

# Pandemic Parametric

Protection gap loss events invariably lead to a discussion about parametric re/insurance covers. It's intuitive that the entire risk and capital supply chain would turn to alternative forms of protection for future consideration when today's unhedged loss goes right to their balance sheet. Usually, though, the effort fizzles quickly. In the re/insurance industry – from the risk manager to the retrocession seller – memories tend to be short. And you can usually count on the next challenging loss to come faster than you expected – as the major wind losses in the United States and Japan demonstrated rather convincingly in 2017 and 2018.

COVID-19 may be the most recent economic crisis to instigate an industrywide discussion about parametric insurance protection, but it's certainly not the first. Not even the first in recent memory. Cyber parametrics had a moment after the NotPetya losses in 2017, and a couple of proof of concept transactions were completed in the first quarter of 2020. The microinsurance market has taken a look at parametric alternatives, as well. And as for pandemic, there was some parametric cover in place prior to the outbreak of COVID-19, and the topic has once again come up across the industry.

We're still in the early days of the COVID-19 pandemic, and already, the economic impact has been profound. While many in the global re/insurance industry are thinking about how they will buy and sell protection for pandemic in the future, there's a subset trying to figure out how they can transfer risk related to the pandemic while it's still going on. It's time to take a hard look at how parametric risk-transfer industry loss warranties (ILWs) could be structured more effectively to help original insureds, insurers, and reinsurers more effectively manage their risk and capital.

## Pandemic and the Protection Gap

Whenever there's a major catastrophe, news coverage and industry reports almost immediately make the distinction between insured losses and economic losses. The former, of course, are borne by the insurance industry. The latter, on the other hand, fall directly to society as a whole. Such losses can appear on a business's balance sheet or in a family's bank accounts. The difference between the economic loss and the insured loss from an event is often called the "protection gap." Specifically, there's a gap between the protection provided by insurance and the full economic scope of the event.

The protection gap has always represented a tantalizing opportunity to the global re/insurance industry. It represents the economic exposure that could be insured but hasn't yet. Simply put, the protection gap shows large, new opportunities for profitable growth.

So, why hasn't the industry rushed headlong into every protection gap it can find? Well, there are good reasons why some risks aren't covered. Nature may abhor a vacuum, but businesses abhor losses, with insurers no different from any other business. Often, protection gap risks are either difficult to insure or difficult to understand. Or both.

Risks that are difficult to insure may come too frequently, and they may consistently result in such large events that insurers couldn't realistically cover them. If you could count on an event occurring every year – using some back-of-the-napkin math – you'd have to collect a dollar in premium for every dollar in protection you offer (assuming you don't have any overhead...and distribution isn't cheap!). Nobody would buy that policy, because it doesn't actually provide any protection. Flood, in some parts of the United States, is seen as virtually impossible to insure because of the consistent frequency and severity, resulting in a significant protection gap.

It's the risks that are difficult to understand that offer the insurance industry an opportunity for new market entry. There may be (seemingly) insufficient data to understand the risk because of the geographical area (such as microinsurance in Africa), or events could be so infrequent as to provide few historical examples (like pandemic). Sometimes, a risk may be seen as difficult to insure because of the frequency and severity issues mentioned above, when it's really just insufficiently understood – or because conventional measures for analyzing risk don't fit.

Pandemic is often thought to be a bit of both types of risk. It's difficult to understand. The reference event typically used for COVID-19 is the 1918 flu – literally a century ago. There have been some smaller outbreaks since then, but they aren't as relatable to the current pandemic. At this time last year, a discussion of pandemic really had only the 1918 event available. Even the early lessons acquired over the first quarter of 2020 weren't available yet.

Pandemic is also difficult to insure. It may not happen often, but the widespread belief a year ago was that a pandemic would cause such large economic loss that the capital requirements to insure it would be onerous, and that in the rare event of a claim, the cost to the insurance industry would be staggering. We're witnessing the economic consequences of pandemic already, including record numbers of unemployment claims in the United States, vessels stuck at sea for much longer than expected, further volatility in oil prices (beyond what was there already), and profoundly reduced consumer spending. Even aside from the ongoing debate about whether certain policies may potentially provide cover related to the pandemic, the amount of loss staying outside the global insurance system is likely to be profound.

