top issues

An annual report

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The insurance industry in 2015

pwc

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The role of advanced analytics

Customer behavior is a complex subject that affects the insurance industry in fundamental ways, from product development, marketing and distribution to inforce management, financial reporting, and risk management. In 2014, LIMRA and PwC completed an extensive research study on customer behavior.[1] A key finding of this study was that the life insurance industry lags the property and casualty insurance industry (and both lag other industries) in using advanced analytical techniques to better understand customers.

However, the gap is beginning to narrow as more and more insurance companies are realizing the benefits of using advanced analytics for designing products, segmenting markets, developing distribution strategies, and managing inforce business, setting assumptions for financial reporting, and developing metrics for risk management. In fact, a growing number of insurance companies have developed a new area of expertise (or center of excellence – COE) to serve the increasing need for data analysis, predictive analytics, and behavioral simulations.

Although insurers – especially in the life industry – have been behind the curve with advanced analytics, the gap with other industries is starting to narrow.

The mission of this new COE is to work with actuarial, distribution, marketing, underwriting and inforce management areas to address such questions as:

- How do we improve the sales productivity and profitability of our agency force?
- How can we more quickly and accurately identify emerging experiences?
- How should our capital allocation strategy respond to different economic or regulatory changes?

Figure 1

Strategy & growth	Customer & marketing	Sales & distribution	Products, pricing & underwriting	Process & operations	In-force management*	Capital, risk & finance
1. How will changing consumer demographic and socio-economic forces impact demand for our products?	4. Can we do a better job of identifying and valuing our best and worst customers?	7. How should we structure the customer experience through each distribution channel, so as to maximize sales and profits?	10. What is the growth opportunity of our products and services? How does this change under different bundling and pricing scenarios?	13. What operations or technology initiatives will reduce costs without limiting growth?	16. How can we improve policyholder persistency?	19. How should our capital allocation strategy (such as voluntary reserves) respond to different economic or regulatory changes?
2. How are key macro-economic and regulatory changes impacting growth opportunities?	5. How can we best use media and other communications to acquire new customers or deepen relationships with existing customers?	8. What are the implications of refocusing distribution to lower-cost channels?	11. Can we optimize pricing by capturing new health data to apply to our underwriting process?	14. How do we optimize the multi-channel customer service experience for each of our segments?	17. How do we analyze mortality and morbidity results to improve pricing?	20. How do we optimize our portfolio of investments given our strategy and external constraints?
3. Can we grow our business by creating partnerships with asset management firms?	6. What steps can we take to improve customer loyalty?	9. How do we improve the sales productivity and profitability of our agency force?	12. Do our product designs reflect the evolving needs of our customer base?	15. What is the most cost-effective path for managing the flow of policies?	18. How can we more quickly and accurately identify emerging experiences?	

*Including claims & benefits

1 *Dynamic Policyholder Behaviors: A survey and literature review*, Society of Actuaries (March, 2014)

For example, advanced analytics show that a financial advisor who sells a particular type of product more than once to the same customer will have better persistency than a financial advisor who sells a product to a customer just once. In addition, a financial advisor who cross-sells different types of products to the same customer has even better persistency. Finally, a financial advisor who cross-sells different types of products to not only the same customer but also the customer's family has the best persistency.

Another example of how advanced analytics can provide significant insights is simulating how customers select and utilize their insurance products. In recent years, life insurance companies have sold complex products with which they have limited historical experience that give policyholders a variety of options for premium payment, investments, and withdrawals. To complicate the situation further, insurers have sold these products during a prolonged period of steadily declining interest rates and low inflation. Thus, a significant challenge confronting the industry is how customers will behave under different economic conditions.

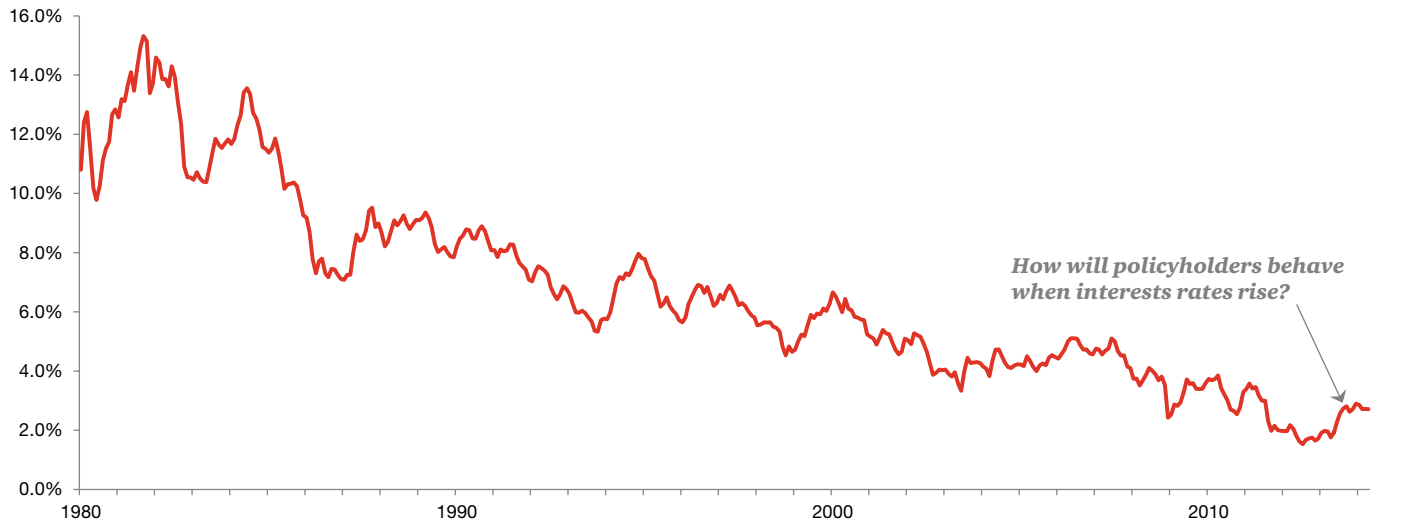
To understand customer behavior requires a change in insurers' mindset. First, it is important to view the customer not just as a male age 40 nonsmoker, but as part of a household. Viewing the customer as part of a household switches the focus to:

- The composition of that household and how it changes over time;
- The life events, such as having children, that take place in the household;
- The household's income, spending, and savings habits;
- The type of assets the household owns and the liabilities it owes; and
- The choices the household makes, both rational and behavioral.

Second, simulating customer behavior under multiple scenarios can help insurers develop a more holistic understanding of the choices policyholders make. They will discover that certain customer behaviors that seem "irrational" may actually reflect their relatively limited view of customers' personal circumstances. For example, classifying a customer's actions as "irrational" because he surrenders a variable annuity contract that was deeply "in-the-money" may be inaccurate. The customer may have needed the cash surrender value to make mortgage payments or cover a large, unexpected medical expense.

These types of behavioral simulations are possible because of the ability to store vast amount of digital data inexpensively, and because the computational speed of computers allows insurance companies to analyze diverse data sources and to form connections that were inconceivable ten years ago. This has given rise of the new profession of "data scientist," an individual or a team of individuals with strong analytical skills and expertise in particular subject matter or business domains.[2]

Figure 2: US Ten Year Treasury Rates

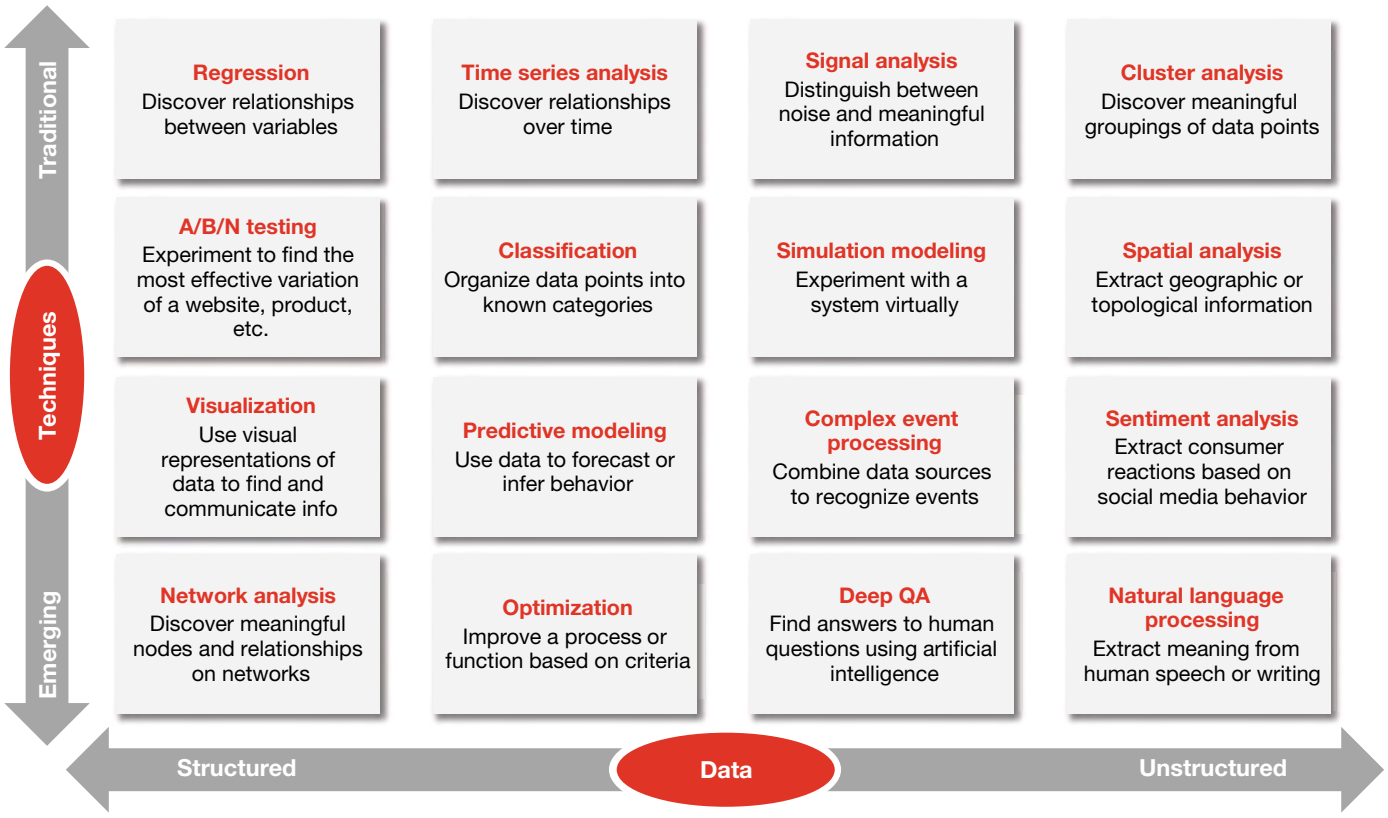


2 For more details on data scientists, please see http://www.pwc.com/us/en/insurance/publications/strategy-data-analytics.jhtml

Furthermore, advanced analytics have given birth to a host of new and emerging technologies that are radically different from the legacy technologies that most insurance companies use today. For example, in-memory technology makes it possible to run queries in minutes instead of hours, and natural language processing serves as a more targeted, semantically-based complement to pure statistical analysis. As technology advances, companies are using a broad range of traditional and advanced modeling techniques to generate insights. As early adopters of these new technologies emerge and disrupt business as usual, others will discover a change in "mindset" is required to exploit these technologies.

Finally, advanced analytics also place a strong emphasis on collaboration. Professionals have to become increasingly specialized, because there is only so much information one person can master. For example, simulating the behavior of customers requires a team of individuals that collectively has a deep understanding of behavioral economics, insurance products, marketing, complex modeling, data management, and insurance regulations. Accordingly, different disciplines have to collaborate because the best insights from advanced analytics lie at the intersections of disciplines.[3] In many instances, this may require an effective change management program to break down silos.

Figure 3



3 Blackwell, Alan F., Wilson, Lee, Street, Alice, Boulton, Charles, Knell, John. "Radical innovation: crossing the boundaries with interdisciplinary teams," *Technical Report, Number 760*, University of Cambridge (November 2009)

Implications

- Consistent, high-quality data that informs decisions throughout the organization is at the core of insurance modernization. Effective analytics make that data truly useful and help insurers more effectively price risk, develop and market products, and target customer segments.
- A modernized company that uses data effectively likely will have a more holistic view of customers, the market, and opportunities than it did pre-modernization. For example, it will look at customers as not just a single data point, but a node on a related group of data points.
- Effective analytics require the contributions of everyone in the organization, not just IT and actuaries. This means that organizational models in modernized companies will be less siloed than in traditional ones, and that employees from different functions will need to closely collaborate to develop and share the knowledge and insights that inform good business decisions.

Advanced analytics place a strong emphasis on collaboration, and are not just the domain of IT or actuaries.

New metrics
Increased efficiency, lower costs and better analysis

It has become vitally important for insurers to understand how new and evolving insurance regulations and financial reporting requirements will affect their strategy, operating results, product design and pricing, and how they manage their in-force business. Effective execution of these changes is increasingly being defined by how promptly a company can understand and act on the value impact to the business and then communicate it in a way that stakeholders can clearly understand. As part of their focus on insurance modernization, thoughtful boards and senior management have made meeting this challenge a priority.

Value metrics, which insurers have used for many years, are changing. In the not-so-distant future, management and stakeholders will need to learn a new "language," and current processes and systems will need reengineering to help in the translation. Accordingly, insurers need a framework that allows boards and management to actively make effective decisions by concurrently producing and utilizing new metrics in a controlled, efficient and timely manner.

