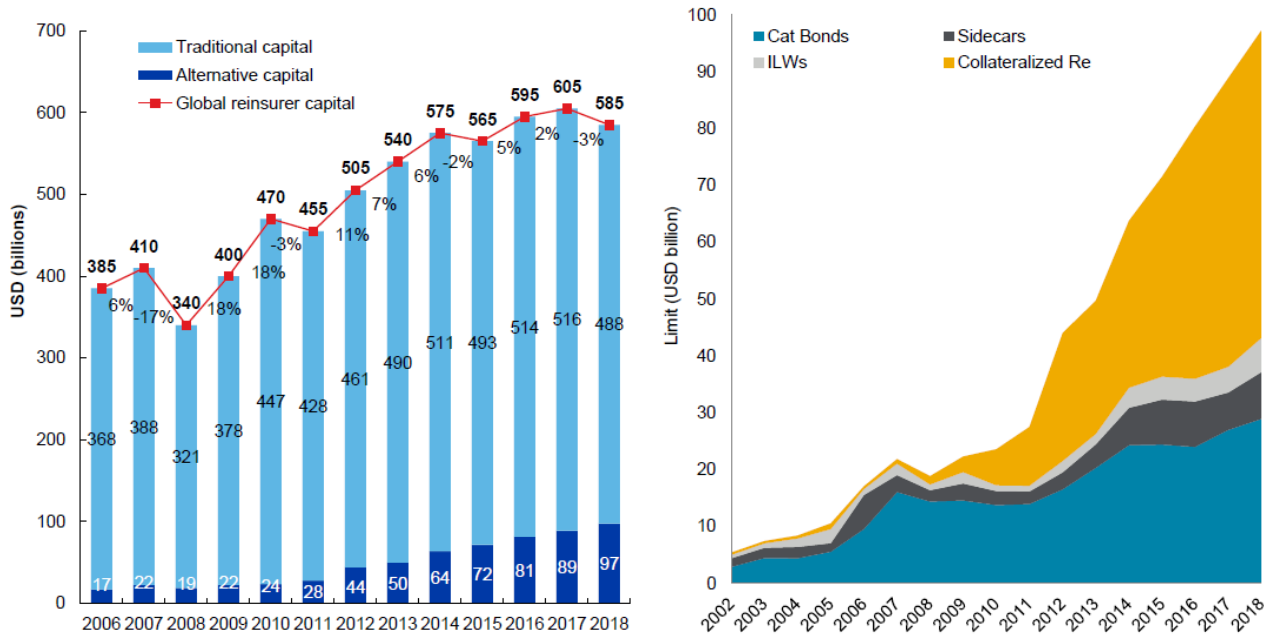


## Insurance-Linked Securities in Hong Kong – Unlocking the potential

### 1. Market Overview

ILS (insurance linked securities) are continuing to break records and are becoming the mainstream capital provider for property catastrophe (re)insurance. According to Aon Securities, the ILS market has grown from US\$ 17bn in 2006 to US\$ 97bn in 2018 representing 16% of the total reinsurance capital. The four most common form of ILS, Cat Bonds, Sidcars, ILW and Collateralized Re have all grown over the years.