Efforts to cover pandemic are made more difficult by factors beyond size. Paucity of historical data has long frustrated efforts to better understand pandemic risk. Modeling has certainly become more sophisticated over time, but there are limits to the advances that are possible when the last major event came at a hundred years ago. Without sufficient frequency, there just may not be enough data points to support in-depth analysis. As a result, even the best thinking is packed with a bit of extra uncertainty. Scaling a market for pandemic risk transfer would thus mean increasing amounts of capital at risk based on thin insight. In the extreme, one big loss could take centuries for an insurer to recoup, if they even manage to stay afloat after the event.

The lack of traditional thinking and tools contribute significantly to the protection gap, but that doesn't put such risks permanently out of reach of the insurance industry. It just means that we need to look at the problem – and the opportunity – differently.

## How Alternative Forms of Risk Transfer Fit Pandemic

ILWs are fairly common in the reinsurance market as a form of retrocessional protection (reinsurance for reinsurers, if you will). And depending on market conditions, insurers may use ILWs to supplement their traditional reinsurance purchases. While useful, ILWs are certainly a niche solution. When market conditions lend themselves to ILW transactions, there could be US\$7-10 billion in limit out in the market (excluding catastrophe bonds that would fit the definition). Further, ILWs generally don't make their way to original insureds. However, a parametric ILW could help insureds address the pandemic protection gap.

First, let's get some definitions out of the way.

**Industry loss warranty (ILW):** An ILW can generally be defined as a form of risk transfer in which an independent third party's measurement is used as the trigger for the protection of payment. The protection buyer's actual loss experience generally does not factor into whether there is a qualifying loss or how much is paid. In the traditional ILW market, a measure of industrywide insured losses is usually used as the trigger, with industrywide losses reported by PCS making up the overwhelming majority of that market. Other types of data can be used in ILW triggers as well, which takes us to...

**Parametrics:** Parametric cover uses a measure of an event’s magnitude to determine whether or not the instrument should be triggered. Like an ILW, there’s a third-party input that’s used, but in this case, it’s related directly to the risk being covered. For hurricane, windspeed and central barometric pressure have been used in parametric covers, along with water depth in flood. For pandemic, there are several measures that could work, including number of cases or fatalities reported.

For an ILW, the source of data is often called the “reporting agent.” The wordings would specify the reporting agent(s) used for the transaction.

Many like ILWs because they are easy to understand, model, and execute. Additionally, for companies that prefer to protect proprietary information, ILWs don’t require any company-specific data disclosure. After all, the triggers are independent of the company being covered. ILWs can be effective for reinsurance and retrocession purchasing because they are covering buyers with broad exposure to the market. Generally, there’s an expectation that a loss to the company would be roughly similar to that of the industry as a whole. It’s never a perfect fit, though. And the areas where that fit isn’t perfect are called “basis risk.”

Basis risk refers to the fact that a protection buyer may not collect (enough) when a loss occurs – or, that they may collect (or over-collect) when there’s a triggering event to the ILW but no corresponding loss to the protection buyer. The further you go down the risk and capital supply chain, the more basis risk seems to become a concern, although the extent to which that is true for parametrics (as opposed to industry loss) is debatable.

So, why haven’t parametric ILWs gained more traction, particularly among original insureds? Basis risk isn’t the only problem. In fact, it probably isn’t even the main one. Historically, risk managers have been able to source sufficient capacity for the risks they need to cover. Sure, there’s been the occasional challenge (like cyber), but in general, the insurance market has served them very well. Buying isn’t infinite because of corporate budgets for insurance purchasing, and some risks either aren’t contemplated because they are so remote or because there’s simply no realistic insurance product for them (at a realistic price). There hasn’t been enough urgency to secure pandemic protection to force the sort of thinking that would push a traditional buyer to the parametric space.

