Bermuda: Living life (insurance) in paradise

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The acceleration of life insurance activity in Bermuda in the past few years has been extraordinary. What may have been just a handful of commercial life insurance companies with operations on the island, just a few years ago, has now grown into nearly 200 registered companies.

And they are not small players simply with an offshore address. Many of these companies are household names in the United States (and other parts of the world) that have decided to set up reinsurance operations locally, with significant assets under management and senior professionals relocated to the island to help administer and manage the business. Moreover, the pace doesn't look like it will level off any time soon. It seems that in making strategic decisions, everyone is now asking the question… "Bermuda?"

In this paper, we review the history of life insurance in Bermuda, reflect on how we got to where we are today, and look forward to what may be ahead. We present a hypothetical (although realistic) case study—"Boat & Beach Life"—to illustrate some of the factors that can lead to a strategic decision to place business into Bermuda and outline some important practical considerations.

The development of insurance in Bermuda

Bermuda's beginnings as an insurance center can be traced back to the foundation of Bermuda Marine Assurance Co. in the mid-19th century, which insured cargo en route from Bermuda to Philadelphia aboard the Liberty ship. But it was not until around a century later that we begin to see what starts to resemble the industry of today, with the formation in 1947 of American International Co. Ltd. in Bermuda to write all of AIG's non-life business. Just a year after that, International Reinsurance Co. Ltd. became the first reinsurance company to be established on the island.

Then in the early 1960s we started to see the emergence of the "captive insurer," which put Bermuda very much on the map in the insurance world. The island fast became (and to this day remains) the world's leading offshore captive domicile. A captive insurer is an alternative to going through a traditional insurance company for coverage, and is also an alternative to self-insurance, whereby an insurance company is created and owned by the insured company and the insurance provided is solely for that company. The term "captive" denotes that the insurance company is captive to the insured company or policyholder. Coverage has been traditionally property and casualty (P&C) reflecting, at least for U.S. companies, the tax advantages that arise as a result of P&C premiums being deductible whereas life premiums are not.

The choice of domicile for a captive insurer has been driven mainly by capital and tax considerations. Bermuda has looked particularly attractive in that regard. Additionally, a great lure of Bermuda has been its geographical location in the North Atlantic Ocean, approximately 650 miles southeast of North Carolina—most of Bermuda's captives are owned by large U.S. companies. Also favoring a Bermudian domicile has been the island's solid economic and political status—it is (at least for now) a British dependent territory—which avoids many of the concerns with operating businesses in other offshore territories. The Cayman Islands has also been a very popular location for the same reasons.

From the beginnings of the captive concept in the early 1960s, through the next 30 years, Bermuda continued to grow exponentially in importance as part of the global insurance and reinsurance ecosystem. However, the growth was largely confined to the P&C sector, reflective of that being the focus of coverage for captive insurance, with life insurance barely a topic of conversation. An international life reinsurer's trip to Bermuda in 1990 would comprise a visit to Bermuda Life—the premier provider of life coverage to local residents[1]—and perhaps a chance meeting with a P&C player to pick up some small amounts of reinsurance on supplemental benefit coverages.

[1] Bermuda Life continues to be a success story to this day, as the premier provider of life insurance to local residents. It is still housed in the Argus Building in Bermuda's capital, Hamilton, as it always has been.

In the mid-1980s foundations were starting to get laid for expansion of life insurance activity in Bermuda. In 1985, ACE Ltd. was created by Marsh & McLennan (already with a strong presence on the island) and Morgan Guaranty Trust to write excess liability and directors and officers (D&O) liability insurance. While originally formed in the Cayman Islands, ACE redomiciled to Bermuda the next year. Rolling forward to the early 21st century, and the heyday of variable annuities with guarantees, ACE began to aggressively reinsure such business from the United States, and place that business in Bermuda via its ACE Life Tempest Re subsidiary. It was to prove to be a turning point in how life insurers looked at Bermuda as an opportunity. ACE rapidly grew its variable annuity business in the years to come, continuing to place that business in Bermuda. A key part of the success of that program was a world class risk management discipline that enabled ACE's senior management to properly gauge and manage the complex risks associated with variable annuity guarantees. Best practice risk management is today a key theme behind the expansion of life insurance in Bermuda, and we return to this important factor later in this paper.

Other life operations at the time also started to see the opportunities and build their business. Activity in the life sector in Bermuda was picking up. And then, in the aftermath of the 2007-08 global financial crisis, something happened—which brings us to the Athene story.

