MARSH

The World of Captives: Growth and Opportunities Without Borders

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FOREWORD

While insurance markets have changed drastically over the past 50 years, one of the few constants has been the steady growth of captives. Despite volatility in the financial sector, global economies, and the emergence of new risks, captives continue to thrive, providing affirmation of their efficacy, flexibility, and stability. The growth of captives in 2014 was no exception. Noteworthy changes in laws broadening rules for risk distribution, an explosion of small captives in the US, an increase in writing nontraditional lines of coverage, continued certainty around Solvency II in Europe, special purpose vehicles (SPVs) and new emerging markets, have begun to transform the captive industry and demonstrate that this cycle of growth is expected to endure.

As business owners become aware of the benefits of captive insurance programs, the exploration of different possibilities in structures, domiciles, and coverage can create an infinite number of opportunities for various types of companies. Once almost exclusive to the Fortune 500 and Financial Times Stock Exchange (FTSE) 100 companies, captives now can provide benefits to organizations of all sizes, industries, and geographic orientation. Captives have been rapidly expanding throughout the middle market space, which is anticipated to be a robust growth sector for the captive industry in the future.

Keeping these evolving trends in mind, our eighth edition of the *Marsh Captive Solutions Benchmarking Report 2015* includes more than 1,100 captives managed by Marsh, using extensive and powerful analytics to provide compelling findings from an industry perspective, and to develop an understanding of what is happening in the ever-changing captive landscape. More and more, business owners are finding that having a captive is a strategically important corporate asset, as it effectively raises the visibility of risk management costs and serves as an excellent control tool.

It is with great pleasure that we welcome our clients, colleagues, and members of the captive industry to *The World of Captives: Growth and Opportunities Without Borders*. We are confident you will find the information provided of value and understand why Marsh is the leading captive manager in the world. We encourage you to reach out to your Marsh Captive Solutions contact, client executive, or your Marsh team if you wish to discuss the report in further detail.

CHRIS LAY
President, Marsh Captive Solutions

DEVELOPMENTS AND EXECUTIVE SUMMARY

We often hear from our clients that they want their captive manager to be more strategic, provide more innovative solutions, and be their trusted advisor in business and risk management functions. This year, we have benchmarked 1,109 captives from around the globe, ranging from the world's largest insurance vehicles to small captives, strategic special purpose vehicles (SPVs), and even some dormant captives or those in run off. This year, we ***challenge you*** *— the reader, captive owner, those considering a captive, or industry expert* — to think critically and creatively. As we discuss various aspects of the captives analyzed in this report, we recommend you take an in-depth review of your captive, whether it be from a line of coverage, tax election, investment strategy, or a domicile perspective, and contemplate what these results mean for your captive.

Think strategically and, if appropriate, take some action, challenge the status quo, ask hard questions and use this information to take your captive to the next level. The following developments provide key materials for you to consider as you challenge your organization's use of a captive or consider establishing a new captive.

Here are our findings from the *Marsh Captive Solutions Benchmarking Report 2015*.

TERRORISM INSURANCE AND THE NEWLY EXTENDED TRIA PROGRAM

A powerful advantage of US captives is the access they provide to the US Government terrorism program, formally known as the Terrorism Risk Insurance Act (TRIA), re-established by the Terrorism Risk Insurance Program Reauthorization Act of 2015 (TRIPRA). However, we have found that of the 374 US captives we manage, only 83 (or 22%) actually access TRIPRA for property coverage, writing either conventional terrorism coverage for property damage or the excluded nuclear, biological, chemical, and radiological perils (NBCR). Based on this fact, we suggest all owners with a US captive to investigate whether adding TRIPRA coverage to your captive could provide economic value, address a self-insured peril, and add overall protection and value to the organization should a devastating terrorism event take place. We urge you to think about the financial impact on your organization in the event of a catastrophic NBCR terrorism event. Could your corporate balance sheet absorb the costs without detrimental impact to the capital markets' view of your company's financial strength? In essence, TRIPRA is a form of government-supported terrorism protection and Marsh is also working on a TRIPRA trigger protection program that could reduce a captive's exposure at a reasonable cost. Furthermore, Marsh has an offering to provide protection to captives that write terrorism insurance and take advantage of the backstop if the TRIPRA "trigger" is not met.

We are excited about sharing this concept with captive owners and clients looking to set up a new US captive to access TRIPRA, and finding a solution to cover the trigger issue.

Just recently, the Risk and Insurance Management Society (RIMS), America's leading risk management association, wrote to the US Department of the Treasury to provide its recommendation on certifying acts of terror, should they occur within a 60-90 day time frame, to prevent uncertainty and issues related to delays in wondering whether or not an event would be covered under TRIPRA. We take this as welcome news to provide more clarity for captives that write TRIPRA.

CAPTIVE TAX STATUS

Two significant captive tax court cases were decided on in 2014. Opinions on *Rent-A-Center, Inc.*, January, 2014, and *Securitas Holdings, Inc.*, October 29, 2014, broadened the traditional rules for risk distribution. These two cases can be viewed as taxpayer friendly, and each addresses various elements of the requirements for a captive to qualify as an insurance company for federal income tax purposes. Risk distribution, capitalization, and parental guarantees were all at issue in these cases. As a result, captive owners can use these cases to review their specific facts to determine if these changes in tax case law could positively change their positions. In our analysis, we have looked at all US captive owners that are for-profit and have found that 47% of US-owned captives actually achieve insurance tax status and deduct premiums paid to the captive. This still supports the notion that less than 50% of captives actually obtain federal tax efficiencies from their captives. However, it also shows that cost savings and tax efficiencies afforded to insurance companies are most likely relevant for many organizations.

> "Our captive structure is the keystone to our corporation's risk management strategy. It is utilized in almost all of our insurance programs and is appreciated at all levels of management."
>
> **PAUL P. JOHNSON, ARM**
> Director – Captive Operations
> Verizon Communications Inc.

EUROPEAN CAPTIVES AND SOLVENCY II

European Union (EU) domiciles are, once again, flourishing with the certainty around Solvency II. Companies, including those based in Asia, the US, and Europe, should review their global operations and where concentration of exposures are located. If your company has a European captive in place, we urge you to review its performance, location, and perhaps how it could benefit from reinsuring a second captive. An additional captive domiciled in a geography where your operations are significant, perhaps in the US or Asia, could increase productivity and operational efficiencies.

Due to the requirements of Solvency II, all EU-domiciled companies were required to submit their Forward-Looking Assessment of Own Risks (FLAOR) during 2014. A key advantage in completing this process is that it forces captive owners to think strategically and take a "clean slate" approach to analyzing their captive operations. It could mean that a company is reviewing retention options through the use of data and analytics, where the results will optimize its insurance program and, ultimately, reduce its insurance costs.

Due to the stability of Solvency II, European companies now have great potential opportunities in domiciles such as Dublin, Luxembourg, Malta, and Sweden, among others, which allow for direct writing across all EU countries. Since EU domiciles typically have a much lower tax rate than the US, this approach could dovetail with a US captive to deliver meaningful economic value.

We suggest you think about the business purposes and benefits of owning two captives, and using reinsurance as a strategic business driver for your company globally.

If capitalization of a captive in the EU is a barrier, there are numerous cell captive (or Protected Cell Companies (PCC)) strategies that can assist with making it more efficient for a company to enter a captive without needing to access funds for initial capitalization, €3.7 million in the EU for example, for a direct-writing captive. Because many middle market organizations across Europe now want to enter the captive market and reap the benefits that larger companies enjoy, there are many options available from reinsurance captives, direct-writing facilities, and PCCs.

EMERGING MARKETS

LATIN AMERICA – Latin America is an ever-developing market, similar to what the US was more than 35 years ago, and similar to what the Middle East is today. There are thousands of small or middle market companies in Latin America that are hungry for information on captives, and that want to make a move into captive ownership, yet are held back for various political, legal, and capitalization reasons, or because peer companies have not yet tested the waters.

Maria Escobar, head of Marsh Captive Solutions for this market, notes that Latin America is facing a shift in the risk management paradigm. "As an emerging market with sustainable growth over the past years, it has become more integrated and more sophisticated regarding risk-financing options and now has the perspective to understand and take advantage of the 'positive' side of risk," says Escobar. "Considering the size of the region and the different development levels of the countries, there are obviously some countries that are more advanced and open to analyzing new options and alternatives to leverage the total cost of risk for their companies."

CHINA – Although Chinese parent companies were slow to start captive arrangements, recently, Hong Kong has become an emerging domicile, and currently has three captives. Hong Kong captive regulators are reportedly pro-captive and business friendly with a short-term goal to have more than 20 captives. As a result, we expect to see tremendous growth, with Chinese companies forming captives for access to reinsurance, property coverages, and a more disciplined risk management approach, as well as for non-traditional lines of coverage, such as trade credit insurance.

MIDDLE EAST – The Middle East tends to follow US financial trends, such as being very active in mergers and acquisitions. Because of this, Middle Eastern companies have a tendency to have scattered and spread out operations, making them a likely candidate for evaluating captive strategies. Several factors are encouraging corporations in the Middle East region to consider alternative ways of financing risks. Economic growth, infrastructure spending, governance requirements from shareholders, diversification, and cross-border mergers and acquisitions have led to greater complexity in business and associated risks, strengthening the case for more sophisticated insurance and risk management solutions.

SMALL CAPTIVES TAXED UNDER SECTION 831(B)

It is no surprise that captive growth in the US was driven mostly by small captives in 2014. States like Utah (the largest domicile for small captives), formed a staggering number of new captives. Utah, however, also manages its share of substantial and well developed large captives and seeks to attract additional large captives to the state. Delaware, Tennessee, and North Carolina also had a great year in terms of new formations and redomestications.

In early 2015, the IRS placed the small-captive approach on their informal "Dirty Dozen" list of questionable transactions. Our approach with clients is to get it right from the beginning and continue to do it right consistently. Marsh has challenged clients who want to form new small captives, as well as the many prospective clients that come to us, because they feel something is not working as efficiently as it should be with their current captive manager. Our strict and detailed approach involves a comprehensive feasibility analysis, premium and risk determination, ownership structure analysis, and actuarial and capital assessments.

NONTRADITIONAL COVERAGES

Nontraditional coverages in captives grew by 11% from 2013 to 2014. The steady growth of coverages like crime, political risk, trade credit, cyber risk, and others in the captive market continue to to be fueled mainly by two forces: (1) Sophistication of captive owners looking for the expansion of their captives to generate efficiencies in their insurance programs, or looking to turn them into profit centers in some cases; and (2) The emergence of new risks and the need to manage them, whether through disciplined self-insurance funding, quota share participation, or with a reinsurance scheme. The best example of this is cyber risk, an exposure that is no longer exclusive to Fortune 500 companies, but a risk that virtually every company has to mitigate. When considering nontraditional lines of coverage, the starting point is usually a risk-retention exercise. The best way to assist with your analysis is with the help of analytics. In particular, the Marsh Analytics Platform (MAP), can complement a captive feasibility exercise.

SPECIAL PURPOSE VEHICLES (SPVs)

This year, we have undertaken a very detailed inspection of various SPV entities. In general, an SPV is a type of captive not defined as a single parent captive, group captive, or risk retention group, under a captive domicile's laws.

SPVs are generally owned by financial institutions (see the "Industry-Focused Captive Benchmarking" section) and include traditional SPVs and insurance-linked securities (ILS). SPVs include: 1) Securitization structures such as accounts receivables factoring, which our Dublin office has been advising on for more than 14 years, including ILS or catastrophic (CAT) bond arrangements, and are very popular in Bermuda and the Cayman islands and are ideal for companies that need significant insurance protection and limits for perils such as flood, earthquake, or collateral debt obligations (CDOs); 2) Life insurance XXX or AXXX reserve-financing captives used for capital relief strategic cost-saving initiatives.

REGULATORY DEVELOPMENTS

FEDERAL HOME LOAN BANK CAPTIVES — Last year we discussed the emergence of single parent captives formed by real estate finance firms that were also seeking to become members of the Federal Home Loan Bank System (FHLB). After a nine-month, self-imposed moratorium on admissions and proposed regulations that would have prohibited the practice, the FHLB has recently begun accepting new applications. This trend will be of interest to firms that originate or hold real estate securities or whole loans. Rates are very favorable compared to other sources of financing.

