



June 29, 2016 04:01 AM GMT

# Insurance - Property & Casualty

## North America Insight: Digital Disruption in Small Business Insurance

InsurTech startups & new entrants are driving a digital disruption in the ~\$100b small business insurance mkt. We see 3 scenarios and est. \$17-33b mkt. opportunities to gain/lose by 2020. Incumbent carriers & brokers must adapt, and investors should pay attention.

**Digital disruption in ~\$100b SBI market.** Small business owner demographics favor digital insurance. By 2020, more than 60% of US small business will be owned by Millennials & Gen Xers, who prefer to manage insurance digitally. In our recent survey, 38% of small businesses would buy insurance online if they were starting out today. InsurTech startups are zeroing in on this opportunity. And traditional carriers (incumbents & new entrants) are positioning for changes in this large, profitable & fragmented marketplace.

**A \$25b+ digital SBI market opportunity to gain (or lose).** We see 3 scenarios with 15-30% digital SBI penetration by 2020, up from ~4% today. This translates into a \$17-33b market opportunity. In our most likely scenario, we estimate ~24% of SBI, or ~\$26b premiums, sold digitally by 2020, a ~46% CAGR vs. ~2% for SBI market overall. The scenarios imply \$3-8b operating profit up for grabs for carriers and \$400m-1b for brokers.

**InsurTech & new entrants likely to drive changes.** InsurTech companies are poised to fill the needs of small businesses seeking simpler products that are easy to understand & buy. E-brokers provide a consumer-friendly experience. Aggregators give small businesses a quick look at options. Adjacent players are cross-selling insurance. Technology enablers are assisting incumbent carriers/brokers. Some non-incumbent insurers are taking innovative, digital/direct approaches to SBI.

**Incumbent carriers & brokers must adapt to changing landscape.** In the past 2 decades, the top 3 direct auto insurers gained 17% share, at the expense of larger & smaller competitors. Given tech advances & the ubiquity of digital offerings, the SBI shift should happen much faster. To address the opportunity, insurers must adopt digital/direct distribution & improve customer experience. Brokers face a more significant reinvention to embrace an omni-channel approach & redefine their value proposition.

**Who are the likely winners (and laggards)?** Among our coverage, Hartford (EW), Travelers (EW), Chubb (OW) & AIG (EW) have the most exposure in SBI. We estimate each point of share gain could boost their earnings by 4-14%. They have financial & technology resources but could be constrained by channel conflict and inertia. Smaller insurers and brokers could face the biggest challenges. In our broker coverage, Brown & Brown (UW) is most exposed. New entrants (startups or traditional insurers) could be the biggest beneficiaries in the digital transformation of SBI.

MORGAN STANLEY &amp; CO. LLC

**Kai Pan**

EQUITY ANALYST

Kai.Pan@MorganStanley.com

+1 212 761-8711

**Chai Gohil**

RESEARCH ASSOCIATE

Chaitanya.Gohil@morganstanley.com

+1 212 761-1710

**Nigel Dally**

EQUITY ANALYST

Nigel.Dally@morganstanley.com

+1 212 761-4132

**Brian Nowak, CFA**

EQUITY ANALYST

Brian.Nowak@morganstanley.com

+1 212 761-3365

## Insurance - Property &amp; Casualty

North America

IndustryView

In-Line



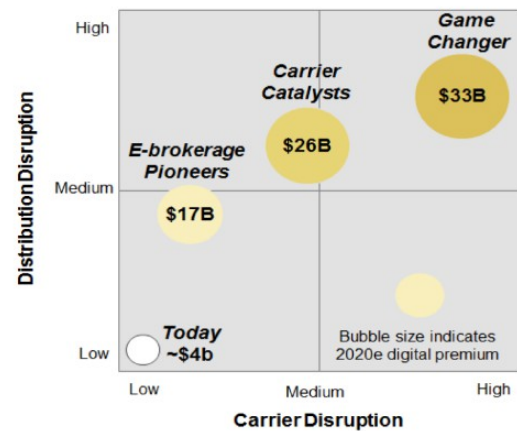
Achim Schwetlick  
Lucy Pilko  
Nathalia Bellizia

Boston Consulting Group is an international management consulting firm. For more information, visit [www.bcg.com](http://www.bcg.com).

Boston Consulting Group is not authorized nor regulated by the SEC or FINRA and as such is not providing investment advice. Boston Consulting Group authors are not research analysts and are not registered with FINRA.

Boston Consulting Group authors have only contributed their expertise on business strategy within the report. Their views are clearly delineated. The securities and valuation sections of the report are the work of Morgan Stanley only and not BCG.

For disclosures specifically pertaining to BCG please see the Disclosures Section located at the end of this report.

**Exhibit 1: Three Scenarios for Digital SBI Market in 2020**

Source: The Boston Consulting Group and Morgan Stanley Research

Morgan Stanley does and seeks to do business with companies covered in Morgan Stanley Research. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of Morgan Stanley Research. Investors should consider Morgan Stanley Research as only a single factor in making their investment decision.

**For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report.**



## Executive Summary

---

**We think the ~\$100b small business insurance (SBI) market is in the early stages of a digital disruption.** Changing demographics of small business owners, increasing number of InsurTech startups, and heightened focus of traditional carriers (both incumbents and new entrants) in this sizeable and profitable market are catalysts for this secular trend.

- **Demographics favor digital insurance solutions.** By 2020, more than 60% of small business in the US will be owned by Millennials and Gen Xers, two groups that prefer to purchase and manage insurance digitally. According to our recent survey, 38% of small businesses would buy insurance online if they were starting their businesses today.
- **There are unmet insurance needs of small businesses.** Proprietors look for simpler products, easier to understand and buy. "Mom and pop" agents have difficulty filling this demand as commissions are too small and the investments too big.
- **InsurTech startups are zeroing in on this emerging opportunity.** Backed by venture capital and even traditional insurers, a growing number of startups are focusing on SBI, leveraging experiences from personal auto and other financial services, including FinTech companies.
- **Traditional carriers are positioning for digital disruption.** As SBI is a large (~\$100b annual premiums), profitable (~90% combined ratio), and fragmented market (none of top players has more than 5% share), large incumbents are ramping up their digital efforts and new entrants are expanding into SBI.

**Changes in the personal auto insurance market provide an important case study.** Over the past two decades, the top three direct underwriters (GEICO, Progressive, and USAA) collectively gained 17% market share, at the expense of both larger and smaller competitors who are unable or unwilling to adapt the changing consumer preference. Besides convenience, direct/digital distribution also lowers insurance costs which drives consumer adoption as well. We believe the pace of digital adoption in the SBI market could be much faster as the internet and mobile technologies are ubiquitous now.

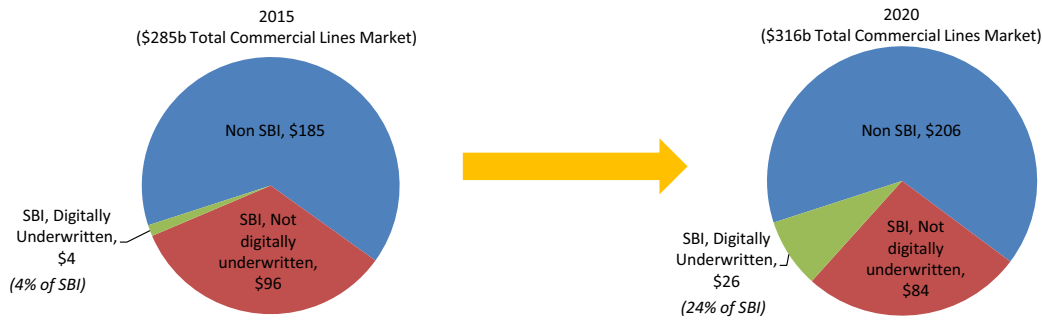
**A \$25b+ digital SBI market opportunity to gain (or lose).** We estimate 15-30% of SBI will be sold digitally by 2020, up from ~4% today. This translates into a \$17-33b premium market opportunity.

- In the most likely scenario, we estimate ~24% digital SBI penetration by 2020, or ~\$26b annual premiums. This represents a ~46% CAGR vs. ~2% for SBI market overall.
- Based on certain underwriting and operating margin assumptions, the digital SBI market could imply \$3-8b operating earnings for underwriters and \$400m-1b for brokers.
- Among our coverage, **Hartford** (EW), **Travelers** (EW), **Chubb** (OW), and **AIG** (EW) have the most SBI exposures (8-33% of total P&C premiums). We estimate one point market share gain could be 4-14% accretive to earnings while one point market share loss could negatively impact earnings by 2-7%. They have financial & technology resources but could be constrained by channel conflict and inertia.
- Smaller regional insurers could struggle to maintain their market share as SBI market consolidates, if they are not proactively adjusting their go-to market strategy.
- Smaller agents/brokers could face the biggest challenges. Among our brokerage coverage, **Brown & Brown** (UW) has the most SBI exposure.



- Larger brokers **AON** (EW), **Marsh McLennan** (EW), **Willis Towers Watson** (OW), and **AJ Gallagher** (EW) among our coverage, while not immediately threatened by digital disruption in SBI, could face increasing competition if smaller brokers have to move up to middle markets.
- Digital disruption in SBI provides an opening for non-incumbents to gain a foothold — and share.
- The biggest beneficiaries could be InsurTech companies — nothing but to gain share. However the lack of data and underwriting expertise could impede or even doom some efforts.

**Exhibit 2: The SBI Market Is Poised for Strong Growth (\$b)**



Source: SNL and Morgan Stanley Research estimates

**Exhibit 3: SBI Exposure (\$m)**

Who	SBI		P&C Total	SBI / P&C Total	Potential EPS Impact	
	Mkt Share	SBI (est')			SBI Mkt Share Change	SBI Mkt Share Change
AIG	2.5%	2,500	32,016	7.8%	-1.0%	3.7%
CB	3.0%	3,000	28,330	10.6%	-4.1%	7.5%
HIG	3.5%	3,500	10,537	33.2%	-6.6%	13.5%
TRV	4.0%	4,000	24,121	16.6%	-3.3%	7.6%
<b>Industry</b>		<b>100,000</b>	<b>520,229</b>	<b>19.2%</b>		

Note: EPS impact is incremental 2020e EPS relative to 2016 consensus EPS.

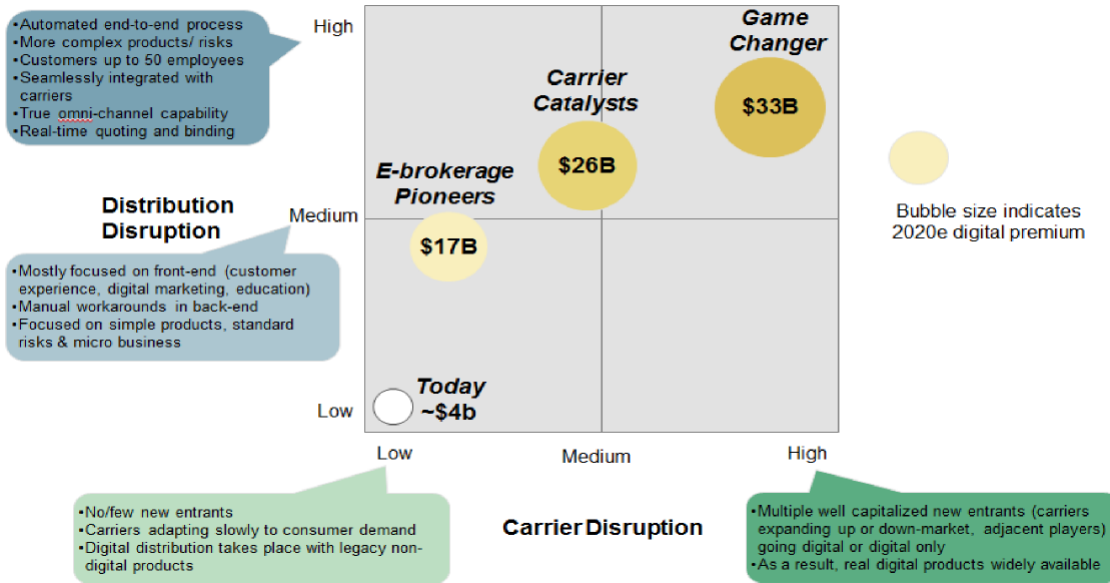
Source: SNL and Morgan Stanley Research

**InsurTech and new entrants are likely to drive the disruption. InsurTech startups** are focusing on distribution: E-brokers (such as Embroker, Next Insurance, and CoverWallet) are providing consumer friendly digital experience; **Aggregators** (like Compare.com and Einsurance) try to give small businesses a quick look at their options; **Adjacent players** (such as Intuit, Justworks, and Zenefits) are cross-selling insurance; **Technology enablers** (like MarketScout and QuanTemplate) are assisting incumbent carriers or brokers. **Traditional insurers** are taking innovative, digital/direct approaches to SBI: Berkshire Hathaway plans to sell worker's comp and BOP policies directly online; Hiscox offers SBI products directly from its website; American Family invested in AssureStart, a direct writer of SBI; AIG, Hamilton Insurance Group, and Two Sigma plan to establish a technology-driven platform in SBI. Most recently, Travelers announced a direct SBI online platform in the UK. Incumbents must adapt to survive and thrive. Carriers need to adopt digital/direct distribution and reduce product complexity. Brokers must embrace omni-channel distribution and redefine their value proposition.



We outline three possible scenarios in the evolving SBI market for 2020. **E-brokerage Pioneers** scenario (~15% digital SBI, or ~\$17b premiums) contemplates startup e-brokers appealing to newly created small businesses. **Carrier Catalysts** scenario (~24%, or ~\$26b) assumes digital distribution platforms adopted by major incumbent carriers. **Game Changer** scenario (~30%, or ~\$33b) envisions a few dominant SBI carriers also distribute directly online.

**Exhibit 4:** Three Scenarios for Digital SBI Market in 2020



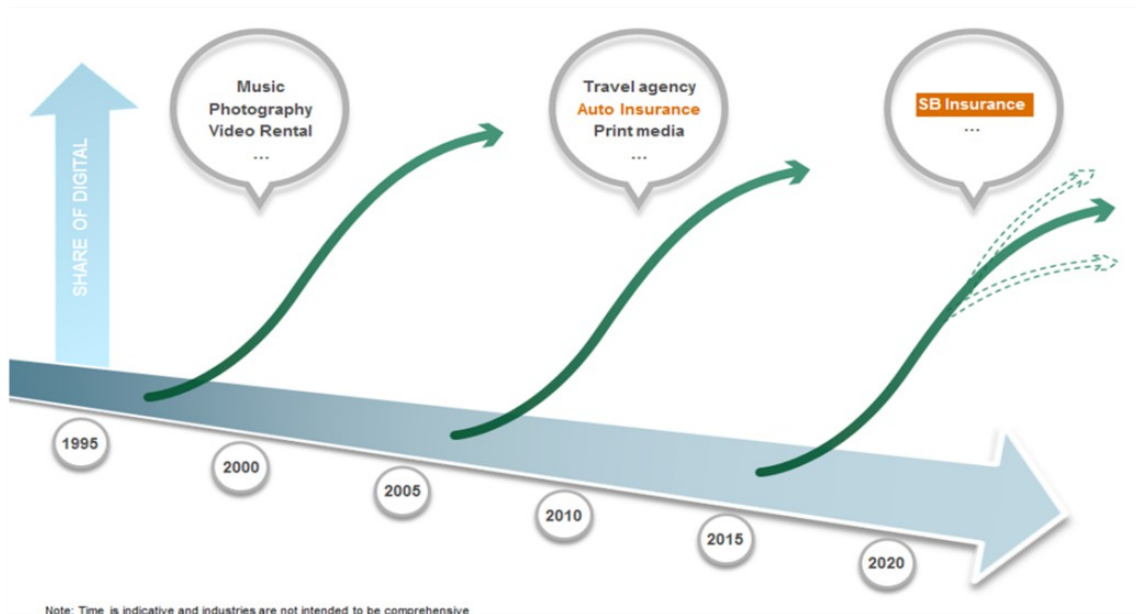
Source: The Boston Consulting Group and Morgan Stanley Research



## The (Digital) Future of Small Business Insurance

From music, photography, and video rental to travel agency, print media, and auto insurance, we have seen waves of digital disruptions. We think small business insurance (SBI) could be the next frontier. **How fast will the digital breakthrough come?** If US insurers are to increase their share of the attractive small business market, they would do well to enhance their digital small business offering. There is every reason to believe that small businesses will favor digital solutions for their insurance needs, and that a substantial advantage will go to carriers and distributors that see what's coming and get there first.

