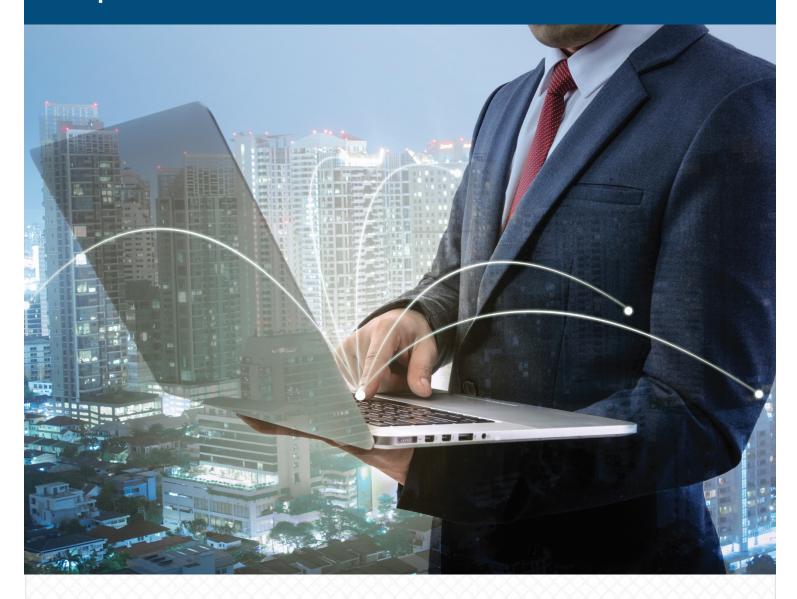


Comparison of Captive Insurer Jurisdictions



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SPONSOR: Reinsurance Section and

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Research

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FOREWORD

(By Project Oversight Group)

In recognition of captive insurance as a risk management tool and a mechanism for facilitating risk transfer in the life insurance, annuity and long-term-care sectors, the Society of Actuaries (SOA) has undertaken research, overseen by a Project Oversight Group (POG). The research is focused on providing perspective on the current state of captive insurance markets and is not an endorsement for or against the use of captive reinsurers. The purpose of the research is to create a resource for the insurance industry to assist life insurers in their investigation of ways to manage capital and to help policymakers and regulators assess the impact of the use of captive reinsurers on existing insurance industry requirements.

In contemplating the formation and successful operation of a captive insurance company, principals are likely to seek insight into both micro-considerations, which relate to the choice of a specific captive domicile and corresponding licensing and operating requirements, and macro-considerations, which pertain to the evolution and current state of global captive insurance markets, current regulation and types of risk transfer vehicles available.

- Micro: Information pertaining to specific jurisdictions licensing captive insurance companies engaged in risk transfer of life insurance, annuity and long-term-care exposures (exclusive of employee benefits) is presented in the report prepared by Risk & Regulatory Consulting LLC (RRC), under the guidance of the POG.
- 2. **Macro:** An outline of major considerations pertaining to the global captive insurance markets prepared by the POG is discussed directly below.

Captive Insurance Licensing/Risk Transfer

An ongoing broadening has been seen of what can be loosely termed "captive insurance": beyond pure parent captive insurance companies, we now find cell companies, portfolio insurance companies, special purpose vehicles, special purpose reinsurance companies and insurance-linked securities, which are licensed and regulated as captives.

This has resulted in an expansion of the types of risk, size of transactions, types of transactions and general risk considerations that are flowing into captive insurance jurisdictions with respect to life insurance, annuities, defined benefit pension risk, long-term-care and long-term-disability segments where such transactions and vehicles are common.

- 1. Preeminent captive jurisdictions, notably the Cayman Islands, Vermont, Guernsey and recently Delaware, have taken respective positions that they will license activity in the life sector under the broad forms outlined above.
- 2. It is important that a reader contemplating sponsoring a captive insurance facility or working as a consultant on behalf of a client be aware of the various risk transfer vehicles and frameworks available in the captive markets and jurisdictions.

Regulation

Evolving regulation has an ongoing impact in the global insurance markets and can serve to slow interest in captive insurance or act as a catalyst for increased interest and activity.

PBR may serve to slow captive life insurance activity at least on a short-term basis. Conversely Solvency II (SII) may have a dual impact in that it may decrease captive insurance activity by U.S. sponsors in the EU; however, it has also given rise to interest in captive insurance vehicles in offshore jurisdictions such as the Caymans that are not pursuing equivalence under SII.

Becoming an NAIC-accredited reinsurance jurisdiction, such as Bermuda has done, can increase interest in establishing and maintaining captive reinsurance companies in a given jurisdiction.

While any given regulatory initiative may result in a decrease in current types of risk transfer activity, it can conversely lead to the development of new risk transfer opportunities, mechanisms and vehicles.

Measurement of Life Insurance Captives

It is commonly acknowledged that challenges exist in securing viable information on the size of the life insurance captive sector; however, the primary challenges come from attempting to understand the information presented and make useful comparisons. In reality, measuring life insurance risk transfer in captive markets is challenging because of the following:

- Different jurisdictions license, measure and categorize life insurance risk transfer differently. For example, in the Cayman Islands, captives issuing term life insurance would be licensed as general insurers and not long-term insurers, thus complicating the measurement of life insurance risk transfer in the captive sector. Other jurisdictions have similar measurement nuances.
- 2. As noted above, the definition of what constitutes captive insurance is constantly evolving and is different in various jurisdictions: for example, should a cell company or a portfolio insurance company with a number of cells each engaged in a major life insurance transaction be counted as one entity or a number of entities?
- 3. Jurisdictions are not universally consistent with respect to their measurements of licensing activity.
- 4. The appropriate metric to use in measurements may vary by transaction type.

Global Captive Markets

Similar to reinsurance markets, captive insurance operates in a global market place. Thus a sponsor's decision to pursue captive insurance licensing includes a decision between available domestic jurisdictions and international ones as well.

The global captive market can be viewed as having four major sections: the United States, Europe, Asia and Offshore.