There’s a tendency across the insurance industry to learn from the past and apply it to the future...although some have suggested the dynamic is more like buying a helmet after you crash. From whatever perspective you choose to perceive the lesson, there’s renewed interest worldwide in parametric cover for pandemic. And while parametric ILWs can be easy to understand, there are a few important considerations that can make your risk-transfer effort more reliable.

## Formal and Informal Reporting Agents

In the traditional ILW market – frequented by insurers and reinsurers seeking catastrophe protection – it's generally easy to find a reporting agent. Roughly two thirds of the capital in the ILW market covers risks in the United States and Canada, where PCS is the reporting agent. It's a role we've filled for decades. Other regions have dedicated professional reporting agents as well, with PCS covering Japan and Asia-Pacific, Mexico and Latin America, and Turkey. There are subsets of the ILW market for specialty risks – such as cyber, marine, and terror – and they are covered by PCS as well. Other professional reporting agents exist for smaller regions and lines worldwide.

Where there isn't a formal reporting agent but still a need for ILW risk transfer (be it industry loss or parametric), the market often turns to informal reporting agents. These can be sources of information available to the public that are then used to trigger a transaction. In most cases, the informal reporting agent isn't formally engaged – and may not even know it's being used in an ILW.

The benefits of using a formal reporting agent are fairly straightforward. You'll wind up with an organization that is dedicated to providing information to the market following a specific methodology. You'll be able to talk to the experienced team responsible for the service, conduct any due diligence, and get a predictable schedule for the production of data.

Informal reporting agents can be more difficult. They aren't commercially obligated to publish the information being consumed by the ILW transaction, so there's the risk that an event that could qualify might occur, but that no data is produced. Or, the data may not be reflective of an evolving situation on the ground. Quite simply, there are issues with timeliness, accuracy, and reliability that the parties to the trade simply have to accept – or fight out in post-event dispute resolution.

Often, informal reporting agents are sufficient – as long as there's no triggering event! That said, there are plenty of examples of informal reporting agent arrangements that didn't work out. The most recent, of course, involves industry loss-triggered ILWs exposed to Typhoons Jebi and Trami (Japan) in 2018. PCS understands that more than US\$100 million in protection was at risk of being triggered as a result of the two storms – with ILWs using informal reporting agents. We know of a number of ILWs that failed to trigger because of one informal reporting agent's US\$9 billion estimate for Typhoon Jebi. The market has been kept in limbo, with some parties insisting that an update could be published and others saying that such a move is virtually unprecedented. Without a formal methodology and commercial relationship with the reporting agent, no further certainty is guaranteed.

As an emerging risk, pandemic lacks much of the formal infrastructure available for other perils, and the reporting situation is no different. For the rare pandemic parametric ILW completed in the past, only informal reporting agents have been available. Parties to a risk-transfer transaction like this would generally agree to (and codify) an authoritative organization with publicly available data, such as the World Health Organization (WHO) or Centers for Disease Control and Prevention (CDC). This approach does provide a quick fix – often for urgently needed transactions where no alternatives are available – but it does come with some inherent risks.

## Deep Dive: Reporting Inconsistencies from COVID-19

The most important problem with using informal reporting agents is that they are not accountable for anything. They aren't formally engaged, they may not know they're part of the transaction, and they may not have the resources or expertise to invest in reporting during the challenging times that a parametric instrument is intended to address. One could say that there's a risk that an informal reporting agent could take its eye off the ball when times are tough, but the reality is that there's no guarantee they'd have their eye on the ball anyway. We saw this problem manifest in WHO reporting in the earliest stages of the COVID-19 pandemic, and we believe that the problem has the potential to recur. Let's take a closer look at WHO reporting.

The WHO reports COVID-19 through two parts of its website: [daily situation reports](#) and an [online dashboard](#). It became evident in March that the two parts of the website were not being updated in a coordinated manner. From March 17, 2020, through the end of the month, the situation reports and portal were out of sync.

