

# *What the future holds*

## Insurance 2020

All insurance sectors have experienced dramatic change over the past decade. This will continue and even accelerate over the coming decade, and not all of these trends may be favorable for insurers.

Insurers who can anticipate and plan for change can create their future, while others who are "Fast Followers" need to be agile enough to recognize the leaders and follow them. The "Survivors" are likely to be focused on short-term performance. Which one are you?

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## Introduction

On January 1, 2000 the global economy was peaking, with booming stock and labor markets. The Internet was changing everything from how consumers bought insurance to how aircraft manufacturers bought supplies. Then, the dot com boom quickly went bust and terrorists attacked the World Trade Center. After an extended slump, western economies recovered from these shocks and reached new peaks in mid-2007, only to crash again in the most severe economic downturn since the Great Depression. Unlike previous cycles, emerging economies quickly recovered from the financial crisis, but developed countries are still struggling to get back on their feet.

These events have profoundly affected the psychology and expectations of people around the world. The past decade has seen unprecedented social, technological, environmental, economic, and political (STEEP) changes (see Figure 1 below). These changes have affected all global insurance sectors, including personal lines, commercial lines, individual life, annuities and retirement, and group benefits. Some of these STEEP changes are likely to continue and even accelerate over the next decade. For example, the rise of virtual communities via social networking, the exponential growth of mobile internet, the increasing sophistication of Internet tracking that generates real-time data, and the analytics that transform this data into insights already are shaping how consumers obtain advice on and purchase insurance products, as well as how carriers underwrite, manage and transfer risk, and proactively reduce losses.

**Figure 1: STEEP Drivers**

Social	Technological	Economic	Environmental	Political
<ul style="list-style-type: none"> <li>• Customer behaviors                             <ul style="list-style-type: none"> <li>– Social networking</li> <li>– Customer expectations</li> <li>– Risk awareness</li> <li>– Health</li> </ul> </li> <li>• Demographic shifts                             <ul style="list-style-type: none"> <li>– Rise of middle class</li> <li>– New family structure</li> <li>– Dependency ratio</li> <li>– Aging</li> </ul> </li> <li>• Stakeholder trust</li> <li>• Talent drain</li> <li>• Corporate social responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Information &amp; analysis</li> <li>• Devices &amp; sensors</li> <li>• Software applications</li> <li>• Medical advances</li> </ul>	<ul style="list-style-type: none"> <li>• Urbanization</li> <li>• New growth opportunities</li> <li>• Fiscal pressures</li> <li>• Inflation / deflation</li> <li>• Risk sharing &amp; transfer</li> <li>• Pensions / entitlements &amp; benefits</li> <li>• Distributor shift</li> <li>• Partnerships</li> </ul>	<ul style="list-style-type: none"> <li>• Climate change &amp; catastrophes</li> <li>• Sustainability</li> <li>• Pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Regulatory reform</li> <li>• Geopolitical risk</li> <li>• Rise of state-directed capitalism</li> <li>• Terrorism</li> <li>• Tax treatment</li> <li>• Sharia compliance (Takaful)</li> </ul>

Source: PwC analysis

Not all STEEP changes will affect insurers positively. Economic growth in at least the short to intermediate term will be stronger in emerging economies. Nevertheless, savvy insurers in developed countries can still grow in their local markets by exploiting socio-demographic and technological trends, while at the same time targeting the emerging countries for growth.

Similarly, insurers from emerging economies have an opportunity to reshape insurance products for their local markets while going global to build their technical expertise.

Although no-one can predict exactly what STEEP changes will occur in the next decade and how they will impact different insurance sectors, we see five key mega-trends within the social, technological, economic, and political drivers that will influence the four key insurance sectors.

- **Social:** Shifting balance of power towards customers;
- **Technological:** Advances in software and hardware that transform "big data" into actionable insights ;
- **Environmental:** Rise of more sophisticated risk models and risk sharing to address increasing severity and frequency of catastrophic events;
- **Economic:** Rise of economic and political power of emerging markets;
- **Political:** Harmonization, standardization, and globalization of insurance market

We discuss each of these mega-trends in more detail below.

