

The potential of portfolio administration and migration in the European life insurance market

Evaluating the possible expansion of German administration systems to external markets

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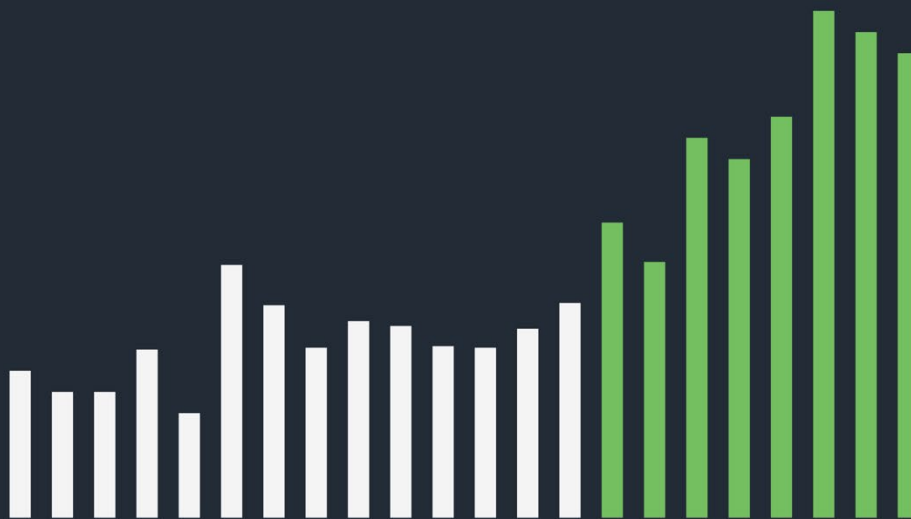


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Introduction

Insurance in the 21st century is developing more and more into an international business. The 10 largest insurance firms in the EU have branches, partners, or subsidiaries in a range from seven to more than 30 different countries. Freedom of movement allows major cross-border mergers and acquisitions (M&A) activity within the EU, and insurance portfolios that were sold in one country can end up being managed by a foreign firm. Although this is becoming more common, policy management systems are often domestically produced, whether the systems are developed in-house or purchased from an outside provider.

Insurance policy management is complex and requires efficient systems that conform to current actuarial and regulatory standards. As insurance portfolios cross borders more frequently, we at Milliman have wondered what potential may lie in moving policy management across borders as well.

When a portfolio changes hands, it can often require a migration to a new portfolio management system. A portfolio migration in Germany can be a massive undertaking, often requiring years to migrate portfolios that often number in the millions of policies. At Milliman, we offer actuarial support in these migrations, using actuarial know-how and a variety of computer/programming skill sets to help ensure that a migration runs smoothly, and that each policy and its corresponding premiums, benefits, and provisions remain unaltered in the transfer from one system to another.

In the following pages we will compare the major differences between the German life insurance market and regulations and the market and regulations in five other countries, across multiple different themes relevant to policy management. We hope that bringing these differences to light can aid in the evaluation of market potential to adapt a German policy management system for use in other countries. Although the market differences described are not comprehensive, they should provide a reliable overall perspective on the costs and benefits of pursuing these external markets.

Executive Summary

The purpose of this report is to explore the potential market demands or market opportunities for German policy management systems in foreign markets. Therefore we will be using the German legal and market standards as the benchmark in our exploration of these markets. Our analysis will be in reference to the prevalent local system providers and to the market and regulatory standards that govern how a policy management system is structured in Germany. The major regulations that affect policy management address subjects such as profit sharing, the partitioning of insurance businesses, rights of the insured, and guarantees.

Collaborating offices on this project were our colleagues in Ireland, Italy, Belgium, the Netherlands, and Luxembourg (BeNeLux), and Spain and Portugal. Their shared insights on the insurance market in their respective countries have given us a wider perspective on what would potentially be required of a German policy management system provider to offer its product in a foreign market. We will be presenting the details and differences in their respective markets compared to Germany, organized by subjects relevant to policy management.

Even though the markets differ significantly from each other, potential has been identified in each country to present software solutions from the German market. As expected, complexity is significantly reduced in many areas compared to the complexity required by the highly regulated German market. As a result, some component systems that are mandatory in Germany do not have to be implemented in foreign systems, which can lead to competitive market prices. However, we have also identified special features in each country that German providers of portfolio management software are not yet familiar with and the corresponding adjustments that would be necessary.

FIGURE 1: FEATURES AND ASSESSMENTS OF PRODUCT LANDSCAPE

Country	Product landscape or software issues	Specific features or tasks	Outlook for future market participation	Overall Assessment
Ireland	Product landscape is less varied than in Germany. Few non-linked products, almost all in runoff.	Efficient third party administration (TPA) creates high pressure to deploy cost-effective software systems. Many products are unit-linked bank products or similar.	Cost savings for local insurers are likely by adapting German software solutions to the market.	5
Spain	The market for private pension insurance is extremely small, which makes the overall volume appear small; however, this is not the case for savings or risk-life (funeral).	The need for adaptation of German software has been identified, e.g., profit allocation during the year and dealing with special "tax" regulations.	Further investigation is necessary to evaluate the market differences from a technical perspective.	3
Portugal	Employer-based pensions and disability products related to often irregularly varying actuarial bases (e.g., salary) are common and require agile software.	There is current insecurity regarding IFRS17 implementation and related policy administration functions.	Great opportunities to gain large market shares due to large portfolios managed by only a few insurance companies.	4
Belgium	The selections of products are less regulated analogues of German insurance products.	Permanent premium adjustment based on changes in mortality rates and many different guaranteed rates in a single policy will be challenging.	With minor modifications, most of products in the market can be implemented in established German software solutions.	4
The Netherlands	New pension law could lead to a new distribution of market shares, which would require new software solutions for policy administration.	The options guaranteed for customers to request transactions regarding fund investment are extensive and will lead to adjustments.	The flexibility of German software solutions makes it possible to adapt to expected market changes or future merges. In addition, we would like to point out that there is only a small language barrier. ¹	5
Luxembourg	The market focus is on one-time premiums with variable additional premiums, as well as products analogous to German products.	Fund management, in particular in three different fund categories, needs to be adapted to common German software solutions.	Great chances for entering the market without significant complications. In addition, we would like to point out that there is only a small language barrier. ²	5
Italy	The predominant policy administration system is aging and needs to be replaced.	The implementation of best-of guarantees is more complex than for German maximum interest rates.	There exists a good likelihood for a market opportunity. This should be further analyzed.	3

The gradation assessments chosen in the table in Figure 1 classify the possibilities of entering foreign markets with well-known German software solutions on a scale of 1 to 5, with 1 being unlikely to enter the market and 5 being very likely to enter the market with low-cost adaptation.

In this document, we will first provide an overview of standard systems in Germany and general key figures of the market. The first special features can also be seen from this. A comparison of these special features with the following examinations of various other countries was the basis for our classification in Figure 1. In the following sections, our results for the individual markets and regions are clarified and discussed.

¹ About 70% of the population in the Netherlands can communicate in fluent German, a great advantage for joint projects.

² About 78% of the population in Luxembourg can communicate in fluent German, a great advantage for joint projects.

