COVID-19 effect on the insurance industry

An outbreak of novel coronavirus (2019-nCoV, “COVID-19”) that began in Wuhan, China, has spread rapidly across the globe. The first U.S. case was reported on January 20, 2020.

It was not until the latter portion of February that the U.S. population began to grasp the fact that what was happening in Asia, then in Italy, could begin to have similar impacts here.

The S&P 500 index declined from a record high of 3394 on February 19 by more than 30% in less than four weeks, before partially recovering.

The life-annuity stocks have been hardest hit, while all the major insurance sectors except for personal lines have underperformed the market. Our life-annuity composite was down 47% on March 24 relative to the February 19 high, while the property-casualty and managed care indices were down 33% and 31%, respectively.

Rating agencies led by Fitch and A.M. Best have revised their rating outlooks to negative for most insurance sectors across multiple regions based on the COVID-19 spread and the ensuing impact on economic conditions. Initial GDP estimates for the second quarter and full-year 2020 are in a wide range, including sharply negative—and this will have a meaningful impact on premium growth due to the insurance industry’s strong correlation to overall economic activity.

Beyond the direct financial effects, it is also important to consider the impact of exogenous factors—particularly government actions that may have broad effects on the industry.

Listed on the following page is a summary chronology of key developments and news items relevant to insurers.

Summarized below are key takeaways regarding the impact to insurers triggered by the spread of the COVID-19 virus.

**Key takeaways**

- **Growth** will be negatively affected across all sectors as the economy rapidly contracts, with a high degree of uncertainty around the magnitude, duration, and recovery.
- **Life-annuity insurers** are most exposed to asset changes affecting capital and RBC, in addition to increased hedging costs and spread compression.
- State or federal mandates to provide BI coverage for risks not anticipated in property-casualty insurance contracts pose a nontrivial risk.
- Reduced economic activity will result in lower property-casualty claims exposures, with consumer advocate groups already calling for premium reduction adjustments.
- Cash flow for smaller property-casualty companies could be stressed due to regulatory and market pressures to defer premium payments.
- The health insurance sector will experience a rise in claim costs, which will disproportionately affect those with Medicare concentrations. Insurers are also waiving deductibles and testing costs.
- Operational expenses will rise from insurers replicating centralized functions in a work-from-home environment, offset by reduced travel and related costs.

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Total Confirmed Cases and Fatalities March 1, 2020, through March 27, 2020

<table>
<thead>
<tr>
<th>Country</th>
<th>Total Cases</th>
<th>Total Deaths</th>
<th>Fatality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>82,076</td>
<td>3,286</td>
<td>4.0%</td>
</tr>
<tr>
<td>South Korea</td>
<td>9,332</td>
<td>139</td>
<td>1.5%</td>
</tr>
<tr>
<td>Italy</td>
<td>80,539</td>
<td>8,165</td>
<td>10.1%</td>
</tr>
<tr>
<td>Spain</td>
<td>56,188</td>
<td>4,089</td>
<td>7.3%</td>
</tr>
<tr>
<td>Iran</td>
<td>28,496</td>
<td>2,234</td>
<td>7.6%</td>
</tr>
<tr>
<td>United States</td>
<td>85,356</td>
<td>1,246</td>
<td>1.5%</td>
</tr>
<tr>
<td>Global Total</td>
<td>509,164</td>
<td>23,335</td>
<td>4.6%</td>
</tr>
</tbody>
</table>

Prepared by Conning, Inc. Source: WHO Daily Situation Case Reports, U.S. numbers from Centers for Disease Control
Property-casualty sector

Key takeaways
- Reduced premium growth is expected from decline in economic activity, with a particularly negative impact on commercial exposure units.
- Economic slowdown will also work to slow the drivers of loss frequency in most lines (vehicle travel, retail traffic, work activity, etc.).
- Lines facing increased virus-related claims include business interruption and event cancellation coverages, particularly if regulatory mandates emerge to override standard policy exclusions.
- Premium collection may slow as insurers implement payment deferrals for individuals and small businesses, straining cash flow and increasing credit risk.
- Conning estimates a decline in the industry’s investment portfolio of approximately 5%, resulting in a decline in economic surplus of approximately 9% (as of March 25).
- Continuation of positive commercial lines rate momentum is in jeopardy, with the reduction in capital and need for rate offset by weaker economic conditions.

