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… Or How Insurance Companies Learned to Love Passive Investing

Passive mandates and ETFs have found their way into insurers portfolios

It is well documented that institutional investors, including insurance companies, continue to utilize ETFs to take certain investment exposures - and increasingly so. Less well known is the rapid rise of another form of passive investing, namely customized passive mandates, which have also started to find their place in the insurers general accounts.

Traditionally, insurers have been active investors, usually matching their liability streams with corresponding assets and playing around the margin with security selection and/or asset allocation to attain additional investment income. Besides taking into account their liability structure, insurance companies typically also have to consider regulatory and accounting constraints in their investment decisions. In order to comply with these constraints, insurers require a high degree of customization in their investments, especially in the fixed income space. In this light, passive investment products – which are often only associated with one-size-fits-all ETFs or index funds – may not be the first choice for insurance companies to make any strategic investment.

DWS believes the insurance industry may miss an opportunity by neglecting the considerable value an additional form of passive investing can bring – customized passive mandates which can offer a broad range of different investment outcomes while also taking into account individual investment constraints such as exclusion lists or target durations. Indeed, some of the largest insurance and reinsurance companies in the world have begun to "passivize" parts of their asset allocation mainly in equities but increasingly also in fixed income. This paper outlines some of the considerations that have led these insurers to embrace passive mandate investing, while also summarizing some of the advantages that ETFs have for insurance investors.

Amongst others, these considerations include:
_ Passive mandates can provide efficient exposure to various risk/return profiles in the equity and fixed income space by tracking standard or custom indices
_ Tracking ESG indices can be a faster way to render a part of the portfolio "ESG compliant" when compared with reconfiguring an existing investment strategy
_ Passive equity strategies are the natural underlying for option-based protected equity strategies as they can ensure high hedge effectiveness
_ Passive investments are typically more cost efficient by having low management fees
_ ETFs can be used as a tool for tactical allocations and transition management as well as efficient building blocks for multi-asset unit-linked products

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What is a passive mandate?

A passive mandate in its most basic definition is nothing else than a separate account that follows a certain benchmark as closely as possible. This is usually done by a portfolio manager based on a set of rules and tasked with replicating a given benchmark within this set of rules. The legal structure can vary, such as being implemented in a separately managed account or wrapped in a fund structure, through an investment management agreement, power of attorney over certain accounts, or an investment advisory agreement, leaving the final decision on every transaction to the investor's in-house investment team. In essence, one can think of a passive mandate as if one owned an ETF all by one-self with the option of designing the investment vehicle to one's own needs and without the need to trade any units through an exchange or over the counter. Passive mandates can come in different forms and sizes and can be flexibly adjusted over their lifetime. On the latter it should be noted that mandate increases and decreases are possible at all times, short of the minimum size of a portfolio required to replicate its benchmark effectively.

The three most important things in passive mandates: customisation, customisation, customisation

An insurance company is by nature more constrained than almost any other institutional investor. Accounting, regulation, solvency capital and income generation, amongst others, are all very specific considerations for the insurance investor when implementing an investment strategy. Standardised products, such as mutual funds, can work for satellite investments, but the balance sheet must be run in a highly customised manner to ideally satisfy the many diverse (and sometimes contradictory) requirements, which is one of the reasons that insurers are sometimes hesitant to embrace large-scale outsourcing (which is a debate to have another time).

This requirement for customisation is one reason why passive mandates are increasingly en vogue. Insurers are becoming more aware of a passive mandate's ability to be designed based on very specific rules and guidelines, in just about any way one would like to. While the term "smart beta" is possibly overused, for the purposes of this discussion it is apt; considerable thought must go into the construction and design of a passive mandate transforming it into a sophisticated and personalised investment and not a simple index tracking instrument.