Athene and Bermuda

In 1990, after the collapse of Drexel Burnham Lambert, its former head of mergers and acquisitions (M&A), Leon Black, and other Drexel alumni, created Apollo Advisers, a private equity firm. Apollo grew rapidly during the 1990s and the first decade of the new century. Having developed a niche in the area of distressed credit-risky securities, Apollo recognized a possible opportunity that could open up in the life insurance space. Life insurance liabilities were typically long-dated, and "sticky," inasmuch as there was high likelihood that the funds would remain under management for a very long period of time (illiquid liabilities), and historically the management of the assets of such were confined to Treasury bonds and relatively high-quality corporates. Was there a way in which Apollo could bring to bear its expertise in generating higher yields on such portfolios, and also potentially give itself a more permanent capital base? With that in mind, in 2008 Apollo, along with the former president of Sun America, Jim Belardi, and the former head of the Bear Stearns Insurance Solutions Group, Chip Gillis, created Athene, with the stated objective of providing solutions to meet the growing need for tax-efficient savings vehicles to support Baby Boomers. Apollo also saw the capital and tax efficiencies that Bermuda offered, and a key part of the original strategy was the creation of Athene Life Re on the island. A life reinsurer's trips to the island from then on would now include a visit to Athene, albeit initially more as a visit of curiosity as to whether such an audacious strategy could have any legs at all.

Then, in 2012, Apollo took the life industry by storm with the purchase of Aviva's U.S. business, and placement of that business into Athene, winning a competitive deal that surprised everyone. The Aviva U.S. block represented at the time $56 billion of statutory admitted assets, with one of the U.S. industry's largest portfolios of fixed and indexed annuity policies. Apollo's focus was always on the annuity block—in essence spread-based products where investment risk is largely passed to the insured—and the Aviva life block was immediately sold to Global Atlantic Financial.

What was initially a curiosity for the life industry had become a startling reality, and it was clear that the Apollo and Athene partnership had created something that represented a paradigm shift in how annuity assets and liabilities could be managed. In the years to follow, increasingly more and more private equity and asset management firms sought to copy "the Athene model," moving to accumulate long-dated (especially fixed and deferred annuities) liabilities. Some of the key concepts behind this business model are as follows:

- Relatively illiquid long-dated liabilities can be matched by relatively illiquid long-dated assets.
- The private equity or asset management firm leverages its special expertise in alternative asset classes that traditional insurance investment shops do not have, for example deep expertise and experience in private debt and collateralized loan obligations (CLOs).
- Then a Bermudian entity (owned by the same parent as the life insurer) is used to reinsure the business offshore where there are less conservative reserving and capital requirements, plus favorable tax treatment. This frees up capital that can be used for other purposes—in short, a credit for reinsurance is obtained and hard assets taken out.
- Fixed annuities have a particular attraction as they have lower biometric and policyholder anti-selection risk, in addition to a lower cost of capital than other long-dated insurance liabilities (e.g., life insurance).

Bermuda today and looking ahead

Today in Bermuda the life insurance industry is flourishing and continues to grow. As of October 2021, there were 170 registered commercial life insurance companies, many of them associated with well-known large U.S. life insurers.

Certainly the activity of the private equity firms and the asset managers has been instrumental in getting us to where we are today, but the activities of the traditional insurers have also been vibrant on the island, as they seek to maintain competitiveness. For example, Global Atlantic, Legal & General, and Wilton Re all have long histories in Bermuda.

A development of particular note spearheaded by the traditional insurers is the concept of a "reinsurance sidecar," whereby an insurer sets up a reinsurance subsidiary to manage a particular block of business. A recent example of this is the creation of Martello Re, a specialist company just recently set up in Bermuda by MassMutual to manage the fixed annuity business acquired from Great American.

Looking forward, the growth of life insurance in Bermuda looks promising, for a number of reasons.

First, opportunities for improved profitability and/or product performance will continue, because of the following factors:

- Potentially a reduced total asset requirement (reserves plus required capital).
- Increased investment flexibility—fewer restrictions versus U.S. statutory. Indeed, it may be the case that an investment strategy for spread-based products that is focused on commodity-like public investing will no longer be viable from a competitive standpoint. Bermuda may have to be considered simply from a defensive perspective. That said, there are two sides to the coin. Investing into these new categories of asset undoubtedly introduces new complexities and risks that life insurers need to manage. As life insurers expand their portfolios and strive for yield, they will also need to understand the risks a new asset portfolio brings, as well as addressing the regulatory constraints. In this way, the broadening of the potential asset mix creates tremendous opportunity, but the risks need to be carefully evaluated and gauged against all the key metrics that are important to the corporation. Never has it been so important for the investment and risk areas to work together in making strategic asset allocation decisions.
- Potential tax benefits. This benefit is becoming less likely given the latest U.S. tax law, but some opportunities may still be available, and are being explored by companies.

Second, the U.S. markets are rich with capital, and certainly existing reinsurers and asset managers have demonstrated they are ready to deploy capital.