New reporting metrics have common key principles, around which insurers can develop an effective metrics and communications framework.

In the following pages, we focus on four different reporting metrics to which the US life insurance industry is or will be exposed (see Figure 1), namely US GAAP targeted improvements to long-duration contracts, principles-based reserving (PBR), IFRS 4 Phase II, and embedded value (EV). A notable characteristic of each of these new metrics is that they have common key principles, around which insurers can develop an effective metrics and communications framework:

- **Discounted cashflows** – Requires projections of future cashflows and discounting them to current valuation date.
- **Current assumptions** – Use of assumptions based on current market environment and emerging experience.
- **Risk and other adjustments** – Adjustments to underlying assumptions as required by the reporting framework.

Figure 1: Reporting metrics and common principles

Common key principles

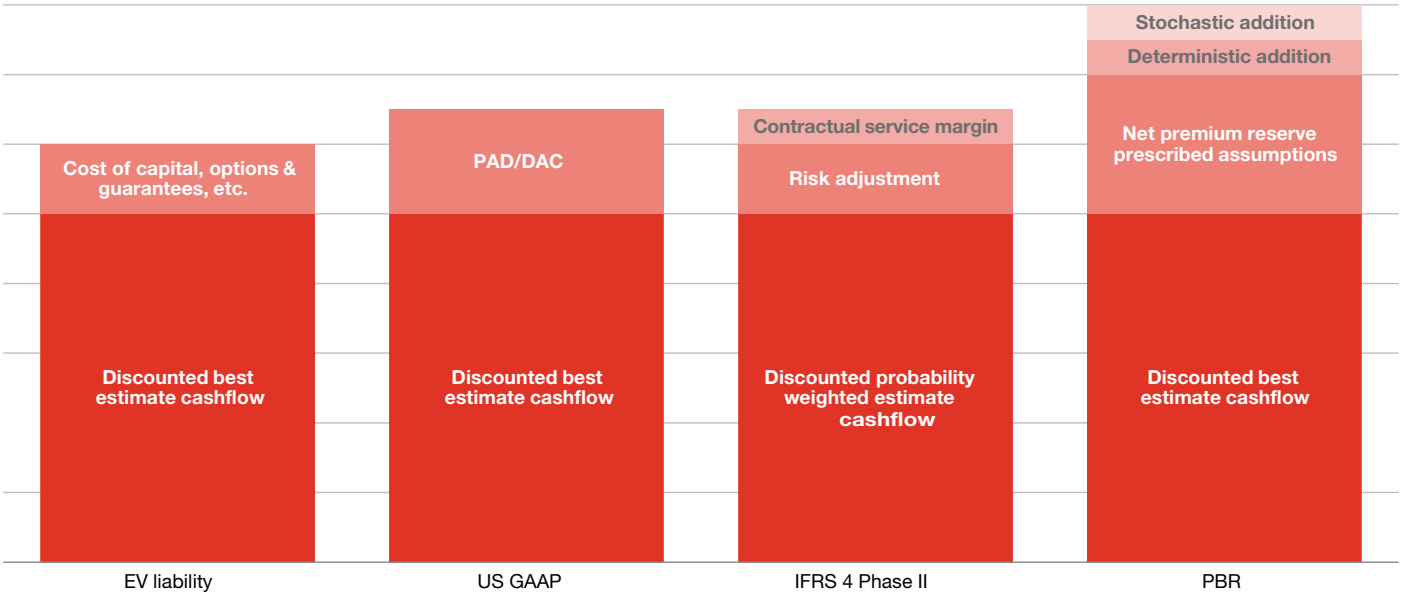
Insurers can apply the common principles underlying the new metrics to reduce current duplication of effort and infrastructure, particularly within the finance, actuarial and risk areas. Based on our experience with the industry, redesigning data, processes and systems around these common principles can result in significant process and cost efficiencies, notably fewer actuarial systems, less reconciliation effort and fewer specialized resources in the reporting process, and better use of centralized shared services.

Redesigning data, processes and systems around common principles can result in significant process and cost efficiencies and help offset the cost of a transformation.

A promising approach to leveraging these common principles is to redesign processes and systems around an "anchor" metric that best represents the range of metrics that will need to be produced. In many cases, life insurance companies are using an EV-based metric as this anchor because 1) its most basic building block is based on a valuation using best estimate assumptions and 2) it commonly aligns with economic analysis to support business decision-making. This allows more intuitive analysis of value changes from actual experience and basis updates. Figure 2 shows a simplified representation of the various building blocks and focuses on the key components that are common throughout the metrics, namely:

- **Probability weighted discounted expected cash flow/ Best Estimate Liability** – This is the foundation for each metric and represents the present value of future best estimate cash flows using assumptions based on current experience.
- **Allowance for risk and other adjustments (e.g., provision for adverse deviations (PADs), risk adjustment, value of options etc.)** – These adjustments are metric specific but generally reflect an adjustment to the best estimate assumptions used above, or to the range of assumption scenarios incorporated.

Figure 2: Common building blocks across multiple reporting bases – illustrative*



* The relativities of the different building blocks are illustrative and are not meant to represent the valuation of a specific product or the impact of different bases.

Other common foundational elements include:

- **Data** – The underlying valuation data generally will be the same, even though it may be simplified or stratified to reduce run time.
- **Product features** – The cashflows produced will follow the modeling of the product features being valued.
- **Modeling engine(s)** – The same modeling engine can be used.

Although not represented in Figure 2, a similar analysis for other regulatory and capital metrics will result in similarly leverageable building blocks, which increases the rationale for implementing this approach.

The design of the ultimate processes and systems naturally will require fine tuning. For example, the discount rates and expense assumptions used for a US GAAP valuation may be different from those required in an EV calculation. Therefore, while the approach for calculating best estimate cashflows (and hence the underlying actuarial systems) can be identical, some of the required inputs and methodologies to the calculation may differ.

Benefits of the anchor metric approach

In addition to the process and cost efficiency benefits we note above, the anchor metric approach also provides a number of analytical benefits. Most insurers spend a significant amount of time and resources on trying to rationalize and explain the metrics they produce, rather than trying to analyze the results to provide management with business insights. Obviously, this rationalization in addition to trying to reconcile the various metrics is not the most efficient or effective use of time and resources.

Breaking down metrics into common building blocks and redesigning processes and systems to promote consistency across building blocks can significantly reduce the time rationalizing and reconciling results. For example, using the same data and projection engines can eliminate the need to validate data sources and coding differences across systems. Also, defaulting to the same base building block across metrics (e.g., discounted best estimate cashflow) can facilitate the reconciliation process because each metric has essentially the same starting value. Accordingly, analysis of results also becomes easier because each change in assumption or methodology can be explained relative to the base building block.

Figure 3: Illustrative approach to analyzing results

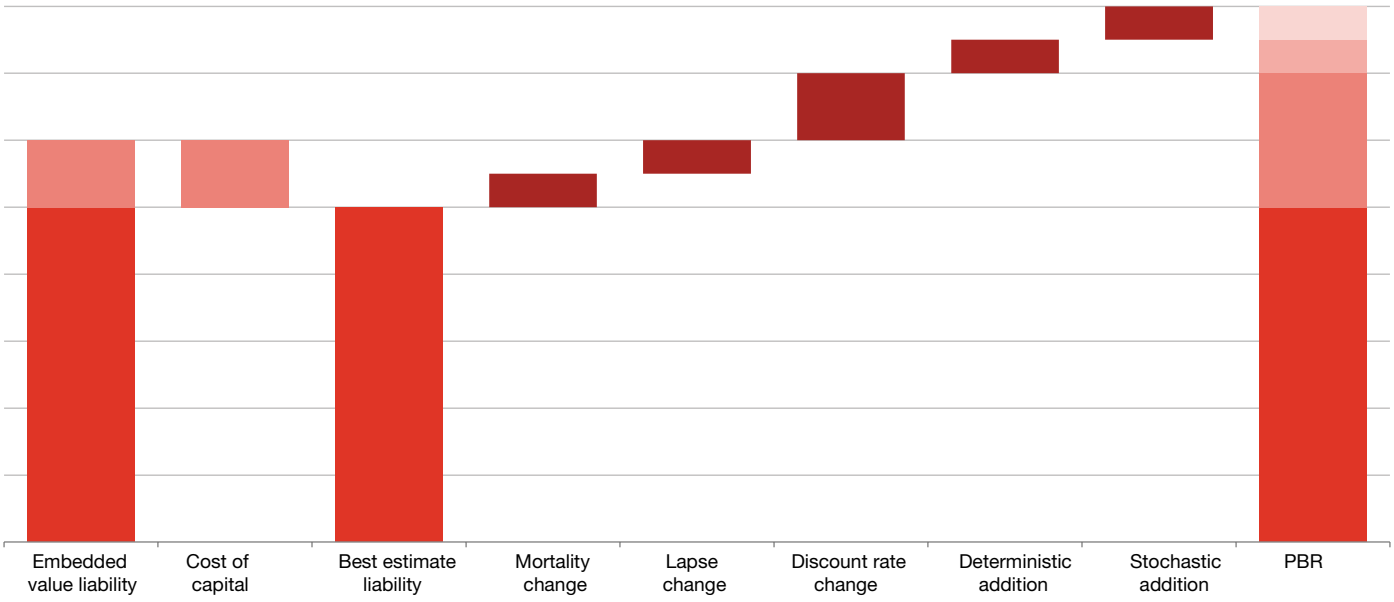


Figure 3 is a simplified illustration of reconciling two metrics (in this case, EV liability and PBR) and how the various assumption and methodology changes could be analyzed relative to the base building block or chosen anchor metric. In this illustration, we have chosen the EV liability as the primary metric used to measure value and removed the cost of capital (which is basis specific) to arrive at our base building block or anchor metric (the best estimate liability). From there, each assumption change (mortality, lapse and discount rate in this case) and methodology change (deterministic and stochastic calculations) can be determined by applying each basis and methodology change sequentially to the base building block to arrive at the PBR metric. This type of analysis not only clearly illustrates what is driving differences between the metrics, but also shows the materiality and direction of those changes, thereby aiding managements' understanding of what is driving the value of the business.

Implications

- The many new insurance regulations and evolving financial reporting requirements make it necessary for boards and management to see in real-time how their decisions impact the value of the business according to these different metrics. Companies that can effectively meet these requirements will have a strategic advantage.
- Investment in technology solutions and redesigning processes to meet the new metrics' demands is inevitable and likely to be significant. Because these metrics share a number of common principles, there is a compelling business case to redesign data, systems and processes around their commonalities.
- Redesigning data, systems and processes around the new metrics' commonalities is likely to result in lower implementation costs, less reconciliation effort, fewer systems and processes, more efficient use of resources, and more valuable and timely analysis.

Developments in insurance contracts accounting and reserving

Certain proposed regulatory and standard setting changes pertaining to insurance contracts accounting and reserving are becoming more defined, and formal implementation of them is looking increasingly certain. Some of these changes will have a profound impact on insurers' business and are likely to drive strategic change. Insurers should not wait to assess the impacts of these proposals, and when performing their evaluations of them, should take an enterprise-wide view of their potential impacts.[1]

FASB and IASB Insurance Contracts Project

Since February 2014, the FASB's focus on accounting for insurance contracts has been on exploring potential targeted improvements to existing US GAAP. The project is divided into two components, short-duration and long-duration insurance contracts.

For short-duration contracts (principally property/casualty and health insurance contracts), the FASB is limiting its proposals to enhancing disclosures. The disclosures proposed by FASB include annual disaggregated incurred and paid claims development tables that need not exceed ten years, claims counts and incurred but not reported claim liabilities for each accident year included within the incurred claim development tables, and interim (as well as year-end) roll forwards of claim liabilities. The FASB is expected to issue a final standard in the second quarter of 2015.

For long-duration contracts (principally life and annuity contracts), the FASB is focusing on enhancements to both valuation and disclosures. These include the potential updating of assumptions used in calculating various insurance liabilities, simplifications to deferred acquisition cost amortization models, and reconsideration of the measurement model for minimum benefits associated with variable annuities, such as minimum death benefits, income benefits, accumulation benefits and withdrawal benefits.

The impact of updated assumptions, including discount rate changes, would be recognized in net income.

The FASB has also proposed that the discount rates used to present value certain long-duration contract cash flows should be changed from the expected investment yield to the rates of return on reference portfolios of high-quality fixed income investments, as a proxy for a liability rate. Long-duration contracts deliberations are in the early stages. Although not yet discussed, a formal public comment process on any proposed targeted improvements would seem likely.

The Insurance Contracts Project's revised objective in 2014 was a dramatic change from the FASB's former comprehensive joint project with the IASB.

The project's revised objective in 2014 was a dramatic change from the FASB's former comprehensive joint project with the IASB. The objective of that project, still in process at the IASB, was to develop common, high-quality guidance that would address recognition, measurement, presentation, and disclosure requirements for insurance contracts. Joint deliberations with the IASB from 2008 through 2013 ultimately led to the issuance of exposure drafts by the respective Boards in June 2013; however, the two boards reached different conclusions on several key areas. The FASB's decision to narrow its focus was in large part due to feedback from US investors and preparers who favored targeted improvements to existing US GAAP in the event that substantial convergence with the IASB's proposed insurance model became unlikely.

The IASB optimistically projects completion of its insurance project around the end of 2015. The IASB has been struggling during the re-deliberation phase to arrive at an acceptable approach for the accounting for participating insurance and investment contracts, which are quite common in Europe and other territories abroad.