### COVID-19 Developments

<table>
<thead>
<tr>
<th>Week of</th>
<th>Developments</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2</td>
<td>Italian daily coronavirus deaths jump 57% to 366. South Korea reports 179 new coronavirus cases as rate of increase slows. S&amp;P 500 up 0.6% for the week.</td>
</tr>
<tr>
<td>March 9</td>
<td>The WHO declared the coronavirus an epidemic on March 11. Coronavirus fallout leads to first of round layoffs in U.S. Fed cuts the Federal Funds rate to 0% to 0.25% in an emergency weekend meeting on the 15th. 10-year U.S Treasury reaches lowest inter-day level of 0.44%. S&amp;P 500 declines 9% for the week.</td>
</tr>
<tr>
<td>March 16</td>
<td>The first lawsuit relating to a business interruption claim was filed by a restaurant in New Orleans. New Jersey considers a new law requiring P&amp;C insurers to cover BI claims. Federal government considering proposal to cover BI claims, to be paid for by the government. Premium payment grace periods and extensions were announced by several insurers and by the California DOI. A.M. Best announced it is deploying coronavirus stress testing to rated insurers. A.M. Best outlook on U.S. life-annuity insurers revised to negative. Fitch outlooks on U.S. life sector, health sector, P&amp;C sector, and global reinsurance sector revised to negative. Stay-at-home orders issued in CA, NY, OH, IL. S&amp;P 500 declines 15% for the week.</td>
</tr>
<tr>
<td>March 23</td>
<td>Massachusetts and Ohio consider proposals to retroactively force insurers to cover BI. The Federal Reserve announced a second wave of initiatives to support the economy, including securities purchases and ensuring the flow of credit. Tokyo Summer Olympics postponed to 2021. WHO pandemic bond reaches time requirement for triggering. $2 trillion stimulus bill approved by Senate, followed by House approval and presidential enactment. S&amp;P 500 increases 17% for the week (as of March 26). Initial unemployment claims were 3,283,000, an increase of 3,001,000 from the previous week—the highest level in the history of the series.</td>
</tr>
</tbody>
</table>

Prepared by Conning, Inc. Sources: Various new articles and company websites

### Insurance Industry Stock Indices vs. S&P 500, February 19, 2020, to March 26, 2020

Prepared by Conning, Inc. Source: ©2020 S&P Global Market Intelligence, Yahoo Finance
Revenue effects
With recession a certainty, reduced economic activity will have a negative impact on exposure growth in most lines. Economic growth is the underlying fuel for exposure growth, and the hardest-hit industries include hotels, airlines, restaurants, movie theaters, sporting events, and convention centers. At the start of 2020, the consensus expectation was for GDP growth of close to 2% for the year; now forecasts are quickly turning to flat or negative growth for the year. Forecaster are mostly uniform in their assessment of negative growth in the second quarter, with variability across forecasts as to the duration of the recession. It appears a recovery will look more U-shaped than V-shaped.

Economic growth conditions drive most of the direct and indirect exposure bases for most lines of business: sales, new construction, property values, vehicle mileage, wages, and office occupancy.

New light vehicle sales are slowing dramatically. Over the past two weeks, expectations have fallen from 16.9 million units for 2020 to 15.9 million units by mid-month (a 6% drop in one week). As a measure of sensitivity, at the depths of the 2008 recession, new light vehicle sales dropped by 40% between 2007 and 2009. Based on a vehicle fleet of 250 million personal vehicles, a drop in new light vehicle sales of 40% would lead to a reduction in personal auto exposures by 1%.

Forecast retail sales, projected at the beginning of the year to be up more than 3% for 2020, declined by 0.5% in February and will be more adversely affected by the shutdown in March and subsequent months. Restaurants and theaters are closed in most locations, creating essentially a 100% decline in revenue on a year-over-year basis for the next several weeks.

In addition, premium collection will slow as businesses and individuals struggle with cash flow. Allstate has seized on this issue, providing a two-month grace period for nonpayment of premiums—waiving the cancellation for nonpayment clause for a two-month window—a strong initiative that will pressure others to follow and possibly could pre-empt more draconian measures imposed by states or by the federal government. California and Washington have requested auto insurers implement a 60-day grace period for premium payments.

