Risk & Analytics
Global Captive Practice

Captives in Asia-Forbidden City or Promised Land

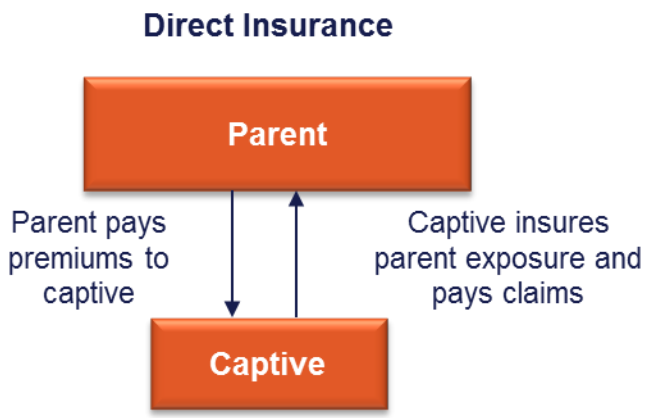
PARIMA
November 16, 2015

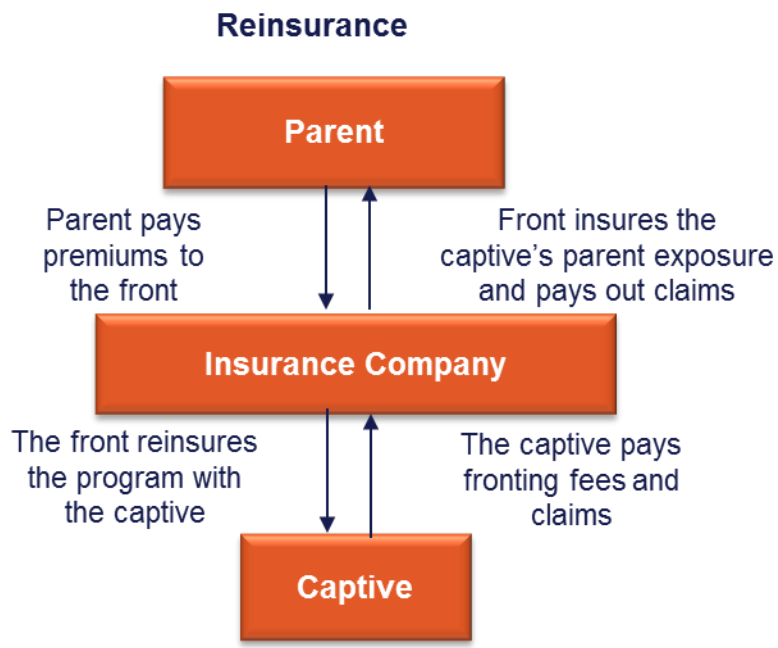
Willis

The Basics

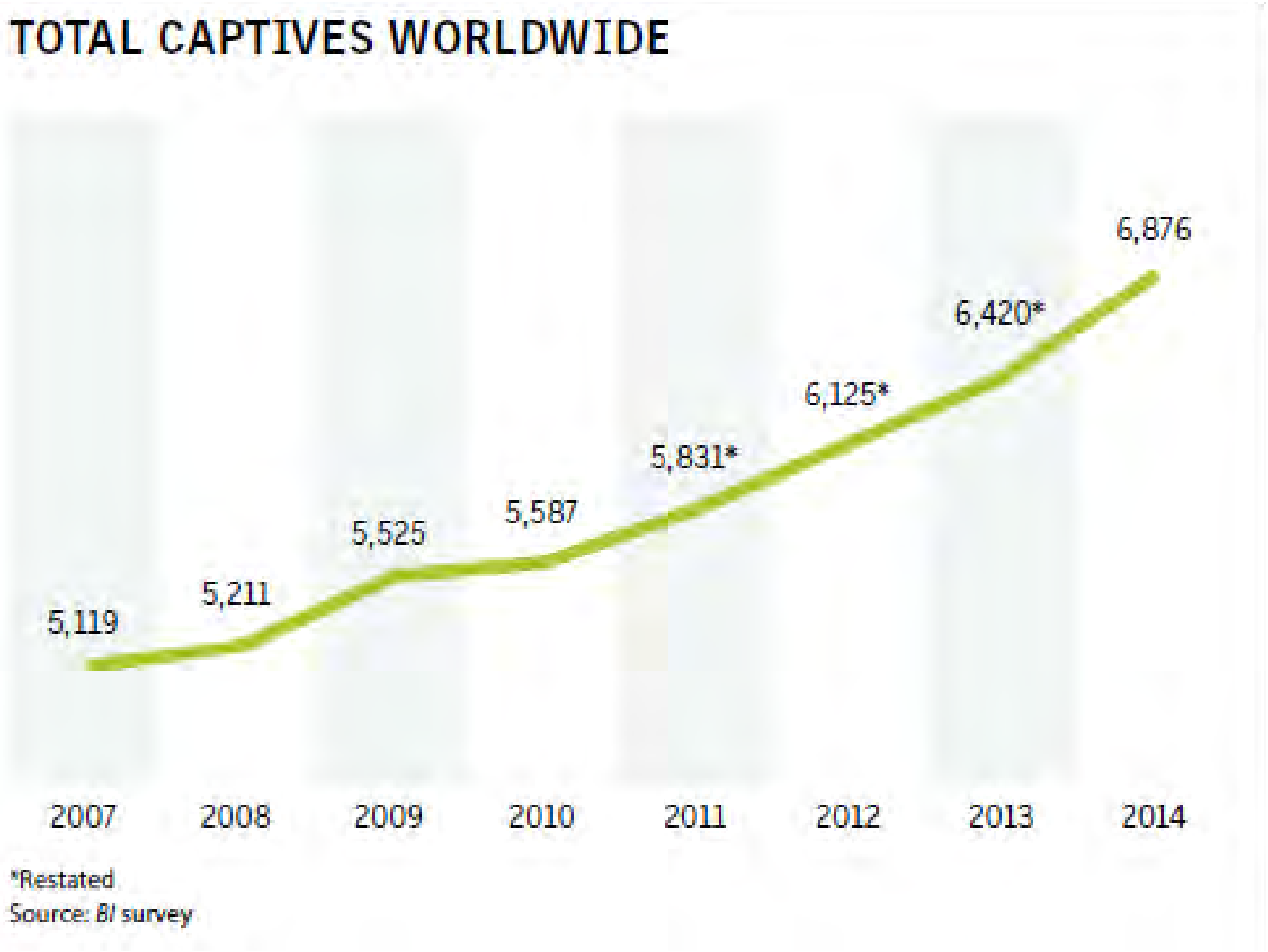
What is a captive?