1 For insight into how insurers can develop an effective metrics and communications framework under new regulations and standards, please see the section of this report titled "Managing the metrics: Unlocking the potential of better business decisions through insurance modernization."

Under the IASB's proposal, an insurer would measure its net obligation to pay claims and benefits and its right to future premiums using an expected value discounted cash flow approach, inclusive of a risk adjustment, and remeasure each period (referred to as the building block approach). Changes in expected cash flows related to future services would be recognized over time while cash flows related to past services (i.e., changes between expected and actual) will be recognized immediately. At inception, there would be no immediate gain recognition for the expected excess of premiums over cash outflows.

A modified approach has been proposed under IFRS for certain short-duration contracts that meet specified criteria. Like the unearned premium approach used today for short-sduration contracts, the premium allocation approach would recognize premiums as revenue over the coverage period. However, incurred losses would be measured in a manner consistent with the building block approach, including discounting of expected cash flows and a risk adjustment. A non-discounting practical expedient would be available for claims or the portion of claims expected to be paid within twelve months of the claim occurrence date.

Statutory accounting: Move to principles-based reserving

When applied, the additional changes in statutory accounting that are on the horizon for most life insurance contracts will dramatically change statutory profit profiles.

A new method for calculating life insurance policy reserves, referred to as Principles-Based Reserving ("PBR"), is a paradigm shift in the determination of statutory life insurance reserves with far-reaching business implications. The current formulaic approach to determining policy reserves would be replaced by an approach that more closely reflects the risks of products. Once at least 42 states representing at least 75% of total 2008 US direct premium adopt the revisions, PBR will be adopted for new business and implemented over approximately three years.

PBR's primary objectives are to have reserves that properly reflect the financial risks, benefits, and guarantees associated with policies and also reflect a company's own experience for assumptions such as mortality, lapses, and expenses. The reserves also would be determined by assessing the impact under a variety of future economic scenarios.

PBR's primary objectives are to have reserves that properly reflect the financial risks, benefits, and guarantees associated with policies and also reflect a company's own experience for assumptions such as mortality, lapses, and expenses.

PBR reserves can require up to three different calculations based on the risk profile of the products and supporting assets. Companies will hold the highest of the reserve using a formula based net premium reserve and two principle-based reserves – a Stochastic Reserve (SR) based on many scenarios and a Deterministic Reserve (DR) based on a single baseline scenario. The assumptions underlying principles-based reserves will be updated for changes in the economic environment, changes in company experience, and for changes in margins to reflect the changing nature of the risks. A provision called the "Exclusion Tests" allows companies the option of not calculating the stochastic or deterministic reserves if the appropriate exclusion test is passed. Reserves under PBR may increase or decrease depending on the risks inherent in the products.

PBR requirements call for explicit governance over the processes for experience studies, model inputs and outputs, and model development, changes and validation. In addition, regulators will be looking to perform a more holistic review of the reserves. Therefore it is critical that:

- The PBR reserve process is auditable, including the setting of margins and assumptions, performance of exclusion tests, sensitivity testing, computation of the reserves, and disclosures;

- Controls and governance are in place and documented, including assumption oversight, model validation, and model risk controls; and
- Experience studies are conducted with appropriate frequency and a structure for sharing results with regulators is developed.

The NAIC also has adopted Actuarial Guidance 48 ("AG 48") which incorporates elements of the PBR model. This guideline is effective from January 1, 2015. The guidance is intended to harmonize the regulation of insurers using captives and special-purpose vehicles to offload the costs of reserving for term life and universal life with secondary guarantee products (often referred to as XXX/AXXX reserves). This will require insurers to post certain collateral requirements using the PBR valuation method and provide additional disclosure around both those transactions that follow and those that don't follow AG48. The use of the PBR actuarial method is intended to produce a required level of primary security more aligned with insurers' own economic view of what the PBR reserves for these products should be. So-called "redundant" statutory reserves that exceed the PBR level may be collateralized by "other securities" – that is, any asset that is acceptable to the commissioner of the ceding insurer's domiciliary state.

Implications

- All of the changes we describe above will place additional demands on the financial reporting process and business, and increase:
  - Reliance on a company's liability and cash flow models and data;
  - Demands on technology, computing and data resources to support stochastic models, and an increase in the number of times models are run (for example, sensitivity testing, and quantification of margins, changes in assumptions, validations, and analysis);
  - Emphasis on company experience and assumption setting processes;
  - Emphasis on governance (experience studies, inputs, models, outputs, processes) and disclosures;
  - The need to secure staff resources and skill sets with the capability to understand, interpret, and to explain results;
  - Demands on staff during the close process;
  - The need to reconcile among all reporting bases in order to make effective business decisions; and
  - Communication to key stakeholders on the results and any volatility related to changes in assumptions.
- Financial results will change and, more importantly, provide greater transparency into a company's own experience, governance, and risk and capital management.
- Many functions within the organization will be impacted, especially actuarial and IT. Collaboration among all impacted areas will be a critical success factor for effective modernization.
- In addition to the Insurance Contracts Project and PBR, there are numerous other regulatory changes that impact insurers, including Solvency II, the ORSA, proposed changes from the FASB on consolidation and financial instruments, and the recently issued standard on revenue recognition.
- Legacy processes and systems will not be sufficient to address pending regulatory and reporting changes. Forming a holistic strategy and plan to address these changes will promote effective compliance, reduce cost and disruption, and increase operational efficiency, as well as help insurers create more timely, relevant, and reliable management information. Companies that do not plan effectively are likely to struggle with subpar operating models, higher capital costs, compliance challenges, and overall competitiveness.

Regulation

Regulatory environment

The regulatory environment

In last year's edition of "Top Insurance Industry Issues," we wrote about regulatory uncertainty. This year we can report some good news: a clearer outlook for 2015 and beyond has reduced some of that uncertainty. However, with clarity comes change that will have real and meaningful impact and require senior management and board-level attention.

Monetary impacts

The Basic Capital Requirement (BCR) proposed by the International Association of Insurance Supervisors (IAIS) is now complete, and Globally Systemically Important Insurers (GSIIs) are breathing a sigh of relief. BCR's demands are unlikely to have much of an impact on the industry, although it would be imprudent for insurers to be complacent about subsequent developments.

Higher Loss Absorbency (HLA) standards are now under consideration, and the concept that they "should have teeth" is making the rounds among regulators. Does this mean that these standards will wind up biting any GSIIs? Could they portend a real capital demand, not just another calculation to be filed as a compliance exercise?

By all indications, the International Capital Standard (ICS) appears to be headed in a market-consistent, Solvency II-like direction. For many North American products and the insurers that have them in their portfolio, this is likely to result in a very different and less attractive financial picture than under their current valuation and solvency regimes. Many popular long-term products might need to be re-priced, making them potentially less appealing to consumers.

All of these international developments will have real monetary implications for the GSIIs and Internationally Active Insurance Groups (IAIGs), and there is likely to be a knock-on effect for mid-sized international and domestic-only insurers.

In response to the standards the IAIS put forth, the NAIC has convened a working group to propose a US group capital methodology that would apply to US-based internationally active insurance groups. While collaborating with the Federal Reserve (the Fed) and the Federal Insurance Office (FIO), the NAIC is seeking to propose a standard that will provide an indication of the financial strength of consolidated insurance groups while retaining some of the factor-based approach currently found in the states' risk-based capital standards. The "Team USA" approach among these bodies will likely unfold during 2015, but it will undoubtedly face challenges at the global level.

Regulations and standards that initially apply to large and/or internationally active insurers tend to become industry-wide standards for all insurers sooner or later.

Closer to home, Principles Based Reserves (PBR) – at least in some form – looks increasingly certain. Our internal analysis shows that, when applied, for many products PBR will dramatically change statutory profit profiles. Here, too, there will be significant monetary implications.

Lastly, it is important to keep in mind that not all uncertainty is gone. The Fed has not yet determined capital standards for insurance SIFIs. Since the Fed has recently developed standards for other non-bank SIFIs, we expect the focus to increase in 2015 on such standards for insurance companies. However, it seems likely that whatever capital standards the Fed requires will have significant monetary implications and a knock-on effect.

Regulation and good business practices

Over the last year, we have observed an interesting development in the qualitative aspects (governance, control function responsibilities, frameworks, policies, reporting, etc. – in other words, all things not related to capital standards) of prudential regulation. We find that once senior management and especially boards gain exposure to emerging standards and related leading practices, they are not inclined to be satisfied with lesser practices. Examples of this include model risk management (MRM), the ORSA, and governance.

In hindsight, MRM seems like an activity that insurers would have engaged in decades ago. After all, models are not new to them and have always played a critical role in product design and pricing, investing, financial reporting and risk management. In response to specific guidance from the Fed and Insurance Core Principles (ICP), model risk management and model validation have only recently become a necessity for insurers looking to exhibit effective enterprise risk management (ERM). As a result, senior management and boards of directors have come to see effective MRM as an essential condition to using these models when making business decisions. In other words, insurers will continue to focus on this area regardless of specific regulation because they see the business benefits of doing so.

The industry often has been ambivalent about new regulations and standards, but has shown real enthusiasm for some recent changes (e.g., the ORSA) that encourage sound business practices.

Comprehensive articulation of a company's enterprise risk environment (i.e., ORSA) also started as a regulatory requirement. In the US in particular, it has been a centerpiece of solvency modernization. As with MRM, we have observed that board members have been enthusiastic users of the ORSA. In hindsight, it seems very sensible that all of a company's key ERM elements be compiled and organized into a single comprehensive document. Here, too, we expect it would be highly unlikely for boards to drop their focus on the ORSA, even if regulations ceased to require it. One of the areas where we see the industry still evolving is in the use of tools like risk appetite frameworks, stress testing and risk quantification as the foundation for decision-making on capital allocation.

Lastly, there is considerable interest in improved governance. This applies from board level down to operational activities. Boards are looking at their structure (should there be a risk committee), their responsibilities (compliance oversight) and composition (adequacy of risk, compliance and regulatory knowledge). Operationally, insurers are revisiting the three lines of defense, looking to clarify roles between and among risk, compliance, actuarial, and internal audit, and emphasizing the distinct responsibilities of first-line business and operations functions.

We believe that much of the activity on the qualitative side is the result of increased exposure to and familiarity with the concepts that inform regulatory expectations. In many cases, even if certain proposed regulations do not materialize or are not applicable to certain companies because of their size or domicile, once effective business ideas are "out of the bag," we expect that insurers will apply them.

The effect of regulation on business strategy and operations

Insurers can no longer relegate responsibility for maintaining awareness of regulatory developments to a second tier supporting role. If insurers wish to influence these regulatory developments the level and profile of attention rises to the most senior levels of company management. There are many examples of insurers where the CEO is devoting a significant amount of time and energy to these matters because of the impact that regulatory changes will have on real business issues such as product strategy, data-driven decision making and resource allocation.

Prudential regulation, particularly in the US, recently operated as a guard rail on business decision-making, with GAAP or economic metrics driving the process. Both quantitative and qualitative regulatory developments now need to be accommodated in the fabric of the business, not beside it. A good example is regulation and the risk function. In the past, ERM was left to develop based on internal expectations of good practice, augmented to some extent by ideas from professional bodies and ratings agencies. Now, regulation is a major influencer of what constitutes effective ERM.

Moreover, the current business environment is truly a global one. No country, no key function or activity, and ultimately no insurer, no matter how small, is immune to developments happening on the global stage. As we have recommended in previous editions of this report, insurers should pay close attention to regulatory developments around the world, not just domestically. If they don't, then they may face some unwelcome surprises in the future.

Implications

- New North American capital standards and PBR likely will result in a very different financial picture for insurers than they produce under current valuation and solvency regimes. Many popular long-term products might need to be re-priced, thereby potentially making them less appealing to consumers.
- As is the case with model risk management and the ORSA, insurers will continue to focus on many areas regulators have considered or are considering – regardless of specific regulation – if they see the business benefits of doing so.
- Recent regulatory and standards setting developments are relevant to the business overall, not just compliance functions. In fact, these developments are now often primary drivers of strategic and operational change, and insurers should take an accordingly enterprise-wide view of them.

Strategy

Potential impacts of automated driver assistance systems (ADAS) and autonomous car technologies on the insurance industry

Group insurance and the rise of exchanges

The insurance deals market: At long last, momentum

Potential impacts of automated driver assistance systems (ADAS) and autonomous car technologies on the insurance industry

Although it may take a couple of decades for the market to feel the full impact of automated driver assistance systems (ADAS) and autonomous car technologies, the implications to the auto insurance sector – which include potentially lower premiums – are significant. Forward-thinking insurance carriers and auto manufacturers will create new opportunities to thrive in this automated environment, while others are likely to see a significant erosion of revenues.

The US National Highway Traffic Safety Administration (NHTSA) recently came up with five levels of maturity for automated driver assistance.[1] The five levels provide a useful framework for examining the different types of technologies:

- **Level 0**: No automation
- **Level 1**: Function-specific automation (e.g., cruise control, automatic braking, and lane keeping)
- **Level 2**: Combined function automation (e.g., adaptive cruise control and lane centering)
- **Level 3**: Limited self-driving automation where the driver cedes control of all safety critical functions under certain traffic or environmental conditions
- **Level 4**: Full self-driving automation where the car performs all safety critical functions under all conditions

Most current vehicles are at Level 1, though some manufactures are introducing Level 2 vehicles and even a few experimental Level 3 vehicles. Level 4 vehicles are operational on test tracks and cannot legally operate on normal roads.