Among the customisation abilities that an insurer can choose to implement:

_ Exclusion criteria, e.g. benchmark ex insurance in order to avoid investment into a competitor,
_ Tracking combined benchmarks such as an MSCI World benchmark with individual regional weights, e.g. 50% MSCI Europe + 40% MSCI North America + 10% MSCI Pacific,
_ Custom duration and rating buckets for fixed income benchmarks,
_ Individual smart beta weighting schemes such as quality weighting for government bonds benchmarks or yield-focused strategies in the corporate bonds space
_ ESG considerations, and
_ Capital efficiency, such as protected equity strategies

Case Study: Passive protected equity strategies providing capital efficiency under Solvency II

Under Solvency II, equity exposures are subject to a basic capital charge of 39% to 49%, depending on the country of listing of the individual stocks. Insurers can reduce the capital charge by applying certain risk mitigation techniques. At DWS we have worked with insurance companies to design protected equity strategies combining a passive underlying with a put option overlay to limit the drawdown of the equity portfolio and therefore allowing to reduce the equity risk capital charge. For example, a protected US equity strategy can be constructed by passively tracking the S&P 500 and buying put options on the S&P 500 for protection. The protection level is defined by the strike level of the option. For example, a strike level of 80% will limit the maximum drawdown of the portfolio to -20%. In this way, also the Solvency II capital charge can be reduced to approx. 20% given that the option overlay fulfils certain conditions. For example, one main requirement for a full regulatory recognition of the overlay is that it must be in force for at least 12 months. This can also be achieved by a hedge program using rolling options with a maturity below 12 months. Some insurance companies also wish to construct a collar strategy by additionally selling call options on the same index to (partially) finance the purchased put options, but at the opportunity cost of limited upside. Protection overlays typically use listed index options. Hence, a passive equity portfolio tracking the underlying index is the natural investment strategy to ensure the highest hedge effectiveness.

Low cost can serve as an "alpha proxy"

It will surprise no one when we state that most passive investments are less costly than active implementation styles. One can therefore consider that allocating to an asset class in a passive manner is much more cost efficient than investing into highly specialised staff that seek for instance to outperform a certain benchmark. Hence, the low-cost component can be considered a proxy for the alpha sought in active strategies, however it is by definition certain to be realised.

It is important to note that some asset classes have more alpha potential than others, which is a strategic consideration when considering where to gain market exposure and how – and we would not argue that it makes sense to passivize a balance sheet entirely. Some of the more "plain vanilla" portions of the balance sheet offer less alpha potential in general, so why even invest in an active manner when all of the insurance specific requirements can be met with a passive mandate as well? By passivizing and saving on the cost side (whether internal or external) a sort of alpha proxy can be captured. The cost benefit analysis of allocating actively vs. passively should be conducted in that light.

Summarised in figure 1 are those asset classes that, based on our observation, insurance companies consider to manage through passive mandates versus those that insurers tend to continue in an active manner.

FIGURE 1: ASSET CLASSES THAT INSURERS CONSIDER TO MANAGE PASSIVELY VS. ACTIVELY

Manage passively	Manage actively
Large & mid cap DM equities DM government bonds	Small & mid cap DM equities EM equities EM bonds Corporate bonds Alternative investments

Source: DWS International GmbH. As of: September 2019

However, it bears pointing out that basically all liquid asset classes can be managed passively. For example, DWS is also managing passive corporate bond and EM government bond mandates on behalf of insurance companies.

Fixed income investments replicating the liability profile – a philosophical debate

Without a doubt, the main liability-replicating portion of an insurance company's general account is its fixed income allocation, with a strong emphasis on government debt. There is an argument that can be made that this part of the balance sheet is not really managed in the traditional "active" sense but rather referred to as "semi-active" since it's often primarily buy-and-maintain with a book yield component and reinvestment of maturities and coupons. Transactions in this part of the balance sheet are mainly driven by asset-liability management (ALM) or accounting considerations, claims, or dividend payments.

Given that one person's semi-active is another person's semi-passive, this is where passive mandate investing becomes interesting. With myriad possibilities for customisation, who's to say that a rule-based, passively-run bond mandate doesn't actually satisfy all the requirements that an "active" implementation might do as well? Passive mandates are not set in stone for eternity, so quarterly or even monthly changes, or even an occasional gains harvesting program can be implemented easily, rendering such a passive mandate not much unlike the in-house implementation, albeit likely more cost efficient.

… and then to ESG

The rising significance of ESG is possibly one of the key catalysts behind insurers embracing passive investing. Tracking ESG indices is a faster way to render a part of the portfolio "ESG compliant" when compared with reconfiguring an existing equity or fixed income strategy.

ESG integration can range from the implementation of a simple exclusion list to the development of very customized best-in-class ESG benchmarks in cooperation with third-party index providers. In addition, smart technology such as the DWS proprietary ESG Engine can allow for highly bespoke ESG programs, wherein each investor decides what level of importance the different sub-components of the "E," the "S" and the "G" should have. In the absence of a common taxonomy around ESG, some investors may have a particular emphasis on one or several components of Environment, Social or Governance, such as e.g. carbon exposure or the death penalty.

