Mortgage Loans	0.8%	0.9%	1.0%	1.2%	1.2%
Real Estate	0.8%	0.8%	0.8%	0.8%	0.7%
Contract Loans	0.0%	0.0%	0.0%	0.0%	0.0%
Derivatives	0.0%	0.0%	0.0%	0.0%	0.0%
Cash & Short Term Investments	5.8%	5.8%	6.9%	6.0%	6.2%
Other Investments	8.5%	8.7%	8.9%	8.5%	8.2%
Total Cash & Invested Assets	**100%**	**100%**	**100%**	**100%**	**100%**

Source: S&P Global

This composition of investment holdings aligns with the risk management practices employed by the P&C sector to address both the shorter-term obligations of some P&C lines (such as auto liability) as well as longer-tailed liabilities (such as medical malpractice and workers' compensation). Annual growth in total bonds has been firm, averaging 2.1 percent in the last decade, whereas common stocks have grown by 9.2 percent on average. Total bonds, both short-term and long-term combined, were $1.1 trillion at year-end 2019, up by nearly five percent from the previous year-end. Of the entire bond portfolio, at least 93 percent has consistently been comprised of long-term bonds in each of the last five years, while close to 72 percent had durations ranging between one and 10 years on average.

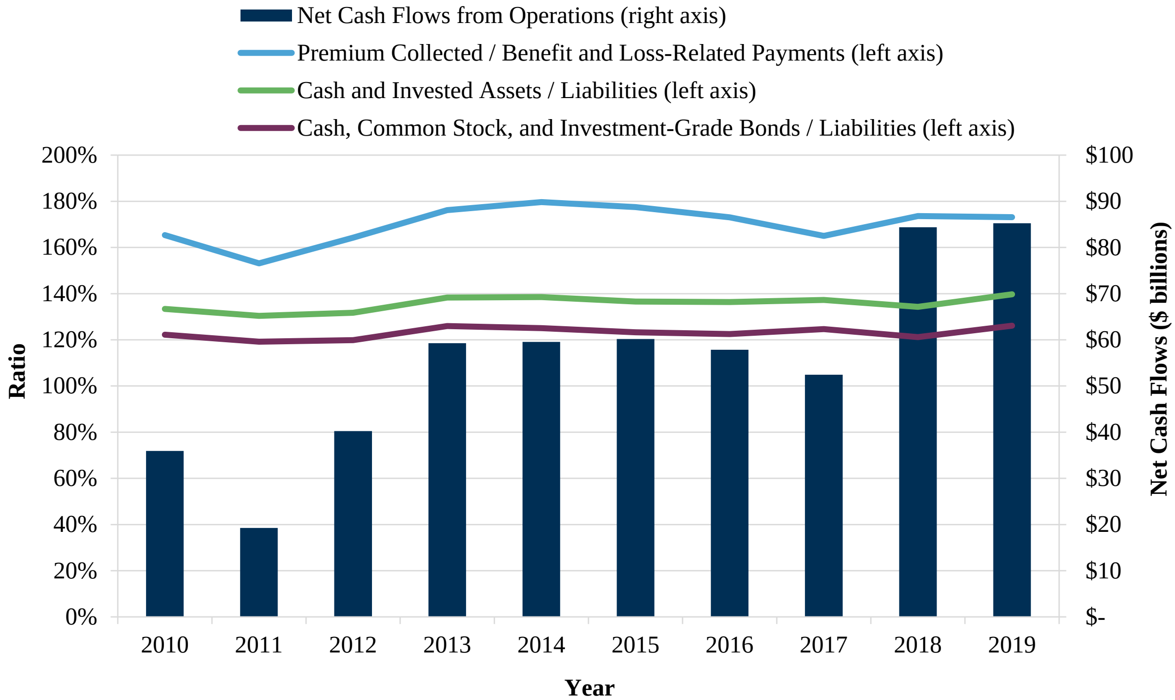
The P&C sector has been allocating an increasing share of its bond holdings to private placements over the last 10 years. Private placements comprised 16.3 percent of the aggregate bond portfolio at year-end 2019, climbing from 15.1 percent at year-end 2018 and by more than 10 percentage points from year-end 2010. Despite the growth in privately-issued bond holdings, publicly-traded bonds still comprised almost 89 percent of total bonds on average annually over the past decade—but only averaged 86 percent in the most recent five years. In addition to the shift between public and private bond holdings, the share of the sector's investment portfolio allocated to equities reached 25.9 percent in 2019, a decade high and more than 10 percentage points greater than in 2010. Recently, common stock investments were $483.7 billion and $389.9 billion in 2019 and 2018, respectively. Between year-end 2011 and year-end 2019, bond holdings as a share of cash and investments declined by more than 10 percentage points, while common stock holdings rose in tandem by nearly nine percentage points. Figure 40 displays this trend between 2015 and 2019.