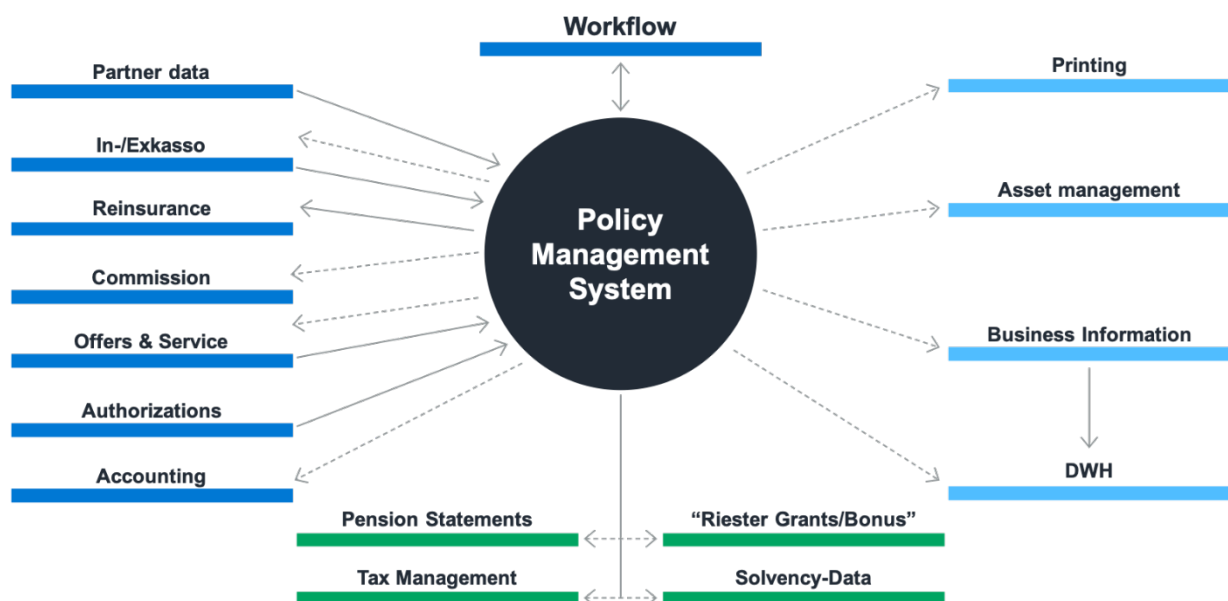
Reference: Overview of the German life insurance market

In order to standardize comparability with the analyzed European markets, this report begins with a short introduction to the German life insurance market. It also mentions country-specific features, such as "Riester" products, to illustrate which situations should also be identified in foreign markets to assess the complexity of their mapping in a standardized portfolio management system.

POLICY MANAGEMENT IN GERMANY

In Germany, our main collaborators are often adesso-insurance-solutions³ (or just adesso) with its PSLife management system and msgLife⁴ with its LifeFactory management system. The company adesso has offered PSLife since approximately 2012/2013, while msgLife or predecessor companies have had their LifeFactory on the market for at least 10 years longer, since about 2002/2003, with both software providers continually updating the software on offer.

FIGURE 2: GERMAN POLICY MANAGEMENT SYSTEM AND PARTNER SYSTEMS

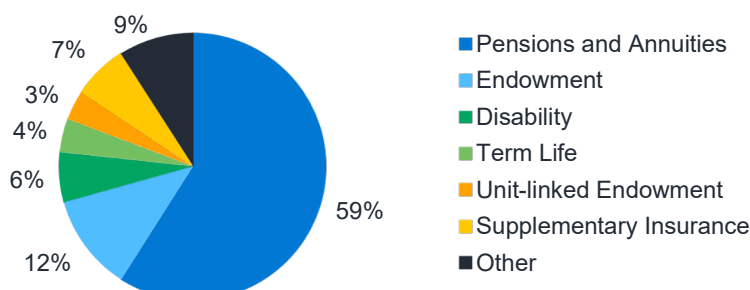


³ See <https://www.adesso-insure.de/>

⁴ See <https://msg-insurit.com/de/produktuebersicht/msg-life-group/>

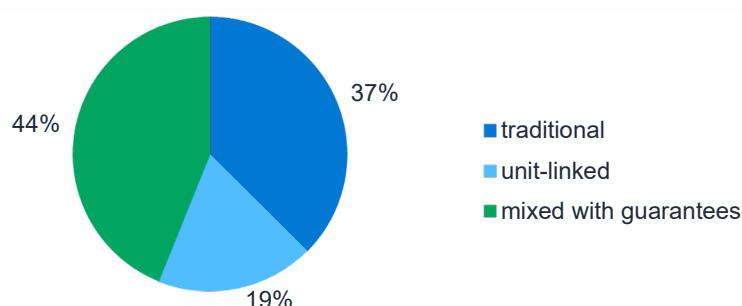
Due to the complexity of German policies, policy administration—or policy management, the terms will be used interchangeably in this report—requires its own dedicated system, with other functions being assigned to partner systems that communicate with the policy administration system. The diagram in Figure 2 gives an idea of what a standard German life insurance management system might look like, and what might be necessary to adapt not just the policy management system, but also its partner systems, for foreign market needs.

FIGURE 3: MARKET SHARE BY GROSS WRITTEN PREMIUM, 2022



Germany is the second-largest life market in Europe and the seventh-largest life market globally, with EUR 103 billion life insurance premiums and EUR 1.059 billion in assets and a very diverse market of 80 life insurers plus global players with German departments.

FIGURE 4: PENSIONS AND ANNUITIES BY GROSS WRITTEN PREMIUM, 2022



PRODUCTS

The majority of life insurance products are guaranteed. Unit-linked products make up a relatively small market share, especially in comparison to other countries, although it has grown since 2020. These guarantees include a guaranteed return for savings products. Because of this, the separate concepts of “defined contribution” and “defined benefit” that are used in other countries do not apply well to German products, as they commonly have both defined contributions and defined benefits. Endowment insurance is the second most significant product type in the market, taking up 15.3% of all insurance products by premium, with unit-linked accounting for 3.6% of that 15.3%. Unsurprisingly, pension products make up 59% of the market, with a split of 22.1% non-linked, 11% unit-linked, and 25.9% mixed-form products, unit-linked with guarantees.

The German government also subsidizes a special savings product beyond the usual tax breaks offered in other countries, called the Riester pension.⁵ Riester pension products are fully guaranteed but can be in the form of classic pension insurance or unit-linked, although the latter is less popular. Beyond a tax exemption at the time of payment (this exemption is not valid for contributions after retirement), there is also a subsidy of EUR 175 per annum (EUR 350 for married individuals) if the minimum of 4% of income or EUR 2,100 is contributed yearly. A child subsidy is received of EUR 185 per child born before January 1, 2008, or EUR 300 per child born January 1, 2008, or after. One may also elect to receive up to 30% of the fund in a lump sum at retirement, but the rest must be taken as an annuity. German policy administration systems will often have a satellite system specifically devoted to particular details of Riester and Rürup⁶ (private pension insurance for self-employed persons) products.

⁵ BaFin (October 18, 2023). Riester Pensions. Retrieved December 7, 2023, from https://www.bafin.de/EN/Verbraucher/Altersvorsorge/Riester/riester_node_en.html.

⁶ Deutsche Rentenversicherung. Rürup Pension. Retrieved December 7, 2023, from https://www.deutsche-rentenversicherung.de/SharedDocs/Glossareintraege/DE/R/ruerup_rente.html.