Vehicle manufacturers and traffic authorities are currently using three main types of technology that will eventually lead to more widespread Level 3 and 4 vehicles:

1. **Vehicle automation** – Several auto manufacturers are deploying various in-car technologies, such as forward collision warning, drowsy driver detection, adaptive headlights, lane departure sensing, blind spot assistance, parking assistance, and adaptive cruise control. When motorists use some of these automated driver assistance technologies in tandem, self-driving automation can reach Level 2 or even Level 3.
2. **Vehicle to infrastructure communications** – This includes both vehicle automation and automating the road infrastructure through road monitoring, smart traffic signals that communicate with cars, and sensors that can detect rain and snow. Such combined automation could lead to more Level 3 automation.
3. **Vehicle to vehicle communications** – Considering the number of cars that are already on the road and the time it will take to replace them and newer non-automated vehicles, automated or partially automated cars will have to coexist with human drivers. Vehicle-to-vehicle communications using either in-car technologies or smartphone technologies can help facilitate this transition.

For the purposes of this report, we focus below on the first of these three.

The impact of automated driver assistance technologies on the frequency and severity of accidents

Automated driver assistance technologies' impact on auto claims and premiums will depend on a number of factors:

- **Technology impact** –Auto manufacturers implement technologies such as forward collision warning, drowsy driver detection, and adaptive headlights in different ways. As a result, collision damage reduction could vary depending on the effectiveness of respective implementations.

There is typically a fifteen-year span between the initial introduction of a new technology and 95 percent new vehicle availability. It takes an additional 15 years (or 30 years total) to reach 95 percent of all vehicle availability.

1 *Preliminary statement of policy concerning automated vehicles*. National Highway Traffic Safety Administration, 2013.

- **Availability** – Depending on manufacturer cost, regulatory requirements, and customer adoption, automated technologies may be standard or optional features. In addition, auto manufacturers may deploy these technologies on higher end models or on all of their vehicles.
- **Usage** – At least for the foreseeable future, human drivers will have to activate some or most of these technologies (e.g., adaptive cruise control and parking assistance). Accordingly, even if vehicles feature them, drivers may not necessarily use the technologies at their disposal.
- **Regulatory intervention** – Given these technologies' potential to increase safety and reduce congestion and greenhouse gas emissions, the government is likely to mandate their eventual usage. However, it almost certainly will want to rigorously test them under all conditions before they approve their widespread deployment. This could either speed up or slow down adoption of automated technologies, depending on if adoption has an urgent mandate or takes an inordinately long time.
- **Penetration** – The availability and use of automated technologies will change as they mature and drivers become more comfortable using them. The number of new cars with these technologies also will be a critical factor in their overall impact.

We have modelled the overall impact of these technologies over a 20-year time horizon in three steps:

- **Step 1: Technology impact analysis** – In this step, we use the Highway Loss Data Institute's research[2] to estimate the impact of the automated driver assistance technologies we list below on the frequency and severity of five types of claims: 1) bodily injury liability, 2) collision, 3) personal injury protection, 4) comprehensive claims and 5) property damage liability.
  - » Forward collision warning
  - » Drowsy driver detection and warning
  - » Adaptive headlight
  - » Lane departure
  - » Blind spot assist
  - » Voice activated systems
  - » Adaptive cruise control
  - » Parking assistance
  - » Back-up protection
  - » Curve assist
  - » Night vision
- **Step 2: Adoption projection** – Having determined the impact of the specific technologies on the five types of claims, we estimate their adoption (which includes availability and usage) over the next 20 years.
- **Step 3: Loss reduction estimation** – In order to determine the net reduction of losses in the five major categories of claims, we use the assumptions of the adoption of automated technologies and how long it will take to replace older vehicles.

The potential for ADAS to significantly reduce risk is gaining increasing acceptance; in fact, the auto industry and auto insurers are discussing not if such a scenario will occur, but when.

2 *Highway Loss Data Institute Bulletins* on initial results of vehicle manufacturer collision avoidance features, December 2011 to April 2014. The bulletins are available at http://www.iihs.org/iihs/iihs-website-search?q=HLDI%20Bulletins.

Risk shifting and sharing are increasingly common, and we also expect to see risk slicing becoming more prevalent in the near future.

The model is sensitive to the assumptions we make in these three steps. In particular, the key assumptions that drive the overall results are:

1. **Technology impact** – Based on our analysis of all the technologies we describe above, the reduction in losses include bodily injury (-15%), collision (-6%), comprehensive (0%), property damage and protection (-14%), and personal injury protection (-10%). This is an average we base on technologies that auto manufacturers deploy. As technologies improve and manufacturers learn from their own and other manufacturers' experiences, these declines could be even larger.
2. **Availability and adoption** – Historical analysis shows a fifteen-year span between the initial introduction of a new technology and 95 percent ***new vehicle*** availability. In addition, we assume that it takes an additional 15 years (or 30 years total) to reach 95 percent of ***all vehicle*** availability.[3] If some of these technologies prove to contribute to passenger safety, then regulators could mandate them, thereby accelerating their widespread availability. Moreover, adoption is likely to come in multiple waves as different technologies are piloted, tested, deployed as optional and finally standard equipment. Frost & Sullivan estimates there will be around 3.2 million semi-automated, highly-automated, and fully-automated new vehicles in North America and around 3 million in Europe as part of the third wave of shipments.[4]
3. **Baseline** – We assume a linear projection of losses for the baseline, based on projecting vehicle miles driven and loss experience from 2009-2013. This projection suggests that total losses would grow to $83 billion by 2025 and $101 billion by 2035 if new technologies have no impact.

Based on the overall assumptions and the analysis, we estimate a reduction of losses of around ten percent for the US auto market by 2025 and 20 percent by 2035. We estimate the net baseline projected losses without driver assistance technologies will be $83 billion by 2025, and $76 billion with driver assistance technologies. By 2035 we project losses without driver assistance at $101 billion, and $80 billion with driver assist technologies. Figure 1 shows the total projected losses for US auto insurance by 2025, with and without automated driver assistance technologies.

We believe these estimates are conservative, and if we relax some of our assumptions about the rate of availability, pace of adoption, and impact of technology on losses, then there should be even greater loss reductions. For example, Thatcham Research estimates that 80 percent of all crashes in the UK occur at a speed of less than 25 Km/hr.[5] ADAS that focuses on safety systems at lower speeds (e.g., forward collision with automatic breaking, emergency brake assistance) can result in 208,000 fewer crashes, 158,000 fewer injuries, and 52, 000 mitigated injuries. This would reduce repaid and whiplash compensation to Euro 1.8 billion.

Changes to regulations are already underway. The 1968 Vienna Convention on Road Traffic, which requires a human driver to be present in a moving vehicle and to have control over the vehicle at all times, is being amended.[6] The Working Party on Road Traffic Safety of the UN Economic Commission for Europe is working on draft amendments to the Vienna Convention that all nations are likely to pass and adopt over the next couple of years. That would remove some of regulatory barriers and hasten ADAS adoption.

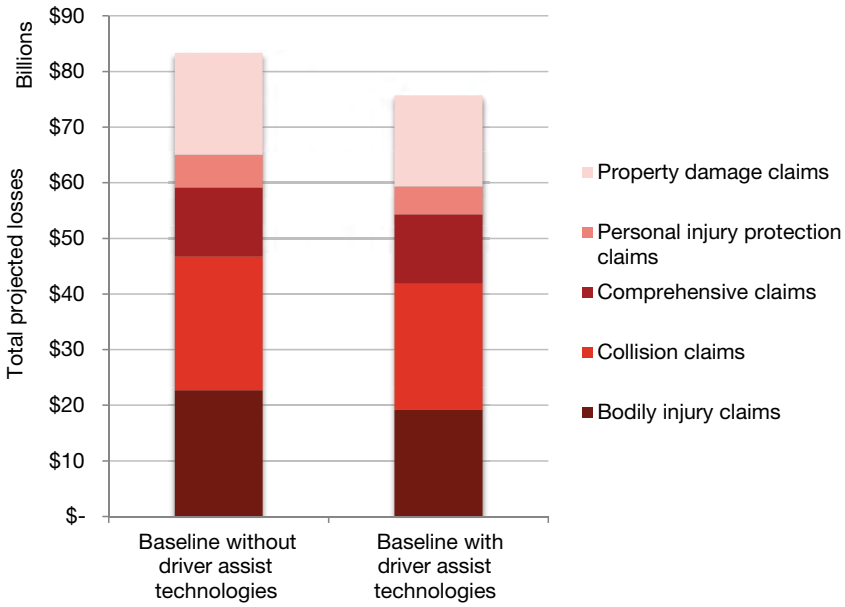
3 *Estimated time of arrival: New safety features take 3 decades to spread through vehicle fleet*. Insurance Institute for Highway Safety Loss Data Institute Bulletin. Vol. 47, No. 1: January 2012.

4 *From Vehicle Automation to Autonomous Driving: The Big Leap*. Prana Natarajan, Frost & Sullivan. Proceedings of the *The Autonomous Car: Risks and Opportunities for the Re/Insurance Industry.* September 2014.

5 *Understanding Technological Advances in Vehicle Safety to Reduce Claims Costs in the Future*. Matthew Avery. Thatcham Research. 2014.

6 *Regulatory Challenges for the Introduction of Automated Driving: Road Traffic Law*. Miodrag Pesut. UN Economic Commission for Europe. Proceedings of the *The Autonomous Car: Risks and Opportunities for the Re/Insurance Industry*. September 2014.

Figure 1: US projected losses – Auto insurance (2025)



Future scenarios

In our earlier work on the future of auto insurance[7], we outlined four possible risk scenarios, including risk shifting, risk sharing, risk slicing, and risk reduction. While risk shifting and sharing are increasingly common, we also see risk slicing becoming more prevalent in the near future, particularly in the following ways:

- **Car sharing** – Car sharing and associated risk sharing is in line with what we predicted in 2013. Car sharing continues to grow, and is especially popular with urban millennials. Over 80 percent of the US and more than 50 percent of the global population is considered urban; city living and the increasing availability of automotive time-sharing suggests a future in which more and more premiums move from 24-hour asset coverage to a pay-per-use model.[8] According to a Frost & Sullivan research estimate that Forbes reported in March 2012, the global car sharing market could exceed $10 billion by 2020, and the North American car sharing market alone could surpass 4.4 million members and $3 billion by 2016.[9] In Europe, the number of members will rise to 15 million by 2020.[10] As a result, an increasing number of low-frequency drivers is likely to mean at least some reduction in individual premiums. However, this scenario does not necessarily represent only lost premiums. Most of the people who do not choose to own cars will need to rent them at least occasionally; accordingly, car sharing can expand the market for alternative buyers of insurance.
- **Self-driving mode** – In the next five to ten years we also are likely to see more cars with a self-driving mode. Drivers will be shifting between hands-on and hands-off-driving depending on road conditions and personal preference. This will result in different risk profiles for a single trip and also different liabilities – driver liability in the hands-on mode and product liability in the self-driving or hands-off mode. This type of risk slicing offers a number of interesting pricing options for auto insurers. Similar to usage-based or mileage-based insurance that telematics-driven auto insurers offer, we could see insurance premiums priced differently based on the mode of driving.

7 http://www.pwc.com/us/en/insurance/publications/assets/pwc-top-insurance-issues-2013-auto-insurance.pdf

8 *How the Autonomous Car will Change the World and Upend Auto Insurance.* Brad Templeton, Singularity University. Proceedings of the *The Autonomous Car: Risks and Opportunities for the Re/Insurance Industry.* September 2014.

9 *Zipcar fuelled up for $22 Run as Business Model Matures*. Forbes. March 20, 2012.

10 *Growing Awareness of Peer-to-Peer Carsharing will Boost Carsharing Rentals in Less Populated Areas in Europe*. Frost & Sullivan. August 22, 2012.

Moreover, the scenario of risk reduction (and potentially even elimination) has been gaining increasing acceptance. The auto industry and auto insurers are discussing not *if* such a scenario will occur, but *when*. Almost every major auto manufacturer has announced an autonomous car initiative with expected public release ranging from as early as 2017 to the middle of the next decade. Driverless or autonomous cars (Level 4) equipped with the latest awareness technologies could completely change the industry as we know it. Google, Inc.'s auto research investments are hastening the eventual, widespread availability of driverless cars. Google's driverless, laser-equipped vehicles have logged over 700,000 miles without an accident; moreover, the company has begun investing in the research and development that initially sets and then drives down the costs of new technologies.[11] Driverless cars are now legal in California, Nevada, Michigan and Florida. Google estimates that the technology can reduce traffic accidents by 90 percent, reduce number of cars by 90 percent, and reduce wasted commute time and energy by 90 percent resulting in savings of $2 trillion per year to the US economy.[12]

Implications

The widespread adoption of ADAS is already happening and autonomous cars will be on public roads in the not-so-distant future. These developments present insurers with a number of risks and opportunities. Ignoring them or not taking decisive action could prove fatal. Some of the ways to turn ADAS adoption into an opportunity include:

- **Product innovation** – Usage-based, driving mode-based, and trip-based insurance using telematic devices and ADAS offers insurers new product innovation opportunities, including unbundling current auto insurance offerings and re-bundling them in new ways to target urban, casual, and self-driving car drivers.
- **Distribution innovation** – The rise of affinity groups, car sharing groups, and vehicle manufacturers who want to package auto insurance with autonomous vehicles can open up new distribution channels for auto insurers. Disruptive players who focus on these segments can adopt a B2B distribution channel directly with auto manufacturers or their dealers. These players would have a fundamentally different business model and could progressively capture market share as the number of autonomous cars increase.
- **Service innovation** – As the need for protection decreases, insurers can play the central role of aggregating information and entertainment needs. Auto manufacturers, online/mobile service providers, telecommunication providers, and information providers all are vying for leadership in in-car infotainment services. Insurers with trusted brands can re-orient themselves as service providers.
- **Claims innovation** – The biggest impact of ADAS and autonomous cars will be on safety and the prevention or reduction of accidents. Insurers who approach insureds who drive these types of cars as a separate segment and handle claims based on on-board diagnostics and analytics will use fundamentally different economics for claims handling and the legal expenses associated with claims. Such auto claims settlement has promise to increase claims satisfaction and reduce litigation costs.