Though still a small percentage of total cash and invested assets, mortgage loans have shown consistent year-over-year growth since 2011. Total mortgage loans were $22.1 billion as of year-end 2019, accounting for 1.2 percent of cash and invested assets but 5.3 times the value of mortgage holdings of $4.2 billion at year-end 2010. As with the L&H sector, the P&C sector has been gradually repositioning its investment holdings, which can be attributed to both market performance and the reach for yield. The effects of a prolonged low interest rate environment are apparent, driving insurers to move away from more traditional bond and equity holdings and increasingly toward such investments as private placements and mortgage loans where additional spread can be earned.

iii. Liquidity

Over the past decade, against the backdrop of sustained economic growth and prior to the onset of COVID-19, the P&C sector has been able to manage its liquidity effectively in meeting the day-to-day needs of its business operations. With benefits and loss-related payments consuming significantly less of total net premiums collected annually, the sector has reported positive net cash flows from operations in each of the last 10 years. Recent net cash flows from operations were $85.3 billion and $84.4 billion in 2019 and 2018, respectively. On a cash basis, net premium receipts have averaged an annual growth rate of 4.1 percent, covering benefit and loss-related payments by 1.7 times on average each year since 2010. As Figure 41 illustrates, premiums collected, net of reinsurance, exceeded benefit and loss-related payments by 73 percent and 74 percent for the years ending 2019 and 2018, respectively. Moreover, the current liquidity ratio[579] attained a decade high of 144 percent in 2019 as did the ratio of cash, common stock, and investment-grade bonds to liabilities.[580]

Figure 41: A View of P&C Sector Liquidity



Source: S&P Global

Positive year-over-year net cash flows from operations have contributed to an average annual growth rate of 4.1 percent in cash and invested assets over the last 10 years, expanding the P&C sector's financial flexibility. Liquid assets (the numerator of the current liquidity ratio) have been at least 2.1 times the level of aggregate policyholder surplus each year since 2010.

Certain concentrations of risk within the sector's investment portfolio have evolved since year-end 2010, likely indicative of the P&C sector's response to a sustained low interest rate environment since 2008 and the search for higher yields to address tight margins, as was observed for the L&H sector. Within the bond portfolio, private-placement bonds have been taking up a larger share of aggregate surplus over the last 10 years. The percentage stood at a high of 21.5 at year-end 2019, more than doubling from 10 percent at year-end 2010. Annual

[579] Current liquidity is used to determine the amount of liabilities that can be covered with liquid assets. It is calculated as follows: the numerator equals net admitted cash and investments less the sum of net admitted first lien real estate loans, net admitted real estate loans less first liens, net admitted occupied properties, net admitted income generating properties, net admitted properties held for sale, affiliated long-term bonds, and affiliated preferred stock; the denominator equals total liabilities less ceded reinsurance premiums payable.

[580] This liquidity analysis is based on cash inflows and outflows—premiums that were collected as well as benefit and loss-related payments made during the year. The combined ratio referenced in the income statement discussion refers to premiums earned and written, and captures dividends and other expenses. These include commissions, salaries and benefits, administrative expenses, and taxes, in addition to incurred loss and loss adjustment expenses.

growth in private placements averaged 14.7 percent over the past decade, while annual growth in publicly-traded bonds averaged 0.7 percent.

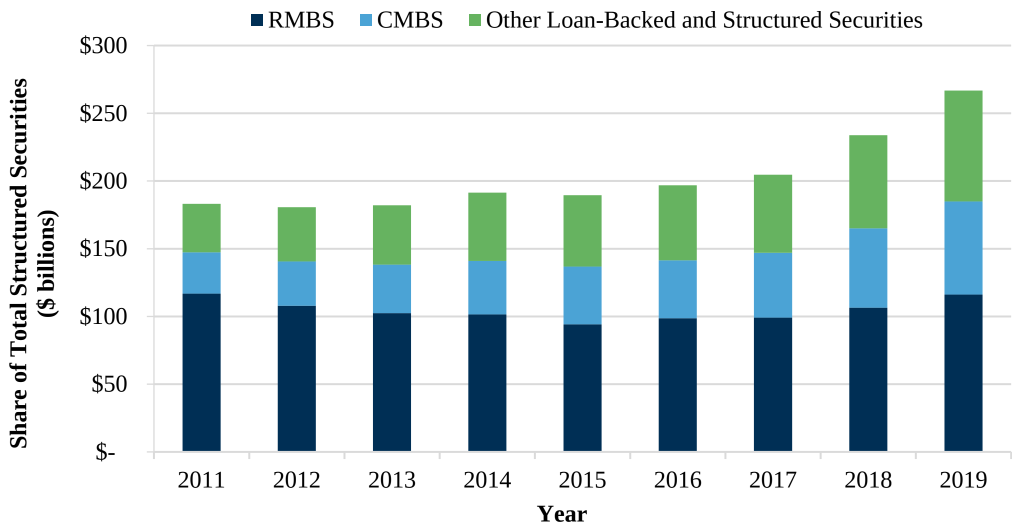
About 30 percent of the P&C sector's bond portfolio has consistently been comprised of securities issued by U.S. federal, state, and local governments. More than two-thirds of all bond holdings have consisted of some form of revenue bond investments, including special revenue and industrial revenue bonds on average in each of the last 10 years. While revenue bonds can often be issued by local or municipal governments, the debt service is typically paid by a private company. Thus, the credit risk exposure for these types of bond holdings is heightened for the bondholder, i.e., repayment becomes a risk exposure to the insurer if the entity responsible for repayment becomes financially distressed. At year-end 2019, revenue bond holdings were $784.9 billion, rising from $744.4 billion at year-end 2018. Revenue bond investments by the P&C sector grew at a yearly rate of 2.8 percent on average in the last decade, while government bond holdings averaged 0.2 percent.