Third, there is increasing pressure on all companies from competitors that are already in Bermuda.

Last and not least, there continue to be many attractions to looking at Bermuda as a domicile:

- Long history as a reinsurance center.
- Large support network for starting up and running insurance businesses, including legal expertise, management firms, accounting firms, and actuarial expertise.
- Easy and quick to establish an insurer.
- Favorable regulatory environment—the local regulator is easy to work with and accessible.
- The Bermuda regulatory environment is well respected internationally—the commercial insurer regime has gained a level of mutual recognition with the United States and the European Union.
  - Solvency II equivalence: Allows European Union insurers with Bermuda affiliates to use Bermuda Monetary Authority (BMA) regulations and required capital without recalculation under Solvency II.
  - Qualified jurisdiction and reciprocal jurisdiction status with the National Association of Insurance Commissioners (NAIC): Enables potential reduction in qualified or no reciprocal collateral in order to receive full reserve credit with new credit for reinsurance law.

Counterbalancing these very positive trends, some uncertainties do remain that could impact the market:

- Impact of the Base Erosion Anti-Abuse Tax (BEAT)
- Global minimum tax
- Tightening of U.S. reserving and capital requirements to restrict reinsurance credits from affiliates

Case study: Boat & Beach Life

We now present a hypothetical (although realistic) case study to illustrate some of the factors that can lead to a strategic decision to place business into Bermuda, and hint at what may still be to come. The case study also demonstrates the importance of a strong risk management discipline, and an understanding of the impact of strategies, across multiple financial lenses where the company is moving more into assets outside the publicly traded space. Specifically:

- The case study examines the impact on reserves and capital, tax, and hence distributable earnings and embedded value (EV), of moving an annuity portfolio invested in traditional assets from the United States to Bermuda
- It then explores the flexibility offered on the investment side by having the business domiciled in Bermuda versus the United States.

The modeling has been performed using Milliman's flagship technology and software platform, Integrate®.

BOAT & BEACH LIFE: PORTFOLIO PROFILE

Much of the recent activity in Bermuda has been around the management of fixed and indexed annuity portfolios, with some also in the structured settlements and traditional life space. It is also expected that we will see increased activity around universal life and pension risk transfer (PRT) portfolios, but more generally around liabilities that are asset-intensive in nature, reflecting the fact that much of the recent activity in Bermuda has had at its core an investment play. For this reason, we have created our hypothetical life insurer, Boat & Beach Life, to be a writer of fixed indexed annuities (FIAs), the majority with guaranteed living withdrawal benefit (GLWB) features.

We start by assuming that the company is currently domiciled in the United States. Its balance sheet comprises approximately $4.1 billion of reserves. The assets backing these liabilities comprise mostly high-quality bonds, plus some commercial mortgage loans (CMLs) and commercial mortgage obligations (CMOs). Assets and liabilities are well matched by Macaulay duration. The tables in Figure 1 summarize the asset-liability profile of Boat & Beach Life.

FIGURE 1: BOAT & BEACH LIFE: ASSET-LIABILITY PROFILE

ASSETS

- Conservative asset allocation, no exposure to alternative assets
- Overall high credit rating
- Well-matched to liability profile
- Due to decline in interest rates, substantial unrealized capital gains, specifically market value / book value = 107%
- Existing IMR of $30 million due to historical realized capital gains from interest rates

LIABILITIES

- FIA in-force block with average duration of 8.6
- Products with both 7-year and 10-year surrender charge schedules with market value adjustment (MVA) feature
- Includes GLWB rider with explicit rider charge
- Product includes premium and interest bonuses

MACAULAY DURATION	
Assets	8.7
Liabilities	8.6

BASIS	INITIAL YIELD
Book Yield	3.48%
Market Yield	2.45

INVESTMENT COMPOSITION	
Government Bonds	6%
Public Bonds	43
Private Bonds	26
Municipal Bonds	2
Commercial Mortgages	12
Structured Assets	11
Total	**100%**

FIXED MATURITIES BY CREDIT RATING	
AAA	1%
AA	7
A	33
BBB	50
BB or lower	9
Total	**100%**

It should be noted that as Boat & Beach Life is a writer of a single product type—not uncommon in Bermuda—there are particular advantages from having a Bermuda domicile compared to one in the United States. In the discussion of the case study that follows these aspects will be highlighted as we get to them.

