



L'Attuario nella gestione dei rischi
per le imprese e per la collettività

La solvibilità' ed il ruolo dell'attuario L'esperienza degli Stati Uniti

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16 giugno 2016

About the NAIC (www.naic.org)

- NAIC = National Association of Insurance Commissioners (NAIC)
- Created in 1871 by state insurance regulators to facilitate regulation of multi-state insurers
- Standard-setting and regulatory support organization governed by the chief insurance regulators of the United States
- Represents the collective views of state insurance regulators domestically and internationally
- Non-profit organization with approx. 500 employees
- Activities and Products:
 - Financial Regulatory Services (*uniform statutory accounting & reporting requirements; \$8.3+ trillion in insurer assets monitored*)
 - Market Regulatory Services (*producer licensing standards, consumer assistance*)
 - Actuarial, Statistical and Data Collection Services (*world leading centralized data repository and analysis for all states on insurers' financial health*)
 - Center for Insurance Policy and Research provides expert resources for state and federal regulators, consumers, media and industry
- Main office in Kansas City, Missouri. Offices also in New York ([Capital Markets & Investment Analysis Office](#)) and Washington, D.C. ([Government Relations Office](#))

Members of the NAIC



- 56 members:
 - 50 States and the District of Columbia
 - 5 U.S. territories (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands)

Team USA

- US representation at the IAIS: USA FRB / USA FIO / NAIC & 56 jurisdictions
 - ❑ The Federal Reserve Board (FRB or “The Feds”) is the ultimate regulator for:
 - Systemically important insurance companies, as designated by the FSOC (Financial Stability Oversight Council): American International Group, Inc. and Prudential Financial, Inc.
 - Insurance companies that own a bank or a thrift: at present 12 companies
 - On June 3rd, 2016, publication for comments of conceptual frameworks for capital standards for the two types of insurance company + enhanced prudential standards for systemically important insurers for liquidity, corporate governance and risk management (comments due August 2nd)
source: <https://www.federalreserve.gov/newsevents/press/bcreg/20160603a.htm>
 - ❑ The Federal Insurance Office (FIO)
 - Established by the federal Dodd-Frank Act in 2010 within the U.S. Department of the Treasury
 - Not a regulator, but it monitors all aspects of the insurance sector for systemic risks to the broader financial system
- Main joint activities of Team USA:
 - ComFrame for supervision of Internationally Active Insurance Groups (IAIGs)
 - International Capital Standard (ICS)

US Insurance Market – 10 times Italy



2014 Premium Volume -- Worldwide

Rank	Jurisdiction	Premium Volume (In Millions US \$)	Market Share	Rank	Jurisdiction	Premium Volume (In Millions US \$)	Market Share
1	United States	\$1,951,332	35.81%	26	Singapore	\$27,000	0.50%
2	Japan	\$479,762	8.80%	27	Russia	\$25,738	0.47%
3	United Kingdom	\$351,266	6.45%	28	Norway	\$25,082	0.46%
4	China	\$328,439	6.03%	29	Austria	\$22,794	0.42%
5	France	\$270,520	4.96%	30	Venezuela	\$22,665	0.42%
6	Germany	\$254,644	4.67%	31	Thailand	\$21,696	0.40%
7	Italy	\$194,735	3.57%	32	Portugal	\$19,151	0.35%
8	South Korea	\$159,515	2.93%	33	Poland	\$17,235	0.32%
9	Canada	\$125,373	2.30%	34	Malaysia	\$15,864	0.29%
10	Netherlands	\$95,956	1.76%	35	Argentina	\$15,845	0.29%
11	Taiwan	\$95,622	1.75%	36	Indonesia	\$15,307	0.28%
12	Australia	\$88,075	1.62%	37	Israel	\$14,344	0.26%
13	Brazil	\$85,444	1.57%	38	New Zealand	\$11,634	0.21%
14	Spain	\$71,473	1.31%	39	Turkey	\$11,595	0.21%
15	India	\$69,889	1.28%	40	Chile	\$10,915	0.20%
16	Switzerland	\$65,211	1.20%	41			
17	Ireland	\$53,954	0.99%	42			
18	South Africa	\$49,159	0.90%	43			
19	Hong Kong	\$41,038	0.75%	44			
20	Belgium	\$39,388	0.72%	45			
21	Sweden	\$38,735	0.71%	46			
22	Luxembourg	\$35,280	0.65%	47			
23	Denmark	\$34,308	0.63%	48			
24	Finland	\$29,625	0.54%	49			
25	Mexico	\$27,242	0.50%	50			
	All the Rest	\$72,594	1.3%				
	Worldwide Total	\$5,449,137	100.00%				