**Exhibit 5:** Waves of digital disruption - SB Insurance is next

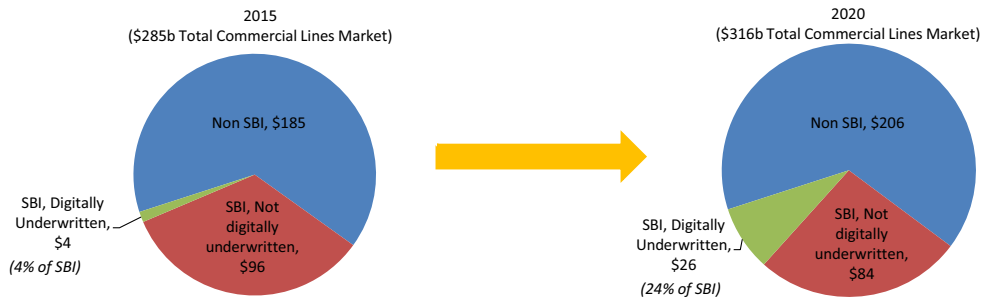


Source: The Boston Consulting Group and Morgan Stanley Research

Because of the tight regulatory environment in which it operates and the low frequency of customer interactions, insurance has lagged other industries in terms of digitization. Disruptive players haven't yet redrawn the landscape of insurance, thus giving customers a reason to alter their behavior or switch providers. So far, personal insurance is the only area where digitization has taken place in a meaningful way. Small business, however, won't be far behind. The two types of insurance have a lot in common, and roughly two in every five people who own a small business insurance policy look to get it from the same carrier they use for personal insurance.



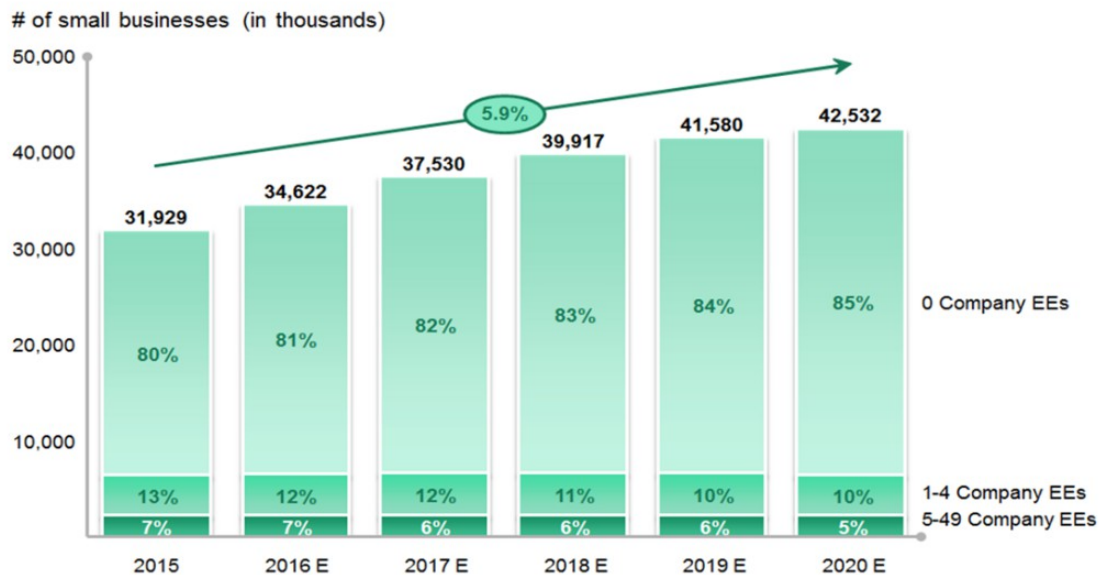
**Exhibit 6: Digital SBI Market Is Poised for Strong Growth (\$b)**



Source: SNL and Morgan Stanley Research estimates

What makes it highly likely that small business insurance offerings will take on a more digital character — and do so, we think, more quickly than many in the industry expect — is the changing composition of customers in the segment. By 2020, more than 60% of small businesses in the US will be owned by Millennials and Gen Xers — two groups that prefer to do as much as possible digitally. Small businesses come and go quickly, reflecting the increase in the freelance economy and the ease with which many workers go back and forth between full-time jobs and running their own single-person businesses or consultancies. These single-person businesses are part of a surge in so-called “microbusinesses” (businesses with 0-4 employees), and are part of the reason why, according to estimates by the Boston Consulting Group (BCG), roughly one in every four small US businesses that will exist a year from now don’t exist today. The variable workload and intermittent risk exposure of small businesses (not just microbusinesses) is ideal for a type of insurance that is more flexible than traditional insurance. Digital solutions for purchasing and managing insurance products may be in the best position to fill this segment’s needs.

**Exhibit 7: Steady Growth Ahead for US Small Business**



Source: The Boston Consulting Group and Morgan Stanley Research estimates

It isn’t just those starting small businesses today and in the next few years who will create the demand for digital insurance solutions. Plenty of existing US small businesses would jump at the chance to use digital channels for purchase and management of insurance if convenient options existed. These businesses already make extensive use of online and cloud technology for their business dealings. For instance, many use Intuit QuickBooks to handle their taxes and financial reporting, Square to process mobile payments, and platforms like Zenefits to manage their human resources needs.



The interest in digital insurance solutions among existing small businesses came through clearly in an April 2016 survey conducted by BCG (see Appendix I for details). Thirty-eight percent of existing small business owners said if they were starting their businesses today, they would want to buy their insurance directly online. The percentage saying this was significantly higher (49%) among those running newly formed businesses — that is, businesses started in the last two years.

**The holdup: a lack of strong digital offerings.** Indeed, the real obstacle to growth in the digital part of the small business insurance market isn't the readiness of the customer base — it's the absence of strong digital products and propositions from suppliers. For the US small business insurance market to move toward more digital solutions, carriers and distributors will have to take a new approach to the customer experience.

### Imperatives for carriers in an era of digitally distributed insurance.

- *Reduce product complexity.* Insurance continues to be a complicated product — full of legal language, multiple coverage tiers and exemptions, and cumbersome claims processes — making it confusing and difficult to use. Put another way, traditional insurance products are very different from what one encounters elsewhere in the digital realm, where convenience and instant gratification are the norm. To underwrite more premiums digitally, small business insurance providers will have to develop simpler modular products, ones written in plain English and easy to understand and buy. They are going to have to find ways to speed up the application process, with shorter forms that can be prepopulated with existing data (such as small business' financial statements or real estate information). Finally, the coverage schemes and pricing are going to have to become more flexible to better suit the needs of small business owners. This could involve usage-based or on-demand models that provide coverage only if and when needed.
- *Improve customer service, particularly in claims.* One of the big inconveniences of insurance is all the manual steps that are required when the policyholder is making a claim. This has started to change in personal insurance — people who have been in car accidents can often send pictures of their damaged vehicles using smartphones — and business insurance has to follow suit. Another part of improving customer service is ensuring that all claim-related transactions, such as appraisals, eyewitness statements and other supporting documents, are immediately available to all parties at the same time. In much the same way that a customer can track a package delivery on her smartphone in real time, she should be able to see every update while her insurance claim is in progress. At the same time, the technology shouldn't be overused; there are interactions that are better done person to person, such as when an injury has occurred.

One good thing about becoming customer centric in this way is that it won't necessarily be costlier to carriers. In fact, by making the right digital investments, carriers will be able to automate more processes, enable self-service where appropriate and redeploy their human resources more productively.

**Imperatives for distributors in an era of digital insurance.** If anything, the distribution side of the business will have to undergo an even more dramatic reinvention than the carrier side if it is to remain relevant in an era of digitally distributed insurance. Agents and brokers have to:

- *Embrace an omni-channel approach.* In today's world customers interact with their brokers and carriers through many different channels: call centers, the Internet, email, mobile technology, and in-person. Many customers prefer to go back and forth between channels, depending on the nature of the interaction or their personal situation. To these customers, a good experience would be one in which all of the channels were seamlessly integrated and had the same customer information at all times. In other words, if the customer made changes to a policy online through the carrier's website, he would want his agent (when he spoke to the agent two days later) to be fully aware of the online interaction and its outcome. This isn't what happens currently. The status quo today is for agents to try to "own" all interactions with the customer. This leads to a bad customer experience (if the customer would rather change his address online and the agency doesn't have that capability) and to a poor use of the agent's time (since the agent has to receive the change and manually feed it



through to the carrier). An omni-channel approach that gets past these limitations — allowing customers to use any channel in a seamless way — will improve the customer experience and agent productivity.

- *Redefine the value proposition of distribution.* Brokers and agents have typically played their biggest roles in the acquisition and renewal stages. They need to provide value at other points that matter to customers — including risk prevention and claims handling. Another way to say this is that distributors (despite the business model of receiving commissions from carriers) need to act as though they have a direct fiduciary responsibility to clients. If they are to improve the value proposition to the customer, agents and brokers will have to heavily leverage technology. Whether they'll be able to do this is a question. With many of their relationships not generating more than \$150 to \$250 in annual commissions, smaller brokers and agencies don't have the scale to make the investment that's required in digital.
- *Develop new marketing capabilities for customer acquisition and retention.* In the past, traditional agents and brokers acquired broker-of-record status by sitting down with small businesses and presenting their pitches (the proverbial kitchen table conversation). The new generation of small business owners (whether they are wine stores, six-person law firms, or physical therapy practices) will be most easily engaged online. Most brokers can't afford to buy search terms on Google, so they'll have to do their digital marketing in other ways, including through social media and other online tools. Brokers may also want to look at doing the kind of affinity analysis that Amazon does. The difference in this case would be that the "people who bought this also bought that" guidance would be insurance-specific: the coverage, deductible levels, price points and carriers that "businesses like yours" most commonly use.

**Change likelier to come from start-ups than incumbents.** Despite the growing interest in digital insurance solutions on the part of small businesses, incumbent carriers and distributors haven't made a beeline to the area. To incumbent carriers, the prospect of a full digital embrace at the small business level has its drawbacks. On the sales front, the drawbacks include the channel conflicts that would result if the carriers moved aggressively into a type of insurance that small businesses could buy directly online, bypassing existing brokers and agents. On the technology front, the drawbacks include the complexity and cost associated with the legacy systems that are supporting millions of existing small business accounts. In addition, designing and delivering a digital customer experience would require significant new investment.

As part of this study, BCG and Morgan Stanley conducted interviews with two dozen major carriers and brokers in the small business space. Many of these companies said they would prefer to keep an eye on the market and be "fast followers" should the pace of the change accelerate dramatically. In the meantime, these companies said they are content to make smaller bets, just enough (they hope) to evolve with the market.

This leaves a substantial opportunity for new entrants to be the catalyst of change, exactly as technology players have been in other industries. And these "InsurTech" companies are coming, thanks to a substantial flow of capital from both traditional venture firms and corporate venture arms. In the unmet customer needs, the high margins (particularly on the distributor side), the market fragmentation, and the absence of any company with a clearly superior digital strategy, the investors in InsurTech rightly see a major opportunity.

**Where the new challengers are placing their bets.** To date, the distribution part of the market has been the focus of the most startup activity, specifically startups looking to displace existing agents and brokers. It might seem unrealistic that a startup insurance broker could step in and disintermediate a company like HUB, Alliant, or USI, which provide insurance brokerage services to businesses. But the mom and pop brokerage shops that account for a large share of distribution to small businesses are an easier target. Startups like Embroker, Next Insurance, and CoverWallet are using consumer-friendly digital interfaces, streamlined application processes and the promise of faster claims-processing to win over small business customers who are willing to switch for a better experience. (See sidebar, "Startup E-Broker Aims to Simplify Insurance-Buying Process.")





### ***Startup E-Broker Aims to Simplify Insurance Buying Process***

Of the many characterizations that exist for insurance, “easy to use and understand” isn’t often one that springs to mind. Yet this is exactly the position that CoverWallet, an e-broker launched in 2015, wants to stake out for itself.

The New York-based firm uses infographic presentations to help small businesses figure out what kind of insurance they might need and what they should expect to pay. Prospects can click on a type of policy (general liability insurance or commercial auto, for instance) to find out what it is and why they would need it. And if they want to receive a quote, instead of keying in all of their information (company name, number of employees, company address, and so on), business owners can send PDFs of the first page of existing insurance policies to CoverWallet and the company will use that information to fill out their applications and access an insurance quote.

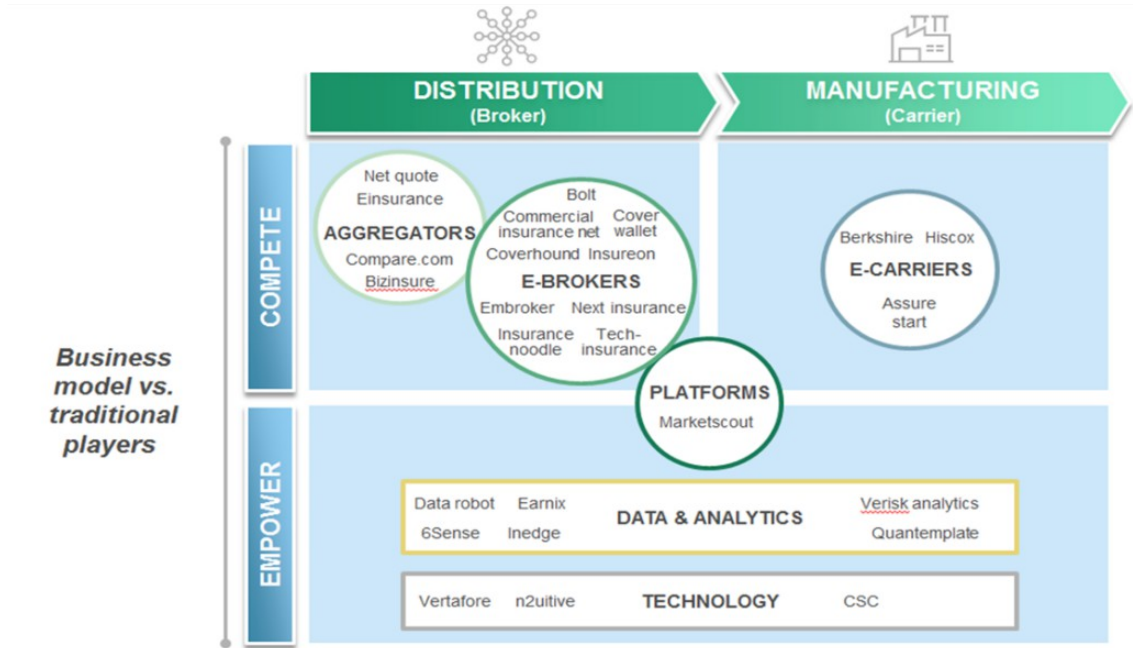
CoverWallet wants to be the broker of choice for companies with 25 or fewer employees and annual insurance costs of less than \$30,000. The founders are two MIT graduates looking to make customers of people a lot like themselves: running small businesses, and without a lot of time to investigate insurance options.