At DWS, we basically identify two main ways of ESG integration into passive portfolios.

Approach 1: Replication of ESG index

With this approach, a portfolio manager tracks an ESG index such as the MSCI World ESG Leaders or the Bloomberg Barclays Euro Corporate Bonds SRI. Individual ESG exclusions can be implemented by constructing a custom ESG index in cooperation with established index providers such as S&P, MSCI or Bloomberg Barclays. However, the customisation possibilities can be limited to a certain degree. For example, when constructing a custom index in cooperation with MSCI, it might not be possible to apply an ESG screen based on data from an ESG data vendor other than MSCI.

Approach 2: Passive portfolio with custom ESG implementation

With this approach, the "ESG tilt" is directly implemented to the passive portfolio while tracking a non-ESG benchmark. The portfolio manager would typically apply an optimisation process to the ESG-adjusted portfolio by which he brings all relevant risk and return factors of the portfolio – such as country or sector weights – in line with the benchmark in order to minimise the portfolio's tracking error to the non-ESG benchmark or operate within a given tracking error budget. This approach allows for highly customised ESG screens using data of one or multiple ESG data providers (e.g. aggregated via the DWS ESG Engine). A regular exclusion list defined by the insurance company itself can also be easily implemented in this way.

Case Study: Running passive equity portfolios with structurally improved ESG metrics

DWS has worked with a Dutch institutional client on passive equity portfolios which are managed with structurally improved ESG metrics versus their benchmarks and a particular focus on the social pillar. One portfolio is benchmarked against the MSCI World ex Japan with custom regional weights. The other portfolio tracks the MSCI Emerging Markets Index.

Both portfolios are managed with structurally improved MSCI ESG metrics versus their benchmarks, such as an improvement in the average MSCI IVA Score (0-10 scale) by +1.5 or a reduction in the average MSCI Carbon Intensity (in T CO_2e / USD Sales) of -20% and an improvement of social pillar-specific scores by 10%. All ESG enhancements are implemented with the lowest possible ex-ante tracking error using a portfolio optimisation which aligns the sector and country weights of the ESG-adjusted portfolio with those of the two benchmarks.

But what about ETFs?

Having examined some of the use cases of passive mandates, below are some examples outlining the increasing use traditional ETF vehicles.

Using ETFs as tactical or transition investments

Insurance companies often use ETFs either to gain tactical exposure to specific sectors, such as high yield, or as placeholders to "park" funds as they work to secure other investments. For example, if a company wants to build or grow an investment grade corporate bond portfolio, it might use a corporate bond ETF as a placeholder while it looks for the cash securities it wants to meet its portfolio needs. Or if it has a sudden, large cash flow that needs to be invested according the company SAA it may resort to ETFs in the interim.

Insurance companies can focus on determining whether bond ETFs make sense as part of their portfolio strategies, and what degree of latitude their regulators provide for their use. Furthermore, given the changes to the traditional cash bond market since the financial crisis, bond ETFs can be useful tools for acquiring fixed income exposures that would otherwise be difficult to achieve.

Case Study: Gaining quick exposure to harder-to-access asset classes

Bond ETFs are increasingly popular tools for insurers looking for exposure to fixed income without worrying about fluctuations in market liquidity. As an example, a US-based insurance clients wanted to invest USD 130m in an active USD high yield mandate. Over the ramp-up period for the portfolio, the client chose to gain exposure via a USD high yield bond ETF.

Another example would be real estate markets. Given the illiquid nature of real estate, some investors have used REIT ETFs as a proxy investment while the direct real estate portfolio is constructed over time. The correlation of REITs with direct real estate exposure is not perfect but the approach can be a somewhat comparable.

Cash management

With rates being negative across Europe, insurance companies are facing increasing direct or implied costs from holding cash in "overnight" deposits and other investment facilities. It is now a priority for many investors to neutralise the costs and risks of doing so. Firms may need to hold more cash depending on market developments and investors are becoming increasingly aware of liquidity, settlement certainty, counterparty risk, cost mitigation etc. As a result, an increasing number of insurance companies tend to allocate to cash ETFs as an effective overnight cash placement tool, offering an alternative to unsecured bank deposits. Overnight Rate ETFs offer a simple solution to short term overnight cash placement challenges by offering a fixed overnight rate benchmark returns (less fees) for cash investments. The returns are provided on a daily basis and reflected in the changing Net Asset Value (NAV) of the ETF.