USA has:

- ✓ Circa 6,000 insurance companies
- ✓ Two SIFIs
- ✓ Three G-SIFIs (out of nine as for Nov 2015 designation by FSB)
- ✓ 30% of the IAIGs

OVERVIEW OF THE UNITED STATES INSURANCE MARKET 2014

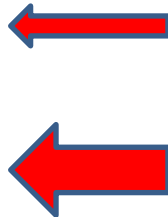
U.S. Premiums by NAIC Financial Statement Type

Data Year	Property & Casualty*	Life	Health**	Fraternal Organizations	Title	Total
2014	\$567,105,540,757	\$737,379,299,501	\$664,294,992,550	\$10,458,718,577	\$11,060,055,329	\$1,990,298,606,714

California, Texas, NY and Florida are the largest in the US

2014 Premium Volume -- Worldwide (An Alternative Look)

Rank	Jurisdiction	Premium Volume (In Millions US \$)	Market Share	Rank	Jurisdiction	Premium Volume (In Millions US \$)	Market Share
1	Japan	\$479,762	8.80%	26	Georgia GA	\$49,412	0.91%
2	United Kingdom	\$351,266	6.45%	27	South Africa	\$49,159	0.90%
3	China	\$328,439	6.03%	28	Massachusetts MA	\$49,108	0.90%
4	France	\$270,520	4.96%	29	North Carolina NC	\$43,842	0.80%
5	California CA	\$266,859	4.90%	30	Virginia VA	\$41,601	0.76%
6	Germany	\$254,644	4.67%	31	Hong Kong	\$41,038	0.75%
7	Italy	\$194,735	3.57%	32	Belgium	\$39,388	0.72%
8	South Korea	\$159,515	2.93%	33	Washington WA	\$39,339	0.72%
9	Texas TX	\$136,862	2.51%	34	Sweden	\$38,735	0.71%
10	New York NY	\$133,463	2.45%	35	Minnesota MN	\$37,793	0.69%
11	Florida FL	\$127,333	2.34%	36	Tennessee TN	\$36,403	0.67%
12	Canada	\$125,373	2.30%	37	Luxembourg	\$35,280	0.65%
13	Netherlands	\$95,956	1.76%	38	Missouri MO	\$34,630	0.64%
14	Taiwan	\$95,622	1.75%	39	Denmark	\$34,308	0.63%
15	Pennsylvania PA	\$92,434	1.70%	40	Wisconsin WI	\$34,191	0.63%
16	Australia	\$88,075	1.62%	41	Maryland MD	\$32,692	0.60%
17	Brazil	\$85,444	1.57%	42	Indiana IN	\$29,877	0.55%
18	Spain	\$71,473	1.31%	43	Finland	\$29,625	0.54%
19	Illinois IL	\$70,096	1.29%	44	Colorado CO	\$29,389	0.54%
20	India	\$69,889	1.28%	45	Arizona AZ	\$29,144	0.53%
21	Ohio OH	\$68,809	1.26%	46	Louisiana LA	\$27,683	0.51%
22	New Jersey NJ	\$66,380	1.22%	47	Mexico	\$27,242	0.50%
23	Switzerland	\$65,211	1.20%	48	Singapore	\$27,000	0.50%
24	Michigan MI	\$61,470	1.13%	49	Russia	\$25,738	0.47%
25	Ireland	\$53,954	0.99%	50	Norway	\$25,082	0.46%
	All the Rest	\$747,855	13.72%				
	Worldwide Total	\$5,449,137	100.00%				



Sources: NAIC Financial Data Repository, NAIC IID Filings, US residual market mechanisms, health insurers or captives not filing to FDR, and SwissRe Sigma No. 4/2015 for the remainder. (Note, U.S. total does not include deposit-type contract funds.)