Alongside of these pure “e-brokers” are companies that are trying to move into insurance brokerage from a different starting point with small businesses, in an attempt to further monetize those relationships. For instance, upstart HR firms like Justworks or Zenefits are using the position they have with small businesses to branch into insurance brokerage. Intuit has partnered with The Hartford to offer worker’s compensation insurance to small businesses that use Intuit’s software. Despite the threat they represent to smaller brokers, partnerships like these could be a boon to incumbent carriers.

Another source of potential competition to brokers are aggregators like Compare.com and Einsurance. These companies try to give small businesses a quick look at their options in areas like auto insurance and general liability insurance. To the extent that their information is seen as thorough and trustworthy, they could erode the position that mom-and-pop brokers have in the microbusiness market today.

After broker substitution, the next most promising InsurTech strategy is providing technology assistance to incumbent carriers or brokers. For instance, MarketScout (which has been in business since 2000, making it one of the older InsurTech companies) operates an exchange that allows individual brokers to pinpoint carriers that have the exact type of coverage needed by small businesses. QuanTemplate (which got going in London in 2013, but now also has an office outside of New York) consolidates a massive amount of insurance industry data, allowing agents, brokers and carriers to get a picture of what’s happening in terms of pricing and underwriting trends.

There’s been much less activity from InsurTech firms, by contrast, to compete directly with carriers. This is a function of significant barriers to entry, including reserve capital requirements, operational capital requirements (including IT infrastructure), a lack of access to historical claims and underwriting performance data. Among the exceptions — that is, insurers trying to replace US companies by offering a digitally-enabled experienced for small businesses — is Hiscox, an insurer that got its start mostly in the UK and doesn’t have a big US distribution network to upset in the first place. (See sidebar, “Direct Insurer That Started Overseas Stakes Out a Position in US.”) And at least one of the would-be incumbent substitutes is a U.S. carrier with a well-known brand in insurance: Geico-owner Berkshire Hathaway, which said last December that it would roll out workers compensation and business owners policies that small businesses can purchase directly online. Other carriers with small business capabilities outside of the U.S. might decide to enter the market with similar digital models.


**Exhibit 8:** Where Ins Tech activity has focused so far


Source: The Boston Consulting Group and Morgan Stanley Research

### ***Direct Insurer That Started Overseas Stakes Out a Position in US***

In the US, Hiscox is trying to replicate the success it has enjoyed in the UK's farther-along small business insurance market. Hiscox's digital insurance strategy is to go both direct to customers and through digital intermediaries, including e-brokers. In the 40 US states in which it currently operates, it has stayed under the radar to some extent by targeting companies with fewer than 10 employees, many of them white-collar businesses in the technology, professional services, and health and beauty fields. As rapidly as these businesses are popping up, they are still not sources of major revenue or profit for big incumbent insurers. For now, Hiscox is a minor annoyance, something the big insurers swat away with their tails.

Small companies entering markets with big competitors have always understood the need to provide excellent customer service, and Hiscox is no exception. The company's direct to customer offering is multi-channel, combining online, call center and outbound mail. And with the intermediated part of its business, Hiscox is positioning itself to work with just about every e-broker and InsurTech player in the market. This is an ecosystem play that could serve it well in the long run.

**Most likely models for digitally delivered insurance in next few years:** Between now and 2020, we expect three models of digital delivery to get at least some traction in the small business insurance market.

- *E-brokerage model.* This refers to the possibility that a broker — whether one that has come of age in the Internet era or that has been around for decades — might create a platform designed to give small businesses both choice and breadth of coverage. The idea of an e-broker is to do digitally what brokers today do mostly offline, while vastly improving customer service, customer analytics and the customer experience.

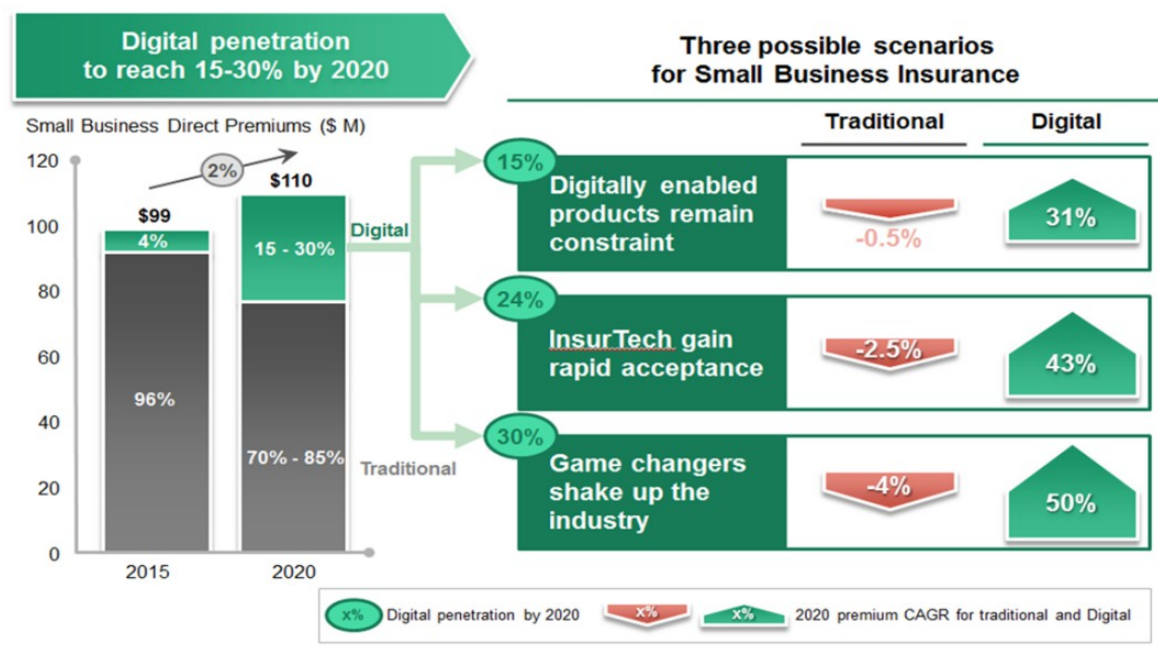
E-brokerage is likely to be the fastest model to evolve. There is a lot of incentive to create something like this, and — in theory at least — there aren't many barriers.



- Digital-direct model.* Essentially, carriers marketing directly to customers through digital distribution. There is nothing stopping this from happening other than the fact that the incumbent carriers that are in a position to do it would be risking a lot and the carriers that can afford to take the risk aren't in a position to do it. Still, it's inevitable that there will be more direct-digital offerings in the next few years, as incumbents (especially incumbents that have seen positive responses to digital services in their personal insurance lines) stick their toe in the water, and as new players build brand awareness. An unexpectedly big investment by an incumbent in digitizing its small business offerings could propel this model much faster than now seems likely.
- Aggregator model.* While there are many companies that would like to be the Google of insurance, a lot stands in the way of this model — in which a specialized search engine would allow small businesses to compare insurance products and would serve as a lead-generation engine for carriers and agents. Among the biggest obstacles is the extent to which it would push carriers toward price competition and product commoditization. Many carriers would prefer less transparency rather than more, and are not going to make it easy for aggregation companies to locate the necessary information. This won't stop some would-be aggregators from trying, but our money isn't on aggregation as a game-changer in the small business insurance market three to five years from now.

**Digital small commercial insurance in 2020: three scenarios.** The share of small business insurance premiums in the US that will be digitally underwritten ( in this context, digitally underwritten is defined as having most purchase processes - shopping, application, quotation, and binding - conducted through online, mobile, or call center channels) is certainly going to grow in the next few years from its current 4% level, but by how much? Here are our stakes in the ground on that, accompanied by commentary on plausible ways for that scenario to materialize.

**Exhibit 9:** Bet on growth or play in a declining segment



Source: The Boston Consulting Group and Morgan Stanley Research

**"E-brokerage Pioneers"**

**Digitally enabled products remain a constraint**

**Conservative scenario ~15%**

In this scenario, the growth of digital insurance is predominantly a function of start-up e-brokers' appeal to newly created small businesses that don't have any preexisting broker or carrier relationships. A market representation of this size in 2020 will mean large brokers haven't prioritized the small business opportunity. It will also mean that incumbent carriers, hoping to avoid channel conflicts with traditional agents and brokers, have been slow to digitize their products and processes. Aggregator models have barely gotten off the ground and there have been no disruptive plays in the carrier space.

**"Carrier Catalysts"**

**InsurTech companies gain rapid acceptance**

**Most likely scenario ~24%**

This scenario, the most probable, in our view (and also in line with the projections in BCG publication "Digital Disruption in the US Small-Business Insurance Market" on April 7, 2016), assumes that e-brokers gain significant traction and that mid-market and large brokers become increasingly interested in the small business space — prompting rapid development of distributor-enabling software and technology. The scenario further assumes that two of these distributor platforms get adopted by major incumbent carriers, prompting other carriers to step up their digital insurance initiatives. In this scenario, most carriers still resist the idea of connecting to aggregator platforms. Carriers' and distributors' digital business is still coming mostly from new companies that are relatively small in size, though digital is starting to make inroads with traditional customers and with companies in the ten to 50 employee range in lower-risk industries.

**"Game Changer"**

**Game changers shake up the industry**

**Aggressive scenario ~30%**

This represents the barbarians-break-through scenario. It assumes that one or more of the leading small-business carriers have built or acquired an e-broker and are distributing directly to customers. In addition, both a major foreign small business player and a technology firm have entered the carrier space with disruptive digital plays: new, simple products, predictive underwriting, or a paradigm-changing digital claims service. This is the only scenario in which aggregators have caught on in any real way, though their success is still limited to standardized products (business owner policies, workers' comp, commercial auto) in white-collar industries. With the broader presence of digital offerings, a significant number of existing policyholders starts shifting to digital, encouraged, in some cases, by incumbent carriers' conversion initiatives.



## Investment Implications: A \$25b+ Digital SBI Market Opportunity

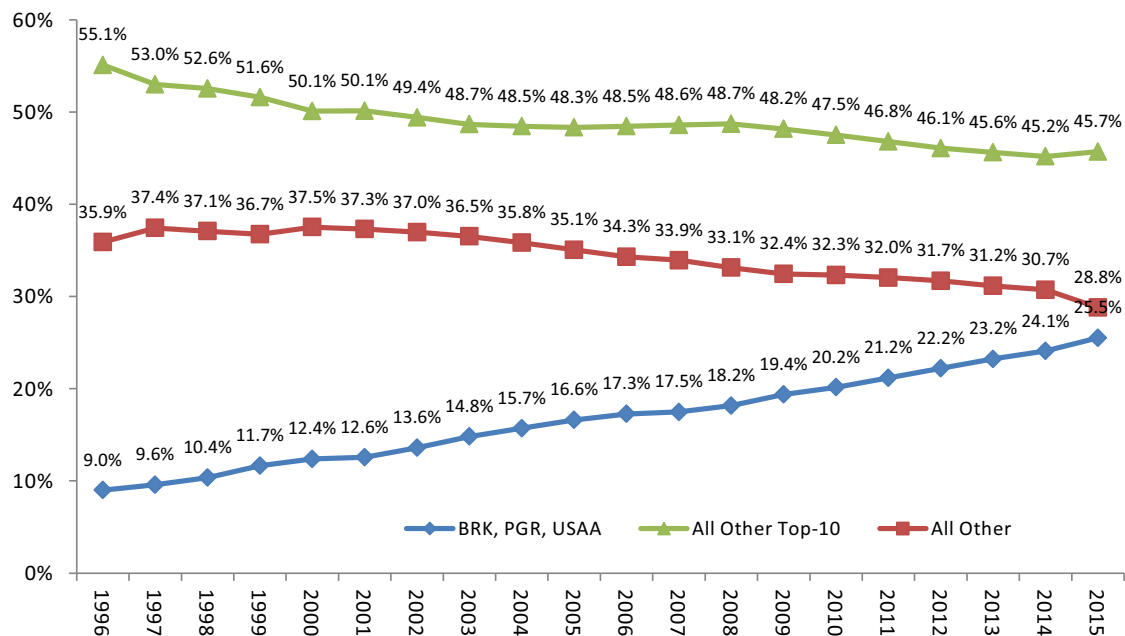
**Digital disruption creates a \$25b+ market opportunity in small business insurance.** As the landscape of small businesses changes, so too will the demand for digital solutions to meet the insurance needs. Quick turnaround on quotes, easier to understand policy terms, and an ever-growing demand for direct channel distribution will be just a few examples of what small business owners will expect. We estimate 15-30% of SBI will be sold digitally by 2020, or \$17-33b in annual premiums. This is a significant market to be gained (or lost). For incumbent SBI carriers, they must invest in digital platforms to maintain or gain shares. For “mom & pop” agencies focusing on SBI, they are facing a greater challenge. For insurance carriers or brokers not competing in SBI currently, they now have an opening to establish themselves. The biggest beneficiaries could be the disruptors — InsurTech companies.

**Learning from the past...** The personal auto insurance market set the stage for what can happen when the market is disrupted by new technology or distribution channels. With Berkshire Hathaway’s purchase of GEICO in 1996, a disruption began as direct writers began what would become a significant market share shift. In the last 2 decades, the top three direct underwriters (GEICO, Progressive, and USAA) collectively gained 16.5% of personal auto market share, at the expense of other top-10 players (-9.4%) and smaller competitors (-7.1%). Specifically, GEICO leaped from No. 8 to No. 2, Progressive jumped from No. 7 to No. 4, and USAA moved up from No. 6 to No. 5. This translates into +11.1% premium CGAR for GEICO, +9.2% for Progressive, and +6.1% for USAA vs. +3.2% for the personal auto industry. We note that each one point of market share is a ~\$2b business opportunity in the ~\$200b personal auto market. GEICO alone grew premiums by almost \$20b during the period. Another example is the small business insurance market in the UK. (See sidebar, “UK Market Shows How Fast Fortunes Can Change.”)