- A limited purpose, licensed insurance company, the main business purpose of which is to insure the risks of the captive's owner(s)
- A risk assumption vehicle
- An insurance or reinsurance company

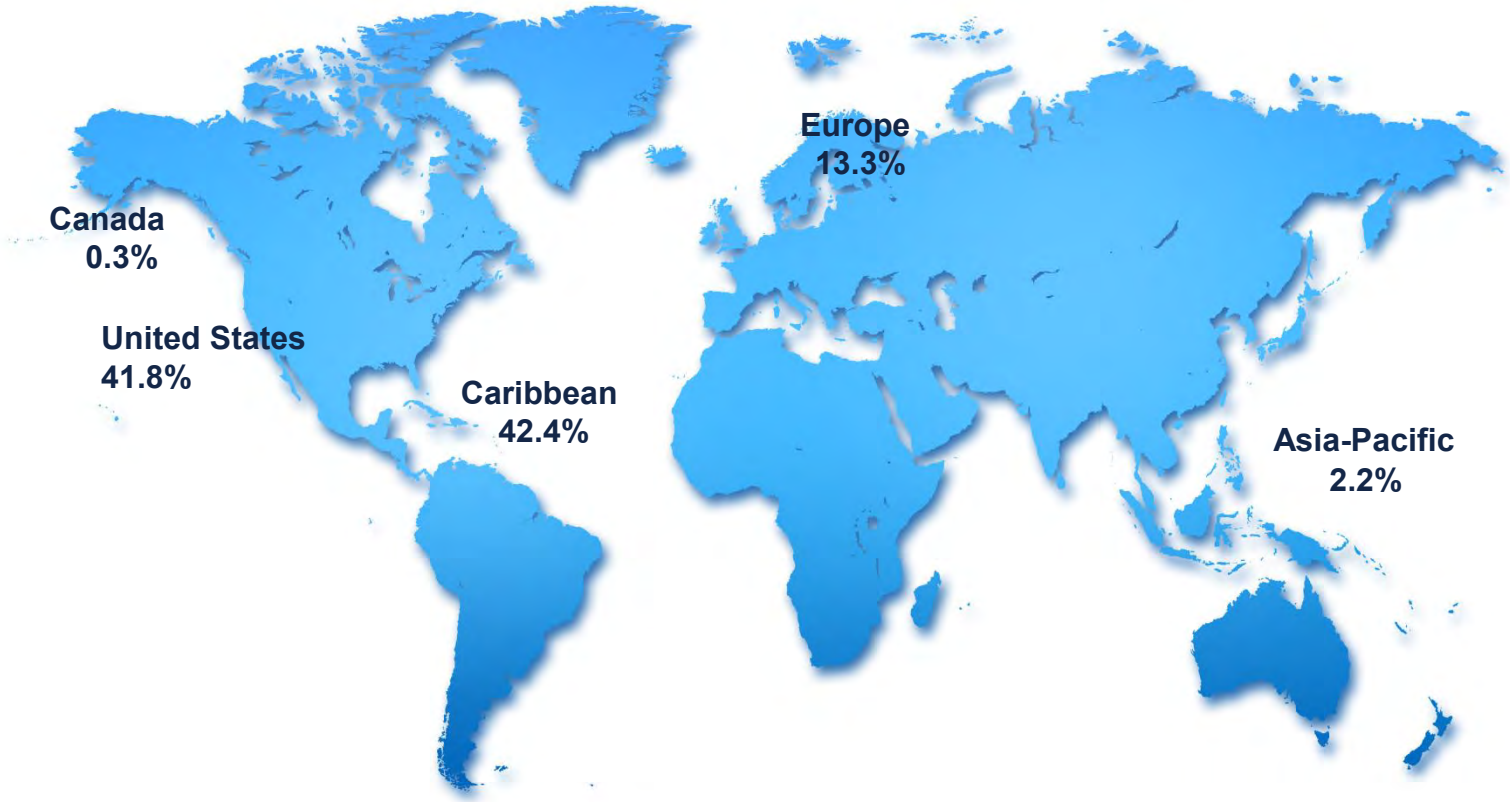




Many large SOE's are now moving towards setting up captives to formalize and fund their risk management programs, in addition, captive owners in the Asia-Pacific region have increased to 23% in 2015, up from 17% in 2013



Captives Distribution around the world



Benefits of a Captive

A captive insurance company can provide an innovative solution to the risk financing needs of the parent company. There are numerous potential advantages to forming a captive insurance company. Captive insurance companies are formed for both economic and risk management purposes.