Case Study: ETF solution for a short term cash placement

Where an insurance company is long cash, they could buy an Overnight Rate ETF. One of the great benefits of ETFs is the ability to find liquidity intraday with a live price or versus Net Asset Value of the respective trading day. Unlike mutual funds which only offer NAV execution, an ETF allows investors to trade such exposure with a live market price intraday. Therefore, when a trade is executed with a live price, the investor has locked in the exposure to the corresponding ETF immediately from the point of trade. Furthermore, given the settlement cycle of ETFs is typically T+2, although the option of T+1 and potentially T+0 settlements do exist, this means that when trading, investors do not have to exchange cash for the securities until the value date, i.e. typically two days after trade date. Therefore, the investor has the advantage of having the option to trade in and out of the Overnight Rate ETF intraday without having to trade a physical cash account at that point in time.

Unit-linked investments

Insurers do not only use ETFs in their general account but also as efficient building blocks for their unit-linked life insurance products. For example, DWS has partnered with a leading European life insurer to set-up a range of multi-asset funds of ETFs offering different target volatilities. The allocation to the equity and fixed income ETFs within each fund is based on a systematic investment process which rebalances the portfolio of ETFs on a monthly basis in order to achieve the defined volatility level. Besides choosing a certain target volatility, the policyholders can also make a choice to invest in a capital-protected version of each fund. The capital protection is achieved by a Time Invariant Portfolio Protection (TIPP) Strategy which systematically shifts investments between a risk component (the ETF basket) and a lower risk component (cash, money market). Typically, a TIPP strategy does not provide a perfect downside protection. Therefore, the remaining “gap risk” is hedged by an OTC put option. In the context of a multi-asset fund, ETFs provide a broad and diversified access to specific markets in one liquid instrument allowing for efficient portfolio re-allocations on a regular basis.

Passive investments under Solvency II

Under the current Solvency II regulation, fund investments are subject to a look-through approach. Hence, indirect investments via ETFs or index funds are treated in the same way as direct investments via passive mandates so that the wrapper of a passive strategy does not play a role in determining the solvency capital requirement. Each individual portfolio holding is subject to the relevant Solvency II market risk sub-module like the equity risk sub-module for equity investments or the spread risk sub-module for fixed income investments.

Figure 2 summarises the Solvency II capital charges for some major benchmarks based on the Solvency II standard model. The capital charge for the interest rate and the currency risk is not included as these charges also depend on the insurer’s liability structure and the resulting duration gap and net position in foreign currencies. Hence, it is not possible to calculate the solvency capital requirement for the interest rate and currency risk a priori without knowing the insurer’s liabilities.

FIGURE 2: STANDARD SOLVENCY II CAPITAL CHARGES FOR BROAD INVESTMENT BENCHMARKS

Benchmark	Risk Module	Solvency Capital Requirement (SCR)
MSCI World	Equity	39.2% + SA*
S&P 500	Equity	39.0% + SA*
Euro Stoxx 50	Equity	39.0% + SA*
MSCI Emerging Markets	Equity	47.5% + SA*
MSCI BRIC	Equity	49.0% + SA*
FTSE World Government Bonds	Spread	1.8%
Markit iBoxx Eurozone Government Bonds	Spread	0.0%
Bloomberg Barclays Euro Corporates	Spread	9.5%
Bloomberg Barclays US Corporates	Spread	11.7%
Bloomberg Barclays Euro High Yield	Spread	21.1%
Bloomberg Barclays US High Yield	Spread	25.3%
JP Morgan EMBI Global Div.	Spread	22.2%
JP Morgan GBI-EM Div.	Spread	6.1%

*SA = Strategic adjustment, an additional variable capital charge ranging between -10% and +10%

Source: DWS International GmbH. As of: 30 August 2019

As mentioned previously, there are also ways to reduce the capital charges by applying risk mitigation strategies. For example, a protective put overlay on a passive Euro Stoxx 50 portfolio using Euro Stoxx 50 put options with a strike level of 80% can reduce the standard equity SCR from 39% to approx. 20%.