PROFIT SHARING

As will be seen in the other countries' descriptions, Germany is quite an exception in its regulations regarding profit sharing. Surplus of earned premiums is strictly regulated and must be distributed back to policyholders, unless expressly declined by the policyholder upon the purchase of the policy. Policyholders receive a significant percentage of any budget surplus depending on the category of surplus, whether from investments (90%), from the risk premium (90%), or miscellaneous surplus (50%). This applies to all products. Profit sharing can be distributed in many different ways, including interest-accruing funds, premium offsetting, bonus programs, and many more, as well as combinations of methods of distribution. This requirement greatly increases the complexity of German policy management and accounting systems.

GUARANTEES

Monetary guarantees are highly restricted in Germany, and a maximum allowed interest rate for guaranteed insurance products is determined by the Federal Financial Supervisory Authority (BaFin) on January 1 every year. No other monetary guarantees regarding return rate of life insurance products are allowed, regardless of construction. Policies have many required guarantees regarding flexibility of the contract and return of funds. All contracts are guaranteed the ability of early surrender, as well as a maximum fee for early surrender. Also, should a policy become paid up, policyholders are still guaranteed benefits, as adjusted for current total paid premiums. These guarantees and many others regarding the policyholders' rights to their policies' funds require an extensive list of transactions that a policy management system must be able to carry out. We discuss them further below in the section "Transactions on Demand."

RIDERS AND SUPPLEMENTARY INSURANCE

German principal insurance usually has optional supplementary policies. They may be similar to riders, but they are technically separate products that can be attached to various different principal policies. Most common supplemental policies are survivor's insurance and disability (Berufsunfähigkeit). Survivor's insurance passes on a percentage of annuity payments to the surviving spouse or dependent for products whose funds are not automatically passed on to inheritors by law. Disability insurance generally has two forms of benefits: suspension of premiums, where premiums are paid by the supplemental policy coverage, or annuity/lump sum payout. Another common supplemental product is long-term care (Pflegerente) insurance, which usually has further specific payouts based on the policyholder's care needs. Disability and long-term care supplemental insurance are types of life insurance in Germany. As will be seen later, this is not the case everywhere.

PARTITIONING OF INSURANCE BUSINESS

Germany maintains strict regulations on what kinds of insurance business a company may conduct. Life, non-life, and health insurance—or any combination thereof—may not be sold under the same company, although a conglomerate may have separate subsidiaries that sell each of the different types. This clear divide requires that German policy management systems are designed only for their own insurance branch, with no direct communication of those systems with systems that handle other types of insurance.

TRANSACTIONS ON DEMAND

In general, policyholders have the right to the funds in their insurance policies at any time. This means that flexibility regarding policy management is a key component in German systems. Paid up, reinstatement, early surrender and partial surrender, and transfer of units to classic funds are just some of the standard transactions that all German policy management systems must be capable of.

ALLOWED ACTUARIAL BASIS

In addition to the generic topics of costs, taxes, mortality tables and actuarial interest, we highlight particular features of interest in this section. Of course, the contents of allowed actuarial basis are not exhaustive, but generally only reflect the points that stand out to us.

Because disability insurance is classified as life insurance, German life insurers use disability tables for supplemental disability insurance. Disability tables are usually in four parts, covering the probability of becoming disabled, the probability of becoming fully abled after disabled status, a mortality table for non-disabled persons (this is usually the standard mortality table of the principal insurance), and a mortality table for disabled individuals.

- **Costs**

To distribute initial acquisition costs and prevent negative technical provisions, zillmerization is most commonly used in cost calculations. Other standard costs are the flat maintenance fee (Stückkosten), and the percentage maintenance fees (Verwaltungskosten). Percentage maintenance fees can be applied to various metrics from the policy, such as current sum of benefits, sum of premiums, and technical reserve. The choice of how to apply the fee is usually decided based on the purpose of the fee (tax management, fund maintenance, personnel costs, etc.).

- **Taxes**

Taxes are managed by the insurer, and these costs are passed on to the policyholder via fees (see above). Pension products do have deferred tax status, and so no taxes are paid with the premium, but are later withheld at maturity.

- **Mortality Tables**

As in all the EU, starting in 2012, all mortality tables were made unisex; previous to that, use of gender in risk calculation was left up to the insurer. The Association of German Actuaries (Deutsche Aktuarvereinigung, or DAV) is the source of most mortality tables that are used by providers, although modifications to the tables are not unusual; however, some providers do develop their own mortality tables based on statistics from their own portfolios. The DAV mortality tables are separately produced for use in pension products ("R" mortality tables) or protection and endowment products ("T" tables). The DAV reviews the most recent tables annually to determine whether a new table should be produced. As of publication, the DAV 2004 R and DAV 2008 T are still the most current tables.

- **Actuarial Interest**

As mentioned in the section on guarantees, the BaFin sets the maximum allowed interest rate that an insurer may guarantee for their products every year. No minimum rate is set, and market competition results in maximum guaranteed interest rates offered across the board for almost all life insurance products.

REGULATIONS

As expected, the regulatory environment in Germany is well in line with EU standards, with further regulations and restrictions, such as the aforementioned separation of insurance business, profit sharing, maximum guarantees, and others. It is also possible for rights of policyholders to be changed retroactively, which requires corresponding retroactive adaptation of the policy management system. One such case was a judicial decision that retroactively affected surrender values.⁷

The strict and highly detailed regulatory environment is a main driver of the required complexity of German policy management systems. Our expectation is that this complexity will be reduced in markets with less stringent regulations.

⁷ Details of the case are available at <https://juris.bundesgerichtshof.de/cgi-bin/rechtsprechung/document.py?Gericht=bgh&Art=en&sid=3f6bd5eacfd480a4e52890c129dc71e5&nr=41500&pos=1&anz=2>.

1. Ireland

KEY FINDINGS

- Inbound cross-border business from Italy made up 28% of overall Irish European Economic Area (EEA) cross-border business in 2021.
- Third-party administration is an important facet of the Irish insurance market.
- The range of available products is very similar to the UK, and mostly consists of unit-linked products.
- Regulation is also similar to pre-Brexit UK and does not expand significantly on Solvency II.

All comments are described in relation to differences from the German market and German policy management. Please review the first section on Germany above for reference.

We begin with Ireland, the country that, in our research, displays the greatest difference from Germany in the insurance market. Ireland's top four insurers, Intesa Sanpaolo, Darta, Zurich, and Irish Life, take up 42% of the market by gross written premium. Ireland has a robust life insurance market, which consists not only of domestic insurance business, but also significant inbound and outbound cross-border business and third-party management. In fact, cross-border business is a much larger portion of the market than domestic, with almost EUR 32 billion gross written premiums in the EU and UK in 2021 compared to EUR 16.1 billion in domestic premiums. This is mostly driven by unit-linked products. In connection with this market balance, Ireland does not follow a "three-pillar" system, which structures retirement insurance based on public (federal) pensions, employer-based pensions, and private retirement products. Because of the fundamental differences between unit-linked and non-linked products and how they are handled in the policy management system, many of the points on our list of market differences will trace back to the dominance of unit-linked business in Irish insurance.

One other important aspect that has effects in multiple different areas of interest is in the approval of policies. While German regulation requires policies to be approved within specifically defined categories of products to assess cost structure, profit sharing, and guarantees, this is not the case for Irish regulations. The Central Bank of Ireland, which governs insurance business in Ireland, allows much more flexibility in product design, and this leads to multiple differences in policy management from the German perspective.