Reduced premiums will also be met with a slowdown in loss payments due to reduced loss exposure. The industry’s cash flow (positive $87 billion for 2019E) could very well turn negative. However, the industry’s liquidity position is strong with $67 billion in cash and equivalents as of year-end 2019. This amount does not include additional liquidity sources including bank lines of credit or access to the Federal Home Loan Bank. Nonetheless, liquidity varies widely by individual company, with smaller companies likely at a disadvantage.

Reduced payroll affecting workers’ compensation
Job losses and reduced hours will cause reduction to wages and salaries, the exposure base for workers’ compensation premium. Although hourly workers typically earn between 20% and 30% less than salaried workers, 59% of workers in the U.S. are hourly employees. In addition to reduced hours, there will be layoffs in the economic sectors hardest hit by crisis. The reduction in payrolls will affect workers’ compensation premium in 2020 and 2021.

Initial unemployment claims were 3.3 million for the week of March 16 alone. In China, close to 5 million jobs were lost in a workforce of 450 million, according to official sources. Sectors expected to be most affected include travel and tourism, restaurant, entertainment, and transportation. The duration of the crisis will dictate the extent of payroll and wage levels. Employment forecasts track GDP forecasts and range from optimistic scenarios with return to growth in the third quarter to full-blown recession through next year.

The ILS market
The ILS (insurance-linked securities) or alternative capital market has operated largely on a business-as-usual basis (except for constrained secondary market liquidity), demonstrating the noncorrelated nature of this asset class versus nearly all financial markets. Further, assets backing the collateral requirements for these structures are typically invested in high-quality, liquid, and relatively short-term securities. While only a small portion of institutional portfolios, the ILS asset class will very likely attract additional interest among institutional investors.

Loss/expense effects
The slowdown in economic activity will actually work to put the brakes on the drivers of loss in most lines (vehicle travel, retail traffic, work activity, etc.). Large or sudden increases in virus-related claims are unlikely for the property-casualty sector, but BI coverage may be cause for concern. BI is typically not triggered under a virus scenario due to specific policy exclusions and requirements for a physical loss to have been incurred. However, consider recent developments:

- The New Jersey legislature debated a law to retroactively apply BI coverage, overriding specific policy language. The law has not yet moved forward, with various industry groups united in opposition.
- Two other states, Ohio and Massachusetts, are working on similar bills to have insurers retroactively provide BI coverage to small businesses.
- Congress is working on several bills that would provide BI coverage to qualified insureds, most involving the federal government covering loss payments.

For firms that participate in longer supply chains, the threat of suppliers not being able to provide inputs due to similar virus shutdowns will also not be covered. In these cases, it is contingent BI coverage that would otherwise cover disruptions by vendors.

Workers’ compensation
The reduction in economic activity will affect workers’ compensation insurance by reducing both premium potential and loss frequency. With workers asked to stay home for an extended period, the near-term opportunity for many types of workers’ compensation claims is dramatically reduced. There may be...
losses directly linked to COVID-19 exposure. The main workers’ compensation coverage question is whether a worker who was sickened (or died) from COVID-19 contracted at work has an occupational disease. Many states exclude “ordinary diseases of life.” Ordinary diseases of life, such as colds, are illnesses to which the general public is exposed and could be contracted outside the workplace. There have already been 31 workers’ compensation claims related to COVID-19 filed in Pennsylvania.

The direction of workers’ compensation court rulings is to be more liberal in interpreting what constitutes an occupational illness, moving from a “peculiar risk” to an “actual risk” standard. This means that there may be coverage even if the risk is not peculiar to the workplace. Some states, including Washington, Michigan, and Pennsylvania, have declared that they will provide coverage to first responders and health care workers who are quarantined following COVID-19 exposure. We expect to see more moves by departments of workers’ compensation and judges in the weeks ahead and vexing differences in approach and interpretation from state to state.

**Event cancellation insurance**

Event cancellation insurance is another area where claims will possibly spike, but coverage determinations will be on a case-by-case basis. The purpose of event cancellation insurance is to protect event revenues and related expenses against the risks of cancellation, postponement, etc., for circumstances beyond the control of the event organizer. Most policies offer broad all-risk coverage, while other policies are written so only specific causes or risks (e.g., extreme weather, terrorism, etc.) trigger coverage.