Accounting is an additional consideration: Different treatment of passive mandates and ETFs under IFRS 9

From 2022, insurance companies that report under international accounting standards must classify and measure their investments according to IFRS 9. As outlined in Figure 3, there are basically three ways to classify and measure a financial instrument under IFRS 9. In many cases, insurance companies prefer to measure their assets at fair value through OCI. However, this also depends on the accounting of liabilities under IFRS 17 as insurers typically also want to avoid accounting mismatches between assets and liabilities.

FIGURE 3: CLASSIFICATION & MEASUREMENT OF FINANCIAL INSTRUMENTS UNDER IFRS 9

Amortised Cost	The instrument is carried at amortised cost. Unrealised gains/losses are not recognised, except for an impairment based on the expected credit loss. This model is basically only available for “plain vanilla” fixed income investments that are held to maturity.
Fair Value through Other Comprehensive Income (OCI)	The instrument is carried at fair value with all unrealised gains/losses being recorded in the equity item ‘Other comprehensive Income (OCI)’ without going through P&L. This model is basically available for all “plain vanilla” bonds that may not only be held to maturity as well for some equity investments that are not held for trading. For fixed income investments, there is an option to reclassify (“recycle”) the gains/losses from OCI to P&L once the instrument is sold. Interest or divided income is directly recognised in P&L.
Fair Value through Profit or Loss (P&L)	The instrument is carried at fair value with all (unrealised) gains/losses recorded in P&L. This model is available for all instruments that cannot be classified under the other two models, i.e. mainly equity investments as well as more complex fixed income instruments.

Source: DWS International GmbH. As of: September 2019

In contrast to Solvency II, there is no look-through for (unconsolidated) fund investments under IFRS 9. This means that it is not possible to classify and measure each holding of an ETF individually. The ETF as a whole is treated as a puttable instrument which is always measured at fair value through P&L. This can lead to a strategic disadvantage of a fund investment when compared to any direct investment via a passive mandate that might be eligible for another treatment than fair value through P&L. For example, a direct bond investment may also be measured at amortised costs or fair value through OCI while the same investment via an ETF is required to be measured at fair value through P&L. Hence, insurers should consider whether to switch their ETF exposures to a passive mandate where the portfolio size is sufficient to do so. This is especially true for strategic exposures that do not require the intraday liquidity an ETF offers.

Enhance your passive exposure

We would argue that the true value of passive (mandate) investing is that you can benefit from lower cost structures without forgoing most of the benefits traditionally associated with active investments. However, we caution against a race to the bottom in terms of fees by always choosing the absolutely cheapest product. Indeed, it is more value-adding for the insurance investor to combine passive components with ESG and other sophisticated approaches.
For insurance investors seeking to benefit from passive (mandate) investing, but at the same time are interested in “enhancing their passive” exposure, it is worthwhile considering systematic investment approaches. These strategies are another low cost alternative to gain equity exposure and share many similarities with passive (mandate) investing in terms of customizability and ESG. A disciplined implementation with strict regional and sector limits preserves the main characteristics of the targeted benchmark and thereby retains many benefits of passive investing. The value add for insurance investors is their potential to generate moderate but stable outperformance with modest active risk at only slightly higher costs.

At DWS, we implement systematic solutions in the form of multi-factor-based strategies with tracking errors and information ratios around one since nearly two decades. Especially in the current low-interest rate environment, these “efficient alpha” strategies are a promising way to generate stable additional returns to close potential funding gaps and therefore work well together with passive allocations. In particular, Europe has been a good play ground for factor based strategies in recent years.

Moreover, multi-factor strategies allow to directly integrate “ESG tilts” within the systematic portfolio construction. The naturally arising tracking error – induced by the ESG integration – can thereby be used efficiently to seek stable and sustainable outperformance at only slightly higher cost.

We believe over the mid to long term insurance investors will not simply choose the cheapest product or solution, but the one that best fits the manifold constraints facing the insurance company.

In conclusion

Insurers tend to be conservative in their approach and are probably right not to follow every hype. Traditionally insurance companies are also active investors but that said, we believe today's insurance company CIO should be open to new investment styles even if that means changing the operating model slightly. Given the many advantages passive mandates and ETFs offer, we strongly believe that passive investments should be well examined for their usefulness by each insurance investors. Large and sophisticated insurance groups globally have already begun to do so, in spite of excellent in-house capabilities which in some cases are even leveraged for third parties. Just as the rise of ETFs vs. actively managed funds appears unstoppable, we believe the share of passive exposures in insurance company balance sheets and unit-linked products will increase significantly over the years to come.

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