From a U.S. statutory perspective, the balance sheet and profit signature of the business are shown in the table and associated chart in Figure 2. U.S. statutory earnings show a conservative reserve build up as surrender charges run off in early years. The methodology and assumptions used for the projections are as follows:

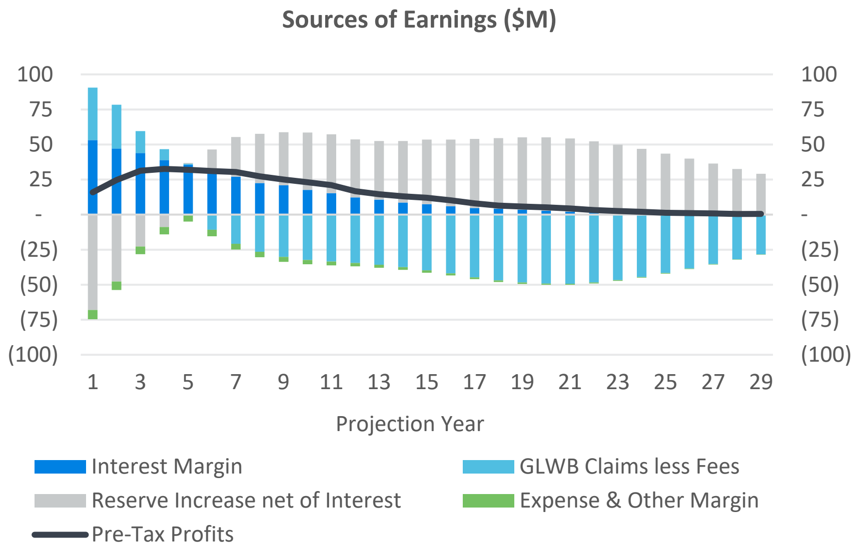
Standard projection mechanism for FIA products, cash flow projection with best estimate assumptions and reserve valuation under Actuarial Guideline (AG) 35.

- A standard forward scenario is used over the projection, which assumes interest rates follow the implied Treasury curve.
- Policyholder behavior assumptions are based on typical industry assumptions.
- Expenses are based on typical industry assumptions with allocated expenses.
- Crediting strategy is based on typical industry rate-setting expectations.

FIGURE 2: BOAT & BEACH LIFE: STATUTORY BALANCE SHEET AND PROFIT SIGNATURE

US STATUTORY BALANCE SHEET (US$M)

Assets	
Invested Assets	$4,498
Accrued Income	36
Total Assets	$4,534
Liabilities and Surplus	
Reserves	$4,141
Interest Maintenance Reserve	30
Total Liabilities	$4,171
Total Statutory Surplus (350% RBC)	$363



BOAT & BEACH LIFE: FINANCIAL IMPACT OF MOVING BUSINESS TO BERMUDA

We assume that from a U.S. statutory perspective Boat & Beach Life is targeting capital at 350% of NAIC Risk-Based Capital (RBC) at the Company Action Level (CAL), and from a Bermudian Economic Balance Sheet (EBS) perspective 150% of the Bermuda Solvency Capital Requirement (BSCR). These levels of target capital are a reasonable "middle ground" for what is typically held in practice by companies in the respective jurisdiction. Note that we are focused on NAIC RBC CAL and Bermuda EBS as they tend to be the binding constraints as far as the Total Asset Requirements (TARs) are concerned.

What now happens if we relocate the business to Bermuda?

From a target capital perspective, on balance the impact is a positive one. While there is a hit as a result of BSCR having relatively higher capital charges for the high-quality assets held by Boat & Beach Life, there are impacts the other way as a result of the assets and liabilities being well matched and of diversification.

Specifically:

- **Asset rate risk**: BSCR is more punitive toward AA/BBB-rated assets, which is the majority of the asset portfolio.
- **Interest rate risk**: Well-matched liabilities and asset portfolios are viewed more favorably under BSCR, especially under the new regime where there is no minimum floor charge similar to that under U.S. RBC regime.
- **Diversification benefit**: The BCSR regime benefits from the stronger degree of diversification. The old regime is a formula-based covariance adjustment that provides diversification credit between the asset, interest rate, and insurance risks. The new regime implemented a correlation matrix approach that results in less diversification credit compared to the old regime, but a company writing a single product is still able benefit from risk aggregation in Bermuda compared to onshore.

A summary of the overall capital impacts on Boat & Beach Life's portfolio is shown in Figure 3.

FIGURE 3: BOAT & BEACH LIFE: REQUIRED CAPITAL IMPACTS OF MOVING BUSINESS FROM U.S. TO BERMUDA JURISDICTION

NAIC RISK-BASED CAPITAL (USD, MILLIONS)

Risks	
C1 Risk – Bonds	$32
C1 Risk – CMBS	0
C1 Risk – CMLs	4
C1 Risk – Concentration	3
C1 Asset Risk	40
C2 Insurance Risk	0
C3 Interest Rate Risk	64
C4 Business Risk	0
Diversification Benefit	0
CAL RBC	$104
350% of CAL RBC	$363

BERMUDA SOLVENCY CAPITAL REQ. (USD, MILLIONS)

Risks	Old Regime	New Regime
Mkt Risk – Bonds	$86	$86
Mkt Risk – CMBS	0	0
Mkt Risk – CMLs	2	2
Mkt Risk – Concentration	9	9
Mkt Risk – Interest Rates	42	38
Insurance Risk	21	21
Diversification Benefit	(60)	(47)
Operational Risk	3	5
100% BSCR	103	115
150% BSCR	154	172
Transition/Reported BSCR*	$106	
150% of Transition BSCR	$160	

* Bermuda-reported BSCR reflects the phased-in from the old regime to new regime, starting in 2019 and to be completed by 2028.