**Exhibit 10:** Direct Writers Gain Significant Market Share

Company	Rank		1996		Company	2015		CAGR
	1996	2015	DWP	Mkt Share		DWP	Mkt Share	
State Farm Mutl Automobile Ins	1	1	23,348,417	21.4%	State Farm Mutl Automobile Ins	36,553,861	18.3%	2.4%
Allstate Corp.	2	3	13,569,007	12.5%	Berkshire Hathaway Inc.	22,805,195	11.4%	11.1%
Farmers Insurance Group	3	5	8,191,287	7.5%	Allstate Corp.	20,036,973	10.0%	2.1%
Liberty Mutual	4	7	5,464,230	5.0%	Progressive Corp.	17,502,500	8.8%	9.2%
Nationwide Mutual Group	5	8	5,099,323	4.7%	USAA Insurance Group	10,539,707	5.3%	6.1%
USAA Insurance Group	6	5	3,415,913	3.1%	Farmers Insurance Group of Cos	9,985,969	5.0%	1.0%
Progressive Corp.	7	4	3,277,616	3.0%	Liberty Mutual	9,942,667	5.0%	3.2%
Berkshire Hathaway Inc.	8	2	3,078,433	2.8%	Nationwide Mutual Group	7,468,708	3.7%	2.0%
Travelers Companies Inc.	9	10	2,456,823	2.3%	American Family Insurance Grp	3,694,271	1.9%	3.5%
American Family Insurance Grp	10	9	1,924,188	1.8%	Travelers Companies Inc.	3,377,404	1.7%	1.7%
Subtotal			69,825,238	64.1%		141,907,255	71.2%	3.8%
All Other			39,105,074	35.9%		57,466,713	28.8%	2.0%
Total Industry			108,930,312	100.0%		199,373,968	100.0%	3.2%

Source: SNL and Morgan Stanley Research

**Exhibit 11:** BRK + PGR + USAA Steady Mkt Share Gain

Source: SNL and Morgan Stanley Research

### UK Market Shows How Fast Fortunes Can Change

The UK market offers a glimpse of how quickly the small commercial market can move toward non-intermediated insurance products including digital.

Between 2011 and 2014, the Direct Line Group, a former insurance division of the Royal Bank of Scotland, increased its share of the UK's small and medium enterprise insurance market from 2% to 7% by focusing on simple products that customers could buy through whatever channel they chose, including directly through their tablet computers or smartphones.

Other insurers that saw what was happening and jumped in with their own digital investments were able to hang on to their market shares. For instance, Aviva's introduction of an e-trading insurance platform — enabled by an investment exceeding £50 million — allowed it to keep its almost one-third share of the UK SME insurance market. Likewise, AXA's rollout of its new direct digital channel allowed it to hold onto its low- to mid-20s share of the UK SME market, while others who moved slowly saw their market share erode.

In addition to showing how quickly traditional insurers can lose ground, the UK example dispels the myth that brokers and agents can never be replaced. Upwards of a quarter of all small-business insurance in the UK is now bought without the help of an intermediary. While the US and UK have different regulatory frameworks, it remains a reminder that channel disruption is possible in insurance and can happen quickly once it starts.

**Small business insurance is a fragmented market in the US.** US commercial lines is a ~\$285b premium market overall (across large/mid-market and SBI). Top-10 players account for ~39% of market share vs. ~71% for top-10 insurers in personal auto. Since 1996, the top-10 players have actually ceded market shares (from 46% to 39%) to smaller underwriters. Eight insurers in top-10 in 1996 remained in the top league in 2015 and only two of them gained shares (Chubb from 4.8% to 5.6% and Nationwide from 2.3% to 2.9%) during the period.



We estimate SBI to account for ~\$100b annual premiums or ~35% of overall commercial line market. It is even more fragmented, with the top-10 players account for ~30% of market share and none garners more than 5% of market share. Nationwide, State Farm, The Hartford, Liberty Mutual, Travelers, AIG, Cincinnati Financial, Farmers, AmTrust, and Chubb are among the leading providers.

**Exhibit 12: Commercial Lines Mkt Share: 1996**

Rank	Company	DWP	Mkt Share
1	Travelers Companies Inc.	11,210,945	8.6%
2	American International Group	9,245,613	7.1%
3	Liberty Mutual	7,836,896	6.0%
4	CNA Financial Corp.	7,072,945	5.4%
5	Chubb Ltd.	6,207,807	4.8%
6	Zurich Insurance Group	4,856,584	3.7%
7	Hartford Financial Services	3,628,692	2.8%
8	Allianz Group	3,442,573	2.6%
9	State Farm Mutl Automobile Ins	3,420,093	2.6%
10	Nationwide Mutual Group	3,025,637	2.3%
Subtotal		59,947,784	46.0%
All Other		70,418,325	54.0%
Total Industry		130,366,109	100.0%

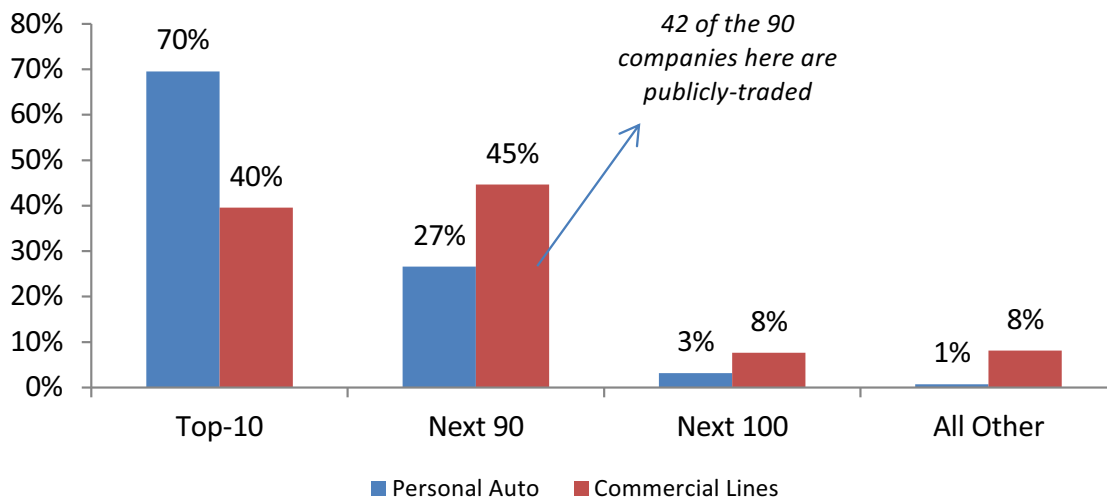
Source: SNL and Morgan Stanley Research

**Exhibit 13: Commercial Lines Mkt Share: 2015**

Rank	Company	DWP	Mkt Share
1	Travelers Companies Inc.	16,214,165	5.7%
2	Chubb Ltd.	16,076,216	5.6%
3	American International Group	15,990,539	5.6%
4	Liberty Mutual	13,384,371	4.7%
5	Zurich Insurance Group	13,297,325	4.7%
6	CNA Financial Corp	8,880,641	3.1%
7	Nationwide Mutual Group	8,399,667	2.9%
8	Hartford Financial Services	7,455,552	2.6%
9	Berkshire Hathaway Inc.	6,980,214	2.4%
10	Tokio Marine Group	5,922,971	2.1%
Subtotal		112,601,660	39.4%
All Other		173,045,857	60.6%
Total Industry		285,647,517	100.0%

Source: SNL and Morgan Stanley Research

**Exhibit 14: A Fragmented Commercial Insurance Market**



Source: SNL and Morgan Stanley Research

**Sizing up the small business insurance market opportunities in 3 scenarios.** Using the 3 scenarios of digital market share in SBI, we estimate ~\$3-8b pretax profit potentially up for grabs for insurers by 2020. By comparison, US P&C industry collectively earned \$65b in 2015. We assume combined ratios of 86-94%, 3x investment leverage, 3.4% investment yield, and 15%, 24%, and 30% of digital market share in 2020. For P&C agents and brokers, there could be ~\$400m to \$1b operating income shifting hands. We assume 12.5% commission rate and varying operating margins (20-25%).

**Exhibit 15:** Digital SBI Operating Income, P&C Underwriters

Insurance Carrier Opportunities				
(\$mm)				
Scenario	E-brokerage Pioneers	Carrier Catalysts	Game Changer	
Digitally Underwritten Premium, 2020	16,500	26,400	33,000	
<i>(% of small commercial insurance market)</i>	15%	24%	30%	
Combined Ratio	94%	90%	86%	
Pretax Underwriting Gain	990	2,640	4,620	
Investment Leverage	3.0x	3.0x	3.0x	
Yield	3.4%	3.4%	3.4%	
Pretax Net Investment Income	1,683	2,693	3,366	
<b>Total operating profit, 2020</b>	<b>2,673</b>	<b>5,333</b>	<b>7,986</b>	

Source: SNL, The Boston Consulting Group, and Morgan Stanley Research

**Exhibit 16:** Digital SBI Operating Income, P&C Brokers

Insurance Broker Opportunities				
(\$mm)				
Scenario	E-brokerage Pioneers	Carrier Catalysts	Game Changer	
Digitally Underwritten Premium, 2020	16,500	26,400	33,000	
<i>(% of small commercial insurance market)</i>	15%	24%	30%	
Commission Rate	12.5%	12.5%	12.5%	
Broker Revenue	2,063	3,300	4,125	
Operating Margin	20.0%	22.5%	25.0%	
<b>Total Operating Profit, 2020</b>	<b>413</b>	<b>743</b>	<b>1,031</b>	

Source: SNL, The Boston Consulting Group, and Morgan Stanley Research

**Potential impact to our covered P&C companies:** Among our coverage AIG, CB, HIG, and TRV are top small business insurers. Given certain company specific assumptions, we calculate potential EPS impact under various market share gain/loss and combined ratio combinations. We estimate each point of market share gain at 90% combined ratio could be 4-8% accretive for AIG, CB, TRV, and ~14% for HIG. Conversely, market share loss would have a negative impact on earnings.

**Exhibit 17:** Company-specific Assumptions

Assumption	AIG	CB	HIG	TRV
2015 SBI market share	2.5%	3.0%	3.5%	4.0%
Underwriting income tax rate	35.0%	16.0%	35.0%	35.0%
Investment leverage	3.0x	3.0x	3.0x	3.0x
Net investment income tax rate	25.0%	16.0%	23.0%	20.0%
2015 shares outstanding (mm)	1,324.5	328.8	403.4	314.2
2016 consensus EPS	\$4.01	\$9.86	\$3.91	\$9.55

Source: SNL, Thomson Reuters, Morgan Stanley Research



**Exhibit 18: Potential EPS Impact for AIG***Incremental EPS in 2020 - AIG*

		SBI Market Share Gain/Loss (over 5 years)				
		-2%	-1%	0%	1%	2%
SBI C/R	86%	(\$0.25)	(\$0.11)	\$0.03	\$0.17	\$0.32
	88%	(\$0.23)	(\$0.10)	\$0.03	\$0.16	\$0.29
	90%	(\$0.21)	(\$0.09)	\$0.03	\$0.15	\$0.27
	92%	(\$0.19)	(\$0.08)	\$0.03	\$0.13	\$0.24
	94%	(\$0.17)	(\$0.07)	\$0.02	\$0.12	\$0.22

*% of 2016 Consensus EPS - AIG*

		SBI Market Share Gain/Loss (over 5 years)				
		-2%	-1%	0%	1%	2%
SBI C/R	86%	-6.1%	-2.6%	0.9%	4.4%	7.9%
	88%	-5.7%	-2.4%	0.8%	4.0%	7.3%
	90%	-5.2%	-2.2%	0.7%	3.7%	6.6%
	92%	-4.7%	-2.0%	0.7%	3.3%	6.0%
	94%	-4.2%	-1.8%	0.6%	3.0%	5.4%

Source: SNL, Thomson Reuters, Morgan Stanley Research

**Exhibit 19: Potential EPS Impact for CB***Incremental EPS in 2020 - CB*

		SBI Market Share Gain/Loss (over 5 years)				
		-2%	-1%	0%	1%	2%
SBI C/R	86%	(\$1.17)	(\$0.48)	\$0.20	\$0.89	\$1.57
	88%	(\$1.07)	(\$0.44)	\$0.19	\$0.82	\$1.44
	90%	(\$0.98)	(\$0.40)	\$0.17	\$0.74	\$1.31
	92%	(\$0.88)	(\$0.36)	\$0.15	\$0.67	\$1.18
	94%	(\$0.78)	(\$0.32)	\$0.14	\$0.60	\$1.05

*% of 2016 Consensus EPS - CB*

		SBI Market Share Gain/Loss (over 5 years)				
		-2%	-1%	0%	1%	2%
SBI C/R	86%	-11.9%	-4.9%	2.1%	9.0%	16.0%
	88%	-10.9%	-4.5%	1.9%	8.3%	14.7%
	90%	-9.9%	-4.1%	1.7%	7.5%	13.3%
	92%	-8.9%	-3.7%	1.5%	6.8%	12.0%
	94%	-7.9%	-3.3%	1.4%	6.0%	10.7%

Source: SNL and Morgan Stanley Research

**Exhibit 20: Potential EPS Impact for HIG***Incremental EPS in 2020 - Hartford*

		SBI Market Share Gain/Loss (over 5 years)				
		-2%	-1%	0%	1%	2%
SBI C/R	86%	(\$0.77)	(\$0.30)	\$0.16	\$0.63	\$1.09
	88%	(\$0.71)	(\$0.28)	\$0.15	\$0.58	\$1.01
	90%	(\$0.65)	(\$0.26)	\$0.14	\$0.53	\$0.92
	92%	(\$0.59)	(\$0.23)	\$0.12	\$0.48	\$0.84
	94%	(\$0.53)	(\$0.21)	\$0.11	\$0.43	\$0.76

*% of 2016 Consensus EPS - HIG*

		SBI Market Share Gain/Loss (over 5 years)				
		-2%	-1%	0%	1%	2%
SBI C/R	86%	-19.7%	-7.8%	4.1%	16.0%	27.9%
	88%	-18.2%	-7.2%	3.8%	14.8%	25.8%
	90%	-16.7%	-6.6%	3.5%	13.5%	23.6%
	92%	-15.1%	-6.0%	3.2%	12.3%	21.5%
	94%	-13.6%	-5.4%	2.8%	11.1%	19.3%

Source: SNL and Morgan Stanley Research

**Exhibit 21: Potential EPS Impact for TRV***Incremental EPS in 2020 - Travelers*

		SBI Market Share Gain/Loss (over 5 years)				
		-2%	-1%	0%	1%	2%
SBI C/R	86%	(\$0.98)	(\$0.37)	\$0.24	\$0.85	\$1.46
	88%	(\$0.90)	(\$0.34)	\$0.22	\$0.79	\$1.35
	90%	(\$0.83)	(\$0.31)	\$0.20	\$0.72	\$1.24
	92%	(\$0.76)	(\$0.29)	\$0.19	\$0.66	\$1.13
	94%	(\$0.68)	(\$0.26)	\$0.17	\$0.59	\$1.02

*% of 2016 Consensus EPS - TRV*

		SBI Market Share Gain/Loss (over 5 years)				
		-2%	-1%	0%	1%	2%
SBI C/R	86%	-10.2%	-3.9%	2.5%	8.9%	15.3%
	88%	-9.5%	-3.6%	2.3%	8.2%	14.1%
	90%	-8.7%	-3.3%	2.1%	7.6%	13.0%
	92%	-7.9%	-3.0%	2.0%	6.9%	11.8%
	94%	-7.2%	-2.7%	1.8%	6.2%	10.7%

Source: SNL and Morgan Stanley Research



A detailed example calculation supporting the Travelers EPS impact of \$0.59 given a small commercial insurance market share increase of 1% and a combined ratio of 94% is found below.