## WHO Reported COVID-19 Cases in the United States

Date	Situation Report Cases	Portal Cases	Delta (cases & %s)
March 17, 2020	3,503	3,536	33 (0.94%)
March 18, 2020	4,356	7,087	2,731 (62.70%)
March 19, 2020	7,087	7,087	–
March 20, 2020	10,442	15,219	4,777 (45.75%)
March 21, 2020	15,219	15,219	–
March 22, 2020	15,219	15,219	–
March 23, 2020	31,573	31,573	–
March 24, 2020	42,164	42,164	–
March 25, 2020	51,914	51,914	–
March 26, 2020	63,570	63,570	–
March 27, 2020	68,334	68,334	–
March 28, 2020	85,228	85,228	–
March 29, 2020	103,321	103,321	–
March 30, 2020	122,653	122,653	–
March 31, 2020	140,640	140,640	–

Source: WHO

The fact that this happened isn't all that surprising. The WHO is a massive organization, with more than 7,000 employees operating in 150 countries<sup>1</sup>. Further, it's main purpose during a pandemic is much broader than publishing statistics on its website. With a global crisis unfolding, the organization likely focused on its core priorities, which probably resulted in some issues with reporting consistency. Within the context of the WHO's mission, this frankly isn't a big deal. It does signal a problem, though, for anyone trading parametric ILWs with the WHO as an informal reporting agent. Conflicting data could cause problems in triggering. While there would likely be some form of dispute resolution to follow, it would be tough to engage the WHO in that process to ask them which number is the "right" one. I'm not sure anyone not involved in that transaction would participate in such a discussion easily!

So, if you were to use the WHO as an informal reporting agent for a parametric ILW, you'd be well-served to specify which part of the website to use. Although, do keep in mind that similar problems could manifest slightly differently in the future, so this spot solution is hardly a universal cure.

The next challenge to contemplate with informal reporting agents is conflict among authoritative data sources – another issue we saw in March and April COVID-19 case reporting. Even though a parametric ILW transaction may have a dedicated and specified reporting agent, there is still room for the outcome to be contested, as we've seen in the traditional catastrophe ILW market. If there's a difference in reported parameters between authoritative data sources, one side of the trade could suggest that the specified reporting agent is so wrong that trigger failure has occurred – and that a backup reporting agent should be appointed. The backup – unsurprisingly – usually does suit the agenda of the party suggesting it.

1. <https://www.who.int/about>

## Various Reported COVID-19 Cases in the United States

Date	WHO	CDC	Worldometers	John Hopkins Univ.
March 17, 2020	3,536	5,200	6,411	6,421
March 18, 2020	7,087	7,038	8,335	7,769
March 19, 2020	7,087	10,442	10,810	10,775
March 20, 2020	15,219	15,219	16,621	16,018
March 21, 2020	15,219	N/A	24,142	23,480
March 22, 2020	15,219	N/A	38,167	31,057
March 23, 2020	31,573	33,404	41,433	41,511
March 24, 2020	42,164	44,183	50,860	49,768
March 25, 2020	51,914	54,453	61,808	61,167
March 26, 2020	63,570	68,440	79,082	76,514
March 27, 2020	68,334	85,356	96,968	94,238
March 28, 2020	85,228	N/A	116,448	115,547
March 29, 2020	103,321	122,653	135,627	132,637
March 30, 2020	122,653	140,904	156,352	153,246
March 31, 2020	140,640	163,539	180,789	177,452

Sources: WHO, CDC, Worldometers, John Hopkins University<sup>2</sup>

While internal discrepancies at the WHO can be problematic, the wide spreads among authoritative reporting agencies show a deeper problem. If, as we saw in the aftermath of Typhoon Jebi, a protection seller can try to use gross underreporting as an argument for trigger failure, then the differences in reporting between the WHO and CDC are troubling. Worldometers, an online aggregator of data from state and local health agencies, provides links to the underlying local reporting agencies that could then be aggregated to show a significant delta relative to the CDC (same for Johns Hopkins University). This could have significant implications for parametric ILW structuring.