Regardless of the extent to which insurers want to innovate in any of the above areas, they should continue to monitor and prepare for the following:

- **Driving demographics and patterns**: The move towards the "shared economy," especially as it relates to younger (especially urban) generations' driving behaviors is still nascent, but could be very disruptive to existing business models when and if it becomes more commonplace.
- **Automotive and artificial intelligence (AI) technology acceleration**: The pace of change in AI technology (e.g., machine learning, video/image analytics), its incorporation within auto manufacturing, and the move towards an "open auto platform" can result in faster adoption and reduce (or even eliminate) risk.
- **Regulatory approvals**: Technologies that increase driver, passenger and road safety could gain quick regulatory approval. Accordingly, keeping abreast of regulatory activity is vital to facilitate timely entry or expansion in this market.

11 *How the Autonomous Car will Change the World and Upend Auto Insurance.* Brad Templeton, Singularity University. Proceedings of the *The Autonomous Car: Risks and Opportunities for the Re/Insurance Industry*. September 2014.

12 *Fasten your Seatbelts: Google's Driverless Car is Worth Trillions (Part 1)*. Chunka Mui. January 22, 2013.

Group insurance and the rise of exchanges

In the past, carriers often specialized in health, life or property and casualty. Group insurance was viewed as a good strategic asset, but because it was possible to generate profits without it, group insurance business units typically were underfunded and operated with antiquated systems. However, as the group insurance market continues to grow and evolve, carriers are now making significant investments in it.

Considerable change has accompanied this market growth. Group insurers traditionally have offered group life, short-term disability, long-term disability, dental and vision coverage. However, their product offerings have grown to include accident and health products such as critical illness, accident, hospital indemnity, and pet insurance.

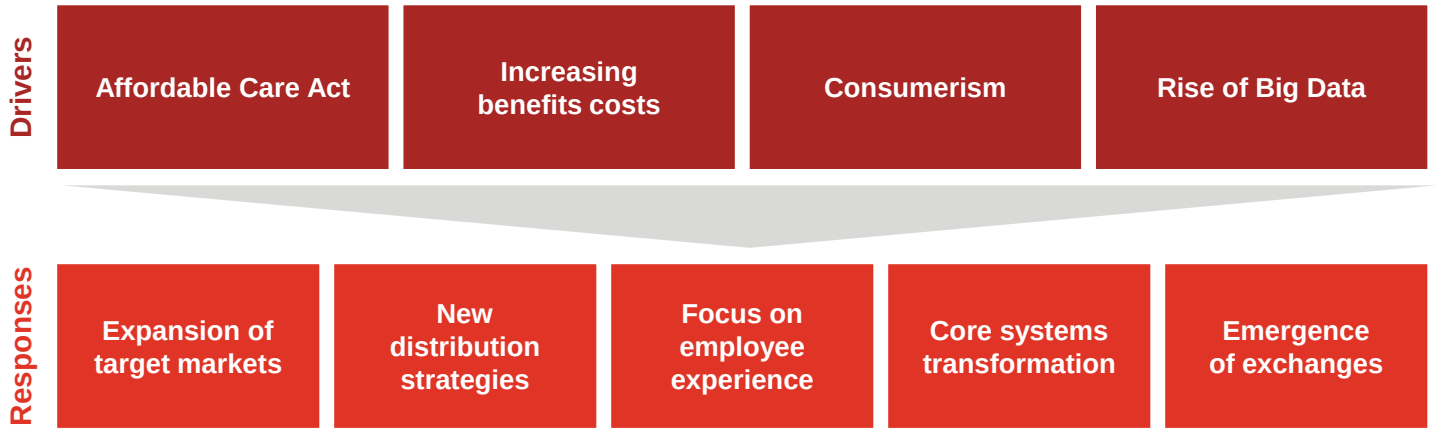
Distribution is also changing. Carriers have traditionally sold to customers through a competitive bid process controlled by national brokers/benefits consultants, regional brokers and independent, local brokers. Recently, this sales landscape has been affected by the emergence of captive/worksite and exchanges, which have become viable alternative distribution channels. In the worksite model, carriers utilize a captive agent force that sells employees group insurance products at the workplace.

Lastly, as group insurance products and distribution channels increase, carriers face the challenge of adopting their current operating models and legacy systems to these new ways of doing business.

Market drivers & disruptors

Four dynamic market trends and disruptors are having significant impact on the group insurance industry: 1) the Affordable Care Act and other government regulation, 2) increasing benefits costs, 3) consumerism, and 4) the rise of big data. In response, carriers are 1) expanding their target markets, 2) developing new distribution strategies, 3) focusing on the consumer experience, and 4) upgrading or replacing core systems.

Figure 1: Market trends & carrier response



1. **Affordable Care Act (ACA)** – Since its introduction in 2011, the ACA has had profound effects on healthcare and has indirectly impacted the group space through the enactment of employer shared responsibility provisions and the introduction of public healthcare exchanges. First, employer shared responsibility provisions require employers with 50 or more employees to provide a minimum level of healthcare coverage or pay a fee in lieu of providing coverage. Because of this, the ACA is causing employers, especially small to mid-size businesses, to re-think the way they provide employee benefits. Additionally, employers with 50 employees or less are eligible for the Small Business Health Options Program (SHOP) plans on the government's public healthcare exchange, healthcare.gov. The introduction of the exchange model has gained traction with brokers and technology companies now offering their own private exchanges to employers of all sizes.
2. **Increasing benefits costs** – Originally, group insurance had a central tenet that employers guaranteed certain types of coverage to employees. This defined benefit model was the mainstay for decades, even as insurance premiums continued to rise. Now, as healthcare spending accounts for almost 18 percent of US GDP[1], employers are searching for strategies that will allow them to support their employees but at lower cost. In response, most employers have moved to a defined contribution model, where employees contribute payroll deductions to fund part or all of their benefits. This model usually gives employees more choice in the benefits they want, and has resulted in the growth of accident, hospital indemnity and critical care group insurance products.
3. **Consumerism** – Thanks to the rise of online shopping, consumers now expect one-click shopping for a multitude of products they can easily research to determine lowest cost options. Accordingly, the increased availability of information and emergence of online decision-making tools on employee benefits have led to an increased focus on selling to individual employees.
4. **Rise of Big Data** – With the transition from paper and pen management to online enrollment and benefits administration, insurance carriers have a wealth of previously uncaptured data they can use to gain greater insight into the market. With consumerism, the data from decision-making tools and other enrollment functionalities has exponentially increased. Carriers have increasingly used this data to perform analytics and gain a better understanding of areas such as claims conversion and broker segmentation, as well as to increase their knowledge of individual employees.

Increasing benefits costs and the ACA are the two of the most obvious drivers of change in the group market, but increasing consumerism (which primarily benefits customers) and a concurrent increase in data about customers (which primarily benefits carriers) are playing an increasingly important role in the transformation of the group industry.

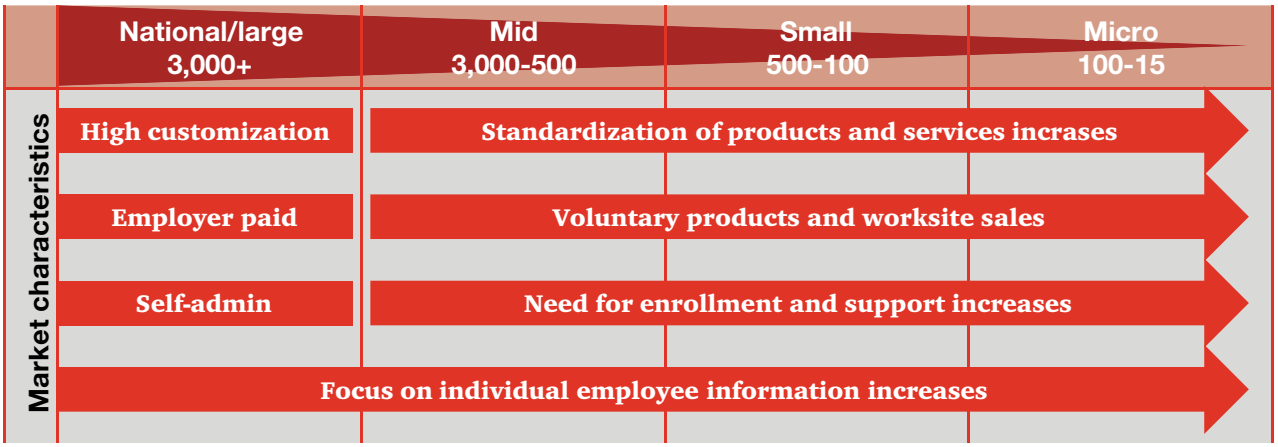
Carrier responses and actions

In response to the trends we describe above, carriers are focusing primarily on four things: 1) expansion of target markets, 2) new distribution strategies, 3) employee (i.e., customer) experience, and 4) transforming core systems.

1. **Expansion of target markets** – As the group insurance space becomes increasingly concentrated, carriers are looking to expand their target market size in order to grow. Specifically, carriers targeting large and national size employers (3,000 + employees) are experiencing less growth opportunities in the segment and have begun shifting their focus down-market. Concurrently, carriers who target the micro and small markets (0-500 employees) are starting to enter mid-sized to large markets. The unique needs and characteristics of the each segment mean that carriers have to build additional capabilities to successfully enter them.

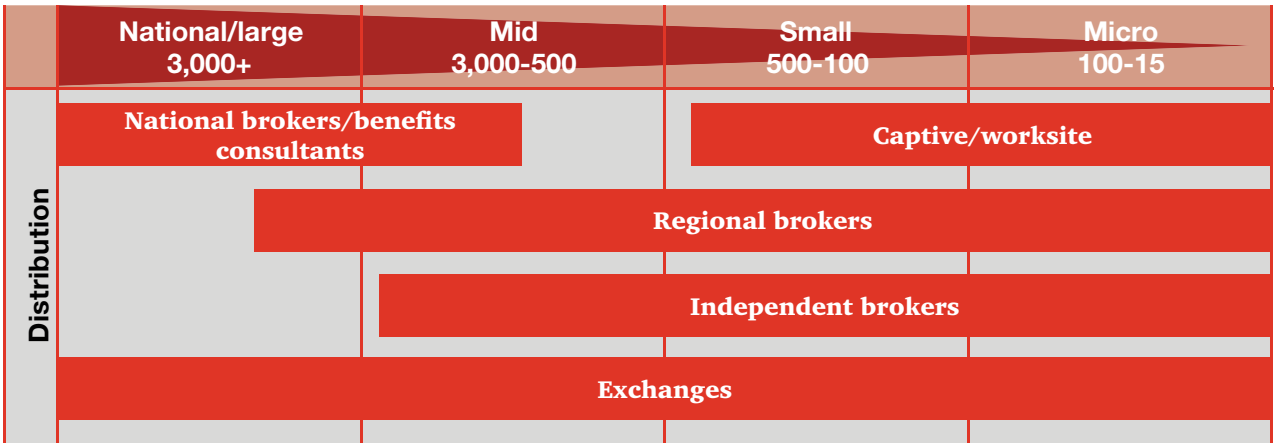
1 Please see http://data.worldbank.org/indicator/SH.XPD.TOTL.ZS

Figure 2: Market characteristics by company size



2. **New distribution strategies** – Brokers and other channels tend to serve specific employer sizes and segments. Accordingly, as they move into new markets, carriers are developing new distribution relationships. Carriers also are considering new distribution channels, specifically the worksite model and exchanges. For these alternate distribution channels, carriers may need to adapt their operating models and mobilize teams in support of new relationships. Moreover, increased use of analytics has enabled carriers to closely examine their current broker relationships and perform broker segmentation, leading to the development and launch of profitability-focused broker compensation schedules.

Figure 3: Company size & distribution



3. **Focus on employee experience** – As employees gain more decision-making power, carriers have increased their focus the employee experience. Specifically, user-friendly enrollment platforms – typically employee portals – feature sophisticated decision-making tools to help educate employees throughout the enrollment process. In turn, carriers can use the data these platforms generate to gather more data and information on their end-customers.
4. **Core systems transformations** – As we describe earlier in this publication, in order to support expansion, new distribution strategies, and increase focus on individual employees, carriers are conducting IT transformations to increase automation and scale. Specifically, group carriers are investing heavily in policy administration transformation because their legacy systems have become antiquated and a patchwork of customization can no longer handle scale or expansion into new products and markets.

The increasing prominence of private exchanges

Private exchanges have the greatest potential to impact the group space. They can provide a combination of increased consumer power, data capture, and high tech capabilities to drive growth.