In addition to the capital impact, there are positive impacts on surplus as a result of asset mark-to-market under the Bermudian requirements, and lower reserve requirements. Specifically, for the immediate point-in-time position for Boat & Beach Life, re-domiciling the business from the United States to Bermuda results in $465 million of free surplus created due to the following:

- Interest Maintenance Reserve (IMR) release: IMR is released as it is not part of asset requirements (i.e., technical provisions) under Bermuda requirements.
- Reserve release: Reserve is released via the update of U.S. statutory assumptions to best-estimate assumptions and methodologies under Bermuda requirements, inclusive of the risk margin component.
- Mark-to-market adjustment: Increase in asset valuation from book value basis to market value basis.
- Capital requirements – Decrease in capital requirements from U.S. 350% RBC CAL to 150% BSCR capital regimes.

A schematic showing the balance sheet impact of Boat & Beach Life moving from a U.S. to a Bermuda domicile is shown in Figure 4.

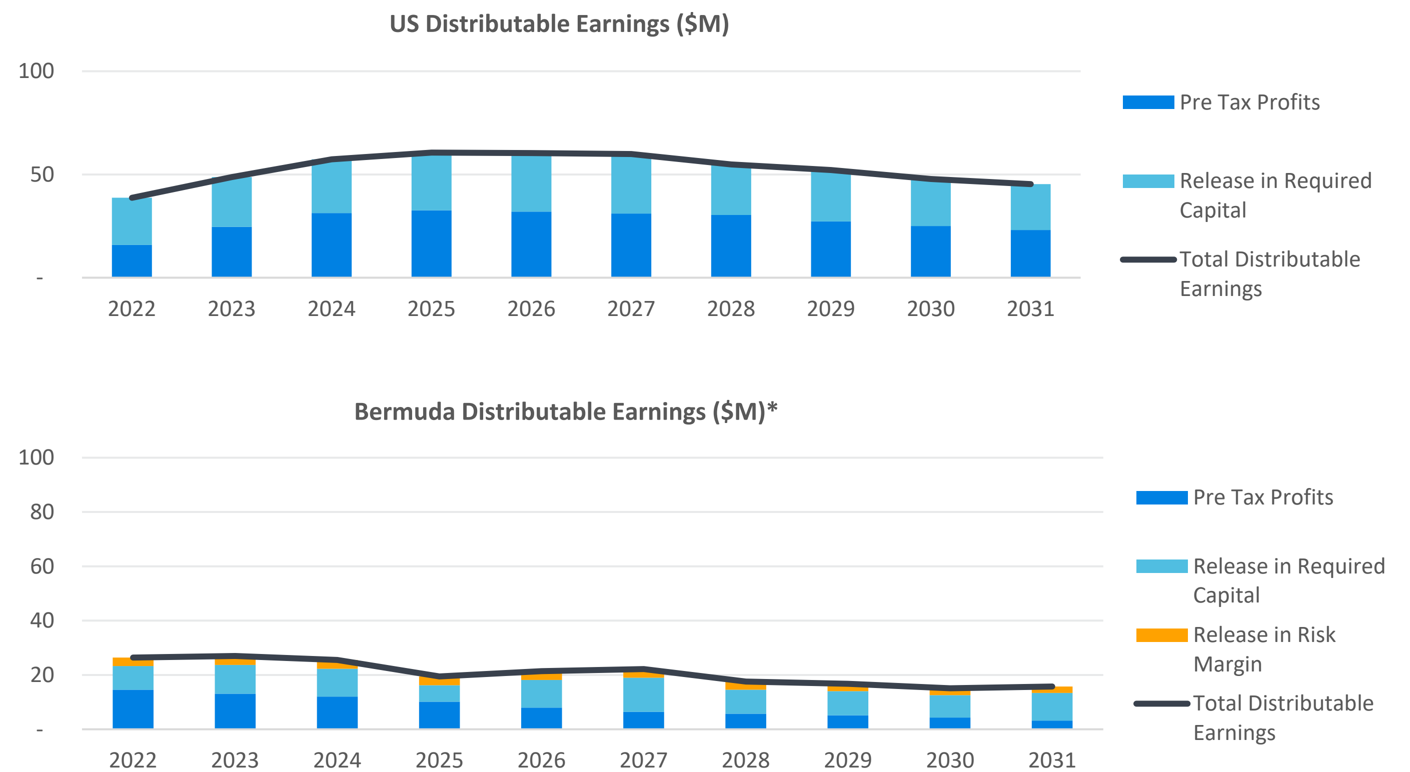
FIGURE 4: BOAT & BEACH LIFE: SCHEMATIC SHOWING STATUTORY BALANCE SHEET IMPACT OF TRANSITION FROM UNITED STATES TO BERMUDA