We typically group the benefits in the following three groups:

- Financial
- Operational
- Strategic

Benefits of a Captive –Financial, Operational, Strategic

Financial:

- Improved risk financing budgeting process
- Improved cash flow and UW results
- Cost control for large business by achieving stable capacity and lower cost from reinsurance market
- Maintain provisions for unknown losses

Operational:

- Key focus for corporate governance, Solvency requirements
- Access to reinsurance markets
- Ready availability of capacity when insurance solutions required (uninsurable risks)
- Improved claims tracking and control
- Credible alternative to market in negotiations with underwriters /Reduce reliance on insurers

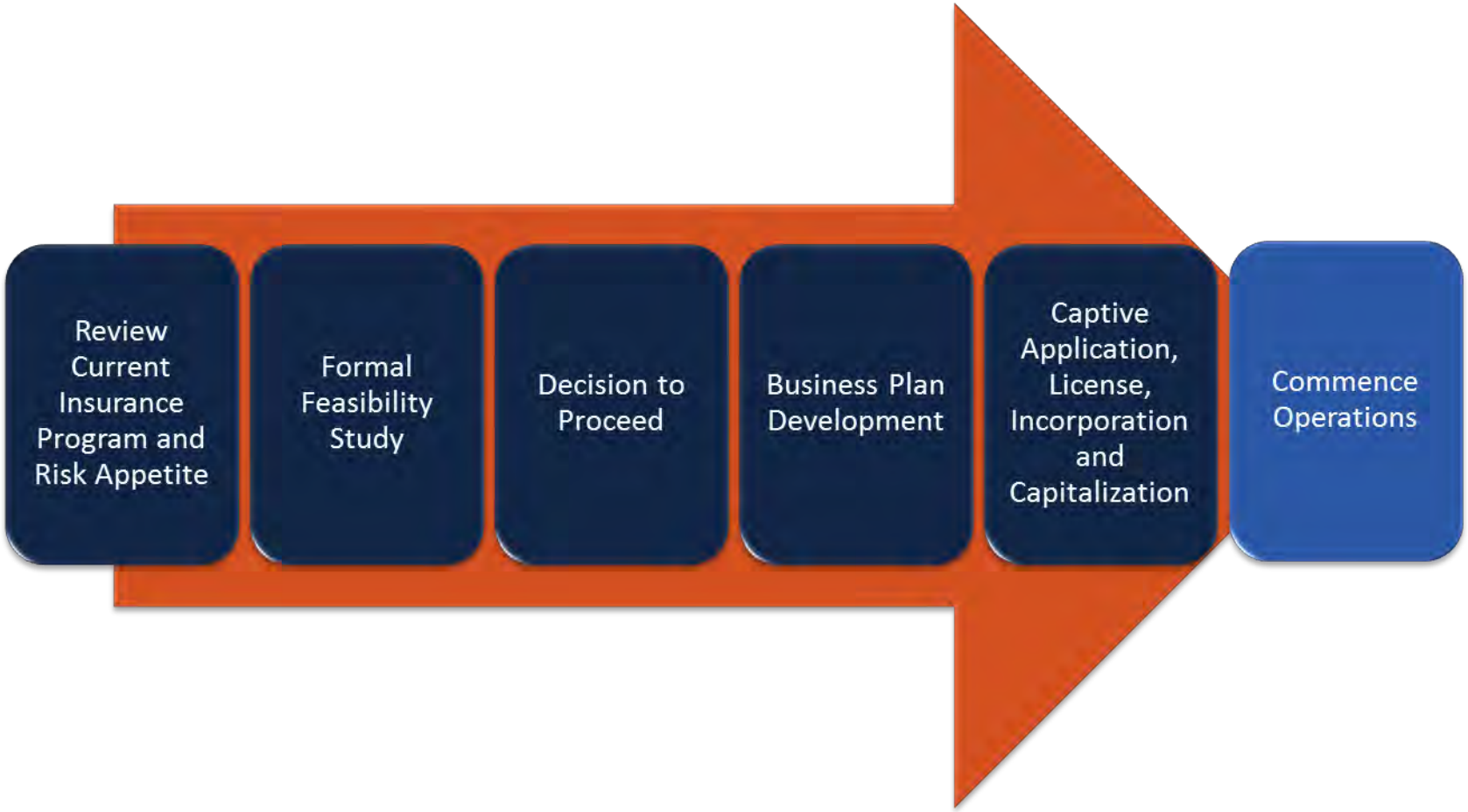
Strategic:

- Platform for implementation of risk management strategy (ERM)
- Corporate Governance / Compliance
- Flexible and Bespoke
- Develop long term capacity / defense against “hard market”
- Transfer Pricing and premium allocation
- Access to advanced modelling tools and techniques to measure and quantify risk

How does a Captive interact with the Insurance Market?

- Not a threat, complements commercial insurance offering
- Successful track record of working together in long term relationships. Over time, premium to insurers increase as additional risks insured.
- Involvement of captive demonstrates a commitment to risk management and a superior risk retention of predictable, low severity, high frequency losses. Reduces administration and dollar swapping with insurers.
- Insurers capital more efficiently applied to transfer of less predictable risks
- Captives depend on insurance carriers for local regulatory compliance, policy issuance, claims handling, loss engineering surveys and risk surveys
- Captives adopt technical pricing of the risk and do not compete on cost with the market for the business
- Captives aggregate premium and may reinsure risk back to local markets or into the international markets

Steps to Creating a Captive – Captive Team and Risk & Analytics



Captive Regulatory Highlights in Asia

The Asia regulatory environment is very dynamic and the regulators are very eager to build a solid framework and governance to attract and maintain Captive insurance companies.

- **Singapore-MAS**
  - Strong and flexible regulations
  - Most developed domicile in Asia
- **Hong Kong – OCI/IA**
  - Changing regulatory environment
  - RBC II equivalent on the horizon
- **China - CIRC**
  - Developing/enhancing captive regulations
  - CROSS
  - Forward looking

In Summary – A Captive Manager's Perspective

Why are the Chinese SOE's forming captive insurance companies in a soft market?

- The sophistication of internal risk management of the SOE's realizing the benefits of alternative risk financing (learning to retain risk) and understanding the process to get there gives an opportunity to improve internal operations.
- Captives are regarded as a key element of a longer-term risk management and risk retention strategy, rather than short term cost saving vehicles.
- The necessity to have in place the governance and structure around their risk in preparation for the implementation of solvency regulations
- Capital efficiency – because of the size of the SOE's, they have the ability to use their own capital strength to finance risk
- Commercial pressure to keep up with other multinationals that have captives - "Best Practices"
- The regulatory bodies (CIRC, OCI/IA) are intent on supporting captive formation and becoming the "Gold Standard" of captive domiciles

WILLIS RISK & ANALYTICS

Willis

MATURE CAPTIVE SOLUTION: STRATEGIC RISK FINANCING

PROBLEM

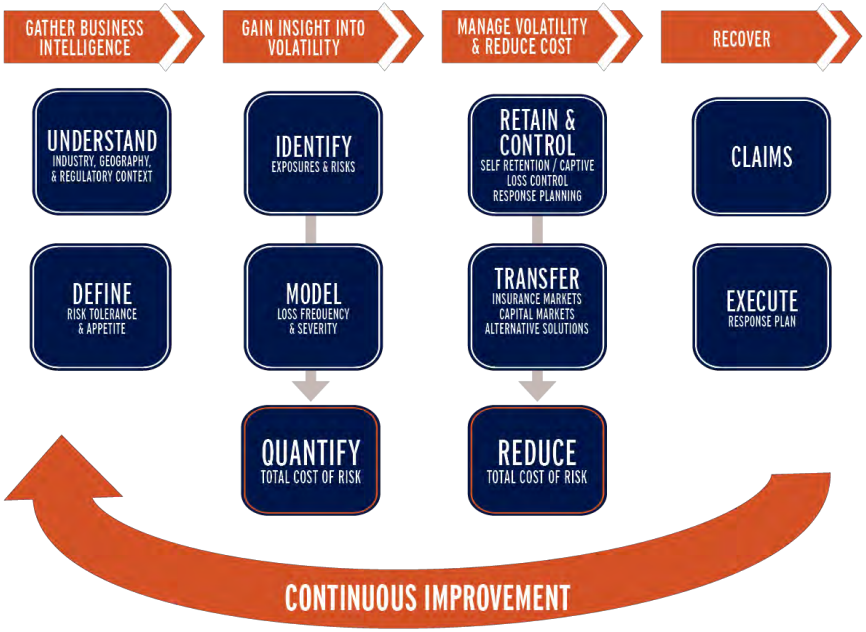
An effective, sustainable, captive risk financing strategy should enable and protect the parent company's mid to longer term objectives and be supported by a robust analytical framework

WHY IS IT IMPORTANT?