In addition, there has been a continued rise in the P&C sector's holdings of structured securities, with considerable growth reported in the last two years. As noted above with respect to L&H sector holdings, structured securities can be exposed to credit, market, and interest rate risks and thus are susceptible to credit pressures and interest rate movements, especially in times of stress.[581] Total structured securities held by the P&C sector were $266.8 billion in 2019, up from $233.8 and $204.7 billion in 2018 and 2017, respectively. Although MBS have grown steadily since 2016, growth in other loan-backed and structured securities have outpaced MBS holdings. MBS holdings have fallen from nearly 81 percent of the structured securities portfolio in 2011 to 69.3 percent in 2019. By contrast, other loan-backed and structured securities increased by at least a multiple of 1.5 both in value and composition—$81.9 billion and 30.7 percent of total structured securities in 2019 compared to $35.8 billion and 19.5 percent in 2011. Figure 42 illustrates the trends in the P&C sector's portfolio of MBS and other structured holdings since 2011.[582]

[581] The degree and scope of the risks associated with these types of securities differ, depending on their structure. They are structured in ways to meet investors' risk appetites and can range from pass-through securities to complex tranching arrangements.

[582] The collection of the data on structured securities by S&P Global differed in 2010 and previous years so the analysis only focuses on 2011 through 2019 in order to maintain data consistency.

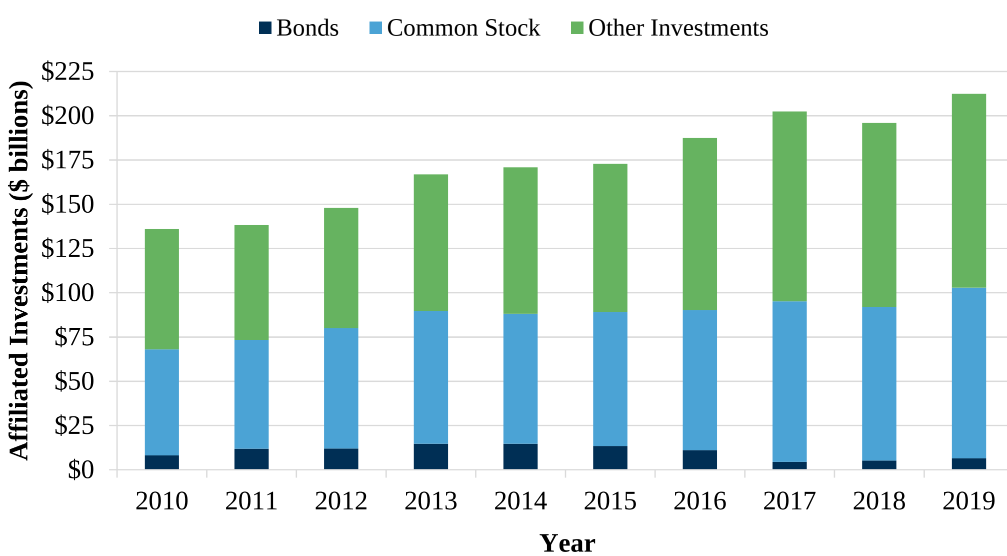
Figure 42: Shift in P&C Sector Structured Securities Holdings



Source: S&P Global

With the exception of 2018, the P&C sector has shown positive year-over-year growth in affiliated holdings over the past decade, exposing the sector to another source of liquidity risk. In particular, the interconnectedness of these types of investments has implications for the holder. The P&C sector held affiliated investments of $212.4 billion and $195.9 billion in 2019 and 2018, respectively. Affiliated cash and investments constituted 11.4 percent of total cash and invested assets at year-end 2019, not significantly changed from 11.5 percent at year-end 2018 but up from 10.3 percent of cash and investments at year-end 2010. Figure 43 shows the growth and shift in the composition of affiliated investments over the past decade.