The National Association of Insurance Commissioners (NAIC) is forging ahead with its work on captive insurance companies used by life insurance companies to finance reserves required under current regulations; these reserves are commonly referred to as "XXX reserves" for certain term-life insurance policies, and "AXXX reserves" for certain universal life insurance policies.

In addition, NAIC has proposed a new definition of "multi-state insurer" that, if accepted, will affect captives that do not use a fronting insurer and write in a state other than the state in which they are domiciled.

INDUSTRY-FOCUSED CAPTIVE BENCHMARKING

In this year's benchmarking analysis, we have focused on the utilization of captives by the parent company industry. We also take a more detailed look at each of the top eight industries that use captives the most, and their contribution to total premium volume.

FIGURE 1 Captive Utilization by Parent Company Industry
Source: Marsh's Benchmarking Survey Analysis

CAPTIVES (%)	CAPTIVES	INDUSTRY	PREMIUMS (%)	PREMIUMS
24%	269	Financial Institutions	52.02%	$19.8B
14%	153	Health Care	7.32%	$2.7B
7%	79	Manufacturing	3.45%	$1.3B
6%	63	Retail/Wholesale	6.65%	$2.5B
4%	49	Transportation	2.44%	$933M
4%	46	Communications, Media and Technology	8.32%	$3.2B
4%	43	Power and Utility	2.24%	$853M
3%	29	Energy	1.55%	$592M
2%	24	Mining, Metals and Minerals	1.56%	$594M
2%	21	Marine	2.13%	$812M
2%	20	Life Sciences	3.97%	$1.5B
2%	20	Food and Beverage	1.61%	$614M
1%	14	Aviation, Aerospace and Space	1.59%	$605M
25%	279	Other*	5.16%	$1.9B
100%	1,109	Total	100%	$38.1B

*OTHER INCLUDES: AUTOMOTIVE, CHEMICALS, CONSTRUCTION, EDUCATION, FOREST PRODUCTS, HOSPITALITY & GAMING, PUBLIC ENTITY, AND REAL ESTATE.

FIGURE 2 **Traditional Coverages Written by Captives by Industry**
Source: Marsh's Benchmarking Survey Analysis

	COMMUNICATIONS, MEDIA & TECHNOLOGY	CONSTRUCTION	FINANCIAL INSTITUTIONS	HEALTH CARE	MANUFACTURING	POWER & UTILITY	RETAIL WHOLESALE FOOD & BEVERAGE	TRANSPORTATION
GENERAL PUBLIC THIRD PARTY LIABILITY	39%	42%	7%	56%	46%	40%	40%	43%
PROPERTY	50%	28%	16%	5%	51%	58%	56%	22%
WORKERS' COMP EMPLOYERS LIABILITY	28%	40%	7%	14%	48%	26%	37%	29%
PROFESSIONAL LIABILITY	15%	22%	9%	56%	5%	14%	5%	4%
OTHER	28%	6%	27%	11%	10%	7%	11%	22%
AUTO LIABILITY	30%	28%	7%	10%	34%	21%	27%	31%
PRODUCTS LIABILITY	7%	16%	1%	2%	37%	19%	14%	6%
MEDICAL MALPRACTICE LIABILITY	2%	0%	0%	39%	1%	0%	2%	2%
EXCESS LIABILITY	7%	6%	2%	16%	8%	21%	3%	18%
PROPERTY MARINE	11%	6%	1%	1%	15%	23%	6%	8%
FINPRO E&O	17%	2%	4%	6%	5%	0%	2%	2%
FINPRO D&O	11%	2%	3%	6%	6%	9%	3%	0%
ENVIRONMENTAL	4%	8%	0%	3%	13%	7%	6%	2%
AVIATION	2%	0%	1%	5%	3%	12%	2%	4%
UMBRELLA LIABILITY	7%	0%	1%	7%	3%	2%	2%	2%
FINPRO FIDELITY	2%	0%	4%	0%	3%	0%	2%	2%
FINPRO FIDUCIARY	0%	0%	2%	1%	5%	5%	3%	0%
MARINE LIABILITY	0%	0%	1%	0%	1%	14%	2%	2%

Remarkably, for many years the same top eight industries have continued to hold the same top spots for captive use. However, as we see in Figure 1, we have seen both growth and change when premium volume by industry is considered instead. Although financial institutions continue to come in first, we find that industries such as communications, media and technology (CMT) and life sciences organizations gain a much stronger footprint in the captive arena when looking at premium volume as opposed to number of captives. This is due to the risk factors and complex programs that CMT companies are forced to manage. Since these organizations tend to be very large, diverse, and global, a captive serves as a central-processing vehicle for their usage. Similarly, life sciences companies have significant volumes of premiums and capital within their captives, resulting from the need for product liability, product recall, and other lines of coverage.

Out of 1,109 captives managed by Marsh, there are on average, three lines of coverage in each; however, this can vary significantly by industry. For example, financial institution captives write an average of one and a half lines, while the food and beverage industry captives write an average of five coverage lines.

This year we will focus on the top eight industry sectors separately based on the number of captives and industry captives by premium volume (see Figure 1).

Figure 3 below shows how diverse captive expense ratios are by industry. Keep in mind that there are many factors that go into expense ratios such as consulting fees, loss control, and reinsurance — among many other elements. Figure 3 also shows how industries typically fare and is a broad benchmark to review in looking at your own expense ratio and the components of a captive's expenses. In general, captives are run at very low costs and captive owners cite that the captives end up paying for themselves. The reason why manufacturing expense ratios trend higher is that many times loss control, safety and engineering are part of the expenses. Furthermore, construction has similar expenses and fronting fees on contractor-controlled programs.

FIGURE 3 Expense Ratios for Captives by Industry
Source: Marsh's Benchmarking Survey Analysis

INDUSTRY	EXPENSES TO PREMIUM RATIO
COMMUNICATIONS, MEDIA, AND TECHNOLOGY	1.45%
CONSTRUCTION	5.12%
FINANCIAL INSTITUTIONS	3.02%
HEALTH CARE	3.93%
MANUFACTURING	4.12%
POWER AND UTILITY	1.32%
RETAIL/WHOLESALE	2.38%
TRANSPORTATION	3.35%
AVERAGE FOR ALL INDUSTRIES	2.83%

FINANCIAL INSTITUTIONS (FI)

The FI industry is the largest user of captives worldwide, writing US$20 billion of annual premium and holding a combined surplus in excess of US$35 billion. The premium generated by FI captives represents over half of all premiums benchmarked in this report.

There are a total of 269 FI captives, representing almost 25% of all captives managed by Marsh. Property lines and financial product coverage such as errors and omissions and directors and officers liability are most common. A significant difference found in FI captives in contrast with the other industries discussed later in this report is the number of lines covered per captive. FI institutions only write one to two lines of coverage on average, considerably less than the other top seven industries. Approximately 57% of FI captives are owned by public companies, and 16% are owned by nonprofits. Of the FI captives, 81 are owned by Fortune 500 companies, which is significantly more than all other industries, comparatively.

About 30% of FI captives write third-party business. Generally, customer business such as credit disability, customer business, and other credit products are lines utilized by these captives. Another favored line of coverage with FI captives is extended auto warranty business, while more exotic lines are also increasingly being explored.

Captives owned by FIs have historically selected Bermuda, Vermont, Dublin, and South Carolina as their preferred domiciles. Of the 92 FI captives domiciled in the US, 79% are treated as insurance companies for US federal income tax purposes and are, therefore, able to benefit from certain tax efficiencies such as the accelerated tax deduction that results from holding casualty reserves within an insurer. This deduction can typically produce a net present value savings of at least 3% of the annual expected loss, translating to added economic savings for these institutions.

FIGURE 4 Financial Institution Industry by Domicile
Source: Marsh's Benchmarking Survey Analysis

DOMICILE	NUMBER OF CAPTIVES
BERMUDA	78
US - VERMONT	62
DUBLIN	49
US - SOUTH CAROLINA	16
LUXEMBOURG	14
CAYMAN	11
BARBADOS	8
US - HAWAII	5
ISLE OF MAN	4
SINGAPORE	4
US - NEW YORK	4
GUERNSEY	3
MALTA	3
US - DELAWARE	2
US - MICHIGAN	2
AUSTRALIA	1
LABUAN	1
SWITZERLAND	1
US - ARIZONA	1

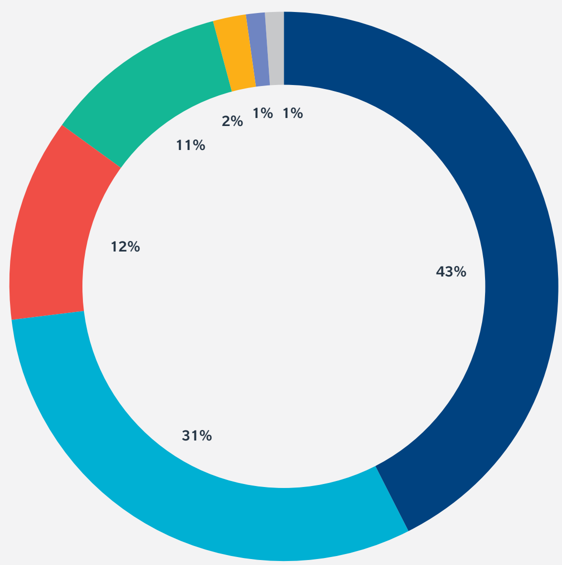
SPECIAL PURPOSE VEHICLES (SPVs)

Currently, Marsh manages 112 SPVs, 65 of which are ILS transactions, including indemnity, parametric, and life insurance SPVs used for financing of reserves specifically for term and universal life products. There are inherent capital relief reasons why a life insurance company would use such a structure. We encourage our FI clients to consider a SPV structure for various reasons, with the top benefit being more efficient use of capital.

Our connected and global network of offices, including Bermuda, Cayman, Dublin, Guernsey, Malta, and Singapore enables us to provide comparable management services in the majority of the recognized ILS domiciles.

Marsh Cayman managed the first-ever ILS transaction in 1996 and has, to date, managed in excess of 65 such transactions. Guy Carpenter, a fellow Marsh &

FIGURE 5 **SPVs by Domicile**
Source: Marsh's Benchmarking Survey Analysis



Another common reason FI companies own captives is for access to government-sponsored terrorism reinsurance schemes. Two of the most common programs accessed by captives are Pool Re in the United Kingdom and TRIPRA in the US. Of the US-based FI captives we manage, 15% use a captive to access at least one of these schemes and several provide limits of greater than US$1 billion. A key benefit of this activity to FI captive owners is that accessing these pools via their captive enables them to offer significant policy limits for NBCR terrorism and accomplish significant risk transfer of their terrorism exposures of up to 85% in the US.

McLennan Companies business, is routinely involved in these deals and assists the client, the SPV manager, Marsh, and finds investors for the ILS/CAT bond facility.

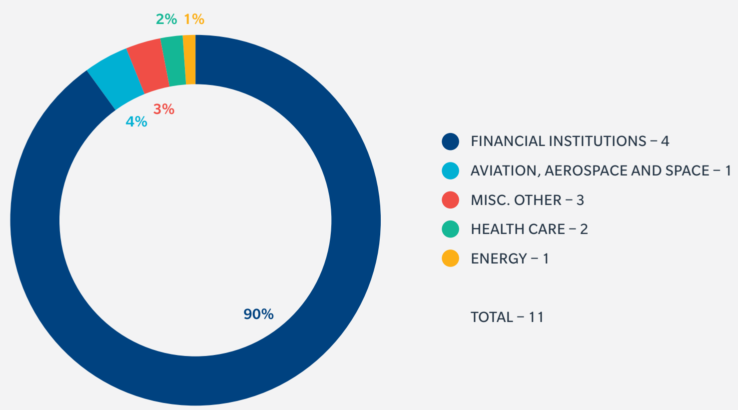
Typically, SPVs issue bonds for cash, which is then used to invest in a predefined asset (collateral) or class of assets, in a manner which is determined by the underlying transaction documents. The economic rationale for the deals varies, but will typically facilitate the release of working capital by institutions, the repackaging of existing investment instruments, and transfer of insurance coverage. This will be considered an efficient structure for an aircraft financing transaction or as an efficient structure to create a trade receivable program, among others. In each instance, the SPV is independent of both the originator (owner of the asset) and purchaser of the bonds. The benefit of issuing bonds is that the interest paid to the bond holders will be fully deductible against income earned by the SPV for tax purposes.