FIGURE 5: MARKET SHARE BY TECHNICAL RESERVES, 2022

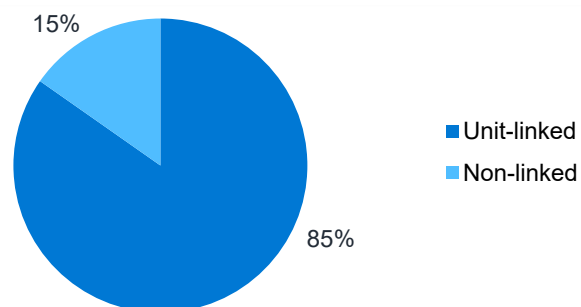
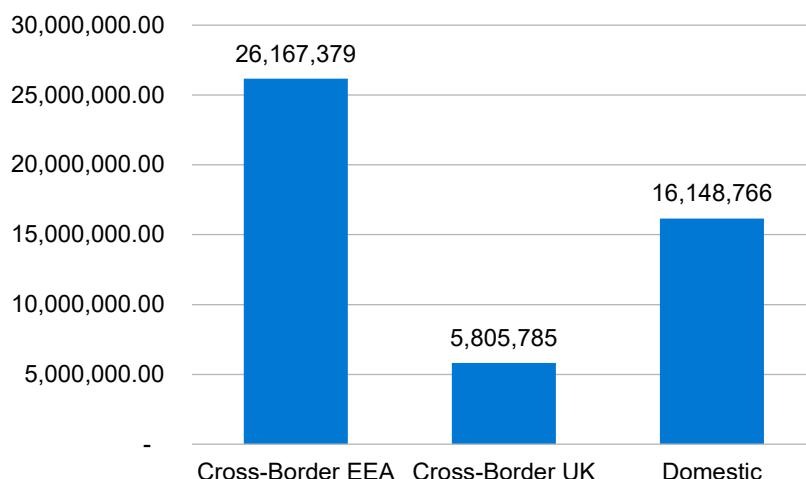


FIGURE 6: GROSS WRITTEN PREMIUMS, 2021 (IN EUR THOUSANDS)

1.1 POLICY MANAGEMENT SYSTEMS IN IRELAND

Irish domestic insurance mostly uses in-house systems, while cross-border business is usually handled by third-party systems. This fact and the near 2:1 ratio of cross-border to domestic business together suggest that a German system adapted to appeal to cross-border Irish insurers would be a prudent approach. However, there are already German policy management systems that Irish cross-border insurers use specifically for their German policies, so a broader approach would be to also offer policy management that is adapted for other cross-border business as well. Due to its importance in Irish life insurance policies, it is also useful to note that the prevalent system for asset management in Ireland is Investpro.⁸ There are also some differences in management for cross-border policies: multiple currencies must be available for calculation, and options for fund choice as well as for choosing third-party fund management must also be included. Projections are necessary for Irish life insurance, in particular projections to fulfill packaged retail and insurance-based investment products (PRIIPs) regulations, but many are carried out regarding unit-linked metrics, for example, projections of accumulated universal life (UL) funds, charges and benefits under different growth scenarios.

1.2 PRODUCTS

Unit-linked products make up almost all of the Irish insurance market. According to our sources, only one or two companies still sell non-linked savings products, while the rest are in run-off, which is supported by the numbers: technical reserves for unit-linked products in 2021 were over EUR 242 billion, compared to EUR 43.7 billion for non-linked products, and the market share of unit-linked products is steadily growing, at 80.37% in 2020, 83.25% in 2021, and 84.73% in 2022.

Banks may sell unit-linked savings products similar to those of insurance companies, but savings products are required to have a risk element to qualify as insurance. To this end, most unit-linked insurance products have a minimal guarantee, for example a death benefit of 101% of the fund value. Insurance unit-linked products can be linked to either in-house funds or externally managed funds, and either in-house or external funds can themselves link to publicly available funds.

From the perspective of policy management, this is already a departure from the system setup for a German firm, where all unit-related transactions are handled in the asset management system instead of the policy management system, and unit-linked products are a clear minority of products. Alongside those functions, the main system often also handles documentation and customer management, which is another deviation from standard German systems, albeit one that does not pose a significant problem for adaptation.

⁸ <https://frsftd.com/>

The extent of subsidization of retirement products in Irish insurance is limited to certain levels of tax relief for pension contributions and disability premiums. This is restricted to five specific structures of retirement schemes, occupational pension schemes, personal retirement savings accounts (PRSAs), pan-European Personal Pension Products (PEPPs), retirement annuity contracts (RACs), or qualifying overseas pensions, and there is a contribution limit for individuals. This is the more common case as will be seen in other countries. Products that are subsidized beyond basic tax breaks at maturity are, on the whole, fairly unusual. Unlike some pension products in Germany, these products are not structured around public pensions and do not take public pension into consideration when guarantees are offered. In the past, however, defined benefit (DB) plans were specifically structured to complement a state pension up to a predetermined percentage of former income.

Virtually all company pension schemes are defined contribution (DC) unit-linked products—the contribution level is agreed, and contributions are invested in a selected unit-linked fund. There are other parts to group retirement schemes, e.g., a "Trust" that sets out the rules between the employer and employee, usually provided and administered by the insurer or an associated entity. Rather than each scheme or employer having its own Trust, the market trend is moving toward "Master Trusts," where many employers are under the same Trust.

Of the more common traditional products, one may encounter employer-provided group or self-employed disability products, as well as individual and joint term and whole-of-life death benefit products. Dread disease is considered life insurance in Ireland, and is also sold as a primary non-linked insurance product.

1.3 PROFIT SHARING

Because of the dominance of unit-linked products in Irish insurance, profit-sharing products are mostly in runoff. There are no regulatory requirements for profit sharing in life insurance products, nor any set minimum. Profit sharing is sold as a class of products, called "With Profits," and they distribute profits in one of two ways: 1) an annually declared "reversionary" bonus that is allocated to provide a smoothed return over time, or 2) an annually declared terminal bonus that is allocated to the policy upon maturity. These two methods are mostly analogous to methods that are commonly used in German profit sharing. There are also "Unitised With Profits" products, for which a daily or weekly unit price is set according to a smoothing algorithm, and profits for profit sharing are determined from there. According to our sources, only one insurer of any significance, Prudential International, is actively selling profit-sharing products, specifically a unitized single premium product that is supported by reinsuring through their profit-sharing funds in the UK.

1.4 GUARANTEES

Another subject greatly influenced by unit-linked products, guarantees in Ireland are very different from those in Germany. This is in large part due to regulation of insurance products. The Central Bank of Ireland does not set regulations based on categories of products, as in Germany. This means that insurance products are not standardized, and therefore the products each insurance provider offers are not finely regulated, namely with no regulation of maximum or minimum guarantees, and due to the nature of unit-linked products, their guarantees are often minimal. Profit-sharing products also offer generally weaker guarantees than German products. Some of the guarantees one may encounter when going through a portfolio of current and legacy policies may include: Guaranteed Minimum Death Benefit (provides greater of a percentage of surrender value, for example 101%, or a set euro amount) and Guaranteed Minimum Maturity Benefit (provides for typically the minimum of two times the total premiums paid as a maturity benefit at the maturity point, typically 99 years) for current unit-linked products, and Guaranteed Minimum Accumulation Benefit (similar to the Guaranteed Minimum Death Benefit) and Guaranteed Minimum Income/Withdrawal Benefit (provides a guaranteed level of income, usually for life) for legacy variable annuities.