Figure 43: P&C Sector's Affiliated Exposures



Source: S&P Global

The “other investments” in Figure 43 include affiliated preferred stock, mortgage loans, and cash and invested assets in addition to other types of affiliated investments such as surplus notes, limited partnerships, joint ventures, hedge funds, private equity funds, and direct investments. These types of investments have come to dominate affiliated holdings, close to doubling their share of total affiliated investments from year-end 2010. Additionally, in the last five years, affiliated preferred stock, mortgage loans, and cash and invested assets have averaged only 1.4 percent of all other affiliated investments.

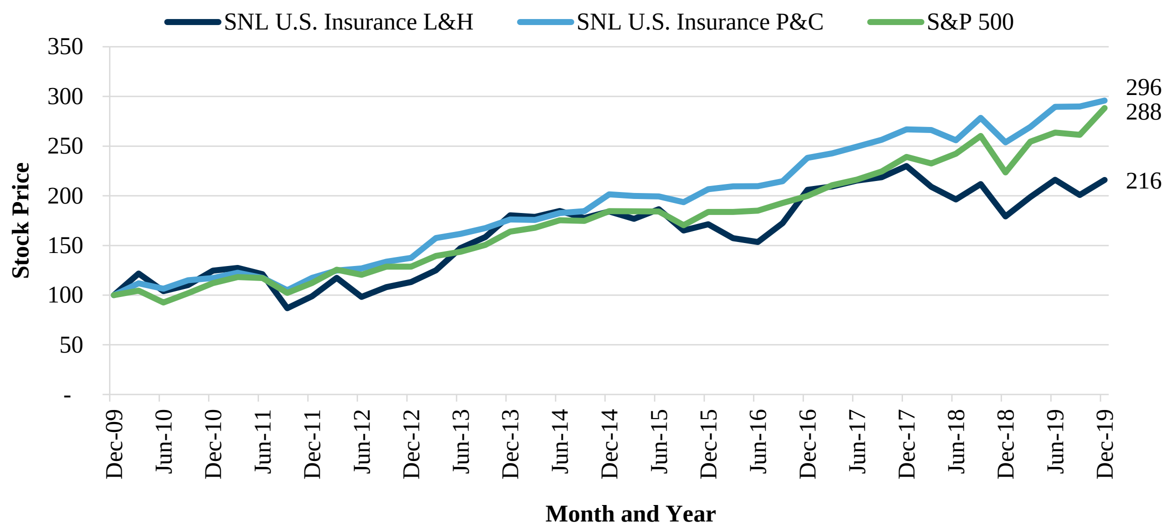
Several factors mitigate the P&C sector’s potential vulnerability to risk exposures in the event of worsening market conditions. First, high quality bonds continue to make up the bulk of the sector’s portfolio of fixed-income securities, including MBS. Investment-grade bonds have averaged 96 percent of the P&C sector’s bond portfolio and nearly 64 percent of cash and invested assets annually over the last 10 years. The ratio of investment-grade bonds to policyholder surplus has been at a 1.44 multiple on average each year, illustrating the sector’s quality of capital. Second, bond holdings at or near default have declined significantly in the last decade, from a high of $11.5 billion and 1.7 percent of policyholder surplus to $5.7 billion and 0.66 percent at year-end 2019. Third, the P&C sector has consistently maintained close to three-quarters of its portfolio of MBS and other structured securities in publicly-traded holdings, which tend to be relatively liquid and subject to less market volatility. Fourth, when examining the ratio of affiliated holdings to policyholder surplus, the increase in affiliated investments has remained relatively steady. Affiliated cash and investments represented 24.5 percent of policyholder surplus at year-end 2019, compared to 25.9 percent at year-end 2018 and 24.2 percent of policyholder surplus at year-end 2010. Moreover, unaffiliated bond holdings have accounted for more than 68 percent of the unaffiliated investment portfolio on average each year, while unaffiliated common stocks have averaged just over 18 percent annually. Finally, unaffiliated cash and invested assets have been at least twice the level of policyholder surplus each year since 2010. All of these factors help to mitigate concerns of the sector’s potential exposures to liquidity risk.

4. Market Performance

Stock price movements are indicators of investors’ perceptions about the recent financial results and future financial prospects of a firm, an industry sector, or in a broader context, the general economy. The discussion that follows considers the price performance of stock indices for the L&H and P&C sectors, as compared to the performance of the Standard and Poor’s 500 Index (S&P 500).