Source: Aon Securities LLC

### 2. The rise of ILS

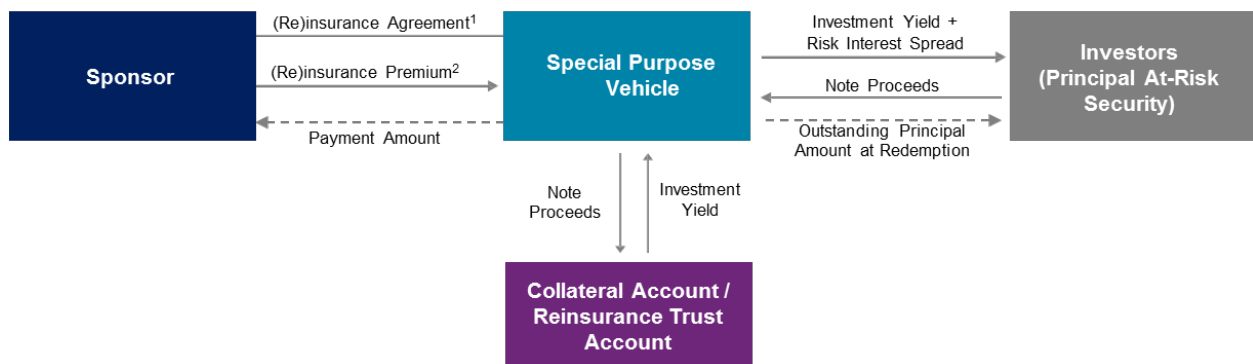
The direct transfer of reinsurance risk to the capital markets began in the wake of the devastating hurricane Andrew, one of the costliest hurricanes in US history. The storm struck the south-eastern US coastline in 1992, wreaking about US\$26.5bn worth of damage. In the aftermath of the storm, reinsurers were looking for additional capacity to take on catastrophe risk. Premiums being paid by insurers for catastrophe risk reinsurance were high, as naturally occurs after a large catastrophe. But the demand for reinsurance outstripped the capacity of reinsurers' balance sheets. This prompted them to look for new sources of underwriting capacity in the capital markets.

So why is it an attractive alternative asset class for investors? It is generally thought to have little to no correlation with the wider financial markets as their value is linked to non-financial risks. And why is it appealing to the buyer of (re)insurance? It is a fast growing source of diversified capital supply with minimal credit risk due to collateralization while offering significant amount of capacity and/or competitive pricing.

The insurance-linked securities market class continues to grow and diversify by region and peril, driven by institutional investors' attraction to the securities' attractive risk-adjusted returns and low correlation to the broader financial markets. Many market participants view 2017 and 2018, one of the worst global catastrophe years on record, as a key turning point in the perception of ILS as a bona fide asset class. During 2017, alternative capital grew US\$ 7bn to approximately US\$ 90bn (and approx. US\$ 94bn YTD including new issuances in 2018) despite these significant losses. The belief held by some that these record losses would cause a dislocation in the ILS market has not manifested, and ILS managers were able to replenish capacity quickly in time for 1/1 renewals. Furthermore, the ILS market played a meaningful role in driving the pricing environment at the 1/1 and especially the 6/1 renewal dates, with initial expectations of moderate rate increases generally mooted due to the quick and sizeable deployment of capacity from the alternative market. Locked up collateral from 2017 losses is increasingly being released and 2018 is primed to be a record year for new issuances, with third party capital to reach US\$ 100bn by 2018 year end.

From a cedant perspective, the use of third party capital continues to be a growing strategic initiative as reinsurers and, increasingly, insurers seek to match risk with the optimal end capital pools. The mutual benefits of forming these capital partnerships will drive the continued growth and diversification of the sector, a trend that is likely to continuously strive to be at the forefront of.