Nuances in licensing and ongoing requirements, operations, acceptable types of risk transfer vehicles, allowable classes of companies, acceptable lines of business and other factors vary among jurisdictions and should be well understood by potential captive sponsors.

The impact of major regulatory initiatives such as PBR and SII should be well understood, as well as an understanding of the individual jurisdictions, requirements for onsite meetings, governance and style of doing business when evaluating the alternatives available in establishing a captive insurance company.

Many organizations with varying risk transfer needs often establish captive insurance companies in a number of jurisdictions to support their business objectives and satisfy their risk management requirements.

Opportunities

Historically, captive insurance markets have provided opportunities for innovation in risk transfer, for example, the development of sponsor-based underwriting risk transfer to the capital markets via risk-linked securities.

It is expected that a need for such innovative risk transfer in the life insurance sector will continue, as demonstrated by recent developments in the captive insurance markets:

- 1. Structuring and transfer of defined benefit pension risk
- 2. Use of portfolio insurance companies to transfer risk among captive insurance companies
- 3. Ongoing evolution and use of cell companies
- 4. Continued development of risk-linked securities as a means of transferring insurance risk to the capital markets.

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EXECUTIVE SUMMARY

The Society of Actuaries (SOA) engaged Risk & Regulatory Consulting LLC (RRC or "we") to conduct research for purposes of comparing captive regulatory regimes, with a focus on captives reinsuring or issuing life insurance, annuities and long-term-care (LTC) products ("life captives"). Employee benefits and life insurance within employee benefit plans were not included in the scope of the research.

RRC worked under the direction of a Project Oversight Group (POG). RRC is grateful for the quidance provided by the POG for this research effort.

The purpose of the analysis is to compare the regulatory frameworks of jurisdictions that allow life captives to be licensed. The analysis is intended to provide a resource for life, annuity and long-term care companies as they evaluate ways to manage their risks, including effective utilization of their capital; additionally, the information can be used by policymakers as they assess the use of captive reinsurers and their impact on existing insurance industry requirements.

RRC researched publicly available information, including regulatory websites, held discussions with key industry personnel, and conducted interviews with regulatory bodies, captive associations, captive managers and other entities associated with captive activity to draw conclusions on the key differences between jurisdictions that may underlie the size of jurisdictions. RRC found from its interviews that qualitative differences, such as reputation, are often important determinants in the selection of a captive jurisdiction.

RRC's research initially included 29 U.S. and global jurisdictions. After additional consultation with the POG, ultimately 23 jurisdictions were selected for inclusion in this report, consisting of eight U.S. and 15 global jurisdictions.

RRC researched publicly available information for various regulatory characteristics associated with each jurisdiction. RRC also conducted numerous interviews with representatives of many of the jurisdictions to supplement findings. During the interview process, our initial efforts were to directly contact the local regulators from the various jurisdictions. If we were unsuccessful in our attempts to speak with the regulatory body, we sought information through captive associations and captive managers, as available. Appendix 1 includes the list of jurisdictions interviewed, as well as the type of resource from that jurisdiction.

The detailed results of RRC's research are included in Sections 3, 4 and 7 of this report; the following list summarizes our high-level conclusions:

- Captive establishment laws, jurisdiction expertise, financial reporting requirements and minimum initial capital requirements are key differentiating characteristics for the jurisdictions
- Life captive activity in U.S. jurisdictions is slowing
- Growth is seen in life captive activity in some larger global jurisdictions, but generally limited activity in the European Union
- Many characteristics observed are similar across jurisdictions (e.g., initial capital requirements, mandatory examinations, credit for reinsurance)

- An opportunity may exist for captive jurisdictions to consider creating life-specific captive rules and regulations if they have not already done so
- Currently, variation is seen in the reporting of life-specific information across the jurisdictions, and some jurisdictions do not publish life-specific information; an opportunity may exist to publish statistics on the size of the market with respect to life insurance.

RRC's high-level observations are as follows:

Financial Reporting and Capital Requirements and Developments in Accounting Standards are Key Drivers in Selecting a Jurisdiction

Based on interviews conducted, in general, the number of life captive insurance applications has declined in recent years. Financial reporting, capital requirements of the captive domiciles and developments in accounting standards for captive sponsors appear to be slowing the activity in the life insurance captive market. Captive domiciles may require Generally Accepted Accounting Principles (GAAP) reporting and/or Statutory Accounting Principles reporting, while others do not have prescribed requirements, and allow the captive to use the reporting requirements followed by their sponsor/parent company. Historically, a main driver of U.S. life insurance captives was the capital strain associated with the high reserving requirements for term insurance, universal life with secondary guarantees (ULSGs) and Variable Annuities (VAs) with guarantees. For VAs, another related driver was to better align the accounting treatment of the assets and liabilities for the guaranteed benefits being hedged on an economic basis, since that hedging tends to create volatility on the Statutory balance sheet.

Anecdotally through our interview process, Principle-Based Reserving (PBR) and Actuarial Guideline XLVIII (AG 48) have been mentioned as significant reasons for the lack of growth being observed in the domestic life captive insurance market, but will likely not have an impact on legacy business ceded to pre–AG 48 compliant captives within the captives. Some of the reserve and capital relief benefits that were realized through the use of the term and ULSG captives under Actuarial Guideline XXXVIII are expected to diminish as the result of the potential impact of PBR and AG 48 (both of which typically lower the required statutory reserves for term and ULSG business). Many companies are taking a "wait and see" approach before entering into new captive arrangements now that PBR is effective. Additionally, reduced VA captive activity could be attributed to the Variable Annuities Issues Working Group, which was established, in part, to address regulatory issues related to VA captive reinsurance transactions through reevaluation of the reserve and capital requirements for VAs. LTC captives have also been used to provide relief on a product line that has experienced significant financial strain. Sponsors are the insurers writing the LTC business, and the captive may be used to enable the sponsor to realize previously unrealized capital gains, invest in higher yielding assets or a combination of the two.