Most SPVs, though not all, are orphan entities, which means they do not form part of a larger group nor do the financial statements require consolidation into any other balance sheet.

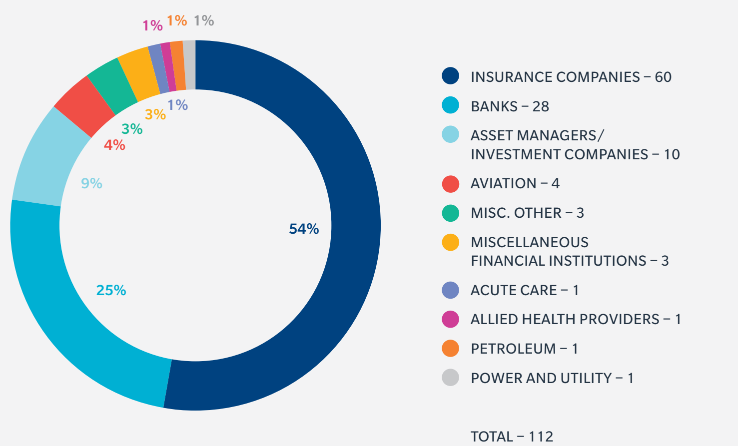
Insurance companies are now looking to the ILS market as an alternative to the traditional reinsurance market, as rates offered to capital market investors have been very competitive. It is possible that corporations will increasingly become buyers of ILS or alternative market products. If knowledge of these options is spread further into the currently soft insurance market, it could eventually translate into cost savings for insurance buyers globally due to competition.

FIGURE 6 **SPVs by Industry**
Source: Marsh's Benchmarking Survey Analysis

BY INDUSTRY



BY SUB SEGMENT



COMMUNICATIONS, MEDIA, AND TECHNOLOGY (CMT)

The CMT industry is the seventh-largest user of captives; however, it generates the second-largest amount of premium totaling US$3.2 billion, representing 8.3% of the total captive premiums written. CMT captives hold a combined surplus in excess of US$5.7 billion. These captives are typically domiciled in Bermuda, New York, Luxembourg, or Hawaii and write on average about four lines per captive. While 22% of CMT captives are owned by private companies, the large majority of CMT captives are owned by large public companies. General liability, property, auto, employers liability, and workers' compensation (WC) are coverages likely found in captives owned by companies in the CMT industry.

FIGURE 7 **CMT Industry by Domicile**
Source: Marsh's Benchmarking Survey Analysis

DOMICILE	NUMBER OF CAPTIVES
BERMUDA	10
US - NEW YORK	8
LUXEMBOURG	4
US - HAWAII	4
MALTA	3
US - UTAH	3
BARBADOS	2
GUERNSEY	2
US - VERMONT	2
CA - BRITISH COLUMBIA	1
CAYMAN	1
DUBLIN	1
SINGAPORE	1
SWEDEN	1
US - CONNECTICUT	1
US - LOUISIANA	1
US - NEW JERSEY	1

Of these captives, 24% are treated as "insurance companies" for federal tax purposes and are, therefore, able to benefit from certain tax efficiencies such as the accelerated tax deduction on retained reserves or the special small captive election under section 831(b). Of our CMT clients, 22% have their captives underwrite the risk of unrelated parties, thereby capturing potential underwriting profits or having the third-party business risk with their federal tax position.

Over the past two years, our captive advisory practice has performed over 130 captive studies. Some of the largest captive economic advantages were identified for clients in the CMT industry. The combined potential captive benefit that Marsh identified for clients in the CMT industry was US$10.5 million.

HEALTH CARE

Our clients entrust Marsh to manage 153 health care captives that write on average three lines of coverage each. Health care industry captives represent the second-largest utilizer of captives per industry. On the other hand, this industry accounts for approximately 7% of the total captive premium volume, totaling about US$2.8 billion in shareholder funds. General liability, medical malpractice, professional liability, and excess liability are the most common lines of coverage written by health care captives. Additionally, over the past six years, five significantly large health care cyber security breaches have occurred. Since health care companies must comply with Health Insurance Portability and Accountability Act (HIPAA) requirements, and are responsible for the confidentiality of medical records, social security numbers, salary information, and prescriptions, cyber risk liability coverage is becoming increasingly more popular in health care captives. This type of coverage is useful for companies looking to buy higher limits, as well as companies that are looking to access the reinsurance market.

Over 96% of health care parent companies are domiciled in the US, since non-US health care is generally nationalized. Health care captives are predominately domiciled in Cayman, but Vermont, Bermuda, and Hawaii tend to also be popular choices. Notably, 81% of companies owning captives in the health care industry are private companies, and about 72% are owned by nonprofit companies, such as hospitals and universities.

Most property and general liability policies exclude NBCR perils.

FIGURE 8 Health Care Industry by Domicile
Source: Marsh's Benchmarking Survey Analysis

DOMICILE	NUMBER OF CAPTIVES
CAYMAN	70
US - VERMONT	23
BERMUDA	22
US - SOUTH CAROLINA	7
US - ARIZONA	5
US - HAWAII	5
BARBADOS	3
GUERNSEY	3
US - TENNESSEE	2
US - UTAH	2
ISLE OF MAN	1

DOMICILE	NUMBER OF CAPTIVES
MALTA	1
SINGAPORE	1
SWEDEN	1
US - DELAWARE	1
US - DISTRICT OF COLUMBIA	1
US - KENTUCKY	1
US - MICHIGAN	1
US - MISSOURI	1
US - MONTANA	1
US - NEW YORK	1

As shown in Figure 8, most health care captives are domiciled in Cayman; however, nonprofit health care companies can benefit from setting up a new onshore captive to access TRIPRA for terrorism exposures for facilities in the US that generally self-insure this exposure. Most property and general liability policies exclude NBCR perils, so a major hospital or health system that suffers an NBCR loss would be self-insured; however, if they had a US captive accessing TRIPRA, this exposure could be backstopped by the US TRIPRA program up to 85% in 2015, and if reinsurance is purchased that retention could be reduced to zero. Consider patients in a hospital if there is a terrorist attack. Not only would there be a property claim, but there would be huge liability claims by patients, which are typically excluded by property policies. In this situation, a new onshore US captive would be required in order to avoid jeopardizing the "doing business" status of the captive for tax purposes, since a "branch captive" would not be optimal for various reasons.

For those clients where we have typically structured combined professional liability programs for facilities and voluntary attending physicians, Marsh has delivered economic savings of as much as 50% on standard market premiums with insurance program changes and the utilization of a captive.

RETAIL/WHOLESALE, FOOD, AND BEVERAGE (RWFB)

Marsh manages 83 captives in the retail/wholesale and food and beverage industries, which typically write general liability, property, workers' compensation, employers liability, and auto. Captives that are owned by parents in the RWFB industry write US$3.1 billion of premium and hold surplus in excess of US$17 billion. These captives benefit from certain tax efficiencies, as 30% are treated as "insurance companies" for federal tax purposes. There are a total of 30 captives owned by Fortune 500 companies in the RWFB industry.

Many of these captives are members of the Marsh-created Green Island Reinsurance Treaty (GIRT), which provides a captive with an appropriate and effective mechanism for risk distribution. The average age of our RWFB captives is between 10 and 25 years, demonstrating that a captive is a long-term strategy that can provide years of economic and noneconomic benefit to a parent organization.

While the retail/wholesale and food and beverage industries are discussed collectively, in some cases, it is important to distinguish the significant differences found between them in our study. While only representing about 2% of captives managed by Marsh, the food and beverage industry writes the largest number of lines per captives out of all industries included in our benchmarking study — five coverages. Out of the total 83 RWFB captives accounted for, food and beverage captives represent 20 of those captives. Out of the US$3.1 billion in premium written collectively, retail/wholesale contributes the majority, with US$2.5 billion in premium volume.

Retail/wholesale industry captives make up about 6% of all captives benchmarked, have the fourth-largest premium volume amount, and write an average of three lines of coverage per captive. Parent companies in the UK and France have a large presence in the retail/wholesale captive market. Typically, these captives are domiciled in Bermuda, Luxembourg, or Vermont. A quarter of retail/wholesale industry captives write third-party business. These captives are generally owned by public companies (60%).

FIGURE 9 **Retail/Wholesale Industry by Domicile**
Source: Marsh's Benchmarking Survey Analysis

DOMICILE	NUMBER OF CAPTIVES
BERMUDA	19
LUXEMBOURG	8
US - VERMONT	8
US - NEW YORK	5
GUERNSEY	4
US - HAWAII	4
DUBLIN	3
US - SOUTH CAROLINA	3

DOMICILE	NUMBER OF CAPTIVES
MALTA	2
BARBADOS	1
CAYMAN	1
ISLE OF MAN	1
SINGAPORE	1
SWITZERLAND	1
US - ARIZONA	1
US - NEW JERSEY	1

"GIRT provides a highly diversified portfolio of well managed risks to our captive, allowing us flexibility to effectively and substantially increase the captive's capacity to underwrite highly desirable third-party and related-party business."

NICK PARILLO
Vice President of Global Insurance, Ahold

MANUFACTURING

The third-largest industry to utilize captive insurance companies is the manufacturing industry, which comes in sixth in total premium volume written. Collectively, the industry writes an average of about four lines of coverage per captive. Manufacturing captives generate US$1.3 billion in gross premiums, representing 3% of the total captive premiums written. Manufacturing companies have the second largest concentration of Fortune 500 companies that have implemented captives. Manufacturing captives generally include general liability, property, workers' compensation, employers liability, products liability, and auto in the lines they write.

Like most industries, manufacturing parent companies are predominately domiciled in the US; however, the international presence of parent companies in Switzerland, the UK, France, and Luxembourg is significant. Bermuda, Dublin, and Luxembourg are popular captive domiciles, which encompass a large percentage of the 79 manufacturing captive domiciles managed by Marsh. Additionally, 29% of manufacturing industry captives are owned by private companies.

FIGURE 10 **Manufacturing Industry by Domicile**
Source: Marsh's Benchmarking Survey Analysis

DOMICILE	NUMBER OF CAPTIVES
US - VERMONT	23
BERMUDA	14
DUBLIN	12
LUXEMBOURG	7
ISLE OF MAN	3
SINGAPORE	3
US - NEW YORK	3
US - SOUTH CAROLINA	3
BARBADOS	2
GUERNSEY	2
SWITZERLAND	2
US - HAWAII	2
US - MISSOURI	2
US - CONNECTICUT	1

TRANSPORTATION

The transportation industry represents almost 5% of captive insurance companies and is comprised of 49 captives. Transportation captives generated US$933 million in gross premiums, representing 2.4% of the total captive premiums written. The average transportation captive writes four lines each, most notably, general liability, auto, workers' compensation, and employers liability. Private companies represent 53% of captives owned in the transportation industry and a surprising 16% are nonprofit entities. Additionally, 22% of transportation companies that own captives write third-party business, which is typically general liability and nonemployed truckers liability, and cargo insurance, among others.

A little more than half of transportation parent companies benchmarked are headquartered in the US, while Germany, Canada, Sweden, and Switzerland comprise the majority of the remaining captives.

It is important to note that unlike many of the other industries benchmarked, there is significant diversification in terms of captive domicile location. Bermuda, Dublin, South Carolina, Cayman, Luxembourg, and Vermont are all relatively evenly represented in the division of domicile selection.

FIGURE 11 Transportation Industry by Domicile
Source: Marsh's Benchmarking Survey Analysis

DOMICILE	NUMBER OF CAPTIVES
BERMUDA	8
DUBLIN	8
US - SOUTH CAROLINA	6
CAYMAN	4
LUXEMBOURG	4
US - VERMONT	4
MALTA	3
BARBADOS	2
US - NEW JERSEY	2
CANADA - BRITISH COLUMBIA	1
GUERNSEY	1
SINGAPORE	1
SWEDEN	1
SWITZERLAND	1
US - HAWAII	1
US - MISSOURI	1
US - NEW YORK	1

POWER AND UTILITIES

Generating US$854 million in gross premiums and representing 2.2% of the total captive premiums written, the power and utilities industry is the eighth-largest user of captive insurance companies. Marsh manages 43 power and utilities captives, writing an average of approximately four lines per captive, 10 of which are owned by Fortune 500 companies. Almost 60% of all power and utilities captives write property coverage. General liability, workers' compensation, employers liability, transmission and distribution, excess liability, and marine cargo are also common lines covered by power and utilities captives. The power and utilities industry tends to be a very highly regulated industry. Captives have continued to be an asset to their insurance programs' efficiency because their level of regulation is much less burdensome than public utility regulators are and these companies are already used to strict regulation. The captives of power and utilities companies tend to be profitable and also retain a larger proportion of their earnings than other industry groups.