1.5 RIDERS AND SUPPLEMENTARY INSURANCE

The most common riders on Irish insurance products are Critical Illness, Terminal Illness, Children's Life and Illness, Accidental Death, Disability, and Waiver of Premium. All of them would be considered supplementary insurance (Zusatzversicherung) in Germany and therefore may be handled similarly in a policy management system, and the German market has supplementary insurance analogous to most of these riders. Another consequence of the less stringent regulations regarding standardization is that there are no regulations requiring the option of a rider for certain kinds of products, as opposed to Germany, nor are there any minimum or maximum guarantees for riders.

Disability insurance is differentiated by the definition of "occupation" terms in Ireland, specifically: "own," "any suitable," and "any." "Own" and "any" are reasonably similar to German "Berufsunfähigkeit" (career disability) and "Arbeitsunfähigkeit" (work disability), while "any suitable" is more loosely defined, and may be subject to retroactive changes across the board based on legislation change or on an individual basis based on judicial decisions. Because of high costs, "own" has lost market share in recent years.

1.6 PARTITIONING OF INSURANCE BUSINESS

Ireland maintains a similar partition of insurance business, dividing between life, non-life, and health insurance, although there is no specific prohibition on combining insurances. Nonetheless, it is unlikely for an insurer to receive licenses for multiple kinds of insurance from the Central Bank of Ireland. This specific facet would provide no obstacle for a German system provider offering its software.

1.7 TRANSACTIONS ON DEMAND

Unit-linked products in Ireland function more like investment products than traditional insurance products, and so allow a variety of transactions to a policy during its lifetime, including partial or full surrender and temporary or permanent waiver of premiums (the account is "paid up"). Though this is more due to regulation in Germany than to market forces, the flexibility of payment and withdrawal of funds is similar. The automatic indexation of premiums (Dynamik in German) is also a common transaction for both Irish and German products.

Early withdrawals are subject to a charge if they are in the first five years of the policy and may also be subject to a tax on growth. For a unit-linked product, the customer may request to withdraw a percentage of the fund or a set euro amount, and it is then calculated as a redemption of the appropriate number of units to accommodate the request. However, withdrawal charges on additional investments and top-ups are calculated from the time since their investment, not since the initial investment. There may also be a scheduled automatic regular withdrawal.

1.8 ALLOWED ACTUARIAL BASIS

The actuarial bases for unit-linked products generally include discounted cashflow of costs, charges, and benefits. There are no particular rules for these bases, though, apart from a maximum charge for certain retirement accumulation products. There are no regulations regarding the actuarial bases for non-linked protection products (e.g., mortality risk).

1.8.1 Costs

Costs are generally unregulated, with some exceptions, one example of which is a maximum annual charge percentage on PRSAs. However, there is increasing focus on products' costs and charges from the Central Bank of Ireland under the heading of value for money. Some common costs are fixed and variable annual management charges, the latter applied to multi-manager funds and both deducted from unit price, early withdrawal charges, contribution charges, and tax and levy charges. Often in Germany the policy management system may use zillmerization to compensate for the effect of acquisition costs on technical provisions, but this is not applicable to unit-linked products, and not used overall in Ireland.

Policy management fees are usually flat but not necessarily fixed and are subject to change. Broker fees do incur costs that affect premiums, but rather than make the products flexible in this respect, Irish insurers will subdivide their products by possible broker fees, essentially keeping a separate sub-product in their systems for each possible fee level.

1.8.1.1 Taxes

Generally, insurers will carry out tax administration on decumulation retirement products and withhold exit tax; costs for this service are passed on to the client. Any benefits from protection products are paid to beneficiaries tax-free, although the beneficiary may then have to pay taxes themselves; however, non-linked products do incur a contribution levy, which is withheld. The sole capital gains tax is a 41% charge on capital gains incurred for non-pension products, due on withdrawal or every eight years.

1.8.2 Mortality tables

Because they are mostly unit-linked with minimal death benefits, mortality tables do not have to be utilized for most life insurance products, nor are there any rules on the use of mortality tables for non-linked products. The guarantees on unit-linked products are formulated to fall within profit margins and therefore do not require mortality tables. For traditional products, multiple possible tables can be used, including UK CMI tables or reinsurer-provided tables.

1.8.3 Actuarial interest

There are no specific regulations regarding actuarial interest. See further information under 1.4 Guarantees, above.

1.9 REGULATIONS

Regulations regarding measures to prevent money laundering and to counter the financing of terrorism are in line with general EU regulations and recommendations, with the EU's Third (2005) and Fourth (2015) Anti-Money Laundering Directives transposed into Irish domestic law. Since the introduction of Solvency II in 2016, the Central Bank of Ireland has set its regulations accordingly and has not implemented any further regulations that would require special adaptation of a policy management system. However, the Central Bank of Ireland does require an annual report on technical provisions (ARTP), which, though consisting of data that is gathered in the Solvency II annual report, is usually reported separately.

CONCLUSION

A German policy management system focuses much of its efforts in handling many complexities required for the German market, such as profit sharing required by regulation, guaranteed products, and subsidized products such as Riester or Rürup pensions. The Irish insurance market has very little need for this level of complexity, and the more complex products, such as With Profits, are so marginalized as to be of little concern when designing a policy management system to offer to Irish insurance companies. The relaxation of complexity standards from a programming perspective would not pose a significant challenge, and therefore developing a policy management system that fits the needs of the Irish market would be well within the capabilities of a German system provider.

2. Spain and Portugal

Although Spain and Portugal are distinct markets, they share similarities enough that we can consider them together in this report. We subdivide the sections for clarity wherever needed.

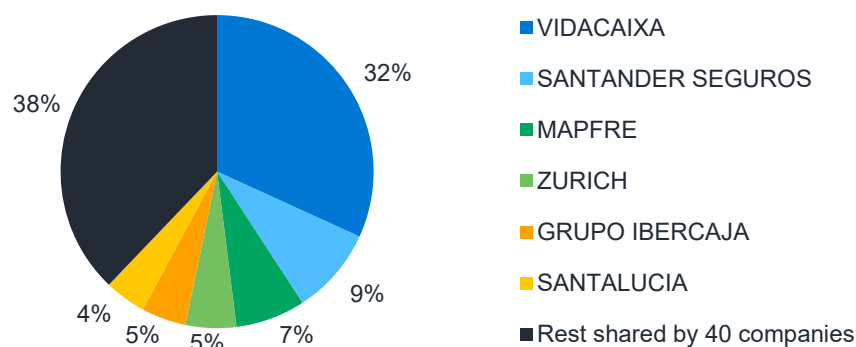
KEY FINDINGS

- The Portuguese pension system consists of a state pension scheme that's provided by the government, alongside much smaller voluntary occupational and private pension options. Additionally, it is legally mandatory for all employers to pay into so-called "workers' compensation," which covers occupational accidents.
- In Spain, specially designed death benefit insurance policies play a decisive role; almost all pension insurances, on the other hand, are organized by the state.
- Profit sharing is not enshrined in the law. Competition among insurers has led to methods to credit profits to the contract balance as early as possible.
- In Spain there is no date for adopting IFRS17 whereas in Portugal it has been mandatory since 2023.

All comments are described in relation to differences from the German market and German policy management. Please review the first section on Germany above for reference.

The insurance business in Spain and Portugal has undergone a fundamental change in recent decades. Large market shares of the life insurance industry have concentrated on individual insurance companies, as seen in the chart of percentage market shares in Figure 7. The development of policy management systems and the migration of portfolios into unified systems of the respective corporations has not been able to keep pace with this development, at least to date. However, regulatory requirements regarding reporting or cost pressure in economic competition among insurance companies could provide an incentive to make up for this step and access standardized software for insurance companies.