Private exchanges are a reaction to changes affecting the industry, most importantly the ACA. Exchanges are a new distribution channel that promotes consumerism with user-friendly online platforms and empowers employees to become more informed shoppers. The market has already demonstrated an interest in exchanges, and brokers and employers alike have started to adopt the model. And, while no dominant exchange model exists today, it is clear that exchanges are a viable distribution channel. Private exchanges utilize the same concept of the public healthcare.gov exchange, which President Obama has said facilitates purchasing insurance "the same way you shop for a TV on Amazon." [2]

2 Please see: http://www.whitehouse.gov/the-press-office/2013/09/26/remarks-president-affordable-care-act

Unlike public exchanges, private exchanges have attempted to expand the exchange model from just health and dental products to other group products, as well. While public exchanges are capped at 50 employees, private exchanges have no defined range, and cover businesses with as few as five employees and as many as 200,000. The main difference between types of private exchanges is who ultimately has the power to choose. One type has "employer choice," in which the employer chooses to work with one carrier. The exchange offers variations of products, and employees can select from those insurer's offerings. In contrast, "employee choice" exchanges are more like online shopping; employees can choose between and among competing carriers' products to tailor their plan designs.

Private exchanges can offer both employers and employees much wider coverage choices than they have enjoyed in the past, and also can help carriers reach much wider markets than they have hitherto.

Private exchange models

We have observed four distinct private exchange models, each of which have a different value proposition.

Figure 4: Private exchange models

National brokers – National brokers have been able to strengthen their ties with clients by offering the broad range of services typical of an exchange. They cater predominantly to larger employers, and feature carriers who specialize in products for companies with 3,000 or more employees. The exchanges offer products from several carriers, creating a competitive marketplace in which employees can comparison shop for types of coverage. Because the national brokers have existing relationships with many large employers, data integration requirements are relatively easy to meet, especially when the brokers are serving a client's benefits administration.

Independent brokers/consultants – In contrast to large brokers, regional and independent brokers work on a regional scale. This regional focus typically limits client size to companies with between 100 and 1,000 employees – generally too small for most carriers to offer a truly competitive marketplace. Therefore, independent exchanges typically carry only one insurer's products, though as exchanges as a whole become more prevalent, more insurers may be forced to remove employer size restrictions. Technology standards vary widely between these brokers' exchanges, as most create their exchanges as premium products in order to differentiate themselves from other local competitors.

Single carriers – In order to combat multi-carrier exchanges, some insurers have developed their own exchanges in order to more effectively market their products. These exchanges act as a defense mechanism by preserving exclusive contracts the carriers already have. In essence, the "exchange" is merely a new platform by which employees make selections for their coverage. The single carrier model originated with health insurers who were trying to compete with public exchanges, but group carriers are now beginning to follow suit.

Technology platforms – Much of the innovation and disruption occurring in private exchanges results from technology companies that have built the platforms which enable the exchanges to operate. To date, many carriers and brokers looking to establish or support exchanges have partnered with these technology providers to whitelabel their systems. More recently, technology providers have begun offering their own products on what amounts to independent exchanges. This high degree of technological sophistication and flexibility has made these providers key targets for acquisition for both brokers and carriers looking to quickly grow their exchange acumen.

While each of these four models has benefits and challenges, partnering with any type of exchange will necessitate changes to an insurer's value chain. Exchanges act as an entirely new distribution class, and carriers must be careful to match their existing channels' capabilities with the ones an exchange requires. Underwriting also will have to deal with significant impacts, and carriers will have to rethink the traditional enrollment process.

Implications

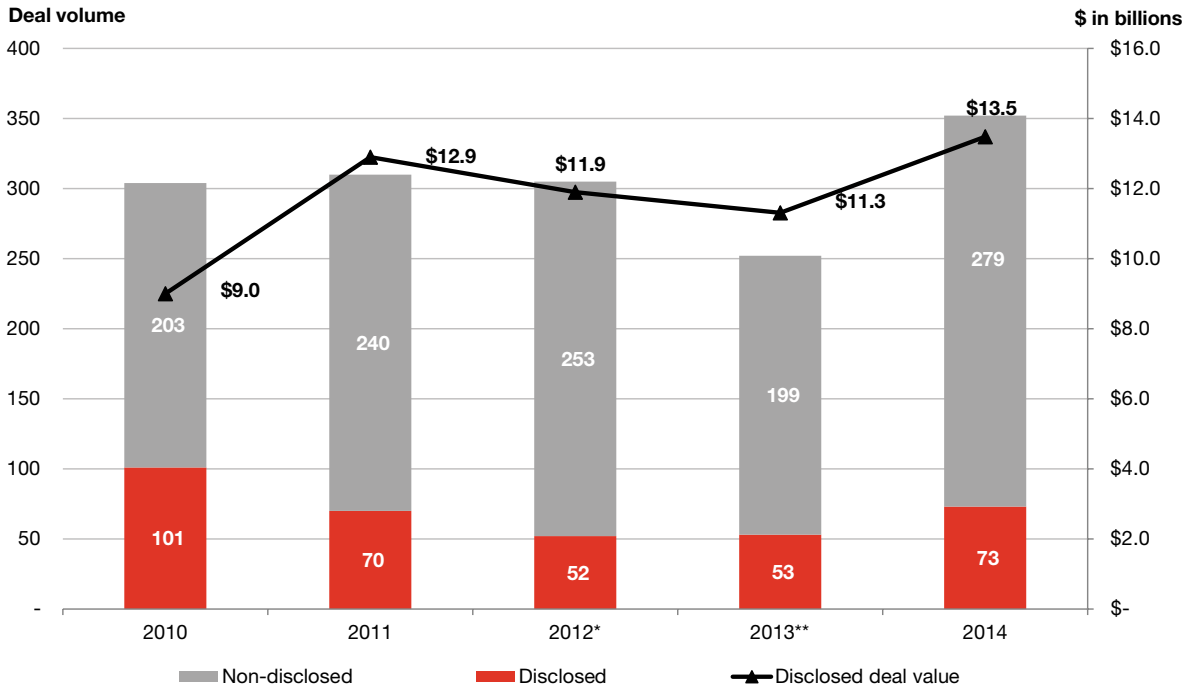
While private exchanges are a relatively new concept, employers and carriers alike have shown a great deal of interest in them. Group carriers looking to establish or enter into exchanges should be aware that:

- Partnering with national brokers will require change and compromise on behalf of carriers, as well as the acceptance of increased competition within the exchange because brokers will want to create a highly price-sensitive marketplace.
- Insurers looking to enter the small and mid-size market should assess the independent broker model. While national brokers moving down market will attract attention, independent brokers maintain high levels of business through relationships and therefore are likely to remain competitive.
- Carriers looking to develop their own exchanges must choose between "buy or build," though both options will require heavy investment.
- The speed at which technology platforms are emerging make them ideal candidates for partnerships, and allow insurers to stay at the forefront of sophisticated technology standards.

The insurance deals market
At long last, momentum

Insurance M&A activity in the US increased significantly in 2014 compared to recent years. There were 352 announced deals with a total announced deal value of $13.5 billion, up from 252 announced deals with a total announced deal value of $11.3 billion in 2013. Q4 2014 represented the strongest insurance deals quarter in recent memory, and this momentum has already continued in 2015.

Figure 1: Announced US insurance deal activity – Annual data



* Includes KKR & Co LP's $1.8 billion acquisition of Alliant Insurance Services Inc. not disclosed in SNL data,
** Includes Hellman & Friedman LLC's $4.4 billion acquisition of Hub International not disclosed in SNL data,
Source: SNL Financial and various other sources

The largest announced deal of the year (and the past several years) occurred in the life and annuity space when Japan-domiciled Dai-ichi Life Insurance Company agreed to buy Protective Life Corporation for $70 per share, or approximately $5.7 billion. This represented a roughly 34% premium on the share price prior to the deal announcement. Interestingly, in 2013, Protective Life was on the other side of the largest announced deal in the life insurance sector when it announced the acquisition of MONY Life Insurance Company for $1.1 billion.

We expect foreign interest in the US insurance market to continue as overseas corporations, particularly those in Asia with excess capital, seek to invest in markets with higher yields.

Figure 2: Top 10 US insurance deals announced 2014 (by value) – Excluding managed care

Rank	Date announced	Target name	Acquirer name	Sector	Value ($ in millions)	% of total
1	6/3/2014	Protective Life Corporation	Dai-ichi Life Insurance Company, Limited	Life & Health	5,580	41.4%
2	3/21/2014	Warranty Group, Inc.	Wolverine Acquisition, Inc.	Property & Casualty	1,225	9.1%
3	12/16/2014	ARX Holding Corp.	Progressive Corporation	Property & Casualty	875	6.5%
4	12/23/2014	Radian Asset Assurance Inc.	Assured Guaranty Corp.	Financial Guaranty	810	6.0%
5	6/23/2014	Western World Insurance Group, Inc.	Validus Specialty, Inc.	Property & Casualty	690	5.1%
6	1/15/2014	Wright Insurance Group, LLC	Brown & Brown, Inc.	Property & Casualty	640	4.7%
7	12/30/2014	Meadowbrook Insurance Group, Inc.	Miracle Nova II (US), LLC	Property & Casualty	433	3.2%
8	12/18/2014	Fireman's Fund Insurance Co.	ACE Limited	Property & Casualty	365	2.7%
9	1/9/2014	Summit Holding Southeast, Inc.	Great American Holding, Inc.	Property & Casualty	260	1.9%
10	3/3/2014	Conseco Life Insurance Company	Wilton Reassurance Company	Life & Health	237	1.8%
Top 10 deal value					**11,115**	**82.4%**
Total disclosed deal value					**13,481**	**100.0%**

Source: SNL Financial

Unlike in prior years, when the largest announced deals were primarily in life and annuity and insurance brokerage, 2014 saw a significant increase in property & casualty (P&C) deal activity. The second largest disclosed deal in 2014 occurred in the P&C space when private equity firm TPG Capital Management acquired private equity-owned Warranty Group, Inc. for $1.2 billion. The Warranty Group offers extended warranty products for auto, home, consumer goods and travel industries in 40 different countries. This deal is roughly double in size of the largest P&C deal in 2013.

Additionally, during the fourth quarter of 2014, Assured Guaranty announced its acquisition of Radian Group Inc.'s Radian Asset Assurance for $810 million. While the deal is significant because of its size, it also is important because it is the first major deal in the financial guaranty space in a number of years.

The overwhelming majority of announced deals in the insurance sector relate to acquisitions in the insurance broker and agency space. These are significant from a volume perspective, but the deals usually do not have announced values. While we have seen large, multi-billion dollar transactions in this space in recent years, we did not in 2014. The largest deal, valued at $640 million, was Brown & Brown's acquisition of Wright Insurance Group (which SNL Financial classified as a property & casualty transaction). This was consistent with our expectations for both 2014 and the coming year, as the largest insurance brokers all were recently acquired or recapitalized.

In addition to the disclosed transactions listed in the tables above, there were a number of transactions involving US insurers that are not in the tables because the business that is the subject of the transaction has been moved offshore. An example is the Canada Pension Plan Investment Board's acquisition of Bermuda-based Wilton Re Bermuda Ltd. for $1.8 billion. (Much of Wilton's operations and assumed risk are actually in the US.) In addition, in late 2014, in an all-Bermuda deal involving companies with significant US operations, RenaissanceRe announced its acquisition of Platinum Underwriters for $1.9 billion, representing a 21% premium on Platinum's closing price prior to announcement.

It is likely that private equity firms will continue to show strong interest in life and annuity companies, insurance brokers, and particularly MGAs and MGUs.

Drivers of deal activity

There are a number of factors that we believe will impact deals activity in 2015. Some of them already had an impact on the market in 2014, while others are emerging trends. They include:

- **Low investment yields** – Throughout 2014, many academics and Wall Street analysts predicted that interest rates would begin to rise and end the year on an upward trajectory. However, interest rates have remained at close to historic lows, and the Federal Reserve appears reluctant to raise rates despite a recovering US economy. While increased interest rates would have a positive impact on insurance company earnings (particularly in the life and annuity space), insurers have adapted their business models to the persistent low interest rate environment.
- **Regulatory** – The evolving global regulatory environment continues to drive insurance M&A as companies continue to assess their businesses and seek to optimize capital and profitability. Solvency 2 in Europe has led some companies to exit certain businesses, while others have sought to enter new businesses to diversify their portfolios and risk profiles. In the US, increased state insurance commissioner scrutiny of the use of captives or shadow insurance and private equity-backed insurance company expansion continues to be a concern to potential buyers.
- **Foreign entrants** – As we noted previously, a Japanese insurance company made the largest announced acquisition of a US insurance company in 2014. In addition, in the seventh largest announced deal of the year, Hong Kong-based Fosun International announced its acquisition of Meadowbrook Insurance Group in December 2014. We expect foreign interest in the US insurance market to continue as foreign corporations, particularly those in Asia with excess capital, seek to invest in markets with higher yields. It is important to note that foreign entrants into the US market may drive up valuations, as they historically have been willing to pay significant premiums for US companies.
- **Private equity** – Prior to 2013, private equity and financial investors were increasingly active in the insurance sector as insurance companies looked to clean up their balance sheets and exit volatile and capital intensive lines of business. We expect to see continued interest from private equity firms in life and annuity companies and insurance brokers, and particularly managing general agencies ("MGAs") and managing general underwriters ("MGUs"). MGAs and MGUs are of particular interest to private equity because they allow them to share in the risk/reward of the insurance business they underwrite without the regulatory risk/burden associated with acquiring an insurance company. Of note, there were a number of private equity-driven announced deals in the MGA space in 2014 with no disclosed deal values (as well as several unannounced deals).
- **P&C reinsurance consolidation** – In response to a soft P&C reinsurance market, many reinsurers are turning to mergers or acquisitions in an attempt generate operational and capital efficiencies, improve pricing power, and offer a wider range of products. A case in point is the announced acquisition of Platinum Underwriters by RenaissanceRe that we cited previously. Both companies provide reinsurance for P&C catastrophe claims risks. Additionally, at the beginning of 2015, XL Group Plc announced its acquisition of Catlin Group Ltd. for $4.2 billion, and Axis Capital Holdings Ltd. and PartnerRe Ltd. have agreed to an $11 billion merger to create one of the world's largest reinsurers. We expect the deals momentum in this space to continue through 2015.
- **Technology** – The insurance industry historically has lagged behind other industries in adapting to and leveraging new technology. Over the last few years, many insurance companies, particularly in the P&C carriers, have been investing heavily in upgrading existing and/or deploying new systems. This has helped them improve their operational effectiveness and efficiency, thanks to new-found abilities to more accurately analyze trends and risks to the business and thereby improve underwriting. Over the last few years, we have seen potential acquirers seek to leverage the technology of target companies. Moreover, technology can have a significant impact on valuations as companies seek strategic acquisitions to upgrade their systems.