Parent companies in the power and utilities industry are found in the US, UK, Germany, and Belgium and they tend to domicile their captives in Bermuda, Vermont, Isle of Man, and Malta. Only 5% of power and utility industry captives write third-party business. Private companies own 35% of the captives managed by Marsh and 12% of power and utilities industry captives are owned by nonprofit entities.

CONSTRUCTION

The construction industry, an expanding industry segment, has always utilized captives for global risks such as property, builders risk,

FIGURE 12 Power and Utilities Industry by Domicile
Source: Marsh's Benchmarking Survey Analysis

DOMICILE	NUMBER OF CAPTIVES
BERMUDA	10
US - VERMONT	6
ISLE OF MAN	5
MALTA	5
LUXEMBOURG	4
CAYMAN	3
US - HAWAII	3
BARBADOS	2
DUBLIN	2
GUERNSEY	2
US - SOUTH CAROLINA	1

workers' compensation, and most commonly packaged contractor-controlled insurance programs (CCIPs) and owner-controlled insurance programs (OCIPs). This provides for greater control and cost savings over each subcontractor providing for and obtaining its own coverage. At an average of about three lines per captive, general liablity, property, workers' compensation, employers liability, professional liability, and auto are the most likely lines to be written by a construction industry-owned captive.

Captives in the construction industry are widely used to provide formal evidence of insurance to support bid figures, when needed. It is also a means of obtaining access to TRIA for catastrophic insurance protection for terrorism risk at no cost to the captive owner.

Only 8% of the captives included some sort of third-party risk in their programs. Over half of all construction companies owning captives are public, but only three are owned by Fortune 500 corporations.

Australia is the second largest domicile of construction parent companies. Vermont, Bermuda, and Luxembourg, however, represent the typical domicile choices used by many industries.

LIFE SCIENCES

It is important to note that while captives may be less prevalent in the life sciences industry, they tend to generate a significant amount of premium in proportion to their usage. In fact, they are 16th in line in terms of captive utilization by parent company industry, with only 20 captives, yet produce the fifth-largest amount of premium volume. The need for product liability, product recall, clinical trials, and other lines of coverage account for the high volumes of premium and capital within life sciences captives.

Well over half of the captives owned by life sciences companies write casualty, as well as products liability insurance, at an average of about three lines of coverage each. Other common lines written include property, auto, workers' compensation, terrorism, and professional liability. Approximately 80% of the parent companies that own these captives are public companies and about 15% of their captives write third-party business. There are six Fortune 500 companies that own captives in the life sciences industry. It is noteworthy to point out that life sciences captives' expense ratio is less than 1%, on average.

FIGURE 13 Life Sciences Industry by Domicile
Source: Marsh's Benchmarking Survey Analysis

DOMICILE	NUMBER OF CAPTIVES
BERMUDA	8
US - VERMONT	3
DUBLIN	2
US - HAWAII	2
BARBADOS	1

DOMICILE	NUMBER OF CAPTIVES
FEDERATED STATES OF MICRONESIA	1
GUERNSEY	1
LUXEMBOURG	1
US - MISSOURI	1

We are finding that analytic tools, including Marsh's Marsh Analytics Platform (MAP) product, are helping our clients assess the cost efficiencies of insurance programs, and many are utilizing tools such as Marsh's insurance optimization modeling to measure captive funding needs or increase captive funding when the insurance market appears inefficient. We are finding that life sciences companies are extremely interested in analytics and are using them to drive their captive programs.

With the continued regional regulatory burdens placed on pharmaceutical companies (i.e., drug sponsors for clinical trial insurance coverage), many seek to utilize their captives by engaging an insurance "fronting" company, backed by the captive surplus as a cost efficient manner to satisfy insurance evidence requirements of local medical ethic committees.

As these organizations seek higher growth opportunities in emerging markets (life sciences industry growth projection: US 1-3%, EU (-1) to 2% and emerging 11-14%), we foresee many will utilize captives for managing cost allocations via deductible-funding mechanisms.

NONTRADITIONAL LINES OF COVERAGE

FIGURE 14 **Nontraditional Coverages (Top Eight Industries)**
Source: Marsh's Benchmarking Survey Analysis

	COMMUNICATIONS, MEDIA & TECHNOLOGY	CONSTRUCTION	FINANCIAL INSTITUTIONS	HEALTH CARE	MANUFACTURING	POWER & UTILITY	RETAIL/ WHOLESALE	TRANSPORTATION
CRIME	4%	0%	4%	3%	8%	0%	11%	4%
MEDICAL STOP LOSS	0%	6%	1%	5%	8%	2%	6%	0%
POLITICAL RISK	9%	0%	1%	0%	1%	2%	2%	0%
TRADE CREDIT	7%	6%	2%	0%	6%	0%	8%	2%
CYBER RISK LIABILITY	2%	0%	2%	4%	3%	0%	2%	0%
CONTRACTOR, VENDOR	2%	2%	1%	1%	1%	0%	3%	14%
EXTENDED WARRANTY	4%	2%	0%	1%	6%	2%	6%	0%
SURETY	2%	4%	1%	0%	1%	2%	3%	2%
HIGH-EXCESS COVERAGES	2%	2%	0%	1%	1%	0%	0%	4%
CREDIT LIFE	0%	0%	2%	0%	0%	2%	2%	0%
MULTINATIONAL POOLING OF GLOBAL HEALTH	2%	0%	1%	1%	1%	0%	2%	0%
US LONG-TERM DISABILITY	2%	0%	1%	1%	1%	0%	0%	0%
CREDIT DISABILITY	0%	0%	1%	0%	0%	0%	2%	0%
GAP INSURANCE	0%	2%	1%	1%	0%	0%	0%	0%
SUPPLY CHAIN (BI/CBI)	2%	0%	0%	0%	0%	0%	0%	0%

COVERAGE	2013	2014	CHANGE	CHANGE (%)
CRIME	40	44	4	10.0%
MEDICAL STOP LOSS	34	36	2	5.9%
POLITICAL RISK	18	33	15	83.3%
TRADE CREDIT	32	34	2	6.3%
CYBER RISK LIABILITY	17	20	3	17.6%
CONTRACTOR, VENDOR	15	21	6	40.0%
EXTENDED WARRANTY	17	18	1	5.9%
SURETY	16	17	1	6.3%
HIGH EXCESS COVERAGES	8	11	3	37.5%
CREDIT LIFE	11	12	1	9.1%
MULTINATIONAL POOLING OF GLOBAL HEALTH	7	7	0	0.0%
US LONG-TERM DISABILITY	10	9	-1	-10.0%
CREDIT DISABILITY	8	7	-1	-12.5%
GAP INSURANCE	7	6	-1	-14.3%
SUPPLY CHAIN (BI/CBI)	2	3	1	50.0%

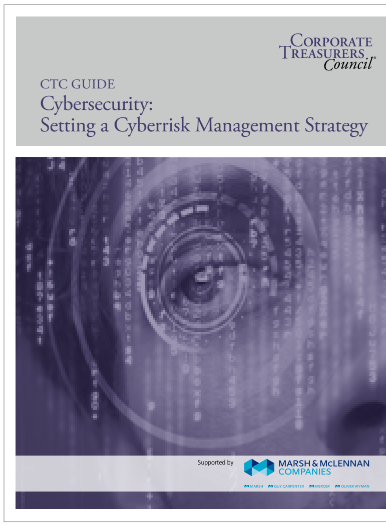
It’s not a matter of “if” your company is going to be the target of a cyber-attack, but rather, “when.”

From 2013 to 2014, nontraditional coverage in captives grew by 11%, with crime coverage leading the ranking with 44 captives writing this line of business. It is expected that the number of captives underwriting nontraditional coverage risks will grow as captives develop within the middle market, due to the large catastrophic lines of coverage underwritten by small captives and the need for midsize clients to self-insure certain risks, all making them natural fits for a captive. We have also noticed traditional captives are more eager to expand their business by including lines that were previously uninsured. By funding for significant, unknown future losses in a captive, the parent company gains budget stability and protects its balance sheets and profits and losses from spikes due to the volatility of uninsured risks.

There are two nontraditional coverages that have been trending upward in the last five years, namely political risk and trade credit. We see that political risk, or foreign investment risks, are being included in captives around the world, especially in captives in the communications, media, and technology industry, where 9% of the companies included some political risk coverage in their captives. This type of program is used to protect companies that export or have operations in foreign countries, mostly in emerging markets, against the volatility and risk derived from the interaction with those markets. Political risk exposures for US and non-US companies are on the rise, as we see companies doing more business in the Middle East, North Africa, and Latin America. Political risk written in a captive, either with or without reinsurance, can add much value. For example, a captive can write multiyear contracts, with customized terms and conditions and obtain reinsurance protection above a certain threshold from a carrier. Political risk can be a complimentary coverage to TRIPRA in the US for global entities. Since political risk coverage looks at the parent company’s balance sheet and provides protection to that balance sheet, a captive can write a parent risk without needing to do business in each local country, thereby eliminating concerns regarding the admitted and nonadmitted rules in each country.

From the trade credit perspective, there are various reasons why an organization would include this coverage in a captive: It can allow an enterprise to be more strategic as to where they can enter a market, so that they can feel more confident that their outstanding accounts receivables will be paid, or that they will be covered by real insurance. A captive can act as a mechanism to access the commercial market, or even assume a high retention, at which point commercial coverage can apply as excess over that.

Another force shaping the growth of nontraditional lines is the appearance of “new” needs in the different industries. A good example of this is cyber risk (with 17.6% growth from 2013 to 2014). In today’s interconnected world, it’s not a matter of “if” your company is going to be the target of a cyber-attack, but rather, “when.” Despite this reality, companies are still behind on implementing financing strategies, including the use of a captive in order to reduce the possible impact of a breach.



In the CTC Guide to Cybersecurity: Setting a Cyber Risk Management Strategy supported by Marsh, one of the tasks described to effectively mitigate cyber risk is to manage the remaining risk through insurance and self-insurance. Regardless of how much a company is spending to protect its most valuable data, there is still a chance that security will be breached. Companies will be forced to react to this risk. We are seeing companies that have historically bought cyber insurance at higher limits, with newer entrants required to take on higher retentions and utilize a front in many countries both of which fit nicely with a global cyber captive strategy.

Many companies are utilizing analytics to determine their risk-based capacity (RBC) and then using data gathered by the market to predict a cyber-attack, predict the amount of loss, and determine “how” to buy insurance. We work with companies to determine the optimal way to retain risk, use a captive to participate in that risk, and transfer risk.

WHY ANALYTICS?

Risk management has quickly shifted from limited data and an insurance focus to big data and holistic risk analytics. With this shift, the demand for analytics-based decision-making support tools continues to grow.

With the confluence of changing markets, increasingly complex regulations, and evolving technology, firms have been investing in data analytics to help them make critical risk decisions. Having completed hundreds of risk-financing optimization (RFO) studies, our experience has yielded results with 10:1 returns on investment and 5-15% cost savings.

Marsh's approach leads the way by combining data, technology, and analytics to evaluate risk and inform more strategic business decisions.

Essentially, Marsh Analytics Platform (MAP) allows companies to lower their cost of risk. This, coupled with the use of a captive to finance and retain risk, equals a better bottom line for the parent company.

TERRORISM

It is surprising to find that many captives that could access a terrorism program, actually do not. For example, in the US, of the 374 US captives, only 83, or 22% take advantage of the newly extended TRIPRA program, which essentially gives you free backstop, subject to recoupment provision, for excluded catastrophic coverages such as NBCR. Many companies and captive owners do not realize that most property TRIPRA coverage is only for "conventional" perils and not for excluded perils such as NBCR. We challenge you to ask your property brokers to investigate if a captive for TRIPRA could provide a "backstop" to your property and/or general liability exposures for this significant risk.