Over the 10-year period from December 31, 2009 through the end of 2019, the P&C sector performed essentially in line with the S&P 500, with a long period of outperformance that began in mid-2014 and narrowed over 2019 as shown in Figure 44. On the other hand, the L&H sector stock index underperformed the S&P 500 during this period. The L&H sector’s performance has been more volatile, both underperforming and outperforming the S&P 500 since the 2008 financial crisis; however, the sector has underperformed since the end of 2017. Since the end of 2009, the P&C stock index gained 196 percent and the L&H stock index increased 116 percent; over the same period, the S&P 500 gained 188 percent. In the short-term, for 2019 the P&C stock index significantly underperformed the S&P 500, appreciating by 17 percent versus a 29 percent gain for the S&P 500, and the L&H stock index slightly underperformed the S&P 500, gaining 21 percent (see Figure 44).

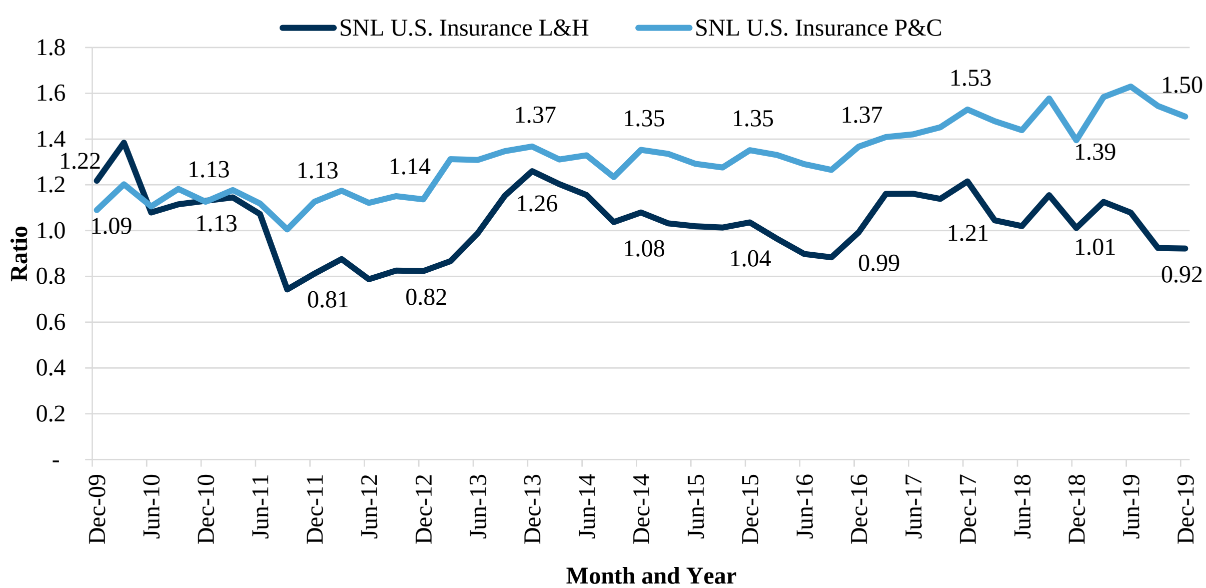
Figure 44: Insurance Industry Stock Price vs. S&P 500



Source: S&P Global

The price-to-book value multiple, which compares on a per share basis the market value of a firm to its book value (i.e., reported equity on its balance sheet), is a popular metric by which to measure valuation. If a share of an insurer's stock is selling for less than its book value per share, the market is valuing the firm at less than its assets minus its liabilities (net worth); the opposite is true if the stock is trading at a premium to its book value. Figure 45 compares L&H and P&C sector price-to-book value ratios from year-end 2009 through year-end 2019.

Figure 45: Insurer Price/Book Value Ratios



Source: S&P Global

B. Capital Markets Activity

The U.S. domestic insurance industry continued to access the equity market for new capital throughout 2019. During the year, 16 insurance-related public equity offerings were completed, with an aggregate value of $7.4 billion.[583] This level of activity was slightly lower in terms of both the number of deals and the aggregate value compared to 2018, when there were 18 offerings valued at $11.5 billion. Of the offerings in 2019, five transactions—valued at $259 million—were initial public offerings (IPOs), marking an increase in number of transactions, but a significant decrease in aggregate value from the two IPOs valued at $3.3 billion in 2018. The largest single public equity offering by an insurer in late 2019 was the $3.1 billion sale of AXA Group's remaining stake in Equitable Holdings, Inc.; the company also conducted two offerings totaling $1.9 billion in common stock earlier in the year.