Looking at the projections of the business, the profit signature of re-domiciling from the United States to Bermuda is also markedly different for Boat & Beach Life. Some key features are as follows:

- Bermuda profits are front-loaded through the initial free surplus release as a result of transition to the Bermuda economic basis.
- U.S. earnings show higher profit after the first year as a result of reserve release from conservatism and higher investment margin due to historical book yields exceeding current market yields.
- Bermuda earnings also include a release of the risk margin over time as both capital and reserves run off.

The charts in Figure 5 compare the projected distributable earnings over 10 years under the U.S. versus Bermudian regimes. Note that in practice there may be collateral requirements to consider, which will have a dampening effect on surplus creation. This important point is returned to later.

FIGURE 5: BOAT & BEACH LIFE: COMPARISON OF PROJECTED DISTRIBUTABLE EARNINGS, UNITED STATES VS. BERMUDA



* Note that the first year surplus release of $465 million is not included in this chart.

As a natural extension of looking at the projection of distributable earnings, we can also look at the impact on the present value of those earnings, or EV. To the extent EV represents the cash-generating ability of the organization and is often the starting point for negotiations in M&A and reinsurance transactions, it is instructive to look at the impact on this basis of moving from the United States to Bermuda.

In deriving EV for Boat & Beach Life, the following assumptions are made:

- Boat & Beach Life is not a U.S. taxpayer.
- Federal income tax (FIT) = 21%
- Federal excise tax (FET) = 1%
- Projected years of distributable earnings = 30

EV is then defined as the present value of pretax profit, less the impact of FIT, and the release of required capital.

The components of EV on a U.S. statutory basis, and then the impact on EV of moving to a Bermuda economic basis, including the profit from the changes in TAR, is summarized in the tables in Figure 6. Overall, there is a significant uplift in EV from the transition, driven by the very significant surplus release that arises as a result of moving from the United States to the Bermudian EBS requirement, at a 10% discount rate a move from $371 million to $531 million.

FIGURE 6: EV AND IMPACTS

COMPONENTS OF EMBEDDED VALUE U.S. STATUTORY (USD, MILLIONS)

	EV Discount Rates		
Component	8%	10%	12%
Value of Pretax Profit	$218	$194	$174
Federal Income Tax	(33)	(30)	(27)
Release of Required Capital	235	207	180
Total	$420	$371	$327

EMBEDDED VALUE MOVEMENT ANALYSIS, U.S. STATUTORY TO BERMUDA EBS (USD, MILLIONS)

	EV Discount Rates		
Components	8%	10%	12%
EV, U.S. Stat. Basis	$420	$371	$327
Profit From Changes in TAR	(318)	(294)	(270)
Impact of Excise Tax	(9)	(12)	(14)
Initial Surplus Release	465	465	465
EV, Bermuda Economic Basis	$558	$531	$508

The analysis so far has not considered any possible collateral requirements, and as hinted at earlier bringing such into account could have a significant impact. To give a feel for how significant this could be, the case study model has been run using an assumption that the collateral requirements for reinsuring the business to Bermuda are set at 103% of U.S. statutory reserves and IMR.

The consideration of collateral has a significant dampening impact on EV due to the reduction in surplus release, as summarized in the table in Figure 7. However, a very strong positive impact remains as a result of the move from the United States to Bermuda. At a 10% risk discount rate, while the Bermudian-based EV has gone from $531 million to $483 million, there is still a very significant uplift in moving from the United States to Bermuda.

FIGURE 7: EMBEDDED VALUE MOVEMENT ANALYSIS, U.S. STATUTORY TO BERMUDA EBS, AFTER ALLOWING FOR COLLATERAL REQUIREMENTS (USD, MILLIONS)

	EV Discount Rates		
Component	8%	10%	12%
EV, U.S. Stat. Basis	$420	$371	$327
Profit From Changes in TAR	(148)	(131)	(113)
Impact of Excise Tax	(9)	(12)	(14)
Initial Surplus Release	254	254	254
EV, Bermuda Economic Basis	$517	$482	$454

In summary, the impact from tax and capital requirements, after allowing for collateral requirements, has generated an increase in EV of $111 million at a 10% discount rate as a result of the redomicile of Beach & Boat Life's business from the United States to Bermuda.