Further, other countries also have terrorism pools or schemes and it is interesting to note the low level of participation, something that all companies should constantly be driving risk management to investigate and explore.

FIGURE 15 CAPTIVES ACCESSING TRIPRA BY PARENT COUNTRY
Source: Marsh's Benchmarking Survey Analysis

PARENT COUNTRY	CAPTIVES ACCESSING TRIPRA	%
UNITED STATES	83	89%
FRANCE	3	3%
IRELAND	2	2%
UNITED KINGDOM	2	2%
CANADA	1	1%
GERMANY	1	1%
VENEZUELA, BOLIVARIAN REPUBLIC OF	1	1%
GRAND TOTAL	93	100%

Vermont, the largest US domicile, and New York, a high-profile terrorist attack city with captive legislation, are high on the list of captives accessing TRIPRA in the US.

FIGURE 16 US Captives Accessing TRIPRA by Domicile and Industry (Captives and Branch Captives)
Source: Marsh's Benchmarking Survey Analysis

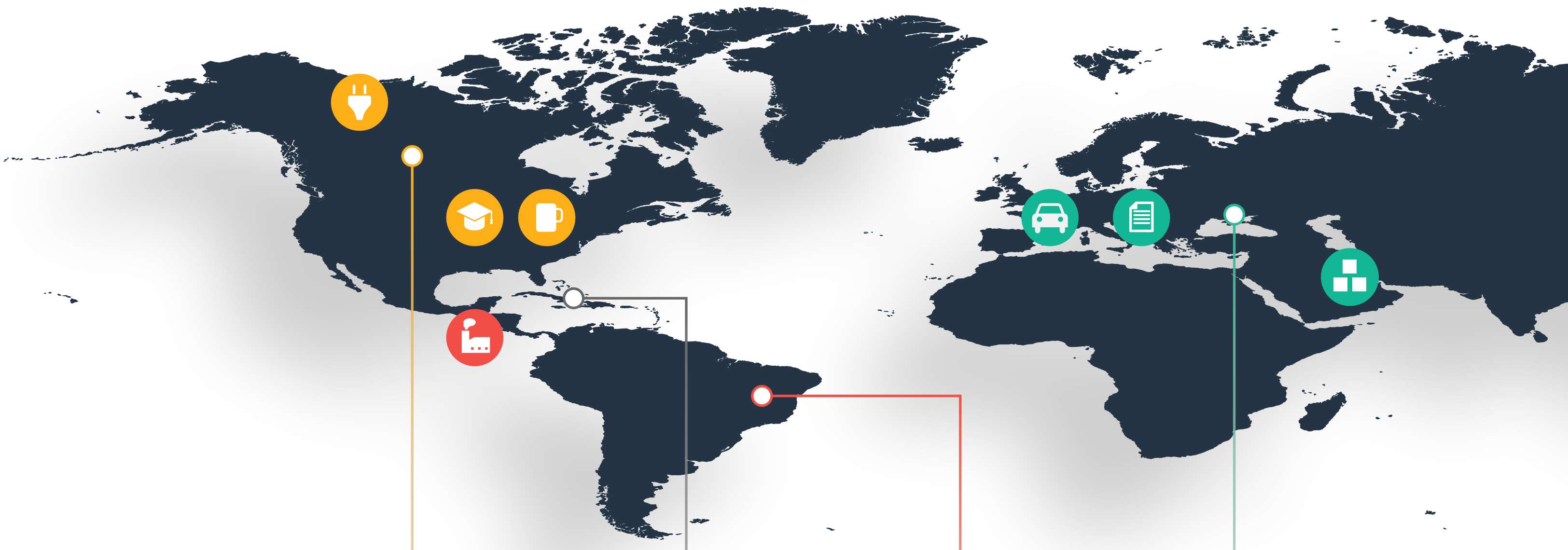
DOMICILE

%	Domicile
46%	US - Vermont – 43
14%	US - New York – 13
8%	US - South Carolina – 7
5%	US - Missouri – 5
4%	Bermuda – 4
4%	US - New Jersey – 4
4%	US - Utah – 4
3%	US - Hawaii – 3
2%	US - Michigan – 2
1%	Barbados – 1
1%	Luxembourg – 1
1%	US - Arizona – 1
1%	US - Connecticut – 1
1%	US - Louisiana – 1
1%	US - Nevada – 1
1%	US - Tennessee – 1
1%	US - Texas – 1
100%	Total – 93

PREMIUMS

%	Industry
15%	Communications, Media, and Technology – 14
11%	Financial Institutions – 10
11%	Manufacturing – 10
9%	Transportation – 8
8%	Retail/Wholesale – 7
6%	Chemical – 6
5%	Real Estate – 5
4%	Construction – 4
4%	Energy – 4
4%	Life Sciences – 4
4%	Power and Utilities – 4
4%	Professional Services – 4
3%	Food and Beverage – 3
3%	Sports, Entertainment and Events – 23
2%	Health Care – 2
1%	Automotive – 1
1%	Aviation, Aerospace and Space – 1
1%	Mining, Metals, and Minerals – 1
1%	Misc. Other – 1
1%	Other Services – 1
100%	Total – 93

A WORLD OF CAPTIVES: KEY STATISTICS AND CASE STUDIES BY REGION



	NORTH AMERICA	CARIBBEAN	LATIN AMERICA	EMEA
MARSH-MANAGED CAPTIVES DOMICILED IN THE REGION	376	416	0	277
GROSS PREMIUM PAID TO CAPTIVES	$21B	$13B	–	$3B
CAPTIVES OWNED BY COMPANIES FROM THE REGION	678	49	11	315
GROSS PREMIUM PAID BY PARENT COMPANIES	$31B	$1B	$88M	$5B

ASIA-PACIFIC

40

$466M

56

$528M

CASE STUDIES

NORTH AMERICA

Energy – Canada

Challenge: Canadian company had grown substantially over time and had diversified geographically. Management felt that the historical risk appetite was too conservative and wanted to take advantage of their strong ability to manage risk.

Solution: Barbados captive that allowed parent to increase its risk retention according to its risk appetite and substantially reduce external insurance premium spend. Client was able to reduce external insurance premium spend by 25%, tie the captive strategy into the organizational goal of continuous improvement of risk management, and align corporate and divisional appetites for key insurable risk.

Higher Education – United States

Challenge: Client struggled with finding appropriate carriers for general liability and directors and officers (D&O) coverage and wanted a long-term approach to control their defense.

Solution: University was able to find reinsurers, create tailored customized policies, and was able to generate premium savings through the use of a captive.

Beverage Distribution – United States

Challenge: Company had many uninsured exposures for which it wanted to build a platform to fund for risks.

Solution: Nevada-domiciled small captive created and adequately capitalized for uninsured environmental, product recall, accidental contamination, and terrorism (NBCR) with significant economic savings.

LATIN AMERICA

Manufacturing/Textile – Mexico

Challenge: Client perception about high-market cost for its property program and good loss record combined with the client´s appetite for higher retention led them to question their current insurance program.

Solution: We found substantial premium credits when the retention was increased. With that starting point, the result was a single parent captive insuring the first layer of the program above the deductible. The company benefited from the premium credits and its efforts to control losses. The captive forced them to be more disciplined and have better control of their risk.

EMEA

Insurance – Luxembourg

Challenge: Captive accumulated a significant amount of Equalization Reserve (ER) over the past underwriting years, which enabled it to meet the upcoming Solvency II requirements, as ER is considered a quasi-equity item eligible to cover the Minimum Capital Requirements (MCR) and Solvency Capital Requirements (SCR). Based on the last SCR calculations from the 2013 financial accounts, the company's SCR was redundant.

Solution: Due to this excess of SCR coverage, the company used this advantage for better negotiating, even cancelling some of its collateral guarantees used to cover open claims reserves, as requested by their ceding companies in the past. The cancellation of the collateral guarantees were mainly done on a case-by-case basis with treaties having some low engagements. This generated savings (no more guarantee fees), which saved time to negotiate these guarantees and increased borrowing power, as credit lines were no longer used up.

Car Rental – United Kingdom

Challenge: Client hoped to gain greater control of its collision damage waiver product and capture a greater share of its economic value where the client currently sells a third-party insurer's product and receives a basic commission.

Solution: Captive was established that used their in-house call center and IT systems to gain greater control of product design and pricing and capture profit currently leaked to commercial insurers. Client was able to reduce program expenses, projecting an increase in the client revenue by over 50%, well over the current "commission only" arrangement.

Diversified – Abu Dhabi

Challenge: Inefficiencies in the insurance program.

Solution: With the guidance of Marsh Captive Solutions, the company established a single parent captive that acts as a reinsurer on energy, construction, and business interruption risks, taking ceded risk from the countries in which their subsidiaries operate. This allowed them to directly access the reinsurance market, especially in Asia.

CAPTIVE OWNERS

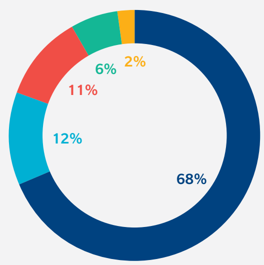
Marsh Captive Solutions manages 228 captives owned by Fortune 500 companies. Although it is commonly known that most Fortune 500 companies have a captive, of those we manage, 115 own at least two captives for various reasons, ranging from segregating various geographies, needing access in Bermuda, direct-writing ability in the EU, certain international tax efficiencies, and other insurance reasons. We encourage you to determine if a second captive for strategic planning reasons could benefit your global and risk management or enterprise risk management (ERM) initiatives.

FIGURE 17 Captives Owned by Fortune 500 Companies By Industry
Source: Marsh's Benchmarking Survey Analysis

INDUSTRY	NUMBER OF CAPTIVES
FINANCIAL INSTITUTIONS	81
MANUFACTURING	23
RETAIL/WHOLESALE	20
CHEMICAL	16
COMMUNICATIONS, MEDIA, AND TECHNOLOGY	14
ENERGY	10
FOOD AND BEVERAGE	10
POWER AND UTILITIES	10
HEALTH CARE	8
LIFE SCIENCES	6
TRANSPORTATION	6
OTHER SERVICES	5
AUTOMOTIVE	4
CONSTRUCTION	3
MINING, METALS, AND MINERALS	3
AVIATION, AEROSPACE, AND SPACE	2
MISC. OTHER	2
SPORTS, ENTERTAINMENT AND EVENTS	2
AGRICULTURE AND FISHERIES	1
FORESTRY AND INTEGRATED WOOD PRODUCTS	1
REAL ESTATE	1
TOTAL	228

FIGURE 18 Captives by Parent Region
Source: Marsh's Benchmarking Survey Analysis

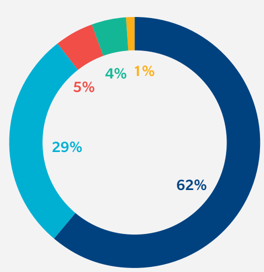
EXCLUDED IN US



- EMEA – 314
- ASIA PACIFIC – 57
- CARIBBEAN – 49
- CANADA – 28
- LATIN AMERICA – 11

TOTAL – 459

ALL CAPTIVES



- NORTH AMERICA – 678
- EMEA – 315
- ASIA PACIFIC – 56
- CARIBBEAN – 49
- LATIN AMERICA – 11

TOTAL – 1,109

When we analyze the parent region excluding US, we find the EMEA countries with 68% of the captives worldwide, followed closely by Asia Pacific and the Caribbean. Asia Pacific is becoming more expansive; therefore, we think Asia, in particular China, could be the next emerging market.

Surprisingly, Latin America only has 2% of the captive owners benchmarked. Latin America is facing an interesting change in terms of risk management. As an emerging market with sustainable growth in recent years, it has become more integrated and more sophisticated regarding risk-financing options and now has the perspective to understand and take advantage of the "positive" side of risk. Considering the size of the region and the different development levels of the countries, there are obviously some countries that are more advanced and open to analyzing new options and alternatives to leverage the total cost of risk for their companies. The global nature of some of the companies, and the need to be competitive in a global environment, has pushed them to review their peers' strategies in terms of risk optimization and the most efficient way to more actively participate in the risks they face. They are changing from a passive attitude to a more proactive approach, recognizing the opportunities they have when they understand and take more control of their risks. As such, more focus and introspection will be seen in Latin America in 2015, and growth will be expected in core countries such as Colombia, Mexico, Brazil, and Argentina.