- Optimize the value that they obtain from their insurance and reduce the overall cost of risk.
- Meet parent company capital efficiency expectations, including risk tolerance and cost of capital measures.
- Respond to changes in the risks presented by insured subsidiaries.
- Identify and evaluate new classes of business.
- Use the latest analytical risk modelling techniques to understand their exposures and optimize the captive's business strategy.
- Comply with regulatory requirements including capital adequacy and transfer pricing transparency.
- Negotiate with insurers from a position of strength in both soft and hard insurance market cycles.

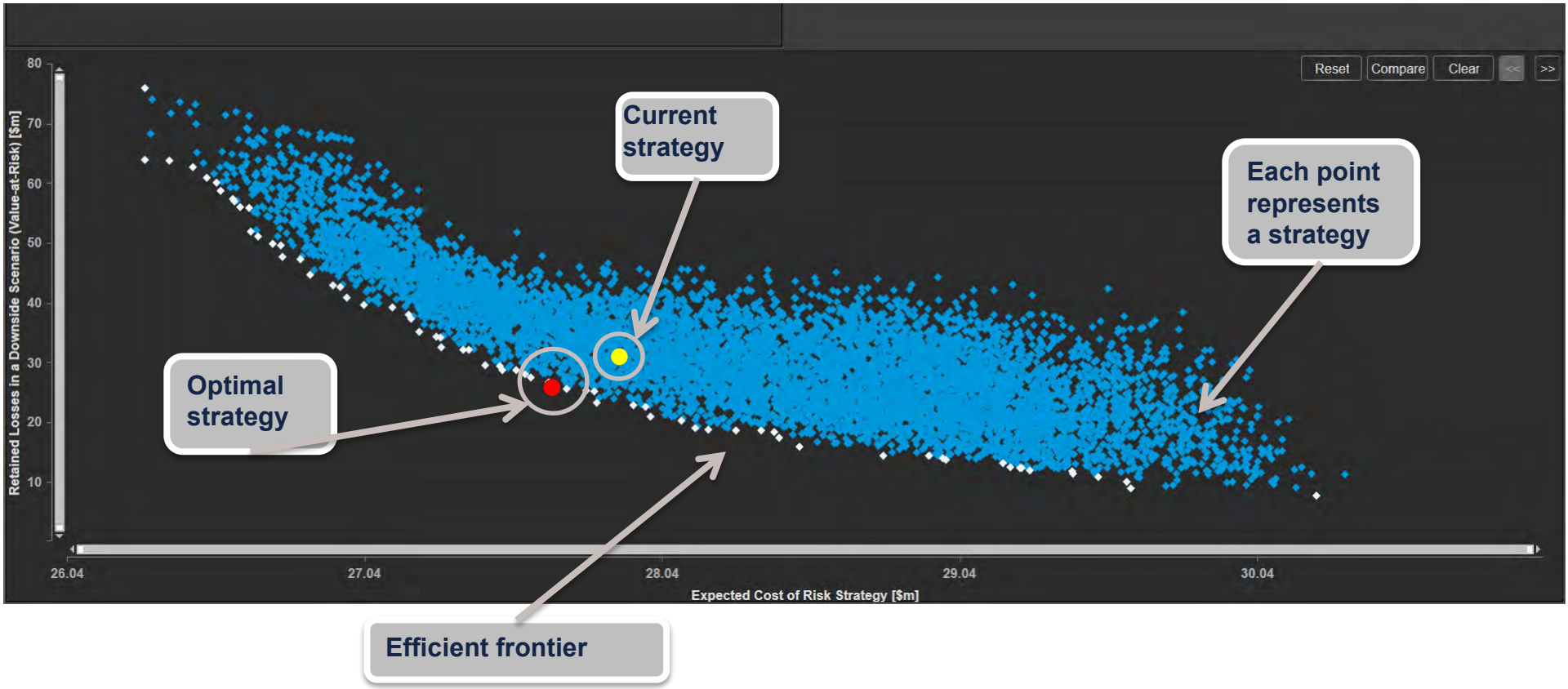
OUR SOLUTION

- Client insight meeting to understand objectives.
- Actuarial loss forecast models developed for key individual risks, and on a combined portfolio basis.
- Create and agree strategic risk financing strategy.



MATURE CAPTIVE SOLUTION: RISK TRANSFER OPTIMISATION

A strategy is on the efficient frontier if it is impossible to save money without increasing risk or reduce risk without spending more.