Event cancellation policies usually exclude infectious disease coverage, but coverage depends on the terms and conditions of the specific policy. For example, losses may be covered if an event is canceled that takes place in an affected region. However, the cancellation of an event may not necessarily be covered if the cancellation was not beyond the control of the event organizers or attendees.

On March 24, the decision was made to postpone the Tokyo Olympics until “no later than summer 2021.” While the cost of postponing the games will likely be significant, they should be less than an outright cancellation.

**Asset effects**

The property-casualty sector began the year in excellent financial health. While in the best condition ever to weather adversity, the current environment will still strain insurer balance sheets, reducing insurer investment portfolios and, consequently, economic surplus levels.

Insurer portfolios experienced a double negative impact: the equity market declined along with corporate bond values, which moved in the opposite direction to Treasuries. While the bulk of the sector’s invested assets are in high-quality bonds, nearly 20% are in BBB and high-yield bonds.

A simplified view of the industry’s investment portfolio indicates the sensitivity to the industry’s financial strength. The table below left is an estimated point-in-time view of the impact to values across asset classes and the consequent effect on invested assets.

As of March 25, 2020, we estimated a decline in value to the investment portfolio of approximately 5%, with the largest contributors being BBB bonds, high yield, and equities. Compared to the end of the year, we estimate economic surplus (note that, for statutory accounting, insurers carry most fixed-income securities at cost and not at market value) may be down as much as 9%. This is a point-in-time view, but does demonstrate the risk to industry capital. Financial markets recovered somewhat during the fourth week of March, reacting to extreme actions by the Fed (announcing it would buy bonds in unlimited numbers and backstop direct loans to companies), but significant volatility remains.

Insurer appetites for new investments range from opportunistic purchases to cash preservation strategies given the economic and cash flow uncertainty. However, with the ten-year Treasury having slid to a sub-1% yield, insurers will be challenged to rely on investment income increases to support profitability.
**Life-annuity sector**

**Key takeaways**

- Excess mortality claims should be manageable for life insurers. However, reinsurers will experience more significant claims due to reinsurer concentration.
- Declining asset values coupled with the need to increase reserves pressure life insurer capital levels.
- Investment pressures will mount with the significant allocation to BBB securities facing declines in market value and likelihood of downgrades, increasing capital charges.
- Annuities will face lower premiums and Separate Account fees, coupled with significant increases in reserves and hedging costs.
- Interest rate pressures, already a challenge, will increase. New money yields will be subject to the decrease in interest rates offset by wider spreads on risk assets.

**Mortality experience**

At this point, the total excess mortality from COVID-19 is uncertain. Some of the features of the infectiousness and deadliness of the disease are similar to that of the H1N1. Flu pandemic of 1918-1919. Total deaths from that pandemic were about 50 million people worldwide, with about 675,000 in the United States. Given the U.S. population of 1918 was about 103 million, this represents a raw excess mortality rate of 0.66%. Given the current base mortality rate in the United States is about 0.89%, that additional amount would be a substantial rise in mortality. However, that is more of a worst-case scenario, especially because social distancing and other measures in various states may slow the spread of pandemic illness and buy time for effective cures.

Mortality from COVID-19 is substantially higher for older people than younger people, a much starker way than one sees in standard mortality patterns. South Korea has done extensive testing and found a 10% case fatality rate for those age 80 and older, while there was less than a 2% case fatality rate for those under the age of 70 and no deaths for those under 30. However, these are preliminary statistics, and that 10% case fatality rate is based on only 33 coronavirus deaths.

Whatever the ultimate level of U.S. deaths, the excess mortality experience for the life insurance industry overall should be manageable. Insurers will have different exposure profiles, depending on the age of their insured population and its use of third-party reinsurance. Many direct writers had been increasing their retention limits or reinsuring with captive reinsurers. We would not be surprised to see companies with reduced use of third-party reinsurance report higher mortality. Reinsurers will experience more significant claims due to reinsurer concentration, depending on geographic footprints.