**Exhibit 22: Specific Calculation Example of TRV EPS Impact (1% market share gain and 94% combined ratio)**

	Item	2015	CAGR	2020	Change	Notes
(1)	SBI Industry Premium	100,000	2.1%	110,950	10,950	Industry is \$100b market; grows 2.1%/yr
(2)	TRV market share	4.0%		5.0%	1.0%	TRV grows its SBI mkt share by 1 pt
(3)	TRV premium	4,000		5,548	1,548	= (1) x (2)
(4)	Combined ratio for SBI	94%		94%		Assume for this example a 94% C/R
(5)	Pretax underwriting gain	240		333	93	= (3) x [100% - (4)]
(6)	After tax underwriting gain	156		216	60	Assume tax rate of 35%
(7)	Investment leverage	3.0x				Assume investment leverage of 3.0x
(8)	Investment yield	3.4%				Assume investment yield of 3.4%
(9)	Pretax net investment income				158	= (3) x (7) x (8)
(10)	After tax investment income				126	Assume tax rate of 20%
(11)	2015 Shares outstanding	314.2				Given
(12)	EPS impact				\$0.59	= [(6) + (10)] / (11)

Source: SNL and Morgan Stanley Research

For distribution, mom & pop agents could face the biggest challenge. Among our broker coverage, BRO has the most small commercial insurance exposure, while others (AON, MMC, WLTW, and AJG) are servicing large/middle markets which are less susceptible to digital disruption.

**Who are the likely winners (and laggards)?** Winning the “digital revolution” in small business insurance will require significant investments in leading-edge technology. But the willingness to do so is just as important.

- Large, national, incumbent carriers have the financial and technology resources but they could be constrained by channel conflict (direct vs. agency) and corporate inertia.
- Smaller regional players could struggle to maintain their market share as SBI market consolidates, if they are not proactively adjusting their go-to market strategy.
- Smaller agents could be the most negatively impacted, given their clients are most prone to move digital while mom & pop agents lack financial and technology resources.
- Larger brokers, while not immediately threatened by digital disruption in SBI, could face increasing competition if mom & pop agencies have to move up to middle markets.
- Digital disruption in SBI provides an opening for non-incumbents to establish a foothold and gain share.
- The biggest beneficiaries could be InsurTech companies — nothing but to gain share. However the lack of data and underwriting expertise could impede or even doom some efforts.

**How soon will investors see the impact?** While there are some early movers in digital SBI market, we believe we are still in the very early innings of this secular change. Given the significant investments and mindset change needed, we expect the market share shift to occur over time. In personal auto, it took direct writers 20 years to gain 17% market share, or less than one point per year. However, the world is drastically different today than it was in 1996 when the internet and mobile technologies were in their infancies. We think the pace of technology adoption in the SBI market could be much faster. Assuming even a 20bps market share gain per year over the next five years for individual carriers in the SBI space, we note that the EPS accretion could be 4-14% for some of our covered carriers (assuming a 90% combined ratio).



**Searching for the next GEICO (or Google):** InsurTech disruption could have profound investment implications. Among our coverage, AIG, CB, HIG, and TRV are top small business insurers. We estimate each point of market share gain in small commercial insurance could boost their earnings by 4-14%. Mom & pop agents could face the biggest challenge. Among our broker coverage, BRO has the most small commercial insurance exposure while others are servicing large/middle markets which are less susceptible to digital disruption. New entrants (either startups or traditional insurers) could be the biggest winners in the digital transformation of small business insurance. InsurTech companies are learning from technology disruptors (see sidebar). Some traditional insurers are taking innovative, digital/direct approaches to SBI market as well, including recent examples of:

- Berkshire Hathaway's recently formed unit to sell workers' compensation and BOP policies directly over the internet.
- American Family Group's investment in start-up firm AssureStart, which sells small business insurance through direct writers.
- Hiscox offers small business insurance product directly from its website.
- AIG, Hamilton Insurance Group, and Two Sigma plan to establish a technology-driven platform targeting SBI.
- Travelers announced a direct SBI online platform in the UK.

There are still many unanswered questions: Will pricing fall with lower distribution cost? Will lower pricing increase demand? Will technology play important roles in not just distribution but also underwriting? One thing is for sure — digital disruption in small business insurance is already happening.

### ***Learning from Technology Disruptors***

Internet giant Google entered into auto insurance market through an model of Google Compare. However the lack of participation from large carriers doomed this year-long experiment. We think Google gained additional insights in this venture to better serve its core search business, with insurance among the highest pay per click. Internet powerhouses, like Google, Apple, Amazon, and Facebook, all possess brand and data analytics which could make them powerful competitors (or partners) in insurance marketplace.

Customer experience is the key to a digital marketplace model. Insurance buyers, especially in small business insurance, have unmet needs in product simplicity and shopping experience. InsurTech companies or even traditional insurers and brokers could learn from other successful digital marketplace models. Positive customer experience benefits from (1) more selections, (2) customer reviews, (3) price comparison, (4) frictionless purchase process, (5) step changes (selling adjacent products/services), and (6) sharing (who bought what).

Most InsurTech startups are focusing on distribution. The relationship with insurance carriers is vital to their success. They could learn from other internet verticals such as online travel agencies.



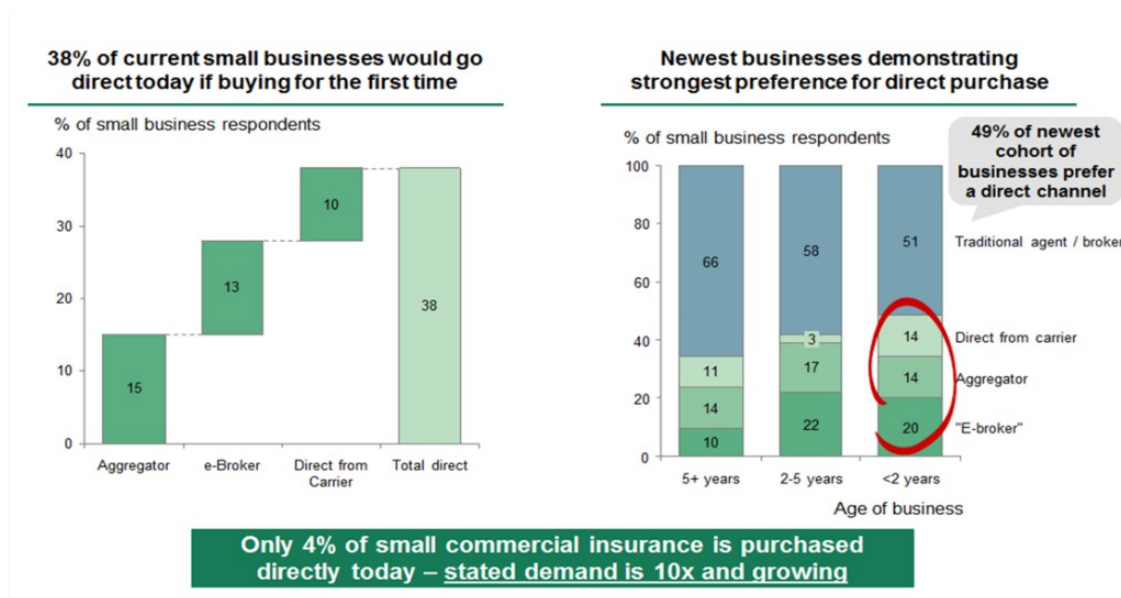
## Appendix I: Small Business Insurance Survey

In conjunction with this research report, BCG conducted a survey of US-based small commercial insurance decision-makers in April of 2016. The synthesized survey results represent 517 total survey respondents who met the following three criteria: (1) Company size: Non-employers to 49 employees, (2) Company purchases commercial insurance, and (3) Respondent is the primary decision-maker or equally shares decision-making responsibility for this purchase.

Our respondents represent a wide range of small businesses across multiple firmographics including company size, industry and firm age: (1) Company size: 39% of respondents are microbusinesses with <5 employees, 21% with 5-9 employees, 13% with 10-19 employees and 27% with 20-49 employees, (2) Our top five industries (Professional and specialty services, Contractors and construction, Retail, Healthcare, Real estate) represent 55% of survey respondents – largely in line with US Census Bureau firm counts for same industries, and (3) 25% of the respondents represent businesses that have been founded in the last five years.

Key takeaways:

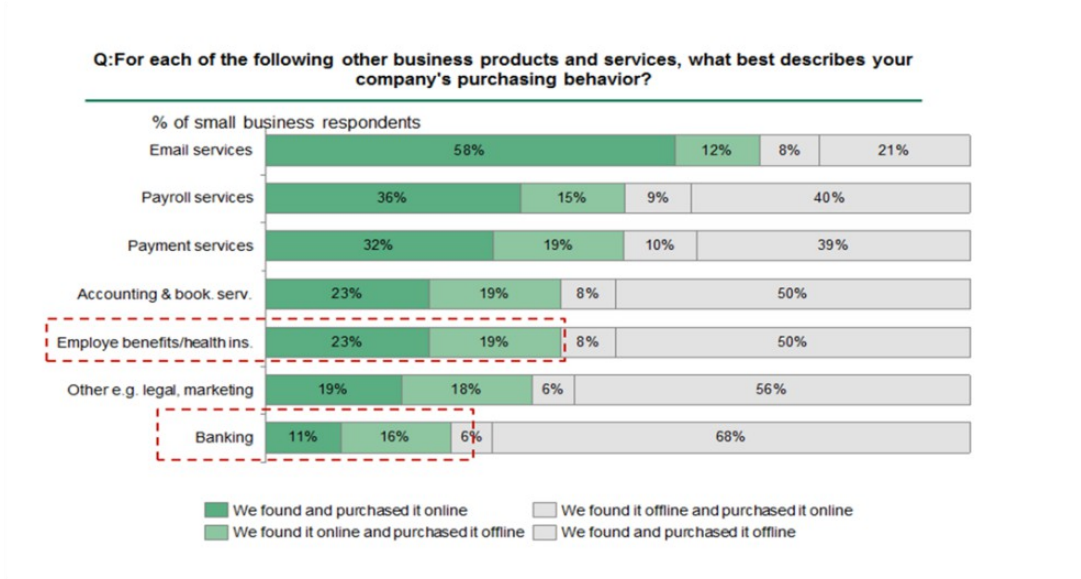
**Exhibit 23:** Demand for an insurance digital solution already significantly exceeds a high quality solution



Source: The Boston Consulting Group

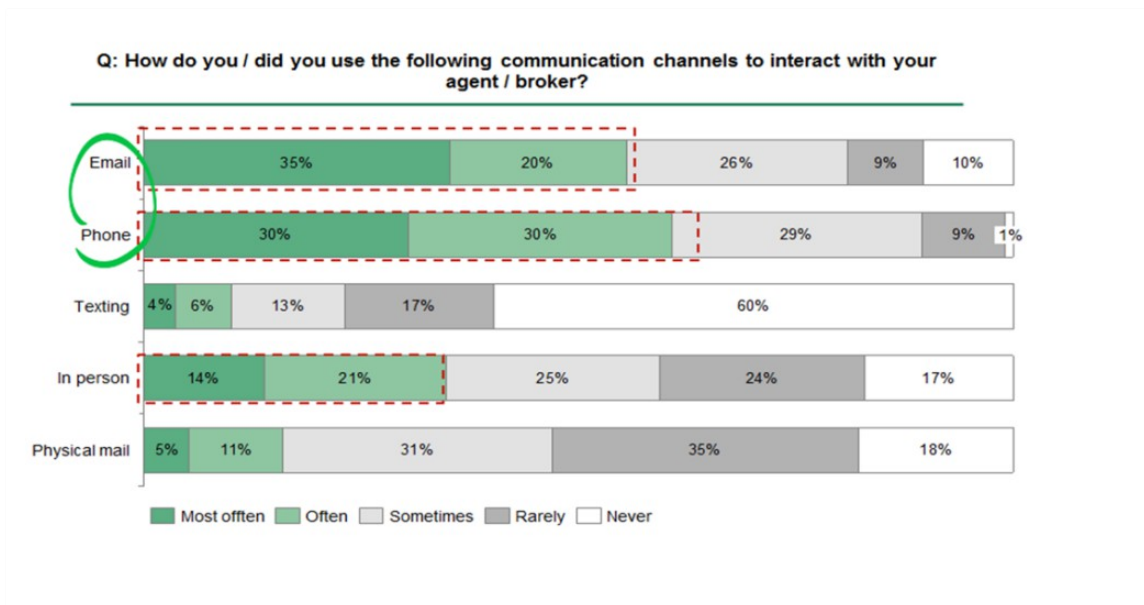


**Exhibit 24:** Small business owners already leverage digital for many day to day operations.



Source: The Boston Consulting Group

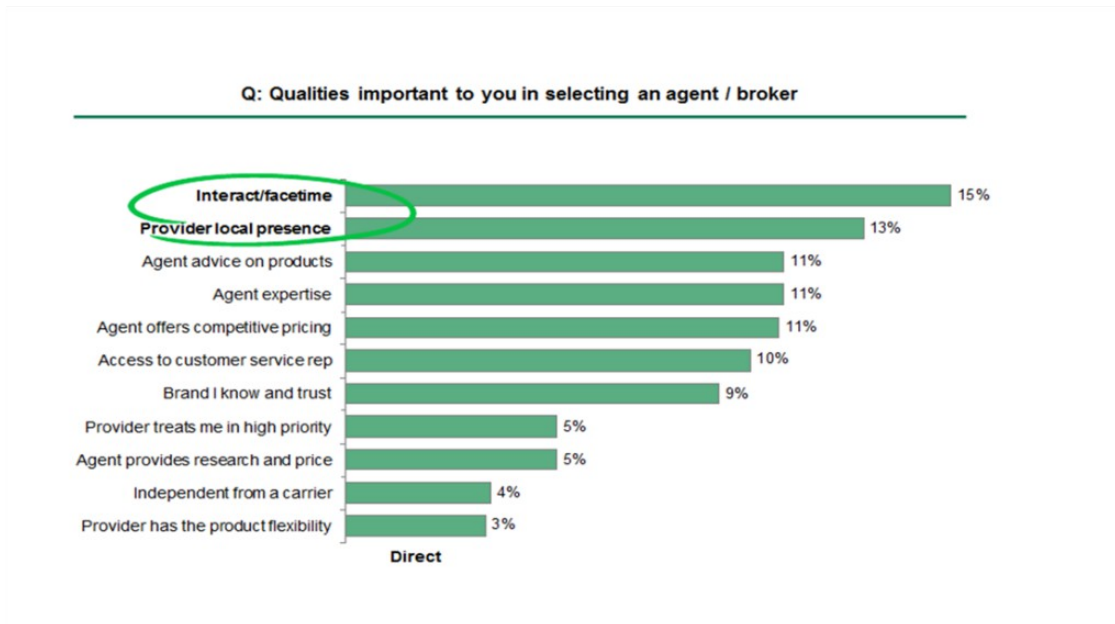
**Exhibit 25:** ... and are already using digital channels to communicate with carriers, agents, and brokers.