2. World Health Organization - <https://covid19.who.int/>  
 Center for Disease Control - <https://www.cdc.gov/coronavirus/2019-nCoV/index.html>  
 Worldometers - <https://www.worldometers.info/coronavirus/>  
 John Hopkins University - <https://coronavirus.jhu.edu/map.html>



## Various Reported COVID-19 Cases in the United Kingdom

Date	WHO	Public Health England	Delta WHO vs. PHE (cases & %s)
March 19, 2020	3,277	4,018	741 (22.61%)
March 20, 2020	3,983	5,018	1,035 (25.99%)
March 21, 2020	5,018	5,683	665 (13.25%)
March 22, 2020	5,018	6,650	1,632 (32.52%)
March 23, 2020	5,687	8,077	2,390 (42.03%)
March 24, 2020	6,654	9,529	2,875 (43.21%)
March 25, 2020	8,081	11,658	3,577 (44.26%)
March 26, 2020	9,533	14,543	5,010 (52.55%)
March 27, 2020	11,662	17,089	5,427 (46.54%)
March 28, 2020	14,547	19,522	4,975 (34.20%)
March 29, 2020	17,093	22,141	5,048 (29.53%)
March 30, 2020	19,526	25,150	5,624 (28.80%)
March 31, 2020	22,145	29,474	7,329 (33.10%)

Sources: WHO, Public Health England<sup>3</sup>

Again, the results from different authoritative data sources vary widely, with the WHO low enough relative to Public Health England that one could imagine a trigger failure argument being made. Also, reports could come in, several months into the tracking of data that, of cases that have been double counted and thus necessitating adjustments be made. This is the case right now with Public Health of England, which has admitted that due to a double method of diagnostic tests — saliva and nasal — more than 20% of the cases have been double counted, with that proportion being much higher earlier on in the crisis. Additionally, the occasional variation between the WHO and ECDC (not shown above) provides further uncertainty, which generally makes it more difficult for the parties to arrive confidently at a final result.

3. Public Health England - <https://coronavirus.data.gov.uk/>

## Various Reported COVID-19 Cases in France

Date	WHO	Public Health France	Delta WHO vs. SpF (cases & %s)
March 17, 2020	6,573	7,730	1,157 (17.60%)
March 18, 2020	7,652	9,134	1,482 (19.37%)
March 19, 2020	9,043	10,995	1,952 (21.59%)
March 20, 2020	12,475	12,612	137 (1.10%)
March 21, 2020	12,475	14,459	1,984 (15.90%)
March 22, 2020	12,475	16,689	4,214 (33.78%)
March 23, 2020	15,821	19,856	4,035 (25.50%)
March 24, 2020	19,615	22,302	2,687 (13.70%)
March 25, 2020	22,025	25,233	3,208 (14.57%)
March 26, 2020	24,920	29,155	4,235 (16.99%)
March 27, 2020	28,786	32,964	4,178 (14.51%)
March 28, 2020	32,542	37,575	5,033 (15.47%)
March 29, 2020	37,145	40,174	3,029 (8.15%)
March 30, 2020	39,642	44,550	4,908 (12.38%)
March 31, 2020	43,977	52,128	8,151 (18.53%)

Sources: WHO, Santé publique France<sup>4</sup>

The results from France do show a bit more stability relative to the WHO than in the United Kingdom and United States, and the same could be said for the results from South Korea, as well. In some countries, reporting and communications are sufficiently disciplined.

So, how can such wide divergences occur? Even if the authoritative data sources eventually catch up with each other, the return to consistency could be too late, depending on how a particular parametric ILW is structured. To understand how such divergences occur is to take the first step toward structuring a better parametric ILW. There are a number of reasons that likely contribute to such disparities, some of them similar to the reasons for internal inconsistency in WHO reporting.