Implications

- After several years of slow deals activity, 2014 saw a noticeable increase in deal volume and size. 2015 already has been similarly active and we believe the remainder of the year will follow suit.
- We expect non-US companies to be active players in the deals market and likely drive up valuations if they remain willing to pay a premium for access to the US market.
- Private equity will remain a major driver of insurance deals activity, especially as it relates to MGAs and MGUs. Increased regulatory scrutiny and risk management concerns make these kinds of deals especially appealing to many private equity investors.
- Thanks in large part to a soft market and limited organic growth opportunities, we expect to see continued consolidation in the P&C reinsurance industry.
- Insurers that have upgraded or replaced their core systems are increasingly becoming the target of potential acquirers. Improved technology usually makes carriers more operationally efficient, and potential acquirers often use strategic acquisitions as a way to upgrade their systems.

Operations

The state of P&C transformation Going beyond increased speed to marketand IT rationalization

Talent transformation: Turning “climate change” into “culture change”

The state of P&C transformation
Going beyond increased speed to market and IT rationalization

Insurance carriers are making an unprecedented investment in transforming their policy, billing and claims systems and processes.[1] The unique convergence of aging legacy platforms, complex market dynamics, and a mature vendor landscape has made policy administration, claims, and billing transformation a top priority for insurance carriers of all size and profile.

Now that transformations are common in the industry – to the point where off-the-shelf software packages are proving to be viable – we have observed several new developments in how insurers are approaching them.

Specifically, leading carriers are no longer satisfied with simply implementing a new platform and then searching for ways to achieve benefits in the post-implementation environment. The definition of a successful transformation is no longer an on-time delivery that promises increased speed to market and IT rationalization. Current expectations of a successful transformation include incorporating it into broader strategies for 1) data analytics, 2) the customer and agent digital experience, 3) underwriting efficiency, and 4) rate optimization.

In addition, successful transformation programs now continually map program decisions to the original benefits case and have a framework to monitor benefits realization in the post-implementation environment. In short, carriers are increasingly focusing on the "transform" in core transformation, and have greater expectations of what a transformation entails.

Carriers are increasingly focusing on the "transform" in core transformation, and have greater expectations of what a transformation entails.

1 For an in-depth look at core systems transformation, please see our recent viewpoints on claims, billing, and policy administration.

Benefits of a core transformation: Typical expectations

Insurers traditionally have opted for transformations for the following reasons:

- Increased speed to market
  - » Bring innovative products to the market within existing product lines (e.g., product bundling).
  - » Expand the breadth of offerings outside of core markets.
  - » Improve the ability to react to regulatory change and risk exposure shifts.
  - » A flexible policy platform allows carriers to rapidly change products to meet market demands.
  - » Business-intuitive systems enable users to move rapidly from product design to implementation.
- Improved operating efficiency
  - » Implement straight-through processing (STP) via advanced business rule definition.
  - » Reduce underwriting cycle times and referral volume, and enable automated re-underwriting.
  - » Implement agency and customer self-service portals.
  - » Reduce call center volume.
  - » Leverage third-party integrations to reduce data entry.
  - » Increase system pre-fill rules, look-ups, and defaults.
- IT rationalization & consolidation
  - » Carriers have targeted 10% to30% reductions in maintenance budgets through license reduction, hardware/software rationalization, or service contract elimination.
  - » Identify and address vendor tool redundancy to rationalize the number of vendors
  - » Decrease FTEs required supporting the IT portfolio due to the simplification of the environment.
  - » Improve productivity by re-deploying staff to other activities that advance the business.

Benefits of a core transformation: New expectations

Leading carriers have realized that they should be getting more than just the benefits we list above. They are looking for transformations to do many things, including establishing the foundation of the customer and agent experience, supporting multiple distribution systems, allowing a single view of the customer, and enhancing analytics capabilities. More specifically, these added benefits include:

- **Data and analytics** – In recent years, carriers have recognized the value of building or improving an enterprise data warehouse (EDW) in parallel with traditional core transformation initiatives. This has enabled them to plan for strategic data analysis and build necessary components into core systems. Modernizing core systems often leads to more reliable data, and when this data is coupled with strategic data analytics initiatives, it facilitates improved process metrics, work queue volumes, and claims fraud detection.
- **Customer and agent experience** – Good customer and agent experiences most often occur with modern underlying core platforms, most of which now offer self-service capabilities and even have the ability to open up new customer channels. For example, a claims transformation can improve the claims reporting, servicing, and resolution process and fundamentally alter how a customer interacts with the carrier's claims processing division. Additionally, billing transformation programs also typically include self-service capabilities that can improve the overall customer experience.
- **Underwriting efficiency** – This can be a direct benefit of any core transformation simply because of the resulting modern screen flow. However, carriers can gain much moreby coupling the screen flow with an operational redesign that integrates the underwriting department with the new system capabilities. (This may entail an assessment and reconfiguration of the underwriting organization.) This is of particular importance in commerical or speciality lines transformations that seek to automate repetitive manual tasks but still require experienced underwriters to fully evaluate risks.
- **Rate optimization** – With the introduction of multivariate rating models, increased use of third-party data and improved techniques to manage large amounts of data, carriers need adequate IT infrastracture and rating plans to use effectively this information to identify and take advantage of new opportunities. While core systems transformation remains a key driver of insurer IT spend, many carriers have also pursued fundamental changes to their rating algorithms, tables and systems. Given the interrelated nature of policy adminstration, rating, forms and risk assessment, leading carriers have recognized that it makes sense to make these changes in parallel with a policy administration systems (PAS) transformation.

P&C transformation remains a top priority for insurers, regardless of size and product mix.

Traits of successful transformations

In order to realize the many benefits an effective transformation offers, insurers are applying a faster, more methodical approach to core transformation than in the past. We have observed several repeatable characteristics that are typical of an effective implementation.

- **Collaborative business case** – Both business and IT stakeholders should collaborate on a business case and roadmap before the implementation. This sounds like common sense; however we have seen many companies start an implementation and try to address any resulting issues before they fully appreciate how this new platform could impact both the business and IT.
- **Conduct a software vendor selection** – Successful transformation programs have typically started with a vendor selection and proof-of-concept (PoC) phase. This has allowed them to look at current options in the marketplace, determine which vendors are actually selling new systems (instead of maintenance contracts on older offerings), and understand how available options fit specific business and IT models. As a carrier starts to narrow its list, it is important that it run a PoC phase in

order to determine how software vendors' platforms work "out-of-the-box" and how they align to the company's unique needs.

- **Conduct a comprehensive mobilization phase** – Transformations that fall short often rush into execution and overlook the need to fully mobilize. Successful transformations take the time to develop a detailed project plan, outline a governance structure, gain agreement on a program scope and budget, and fully understand sourcing strategies. In addition, the mobilization phase offers an opportunity for the company and vendor to agree on key business and architectural foundational questions, as well as understand the key organizational dependencies they need to navigate. At the end of this phase, company stakeholders should clearly understand the scope, be prepared to refine requirements and estimates, be able to plan resourcing requirements, and sequence the overall implementation plan.
- **Involve the business throughout the entire project** – The business – not IT – leads some of the most successful transformations; in fact, IT's ideal role is to enable and support the transformation. Accordingly, it is imperative that business stakeholders prioritize the solution for the company by driving benefits, process changes, leading practices, and requirements. This often means that organizations have to backfill their business resources so they can properly focus on the program. The investment will pay sustainable benefits by promoting consistent requirements and embedding effective change management within the organization as the solution is being built.
- **Utilize an Agile or iterative implementation methodology** – Leading carriers are consistently moving to a more flexible agile methodology to improve the likelihood of success, and Agile methodology is particularly effective in packaged core transformation solutions. We advocate a "documented" Agile process that breaks down the overall build into segments or "sprints." Related deliverables include documented user stories, process flows, source code management, detailed technical designs, documented test cases, and training. This makes the project traceable throughout its lifecycle and enables stakeholders to clearly track progress.

Insurers are extending their core platforms to develop the foundation for digital transformation and analytics.

Implications

- The definition of a successful transformation is no longer an on-time delivery that promises increased speed to market and IT rationalization. Current expectations of a successful transformation include incorporating it into broader strategies for 1) data analytics, 2) the customer and agent digital experience, 3) underwriting efficiency, and 4) rate optimization.
- The most successful core transformation programs have adopted more flexible and agile delivery approaches that facilitate a cross-functional environment, and – perhaps more importantly – also have employed a continuous benefits monitoring framework. This requires program leadership to assess how implementation decisions may impact the overall benefits case and thus maintain a constant focus on the importance of tangible and transformative business value.

Talent transformation
Turning "climate change" into "culture change"

In the wake of the financial crisis, insurers responded to external demands for reduced risk appetite and lower tolerance for mistakes. However, both senior management and the market have continued to place a high value on fresh ideas and strategies that capitalize on market dynamics, improve brand promise, and increase profitability. Accordingly, middle management has had to embrace a mindset that simultaneously calls for a challenging combination of risk aversion and innovation.

Moreover, as we note throughout this publication, many insurers have initiated organizational reengineering in core systems, underwriting, financial reporting, marketing and distribution, and elsewhere to modernize their operations and businesses. As a result, executives are seeking greater levels of analysis and insight from management on tough business issues, and expect their management teams to continually pursue competitive advantage despite the many challenges that can arise in a business environment in flux.

To meet these needs and help new operating models function effectively, some senior executive teams are using reengineering projects to evaluate and update the very ground rules they use to define employee performance. They are attempting to create an organizational climate – and ultimately culture – that balances the need for strong execution and risk oversight with the need for creativity and product innovation.

The most pressing challenges insurers face today require swift response, cross-functional action, and cooperative, multi-party decision-making.

Managing organizational "climate change"

The changes insurers expect from transforming their businesses should ultimately result in positive internal "climate change" that influences how talent needs to perform in a rapidly changing market. However, multiple, often concurrent priorities and initiatives can complicate both management practices and decision-making in the lower ranks of an organization in ways business executives and HR leaders may not realize. (This is especially true in global organizations and/or conglomerates that have disparate national and business cultures.) To mitigate potentially negative impacts, they need to consider how to invest in and develop talent to prepare the company to thrive over the long term.

Fortunately, there are effective strategies that senior management and HR can use to foster greater organizational resilience while developing leadership capabilities to meet the challenges ahead. For example, some initiatives require employee engagement and involvement, while others simply need behind-the-scenes support from staff in various functions. Activities can range from employee communications, learning and development, organization or change management and leadership development. Deploying and coordinating these capabilities in the right way can make the difference between won and lost opportunities and help turn "climate change" into "culture change."

Consider the following:

Organizational buy-in

"Climate change" is a strategic initiative that requires broad-based, cross-functional effort, a defined roadmap, and executive sponsorship and alignment in order to succeed. It is important to keep in mind that, while senior executives can define key priorities, they cannot mandate change to long-held ways of thinking and doing. Active engagement with staff at all levels of the organization will help internal stakeholders understand the impacts of a transformation on roles, improve employee satisfaction and engagement within the organization, as well as help the company effectively manage any talent risks.

As middle managers and individual contributors face new and potentially contradictory forces and choices, their temptation will be to fall back on comfortable ways of working rather than embrace ambiguity and new expectations.

Employee communications

Many insurers find they have overinvested in communications channels and systems and underinvested in the resources that make them truly effective. Communications are critical in driving "climate change," and regular influencing messages from dedicated staff (notably in HR and functional leadership) can provide critical support for middle managers who have to answer tough questions from staff and respond with organizationally-sanctioned key messages.

Organization development and change

While employee programs and systems have become easier to launch, positive outcomes and results remain difficult to achieve. Reaching employees and attracting their attention is likely to remain a challenge in the coming years. Effective change initiatives are coordinated in a programmatic way that reiterates clear and simple messages that explain the reason for change and how it can benefit the organization.

Talent acquisition and sourcing

Recent hiring activity has focused on monitoring and managing risk and managing relationships with regulators. While hiring talent from regulatory bodies does help organizations respond to the those challenges, more insurers need to consider promotions from within their ranks, and develop leaders whose behavior and leadership style align to expectations for the future.

Performance management and retention

Rewards strategies focus on critical roles and high performers, based on the assumption that these two categories of staff have greater impact on the organization's success. In a period of broad change, insurers must protect themselves from turnover in these key groups. By investing in their most-valued employees and performance management strategies (e.g., financial rewards, new opportunities, improving the workplace environment, etc.), insurers can create loyalty to the company that offsets the discomfort that stems from change.

Leadership development

Over the past few years, investments in learning programs have focused on important topics like regulatory knowledge, ethics, and compliance, but this may be leading to a generation of risk-averse executives rather than innovative and nimble leaders. To be prepared for and drive "climate change," core skills again need to be a focus. Accordingly, the need for critical thinking, personal resilience and creativity is driving prescient insurers' leadership development agenda.