MATURE CAPTIVE SOLUTION: CAPITAL PLANNING AND GOVERNANCE

PROBLEM

Evolving regulations in EU and Offshore require captive owners to be fully informed on current and evolving regulations and invest time assessing, understanding and managing risks, and to demonstrate that governance arrangements and capital levels are adequate and appropriate for the needs of the business.

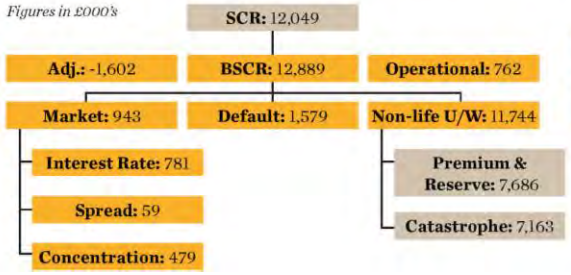
WHY IS IT IMPORTANT?

- Regulators in most captive domiciles are increasingly implementing robust risk-based solvency and governance frameworks.
- In EU captive domiciles new Solvency II risk-based capital regulatory requirements will be implemented on 1st January 2016.
- Offshore domiciles such as Guernsey and the Isle of Man have implemented risk-based capital regimes which need to be compliant with core principles as set out by the International Association of Insurance Supervisors.

OUR SOLUTION

- Develop a framework by which the captive assesses its risk profile on a holistic and forward looking basis to ensure that it has sufficient capital.
- Determine the regulatory minimum and solvency capital requirements.
- Formalise and document the governance and risk management arrangements, development and formalise any new processes and procedures in line with regulatory requirements.
- Review capital allocation in multi captive/domicile arrangements.
- Explore ways of mitigating capital requirements, for example by restructuring current programmes, reinsurance and investment portfolios.

The diagram below shows an example output of a Solvency II capital analysis, resulting in a capital shortfall funding plan:



	Solvency II
Capital Available	10,917
Capital Requirement	12,049
Excess/ (Shortfall)	-1,131
Solvency ratio	91%

Willis

MATURE CAPTIVE SOLUTION: PREMIUM SETTING & TRANSFER PRICING

PROBLEM

- Premium Setting & Transfer Pricing are now a central focus for both the internal and external stakeholders.
- Companies need to demonstrate that premiums transferred to captives are equitable but not excessive.
- Current pricing processes may be inadequate, relying unduly on benchmarking against insurance market rates instead of a robust and transparent methodology.

WHY IS IT IMPORTANT?

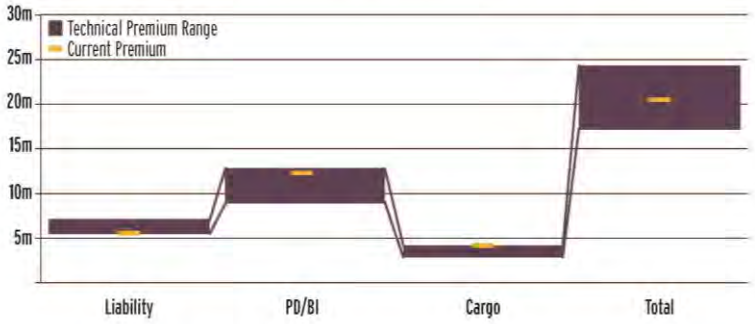
Risk managers need to be able to:

- Demonstrate to the parent company and its business units that the required transfer premiums are equitable.
- Ensure the financial strength and sustainability of the captive.
- Meet the solvency requirements of the captive's regulator.
- Respond to interested tax authorities, who will give consideration to whether or not the captive's profits are reasonable or excessive.

OUR SOLUTION

- Provide transfer pricing frameworks and analyses to captive and corporate clients Provide a transparent, auditable trail supporting premium calculations, which can be demonstrated to a tax authority if necessary.
- Risk management and governance will be strengthened by demonstrating to business units that an equitable methodology is used.
- The results of our analyses can be used as the primary input into the premium allocation process.
- Adherence to solvency requirements of the captive's regulator can be demonstrated, underpinned by robust modelling. This is increasingly important in Solvency II and other risk-based capital environments.

The diagram below shows an example output of a captive transfer pricing exercise. The graph shows the likely range of acceptable premiums for each line of business:



Willis

MATURE CAPTIVE SOLUTION: PREMIUM ALLOCATION

PROBLEM

Premium allocation is often one of the most contentious aspects of a risk manager's role. It can be a logistical and political minefield resulting in inefficiencies and costly disputes between the risk manager and the participants in the insurance programme. This need not be the case.

WHY IS IT IMPORTANT?