From a global perspective, motivation to form life insurance captives may arise because of Solvency II requirements. At the same time, Solvency II appears to be a driver of why some jurisdictions are not attracting life insurance captives. An interview with a Guernsey captive manager representative indicated that this jurisdiction's popularity as a captive domicile for longevity reinsurance transactions stems in part from the fact that it has not sought Solvency II

equivalence. This may make Guernsey a more popular option than other potential captive jurisdictions. In contrast, Bermuda has achieved Solvency II equivalence yet remains the largest captive domicile in the world from both a total captive and life captive perspective, although it has recently experienced a net decrease in captive licenses.

There Are Still Some Areas of Growth

While the life insurance captive market has seen limited growth in recent years, some opportunities for growth remain. One such opportunity was noted in relation to Guernsey, where longevity risk is now being transferred from pension plan sponsors to various Incorporated Cell Captive (ICC) and Protected Cell Captive (PCC) structures, and then reinsured. Assuming longevity risk as a means of diversifying mortality risk may be a motivating factor for the reinsurers that assume the risk, and supports the formation of life captives in this jurisdiction. Other opportunities for diversification or arbitrage through the use of life insurance captives may potentially arise as regulatory or other changes take effect over time.

Reputation and Experience May Matter Most

The reputation and experience of captive jurisdictions have a significant impact on the size and activity of the jurisdiction. Numerous U.S. interviewees made this statement in relation to their own jurisdictions, and some respondents observed the importance of reputation and experience in relation to other jurisdictions.

From a global perspective, reputation and experience are also frequently cited as key contributors to the popularity of jurisdictions such as Bermuda, the Cayman Islands and Guernsey.

The typical size of a captive life insurance transaction is large (often \$250 million or more in premium, which is paid at inception as reserves on in-force business are transferred from the sponsor to the captive). It is therefore understandable that reputation and experience play a large role in the selection of a captive jurisdiction for a life captive, perhaps even more than other forms of captive insurance, where marginal differences in rules, regulations and start-up costs may contribute more to the decision. Critical considerations mentioned in interviews include knowledge of the industry, consistency of process and the ability to effectively review and close proposed transactions in a rapid manner, more than the jurisdiction's reporting requirements, capital requirements or other governance-related items.

SECTION 1: BACKGROUND

The overall captive insurance industry has existed for some time, with a broad range of captive purposes and types. Historically, the use of captive insurers involved sponsorship by noninsurers, primarily for self-insuring certain types of employment benefits such as workers' compensation. These captives are typically referred to as "pure" captives, and state regulations related to captive insurers often focused initially on these.

Subsequently, additional captive types for various purposes have been created, and additional statutory rules have been developed in some states and international jurisdictions to handle these additional types of captives. A summary of some of the types of captives, along with a brief definition, is included as Appendix 2.

Since the captives most often involving life insurance and annuities are special purpose captives, and involve the assumption of reinsurance from the sponsor insurer writing the business to the special purpose captive, much of our research focused on these captives. They are also referred to as Special Purpose Financial Captives, Special Purpose Financial Reinsurance Companies and other terms depending on the jurisdiction. In addition to this primary captive type used for life and annuity business, we will also refer in some cases to protected cells and incorporated cells, which are occasionally used for specific, special cases of life, annuity or LTC business.

Captive life reinsurance grew in popularity after changes in U.S. statutory accounting in 2000 and 2003 related to reserve requirements for term life (Actuarial Guideline XXX [XXX]) and universal life policies with secondary guarantees (Actuarial Guideline AXXX [AXXX]). These reserve requirements resulted in very significant increases in required reserves, and companies formed captives to reduce surplus strain. The domestic company sponsor ceded the business to its captive, and the captive backs a portion of the large statutory reserve with alternative assets, such as a letter of credit, or through a securitization of the excess. This approach reduces surplus strain, and the provider of the alternative assets is paid back over time as the excess reserves run off. Captive insurance had been established as a popular risk financing mechanism long before this, however, primarily for corporations with property/casualty exposure. A subsequent material driver for activity in the captive marketplace was the change in reserving requirements for VAs that went into place in 2009, Actuarial Guideline XXIII (AG 43). AG 43 implications were twofold: the large reserve levels created surplus strain, but the requirements also caused financial statement volatility for VAs with guarantees subject to an economic hedging program. The guarantees embedded in the product are generally less reactive to market movements than the hedges themselves, and in some cases the existence of a hedging program increased required reserves because of the administrative costs of the program. Companies established captives to reduce surplus strain and to segregate the hedged guarantees into a separate entity that also conducts the hedging activity.

While term life, ULSG and VA businesses are the most significant examples of life insurer captive use, other less common examples are found where captives are used to mitigate surplus strain. Mutual insurance companies with large closed blocks of participating life insurance business have used captive transactions to release trapped capital associated with those blocks through securitization. In addition, some writers of LTC insurance have used captives to ease surplus strain

either through the recognition of otherwise unrealized gains on their asset portfolios, or to more easily invest in longer-dated, higher-yielding assets to support profitability of the business.

In researching captive regulations, it is apparent that the long history of property/casualty captive insurance is the basis for many of the specific captive regulations found in the jurisdictions included in this study. Regulations frequently make little or no specific mention of life insurance business. An example is captive restrictions, one of the characteristics included in our research. RRC found that captive restrictions, specifically restriction on products that may be written, typically relate to specific property/casualty types only. There were no observed instances of XXX, AXXX, VA or any other type of life or annuity captives prohibited in captive regulations, though one jurisdiction noted in an interview that proposals for such captive formations would be discouraged. Another example is capital requirements, which are generally much lower in the regulations than would be considered appropriate for a typical life transaction. In practice, captive regulation focuses on capital requirements for each transaction based on the captive plan, and the regulatory minimum capital plays little or no role in the assessment of capital adequacy by the regulator.

The size of the life captive market is not easy to measure, as most captive domiciles report total market size versus life-specific statistics. From interviews, we were able to capture market size for many of the jurisdictions included in our study. Including Special Purpose Insurers, Bermuda has the largest number of life captives for any single jurisdiction by a considerable margin, with more than 100. Vermont and the Cayman Islands each have approximately 50 life captives. Many of the jurisdictions in this study have far fewer life captives than nonlife captives.