FIGURE 7: MARKET SHARES, SPAIN



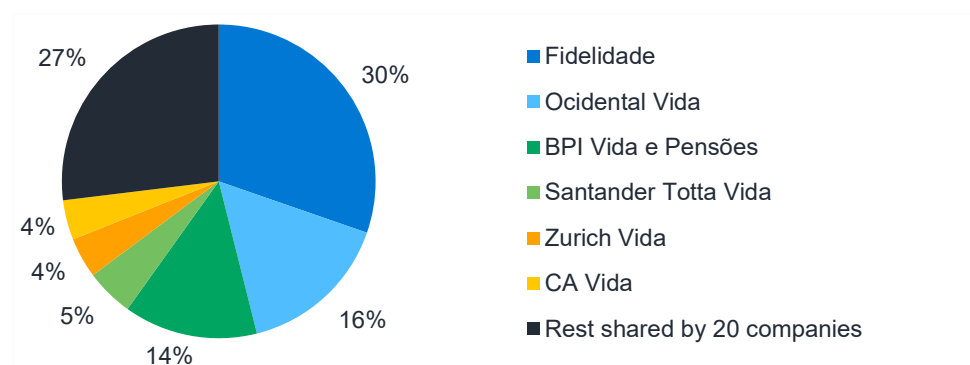
Note: Percentages are rounded to whole values.

Almost two-thirds of the market share in the Spanish life insurance market is concentrated in just six companies.⁹ By way of comparison, in Germany this market share is only achieved by the 13 most popular insurers, although Allianz Life plays a similarly dominant role as VIDACAIXA in Spain.

An analogous breakdown for Portugal gives an even clearer picture.

⁹ More information is available at <https://www.icea.es/es-ES>.

FIGURE 8: MARKET SHARES, PORTUGAL



Note: In Portugal, the six largest insurers already have a market share of around 73%.¹⁰

2.1 POLICY MANAGEMENT SYSTEMS IN SPAIN AND PORTUGAL

In principle, very old policy management systems are used in Spain, many of them more than 30 years old. Publicly known software is, for example, ORACLE or AS400 from IBM. However, there are also insurance companies that still rely on in-house developments of their in-house IT departments. These are examples of often historically developed systems that have already survived portfolio consolidations. This often also leads to the fact that technical records of older systems or subsystems are no longer available even if they are still in use. Another effect is that the delineations of typical partner systems, e.g., debt collection or collection system, fund management, even document output, etc., are not recognizable on the German market, because these systems have simply grown together for historical reasons. Only the accounting is recognizable in all cases as an independent subsystem. Another difference from the German market is that there is no separation of insurance business. As a result, some insurers use their in-house management systems for both life and non-life products.

2.2 PRODUCTS

Universal life (UL) products are usually provided with certain minimum guaranteed rates until the end of the contract. Additionally, a discretionary additional rate can be credited for shorter durations (six months or 12 months are the most common periods).

Unlike in Germany, these guaranteed rates are redefined at intervals of three, six, or 12 months, or depend on the duration or changes to the contract that are communicated to the customer. Depending on the success of the insurance company on the capital markets, the actual rate of the interest earned will then be charged to the contracts at the above-mentioned intervals. This must never be below the guaranteed rate.

Unit-linked products are also common on the Spanish and Portuguese markets. They are divided into different pots, which can be chosen depending on risk profile. Depending on the company, funds in each pot can be managed internally or externally. Customers can vary the allocation of funds into the individual pots during the contract period and can adjust the risk preference of the selected pots. All necessary calculations for the distribution of contributions to the various pots come from the policy management system and not from the asset management system.

The main cover for risk products is death benefits, but these contracts can also include other riders (such as accidental death, disability, critical illness, etc.)

¹⁰ More information is available at <https://www.asf.com.pt/>.

2.2.1 PENSIONS IN PORTUGAL

The Portuguese pension system consists of a state pension scheme that is provided by the government, alongside much smaller voluntary occupational and private pension options. Additionally, it is legally mandatory for all employers to pay into so-called “workers’ compensation,” which covers occupational accidents.

Workers’ compensation obliges employers to pay for their employees’ cover for the duration of an employment relationship. As a rule, this secures the current net wage. Beyond disability, workers’ compensation includes cover for pensions and short- and long-term medical expenses. Coverage is like an annuity, the amount of which is set by a medical tribunal in the case of disability. And they must be revalued in line with inflation. For some types of pensions, the technical bases are regulated, the current one being mortality table TV/TD 8890 and interest rate 5.25%. However, for the most part the technical bases are decided by the insurers, and they usually use mortality tables from de Statistic Institute of Portugal; for example, INE 2021-2023. Because mathematical reference variables such as salary or occupational group classification change irregularly but often, these policies are subject to frequent transactions and therefore represent a particular challenge for the portfolio management system.

2.2.2 PENSIONS IN SPAIN

Pensions in Spain are organized by law. Private insurance industry is understood as a complement to the state pension. Although there have been tax advantages in the past that made such products lucrative, their popularity has declined in recent years due to less attractive tax advantages.

2.3 PROFIT SHARING

Profit sharing is provided for almost every UL and traditional product. It comes in the form of either the already declared annual, semiannual, or quarterly profit continuation, with the profit shares exceeding the guaranteed interest rate, or in the form of a profit addition at the end of each calendar year, with scaled profit distribution according to the profits achieved in the past year.

Unlike in Germany, the profit sharing of individual contracts is not required by law but has only developed based on the economic competition of various insurance companies. Therefore, the methods for evaluating contracts and their proportional profit entitlement are not standardized. However, the current trend is to credit profit to the contract holders at an early stage.

Other profit-sharing methods, such as offsetting the contribution to be paid or bonification only at the end of the contract period, have not become common in the economic competition of the providers and represent only small partial stocks.

2.4 GUARANTEES

In life savings products, standard death guarantees are insignificant, it is a common practice to be set as a percentage of the fund or a maximum of EUR 600, usually until the 65th year of life of the insured person.

The guaranteed minimum interest rate is very low for most products, often even 0% or linked to the interest rate published annually by the Spanish insurance authority. Only with older contracts are there higher rates. However, the division of policies into high-interest contracts and contracts without significant guaranteed interest does not resemble the German market, as there are changes possible each year during the contact life cycle.

2.5 RIDERS AND SUPPLEMENTARY INSURANCE

Supplementary insurance covers for protection are common for risk products. However, rider covers are less frequent for savings contracts. Innovative products such as protection against cancer or mental impairment are available but have not yet become standard.

2.6 PARTITIONING OF INSURANCE BUSINESS

Insurance companies need approval to operate in each type of insurance (life, health, motor, fire, etc.). Once approval is obtained, the information of all types of insurance is integrated in the company's system, which could be shared between the departments. This means that, with regard to a software solution for policy management, it may also be a demand that information from other lines of business can be tapped and utilized, e.g., with regard to additional risk premiums.

But there are restrictions to the mixing of insurance business, namely that assets backing liabilities have to be identified and allocated to specific funds.

2.7 TRANSACTIONS ON DEMAND

Sometimes some universal life products can be converted to annuities instead of principal payment at the time of maturity. Some companies orchestrate these transactions as a new annuity policy, where instead of the client paying the premium the accumulated fund is transferred as a premium payment.