### 3. General ILS structure



<sup>1</sup> Risk Transfer Contract if utilizing a derivative structure

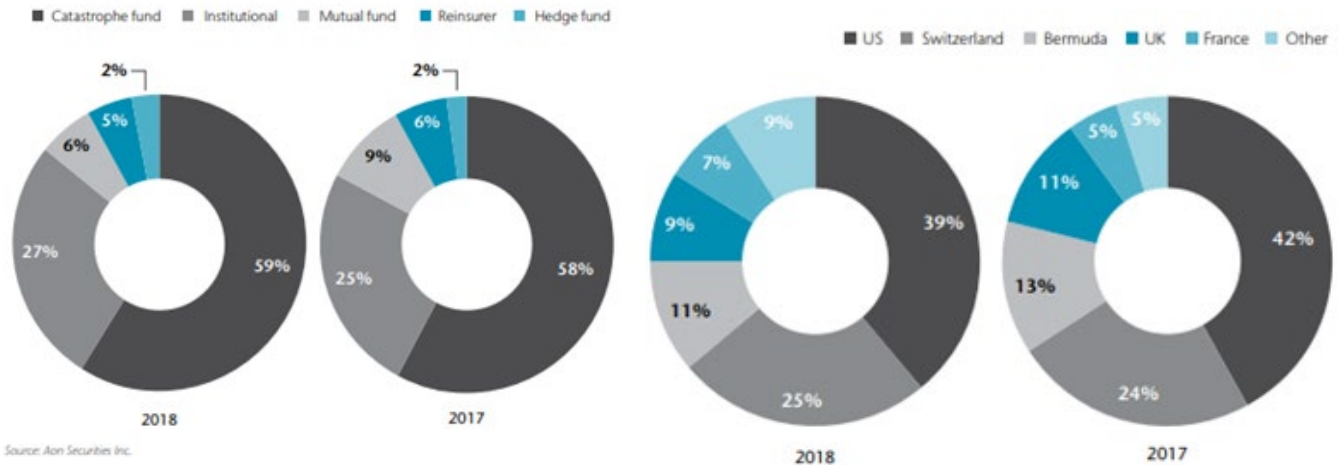
<sup>2</sup> Risk Transfer Premium if utilizing a derivative structure

The process:

- An off balance sheet Special Purpose Vehicle (“SPV”) is created to issue the Notes
- Proceeds from the issuance are placed into a collateral account or reinsurance trust account for the benefit of the Sponsor
- Proceeds in the collateral trust are invested to earn an investment yield less spread/expenses. (Money Market Fund, typically)
- The SPV enters into a reinsurance agreement/contract with the Sponsor

- The sponsor pays a premium to investors as consideration for the risk transfer capacity
- If the bond's recovery mechanism is triggered, the SPV foregoes the obligation to pay the interest or principal amount

#### 4. Capacity Provider



The capacity providers of ILS capital remains relatively consistent over the years. Institutions and dedicated catastrophe funds remains to be the latest providers of capacity. The two categories combined provides 85% of the total capacity. The mutual fund category as dedicated ILS mutual funds continue to grow while the Hedge fund and mutual fund participation remains consistent.

In terms of investor categories, the geographic mix has been stable relatively stable over the years. The US remains the primary source of capital with a 39% market share in 2018. The "other" category is primarily driven by Scandinavia and Japan

## 5. Domicile Review

Bermuda has been the number one domicile for ILS for many years. According to the Bermuda Monetary Authority’s Alternative Capital Report 2018, its share of US\$ 51.9 billion global total alternative capacity is approximately 58 percent, and Bermuda’s alternative capital vehicles reinsure cedants from 17 regions. One of the key reason of success of ILS in Bermuda was the introduction of the legislative framework to support the creation of “special purpose insurers” (SPI) in 2009 for ILS issuance. SPI enjoy an overall lighter and more efficient regulatory regime, with a minimum capital requirement, ability to waive the requirement for an audit and low licensing fees, to name a few. In addition to this legislative and infrastructure advantage, Bermuda is also renowned for its speed to market, investor familiarity and tax friendliness. However, as the ILS markets have grown in size and sophistication in recent years, many other domiciles are eyeing this market and its potential.