DOMICILES

During 2014, we observed a slight decline in the trend of more onshore captives than offshore. This supports the fact that captives are versatile, ever-changing vehicles that are at the disposition of a company's risk management philosophy. In prior years, we saw that some captives were redomesticating , but as noted in this section, that trend has not increased over the past four years.

FIGURE 19 Global Captive Onshore and Offshore Domicile Comparison (Captives and Branch Captives)
Source: Marsh's Benchmarking Survey Analysis

	2014	2013	2012	2011
ONSHORE	53%	56%	55%	52%
OFFSHORE	47%	44%	45%	48%

"Our captives enable us to avoid purchasing insurance which we should not be purchasing. Our global balance sheet warrants much higher deductibles than our local operating units could stomach from a business perspective or a management performance measurement perspective so we use the captives to reinsure our insurers for the layer below what our global balance sheet can handle and above what our local operating units can handle."

DAVID OBRIEN
Vice President and Group Treasurer, McCain, Inc.

In 2014, we saw an influx of SPVs in established domiciles such as Bermuda, Cayman, and Dublin. As mentioned in the FI industry focus section, 90% of SPVs are owned by FI organizations and the fact that there were so many new formations of SPVs in 2014 supports the findings below that offshore domiciles still hold the largest number of captives worldwide.

There were eight total redomestications in 2014, down from 11 in 2013. Even more surprising is the fact that there were 16 redomestications in 2012, double the amount as in 2014, showing that there is no large scale continued redomestication trend.

Redomestications in 2014 showed a different trend in respect to offshore/onshore domicile election as well (Figure 20), with a total of six domestications from offshore domiciles to onshore domiciles as shown below.

FIGURE 20 Redomestications
Source: Marsh's Benchmarking Survey Analysis

ORIGINAL DOMICILE	NEW DOMICILE
BERMUDA	LUXEMBOURG
BERMUDA	LUXEMBOURG
BERMUDA	US - CONNECTICUT
BERMUDA	US - HAWAII
CAYMAN	US - DELAWARE
CAYMAN	US - VERMONT
ISLE OF MAN	LUXEMBOURG
US - VERMONT	US - MISSOURI

FIGURE 21 Gross Premium by Domicile
Source: Marsh's Benchmarking Survey Analysis

DOMICILE	NUMBER OF CAPTIVES	GROSS PREMIUM IN USD
BERMUDA	270	$7,787,948,774
US - VERMONT	192	$15,548,906,584
CAYMAN	110	$5,055,676,009
DUBLIN	98	$513,977,481
LUXEMBOURG	64	$1,477,123,615
US - SOUTH CAROLINA	48	$1,956,014,816
US - HAWAII	43	$864,427,908
GUERNSEY	40	$268,684,863
BARBADOS	34	$486,308,740
SINGAPORE	31	$385,412,508
US - NEW YORK	28	$1,960,280,748
MALTA	26	$550,414,319
ISLE OF MAN	23	$150,581,094
SWEDEN	14	$79,859,799
US - MISSOURI	14	$154,836,907
US - ARIZONA	11	$163,791,495
US - UTAH	8	$16,504,738
SWITZERLAND	7	$33,678,834
US - NEW JERSEY	6	$402,737,144
US - MICHIGAN	5	$12,750,334
LABUAN	4	$63,708,864
US - DELAWARE	4	$54,892,551
US - TENNESSEE	4	$0
AUSTRALIA	3	$0
CANADA - BRITISH COLUMBIA	2	$2,321,303
FEDERATED STATES OF MICRONESIA	2	$17,753,750
US - CONNECTICUT	2	$11,572,785
US - DISTRICT OF COLUMBIA	2	$3,647,484
US - NEVADA	2	$11,320,732
US - TEXAS	2	$0
ARUBA	1	$3,736,121
BRITISH VIRGIN ISLANDS	1	$2,096,408
US - KENTUCKY	1	$7,111,246
US - LOUISIANA	1	$44,186,255
US - MONTANA	1	$88,380,992
GRAND TOTAL	1109	$38,180,645,201

Bermuda, with 270 total captives, continues as the world leader when considering the number of captives per domicile, constituting 24% of the total benchmark. This domicile is followed by Vermont with 192 captives, equating to 17% of the distribution. The continued flexibility, pure experience, and developed infrastructure that these domiciles offer to captive owners are key factors to their growth and will continue to be in the future.

In contrast, if we analyze this in terms of premium volume, we see that Vermont becomes the world leader, as it accounts for 40% of the total premium received by Marsh-benchmarked captives. Bermuda takes second place with 24% of the premium volume of captives managed by Marsh.

A key development in 2014 was the establishment of captives in Guernsey (the world's fourth-largest domicile), of synthetic fronting structures in a longevity pension-swap arrangement. Although most defined benefit pension plans are closed, significant challenges remain in the management of legacy obligations. We expect to see further innovation involving captive structures in the pension arena in 2015. Marsh has in-house longevity pension expertise across Europe for our clients to access. Across Europe, employee benefits are one of the areas that companies are focusing on and exploring with captives and we expect to see many new formations around the coverage in 2015.

Non-US domiciles, such as Hong Kong, are slow to start with only three captives, but there is much talk about how pro-captive the Hong Kong regulators are. We think that this will open up opportunities for clients in Asia, especially in China, where companies are testing the waters and using captives in the National Oil Companies (NOC) space and for lines such as property and trade credit.

In the US during 2014, only one new domicile emerged — Ohio. Although it is not yet home to any captives, there is no shortage of captives domiciled in the US. Ohio now brings the total US domicile count to 35. North Carolina, Tennessee, Delaware, and Utah continue to grow rapidly, especially on the small-captive front. New Jersey and Connecticut captives are also growing at a steady pace. Long-time domiciles like South Carolina, Hawaii, and Vermont show progressive growth, but because of mergers and acquisitions some captives are liquidated and new ones formed, so the net growth has generally been minimal. A new US state is also considering captive legislation in 2015.

> "We began our captive in 2001 and write property, business interruption, and primary casualty. We value the flexibility of the captive as well as the reduced long-term cost of our insurance program. We also prefer to have as much control over our program design as possible and the captive allows us to leverage it when we are designing, negotiating, and implementing any particular line of coverage each year."

DENISE STRAKA
VP of Insurance, Calpine Corp.

CAPTIVE TAXATION

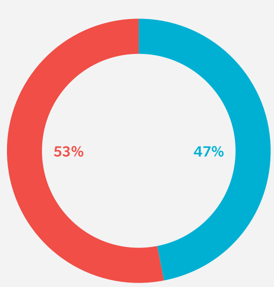
We live in a global economy where organizations are constantly looking for cost-saving techniques, as well as strategic and innovative processes that can help their businesses thrive. A captive provides a mechanism to realize all of these benefits. One way for an organization to measure their investment in a captive is by valuing what the tax efficiencies are. In many parts of the world, legislatures and lawmakers afford insurance companies special tax benefits because of the required and essential global offerings they provide, and captives can also realize these same benefits if they are established for valid business and risk management reasons.

Global companies, especially those that are domiciled in the EU, now have a significant opportunity to utilize captives because of the certainty around Solvency II. A non-US parent with operations in Europe, or a company in the US that owns one or two captives, can find significant economic advantages and business incentives to strategically plan the use of their captives. Because most non-US domiciles have a much lower tax rate than US companies, a captive can sometimes produce significant value. We encourage you to work with Marsh and your advisors to re-evaluate whether what was done in the past with your captive could be redesigned to take advantage of recent developments that could benefit your organization's long-term risk management goals.

Following the taxpayer win in the *Rent-A-Center* case in 2014, later in the year *Securitas Holdings, Inc.*, resulted in a second captive case decision favoring a taxpayer. The court held that payments made to a brother-sister insurance company were properly deductible as insurance premiums and provided precedential guidance for captive owners to review their captive tax facts patterns. We encourage our captive clients to discuss these cases with us, whether they already have a captive or are thinking about forming a new captive. The developments that have arisen from these tax court decisions are important to consider in determining whether your captive could be afforded similar tax benefits.

In last year's benchmarking report, we reported that roughly 37% of US companies with captives actually achieve insurance company tax status.

FIGURE 22 US Captive Owners That Treat Captives As An Insurance Company for Tax Purposes
Source: Marsh's Benchmarking Survey Analysis



This year in our analysis, and because of the results in the two taxpayer favorable cases, we again took a similar inspection but excluded all US-owned nonprofit organizations such as hospitals, churches, public institutions, and any other organizations exempt from taxation.

Figure 22 shows that 47% of all US for-profit companies owning captives treat their captives as insurance companies for federal income tax purposes. As one would expect, many of the companies who own these captives are large Fortune 500 or Fortune 1000 firms.

Approximately 36% of US companies that own offshore captives are treated as insurance companies and make a special 953(d) tax election. This makes a foreign captive a US company for tax purposes and provides powerful benefits, including the elimination of the Foreign Excise Tax (FET) at 4% or 1% and withholding taxes on interest, as well as providing intercompany transactions, and making the provisions of the Foreign Account Tax Compliance Act (FATCA) more administratively convenient.

An important element in qualifying for the federal income tax status of an insurance company, is which "test" a company qualifies under. A company must choose between the "brother-sister approach" or "the third-party writing approach." Figure 24 shows a relatively even spread between the "entity" approach and the third-party writing approach, or a hybrid approach.

Third-party risk in a captive can be viewed as providing diversity in a captive's risk profile in that it can mix up casualty or property lines of coverage with something

FIGURE 23 **Offshore Captives with 953(D) Tax Election**
Source: Marsh's Benchmarking Survey Analysis

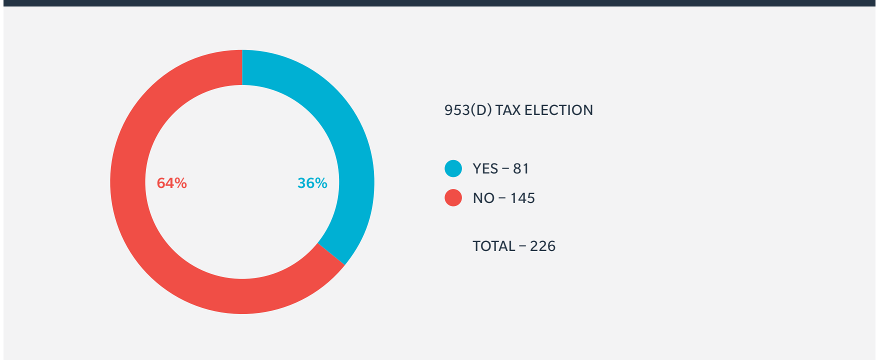


FIGURE 24 **US Parent-Owned Captive: Approach Used to Qualify As An Insurance Company**
Source: Marsh's Benchmarking Survey Analysis

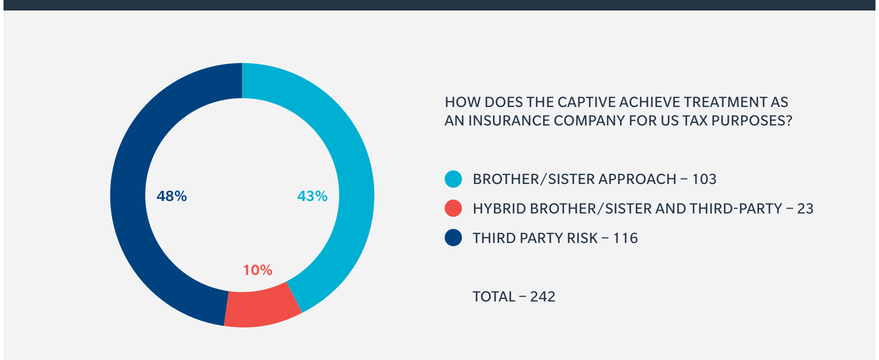
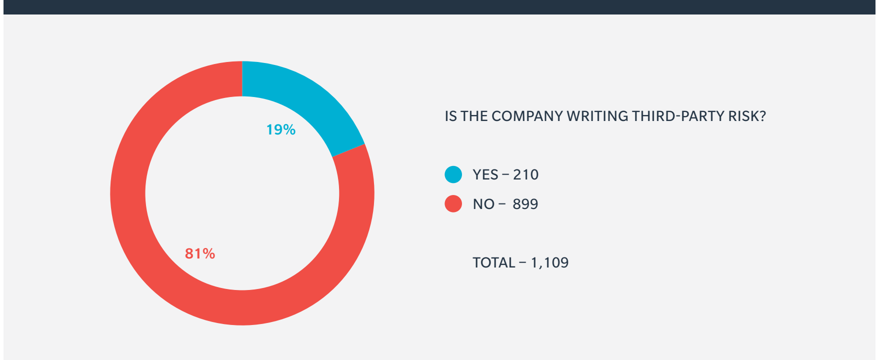
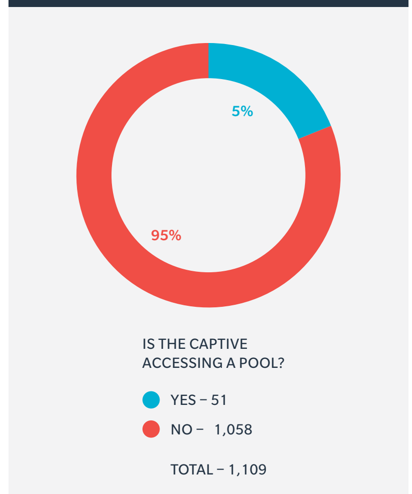


FIGURE 25 **Captives That Write Some Amount of Third-Party Risk**
Source: Marsh's Benchmarking Survey Analysis



much different. An example of this would be an extended warranty or a service contract that can not only act as a "profit center" for the captive, but can alleviate poor loss experience with some more predicable stable and profitable business. This is similar to the method large commercial insurance carriers use when they decide how much of what type of business they are willing to write or how much capacity they will put up with in any one line of coverage.