4. Santé publique France - <https://www.santepubliquefrance.fr/maladies-et-traumatismes/maladies-et-infections-respiratoires/infection-a-coronavirus/articles/infection-au-nouveau-coronavirus-sars-cov-2-covid-19-france-et-monde>

**1. Operational strain due to crisis conditions:** Informal reporting agencies like the WHO, CDC, PHE, and SpF do a lot more than tally and publish case statistics during pandemics. Particularly early in a crisis, they have to balance a number of competing priorities, all of which are often quite literally a matter of life and death. As a result, reporting and publishing discipline may not always be top of mind.

**2. Lack of focus on reporting, as it's not the reporting agent's core mission:** The most current or most accurate numbers may not make it to the website every day. And frankly, per their missions, it's not all that important that the absolute best numbers make it to the web every day. They can always update the next day. However, the implications for transactions referencing one of these organizations could be significant. Sometimes, the numbers can be changed retrospectively, even weeks later.

**3. Political friction in reporting data between agencies:** There are a number of reasons why politics would impact how data is reported to (and accepted by) different agencies up through the WHO. They can range from measures of approval to matters of national security. Whatever the reason, the upshot can be that some data might not make it all the way to the WHO in a timely manner. Getting closer to the source often tends to have the potential for the most accurate reporting.

**4. Lack of reliable data from the public:** In part, this could be the result of insufficient testing, backlogs for testing and treatment, and general strain on a country's public health system. Some people may not qualify to be tested when there's a shortage of materials. Others may decide that they don't need to be tested (figuring they are sick anyway). And an overrun health system just may not get the numbers right while focusing on keeping people alive.

**5. Difference in publishing schedules:** It sounds simple, but publishing timeframes can lead to gaps in reporting. If one agency publishes in the morning and the underlying agency (which provides data) reports in the afternoon, the result could be a lag of almost 24 hours. And it becomes worse if one publishes over the weekend and the other doesn't.

## Managing Reporting Agent Risk: Lessons from COVID-19

It's not all gloom and doom. Even though there are challenges associated with data access and quality during a pandemic, it's still possible to develop reasonably robust and reliable parametric triggers for ILW risk transfer. You'll just need to invest in a bit more discipline. Developing a trigger using informal reporting agents can be tricky, but it's not impossible. The most important step is to understand what data is actually reported by different sources, how they operate, and what difficulties could arise through the course of normal reporting. In addition to addressing the five points above in trigger wordings, you may want to contemplate some of the following ideas.

**1. Conduct a thorough review of the universe of potential data sources:** While it's tempting to stick to large, seemingly reliable authoritative data sources, they may not be the best. Dig around. Try to find more granular, sub-national reporting agents (like state health agencies in the United States). Then, try to reconstruct national or global numbers based on what you find. A package of local estimates might be more effective than a single source of the truth for pandemic parametric ILWs.

**2. Specify the data source clearly:** This sounds simple enough, right? Think back to the internal disparities in WHO reports, though. Rather than just specify "WHO," it may make more sense to specify "WHO Daily Sitreps" and maybe even specify the title or section of the WHO website where those reports can be found. Be careful about getting too specific, though. If the site is redesigned, you could be left with more questions!

**3. Understand the differences among data sources:** Review historical results to try to get a sense of whether one source is consistently lower than another (or higher) and whether or not that delta is reasonably consistent. It may make sense to model "actual" results that could include cases not reported by any of the major data sources, but which could have an impact on your book. Then, you can try to identify the best data source relative to your understanding of the risk.

**4. Plan for timing and schedules:** The lags created by different publications schedules among reporting agencies can be problematic enough. When you also consider weekends, holidays, and other non-working days, you could wind up with ambiguity as to which day's numbers make the most sense. From our review of results from COVID-19, we've seen that weekend reporting can be problematic – and sometimes Mondays may be light as well. Engineering an ILW to use data from the last Tuesday, Wednesday, Thursday, or Friday after the end date of the cover might be more effective than just using the last day of the coverage period.