Additionally, there are the usual business transactions to amend a contract and a legal right to pause the premium payment for a defined period. Contracts can also be canceled prematurely; unlike in Germany, only the individual regulations of the respective insurance company apply to the payment of a surrender value and no regulatory definitions of a minimum surrender value.

2.8 ALLOWED ACTUARIAL BASIS

The actuarial bases for unit-linked products should include an actuarial death benefit through a risk premium payment, where the sum assured is not material in comparison with the fund value. This requirement is mandatory in the Spanish insurance market in order to sell this type of products.

2.8.1 Costs

Costs for life insurance contracts are passed to the policy management system analogous to the German model. The only requirement is that the charges collected from the clients must be sufficient to pay the expenses incurred by the company. Acquisition costs play a central role in this. They cover expenses in addition to commission for the broker. This includes product development costs, medical assistance for underwriting purposes, marketing costs, and sales costs in general.

2.8.1.1 Taxes

There are savings products (similar to universal life) with certain tax exemptions for contributions made. However, the state has lowered the level of these exemptions, and they are becoming less and less beneficial. There are also some savings products that pay the benefit in the form of a life annuity with tax benefits compared to regular income tax.

Compared to Germany the most divergent point is the Spanish "Consortio de compensación de seguros,"¹¹ which covers losses caused by extraordinary meteorological events, pandemics, terrorism, etc. For all insurance companies, including life insurance companies, it is mandatory to pay a fixed per mille value of the insured sum (currently 3‰) to this state organization during the period of payment of the premium. In some cases, other reference values, such as the forecast reserve at the end of the scheduled contract term, are also used. This can be seen in the specific taxation whereby this tax is used to cover diverse risks concerning the whole population. In view of profit additions at regular intervals throughout the contract term, in some cases this also results in a requirement for the policy management system to manage and pay this "tax."

¹¹ See <https://www.consortseguros.es/web/inicio>.

2.8.2 Mortality tables

Mortality tables are similar to Germany but with widely differing data on empirical mortality. This essentially means that mortality is estimated under significant precautionary assumptions and is included in the calculation of biometrics. These deviations from the actual mortality rate also lead to profits for the insurance company, which can be credited to the policyholders on a pro rata basis in accordance with the methodology described above, some of which is used during the year.

2.8.3 Actuarial interest

There is a maximum interest rate that can be used for technical provisions, which is published by Spanish supervisory authority. This rate used can be higher if the company applies some asset-liability management (ALM) rules.

2.9 REGULATIONS

Both in Portugal and in Spain insurance companies need approval to operate in each type of insurance (life, health, motor, fire, etc.). Once approval is obtained there is no separation between the departments.

In Spain there is no currently set date for adopting International Financial Reporting Standard (IFRS) 17. Only listed companies are adopting IFRS17, whereas in Portugal it has been mandatory for the whole market since January 2023. As of publication, the conversion process is still in progress and offers an interesting incentive to switch to modern software solutions that can generate cash flows from one system instead of several legacy systems.

2.10 THIRD-PARTY ADMINISTRATION AND CROSS-BORDER BUSINESS

Third-party administration is not a significant aspect of the Iberian insurance market. It seems historically conditioned to consciously avoid coadministering South America or Latin America treaties.

CONCLUSION

In particular, the age of the policy management systems used indicates an increased need to carry out structured migration projects in the Spanish market and in the Portuguese market. A professional division of policy management system and various conversion systems could also be expedient for insurance companies to meet the challenges of modern customer requirements, such as digital customer self-service, and the often European supervisory authorities, e.g., Solvency II reporting. Both the introduction of modern policy management solutions for new business and the migration of historical contracts there have failed in recent years due to the considerable costs of such a project. Because of the changing market environment, with increased interest rates in all capital markets, these projects could be manageable for insurance companies in the short term. In Spain, the focus tends to be on its capital and risk products, while in Portugal, of course, the greatest potential is seen in private sector workers' compensation, which is to be mapped with considerable numbers of contracts and thus supports insurance companies in modernizing and, if necessary, reducing the administrative burden.

3. Belgium

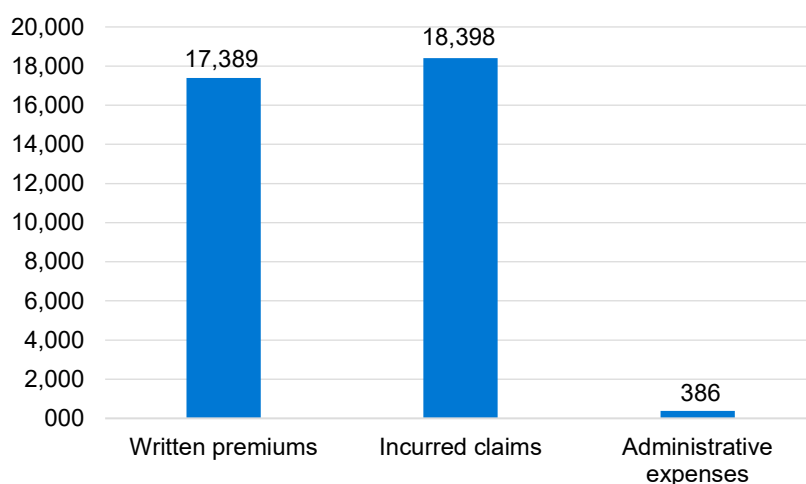
KEY FINDINGS

- Most new business is completely unit-linked or a combination of unit-linked and non-linked.
- Leading policy management system is old, giving good chances for new providers.
- Belgium uses a unique guarantee, set at the time of payment for each individual premium for non-linked saving products.
- Discretionary profit sharing is an important factor in the market.

All comments are described in relation to differences from the German market and German policy management. Please review the first section on Germany above for reference.

The insurance industry in Belgium has an almost even mix of foreign and domestic companies leading the market. Business, however, is mostly domestic, with no significant amount of third-party administration, and a small minority of cross-border business with the neighboring markets of France, Germany, and the Netherlands, as well as with Italy. The top three insurers in Belgium, AG, AXA, and KBC, accounted for 43.8% of life insurance business in 2021. Gross written premiums of life insurance in 2021 was EUR 17,389 million and gross claims incurred amounted to EUR 18,398 million. Gross administrative expenses were EUR 385.7 million.

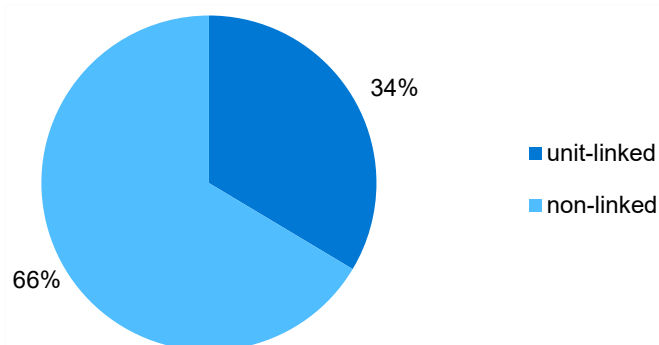
FIGURE 9: BELGIAN LIFE INSURANCE, 2021 (IN EUROS MILLIONS)



At the moment, traditional life products are a lower priority to insurers than unit-linked or universal life products.

Most salient for policy administration system providers is how profit sharing can affect premiums because it may be applied as premium offsetting but applied to the premium over the whole lifetime of the policy instead of a one-time or limited offset. The consequences of this and its challenges regarding policy administration will be discussed more in depth in subsections 3.3 and 3.4.