**Asset decline affects capital and liabilities**

The economic turmoil caused by COVID-19 has a double impact on life-annuity insurers. Declining asset values decrease capital as asset valuation reserves are drawn down. At the same time, reserves are strengthened to support in-the-money annuity guarantees, fixed annuity crediting rates, and decreased surrenders. The combined impact will lead to lower capital. This impact plays out differently based on an insurer’s size, product focus, and investment strategy.

**Impact on annuities**

When markets fall, annuity guaranteed benefits move “into the money” and insurers must increase reserves for those benefits. In addition, those annuity contracts become more valuable to the contract holder. The challenge with lower-than-expected surrenders is that, while the contracts continue to generate fees, the insurer must also maintain capital and reserves to support those contracts.

**Reserve increases**

Looking at 2020, we would expect to see a strong increase in reserves among annuity players, driven by equity market declines and portfolio yields. We saw this in 2008, when insurers strengthened individual annuity reserves by $72 billion, compared to just $3 billion the year before. As a reminder, the S&P500 declined 38.5% in 2008, after a 3.5% increase in 2007.

Interest rates, and the insurer portfolio returns they help generate, also lead to higher reserve additions. When those returns are lower than expected, especially for a long period, fixed and indexed annuity reserves will need to be strengthened. Some annuity insurers with large fixed annuity blocks may need to increase their reserve contributions in 2020.

**Hedging costs**

In addition to the need to strengthen reserves, variable annuity insurers have instituted robust hedging programs to manage that risk. Those costs have been rising over time during the persistent low interest rate environment. Now, with the greatly increased equity market volatility, those hedging costs have skyrocketed. Policyholder behavior can also increase costs. In crisis situations, policyholders have been known to rush into “safer” asset allocations that then lead to missing out on market recoveries, adding to both guarantee and hedging costs. Given the equity market’s turmoil and the pressure to keep interest rates low, 2020 is shaping up to be painful again for annuity insurers.

**Capital impact for the life industry**

In 2008, total adjusted capital (surplus plus AVR) fell 9%, while their ACLC (authorized control-level capital) fell just 4%. Estimated RBC for the life-annuity industry went from 403% in 2007 to 381% in 2008.

The hit to capital could have been larger, had asset valuation reserves not been approximately 12% of total adjusted capital at the end of 2007. Those reserves were in place to absorb the hit to asset values, falling to just 6% of total adjusted capital at the end of 2008.

At the end of 2019, AVR had returned to 12% of total adjusted capital. Those reserves will once again be called into play to soften the impact. What is troubling, however, is that overall RBC for the life-annuity industry has been falling since 2014.

The good news about these impacts is that, as market cond-

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tions improve, the extra reserves will be released, helping to rebuild capital levels. With 2020’s turmoil, life-annuity insurers are likely to end the year with lower RBC ratios. As the economy stabilizes and improves, those ratios should recover.

Increased yield pressure leading to increased investment risk

While life insurers do not have much exposure in their General Account to equity markets, other key asset classes are also being affected due to the overall economic impacts of pandemic. Credit spreads and credit risk shifts in the bond portfolio overall will likely challenge insurers, as life insurers increased their allocations to BBB-rated bonds from 27.2% of their bond portfolios 2010 to 34.4% in 2018.

In a wide recession, many corporate credits are at risk of downgrades, as well as defaults. Downgrades would affect RBC ratios for insurers, in turn increasing capital charges. The current NAIC C1 risk charge for NAIC Class 2 is 1.3% charge for BBB-rated bonds and 4.6% for NAIC Class 3 (BB-rated) bonds. This is a 3.5x increase in the C1 risk charge, and C1 is a very large component of life RBC. For BCAR, at a 99 Value at Risk (VaR), a BBB- ten-year corporate bond has a baseline charge of 7.01%, and a BB+ is 11.99% for the same VaR and maturity.

With so many BBB-rated bonds, and a large risk charge increase if they drop one notch to BB, a small number of downgrades could lead to a large increase in capital charges.

Real estate is also a large exposure for life insurers, accounting for 18% of total investable assets. This exposure consists of commercial mortgages, mortgage-backed securities, and direct real estate holdings. This sector, encompassing office buildings, hotels, malls, restaurants, and other establishments, whose health is dependent on people actually occupying buildings, will be greatly affected by quarantine and lockdown.

Revenue effects

Life-annuity insurers will find 2020 is a year when revenue growth will be low, at best, and may decrease. Key factors in that outcome will be annuity and life insurance sales and Separate Account fees.