**5. Extension periods:** Given the fact that a pandemic can leave local healthcare systems and their attendant agencies overworked and overrun, there appears to be a likelihood that data can be changed retrospectively. For example, reported cases for several days in April could be updated in May. Because of this, adding a period after the completion of the coverage period to account for any adjustments by the underlying data sources could provide more certainty and reduce the risk of disagreements later.

Because of some of the complexity, analysis, and legwork that could go into developing and managing a reliable, consistent, and independent reporting agent infrastructure for a pandemic parametric ILW, it could make more sense to engage an existing commercial reporting agency (like PCS) to sit between the transaction and the end data sources. The reporting agent's role would be to choose from the available data sources and build a confirmed case estimate that is deemed accurate and reliable – and which would involve the credibility of the reporting agent as a final arbiter of the estimated number of cases. PCS has done this in some cyber transactions and has received feedback from protection sellers about the value of having an independent and experienced reporting agent in parametric risk-transfer transactions.

## Challenges Associated with Accessing Capital

The development of a mechanism to facilitate effective risk-transfer doesn't mean that trading will soon follow. Infrastructure is important, but in the end, a transaction has to make sense for both parties. For protection buyers, that means affordability relative to expected loss. And that requires extra consideration for the fact that pandemic covers may not be accounted for in existing budgets, which themselves are under pressure because of global economic deterioration. Sellers, on the other hand, need to be comfortable that they're being compensated sufficiently for the risk they're assuming – an emerging risk where the most recent reference event occurred before the advent of television.

Some market players have suggested to PCS that the capital markets could be an appropriate source of capacity for pandemic parametrics. Broadly, that makes sense, as the capital markets offer vast amounts of capacity, dwarfing the reinsurance sector. However, the insurance linked securities (ILS) community is usually what folks mean when they suggest "capital markets," and the situation is a little more complex.

For emerging risks, protection buyers tend to believe that protection shouldn't be expensive (we saw this recently in cyber, for example), and that low rate on line (ROL) deals should be the norm. If the ROLs get too low, however, the ILS market can't really participate. There needs to be some margin above the fees collected by ILS managers, otherwise, their end investors are just getting risk without return. That's not exactly a sustainable model!

Even if there's a nominal effort at a ROL that would exceed ILS fund manager fees, the greater tension between buyer and seller for an emerging risk involves setting the first marker. On a first trade, protection sellers know that they'll probably only see rates decline over time, with the occasional upswing after a major loss event. And even major loss events have shown less and less propensity to push rates higher in the decades following Hurricane Andrew. On the other hand, protection buyers see the first trade as an additional expense – one without precedent. New spending for protection is difficult to secure, especially in "protection gap" markets. That's part of the reason why protection gaps exist.

Where the capital markets and ILS community could help would be to provide capacity for reinsurance and retrocessional transactions for the insurers assuming original risk. In the early days, it may be easier for risk-bearers with rated paper to assume large risks and then use the capital markets to deliver strategic support for insurers taking their first steps into this relatively new line of business (and new mechanism for risk transfer). That's not to say there isn't room for direct ILS participation. It's just that rated paper should make it easier for a market to scale earlier.


Original insureds with significant concerns about pandemic risk could also possibly develop parametric index covers with captives to provide protection. In such circumstances, it would probably make sense to engage an independent commercial reporting agent rather than use informal sources, if for no other reason than to show discipline and independence in the transaction. Also, it would then likely be easier for the captive to transfer some of its risk to the reinsurance market on a pandemic parametric ILW basis using the same commercial reporting agent.

Creativity is key. You can't think about emerging risks and new markets while clinging to past operating approaches. COVID-19 has brought what is literally a once-in-a-century learning opportunity. The risk-transfer techniques our industry pioneers today could be the first step future generations use a hundred or more years from now. With that in mind, maybe a proof of concept in 2020 wouldn't be such a bad idea?

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