- Increased control over charges
- Consistency over time
- Improved efficiency
- Risk management incentive
- Improved internal cash flow
- Improved relationships
- Supports transfer pricing principles

OUR SOLUTION

- Establishing the methodology
- Designing the model
- Project managing the process
- Implementing the premium allocation

Below is an example of premium allocation to business units:

Data					Initial Allocation / Weighting						Limitations			
Exposure	Territory Risk	Exposure X Territory Risk	Claims Severity	Claims Frequency	Exposure X Territory Risk 60%	Claims Severity 30%	Claims Frequency 10%	Total Initial Allocation 100%	Initial % Share	Expiring Premium (2009)	Min with Max Decrease of 10%	Max with Max Increase of 10%	Revised Initial Allocation	Best Allocation
£ -	1	£ -			£ -	£ -	£ -	£ -	0.00%	£ -	£ -	£ 9,999,999	£ -	£ -
£ 35,394,332	3	£ 36,456,162	£ 29,990	8	£ 21,076	£ 7,434	£ 145,601	£ 174,111	1.52%	£ 74,016	£ 66,615	£ 81,418	£ 81,418	£ 81,418
£ -	3	£ -			£ -	£ -	£ -	£ -	0.00%	£ -	£ -	£ 9,999,999	£ -	£ -
£ 240,979,575	4	£ 253,028,553			£ 146,279	£ -	£ -	£ 146,279	1.28%	£ 227,615	£ 204,854	£ 250,377	£ 204,854	£ 223,718
£ 17,123	3	£ 17,637			£ 10	£ -	£ -	£ 10	0.00%	£ 1,250	£ 1,125	£ 1,375	£ 1,125	£ 1,126
£ -	1	£ -			£ -	£ -	£ -	£ -	0.00%	£ -	£ -	£ 9,999,999	£ -	£ -
£ 975,076	2	£ 984,827			£ 569	£ -	£ -	£ 569	0.00%	£ 2,474	£ 2,226	£ 2,721	£ 2,226	£ 2,300
£ 19,439,017	2	£ 19,633,407			£ 11,350	£ -	£ -	£ 11,350	0.10%	£ 1,655	£ 1,489	£ 1,820	£ 1,820	£ 1,820
£ 75,363	4	£ 79,131			£ 46	£ -	£ -	£ 46	0.00%	£ -	£ -	£ 9,999,999	£ 46	£ 52
£ 108,068,040	2	£ 109,148,720			£ 63,100	£ -	£ -	£ 63,100	0.55%	£ 167,307	£ 150,576	£ 184,038	£ 150,576	£ 158,714
£ -	3	£ -			£ -	£ -	£ -	£ -	0.00%	£ -	£ -	£ 9,999,999	£ -	£ -
£ 1,451,260	3	£ 1,494,798			£ 864	£ -	£ -	£ 864	0.01%	£ 4,338	£ 3,904	£ 4,771	£ 3,904	£ 4,015
£ 15,535,515	3	£ 16,001,580			£ 9,251	£ -	£ -	£ 9,251	0.08%	£ 7,886	£ 7,080	£ 8,653	£ 8,653	£ 8,653
£ 9,807,362	5	£ 10,493,877			£ 6,067	£ -	£ -	£ 6,067	0.05%	£ 2,981	£ 2,683	£ 3,279	£ 3,279	£ 3,279
£ -	5	£ -			£ -	£ -	£ -	£ -	0.00%	£ 13,486	£ 12,137	£ 14,834	£ 12,137	£ 12,137
£ 16,887,318	5	£ 18,069,430			£ 10,446	£ -	£ -	£ 10,446	0.09%	£ 14,658	£ 13,192	£ 16,123	£ 13,192	£ 14,539
£ 1,320,000	4	£ 1,386,000	£ 2,050	3	£ 801	£ 508	£ 54,600	£ 55,910	0.49%	£ 13,183	£ 11,864	£ 14,501	£ 14,501	£ 14,501
£ -	3	£ -			£ -	£ -	£ -	£ -	0.00%	£ -	£ -	£ 9,999,999	£ -	£ -
£ 2,462,064	1	£ 2,462,064			£ 1,423	£ -	£ -	£ 1,423	0.01%	£ 1,761	£ 1,585	£ 1,937	£ 1,585	£ 1,769
£ 83,820,000	2	£ 84,658,200	£ -	0	£ 48,942	£ -	£ -	£ 48,942	0.43%		£ -	£ 9,999,999	£ 48,942	£ 55,254
£ 1,891,927,138	5	£ 2,024,362,037	£ 916,271	5	£ 1,170,309	£ 227,133	£ 91,001	£ 1,488,442	12.98%	£ 2,450,000	£ 2,205,000	£ 2,695,000	£ 2,205,000	£ 2,396,951
£ -	5	£ -			£ -	£ -	£ -	£ -	0.00%	£ -	£ -	£ 9,999,999	£ -	£ -
£ 11,634,454,842		£ 11,900,175,016	£ 13,876,499	63	£ 6,879,640	£ 3,439,820	£ 1,146,607	£ 11,466,067	100.00%	£ 11,353,375			£ 10,577,460	£ 11,466,067
													£ 888,607	£ -

LOSS RESERVING

PROBLEM

- The captive board of directors supported by company management are primarily responsible for ensuring the accuracy of loss reserving on the captive balance sheet.
- As loss reserves are often the largest liability in a captive's financials the reserve has a significant impact on income and surplus.