Annuity and pension risk transfer revenues

Equity market volatility and losses are never positives for VA sales. We would not be surprised to see VA sales decrease in 2020 and perhaps into 2021, depending on the severity and length of an equity market downturn. Efforts to stimulate the economy by lowering interest rates place pressure on fixed annuity sales as insurers lower crediting rates to match lower returns on their portfolios.

Pension risk transfers had been a growth area for several insurers, but recent market movements could jeopardize that growth. At the end of February, according to the Milliman 100 Pension Funding Index (an index of the 100 largest corporate pension plans), the funded status deficit was $347 billion, driven by the decrease in the benchmark corporate bond interest rates and by the precipitous decline in investment returns during February. Worsening funding ratios make it less likely that pension plans will purchase annuities. At the same time, lower crediting rates on those annuities increase the cost of the underlying product. Taken together, the life-annuity line may well be in for a decrease in individual and group annuity premiums in 2020.

Less impact on life revenue

Unlike annuity lines, life insurance revenues are driven far more by renewal premiums than sales. For individual life insurance, about 74% of direct premium are renewals. However, even should consumers be interested in buying life insurance
As layoffs and unemployment increase, a decrease in group benefit plan enrollments is likely. Meanwhile, individual comprehensive and Medicaid may see increases in enrollment. At the time of publication, the World Bank’s pandemic bond has still not triggered.

**Lower Separate Account fees**
With the equity markets declining, the impact on life-annuity insurers will be directly felt in the amount of asset management fees earned on Separate Accounts. While Separate Account fees are likely to decrease in dollar terms if equity markets remain depressed. This decrease would be driven by the combination of lower Separate Account balances as well as negative Separate Account net transfers. During the previous economic crisis, individual annuity Separate Account fees decreased 13% from $10.6 billion in 2007 to $9.6 billion in 2009.

**Health sector**

**Key takeaways**
- Health insurers are covering the cost of testing without cost to insureds as well as waiving deductibles.
- Insurers with significant Medicare Advantage blocks of business could be hit harder because the Medicare population is older.
- As layoffs and unemployment increase, a decrease in group benefit plan enrollments is likely. Meanwhile, individual comprehensive and Medicaid may see increases in enrollment.
- At the time of publication, the World Bank’s pandemic bond has still not triggered.

**Claims and expense effects**
COVID-19 will create medical costs for health insurers as the number of cases and hospitalizations in the U.S. increase. Currently, there are regions across the U.S. that are experiencing high rates of hospitalization. While initially predicted to have costs similar to “an extended flu season” earlier in the month, as the infection rates continue, total costs for insurers could be significantly higher. Most health insurers are covering the cost of testing without any out-of-pocket cost to the insured, and some are waiving out-of-pocket costs for COVID-19 related hospitalizations and telehealth visits. There will also be additional doctor and hospital costs associated with the more severe cases. So far, mild cases are being treated with over-the-counter medications, so extra medical costs for mild cases will likely consist of office or telehealth visits plus the cost of testing.

S&P Global Ratings performed hypothetical stress tests on health insurers to measure the MLR (medical loss ratio) under a moderate or severe scenario. With average industry MLRs at 85%, under the moderate scenario, MLRs increase to 89%; under the severe scenario, they increase to 97%. While insurers may not necessarily be on the hook for all of these losses as some businesses self-insure, there is a risk on the profitability of the companies. Depending on whether companies are in heavier-hit areas, they may see their MLRs increase well above this 97%. Aetna has found a way to try to limit this MLR risk. Through an insurance-linked security named Vitality Re, the company has issued eleven transactions that use the medical benefit ratio as a trigger. Should the ratio rise above a predefined attachment point for either tranche, the notes trigger.

In the most current notes, the Class A tranche has a medical benefit claims ratio limit of 102%, and the Class B tranche is set at 96%.

Insurers with significant Medicare Advantage blocks of business could be hit harder because the Medicare population is, by definition, older. The MLR for Medicare Advantage was 85.2% in 2018 and resulted in an underwriting margin of 2.3%. Under the S&P Global Ratings moderate scenario, if the MLR increased to 89%, the resulting underwriting margin would drop to -1.5%. Under the severe scenario with an MLR of 97%, Medicare Advantage would have a -8.7% underwriting margin, essentially wiping out almost four years of profits.