Debt markets continued to be the preferred source of additional capital for insurers in 2019, consistent with the gradual decline in interest rates over the first nine months of the year, followed by a moderate increase in the fourth quarter. During the year, U.S. insurers raised an aggregate $105.0 billion in 159 separate debt offerings.[584] Debt issuance increased notably from the $72.9 billion raised in 118 offerings in 2018. In the aggregate, the funds raised by the top five issuers of debt accounted for 65 percent of the 2019 industry total.

1. Mergers & Acquisitions of U.S. Insurers

In 2019, there were 52 merger and acquisition (M&A) transactions announced involving U.S. insurers, with a total value of $52.0 billion.[585] The number of deals was significantly less than the 90 transactions in 2018, but the aggregate value of the 2019 deals nearly doubled the $27.6 billion in 2018. The aggregate value of 2019 M&A activity was somewhat higher than other recent historical figures. The largest transaction in 2019 was the March announcement of the acquisition of Wellcare Health Plans, Inc. by Centene Corp., a deal valued at approximately $17 billion. The second-largest deal announced in 2019 was the acquisition of Cigna Corporation's group life and disability insurance operations by New York Life Insurance Company, valued at $6.3 billion. Other notable deals announced in 2019 included the $3.1 billion acquisition of Privilege Underwriters, Inc. by Tokio Marine Holdings, Inc.

[583] All data in this section with respect to capital markets and mergers and acquisitions are sourced from S&P Global, as collected and calculated by FIO. The data include Bermuda-based holding companies for which primary insurance underwriting subsidiaries are domiciled in the United States.

[584] Foreign currency-denominated transactions converted to U.S. dollars by S&P Global.

[585] Transactions were announced between January 1, 2019 and December 31, 2019, and were either completed during the year or remained pending at the end of 2019. S&P Global did not report transaction values for all deals.

2. Alternative Risk Transfer Insurance Products

Alternative risk transfer (ART) financial instruments include catastrophe bonds ("cat bonds"), collateralized reinsurance, industry loss warranties (ILWs), reinsurance sidecars, longevity swaps, catastrophe futures, and other ILS.[586] By using the capital and derivatives markets to attract investors from outside the insurance industry, ART markets increase the capacity for reinsurance and retrocession, and thereby increase the U.S. insurance industry's ability to supply insurance.

The outstanding amount of cat bonds and other ILS securities totals $41.5 billion.[587] The entire ART market totals $91 billion.[588] Over the past year, the composition of the ART market has changed slightly: the ILS segment has continued to grow while collateralized reinsurance has contracted. A January 2020 market report opined that "[r]ecent uncertainty in loss development is resulting in cedants retaining more collateral over longer periods of time than in the past. This trapped collateral creates a drag on investor returns and ultimately raises the cost of the alternative capital being provided."[589] Risk transfers through sidecars and industry loss warrantees are holding steady. While ILW trading volume rose materially, outstanding amounts have not.[590]

One of the more noteworthy developments over the past year is the continuing growth of mortgage insurance risk as a share of the total cat bond market. Mortgage insurance now constitutes 23 percent of total outstanding issuance compared to 18 percent and 12 percent, respectively, for international and U.S. multi-peril. While 2020 issuance is lagging behind 2019, it is nonetheless set to exceed 2018.[591] Another development has been the strong rebound in overall ILS issuance in 2020. As of July 28, 2020, there were $10 billion in new issues of ILS compared to $10.3 billion for all of 2019.[592]

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[586] For more detailed descriptions of ART instruments, see FIO, *2018 Annual Report*, 97-102.

[587] Artemis, *Q2 2020 Quarterly Catastrophe Bond and ILS Market Report* (June 2020), 17, https://www.artemis.bm/wp-content/uploads/2020/06/q2-2020-cat-bond-ils-market-report.pdf.

[588] Aon, *Reinsurance Market Outlook* (July 10, 2020), 3, http://thoughtleadership.aonbenfield.com/Documents/20200710-re-analytics-reinsurance-market-outlook-junejuly.pdf (June/July *2020 Reinsurance Market Outlook*).

[589] Aon, *Reinsurance Market Outlook* (January 8, 2020), 7, http://thoughtleadership.aonbenfield.com/Documents/20200108-re-analytics-reinsurance-market-outlook-jan.pdf.

[590] "In addition, a lot of activity has been seen in the industry lost warranty (ILW) market, given the more limited availability of ultimate net loss coverage." Aon, *June/July 2020 Reinsurance Market Outlook*, 6.

[591] FIO calculations using Artemis Deal Directory, https://www.artemis.bm/deal-directory/.

[592] FIO calculations using Artemis Deal Directory, https://www.artemis.bm/deal-directory/.