## *Social*

### *Shifting balance of power towards customers*

Customer expectations for simplicity, transparency, and speed of fulfilment have changed significantly over the past decade. Increasing familiarity with the online channel and the resulting comfort with using it for education, research, advice and purchase of complex products has grown exponentially in recent years. The online world also is becoming increasingly mobile as the smart phone and tablet use increases and fuels the demand for localized information, anytime/anywhere. For example, by 2014 the number of mobile Internet users, estimated to be 1.6 billion, will overtake desktop Internet users. Moreover, in a recent survey of US consumers, more than 32% of all respondents — and 50% of those aged 18 to 25 - prefer to work directly with insurance carriers. We expect to see demographic shifts, advances in mobile devices, and access to mobile internet drive these numbers even higher over the next decade.

The rise of the social networks over a relatively brief period of time has been one of the fastest global adoptions ever. In just six years since its launch, Facebook has over 600 million users; only China and India can claim greater populations. As consumers get even more comfortable with social networks, exchange more personal information, and start building networks of trusted friends, family, and acquaintances, we are likely to see the trust balance shift from insurance agents and advisors to online communities. Online social networks could wield substantial purchasing power and become the new group channels. Such 'virtual affinity groups' will constitute the new 'group insurance' benefiting information-driven online intermediaries. These online social networks eventually could become pooling mechanisms for self-insurance. If this happens in significant numbers, then the role of insurers could change from that of insurance product manufacturers to insurance administration service providers.

Taken together, these factors imply an increasing shift of power to customers from distributors.

## *Technological*

### *Advances in software and hardware that transform "big data" into actionable insights*

As the insurance industry reaps productivity gains from the most recent wave of automation, new technologies are significantly enhancing operational efficiencies, increasing revenue opportunities, and enhancing the customer experience. First and foremost among these technologies are smart phones and tablets that provide anytime, anywhere access to the Internet, as well as the estimated 50 billion active sensors and devices that will be connected to the Internet in the near future. All of these connected devices and sensors will be generating and transmitting large amounts of real-time data, often called "Big Data." For example, by 2013 the amount of traffic flowing over the internet annually will reach 667 exabytes. The amount of data collected in one year by connected sensors would fill a stack of DVDs going one-fifth of the way to the sun. These devices and sensors will not be restricted to just machines and inanimate objects, but also are likely to become an integral part of the human body to monitor vital health statistics.

Coinciding with the "Big Data" trend is global investment in advanced analytical techniques that can process large volumes of unstructured data (e.g., text, continuous real-time video, life logging) and multi-media data (e.g., video, audio, gestures, mobile, social chatter). These advances will lead to software and eventually hardware that can translate "Big Data" into actionable insights such as searching a continuous video cam feed to identify suspicious activities and enhancing and matching these images (i.e., facial recognition) to a database of suspects. As this technology spreads and matures, the reliability of identification and prediction will increase and lead to greater automated generation of insights.

These two trends will profoundly impact both the P&C and life & annuities sectors. In both cases, insurers should be able to move from passively identifying and pricing risk and reactively paying claims once an event has occurred to proactively using "Big Data" and actionable insights to reduce losses and better manage risk. For life and health insurers and annuity and retirement income providers, monitoring devices could significantly extend life expectancies and increase the number of years of active retirement life.

## *Environmental*

### *Rise of more sophisticated risk models and risk transfer/sharing*

The severity and frequency of catastrophic events, both natural and man-made, have been increasing over the past twenty years. Between 1990 and 2009, hurricanes and tropical storms accounted for 45.2 percent of total catastrophe losses, and the rate and intensity of these storms is predicted to increase with global climate change. A large portion of claims payouts result from business interruption coverage losses — in the Chilean earthquake, over 50 percent of claims were filed for business income interruptions and extra expenses. Managing this type of situation requires insurers to be more sophisticated in their risk modeling and innovative in structuring risk sharing and risk transfer deals. Insurers who fail to do so might be forced to exit markets in certain coverage areas (e.g., flooding or forest fire).