The impact on Medicaid is likely to be much less. The managed care version of Medicaid typically covers single parents and children, a demographic that is more likely to have a milder case of COVID-19. Medicaid programs also cover the “medically indigent” population with more severe health conditions, but that population is covered under fee-for-service Medicaid, which is not an insurance product.

Health care providers could also be affected by the additional costs, depending on their contractual arrangements with insurers. Some health care providers are on-risk for some claim costs, giving them a financial incentive to manage health care efficiently by aligning the incentives of the health insurer and provider. Health care providers, especially the larger hospital/physician chains, may end up bearing some of the additional COVID-19 costs through the cost-sharing mechanisms of their contracts with health insurers.

Finally, larger employers will have higher employee benefit costs because most self-insure their employee plans. This additional cost will flow directly to their bottom line, adding to reduced revenue from forced closures and lost productivity.

**Revenue effects**
With industries shutting down for quarantine and the potential for layoffs, a decrease in group benefit plan enrollments is likely. Sectors expected to be hardest hit include travel and tourism, restaurant and entertainment, and transportation. In the Great Recession, as unemployment increased, it led to a decrease in group comprehensive enrollment through 2009 and a decrease in net premium growth. While enrollment levels may decrease for group comprehensive, individual comprehensive and Medicaid may see increases in enrollment. The
One thing is clear, there will be many changes in the insurance industry. While group comprehensive enrollment and premiums are expected to decrease, those companies offering products on the exchanges and Medicaid contracts could see increases in enrollment and premiums, although the increase in enrollment may be delayed a few months as people shop for coverage. For Medicaid, it may take several months for newly unemployed workers to become eligible for Medicaid, also delaying any increase in eligibility.

Pandemic bond
In July 2017, the World Bank launched the PEF (Pandemic Emergency Financing Facility) after the Ebola outbreak in Africa. The PEF is designed to help some of the world’s poorest countries finance the fight against pandemics. The PEF covers multiple disease outbreaks, including pandemic influenza, coronaviruses such as SARS, filoviruses including Ebola, and other zoonotic diseases.

At the time of publication, the bond has still not fully triggered, despite having met all the conditions. Factors such as the fatality rates and country reach have been met in multiple countries. Additionally, the twelve-week period from the start of the event was reached on March 23, 84 days after unknown pneumonia cases were reported to the WHO China offices. The twelve-week period from the start of the event was reached on March 23, 84 days after unknown pneumonia cases were reported to the WHO China offices. The bond could provide approximately $196 million in coverage and are due to mature in July 2020.

Conclusion
As the virus sweeps the globe, individuals and organizations find themselves with a heightened sensitivity to risk, providing an opportunity for the insurance industry to demonstrate its value. Many insurers, such as Allstate, have already stepped up, allowing customers to miss payments with no repercussions on their policy status. Health insurers quickly announced that the cost of testing for the virus would be covered without deductible or copay, demonstrating that insurers can be part of the solution.

As our economy plunges into a recession, note that the reaction and damage to that economy might be worse than the impact of the virus itself. The small business segment, which represents $100 billion of property-casualty premium, could be devastated by the pandemic and the response. The recovery could take much longer than the time for disease containment—and there will be some sectors of the economy that take much longer to rebound than others.

However, with every momentous event in risk management and insurance, innovation and new insurable risks sprout on the other side. Just as cyber cover was unknown and seemed too expensive for the typical insured just a decade ago, pandemic insurance could be the next new product, protecting the market from financial risk associated with a pathogen outbreak. Talks have already begun in Congress about forming a TRIA-like backstop—PRIA, a risk pooling facility to address future pandemics.

One thing is clear, there will be many changes in the insurance landscape, including an increase in telehealth as a much more widely accepted way of delivering health care and changes to how we work.

While the industry is well suited to weather this event, rating agency stress testing will result in both ratings downgrades and requirements for additional capital for certain insurers, both life and property-casualty. Looking to the past and extraordinary events such as the Chicago fire of 1871, the San Francisco Earthquake of 1906, or, more recently, the terrorism events on September 11, the industry will survive this event, but if the government has to assume the roles that insurers have typically played, that could be a severe reputational hit.

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