C. International Insurance Marketplace Overview

The United States remained the world's largest single-country insurance market in 2019, with a 29 percent market share of global direct premiums written (see Figure 46).[593] This market share increased slightly (by approximately 50 basis points) compared to 2018, but represents a nearly two percentage point increase over 2014. When viewed as a single market, the combined share of the EU (including the United Kingdom) of global direct premiums written (29 percent) is closely comparable to the market share of the United States. China remained the second-largest single-country insurance market, with 11 percent of global direct premiums written. Globally, direct premiums written increased by 2.9 percent in real terms (adjusted for inflation) in 2019, led by solid growth in non-life premiums in advanced economies.[594] Growth in global non-life premiums of 3.5 percent outpaced the 2.2 percent increase in life premiums and the 2.5 percent growth in global GDP in 2019. [595] Although life premium growth rebounded nicely from the nearly flat comparison in 2018, it still lagged the growth in global GDP.

Consistent with the past several years, emerging markets exhibited a considerably greater rate of premium growth than advanced markets, in total and in both the life and non-life sectors. The improvement in growth in global life premiums was driven mainly by a 5.6 percent gain in emerging economies that reversed the 2.0 percent drop experienced in 2018; growth in life premiums in advanced economies also strengthened to 1.3 percent in 2019, following less than one percent growth in 2018.

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[593] Swiss Re sigma, *World Insurance: Riding Out the 2020 Pandemic Storm* (July 9, 2020), https://www.swissre.com/institute/research/sigma-research/sigma-2020-04.html. Swiss Re sigma examines insurance and macroeconomic data from 147 countries sourced through Swiss Re Institute. Growth rates are presented in real terms, i.e., adjusted for inflation as measured by local consumer price indices. Swiss Re sigma separates the insurance industry into "life" and "non-life" sectors according to standard EU and OECD conventions; under these conventions, the "non-life" sector includes health insurance.

[594] *See* Swiss Re sigma, *World Insurance*, 8.

[595] Swiss Re sigma, *World Insurance*, 2-3.

Figure 46: Gross Premiums Written and Market Share for Top 20 Countries and World Total, 2014 vs. 2019[596]

2014 Rank	2019 Rank	Country	2014 Premium Volume ($ millions)	2014 World Market Share (%)	2019 Premium Volume ($ millions)	2019 World Market Share (%)	Change in World Market Share (%)
1	1	United States	$ 1,280,443	26.8%	$ 1,548,123	28.8%	7.4%
4	2	PR China	328,439	6.9%	617,399	11.5%	66.9%
2	3	Japan	479,762	10.0%	459,347	8.5%	(15.0%)
3	4	United Kingdom	351,266	7.4%	366,243	6.8%	(7.4%)
5	5	France	270,520	5.7%	262,283	4.9%	(13.9%)
6	6	Germany	254,644	5.3%	243,852	4.5%	(15.0%)
8	7	South Korea	159,515	3.3%	174,520	3.2%	(2.8%)
7	8	Italy	194,735	4.1%	167,838	3.1%	(23.5%)
9	9	Canada	125,373	2.6%	133,157	2.5%	(5.7%)
11	10	Taiwan	95,622	2.0%	117,823	2.2%	9.4%
15	11	India	69,889	1.5%	106,307	2.0%	35.1%
10	12	Netherlands	95,956	2.0%	83,657	1.6%	(22.6%)
13	13	Brazil	85,444	1.8%	74,106	1.4%	(23.0%)
17	14	Ireland	53,954	1.1%	73,347	1.4%	20.7%
19	15	Hong Kong	41,038	0.9%	72,253	1.3%	56.4%
14	16	Spain	71,473	1.5%	71,002	1.3%	(11.8%)
12	17	Australia	88,075	1.8%	68,690	1.3%	(30.7%)
16	18	Switzerland	65,211	1.4%	58,953	1.1%	(19.7%)
18	19	South Africa	49,159	1.0%	47,093	0.9%	(14.9%)
22	20	Luxembourg	35,280	0.7%	45,467	0.8%	14.4%
		World Total	**$ 4,778,248**	**100%**	**$ 5,380,600**	**100%**	

Source: Swiss Re sigma, *World Insurance*

Insurance indices in major insurance markets recorded strong gains in 2019 and generally followed trends of their respective broader benchmarks. Among the indices FIO tracked (see Figure 47), S&P Global's China Insurance composite was the best performing, increasing 30 percent in 2019. The strong performance of China insurance equities could be a result of the increasing demand for P&C and life insurance products as a result of rising incomes and demographic trends in that country.[597] Chinese-domiciled insurers have attracted investor capital due to China's fast-growing insurance market and the potential of being the largest insurance market in the world by the mid-2030s.[598] The SNL U.S. Insurance Life & Health Index finished