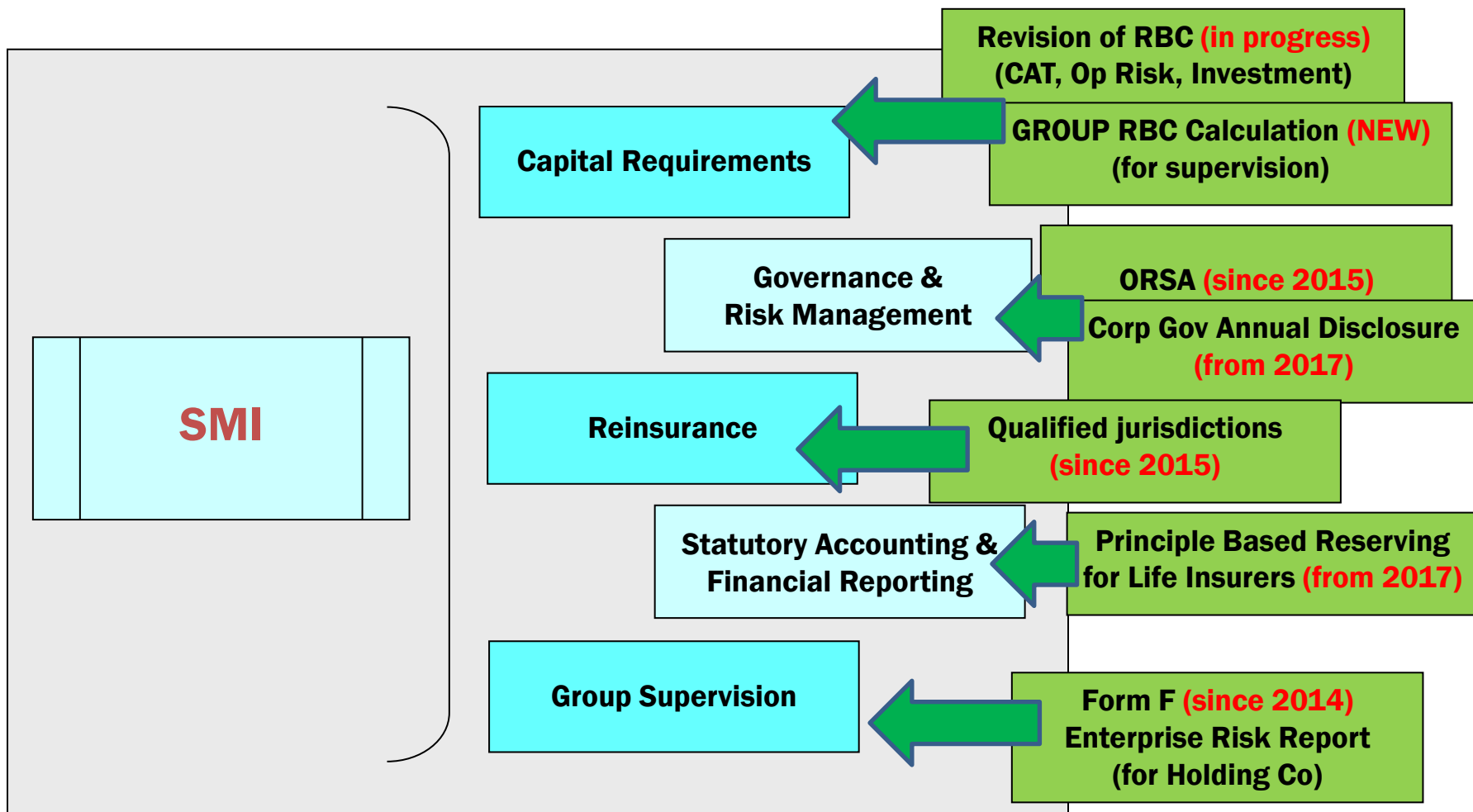
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Source: http://www.naic.org/state_report_cards/report_card_us.pdf