## *Economic*

### *Rise of economic and political power of emerging markets*

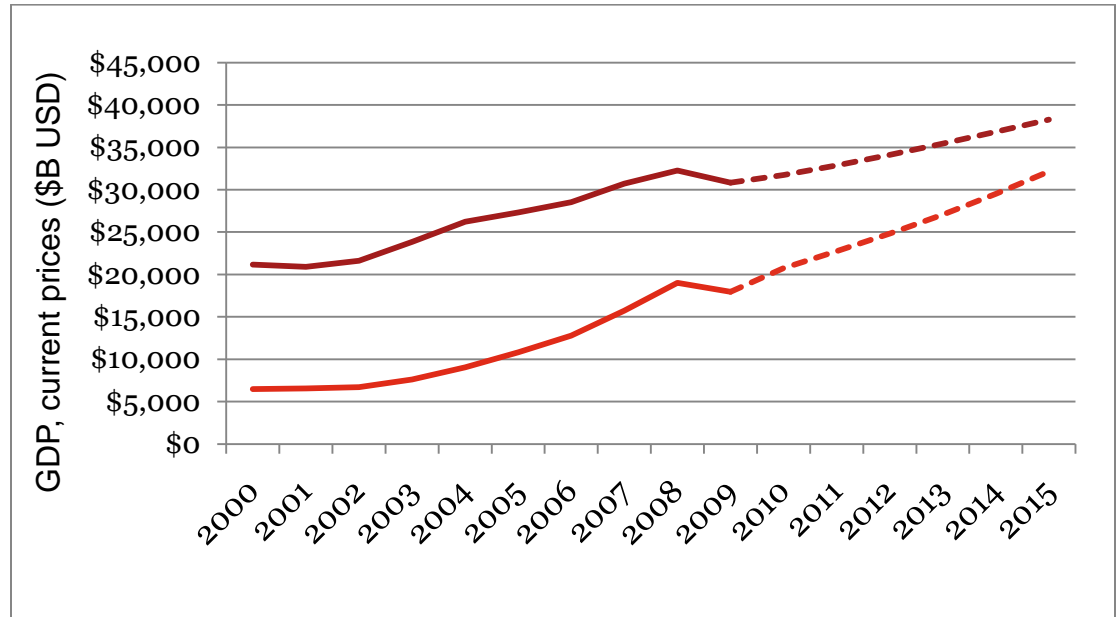
The BRIC (Brazil, Russia, India, China) countries' proportion of global GDP has been increasing over the past twenty years, and the liquidity and debt crunch precipitated by the financial crisis of 2008 continues to affect developed economies far more than the emerging ones. The bailout of Western financial institutions following the financial crisis has contributed to high budget deficits in many developed countries — some of which are experiencing sovereign debt crises and/or debt restructuring — as well as a depreciating US dollar.

The aftermath of the financial crisis has exacerbated the difference in growth between developed and emerging markets, thereby increasing the attractiveness of the latter (see Figure 2 below). Over 20,000 multinationals are operating in emerging economies; Western multinationals expect to find 70 percent of their growth in these economies—40 percent in China and India alone. S&P 500 companies are deriving an increasing proportion of their revenues and profits from markets outside the U.S. — over 46 percent of sales came from outside the US in 2009. Non-US revenues for S&P500 financial services companies increased from 29 percent in 2003 to 40 percent in 2009. For example, only five of the 30 largest developing economies experienced total non-life premium growth of under 50 percent. Overall, premiums declined 1.9 percent in developed countries, but increased 7.1 percent in developing economies.

These trends indicate three plausible global growth possibilities: 1) Emerging markets could continue to grow around eight to ten percent a year, while the developed world could continue to experience sub-two percent growth (twin-track growth); 2) Emerging markets could create enough of a demand for developed market goods to offset the US/EU/Japan slump in consumer spending; or 3) Troubles in the developed markets could spill over to the emerging markets. There also is a less distinct possibility that a global slowdown could begin in the emerging markets; for example, there has been a global commodities boom over the last three years that could go bust if the Chinese housing market declines.

Economic growth (or lack of it) in both the developed and emerging markets could create different competitive dynamics. The insurance industry as a whole could become more globalized as countries harmonize regulations, standardize practices and distribute products across borders (see "Political" below). This could lead to greater market share for global insurers, as well as economies of scale and scope that drive the globalization of the insurance value chain. Conversely, twin track growth and the loss of the developed world's authority in the wake of the financial crisis could result in greater protectionism by countries or regions. In between these two extremes, developed market insurers could increase their attempts to find growth in emerging markets, and/or emerging market players could expand into developed markets for know-how and talent.

Figure 2: GDP Growth of G7 and Emerging Markets



### *Political*

#### *Harmonization, standardization, and globalization of insurance market*

The financial crisis has enhanced communication and dialogue between and among the US, EU, and emerging market regulators, and it is conceivable that the regulators will be successful at negotiating and harmonizing the global insurance regulations. This could lead to greater standardization of products and policies, and promote more globalization of the insurance value chain. On the other hand, it is conceivable that regulators continue to develop new but different (and potentially onerous) regulations in each market. In between these two extremes, it is possible that emerging markets will prevent developed market players from entering their markets or put limits on their activities. Similarly, emerging markets could encourage developed market entry by removing restrictions and easing regulatory burdens.