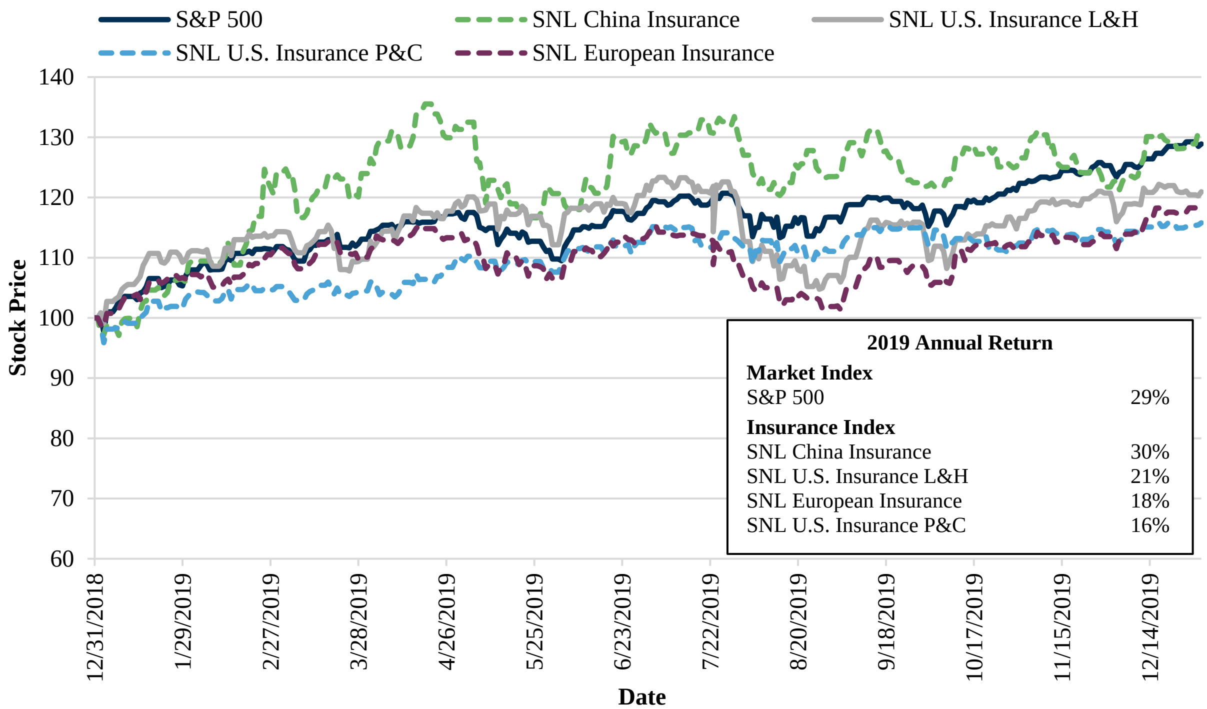
[596] In its reported 2019 global insurance totals, Swiss Re Institute included for the first time health insurance premiums ($912 billion) in the U.S. figures to align with practices in other regions. To maintain a consistent sample for a 5-year comparison this value was removed from both the 2019 U.S. and 2019 world total amounts.

[597] Reshma Kapadia, "Chinese Insurer Ping An Is Betting Big on Tech. Here's How That Will Boost Its Stock," *Barron's*, January 3, 2020, https://www.barrons.com/articles/chinese-insurer-ping-an-is-betting-big-on-tech-heres-how-that-will-boost-its-stock-51578076483.

[598] *See* Swiss Re sigma, *World Insurance*, 10.

up 21 percent for the year and followed the strong rebound of U.S. equities in 2019.[599] Historically, the performance of U.S. life insurance stocks have been strongly correlated with interest rates and equity market returns.[600] The SNL U.S. Insurance P&C Index underperformed relative to most other insurance indices in 2019, although still increased 16 percent for the year. U.S. P&C insurance stocks are typically more a defensive group in the insurance industry and tend to outperform L&H insurers during periods of equity market stress and elevated credit defaults.

Figure 47: Performance of Global Insurance and Reinsurance Indices as compared to Broader Market Average (S&P 500)



Source: S&P Global

D. Conclusion

The COVID-19 pandemic likely will continue to affect the insurance industry through the remainder of 2020, as discussed in greater detail above in Section II. FIO will continue to monitor the effects of the pandemic, civil disruptions, natural hazards, weather-related events like the wildfires on the West Coast, and other relevant developments on the U.S. insurance industry, policyholders, and consumers. Full-year 2020 insurance industry results will be reviewed by FIO in its 2021 Annual Report.

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[599] S&P Global. In 2018, the SNL U.S. Insurance L&H Index and the S&P 500 declined 22 percent and six percent, respectively.

[600] Joel Salomon, "Understanding the Interest Rate Sensitivity of Insurance Companies," *Factset*, January 28, 2020, https://insight.factset.com/understanding-the-interest-rate-sensitivity-of-insurance-companies.