FIGURE 26 **Captives Accessing Risk Pools**
Source: Marsh's Benchmarking Survey Analysis



Third-party coverage in captives has increased one percentage point over last year, showing that companies are looking to expand either their own third-party coverage, looking to risk pools such as Marsh's GIRT mechanism, or entering into well thought out, conservative, and vetted pooling arrangements for small captives.

Of the third-party risks written in captives, Figure 27 shows what amount of unrelated risk captive owners are taking on. While some captives want to be conservative and only write up to 10-20% of unrelated risk, other captives want to squarely fall within IRS safe-harbor rulings of up to 50% unrelated risk, or potentially between 30-50% of third-party risk. Every few years, captive owners should review whether they should write third-party risk and what the benefits of doing so could entail. We have worked with clients to determine the type, and source of unrelated risk in a captive for a profitable approach, tax reasons, and diversification of a captive's business.

FIGURE 27 Percentage of Third-party Risk Premium
Source: Marsh's Benchmarking Survey Analysis

THIRD-PARTY RISK PREMIUM	NUMBER OF CAPTIVES	%
1 - 10%	17	8%
11 - 20%	11	5%
21 - 30%	8	4%
31 - 40%	13	6%
41 - 50%	7	3%
51 - 60%	4	2%
61 - 70%	5	2%
71 - 80%	3	1%
81 - 90%	5	2%
91 - 100%	137	65%
TOTAL	210	100%

An area of focus for medium-to-large companies should be voluntary benefits offered to employees. Namely, home, auto, and umbrella liability that is offered through payroll deduction coverages for employees. We have seen, in many situations, that carriers like Met Life, Travelers, and Lexington, to name a few, have entered into profit-sharing arrangements when the carrier writes this coverage. In some instances, quota share cessions of 20-50% can be reinsured to a captive and this coverage can be almost 100% profitable in many scenarios. This not only provides a mixed pool of risk, it adds to a captive's bottom line.

SMALL CAPTIVES

It is clear from the increase in the number of US captives being formed that middle market and smaller private and public companies are joining the captive market. Of the 1,109 captives included in our benchmarking report, less than 5% of them are small captives, taxed only on investment income. The number of small captives we manage grew by more than 100% last year. The industries that utilize small captives are diverse, with sports entertainment and events, agricultural organizations, and professional services being the top utilizers. However, various other industries equally use small captives either as a starting point to a more mature and growing captive or as risk management and business benefit vehicles.

Small captives can be thought of as enterprise risk management (ERM) risk captives and as such, one needs to take careful consideration in structuring the appropriate lines of coverage from property and TRIPRA risk, to cyber, environmental and also pandemic insurance and even accidental contamination, recall cover, and construction defect insurance.

Regarding small captives, we seek to work with our clients to develop the right captive strategy for them. This means working to validate the business and insurance drivers for forming the captive, pricing the premiums appropriately, justifying the need for placing the correct and strategic coverage within the small captive and, above all else, reviewing the risk-shifting and risk-distribution requirements and ensuring there is adequate capital in the captive. Not only have we reviewed competitor-managed captives and suggested changes, but we have actually recommended that our clients close down certain egregious captives and start over. We are currently looking to engage companies who are

FIGURE 28 Percentage of Small Captives By Industry
Source: Marsh's Benchmarking Survey Analysis

INDUSTRY	SMALL CAPTIVES
CONSTRUCTION	17%
TRANSPORTATION	13%
COMMUNICATIONS, MEDIA, AND TECHNOLOGY	10%
SPORTS, ENTERTAINMENT, AND EVENTS	10%
FINANCIAL INSTITUTIONS	7%
FOOD AND BEVERAGE	7%
HEALTH CARE	7%
PROFESSIONAL SERVICES	7%
AGRICULTURE AND FISHERIES	3%
CHEMICAL	3%
LIFE SCIENCES	3%
MANUFACTURING	3%
MISC. OTHER	3%
OTHER SERVICES	3%
REAL ESTATE	3%
GRAND TOTAL	100%

interested in exploring the feasibility of finding the right captive fit for them, whether that be a small captive, a group captive, or a traditional captive.

In early 2015, a proposal that could have put many "small captives" out of business was withdrawn before a Senate Finance Committee vote, and was replaced by one that will make small captives insurers even more financially attractive. Those surprising actions came just a week after the IRS added small captives to its Dirty Dozen list of "tax scams," stating that they allow some companies and wealthy individuals to avoid paying taxes while abusing the legitimate tax structure.

This new proposed legislation from the Senate Finance Committee now removes the 20% premium limit from a single policyholder. The maximum tax-deductible premium limit would be doubled to US$2.2 million, with that increase boosted annually in line with increases in the cost of living. With a higher contribution limit, small captives became more attractive.

POOLING

Captive risk pools have been around for decades, but recently these pools are getting a lot of attention from both regulators and the IRS in response to alleged abuses within these pools. Risk pools, by definition, must share risk, experience losses, be properly underwritten, funded, reviewed by actuaries, be certified by public accountants, and examined by state insurance regulators. With most small captive risk pools in existence today, the latter does not occur. It is no wonder why the IRS has clamped down on these transactions.

Marsh's risk pool, GIRT, has been in existence since 1997 and is a Marsh-managed casualty reinsurance arrangement, which provides captive insurance companies with risk diversification. Through a pooling mechanism, participating captives "share" their loss experience by transferring a portion of their risks in exchange for assuming a percentage share of the risks of other treaty participants. In addition to providing captives with risk diversification, participation in GIRT should result in a reduction in the variability of expected losses for individual members, as each member will be writing a smaller portion of a large pool of losses. Currently in its 19th underwriting year, GIRT is the largest, most diversified pooling facility of its kind, with estimated annual premiums of US$670 million in 2014. GIRT has grown to a level that enables it to accept participants of various sizes — including the very large — while still, typically, providing significant amounts of unrelated risk and risk diversification.

On a smaller scale, other risk pools should be examined for all of the elements listed above. To ensure a small captive is within the requirements set forth for captive tax status, owners should ask difficult questions of their captive managers and the pool administrators to ensure that they are operating at the highest efficiency possible. We have found that of the small captives we manage, only 17% rely on risk pools, a number expected to increase within the next year to include all captives formed in late 2014. The best approach for a small captive owner is to work with Marsh to examine the risk pool, determine what options are available and, if needed, exit from a detrimental pool.

FIGURE 29 **Approach to Achieve Insurance Status for Small Captives**
Source: Marsh's Benchmarking Survey Analysis

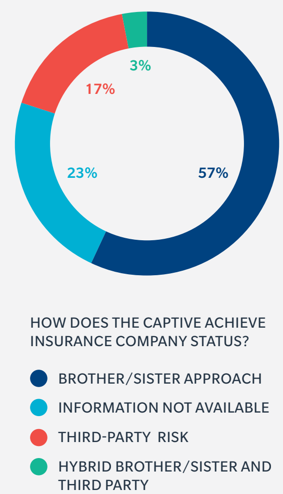
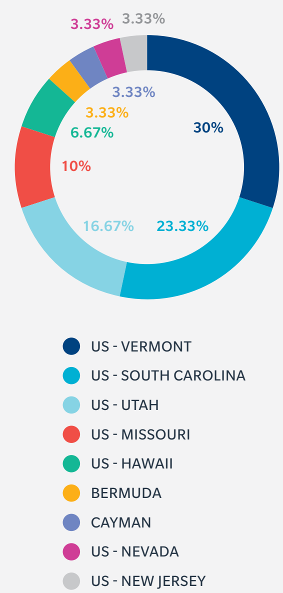


FIGURE 30 **Small Captives by Domicile**
Source: Marsh's Benchmarking Survey Analysis



CAPTIVE BASICS

FIGURE 31 **Traditional Lines of Coverage**
Source: Marsh's Benchmarking Survey Analysis

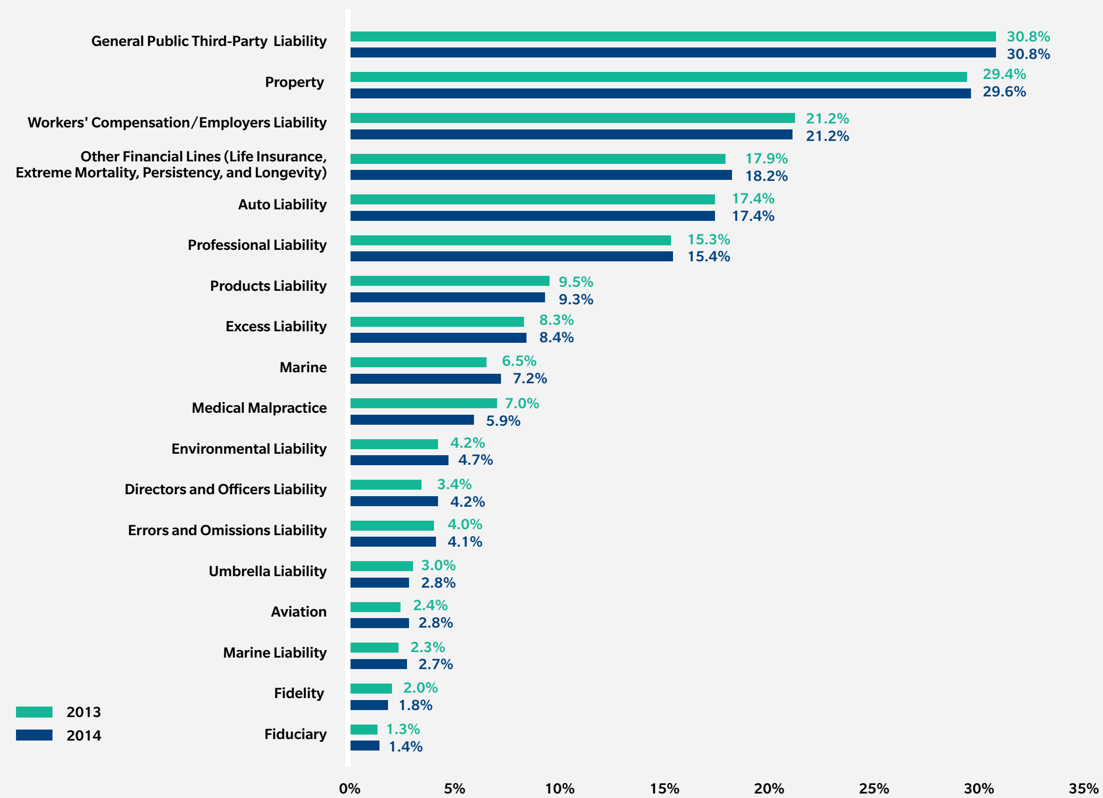


Figure 31 shows the traditional lines of coverage that captives are writing.