Despite the relatively small numbers of active life insurance captives, RRC observed several common themes cited by many of those who were interviewed as part of the study. Differences in regulatory requirements, except for certain financial reporting and capital requirements, are generally seen to have less importance as a differentiating factor among jurisdictions as compared to the experience and expertise of the individuals dedicated to supporting the captive industry from the regulatory area. Most of those interviewed believed that life captive formation has been slowed for some time because of PBR (PBR will result in decreased reserves, thus reducing the benefit received through the use of a captive) and AG 48 (AG 48 reduces the amount of the assets backing reserves that may be financed versus what was allowed pre–AG 48; in other words, more real assets will be needed to back reserves); many interviewees provided the number of life applications received by year in support of this view. Some optimism remains that new opportunities to manage capital through life captives will arise and the market will expand again.

SECTION 2: SCOPE

2.1 Scope Elements

The scope of our work involved the following key steps:

• Identify both U.S. and global jurisdictions to be included in the study

- Identify characteristics of the captive jurisdictions to be captured
- Conduct research on the jurisdictions, including conducting interviews with stakeholders in most of the U.S. and some of the global jurisdictions
- Develop observations and conclusions from the comparisons
- Create a template comparing all the identified characteristics for each jurisdiction.

Our work related to the first two items are summarized in this section. The results of our research, including our observations and conclusions, are included in the following section (Section 3). The template is given in Section 7.

2.2 Identify U.S. and Global Jurisdictions

The global captive marketplace continues to develop, as factors such as regulatory activity, capital requirements, company risk profiles and financial reporting requirements continue to evolve. Items such as longevity reinsurance, Solvency II equivalence, enactment of Principle-Based Reserves and ongoing development of Protected Cell structures as well as evolving nontraditional captive structures are influencing the overall pace of captive activity as well as the selection of one jurisdiction over another. Licensing activity of life captives is most significant in North America and the Bermuda/Caribbean region, with less activity in Europe. The Asian captive market is not as large as these other regions, but is considered to be an emerging market.

An initial list of 13 U.S. jurisdictions and 16 global jurisdictions to research was compiled. These jurisdictions were selected based on both statistics found through research of publicly available information (total number of captives currently licensed and current premium volume of all captives) as well as RRC's and the POG's general industry knowledge. RRC was directed by the POG to further research each jurisdiction on this list to gain a better understanding of the environment specific to life captives, and to potentially remove any jurisdictions with little or no life captive activity. This was accomplished through further research and through phone and email correspondence with representatives of the jurisdictions. The final list of jurisdictions researched for the purposes of this report comprises eight U.S. jurisdictions and 15 global jurisdictions. We did not remove all jurisdictions with little or no life captive activity, because in some cases we received information from such jurisdictions deemed to be helpful to be the study.

U.S. Jurisdictions

- Arizona
- Delaware
- Hawaii
- Missouri
- Nevada
- North Carolina
- South Carolina
- Vermont

Note: The following jurisdictions were part of the initial list; however, through contact with representatives of the Captive Insurance Department, via phone or email, it was determined that life captive activity is either nonexistent or nonmaterial, thus eliminating them from the final list:

- lowa
- Montana
- Tennessee
- Utah
- Washington, DC

Global Jurisdictions

- Anguilla
- Barbados
- Bermuda
- British Virgin Islands
- Cayman Islands
- Gibraltar
- Guernsey
- Hong Kong
- Ireland
- Isle of Man
- Jersey
- Luxembourg
- Malta
- Nevis
- Singapore

Note: The Bahamas was the only non-U.S. jurisdiction to be removed from the original list. No life captives currently write business in the Bahamas; however, the Bahamas is active with captives, with the majority of the business running through Individual Cells.

2.3 Identify Characteristics to Capture

Based on the information in the request for proposal, internet research and discussions with the POG, 13 important characteristics were identified to be captured in the comparative template. These characteristics were initially identified as the ones most likely to be considered for establishing captive operations in a particular domicile. The characteristics shown for the jurisdictions are factual in nature. In some cases, the factual information came from interviews with representatives from the jurisdiction, and not from research of publicly available sources of information. The characteristics shown are the following:

- Market size. The number of captives writing business, as well as the number of life captives writing business, where available.
- **Premium Volume**. Total annual premium generated by business in the captives in the most recent year, as well as specifically for life captives, when available.¹
- **Top Products.** The most common lines of business that captives write (health care, workers' compensation, life). When available, also specifically what kind of life products are most popular (e.g., XXX, AXXX, VA).
- Initial Capital Requirements. Amount of capital needed to start a captive, based on factors including type of captive, type of business and level of third-party risk.
- Financial Reporting Requirements. GAAP, Statutory or other.
- Dissolving/Exiting Requirements. Documentation requirements, dissolution of liabilities, other requirements.
- Affiliate Agreement Requirements. Affiliate restrictions, Commissioner-mandated affiliate agreement requirements.
- Regulatory Environment. Extent to which regulatory examinations are required, and frequency of those examinations.
- Captive Restrictions. Specific lines of business that cannot be written.
- Requirements for Establishment. Incorporation fees, processing fees, annual license fees, other fees.
- Governance Framework Requirements. Reserve Opinion requirements, Annual Board Meeting requirements, other requirements.
- Credit for Reinsurance. Extent to which captives are allowed to provide reinsurance, and restrictions on reinsurance provided.
- Incorporation Time. Timeframe for a typical complete application to receive approval for incorporated status.

Two additional items, Contacts and Miscellaneous, are also included in the template to provide the user with additional pertinent information.