Source: The Boston Consulting Group

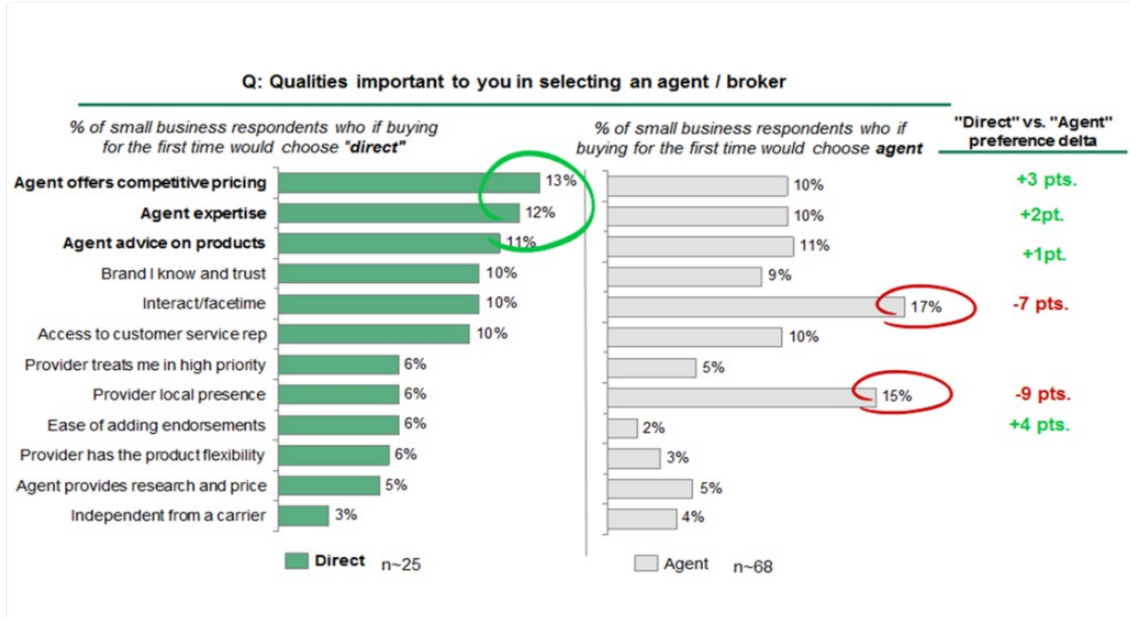


**Exhibit 26:** Although face to face interaction and local presence are still important criteria in selecting agents/brokers.



Source: The Boston Consulting Group

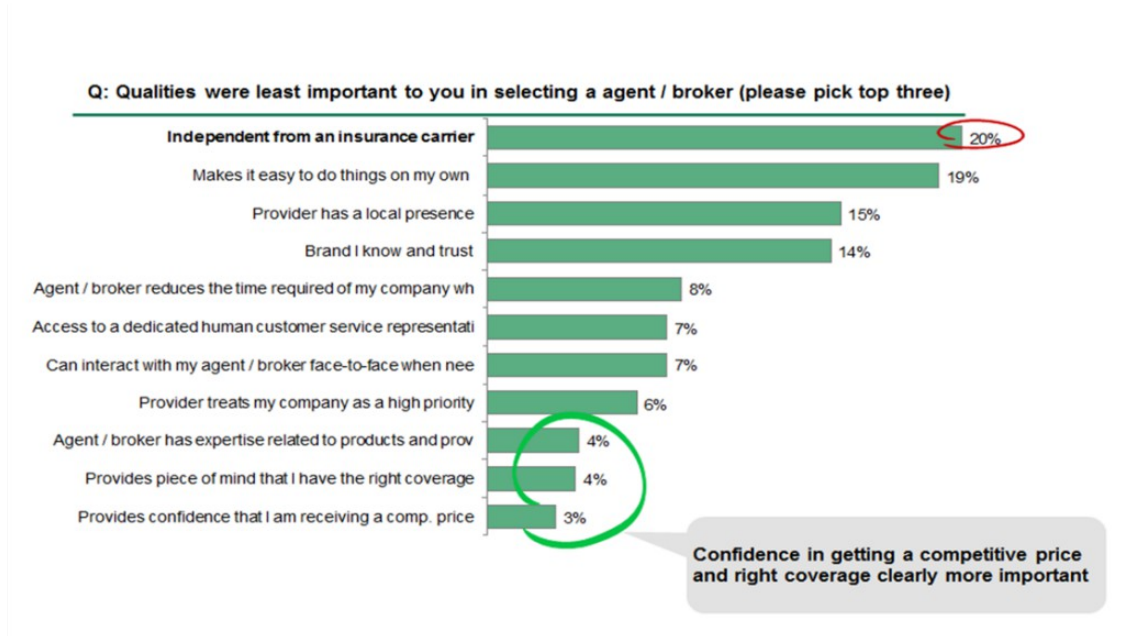
**Exhibit 27:** ... Small businesses interested in buying direct place more importance in price, expertise, and brand.



Source: The Boston Consulting Group

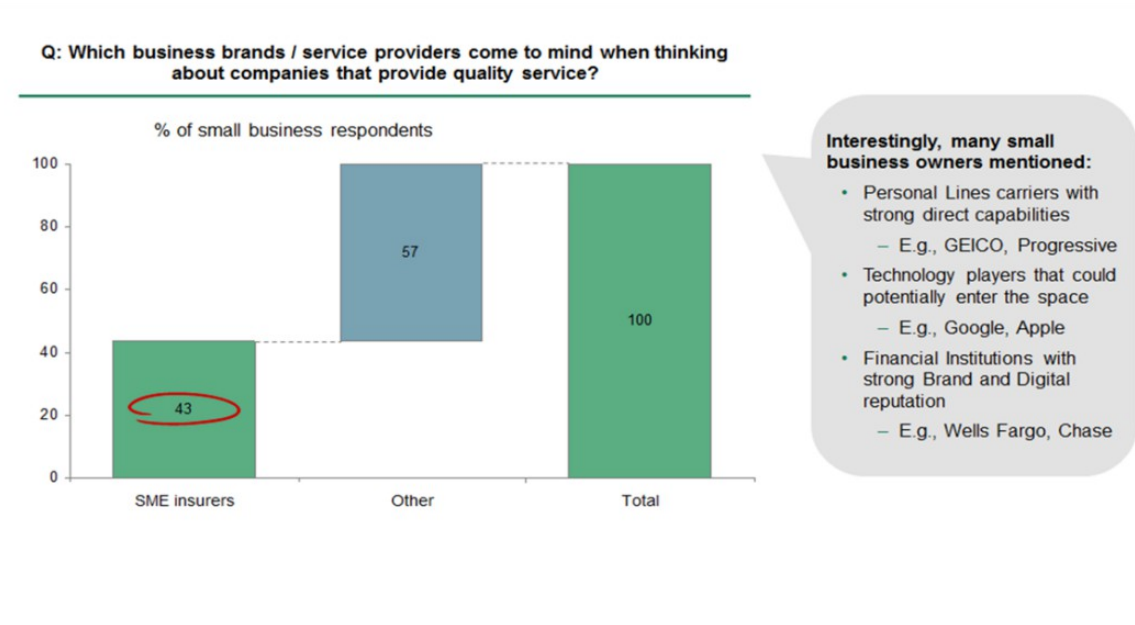


**Exhibit 28:** Independence from carrier is not considered an important criteria in agent/broker selection.



Source: The Boston Consulting Group

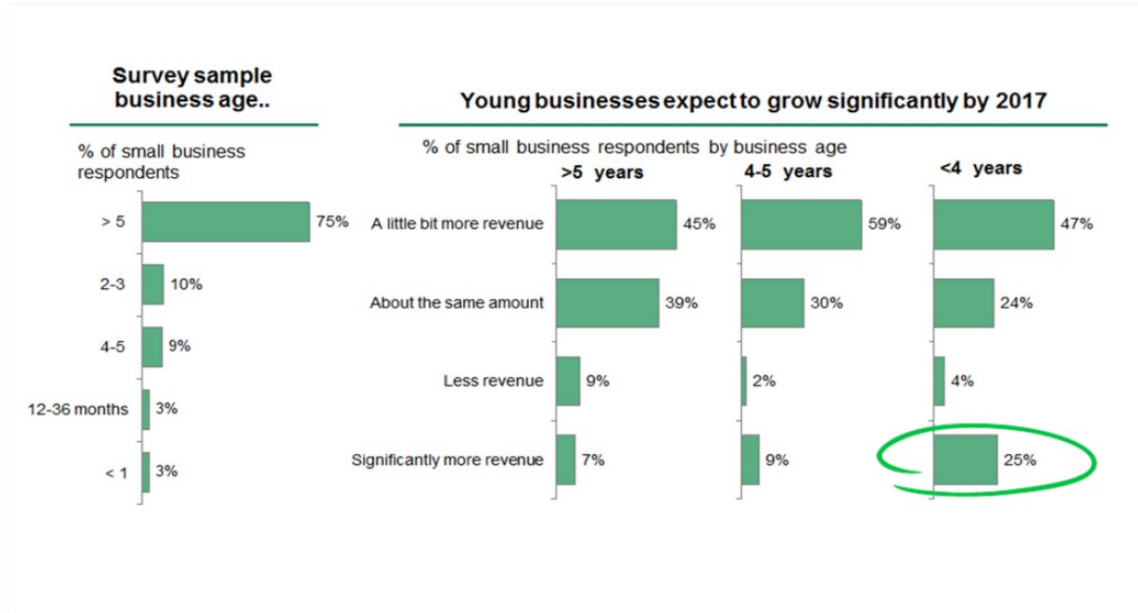
**Exhibit 29:** We found low association of carriers with quality of service.



Source: The Boston Consulting Group

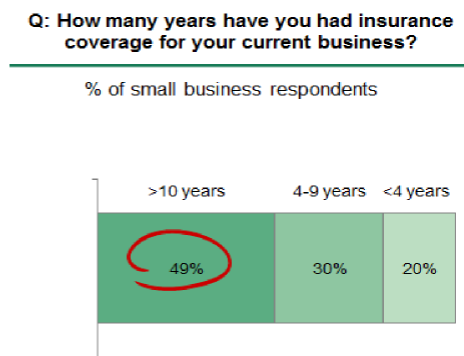
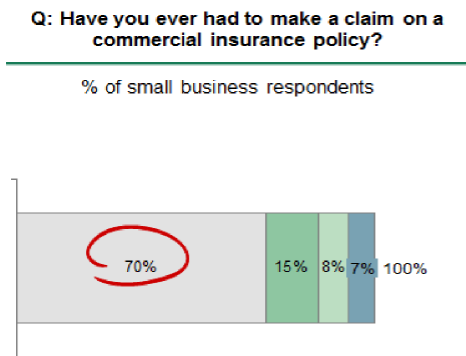


**Exhibit 30:** Significantly more optimism among young businesses.



Source: The Boston Consulting Group

**Exhibit 31:** 70% of respondents have not had a claim despite of 50% holding insurance over 10 years.



No, not on any commercial policy
  Yes, on another policy for this company  
 Yes, on the current policy
  Yes, on another policy for another company

Source: The Boston Consulting Group





## Appendix II: InsurTech Company Profiles

**Exhibit 32: Select InsurTech Company Profiles**

Startup	Startup	Launch	Description
Aggregators	Compare.com	2013	Price comparison website for auto, health, home, life and small business insurance
	Bizinsure	2012	Focuses on combining knowledgeable, licensed human support with the simplicity and affordability of technology, allowing consumers to compare multiple top rated business insurance quotes within minutes, and buy with the company online or over the phone.
	Einsurance	1999	Price comparison website for auto, health, home, life and small business insurance
	Netquote	1989	Focuses on providing consumers with a free, simple, and effective way to fulfill insurance shopping needs. NetQuote operates a web-based business through which local insurance agents and national insurance companies purchase high quality leads of consumers in the market for competitively priced insurance policies. NetQuote's website enable consumers to receive multiple insurance quotes in all 50 states from the Company's network of independent local insurance agents and local representatives from its national insurance partners.
E-brokers	Bolt	2000	e-agent focused on delivering a better way for small businesses and individuals to choose and buy their insurance coverage. Company bets on a combination of expertise, customer service, and online platform to help customers efficiently determine which carrier and product are a good fit for the customers.
	Coverwallet	2015	e-broker that leverages data, design and technology to deliver a better experience for small business owners. Its assessment system to help small businesses identify their insurance needs and find a policy that fits their budget. The use of consumer-friendly online technologies (e.g., automatic risk analysis, document management, benchmarking and data analytics, intelligent data driven risk and insurance assessments, coverage recommendations, peer risk comparisons and claims support) makes the process of obtaining a quote a lot simpler and faster for small business owners.
	Coverhound	2010	Online platform for comparing and purchasing insurance, built to deliver fast, accurate and actionable rates from leading US carriers based on clients specific needs. Company is dedicated to providing the best in class customer experience from leading U.S. property and casualty carriers.
	Embroker	2015	Cloud-based risk and insurance management platform that uses the company's own software, data and predictive analytics to help businesses buy all types of commercial insurance. Focused on a broader spectrum of business insurance with emphasis on efficiency, transparency, and empowerment
	Insurance noodle	2000	Small business insurance wholesaler (mostly focused on white collar industries) that allows independent agents to find insurance products quickly and easily by using state-of-the-art technology. It also plays in personal lines.
	Insureon	1997	Online small business insurance agency that provides coverage for more than 175,000 small businesses. It both serves retail clients directly and supports leading top-five banks, brokerages, and insurance companies in delivering their small commercial business.
	Just works	2013	Payroll management and benefits solution provider for small businesses. The dashboard allows companies to make it easy to fill out forms such as the I-9 and offers direct deposit and processes payments for contractors (a free service), salaried employees and hourly workers. On the platform, companies can also offer full medical, dental and vision coverage and process payments, files required taxes, files for workers' comp and handle other legalities for its users.
	Next Insurance	2016	Online small businesses insurance platform focused on creating a process that's online, transparent, fast and complete by partnering with carriers that provide a digitally underwritten small business products.
Data & Analytics	DataRobot	2016	Data and Analytics company that helps users build better predictive models faster in the cloud. DataRobot is designed to be a co-pilot by building and testing hundreds of models to find the best match for your data. Its platform integrates with R and Python, allowing users to code, train and test models on its platform to see how they compare.
	Earnix	2001	Integrated Pricing and Customer Analytics software that empowers financial services companies to predict customer risk and demand and their impact on business performance, enabling the alignment of product offerings with changing market dynamics. Banks and insurers rely on Earnix solutions to improve deposit, loan, and insurance policy offerings
	Inedge	1994	Analytics solution provider specialized in the Insurance industry. Company focuses on helping clients gather and understand large amounts of data from various sources to make real-time decisions in a more cost-effective, efficient, and reliable manner by providing proprietary software accelerators and applications for a decreased implementation time, costs, and risks.
	Quantemplate	2011	Insurance reporting and analytics software built for the complex, collaborative world of the wholesale reinsurance markets to enables importing, analysing, modelling, reporting and utilization of data. Through QuanTemplate, underwriters and brokers can conduct all operational activities required to trade in the insurance market, while optimising their risk in realtime.
	Verisk	1971	Provider of information about risk to professionals in insurance, healthcare, mortgage, government, and risk management. Using advanced technologies to collect and analyze billions of records, Verisk Analytics draws on vast industry expertise and unique proprietary data sets to provide predictive analytics and decision-support solutions in fraud prevention, actuarial science, insurance coverages, fire protection, catastrophe and weather risk, data management, and many other fields.
	6sense	2013	Predictive analytics platform that helps B2B marketing and sales leaders by combining robust data science and machine learning with a "Buyer Intent Network" that captures time-based, structured and unstructured behavioral data from thousands of sources. Company focuses on helping businesses identify prospects in new markets and verticals – or find buyers with a need for products in new market categories
Platforms	Marketscout	2000	MarketScout is an insurance exchange with over 35,000 users (mostly independent retail agents) who use MarketScout to access specialists that help insurance agents and their clients to secure insurance quotes that best fit their needs (i.e. from Best of Class companies) by providing research support and serving as a third party advisor.
Technology	CSC	1959	Global provider of information technology (IT) services and solutions that focuses on enabling insurers to grow digitally while simultaneously transforming their existing IT environment, for improved efficiency and speed to market.
	N2uitive	2006	Claims software that helps improve decision support, advance best practices, and facilitate robust collaboration across your entire organization.
	Vertafore	1969	Largest technology provider for the insurance industry in the US, offers broad and adaptable technology solutions for carriers and agents.