When considering traditional or nontraditional lines, the starting point is usually a risk-retention exercise. Analytics can help you in your analysis. In particular, the Marsh Analytics Platform (MAP) can complement a captive feasibility exercise. MAP combines data, technology, and actuarial tools into a new analytics-based risk management framework that yields a customized analysis, which can empower clients to make better risk-financing decisions.

Analytics is a key part of establishing and managing a captive. A significant number of clients are using data and analytics to inform their risk-financing decisions and to drive down their cost of risk. Analytics can play an important role in helping companies identify opportunities to retain risk and make optimal use of a captive, often yielding significant strategic and economic benefits.

Marsh's Analytics team works with clients to answer questions such as:

- How much risk can a company retain without significantly impacting its financials?
- Is a company adequately protected against risk within its corporate risk tolerance?
- Is a company getting a fair price for insurance?
- Can a company leverage a captive to gain strategic advantage and minimize the cost of risk?

FIGURE 32 **Captives by Net Premium Volume**
Source: Marsh's Benchmarking Survey Analysis

SIZE	NUMBER OF CAPTIVES	%
SMALL	344	31%
MEDIUM	181	16%
LARGE	107	10%
EXTRA-LARGE	291	26%
RUN-OFF	160	14%
LIQUIDATION	26	2%
GRAND TOTAL	1109	100%

Captive size based on net premiums as follows:

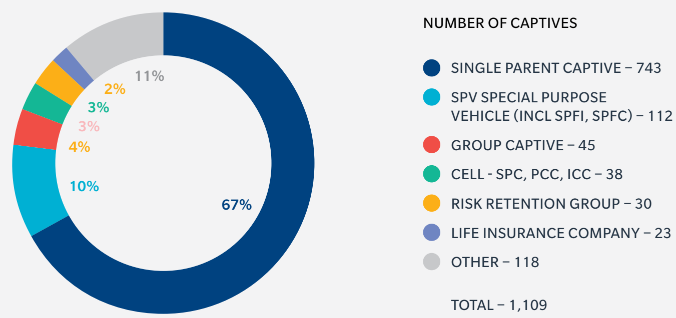
- Small – Less than US$1.2 million.
- Medium – US$1.2 million to US$5 million.
- Large – US$5 million to US$20 million.
- Extra Large – Above US$20 million.

When we take a look at captives by size, it is apparent that the two largest groups are small captives with 31% and extra-large with 26%. Small captives generate a net premium of less than US$1.2 million, while extra-large captives generate more than US$20 million. These are very powerful indications of what is happening with the captive landscape today.

The majority of small captives in Figure 32, of which most are not 831(b) captives, are owned by companies in the middle market. The fact that small-sized captives are the largest group in the distribution effectively demonstrates our theory that captives are no longer exclusive to Fortune 500 companies.

Single parent captives are still, by far, the most popular structure for a captive arrangement. An impressive 67% of the captives managed by Marsh benefit from the advantages in control, costs, and flexibility that a single parent structure provides.

FIGURE 33 **Type of Risk-Financing Vehicle**
Source: Marsh's Benchmarking Survey Analysis



THIRD-PARTY BUSINESS AND PROFIT CENTER BUSINESS

We observed a 1% increase in captives adding some form of third-party risk in their programs from 2013 to 2014. Two main reasons explain this: The capture of profits and the need to meet risk-distribution patterns that support tax deductibility for premiums paid to the captive.

The most common types of third-party coverage lines written are health, warranties, life insurance, and joint-venture business. In domiciles like Cayman and Bermuda, employee health benefits and multinational pooled benefits are commonly found in captives writing third-party business.

Pooling, as discussed in the taxation section, is another common method captives use to write third-party coverage. In a pooling arrangement, captives share their loss experience by transferring a portion of their risk to the pool and assuming the risks of other treaty participants. The most common coverages found in these pools are traditional lines of insurance such as workers' compensation, general liability, and auto. Many of Marsh's clients access GIRT, the Marsh-managed risk pool discussed previously in this report. Participation in pooling mechanisms has affected not only the amount of third-party risk a captive assumes, but also the diversification of a captive's risk profile.

We observed a 1% increase in captives adding some form of third-party risk in their programs from 2013 to 2014.

Since captives generally cannot transact business with third parties directly, another mechanism used by captives to include third-party business in their programs is to do so by way of a fronted captive. Most captives operate on a direct-writing basis (69%). A fronting arrangement is when an insurance policy is issued to an insured by an admitted "fronting" insurer, who then reinsures all or a portion of the risk to the captive. Almost one third of the captives benchmarked use a front. Bermuda concentrates a quarter of the fronted captives worldwide, followed closely by Vermont with 22% of fronted arrangements managed by Marsh. In addition, many captives domiciled offshore, such as Bermuda, need a front in order to comply with "admitted" coverage regulations in the parent company's country.

FIGURE 34 Captives Using a Fronting Carrier
Source: Marsh's Benchmarking Survey Analysis

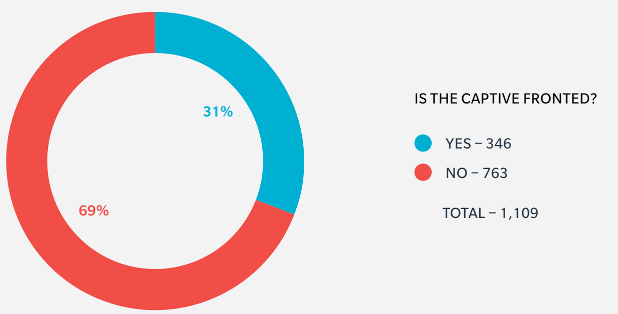


FIGURE 35 Captives Using a Fronting Carrier By Domicile
Source: Marsh's Benchmarking Survey Analysis

DOMICILE	FRONTED ARRANGEMENTS	%
BERMUDA	87	25%
US - VERMONT	76	22%
CAYMAN	31	9%
GUERNSEY	22	6%
DUBLIN	18	5%
BARBADOS	17	5%
US - HAWAII	16	5%
SINGAPORE	14	4%
US - SOUTH CAROLINA	12	3%
OTHERS	53	15%
GRAND TOTAL	346	100%

REGULATORY GUIDANCE

Terrorism Risk Insurance Act

Congress first passed the Terrorism Risk Insurance Act (TRIA) in 2002 in the wake of the September 11th terrorist attacks. Designed as a temporary program to protect the commercial insurance market and its customers, TRIA requires insurers to offer terrorism coverage in exchange for the government stepping in with reimbursement after a terrorist attack, if the industry's losses exceed a loss-size threshold of US$100 million in 2015.

Since its most recent December 31, 2014, lapse, TRIA has been reauthorized for a third time via the Terrorism Risk Insurance Program Reauthorization Act (TRIPRA 2015) which provides the following:

- Creates a six-year federal backstop terminating December 31, 2020.
- Includes certified acts of terrorism against US targets.
- Covers commercial property/casualty insurance.
- Contains a program trigger of US$100 million and is scheduled to increase to US$200 million by 2020.
- Insurer deductible of 20% of the prior years' direct-earned premium.
- Federal share of loss payment is set to decrease from 85% to 80% of insured losses that exceed insurer deductibles by 2020.
- Accelerated timing of the mandatory recoupment of the federal share through policyholders' surcharges.

EU - Solvency II Implementation

Preparations are well under way in the EU for Solvency II, which comes into effect on January 1, 2016. Implementation across the region is being coordinated in accordance with the European Insurance and Occupational Pensions Authority (EIOPA) Guidelines for Preparation for Solvency II, which became effective in 2014. The guidelines contain interim requirements applicable through 2014 and 2015, mainly concerning Pillar 2 elements of Solvency II, as follows:

- Forward-Looking Assessment of Own Risks (FLAOR).
- System of Governance.
- Pre-application for internal models.
- Submission of information to National Competent Authorities.

In all EU domiciles, companies were required to submit their FLAOR during 2014. A key advantage in completing this process is that captive owners can now review their captive programs in the light of the Solvency II capital requirements and Forward-Looking Assessment of Own Risks (FLAOR) results to maximize returns on capital while managing their group risks effectively.

Certainty and understanding around Solvency II has had a very positive effect on captive growth in the EU, with new formations in Dublin, Luxembourg, Malta, and Sweden in 2014.

US-Self Procurement Taxes

Illinois is the latest state to enact a self-procurement tax of 3.5%. This is a growing trend we expect other domiciles to follow in the near future. Currently, two-thirds of US states have a self-procurement tax.

Luxembourg

In Luxembourg, the new European Solvency II regulation, applying to all EU domiciles beginning in January 2016, considers the cumulated equalization reserve (ER) as a quasi-equity item eligible to cover the minimum capital requirement (MCR) and solvency capital requirement (SCR). This specificity in the new Solvency II regulation, which follows the accounting rules based on the International Financial Reporting Standards (IFRS) regulation will, for most of the Luxembourg reinsurance companies, limit any capital increases to be in line with the MCR and SCR levels. Thus, Luxembourg organizations are seemingly ready to consider whether or not a direct writer and reinsurance captive can save your organization, not only on capital infusion, but on pure cost insurance savings.

"Utilization of captives is a key foundational component of our global risk management strategies and has been for over 20 years. We have three captives, a US-based captive that does both direct and reinsurance business, a direct-writing captive that primarily acts as an insurer, and an employee benefits captive. Our experience with captives is very positive. They play a key role in helping centralize risk and improve visibility."

MICHAEL FENLON
Department Manager, Global Risk Manager,
United Parcel Service, Inc.

About Marsh

Marsh is a global leader in insurance broking and risk management. We help clients succeed by defining, designing, and delivering innovative industry-specific solutions that help them effectively manage risk. Marsh's approximately 27,000 colleagues work together to serve clients in more than 130 countries. Marsh is a wholly owned subsidiary of Marsh & McLennan Companies (NYSE: MMC), a global team of professional services companies offering clients advice and solutions in the areas of risk, strategy, and people. With 57,000 employees worldwide and annual revenue exceeding $13 billion, Marsh & McLennan Companies is also the parent company of Guy Carpenter, a global leader in providing risk and reinsurance intermediary services; Mercer, a global leader in talent, health, retirement, and investment consulting; and Oliver Wyman, a global leader in management consulting. Follow Marsh on Twitter @MarshGlobal.

About Marsh Captive Solutions

Marsh Captive Solutions includes the Captive Advisory Group, Captive Management Services, and the Captive Solutions Actuarial Group. We have more than 430 colleagues managing more than 1,240 captives globally. In the industry for nearly 50 years, we have management offices in 18 countries and advisory expertise in retail brokerage offices worldwide. Captive Advisory is the consulting arm of Captive Solutions.

A designated team of expert captive advisors works closely with captive champions in the geographies to deliver best-in-class advice and service from feasibility studies to structuring and implementation of captives. This group is also responsible for training and developing colleagues throughout Marsh to be captive champions and practitioners.

Captive Management is an industry leader in designing, implementing, and managing new captives. Once a client has decided to develop a captive, Captive Management can provide the necessary financial, accounting, treasury, and insurance services, from choosing the appropriate location to conducting regulatory filings. Our established relationships with key service providers such as auditors, lawyers, and actuaries helps ensure that each captive runs smoothly, cost effectively, and with the strategic and financial benefits most appropriate for our clients' businesses. Our Captive Solutions Actuarial Group comprises credentialed actuaries and supporting actuarial analysts. Our actuaries consult exclusively with captive and self-insurance programs in numerous global domiciles.

MARSH

For more information, contact the colleagues below or visit our website at:
www.marshcaptivesolutions.com.

JULIE BOUCHER

Captive Solutions Practice Leader,
Americas
+1 802 864 5912
julie.s.boucher@marsh.com

IAN CLANCY

Captive Solutions Practice Leader,
EMEA Asia Pacific
+3531 605 3063
ian.clancy@marsh.com

ELLEN CHARNLEY

Global Sales and Marketing Leader
+1 702 576 2764
ellen.charnley@marsh.com

LORRAINE STACK

Business Development Leader,
EMEA Asia Pac
+3531 605 3039
lorraine.f.stack@marsh.com

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