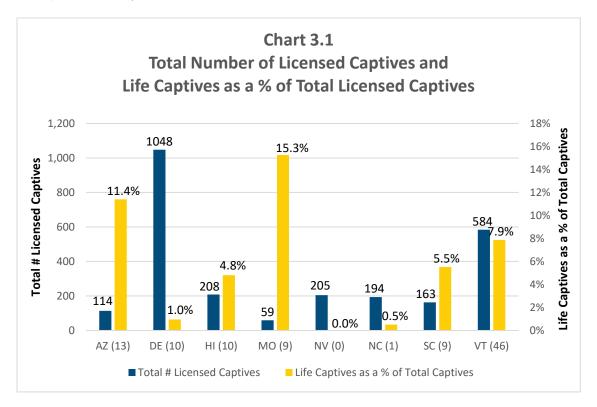
¹ Annual premium can be potentially misleading because many life captive transactions involve a one-time premium at transaction inception

SECTION 3: U.S. JURISDICTIONS

3.1 Market Size

RRC was able to determine the number of total captives licensed in each U.S. jurisdiction through research of publicly available information. We were able to both confirm the total number of captives licensed and obtain the number of active life captives in the U.S. jurisdictions included in the study through phone interviews and through emails with representatives in each jurisdiction.

Chart 3.1 shows the total number of licensed captives as well as the percentage of total captives that are life captives for each jurisdiction. The number of life captives is included in parentheses for each jurisdiction. Note that Hawaii representatives responded that there are currently "less than 10" life captives in their jurisdiction.



Note: Delaware count includes Series captives; Hawaii life count set at 10 for purposes of the exhibit.

Although our research focused on jurisdictions with some life captive activity, another consideration related to choice of jurisdiction is the extent to which special purpose captives are contemplated as part of the jurisdictions laws. Special purpose captives tend to be the form that is most often used for complex life insurance captive transactions. A correlation exists between states with significant numbers of life captives and those that have had special purpose captive laws in place for a longer period. For example, in 2004, South Carolina passed the first legislation allowing special purpose financial captives, and Missouri, Vermont and Delaware enacted special purpose financial captive laws in 2007. Subsequently, these states saw a significant increase in life captive activity.

3.2 Premium Volume

Information regarding premium volume was collected in the same manner as the market size data. As expected, premium volume is correlated with market size. In 2014 Vermont captives wrote \$25.5 billion of gross premium. In 2015 life captives accounted for \$12.6 billion of premium. The next closest state in terms of premium volume for life captives is Delaware, in which life captives wrote more than \$5 billion in 2016. Missouri and South Carolina are the only other U.S. jurisdictions with life captives writing more than \$1 billion of premium (\$2.2 billion and \$1.15 billion, respectively).

3.3 Top Products

The primary products within the life captive markets are term, ULSG and VAs. Some transactions have involved LTC. There are also some captives with traditional whole life, which were set up subsequent to life insurer demutualizations, and used to release trapped capital associated with closed blocks of dividend-paying business.

3.4 Initial Capital Requirements

Initial capital requirements do not vary widely by state. All states have laws that define the prescribed minimum initial capital requirements based on the type of captive. Ongoing capital requirements may be considerably higher than the initial prescribed minimum requirements. These requirements are all very similar in terms of how they are structured and the amount of capital required. In fact, the initial capital requirement for a pure captive is \$250,000 for every researched U.S. jurisdiction, except for Nevada (\$200,000). The requirements range from \$200,000 (for a pure captive) to \$1,000,000 (for Risk Retention Group [RRG] or sponsored captive) across all states. Through our interviews, we concluded that capital requirements are not considered an important benchmark when determining a U.S. jurisdiction, because almost all captives have more than enough capital and because of the similarities in requirements across the jurisdictions. We were also able to conclude through our interviews that some jurisdictions allow for letters of credit as an acceptable means of fulfilling capital (Arizona, Delaware, North Carolina, Vermont), whereas others do not (South Carolina). This aspect could potentially have a greater impact when determining a jurisdiction than the initial capital requirement.

3.5 Financial Reporting Requirements

The majority of U.S. jurisdictions require annual reporting on a GAAP basis. Statutory requirements are not uniform across U.S. jurisdictions, as we received the following responses during our interviews:

- Allow modified Statutory (e.g., Statutory with GAAP or IFRS reserves; Statutory with a variation on the reserve formulas)
- May require Statutory, depending on circumstances; for example, RRGs are required to file based on Statutory accounting

- Have discretion to allow Statutory or other reporting
- All must report on a Statutory basis
- Quarterly Statutory financials (blue books) are required.

In addition, many captive jurisdictions do not require that captives follow Statutory risk-based capital requirements

3.6 Dissolving/Exiting Requirements

Jurisdictions may require written requests of termination and/or dissolution of liabilities for a captive to exit. These requirements vary widely by jurisdiction. We were informed through our interviews that captives dissolving and exiting are not commonly seen.

3.7 Affiliate Agreement Requirements

Captives may enter into various types of agreements (for example, administrative services) with their affiliates, either the sponsoring entity or other legal entities within the group. Some jurisdictions place restrictions on these agreements, for example, requiring that they be fair and reasonable, or representative of an "arm's length" agreement. Affiliate agreement requirements, or restrictions on such arrangements, are not utilized by all states. Delaware and Nevada have specific statutes pertaining to affiliate agreements. Through the course of our interviews, other states did not have any information regarding specific restrictions related to affiliate agreements.

3.8 Examinations

A mandatory financial examination by the Director or Commissioner is common in the United States. An examination is typically mandated every three or every five years.

3.9 Restrictions on Writing Business

Restrictions on the lines of business a captive can write vary by state. In general, these restrictions apply more toward property/casualty captives than life captives. For example, Arizona, Delaware, Missouri, North Carolina and South Carolina all restrict the direct writing of workers' compensation or personal lines. In most cases, all lines can be reinsured. However, life restrictions are in place in some states. In North Carolina, insurers may not directly write annuities or life coverage. Nevada stated in their written response that "Nevada has not licensed any life (XXX/AXXX) reinsurance captives." Some jurisdictions do not allow LTC business in captives.