BOAT & BEACH LIFE: IMPACT OF ALTERNATIVE ASSETS

The analysis described so far for Boat & Beach Life has assumed a relatively traditional investment portfolio, comprised mainly of high-quality corporate bonds, with some CMLs and CMOs. Under this portfolio, the overall impact of moving from a U.S. capital target of 350% RBC to a Bermudian capital target of 150% of BSCR was to lead to an increased capital requirement due to generally higher required capital on higher-quality corporate bonds. However, the position can be quite different depending on the specifics of the asset portfolio and in many cases the more esoteric asset classes have less conservative capital charges in Bermuda compared to the United States. In the following section, we explore a scenario where Boat & Beach Life not only enjoys the benefits of assets being marked to market and lower reserve requirements, but also lower asset capital charges as a result of moving business to Bermuda, because of holdings in alternative illiquid asset classes.

For this scenario, we show the impact of restructuring the asset portfolio of Boat & Beach Life so that there is now a 7% allocation to "Alternative Assets" (held at that level over the entire projection period). For simplicity, we define such assets as being equities with an expected yield of 10%. Under the BSCR regime, Alternative Assets are typically considered as equity with potential capital charges of 20%, 25%, or 35%, depending on the type of categorization. For the purpose of the case study, we have assumed 50% of the Alternative Assets in the 20% risk charge category and another 50% in the 35% risk charge category, resulting in a 27.5% aggregate risk charge for the Alternative Assets. Classification as equity has advantages over

U.S. RBC from a capital charge perspective, given the different capital multipliers as well as generous diversification benefits against fixed income assets.

The restructured asset portfolio for Boat & Beach Life is shown in Figure 8.

FIGURE 8: RESTRUCTURED ASSET PORTFOLIO

Government Bonds	6%
Public Bonds	40
Private Bonds	24
Municipal Bonds	2
Commercial Mortgages	11
Structured Assets	10
Alternative Assets	7
Total	100%

The tables in Figure 9 then show a comparison of the impact of the 7% investment in Alternative Assets compared to the original portfolio. The impact is an increase in target BSCR capital of just $50 million, compared to an increase in target RBC capital of $76 million.

FIGURE 9: MARKET RISK CAPITAL REQUIREMENTS: BASELINE VS. ALTERNATIVE ASSETS

BSCR – BASELINE VS. ALTERNATIVE PORTFOLIO* (USD, MILLIONS)

	Baseline	Alts
Mkt Risk – Fixed Income	$88	$82
Mkt Risk – Equity	0	81
Mkt Risk – Conc. and Int. Rate	47	47
Market Risk	105	156
BSCR*	115	168
Transition Impact	(9)	(28)
Reported BSCR	106	140
150% of Reported BSCR	$160	$210

* BSCR charge based on new regime.

RBC – BASELINE VS. ALTERNATIVE PORTFOLIO (USD, MILLIONS)

Risks	Baseline	Alts
C1-cs (Common Stock Risk)	$0	$75
C1-o (Other Assets Risk)	40	37
CAL RBC	104	125
350% of CAL RBC	$363	$439

Once again, it is instructive to consider the overall impact on EV of the new strategy. From an EV perspective, the impact to consider is threefold:

- Pretax profit: Higher investment income from Alternative Assets.
- Federal income tax: Not applicable for Bermuda.
- Cost of capital: Higher risk requirement on Alternative Assets, partially offset by higher diversification.

Focusing on the impact on EV incorporating the impact of collateral requirements, the tables in Figures 10 and 11 show the impact on EV of incorporating Alternative Assets. On the U.S. side, the increase in investment income from Alternative Assets is dampened by the significant increase in cost of capital, as well as corresponding income tax. For Boat & Beach Life, this results in a U.S. EV increase of $57 million under a 10% discount rate. In Bermuda, the impact on cost of capital is muted as the existing collateral requirement exceeds the BSCR target capital in much of the projection. As a result, for Bermuda there is a larger increase in EV of $113 million under a 10% discount rate—reflective of the higher investment income offsetting the relatively small increase in capital requirements.

FIGURE 10: BERMUDA EV MOVEMENT ANALYSIS BASELINE TO ALTERNATIVE PORTFOLIO (USD, MILLIONS)

	EV Discount Rates		
Component	8%	10%	12%
EV, Bermuda Baseline Portfolio	$517	$482	$454
Increase in PreTax Profit	125	113	102
Increase in Cost of Capital	(0)	(0)	(0)
EV, Bermuda Alternative Portfolio	$643	$595	$556

For the purpose of the case study, the impact from the sale of the assets due to asset restructuring was not included. It should be noted that, in the United States, an entity would not be able to obtain the full market value of the assets immediately due to IMR requirements, which are not a factor under the Bermuda regime.