WHY IS IT IMPORTANT?

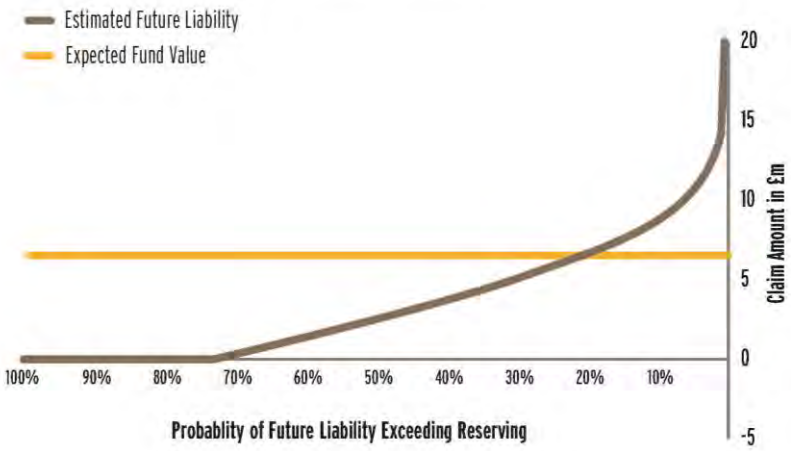
There is increased reliance on actuaries to 'sign off' on the loss reserves held by captives. Key stakeholders rely on loss reserve estimates.

- Management and the board
- The insurance regulator
- Tax authorities
- Fronting companies
- The captive shareholder
- Rating agencies
- Captive auditors

SOLUTION

- Willis' actuarial team works closely with captive boards, managers and owners to bring clear solutions by assisting them in taking responsibility for providing accurate and adequate loss reserving information relied upon by key stakeholders.
- Actuarial analysis provides an independent, scientific evaluation of loss reserves, communicated in clear unambiguous language so that those relying on the results can understand them.

The graph below shows an example output of a reserving analysis. There is a 20% probability that the fund will be inadequate:



LONGEVITY RISK SOLUTION

PROBLEM

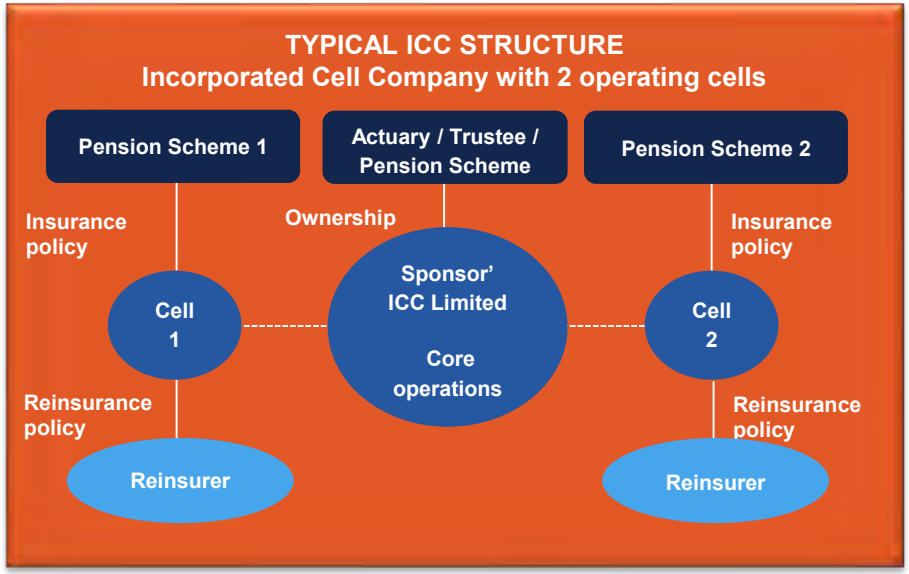
The management of longevity risk has always been a key consideration for pension schemes. Life expectancy around the world is increasing steadily and whilst pension schemes have been dealing with the financial impact for the past ten years or so, a new innovative solution is emerging.

WHY IS IT IMPORTANT?

- Global reinsurers have indicated an increased appetite in recent years to accept longevity risk.
- Many reinsurers have significant mortality protection portfolios and longevity risk offers a hedge against this exposure.
- Accessing this capacity via a traditional insurance company is very inefficient and costly.

SOLUTION

- Captive insurance companies provide direct access to the reinsurance markets
- Incorporated Cells provide an even more efficient solution than a standalone company by reducing the overall cost of managing a captive
- Pension schemes establish their own captive insurance vehicle to access the capacity



Presented By:

ROB DE JONGE, DIRECTOR RISK & ANALYTICS | WILLIS GB & INTERNATIONAL
ROB.DEJONGE@WILLIS.COM

TRACY L. STOPFORD 司徒蕾溪, ACI, MANAGING DIRECTOR, WILLIS MANAGEMENT (HONG KONG), PTY LTD.
TRACY.STOPFORD@WILLIS.COM

Willis