3.10 Requirements for Establishment

Most states except North Carolina charge fees such as an application fee, an incorporation fee, business plan change fee, annual report fee or annual license fee. The North Carolina Department does not charge any fees except for a one-time \$12,000 application fee for special purpose financial captives. Application fees in other states range from \$200 (South Carolina) to \$10,000 (Missouri). The annual license fees range from \$400 (Delaware) to \$7,500 (Missouri).

3.11 Governance Framework Requirements

The majority of requirements within U.S. jurisdictions are stated within more specific topics, and the governance requirements mentioned during interviews with U.S. jurisdictions were limited to items such as Board meeting frequency and loss reserve certification. RRC observed that regulations associated with global jurisdictions tended to have more specificity with respect to governance requirements as compared to the United States.

3.12 Credit for Reinsurance

Most states allow captives to assume reinsurance on risks and take credit for risks ceded to reinsurers, as long as they are in compliance with the regulations of the particular state. In Hawaii, the captive may only provide reinsurance on risks ceded by any other insurer with the approval of the Commissioner.

3.13 Incorporation Time

In general, the stated target time to incorporation for most U.S. jurisdictions is 30 days. However, through interviews with multiple states, we concluded that the time required heavily depends on the quality and completeness of the captive's application. These data are another example of information that is likely to be oriented toward a typical property/casualty application as opposed to a complex life transaction.

The following chart summarizes some of the key categories from our template.

	AZ	DE	HI	МО	NV	NC	SC	VT
Number of Life Captives	13	10	"Less than 10"	9	0	1	9	46
Dissolving/ Exiting Requirements	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Affiliate Agreement Requirements	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Restrictions on Types of Life Captives	No	No	No	No	Yes	Yes	No	No
Application/ Annual License Fees	\$300/\$400	\$1,000/\$300	\$7,500/ \$7,500	\$7,500/\$ 7,500	\$500/\$300	None	\$200/ \$500	\$500/\$500
Target Incorporation Time	45 days	4–6 months	30 days	Target not stated	10-30 days	14–30 days	30–45 days	45 days or less

SECTION 4: GLOBAL JURISDICTIONS

Life captive activity in global jurisdictions is very limited, with the exception of Barbados, Bermuda, the Cayman Islands and Guernsey. We provide additional details on Bermuda, the Cayman Islands and Guernsey in Section 5. The following jurisdictions did not participate in interviews or assist in completing our template, therefore no specific life captive information beyond published laws or studies was gathered: Anguilla, British Virgin Islands, Jersey, Gibraltar, Hong Kong and Nevis.

According to our discussions with representatives from Ireland, Malta, Singapore and the Isle of Man, little to no life captive activity occurs in any of these jurisdictions, and our research suggests that the same is true for Jersey and Hong Kong. Based on these discussions and corresponding research, it does not appear likely that there will be an increase in life captive activity in these jurisdictions soon. Discussions with Ireland and the Isle of Man revealed that anything involving life insurance would be an ancillary element within the reinsurance of employee benefits. The Isle of Man has one reinsurance company currently reinsuring variable annuity-type business, which is currently in run-off.

We were able to interview a representative from Aon Risk Solutions to discuss captive activity in Luxembourg. Aon is the largest captive manager in Luxembourg, with a 40% market share, and since activity throughout the jurisdiction is fairly consistent, some information could be extrapolated to represent the entire jurisdiction beyond the Aon market share. Most captives are reinsurance captives, and no publicly available data are available to distinguish life versus nonlife activity. A small number (likely fewer than five) of captives are reinsuring the life insurance business of a bank insurance group, but these captives include other types of business and no pure life reinsurance captives were identified. Out of more than 200 Luxembourg captives, approximately 20–25 captives cover employee benefits, including death, disability and medical expenses, but not the longevity (pension) component.

From the research conducted, we are unable to determine the amount of life captive activity in Anguilla, the British Virgin Islands, Gibraltar and Nevis. Chart 4.1 depicts the total number of captives currently licensed in these jurisdictions; however, since the number of life captives was not available, the percentage of life captives is not shown.

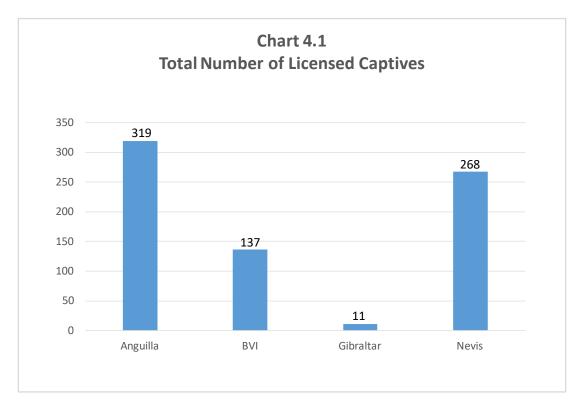
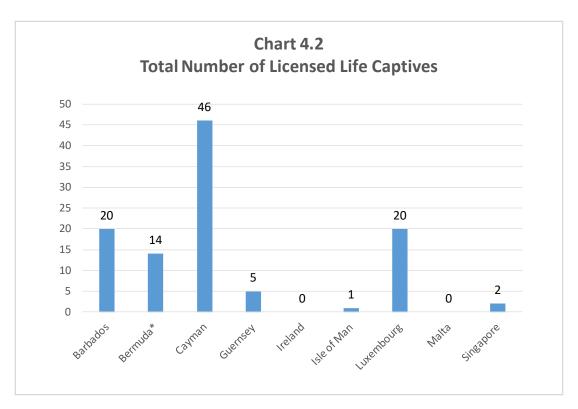


Chart 4.2 compares the total number of licensed life captives for the global jurisdictions that provided us with the information. Note that we did not receive a precise figure for Guernsey, but we understand it to be fewer than five, and growing. We used five for purposes of Chart 4.2. Also, note that the Bermuda figure of 14 in Chart 4.2 relates only to Long-Term Class A and B captives, and does not include 115 Special Purpose Insurers. Bermuda's Special Purpose Insurers (SPIs) are used for securitization transactions and, based on our research, may involve life insurance business including XXX and AXXX transactions as described previously, as well as embedded value securitization.