<b>Overview of Common Domiciles/Jurisdictions</b>					
	<b>Bermuda</b>	<b>Cayman</b>	<b>Ireland</b>	<b>United Kingdom</b>	<b>Singapore</b>
<b>Catastrophe Bond Deal Count **</b>	103	25	12	1	2
<b>Notional Amount Issued ** (\$ USD B)</b>	32	6.1	2.2	0.3	0.175
<b>SPI/SPV Approval Timeline</b>	10-20 days (5-7 days for renewals)	10-20 days (5-7 days for renewals)	Guidance received of 4-5 weeks, but have often seen 3-4 months	4-6 months (though have also been advised quicker turnaround possible)	4-6 months (not tested)
<b>Structure Tested by Loss Payout</b>	Yes	Yes	No	No	No
<b>Expense Reimbursement</b>	-	-	-	-	SGD \$2M Approx. USD \$1.5M
<b>Protected Cell Company Regulation</b>	Yes	Yes	No	Yes	Reviewing, S-VACC may apply
<b>VAT</b>	None	None	23%, structuring work is exempt	19%	7%

\*\* Values are from January 1, 2014 to present

### Bermuda and Cayman

- By far the most established jurisdictions:
  - Issued over US\$ 80 bn of limit through almost 400 transactions, collectively
- Obtaining SPI approval is very straightforward, requires shortest overall timeline, and carries lowest execution risk
- Regulators and local service providers are experienced and comfortable with the issuance process
- Existing Protected Cell Company regulations, facilitating shelf issuances.
- Tested by loss events and subsequent payout
- Tax and cost efficient

### Ireland

- Framework has been available since 2006
- Less utilization as structuring and approval process can be relatively cumbersome carrying longer approval timeline and execution risk.
- The Central Bank of Ireland requires more information be submitted on underlying business, trigger mechanism, and basis risk
- Currently no Protected Cell Company regulations in place, limiting utility of shelf placements
- Not tested by a catastrophe event and subsequent loss payout
- VAT in Ireland adds cost to the structure
- SPV approval process has been quoted to Aon to take 4 to 5 weeks; however, experience has seen up to 4 to 6 months.
- Brexit has dramatically increased the number of non-ILS approval requests which could influence turnaround time
- No anticipated change in law to promote growth

### United Kingdom

- New framework established in October, 2017
- Three successful ILS issuances from SCOR (Cat Bond) and Neon (two Sidecars) issued
  - This helps reduce concerns around execution risk
  - However, there remains considerable uncertainty regarding overall timing
- The United Kingdom framework includes:
  - Regulations for Protected Cell companies
  - VAT of 19%, which may be applicable to some service providers
- Considerable interest domestically to support the local regime

## 6. Hong Kong to develop local ILS market

At first glance, the economics of ILS in Asia may appear to be challenging. Asia is still a developing market with low insurance penetration. Traditional reinsurance coverage is still viewed as competitive enough not to tap into the ILS markets in the region. Apart from more mature markets such as Japan and Australia, a large part of Asia has yet to tap the capital markets for their growing insurance needs. Having said that, Hong Kong being the third biggest financial hub in the world and the fifth biggest Market Capitalisation of the World's Top Stock Exchanges with US\$ 3.8 tn. ILS is certainly an area where Hong Kong can play a significant part in. In addition, Hong Kong has the benefit of being closer to the faster-growing Asian markets and that it may be cheaper to access. As ILS funds continue to seek diversification opportunities for their investment portfolios, Asia is poised to be the next frontier for ILS growth.

Hong Kong indeed does have strategic advantages. It has one of the biggest capital market in the world and has world class asset management capabilities through different asset classes with a deep debt capital market. Hong Kong is a vibrant international bond market with bond issuance amounted to US\$ 467bn in 2017. This is added to practical knowledge and familiarity of Rule 144A under U.S. Securities Act by law firms domiciled in Hong Kong. Also, 70% of the world's 100 largest banks have operations in Hong Kong. It offers a stable and flexible capital market with free flow of capital, and a sound, independent and bilingual legal system.

Hong Kong plays a key role as a bridge between international investors and Mainland China market being the largest offshore RMB business hub. It has processed more than 70% of RMB transactions globally in 2018. This unique position is important for the mainland China companies. With the increasing amount of exposure, there is a willingness for Chinese corporations to manage risk exposure in RMB to eliminate exchange rate risk. And the Hong Kong government intends to further strengthen this role.