**Figure 3: Range of possible scenarios**

	<b>Regressive gloom &amp; doom</b>		<b>Combination of Factors</b>		<b>Progressive boom &amp; zoom</b>
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Social</b>	Customers predominantly seeking face-to-face interactions with intermediaries.	Distribution disruption in which multiple channels compete for customer interaction.	Distribution disruption where integrated multi-channel interaction is the norm.	Distribution destruction, where customers buy directly from carriers.	Distribution destruction, where self-forming groups of customers negotiate bulk purchases from carriers.
<b>Technological</b>	Insurers face increased data overload, quality and privacy issues, and cyber threats, resulting in a regression in a "gut-driven" decision making.	Insurers continue to manage information overload and ever-increasing sophistication of analytical techniques that require ongoing investment to keep pace with competitors.	Sophisticated information analytics becomes the key determinant of competitive differentiation, which underwriting talent magnifies.	Sophisticated information analytics, new sources of information (from mobile sensors), and underwriting talent become the key determinant of competitive differentiation.	Sophisticated information analytics progresses to a point where no more useful information can be extracted and all key decision-making has been automated; competition shifts to prevention and productivity gains.
<b>Environmental</b>	With catastrophic events on the rise and insufficient data to accurately predict them, insurers will exit unprofitable areas.	Insurers will continue to rely on catastrophe models, but regulatory restrictions will prevent them from restructuring innovative risk transfer/sharing deals.	Insurers will continue to rely on catastrophe models and sell innovative catastrophe insurance products through securitization and reinsurance.	Catastrophe modelling gets more sophisticated and uses advanced, early warning technologies to underwrite in specific, catastrophe-prone areas.	Advanced early warning technologies and new risk transfer/sharing mechanisms with public and private enterprises reduce loss from catastrophic events to human lives and property.
<b>Economic</b>	The world moves from globalization to regionalization and insurers operate in and create products specific to narrow boundaries.	Emerging market insurers grow in scale and importance and limit opportunities for developed market insurers.	As developed market insurers enter emerging markets, margins in these markets decline.	New emerging market insurers move into developed markets and become global businesses.	Truly global markets with products that are able to integrate multiple parts of the value chain, regardless of location.
<b>Political</b>	Developed and emerging markets implement burdensome regulations on insurers. Products and practices diverge between countries.	Emerging markets erect more onerous regulations than developed markets, complicating entry into emerging markets.	The majority of global regulatory attention is on banks; insurers face few mandated changes to pricing, coverage, rates, and reserve requirements.	Although emerging markets do not harmonize regulations with developed markets, they change regulations to make it easier for developed market insurers to enter their markets.	Harmonization between and among countries (and states), which leads to standardized products and practices.

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## Macro Scenarios

Our detailed analysis of over 25 key STEEP drivers (please see Figure 3 above) has enabled us to determine the five mega-trends we discuss above. These mega-trends have two key dimensions:

- **Socio-Technological:** This includes the possibility of a world in which the power balance shifts towards the customer, with virtual social networks acting as trusted networks for insurance purchase or self-insurance. Another possibility is a world in which distribution power remains largely with traditional insurance agent/advisor intermediaries, if social networking turns out to be a quickly forgotten fad. On the technological side, this includes the possibility of a world of fully-interconnected devices and sensory networks with advanced intelligent technologies that analyze information and arrive at insights that enable data-driven, automated decision-making. An alternate scenario is a world of information overload characterized by manual interventions to keep systems running.
- **Politico-Economic:** This ranges from the possibility of an emerging market-led global recovery to a developed world-led-global downturn. In addition, this dimension includes the possibility of a world with harmonized regulations, products, and practices, and a stable geopolitical landscape, as well as its converse: A world of developed and emerging market blocs that invariably cause global friction.

Based on the range of possibilities in these two dimensions, we have developed four major Insurance 2020 scenarios that take into account world developments and their impact on the insurance industry.

- **Progressive Boom & Zoom:** One extreme is when socio-technological advances result in a customer-driven model with collective, social networking-influenced insurance purchasing in a world of data-driven, automated decision-making. This scenario envisions a politico-economic dimension that features collaborative, harmonized regulations, products, and practices that lead to the globalization of insurance in a stable, growing world economy.
- **Regressive Doom & Gloom:** The other extreme is when the socio-technological dimension regresses and customers lose trust in online and social networks and go back to traditional intermediated models; in this case, information and technology will play a less critical role as insurers and customers cope with information overload and insurers face soaring IT costs. On the politico-economic front, the world would enter a period of nationalistic and/or regional regulations and policies and conflict over scarce resources, resulting in an unstable geopolitical situation with likely low global economic growth.
- **Regressive Boom & Gloom and Progressive Doom & Gloom:** In these two scenarios, the world progresses in either the socio-technological or the politico-economic dimensions but not the other.