^{*} Bermuda count does not include Special Purpose Insurers.

Although SPIs (such as in Bermuda), Special Purpose Vehicles, Insurance-Linked Securities and other nontraditional structures are not included in the quantitative results displayed in this report, it should be noted that these structures are an area of growth for some jurisdictions and may be licensed under reinsurance or captive regulations.

SECTION 5: BERMUDA, CAYMAN ISLANDS AND GUERNSEY

Three of the largest global captive domiciles (in terms of total captives, not just life) are Bermuda, the Cayman Islands and Guernsey. Key characteristics observed from these jurisdictions include the following.

Captive Types

Bermuda is the largest captive regime with nearly 800 total captives, though a distinction among types of life insurance included in this total was not found in the publicly available material that was researched. Bermuda's captive structure is based on three different classes: General Business Insurers, Long-Term Business Insurers and SPIs. Bermuda continues to see large numbers of applications annually, but they are also experiencing surrendered licenses, which resulted in a net decrease in 2016, despite an increase in new licenses. In December 2013, Bermuda won conditional qualified jurisdiction status from the National Association of Insurance Commissioners. As a result, reinsurers licensed and based in Bermuda are eligible to be certified for reduced reinsurance collateral requirements. Because of this permission as well as Bermuda's equivalence status with Solvency II, some captive sponsors believe that their domiciliary regulator will have increased comfort with a captive reinsurance transaction where the captive is Bermuda-based.

In 2009 Bermuda added provisions to their regulations allowing SPIs. These types of insurers must meet the following requirements:

- The insurer is carrying on insurance business in the area of insurance-linked securitizations
- The insurer is established to enter into a single transaction or a single set of transactions
- The insurer's obligations are fully collateralized and
- Transactions are carried out with a limited number of sophisticated participants.

The capital requirement for an SPI is \$1, since the risk is not retained within the SPI. Registration fees are relatively low, only \$525. Financial reporting requirements are more flexible, typically allowing a range of potential methods and no specific requirement for an annual reserve opinion. Twenty SPIs were established in 2015, resulting in a total of 115 SPIs as of year-end 2015.

The Cayman Islands noted that they have approximately 50 life captives, with about four of those captives currently in runoff. Approximately 80% of the life captives reinsure term business, and nine captives are focused on VA products as their primary line of business. The jurisdiction is seeing growth in the captive and international reinsurance marketplace, which could possibly be due to Solvency II, as some companies are evaluating approaches to avoid the capital charges or reporting requirements that go along with Solvency II. According to those we interviewed, there is evidence that U.S.–based reinsurers are interested in the Cayman Islands, since the Caymans do not follow Solvency II. In addition, the Cayman Islands have a strong reputation with significant

experience, and the Cayman Islands Monetary Authority (CIMA) is the sole regulator of hedge funds and banks, and is perceived as having a strong understanding of risks.

It should be noted that under the insurance law in the Cayman Islands, insurers offering term life and credit life are not considered as long-term business for the purpose of the license they hold. However, for statistical purposes, the Caymans record their nature of business based on their primary class of business. Accordingly, as at March 31, 2017, they had 13 companies offering credit life as their *primary class of business*. For Deferred VA and "other types" of life products, eight and 26 companies were identified, respectively. It is possible that these companies offer other (mainly life) products as their secondary class of business.

Overall activity in Guernsey has been increasing at a faster-than-typical pace, particularly because of an increase in companies seeking to reinsure longevity risk. An interviewee with Guernsey noted that the ICC structure is particularly well suited for such transactions. This fact is due to the relatively low cost of such a transaction associated with the cell structure, along with the protection of the business from impacts of nonrelated business that can come with PCCs. It can be challenging for a pension plan sponsor to be able to insure their longevity risk, because insurance coverage of stand-alone longevity risk (as opposed to pension "buyouts" that involve transfer of all risks) can be challenging to obtain in the marketplace. And although the longevity reinsurance marketplace is more active, sponsors are unable to obtain reinsurance directly since they are not insurance companies. To allow the risk transfer to occur, the sponsor creates a captive, and the captive can then reinsure the risk to a reinsurer. The appetite within the longevity market is significant, but the market is not yet mature, so an increase in activity in the coming years is likely.

Financial Reporting Requirements

From a financial reporting perspective, Bermuda has sought and achieved Solvency II equivalence. Companies are required to file audited statutory financial statement. Every insurer must also file its statutory return and Capital and Solvency Return. Bermuda reporting requirements can also include the Bermuda Solvency Capital Requirement (BSCR), Commercial Insurers' Solvency Self-Assessment (CISSA) and stress and scenario analysis. However, for a simple, single-parent captive, which would be classified as a "Class A" long-term insurer, the captive would not be required to meet the BSCR, CISSA and stress testing requirements. In addition, SPIs do not have to meet these requirements.

The Cayman Islands, which is one of the only domiciles that reported growth in its life captive market in an interview, has a two-tiered capital requirement (Minimum Capital Requirement and Prescribed Capital Requirement). Larger insurers may use an Internal Capital Model to calculate the Prescribed Capital Requirement. Also, reporting is required annually.

Financial statements filed in Guernsey are on a GAAP basis and typically follow the GAAP of the parent or sponsor. Guernsey has taken a deliberate path of not attempting to meet Solvency II equivalence. The life captives are all vehicles for transferring pension plan risks from sponsors to ultimate reinsurers, and therefore the risk is essentially "passed through" the captive. In light of this,

the regulator focuses on the existing of reasonable governance structure and appropriate collateral in place with the reinsurer as safeguards for solvency. Most of the structures are "Category 6— Special Purpose Entities" protected cells, and the Guernsey Financial Services Commission typically applies a reduced capital requirement for a PCC platform or ICC, and no capital requirement for cellular transactions within that structure. The basis for this treatment is that the risk is "passed through" to the ultimate reinsurer of the longevity risk, so minimal risk capital is needed.