Source: The Boston Consulting Group



## Valuation Methodology and Risks to Price Targets

---

### **AIG.N**

Our \$63 PT is based on sum-of-the-parts valuation. We estimate valuations of \$26, \$17, and \$20 per share, respectively, for non-life, life & other assets (including DTA). Our PT implies ~0.95x 1Q17e BVPS (ex. AOCI and DTA), given ~9% ROE potential in 2017. We see +15% upside to our PT from current levels, but considerable execution risks keep us on the sideline. Upside risks: better underwriting improvement, higher investment income, top-line growth acceleration, lower than expected cat losses, favorable reserve development, and stronger capital management. Downside risks: unable to execute on financial goals, large losses from catastrophes or adverse reserve development, equity market volatilities, investment losses, non-bank SIFI limiting capital deployment ability.

### **AJG.N**

Our \$48 price target is based on sum-of-parts valuation, valuing Core business at 19x NTMe EPS or 11x EV/EBITDA and Clean coal at 5x EPS. Slowing economic growth and pricing pressure will lower organic growth to ~3%, limiting margin expansion. Tuck-in acquisitions on a global platform along with top line growth and margin expansion should drive ~11% CAGR in 2016-17e. Downside risks include: M&A execution, P&C pricing declines, economic downturn, Clean coal business disappoints. Upside risks include: Faster top-line growth, better margin, improving economy.

### **AON.N**

Our \$100 price target is based on 15x NTMe P/E and 11x EV/EBITDA, in line with peers, assuming low single digit organic growth in risk segment, margins rising and buybacks continue. Healthcare exchange growth continues and pushes valuation above historical average. Downside risks include: M&A, P&C pricing under pressure, Economic slowdown, Healthcare exchange adoption slows. Upside risks include: Faster organic growth (in Risk or HR, especially Healthcare Exchanges) drives higher margin expansion.

### **BRO.N**

Our \$30 price target is based on 17x NTM EPS and 9x EV/EBITDA, below 10-year averages, but above brokers peers with faster EPS growth trajectory. Pricing headwinds and people/technology investments would pressure margins near-term. We see better relative value in other brokers. Upside risks include: faster organic growth; better margins; accretive acquisitions, and larger share repurchases.

### **CB.N**

Our \$136 price target is based on 1.3x 1Q17e BVPS, which is a blended valuation considering legacy Chubb accounts for ~40% of the combined business post acquisition. We expect combined valuation to re-rate higher from historical ACE average ~1.2x. More stable earnings and higher growth potential could support higher valuation than peer averages ~1.2x. Risks include: Integration risk; declining P&C pricing; underwriting margin deterioration; global growth and F/X headwinds; investment portfolio losses; large catastrophes or adverse development.

### **HIG.N**

We value the stock using a SOTP approach, where we value each division on a price to book basis based on peer multiples. This method of analysis leads us to a fair value of \$47. As this implies upside in-line with what we see at its peers, we are reiterating our Equal-weight rating on the stock. Risks include execution challenges associated with its restructuring actions, reserve developments in workers compensation, and any delays in extracting capital from the Talcott operations.

**MMC.N**

Our \$63 price target is based on 18x NTM EPS and 11.5x EV/EBITDA, modestly above MMC historical averages. We estimate ~13% EPS CAGR into 2018 driven by +4% organic growth, ~130bps margin expansion and strong capital management. Improving economies and decelerating P&C pricing drive low single digit organic top-line growth. Upside risks include: less than expected F/X headwinds, better organic growth and margin expansion, larger share buybacks. Downside risks include: global economic slowdown, sharply declining P&C pricing impacting organic growth, poorly executed M&A.

**TRV.N**

Our \$110 price target is based on 1.25x 1Q17e BVPS, a slight premium to its historical averages. We estimate 2016-17e ROE of ~11-12% driven by stable core underwriting margins along with continued reserve releases, share buybacks and steady investment income. Downside risks include: Margin deterioration, catastrophe losses, investment losses, reserve charges, and dilutive M&A. Upside risks include: Better investment income, top-line growth acceleration, continued low cat losses, continued reserve releases at current levels and higher buybacks.

**WLTW.O**

Our \$135 price target is based on 17x NTMe P/E, in line with historical averages. Twin expense drivers of operational improvement at Willis and, merger synergies and tax savings should drive ~15% EPS CAGR in 2016-18e. Valuation expands toward global peers. Risks include: Integration issues; Decelerating P&C pricing or global economic uncertainties hurt organic growth; Inability to execute on current cost saving plan.

---



### *Boston Consulting Group Disclosures*

---

The information provided herein was prepared by Morgan Stanley & Co. LLC ("Morgan Stanley") and The Boston Consulting Group (BCG). It is not investment research, though it may refer to a Morgan Stanley research report or the views of a Morgan Stanley research analyst. This communication does not constitute a complete fundamental analysis of any companies mentioned. Unless indicated, all views expressed herein are the views of the authors and may differ from or conflict with those of Morgan Stanley's research department. This article does not constitute investment advice or recommendations and is not a solicitation or an offer to purchase or sell securities. The information contained herein is only as good as of the date and time of publication; we do not undertake to advise of any changes in the opinions or information contained herein. Morgan Stanley and BCG expressly prohibit the use of any portion of this report, whether by reference, by incorporation, or otherwise, in any prospectus, IPO materials, or other filings with the SEC or other financial supervisory authorities or any public materials on which any investment decisions might be based, and to the fullest extent permitted by law, BCG shall have no, and hereby disclaims all, liability whatsoever to any recipient, and all recipients hereby waive any rights or claims with regard to the report, including the accuracy or completeness thereof. Receipt and review of the report shall be deemed agreement with, and consideration for, the foregoing.



## Disclosure Section

The information and opinions in Morgan Stanley Research were prepared by Morgan Stanley & Co. LLC, and/or Morgan Stanley C.T.V.M. S.A., and/or Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., and/or Morgan Stanley Canada Limited. As used in this disclosure section, "Morgan Stanley" includes Morgan Stanley & Co. LLC, Morgan Stanley C.T.V.M. S.A., Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., Morgan Stanley Canada Limited and their affiliates as necessary.

For important disclosures, stock price charts and equity rating histories regarding companies that are the subject of this report, please see the Morgan Stanley Research Disclosure Website at [www.morganstanley.com/researchdisclosures](http://www.morganstanley.com/researchdisclosures), or contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY, 10036 USA.

For valuation methodology and risks associated with any recommendation, rating or price target referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY 10036 USA.

### Analyst Certification

The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report: Nigel Dally; Brian Nowak, CFA; Kai Pan.

Unless otherwise stated, the individuals listed on the cover page of this report are research analysts.

### Global Research Conflict Management Policy

Morgan Stanley Research has been published in accordance with our conflict management policy, which is available at [www.morganstanley.com/institutional/research/conflictolicies](http://www.morganstanley.com/institutional/research/conflictolicies).

### Important US Regulatory Disclosures on Subject Companies

As of May 31, 2016, Morgan Stanley beneficially owned 1% or more of a class of common equity securities of the following companies covered in Morgan Stanley Research: Prudential Financial.

Within the last 12 months, Morgan Stanley managed or co-managed a public offering (or 144A offering) of securities of Aon PLC, Chubb LTD, Manulife Financial Corp., Marsh & McLennan Cos, National General Holdings Corp, Reinsurance Group of America, The Travelers Companies, Inc., Torchmark Corp., Unum Group, Voya Financial Inc, W.R. Berkley Corp..

Within the last 12 months, Morgan Stanley has received compensation for investment banking services from American Int'l Grp, Ameriprise Financial, Inc., Aon PLC, Chubb LTD, Manulife Financial Corp., Marsh & McLennan Cos, MetLife Inc., National General Holdings Corp, Prudential Financial, Reinsurance Group of America, Sun Life Financial Inc., The Travelers Companies, Inc., Torchmark Corp., Unum Group, Voya Financial Inc, W.R. Berkley Corp..

In the next 3 months, Morgan Stanley expects to receive or intends to seek compensation for investment banking services from Aflac, Allstate Corporation, American Int'l Grp, Ameriprise Financial, Inc., Aon PLC, Arch Capital Group Ltd., Arthur J. Gallagher, Axis Capital Holdings, Brown & Brown Inc., Chubb LTD, CNO Financial Group Inc., Genworth Financial, Inc., Hartford Fin. Services Grp., Intact Financial Corp, Lincoln National Corp, Manulife Financial Corp., Marsh & McLennan Cos, MetLife Inc., National General Holdings Corp, Principal Financial Group, Prudential Financial, Reinsurance Group of America, RenaissanceRe, Sun Life Financial Inc., The Travelers Companies, Inc., Third Point Reinsurance Ltd, Torchmark Corp., Unum Group, Voya Financial Inc, W.R. Berkley Corp., Willis Towers Watson PLC, XL Group PLC.

Within the last 12 months, Morgan Stanley has received compensation for products and services other than investment banking services from Aflac, Allstate Corporation, American Int'l Grp, Ameriprise Financial, Inc., Aon PLC, Arch Capital Group Ltd., Arthur J. Gallagher, Chubb LTD, CNO Financial Group Inc., Genworth Financial, Inc., Hartford Fin. Services Grp., Intact Financial Corp, Lincoln National Corp, Manulife Financial Corp., Marsh & McLennan Cos, MetLife Inc., Primerica, Inc., Principal Financial Group, Progressive Corp, Prudential Financial, Reinsurance Group of America, RenaissanceRe, Sun Life Financial Inc., The Travelers Companies, Inc., Unum Group, Voya Financial Inc, W.R. Berkley Corp., Willis Towers Watson PLC, XL Group PLC.

Within the last 12 months, Morgan Stanley has provided or is providing investment banking services to, or has an investment banking client relationship with, the following company: Aflac, Allstate Corporation, American Int'l Grp, Ameriprise Financial, Inc., Aon PLC, Arch Capital Group Ltd., Arthur J. Gallagher, Axis Capital Holdings, Brown & Brown Inc., Chubb LTD, CNO Financial Group Inc., Genworth Financial, Inc., Hartford Fin. Services Grp., Intact Financial Corp, Lincoln National Corp, Manulife Financial Corp., Marsh & McLennan Cos, MetLife Inc., National General Holdings Corp, Principal Financial Group, Prudential Financial, Reinsurance Group of America, RenaissanceRe, Sun Life Financial Inc., The Travelers Companies, Inc., Third Point Reinsurance Ltd, Torchmark Corp., Unum Group, Voya Financial Inc, W.R. Berkley Corp., Willis Towers Watson PLC, XL Group PLC.

Within the last 12 months, Morgan Stanley has either provided or is providing non-investment banking, securities-related services to and/or in the past has entered into an agreement to provide services or has a client relationship with the following company: Aflac, Allstate Corporation, American Int'l Grp, Ameriprise Financial, Inc., Aon PLC, Arch Capital Group Ltd., Arthur J. Gallagher, Axis Capital Holdings, Chubb LTD, CNO Financial Group Inc., Genworth Financial, Inc., Hartford Fin. Services Grp., Intact Financial Corp, Lincoln National Corp, Manulife Financial Corp., Marsh & McLennan Cos, MetLife Inc., Primerica, Inc., Principal Financial Group, Progressive Corp, Prudential Financial, Reinsurance Group of America, RenaissanceRe, Sun Life Financial Inc., The Travelers Companies, Inc., Torchmark Corp., Unum Group, Voya Financial Inc, W.R. Berkley Corp., Willis Towers Watson PLC, XL Group PLC.

Morgan Stanley & Co. LLC makes a market in the securities of Aflac, Allstate Corporation, American Int'l Grp, Ameriprise Financial, Inc., Aon PLC, Arch Capital Group Ltd., Arthur J. Gallagher, Axis Capital Holdings, Brown & Brown Inc., Chubb LTD, CNO Financial Group Inc., Everest Re Group, Ltd., Genworth Financial, Inc., Hartford Fin. Services Grp., Lincoln National Corp, Manulife Financial Corp., Marsh & McLennan Cos, MetLife Inc., National General Holdings Corp, Primerica, Inc., Principal Financial Group, Progressive Corp, Prudential Financial, Reinsurance Group of America, RenaissanceRe, Sun Life Financial Inc., The Travelers Companies, Inc., Third Point Reinsurance Ltd, Torchmark Corp., Unum Group, Voya Financial Inc, W.R. Berkley Corp., Willis Towers Watson PLC, XL Group PLC.

The equity research analysts or strategists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors, firm revenues and overall investment banking revenues. Equity Research analysts' or strategists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

Morgan Stanley and its affiliates do business that relates to companies/instruments covered in Morgan Stanley Research, including market making, providing liquidity, fund management, commercial banking, extension of credit, investment services and investment banking. Morgan Stanley sells to and buys from customers the securities/instruments of companies covered in Morgan Stanley Research on a principal basis. Morgan Stanley may have a position in the debt of the Company or instruments discussed in this report. Morgan Stanley trades or may trade as principal in the debt securities (or in related derivatives) that are the subject of the debt research report.

Certain disclosures listed above are also for compliance with applicable regulations in non-US jurisdictions.

### STOCK RATINGS

Morgan Stanley uses a relative rating system using terms such as Overweight, Equal-weight, Not-Rated or Underweight (see definitions below). Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold and sell. Investors should carefully read the definitions of all ratings used in Morgan Stanley Research. In addition, since Morgan Stanley Research contains more complete information concerning the analyst's views, investors should carefully read Morgan Stanley Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.