Temperature checks

HR and communications leaders should continue to measure employee perceptions. By taking repeated temperature checks on the organization's climate, leaders can better determine the right levers to pull at the right time in order to influence various groups of employees.

An organization in which management and staff have the ability to connect the dots will typically be superior to one in which employees can paint only one dot, even if they do so perfectly.

Implications

- A coordinated and persistent organizational "climate change" effort will impact employee perceptions of the company's direction in a number of ways. The challenge in managing broad-scale organization change is making the precise impacts leadership wants to see. As with all large-scale organizational change, some interventions can drive unexpected consequences when combined with industry trends and market dynamics.
- As middle managers and individual contributors face new and potentially contradictory forces and choices, their temptation will be to fall back on comfortable ways of working rather than to embrace ambiguity and new expectations. Active engagement with staff at all levels of the organization will help internal stakeholders understand the impacts of a transformation on roles, improve employee satisfaction and engagement within the organization, and facilitate the company's management of any talent risks.
- Organizational silos and heads-down behavior during reengineering will inhibit positive change and lead to a continuation of business as usual. In contrast, an organization in which management and staff have the ability to connect the dots will typically be superior to one in which employees can paint only one dot, even if they do so perfectly.
- In organizations where "climate change" becomes "culture change," leadership clearly communicates the need for and benefits of corporate transformation and obtains buy-in from employee and organizational support teams on the way to achieve it.

Tax

Insurance taxation

Insurance taxation

Legislative outlook

President Barack Obama and key Republican leaders in the US House of Representatives and the US Senate have identified business tax reform as one of the key issues on which they may be able to come to an agreement. For the president, the next two years are an opportunity to define his second-term legacy. House Speaker John Boehner (R-OH) and Senate Majority Leader Mitch McConnell (R-KY) have said that they want to demonstrate Republicans' ability to govern ahead of the 2016 presidential election.

While it appears that Administration officials and key members of Congress are conducting serious discussions about business tax reform options, differences between the two political parties over immigration, healthcare, energy policy, environmental regulations, and other economic and social issues pose challenges for the enactment of significant reform legislation.

Obama Administration action

On February 2, 2015, President Obama submitted an FY 2016 budget to Congress that reaffirms his support for "business tax reform" that would lower the top US corporate tax rate to 28 percent, with a 25-percent rate for domestic manufacturing income. The budget also proposes to make permanent Subpart F exceptions for active financing income, which expired at the end of 2014, along with the research credit and more than 50 other business and individual tax provisions.

The president's budget again sets aside a large number of new and previously proposed tax increases, including specific proposals affecting insurance taxation (discussed below), in a reserve fund for "long-term revenue-neutral business tax reform," but his budget identifies only part of the revenue that would be needed to support his proposed corporate rate reductions without increasing future federal budget deficits.

Significant new international tax increase proposals include a one-time mandatory 14-percent tax on previously untaxed foreign income and a 19-percent minimum tax on future foreign income. The budget states that "transition" revenue from the 14-percent toll tax would go primarily to fund surface transportation programs. While expressing opposition to the Administration's minimum tax rates, key Republicans on the House and Senate tax committees, including House Ways and Means Chairman Ryan, have described the Administration's proposals as being "constructive" and have expressed a willingness to consider using some revenue from tax reform to provide funding for surface transportation programs.

Congressional action

While preferring comprehensive tax reform for both individuals and business, House Ways and Means Committee Chairman Paul Ryan (R-WI) has expressed a willingness to consider a "phase one" approach to business-only tax reform, and has called for an "aggressive" timeline for action on tax reform legislation this summer. Senate Finance Chairman Orrin Hatch (R-UT) has established five bipartisan tax reform working groups to develop specific tax reform proposals by the end of May, and also has expressed hope to mark up a tax reform bill this year.

In early 2014, former House Ways and Means Chairman Dave Camp (R-MI) released a 979-page tax reform discussion draft that would lower corporate and individual tax rates, reform US international tax rules, and broaden the tax base by repealing or limiting business and individual tax deductions, credits, and income exclusions. Significant insurance tax proposals in the Camp plan included changes to the way life insurance reserves and non-life insurance reserves are computed, and changes to the taxation of deferred acquisition costs (the "DAC" tax). Shortly before the last Congress adjourned, Chairman Camp introduced his proposal as H.R. 1, the Tax Reform Act of 2014.

Current Ways and Means Chairman Ryan has referred to the Camp tax reform bill as a "marker" for future reform efforts. Accordingly, insurance companies are advised to consider the Camp proposals carefully, along with the Administration's proposals, and evaluate how the various proposals would affect their Federal income tax liability.

Chairman Ryan also has said that the House will pursue a "dual track" approach to pass bills making permanent certain expired tax provisions. On February 12, 2015, Ways and Means member Pat Tiberi (R-OH) introduced a bill (H.R. 961) to make permanent the subpart F exceptions for active financing income. The Ways and Means Committee last year approved a similar bill that proposed to make active financing exceptions permanent. The timing for Senate Finance Committee action on "tax extender" legislation is unclear at this time.

If, in coming months, President Obama and Congress cannot reach an agreement on tax reform legislation that would address the expired provisions, look for Congress to make a strong push later this year to make permanent the research credit and certain other business and individual tax provisions that have expired, including possibly active financing exceptions, while providing temporary extensions of certain other provisions and possible elimination of some temporary provisions.

Insurance-related revenue raisers

The Obama Administration's business reform framework also proposes several revenue-increase measures specific to insurance companies. Among the insurance-related measures are provisions that would:

- ***Disallow the deduction for non-taxed reinsurance premiums paid to affiliates*** – This proposal would disallow any deduction to covered insurance companies for the full amount of reinsurance premiums paid to foreign affiliated insurance companies with respect to reinsurance of property and casualty risks if the premium is not subject to US income taxation. The proposal would provide a corresponding exclusion from income for reinsurance recovered with respect to a reinsurance arrangement for which the premium deduction has been disallowed. The proposal also would provide an exclusion from income for ceding commissions received with respect to a reinsurance arrangement for which the premium deduction has been disallowed. The exclusions are intended to apply only to the extent the corresponding premium deduction is disallowed. The proposal would provide that a foreign corporation that is paid a premium from an affiliate that would otherwise be denied a deduction under this provision may elect to treat those premiums and the associated investment income as income effectively connected with the conduct of a trade or business in the United States. If that election is made, the disallowance provisions would not apply.
- ***Conform net operating loss rules of life insurance companies to those of other corporations*** – This proposal would modify the carryback and carryforward periods for losses from operations of life insurance companies to conform the treatment to that of other taxpayers. Under the proposal, losses from operations of life insurance companies could be carried back up to two taxable years prior to the loss year and carried forward 20 taxable years following the loss year.
- ***Modify rules that apply to sales of life insurance contracts, including transfer for value rules*** – This proposal would create a reporting requirement for the purchase of any interest in an existing life insurance contract with a death benefit equal to or exceeding $500,000. The proposal also would modify the transfer-for-value rule to ensure that exceptions to that rule would not apply to buyers of policies, and would apply to sales or assignment of interests in life insurance policies and payments of death benefits for tax years beginning after December 31, 2015.
- ***Modify dividends received deduction for life insurance company separate accounts*** – This proposal would repeal the present-law proration rules for life insurance companies and apply the same proration regime separately to both the general account and separate accounts of a company. Under the proposal, the policyholders' share would be calculated based on a ratio of the mean of the reserves to the mean of the total assets of the account. The company's share would be equal to one less the policyholders' share. The proposal would be effective for tax years beginning after December 31, 2015.
- ***Expand pro rata interest expense disallowance for company-owned life insurance ("COLI")*** – This proposal would curtail an exception to a current law

interest disallowance of a pro rata portion of a company's otherwise-deductible interest expense, based on the unborrowed cash value of COLI policies. As modified, the exception would apply only to policies covering the lives of 20-percent owners of the business. The proposal would apply to contracts issued after December 31, 2015, in tax years ending after that date.

- ***Repeal special estimated tax payment provision for insurance companies under section 847*** – This proposal would repeal IRC Section 847 and would include the entire balance of an existing special loss discount account in income in the first tax year beginning after 2015. Alternatively, the proposal would permit an election to include the balance in income ratably over four years. Existing special estimated tax payments would be applied against the liability created by the income inclusion.

Depending on legislative developments pertaining to taxation of overseas profits, insurers may need to re-evaluate their incentives to shift and leave profits offshore.

Insurance developments: Judicial and administrative

A number of judicial and administrative developments occurred in 2014 concerning insurance companies. These developments affected insurers in various lines of business:

- ***Life insurers*** – An Industry Director's Directive instructed LB&I examiners not to challenge the tax hedge qualification of certain transactions insurance companies enter into with respect to variable annuities with guaranteed minimum benefits. The Directive also provided a safe harbor accounting method for insurers to account for gains and losses that result from such tax hedges. Although the Directive provides clarity on tax hedges of obligations that relate to variable annuities issued before December 31, 2009, it does not cover hedges of obligations under contracts issued on or after December 31, 2009. It is not clear at this point whether the Directive's method would be acceptable for such hedges or whether other existing methods utilized for such hedges would be acceptable as a clear reflection of income. The IRS also modified and superseded a controversial ruling that it issued in 2007 concerning the Dividends Received Deduction for Separate Account dividends. In doing so, the IRS republished a noncontroversial portion of the earlier ruling, and removed the more controversial part of that ruling from the books without directly revoking it. It is expected that the IRS will continue not to raise that issue based on an earlier administrative directive.
- ***Non-life insurers*** – The IRS issued technical advice denying insurance contract treatment for certified pre-owned vehicle warranties where the warranties were not evidenced by a separate contract and separate consideration. Because case law that the Service previously cited with approval appeared to conclude otherwise, the technical advice raises the question if this is a change in IRS position.
- ***Health insurers*** – During 2014, health insurance providers were required to make their first payments of the Health Insurance Providers Fee, an amount that is borne by the industry in proportion to each company's share of net premiums written. It is not yet clear how the IRS will approach refund requests by companies that overpaid their share of the fee. Also, health insurers are for the first time considering the appropriate tax accounting for amounts that are payable or receivable under the Affordable Care Act's "3 R's" (the Transitional Reinsurance Fee, Risk Adjustment, and Risk Corridor).
- ***Captive insurance companies*** – During 2014, the Tax Court decided two cases that call into question that IRS's longstanding position that an arrangement cannot qualify as insurance if the risks are concentrated in a small number of policyholders. Those two cases are *Rent-A-Center v. Commissioner*, 142 T.C. 1 (January 14, 2014), and *Securitas Holdings v. Commissioner*, T.C. Memo 2014-225 (October 29, 2014). In addition, during 2014 the IRS issued Rev. Proc. 2014-15 addressing the treatment

of a captive insurance arrangement entered into by a voluntary employees' beneficiary association ("VEBA"). Consistent with its longstanding treatment of insurance provided for the benefit of employees, the IRS concluded that reinsurance between a third-party reinsurer and the captive insurance subsidiary qualified as insurance. The IRS utilized its analysis in prior rulings to look through the reinsurance arrangement and conclude that the insurance requirements of risk shifting and risk distribution were met.

- ***Foreign insurance arrangements*** – During 2014, the United States District Court for the District of Columbia issued a ruling in *Validus Reinsurance v. US*, 19 F.Supp 3d 225 (February 5, 2014). The court held that the plain language of section 4371, imposing the insurance federal excise tax, does not apply to retrocessions covering US risks between two foreign reinsurance companies. An appeal of this decision is pending in the United States Court of Appeals for the District of Columbia Circuit.

As in prior years, the IRS and Treasury jointly issued a Priority Guidance Plan outlining guidance it intends to work on during the 2014-2015 year. The plan continues to focus more on life than property and casualty insurance companies. The following insurance-specific projects were listed as priority items. Many carried over from last year's plan, including:

- Final regulations under §72 on the exchange of property for an annuity contract. Proposed regulations were published on October 18, 2006.
- Guidance on annuity contracts with a long-term care insurance feature under §§72 and 7702B.
- Guidance clarifying whether the Conditional Tail Expectation Amount computed under AG 43 should be taken into account for purposes of the Reserve Ratio Test under §816(a) and the Statutory Reserve Cap under §807(d)(6).
- Guidance on exchanges under §1035 of annuities for long-term care insurance contracts.
- Regulations under §7702 defining cash surrender value.
- Guidance providing de minimis relief under §833.
- Guidance relating to captive insurance companies.

It remains uncertain how many items will be completed by June 30, which is the end of the guidance plan year.

Implications

- There is a good deal of bipartisan agreement on the merits of tax reform legislation, and Congressional leaders are attempting to meet an aggressive timeline for action this year. Accordingly, insurers should closely monitor developments in order to respond to any legislative changes.
- Insurers should closely monitor legislative developments pertaining to taxation of overseas profits, and depending on what transpires, re-evaluate their incentives to shift and leave profits offshore.
- Even in the absence of comprehensive Tax Reform, the Obama Administration's budget proposals include several possible revenue-increase measures specific to insurance companies, and life products in particular. Insurers will need to stay abreast of the status of these measures both in order to address them internally and educate their policyholders on their potential implications.
- In addition to guidance that is promised on the 2014-2015 Priority Guidance Plan, insurers should monitor longer-term trends, including the adoption of Life PBR, the IRS's response to the Rent-A-Center and Securitas cases, and the ongoing appeal of the *Validus* case.

Insurance modernization

The role of advanced analytics

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Developments in insurance contracts accounting and reserving

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Strategy

Potential impacts of automated driver assistance systems (ADAS) and autonomous car technologies on the insurance industry

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