SECTION 6: OBSERVATIONS AND CONCLUSIONS

Based on our research, we have the following observations and conclusions regarding the life captive marketplace internationally:

- The key characteristics that appear to be driving selection of jurisdiction for life captives are as follows:
 - Captive establishment laws of the jurisdiction, that is, some of the larger U.S. and global jurisdictions have had more specific laws relating to life captives, such as special purpose financial captives, for a longer period.
 - Expertise and experience of the jurisdiction, which is correlated with the above characteristic. The longer the jurisdiction has had captives in place, the more expertise and experience it is likely to have to make captive establishment and review easy for the sponsor.
 - In some cases, specific requirements related to financial reporting and capital, such as reinsurance collateral requirements and Solvency II (or lack thereof). In some cases, the ability to use a letter of credit may be a consideration for U.S. captives.
- The life captive market in the United States has slowed since the 2000 and 2003 statutory accounting changes noted earlier, and most of those we interviewed do not anticipate an increase in activity soon. This trend appears to be due, at least in part, to AG 48 and PBR, as well as the work underway to revise statutory requirements for VAs. Active jurisdictions are seeing up to five life applications per year over the last several years. The primary exception to growth appears to be related to pension risk transfer or other longevity solutions, like those occurring in Guernsey, with Bermuda and Delaware also positioned to be active in the longevity space.
- For global domiciles, there appears to be growth in some of the larger domiciles, in part because of company responses to pension plan longevity risk and Solvency II.
- In general, limited life captive activity is seen across the European jurisdictions, where in many cases the life element is limited to the reinsurance of employee benefits.
- Many of the other characteristics observed are similar across jurisdictions and do not appear to be significant differentiators when selecting a jurisdiction for a life captive.
 Incremental differences in such items as start-up costs may be less important for life transactions given their typically large size.
- There appears to be an opportunity for captive jurisdictions to consider creating lifespecific captive rules and regulations, similar to what has already occurred related to nonlife captives.
- There are challenges in comparing statistics across jurisdictions that provide different information on captives. Implementing a reporting methodology that expresses comparable information across jurisdictions on life insurance captives is an area of opportunity.

SECTION 7: TEMPLATE

The template included with this report can be used for comparative purposes. Filters are given for each characteristic so that they can easily be compared between jurisdictions. Blank cells in the template represent jurisdictions for which we were unable to locate information related to the specific characteristic.

APPENDIX 1: INTERVIEWS CONDUCTED

Jurisdiction	Organization Interviewed	Date Completed
Vermont	Regulator	2/17/17
North Carolina	Regulator	2/28/17
Arizona	Regulator	3/1/17
Malta	Law Firm	3/7/17
South Carolina	Regulator	3/7/17
Delaware	Regulator	3/24/17
Cayman Islands	Regulator	3/28/17
Hawaii	Regulator	4/10/17
Vermont	Regulator	4/17/17
Singapore (via email)	Central Bank	4/19/17
Guernsey	Captive Manager	4/20/17
Isle of Man	Regulator	4/21/17
Ireland	Regulator	4/21/17
Luxembourg	Captive Manager	5/4/17

APPENDIX 2: TYPES OF CAPTIVES

Captive Type	Definition
"Pure"	A captive insuring only the risks of their owner or owners; 100% owned, directly or indirectly, by their insureds.
Association/group	A captive formed by an association for the benefit of its members. The association is a "pure" captive, meaning it insures only the risks of its owners. The sponsoring association may contribute 100% of the required capital, but since the association is owned by its members, its members indirectly own and have voting control over the captive insurance company.
Sponsored	Captives owned and controlled by parties unrelated to the insured. The insureds are required to put their capital at risk, risks are financed outside of the commercial regulatory environment, and the purpose is to achieve the risk financing objectives of the captive's insureds. However, a sponsored captive is not formed by its insureds—known as participants—and a sponsored captive does not necessarily pool its insured's risks. A key difference between a pure captive and a sponsored captive is the sponsored captive can be structured to maintain legally separate underwriting accounts, whereas an insured that is a member or owner in a pure group captive shares risk with the other captive insureds.
Special purpose financial captive	A captive that assumes reinsurance on business issued by life insurance company affiliates. The favorable financial regulations provided in onshore jurisdictions make the captive a desirable option to raise capital in the financial markets in the form of letters of credit or reserve financing arrangements. The ability of the captive to issue and account for surplus notes on the balance sheet as statutory equity provides additional financial flexibility.
Branch	A unit of an existing offshore (alien) captive, currently licensed to write employee benefit business for its owners and affiliates onshore. The branch is regulated as a pure captive, is taxed only on the branch writings and is required to use an onshore trust for the protection of U.S. policyholders and ceding insurers.
Agency	A captive, owned by one or more insurance agents, which is used to write insurance cover for a large number of third-party clients.
Risk retention group	An owner-controlled insurance company authorized by the Federal Liability Risk Retention Act of 1986. Authorization under the federal statute allows a group to be chartered in one state, but able to engage in the business of insurance in all states, subject to certain specific and limited restrictions.
Protected cell	Captives with a special provision that legally separates the assets and liabilities in each insured's account or "cell" from those of every other participant's "cell." PCCs guarantee that each cell within the company will be shielded not only from sharing capital and surplus with other cell

	owners but also from any legal action brought against another participant. Even in the event of a cell liquidation, there is no legal recourse against any other cell in the company.
Incorporated cell	An extension of the concept of a protected cell company. An ICC is a company that houses within it incorporated cells. An incorporated cell is a company in its own right. Unlike a PCC, which has separate and distinct cells whereby the assets and liabilities of a cell are legally segregated from those of other cells, each incorporated cell is ringfenced by virtue of its separate legal existence apart from other incorporated cells and the ICC itself.
Insurance-linked securities	Financial securitizations of insurance risks that allow investors such as pension funds and hedge funds to "take the place" of reinsurers on certain classes of business.
Special purpose vehicle	A company created by (but not owned by) an insurer or reinsurer for the sole purpose of issuing debt.

APPENDIX 3: REFERENCES

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