## Global Stock Ratings Distribution

(as of May 31, 2016)

The Stock Ratings described below apply to Morgan Stanley's Fundamental Equity Research and do not apply to Debt Research produced by the Firm. For disclosure purposes only (in accordance with NASD and NYSE requirements), we include the category headings of Buy, Hold, and Sell alongside our ratings of Overweight, Equal-weight, Not-Rated and Underweight. Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definitions below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight and Not-Rated to hold and Underweight to sell recommendations, respectively.

STOCK RATING CATEGORY	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)			OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC)	
	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MISC
<b>Overweight/Buy</b>	<b>1177</b>	<b>35%</b>	<b>283</b>	<b>40%</b>	<b>24%</b>	<b>572</b>	<b>37%</b>
<b>Equal-weight/Hold</b>	<b>1431</b>	<b>43%</b>	<b>337</b>	<b>47%</b>	<b>24%</b>	<b>701</b>	<b>45%</b>
<b>Not-Rated/Hold</b>	<b>78</b>	<b>2%</b>	<b>7</b>	<b>1%</b>	<b>9%</b>	<b>11</b>	<b>1%</b>
<b>Underweight/Sell</b>	<b>663</b>	<b>20%</b>	<b>87</b>	<b>12%</b>	<b>13%</b>	<b>280</b>	<b>18%</b>
<b>TOTAL</b>	<b>3,349</b>		<b>714</b>			<b>1564</b>	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months.

### Analyst Stock Ratings

Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

### Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.

Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

### Important Disclosures for Morgan Stanley Smith Barney LLC Customers

Important disclosures regarding the relationship between the companies that are the subject of Morgan Stanley Research and Morgan Stanley Smith Barney LLC or Morgan Stanley or any of their affiliates, are available on the Morgan Stanley Wealth Management disclosure website at [www.morganstanley.com/online/researchdisclosures](http://www.morganstanley.com/online/researchdisclosures). For Morgan Stanley specific disclosures, you may refer to [www.morganstanley.com/researchdisclosures](http://www.morganstanley.com/researchdisclosures).

Each Morgan Stanley Equity Research report is reviewed and approved on behalf of Morgan Stanley Smith Barney LLC. This review and approval is conducted by the same person who reviews the Equity Research report on behalf of Morgan Stanley. This could create a conflict of interest.

### Other Important Disclosures

Morgan Stanley & Co. International PLC and its affiliates have a significant financial interest in the debt securities of Aflac, Allstate Corporation, American Int'l Grp, Axis Capital Holdings, Chubb LTD, CNO Financial Group Inc., Genworth Financial, Inc., Hartford Fin. Services Grp., Lincoln National Corp, Manulife Financial Corp., Marsh & McLennan Cos, MetLife Inc., National General Holdings Corp, Principal Financial Group, Progressive Corp, Prudential Financial, RenaissanceRe, Sun Life Financial Inc., The Travelers Companies, Inc., Torchmark Corp., Voya Financial Inc, XL Group PLC.

Morgan Stanley Research policy is to update research reports as and when the Research Analyst and Research Management deem appropriate, based on developments with the issuer, the sector, or the market that may have a material impact on the research views or opinions stated therein. In addition, certain Research publications are intended to be updated on a regular periodic basis (weekly/monthly/quarterly/annual) and will ordinarily be updated with that frequency, unless the Research Analyst and Research Management determine that a different publication schedule is appropriate based on current conditions.

Morgan Stanley is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Morgan Stanley produces an equity research product called a "Tactical Idea." Views contained in a "Tactical Idea" on a particular stock may be contrary to the recommendations or views expressed in research on the same stock. This may be the result of differing time horizons, methodologies, market events, or other factors. For all research available on a particular stock, please contact your sales representative or go to Matrix at <http://www.morganstanley.com/matrix>.

Morgan Stanley Research is provided to our clients through our proprietary research portal on Matrix and also distributed electronically by Morgan Stanley to clients. Certain, but not all, Morgan Stanley Research products are also made available to clients through third-party vendors or redistributed to clients through alternate electronic means as a convenience. For access to all available Morgan Stanley Research, please contact your sales representative or go to Matrix at <http://www.morganstanley.com/matrix>.



Any access and/or use of Morgan Stanley Research is subject to Morgan Stanley's Terms of Use (<http://www.morganstanley.com/terms.html>). By accessing and/or using Morgan Stanley Research, you are indicating that you have read and agree to be bound by our Terms of Use (<http://www.morganstanley.com/terms.html>). In addition you consent to Morgan Stanley processing your personal data and using cookies in accordance with our Privacy Policy and our Global Cookies Policy ([http://www.morganstanley.com/privacy\\_pledge.html](http://www.morganstanley.com/privacy_pledge.html)), including for the purposes of setting your preferences and to collect readership data so that we can deliver better and more personalized service and products to you. To find out more information about how Morgan Stanley processes personal data, how we use cookies and how to reject cookies see our Privacy Policy and our Global Cookies Policy ([http://www.morganstanley.com/privacy\\_pledge.html](http://www.morganstanley.com/privacy_pledge.html)).

If you do not agree to our Terms of Use and/or if you do not wish to provide your consent to Morgan Stanley processing your personal data or using cookies please do not access our research.

Morgan Stanley Research does not provide individually tailored investment advice. Morgan Stanley Research has been prepared without regard to the circumstances and objectives of those who receive it. Morgan Stanley recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of an investment or strategy will depend on an investor's circumstances and objectives. The securities, instruments, or strategies discussed in Morgan Stanley Research may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them. Morgan Stanley Research is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy. The value of and income from your investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. If provided, and unless otherwise stated, the closing price on the cover page is that of the primary exchange for the subject company's securities/instruments.

The fixed income research analysts, strategists or economists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues (which include fixed income trading and capital markets profitability or revenues), client feedback and competitive factors. Fixed Income Research analysts', strategists' or economists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

The "Important US Regulatory Disclosures on Subject Companies" section in Morgan Stanley Research lists all companies mentioned where Morgan Stanley owns 1% or more of a class of common equity securities of the companies. For all other companies mentioned in Morgan Stanley Research, Morgan Stanley may have an investment of less than 1% in securities/instruments or derivatives of securities/instruments of companies and may trade them in ways different from those discussed in Morgan Stanley Research. Employees of Morgan Stanley not involved in the preparation of Morgan Stanley Research may have investments in securities/instruments or derivatives of securities/instruments of companies mentioned and may trade them in ways different from those discussed in Morgan Stanley Research. Derivatives may be issued by Morgan Stanley or associated persons.

With the exception of information regarding Morgan Stanley, Morgan Stanley Research is based on public information. Morgan Stanley makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in Morgan Stanley Research change apart from when we intend to discontinue equity research coverage of a subject company. Facts and views presented in Morgan Stanley Research have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley business areas, including investment banking personnel.

Morgan Stanley Research personnel may participate in company events such as site visits and are generally prohibited from accepting payment by the company of associated expenses unless pre-approved by authorized members of Research management.

Morgan Stanley may make investment decisions that are inconsistent with the recommendations or views in this report.

To our readers in Taiwan: Information on securities/instruments that trade in Taiwan is distributed by Morgan Stanley Taiwan Limited ("MSTL"). Such information is for your reference only. The reader should independently evaluate the investment risks and is solely responsible for their investment decisions.

Morgan Stanley Research may not be distributed to the public media or quoted or used by the public media without the express written consent of Morgan Stanley. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation or a solicitation to trade in such securities/instruments. MSTL may not execute transactions for clients in these securities/instruments. To our readers in Hong Kong: Information is distributed in Hong Kong by and on behalf of, and is attributable to, Morgan Stanley Asia Limited as part of its regulated activities in Hong Kong. If you have any queries concerning Morgan Stanley Research, please contact our Hong Kong sales representatives.

Morgan Stanley is not incorporated under PRC law and the research in relation to this report is conducted outside the PRC. Morgan Stanley Research does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. Neither this report nor any part of it is intended as, or shall constitute, provision of any consultancy or advisory service of securities investment as defined under PRC law. Such information is provided for your reference only.

Morgan Stanley Research is disseminated in Brazil by Morgan Stanley C.T.V.M. S.A.; in Mexico by Morgan Stanley México, Casa de Bolsa, S.A. de C.V. which is regulated by Comision Nacional Bancaria y de Valores. Paseo de los Tamarindos 90, Torre 1, Col. Bosques de las Lomas Floor 29, 05120 Mexico City; in Japan by Morgan Stanley MUFG Securities Co., Ltd. and, for Commodities related research reports only, Morgan Stanley Capital Group Japan Co., Ltd; in Hong Kong by Morgan Stanley Asia Limited (which accepts responsibility for its contents) and by Morgan Stanley Asia International Limited, Hong Kong Branch; in Singapore by Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore (which accepts legal responsibility for its contents and should be contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research) and by Morgan Stanley Asia International Limited, Singapore Branch (Registration number T11FC0207F); in Australia to "wholesale clients" within the meaning of the Australian Corporations Act by Morgan Stanley Australia Limited A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents; in Australia to "wholesale clients" and "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents; in Korea by Morgan Stanley & Co International plc, Seoul Branch; in India by Morgan Stanley India Company Private Limited; in Indonesia by PT Morgan Stanley Asia Indonesia; in Canada by Morgan Stanley Canada Limited, which has approved of and takes responsibility for its contents in Canada; in Germany by Morgan Stanley Bank AG, Frankfurt am Main and Morgan Stanley Private Wealth Management Limited, Niederlassung Deutschland, regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin); in Spain by Morgan Stanley, S.V., S.A., a Morgan Stanley group company, which is supervised by the Spanish Securities Markets Commission (CNMV) and states that Morgan Stanley Research has been written and distributed in accordance with the rules of conduct applicable to financial research as established under Spanish regulations; in the US by Morgan Stanley & Co. LLC, which accepts responsibility for its contents. Morgan Stanley & Co. International plc, authorized by the Prudential Regulatory Authority and regulated by the Financial Conduct Authority and the Prudential Regulatory Authority, disseminates in the UK research that it has prepared, and approves solely for the purposes of section 21 of the Financial Services and Markets Act 2000, research which has been prepared by any of its affiliates. RMB Morgan Stanley (Proprietary) Limited is a member of the JSE Limited and regulated by the Financial Services Board in South Africa. RMB Morgan Stanley (Proprietary) Limited is a joint venture owned equally by Morgan Stanley International Holdings Inc. and RMB Investment Advisory (Proprietary) Limited, which is wholly owned by FirstRand Limited. The information in Morgan Stanley Research is being disseminated by Morgan Stanley Saudi Arabia, regulated by the Capital Market Authority in the Kingdom of Saudi Arabia, and is directed at Sophisticated investors only.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (DIFC Branch), regulated by the Dubai Financial Services Authority (the DFSA), and is directed at Professional Clients only, as defined by the DFSA. The financial products or financial services to which this research relates will only be made available to a customer who we are satisfied meets the regulatory criteria to be a Professional Client.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (QFC Branch), regulated by the Qatar Financial Centre Regulatory Authority (the QFCRA), and is directed at business customers and market counterparties only and is not intended for Retail



Customers as defined by the QFCRA.

As required by the Capital Markets Board of Turkey, investment information, comments and recommendations stated here, are not within the scope of investment advisory activity. Investment advisory service is provided exclusively to persons based on their risk and income preferences by the authorized firms. Comments and recommendations stated here are general in nature. These opinions may not fit to your financial status, risk and return preferences. For this reason, to make an investment decision by relying solely to this information stated here may not bring about outcomes that fit your expectations. The trademarks and service marks contained in Morgan Stanley Research are the property of their respective owners. Third-party data providers make no warranties or representations relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages relating to such data. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P. Morgan Stanley Research, or any portion thereof may not be reprinted, sold or redistributed without the written consent of Morgan Stanley.

#### INDUSTRY COVERAGE: Insurance - Property & Casualty

COMPANY (TICKER)	RATING (AS OF)	PRICE* (06/28/2016)
<b>Kai Pan</b>		
Allstate Corporation (ALL.N)	E (07/06/2010)	\$67.73
American Int'l Grp (AIG.N)	E (05/05/2016)	\$49.82
Aon PLC (AON.N)	E (05/31/2012)	\$103.92
Arch Capital Group Ltd. (ACGL.O)	E (07/06/2010)	\$68.75
Arthur J. Gallagher (AJG.N)	E (05/31/2012)	\$45.28
Axis Capital Holdings (AXS.N)	E (08/14/2015)	\$52.11
Brown & Brown Inc. (BRO.N)	U (01/27/2016)	\$35.79
Chubb LTD (CB.N)	O (11/12/2015)	\$125.22
Everest Re Group, Ltd. (RE.N)	E (05/16/2013)	\$174.01
Intact Financial Corp (IFC.TO)	O (05/23/2016)	C\$90.07
Marsh & McLennan Cos (MMC.N)	E (02/09/2015)	\$65.59
National General Holdings Corp (NGHC.O)	O (01/26/2016)	\$20.64
Progressive Corp (PGR.N)	U (04/25/2012)	\$31.97
RenaissanceRe (RNR.N)	E (03/09/2015)	\$113.01
The Travelers Companies, Inc. (TRV.N)	E (03/02/2012)	\$114.13
Third Point Reinsurance Ltd (TPRE.N)	E (01/06/2014)	\$11.06
W.R. Berkley Corp. (WRB.N)	E (01/21/2016)	\$56.49
Willis Towers Watson PLC (WLTW.O)	O (02/12/2015)	\$117.56
XL Group PLC (XL.N)	O (05/12/2015)	\$31.74

Stock Ratings are subject to change. Please see latest research for each company.

\* Historical prices are not split adjusted.

#### INDUSTRY COVERAGE: Insurance - Life/Annuity

COMPANY (TICKER)	RATING (AS OF)	PRICE* (06/28/2016)
<b>Nigel Dally</b>		
Aflac (AFL.N)	E (05/27/2011)	\$68.85
Ameriprise Financial, Inc. (AMP.N)	O (04/15/2015)	\$85.70
CNO Financial Group Inc. (CNO.N)	E (11/12/2014)	\$16.36
Genworth Financial, Inc. (GNW.N)	E (05/28/2015)	\$2.60
Hartford Fin. Services Grp. (HIG.N)	E (02/08/2012)	\$42.11
Lincoln National Corp (LNC.N)	O (08/13/2015)	\$36.77
Manulife Financial Corp. (MFC.TO)	E (11/13/2014)	C\$16.97
MetLife Inc. (MET.N)	E (11/11/2015)	\$37.70
Primerica, Inc. (PRI.N)	E (09/08/2010)	\$55.60
Principal Financial Group (PFG.N)	E (06/09/2014)	\$39.06
Prudential Financial (PRU.N)	O (05/10/2012)	\$68.70
Reinsurance Group of America (RGAN)	U (08/11/2014)	\$92.36
Sun Life Financial Inc. (SLF.TO)	E (05/25/2012)	C\$40.80
Torchmark Corp. (TMK.N)	U (08/13/2015)	\$58.64
Unum Group (UNMN)	E (02/17/2010)	\$30.68
Voya Financial Inc (VOYAN)	O (11/11/2015)	\$23.38

Stock Ratings are subject to change. Please see latest research for each company.

\* Historical prices are not split adjusted.