FIGURE 11: U.S. EV MOVEMENT ANALYSIS, BASELINE TO ALTERNATIVE PORTFOLIO (USD, MILLIONS)

	EV Discount Rates		
Components	8%	10%	12%
EV, U.S. Baseline Portfolio	$420	$371	$327
Increase in Pretax Profit	125	112	102
Increase in Federal Income Tax	(19)	(17)	(16)
Increase in Cost of Capital	(26)	(38)	(43)
EV, U.S. Alternative Portfolio	$501	$428	$370

OTHER PRACTICAL CONSIDERATIONS IN GOING OFFSHORE

In developing the Boat & Beach Life case study, certain simplifications have been made for the purposes of highlighting certain advantages of placing business in Bermuda. In practice, additional aspects may have impacts (possibly considerable impacts) and will need to be addressed. They may include, but are not limited to, the following.

Other regulatory requirements and financial reporting/risk management considerations

In the case study, when calculating EV the Bermuda collateral requirements for reinsured business have been brought into account. The importance of this aspect cannot be overemphasized. As a general point, there will be collateral and trust requirements for entities that do not have reciprocal jurisdiction or similar status under regulatory requirements in order to receive reinsurance credit. Additionally, a company may have its own collateral and trust requirements to satisfy internal risk framework and manage financial reporting volatility. The requirements are typically defined as a percentage of regulatory reserves (and can be on a book or market value basis), as we had assumed for the case study.

Tax considerations

One of the tax considerations would be the tax status of the Bermuda entity. A 953d election would be a U.S. taxpayer, subject to 21% FIT, while a non-953d would incur a 1% FET based on the reinsurance premium. A Bermuda entity that is also a U.S. taxpayer will be able to reflect capital adjustments in the BSCR calculations for deferred taxes.

Another aspect to consider would be the tax impact on the initial surplus release from moving the entity to Bermuda for Boat & Beach, which will depend on the tax position of the current U.S. entity.

Special BSCR requirement for a new entity

The BMA may require that a new entity set up in Bermuda hold higher levels of BSCR as it establishes the business offshore, compared to a more seasoned Bermudian insurer. It is not uncommon to see new entrants hold target capital levels at 180% of BSCR or higher.

Interest rate environment and market value accounting

In the current interest rate environment, the results of the case study show a fairly substantial mark-to-market on the asset portfolio. As the interest rate rises, this would dampen the impact of the market value of surplus released from moving to Bermuda. In addition, market value accounting tends to lead to more volatility in the balance sheet and earnings. This is an important area for risk management, especially during periods of market instability, such as the subprime mortgage global financial crisis in 2007 and 2008.

Longevity risk charge

Currently for FIA products with a GLWB rider there is no longevity risk charge in the BSCR framework. However, there have been discussions on the topic as to whether it would be appropriate to reflect the longevity risk charge for products with a GLWB rider, and how to best reflect it as part of the framework.

To illustrate the potential impact of this, we have rerun the case study model (before incorporating the Alternative Assets) incorporating attained age-based risk factors for immediate annuity payments on GLWB payments, which resulted in a net increase in the BSCR of $110 million due to the change in insurance risk.

Closing thoughts

In this paper, we have reviewed the history of life insurance in Bermuda, reflected on how we have gotten to where we are today, and looked forward to what may be ahead. We have used a hypothetical (although realistic) case study to illustrate some of the factors that can lead to a strategic decision to put business into Bermuda, and outlined some important practical considerations. We hope the reader has found it useful as a means to help understand some of the concepts and key dynamics. In particular, from an EV perspective, we highlighted potentially considerable benefits of a move from a U.S. statutory basis to Bermuda EBS, examining the impact from:

- Reserve/capital levels
- Tax
- Investment flexibility

These impacts are highlighted in the summary table for our case study in Figure 12.

FIGURE 12 EV MOVEMENT ANALYSIS, U.S. STATUTORY TO BERMUDA EBS, AFTER ALLOWING FOR COLLATERAL REQUIREMENTS (USD, MILLIONS)

	EV Discount Rates		
Component	8%	10%	12%
EV, U.S. Stat. Basis	$420	$371	$327
Net Reserve/Capital Impact	106	123	141
Impact of Excise Tax	(9)	(12)	(14)
EV, Bermuda Economic Basis	$517	$482	$454
Increase in Pretax Profit	125	113	102
EV, Bermuda Alternative Portfolio	$643	$595	$556

The last few years have been remarkable ones for the growth of life insurance and reinsurance on the island, and it shows no signs of letting up. We expect to see continued activity driven by all of the private equity (PE) firms, investment management firms, and the traditional life insurers, including through reinsurance sidecar vehicles. We look forward to a very exciting ride yet to come.

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