For example, Hong Kong has introduced regulatory and tax incentives to further capture the business opportunity from mainland China insurers. In May 2017 the mainland China and Hong Kong regulators had signed an agreement for an equivalence assessment under the "China Risk Oriented Solvency System" (C-ROSS). A preferential treatment applies to reinsurance recoverables from an authorised and regulated reinsurer in Hong Kong with an internationally recognised credit rating of at least A-. Favorable regulatory regime and tax incentives are introduced to encourage companies to set-up captive insurers in Hong Kong. According to Marsh, there is an increasing number of captives using ILS to access to reinsurance, especially where capacity limited for the type and level of risks involved. The brokerage firm expects the trend to continue as captive owners look for efficient reinsurance alternatives and the fully-collateralised nature of ILS is an attractive feature to secured recoverables.

Hong Kong is continuing its efforts to create a local insurance-linked securities (ILS) market, with the government and insurance regulator seeking to introduce needed changes by the 2019-2020 legislative session. In June 2019, the Financial Services and the Treasury Bureau and the Insurance Authority are propose to the Legislative Council to renew the favorable tax treatment for captive insurers and reinsurers, to extend the tax regime to direct insurers, and to adopt a new regulatory regime under the Insurance Ordinance focusing on setting up SPV. Under the proposal, an SPV is to be a new type of

authorized insurer solely for the purpose of acquiring insurance risk from another (re)insurer under a risk transfer contract and then issuing ILS to investors to collateralize the risk acquired. The SPV shall be fully funded at all times.

There has been some significant development in the ILS space for Hong Kong. Peak Re, a global reinsurer based in Hong Kong, has launched Asia's first sidecar transaction via a special purpose insurer, Lion Rock Re Ltd., to provide collateralised retrocession for part of Peak Re's global property reinsurance risk portfolio. This represents important milestone in Hong Kong and Asian (re)insurance market. It is encouraging to see an Asia domiciled sponsor of a reinsurance sidecar, the first seen from the region. It signals an increasing comfort in the use of third-party capital among re/insurers, as the capital markets become increasingly embedded within the business models of traditional underwriters.

With privilege access to Mainland China market, Hong Kong is well-positioned to tap opportunities in promising growth of the Mainland China's reinsurance market, with the broader policy drive for the "Belt & Road" and "Greater Bay Area" initiatives in becoming the largest Asian ILS hub. Reports show that Mainland China's reinsurance market was valued at USD 35 billion in 2013 and is expected to reach up to USD 200 billion by 2020, fuelled by explosive growth in the primary general and life insurance markets.

A robust regulatory and tax framework specifically designed for ILS need to be established in order to compete with ILS market leader Bermuda and other new jurisdictions looking to develop their ILS capabilities, such as Singapore and the United Kingdom. The newly proposed legislative amendments to promote ILS transactions within a new specially designed framework in Hong Kong will provide fresh impetus to Hong Kong's development as an international reinsurance and ILS hub. Leveraging off Hong Kong's very well established and stable financial infrastructure with global recognition, Hong Kong is in a unique position to tap into the ILS markets in this region as part of the Greater Bay Area initiatives, so as to attract more insurance and reinsurance companies to efficiently replenish and diversify their own capital base through issuing ILS from Hong Kong. A specially designed ILS regime in Hong Kong will provide a significant opportunity to strengthen Hong Kong's influence in the Asia reinsurance market and secure a strong position in this rapidly evolving and expanding sector.

Hong Kong has the legal and financial infrastructures to issue sophisticated bonds. It is also well-known for efficiency of the authorities, and simple and low tax concession. As an example for comparison, once requirements are met, captive insurance license is issued within two weeks compared to five business days in Bermuda and 6-8 weeks in Singapore. It offers ease access to Asian risks, especially mainland Chinese risks, and (re)insurance talents. The outstanding area is a legal framework to establish a SPV which can enjoy the preferential treatment under C-ROSS calculation for mainland Chinese companies.