Solvency Monitoring in the USA started in the 1990s

- US regulators have developed a detailed and uniform financial regulatory system subject to continuous improvements since early 1990s
- **NAIC Solvency Policing Agenda in the 1990s**, resulting in:
 - Creation of a **legal entity Risk-Based Capital (RBC)** formula for regulatory capital (for Life, P&C, Health)
 - Codification of Statutory Accounting (SAP)
 - For financial analysis: creation of computer automatic analytical routines for use by regulators (I-SITE)
 - For financial exams: introduction in 2010 of **Risk Focused Examinations** (incorporating governance, ERM and prospective risks)
 - Changes to the Model Audit Rule (#205) requiring an internal audit function for USD 500m + companies (since 2010)
- **NAIC Solvency Modernization Initiative (SMI) launched in 2008** and mostly concluded in 2012 (but few initiatives still in progress):
 - Critical self-review of existing regulations (according to SMI Roadmap)
 - Examine the US impact of international developments
 - Lessons learnt from financial crisis on group supervision
 - Compliance with IAIS' Insurance Core Principles (ICPs) and findings of IMF's Financial Sector Assessment Program (FSAP. Last one: 2014)

Solvency Modernization Initiative – Key Solvency Activities



Sources:

Roadmap: http://www.naic.org/documents/index_smi_roadmap_121231.pdf

Single state adoptions: http://www.naic.org/documents/committees_e_related_smi_dashboard.pdf

Solvency and Role of the Actuary (1)

- US Financial Reporting Requirements (Model Act #205) and US RBC Models (#312 and 315):
 - **Actuaries are utilized in three main processes of evaluation of reserve liabilities:**
 - 1) the annual audit 2) the annual actuarial opinion and 3) the risk-focused examination process
 - 1) The auditor will typically use an actuary to perform an independent review of reserves for the annual audit opinion
 - 2) The insurer must appoint an Appointed Actuary to sign an Annual Statement of Actuarial Opinion on the reasonableness of the reserves and report to the Board of Directors. Requirements remain after PBR comes into effect in 2017
 - 3) State insurance departments are required to have “credentialed” (i.e. Associate or Fellow of CAS or SOA) actuarial resources (either internal or external) to review the actuarial functions of its domestic insurers during financial analysis and examination.
- RBC (Regulatory Capital) submissions for life companies must be accompanied by a statement from the appointed actuary certifying the assumptions used for some of the factors.

Solvency and Role of the Actuary (2)

- US Risk Management Requirements (ORSA #505 and Corporate Governance Annual Disclosure #305):
 - **Principle-based requirements** (i.e. we tell you what to do, but not how to do it)
 - **“Trust-but-verify” supervisory approach by state regulators (i.e. during on-site exams)**
 - No explicit requirements to have Risk Management, Compliance, Actuarial and Internal Audit functions. No required segregated duties (as for ICP7 Corp Gov). [Internal Audit function required by Model Audit Rule for USD 500+ companies]
 - No explicit “Suitability” requirements for Key Persons (as for ICP5)
 - No explicit reference to the role of the actuary but implied by complexity of quantitative requirements in the ORSA (i.e. exposure assessment, stress testing, required risk capital using RBC, rating agency capital or economic capital)
 - No regulatory (pre-)approval of internal capital models (only validation by insurer)
- New FRB’s prudential standards for SIFIs:
 - Must employ both a Chief Risk Officer and Chief Actuary to help ensure that firm-wide risks are properly managed

Solvency and Role of the Actuary (3)

- US Actuarial Profession is very active in promoting best actuarial practices in ERM through:
 - Risk Management Committees:
 - Joint Risk Management Research Team of the Society of Actuaries (for Pension, Life & Health – 24,000 members worldwide), Casualty Actuarial Society (CAS – P&C – 6,700 members) and Canadian Institute of Actuaries (CIA – 3,800 members)
 - ERM / ORSA Committee of the American Academy of Actuarial Science (18,500 members - sets qualification, practice, and professionalism standards for all US actuaries)
 - The Actuarial Standards Board (ASB) of the AAA establishes the Actuarial Standards of Practice (ASOPs) for P&C, Life, Health and Pension actuaries
 - It has its own ERM Committee
 - Two ASOP were adopted in December 2012 for ERM:
ASOP 46 (Risk Evaluation in ERM)
ASOP 47 (Risk Treatment in ERM)
Source: <http://www.actuarialstandardsboard.org/standards-of-practice>

For further questions

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