While it is unclear how these global scenarios may play out and impact the insurance industry, it is clear that there will be significant changes for insurers regardless of what happens. As we describe below, there are actions that insurers can take and bets they can make to position themselves for future success.

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## *Making Sense of the Future*

Regardless of which of the above scenarios becomes reality, we see major impacts to insurers in three major areas:

- **Business Models:** The progressive scenarios above would lead to a fundamental change in insurance business models. Insurance companies traditionally have made money by identifying and pricing risk and being more operationally efficient than their competitors. This model would change in the progressive scenarios because being able to use internal and external (social) information to underwrite and price risk, as well as reduce losses and manage risk, would become key competitive advantages. Insurance would shift from a reactive claims payment model to a proactive loss control model. As we are already seeing, personal lines customers would be able to opt for "pay as you go" auto insurance; commercial lines customers would see a "value share" model that balances premiums with loss control incentives. Individual life and annuity customers would see lifestyle-based premiums and payouts that feature incentives for lifestyle based behavioral changes (i.e., diet control, exercise, physical and mental activity, etc.).

In the boom and zoom scenarios, it would be easier for insurance companies to move away from being just state or national businesses to truly global ones. For insurers in developed countries, this would mean easier entry into and growth in emerging markets; for emerging market insurers, this would mean greater ease in moving out of their home markets into other emerging markets or even into developed markets to gain know-how.

- **Value Chain Impact:** While the extreme ends of the two dimensions would result in fundamental changes to business models, limited change across the two dimensions would result in changes to the value chain. For example, limited socio-technological change would result in increasing use of external data (including behavioral and social data) to improve customer segmenting, targeting, and needs assessment, as well as pricing. It also likely would result in more sophisticated analytics and automation, and thereby improve and make more economical product and service customization; however, this would require an ongoing investment in IT and advanced analytics. Similarly, mobile technology would play a greater role in claims management for property and casualty insurers, as it would in customer interactions in both P&C and life and annuities.

Similarly, limited political-economic change likely would result in insurers developing more regional and global capital management, finance, and reporting structures and policies. Marketing and product development would take a more regional or global thrust by and utilize greater understanding of customers to penetrate 'adjacent' markets, and/or use information more advantageously to extract increase business in mature markets.

- **Talent Management:** If the scenarios are closer to extremes and feature increasing globalization and automation, then the need and ability to acquire and grow talent will be especially paramount. The people in demand would have strong abilities in advanced information analytics and be able to bridge the gap between business and technology and business and analytics. In addition, cultural diversity and the ability to understand and function effectively in multiple cultures would be key senior management requirements. In addition, harmonization of regulations, policies and products likely would result more cross-border and cross-business unit initiatives.

While all insurance carriers *will* be affected in at least one of these three areas over the next decade, the precise actions they need to take will differ by their size, global reach, strategy and unique capabilities. There are four broad directions that companies can take as they prepare for the future.

- **Create Your Future - Innovators:** Carriers who want to reshape the future through innovation. Whether these innovators are in emerging or developed markets, their focus will be on R&D, new product innovation (e.g., micro-insurance or pro-active loss control services), and analytical decision-making techniques.
- **Create Your Future - Expansionists:** Carriers who want to reshape the future through global expansion. These carriers will focus on leveraging their capabilities (e.g., customer understanding, product portfolio, capital, diverse talent, Takaful) into adjacent and similar markets around the globe. They will be growth seekers and not necessarily innovators in new products and services.
- **Fast Followers:** Carriers who do not want to be the first, but are adept at following the leaders and establishing a strong presence. Fast followers can be innovators or expansionists, and their focus is less on innovation, and more on scaling capabilities across a broad market. They are good at sensing new innovations and market opportunities, and are nimble enough organizationally to follow and establish a lasting presence.
- **Survivors:** Carriers who are focused on short-term performance and survival. These carriers wait for a majority of the industry to adopt new ideas and practices before adopting them. They tend to be organizationally hierarchical and slow to respond, but can be operationally resilient and efficient.

*Regardless of which category you belong to, there are a number of actions you can take to prepare yourself for the uncertain future and exploit the emerging opportunities.*

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