FIGURE 10: BELGIUM LIFE TECHNICAL PROVISIONS, 2022



3.1 POLICY MANAGEMENT SYSTEMS IN BELGIUM

The market leader for policy management systems in Belgium is the UL3ACC system provided by Vereycken & Vereycken,¹² with the rest of the market mostly using in-house systems. According to its website, Vereycken & Vereycken claim to have at least 12 clients using its UL3ACC system in Belgium. However, the UL3ACC system is over 30 years old and has maintained the same interface, which leaves a potential market opportunity for other providers. Some outside system providers have already made moves to work their way into the Belgian market, such as Sapiens,¹³ with its ALIS system.

3.2 PRODUCTS

Long-term products outside of pension savings are rare; otherwise most products are term products. Retirement products may be insurance products or pension funds sold by banks. Traditional products are on the way out. The vast majority of new business is either universal life (Branch 21) or unit-linked products (Branch 23). A popular new product type is nicknamed Branch 44, a combination of universal life and unit-linked products (Branch 21 + Branch 23). Branch 44 products are treated in the policy management system as the sum of Branch 21 and Branch 23 products, with each part managed separately, although funds or units may be exchanged between the two. Branch 21 products usually have a duration until maturity or for a maximum of eight years plus one day, due to regulations on withholding tax.

The Branch 23 products and fund investment products of banks are very similar. There is only a purely technical difference, that in an insurance context the insurer holds the units of the fund, while in a banking product the funds are directly held by the “policyholder.” The units that Branch 23 products link to are usually internal funds managed by the insurer.

Branch 26 products are pure investment products with guarantees. They don’t cover any risk but may be sold by insurance companies. Under IFRS they are considered to be investment products.

Group insurance for retirement schemes where employers hold the policies for their employees are common and make up the second pillar of the three-pillar pension system of Belgium. In those policies the employer pays a premium and an employee might pay additional premiums. These products have slightly different regulations on guarantees (see 3.4 below). It is important to note that many of those group schemes have special agreements with the insurers. Any update of the policy administration system has to be able to deal with all those different legacy arrangements. In such policies the policyholder might be a single company or there might be a contract based on deals the unions make with an insurance company.

Retirement products only get state subsidization in the form of tax deductions. There is no direct payment from the government into private policies. Annuities are very uncommon in Belgium. Classic endowments are also not very common, but not as uncommon as they are in Germany in the last 15 to 20 years.

¹² See <https://www.vereycken.be/en/home/>.

¹³ See <https://sapiens.com/>.

The usual risk products like mortality coverage for mortgages are the same as they are in Germany. Fixed capital and decreasing versions of the products are available. The typical death benefit is either a fixed capital payout or a payout of zero to a fixed capital minus a reserve.

Long-term care (LTC) products are not available as this risk is covered by the government. Disability insurance is available as a principal insurance and as rider on other insurance contracts, most often universal life. Survivor's insurance is rare but still available.

3.3 PROFIT SHARING

Profit sharing is discretionary, declared annually, usually in Q1, and only used with universal life products and endowment products. There is no minimum set by a regulator, and the amount shared may be different for any policy. Any insurer, for example, may declare profit sharing only for policies above a certain premium or claim amount. Most profit sharing comes in the form of an additional return of the declared percentage of the reserves. Profit sharing from investment yields is usually used to increase the claims. Additionally, there is profit sharing from improvements on the assumed mortality, which may be used to increase the claim in the case of death or may, as mentioned in the Introduction above, be used to reduce the premiums, usually for the entire remaining lifetime of the policy. Although such reductions happen rarely, the ability to cope with such changes must nonetheless be built into any policy management system in the Belgium market.

When profit sharing is used, the policy management system runs a program that recalculates the reserves for the last year to include the profit sharing of that year. With the declaration and approval of the board the shared profits belong to the policyholders and are treated the same as a regularly paid premium.

The Branch 44 products are special in that profit sharing from the Branch 21 products may be used to buy additional units in the corresponding Branch 23 policy.

3.4 GUARANTEES

Universal life products usually have guaranteed rates. Contrary to the German system, where the guaranteed rate is mostly set when the policy is signed, the guaranteed rates in Belgium are set for each individual premium once it is paid. That is, a policy that consists of tranches or slices with different guaranteed rates. Those guaranteed rates are usually set in increments of 25 basis points (bps). This requires some flexibility on the design of a policy management system used in Belgium. A known and clever way to implement those rates is by designing a set of internal "funds," each with a fixed rate, and having the policy "buy" units of that fund. This reduces the overhead in managing many different rates within each policy.

Currently there is a maximum guaranteed rate of 2% for new contracts or new premiums, which extends also to payments made into a policy from profit sharing, but there is no minimum rate, even allowing rates below 0%. For group insurance, i.e., employers holding policies for their employees, the employer must guarantee a legally mandated minimum rate and must cover the gap between the insurance rate and this mandatory rate; insurance providers may cover this gap themselves with profit sharing. This becomes political as the economy minister must validate maximum rates, which are separate from mandated employer rates and therefore affect the gap between the two.

A noteworthy difference of the German market is that there are no extra "held to maturity bonuses," i.e., there is no additional guaranteed rate for holding a policy to maturity.

3.5 RIDERS AND SUPPLEMENTARY INSURANCE

The riders and supplementary insurance market is similar to the German market. The most common riders are death, accident, and disability or long-term care. Those riders either come with leveled premiums, i.e., a constant premium for the entire run time of the contract, or with an annual risk premium.

Additionally, there are some supplementary insurances for hospitalization, often sponsored by an employer.

3.6 PARTITIONING OF INSURANCE BUSINESS

Providers must be licensed for different insurance lines of business. If providers offered multiple insurance types before Solvency I, then they are grandfathered in and can continue to do so. This is true for most of the top 10 insurers. Backing assets and profits are kept separate, and the life policy administration is also kept separate.

3.7 TRANSACTIONS ON DEMAND

Transactions in the policy management systems are similar for the most part to Germany. For Branch 44 products one may change the ratio of universal life assets and unit-linked funds, but it is free only for a limited number of times and afterward a fee is charged; the cap on free changes is rarely reached. This transaction is implemented manually.

For group pension insurance there is the option to keep a policy dormant or to transfer the reserve to a scheme of a new employer.

Surrender of policies can apply a surrender fee and it is possible that certain low-value policies are not eligible for surrender.

For life insurance contracts there is a 30-day time window to revoke the guarantee, whereas it is only two weeks for other insurance products.

3.8 ALLOWED ACTUARIAL BASIS

No significant difference from actuarial bases used in Germany.

3.8.1 Costs

The direct cost is a percentage on premiums, while management costs is a percentage on reserves, similar to Germany. Commission may be a percentage of the annual premium or of a single premium divided by 10; possibly partially reversible in case of early surrender in first years of the contract.

Acquisition costs generally may lead to negative reserves; in German life this is usually avoided by zillmerization. Belgium does not directly use zillmerization but defers parts of the acquisition costs in accounting to avoid negative reserves in the policies, which is in concept close to zillmerization in Germany.

3.8.1.1 Taxes

There are two noteworthy facts about taxation for Belgium in the insurance context. If a policyholder takes out capital from their (non-fiscal) universal life products in the first eight years, there is a payout deduction of 30% in the form of a withholding tax.

Additionally, depending on how old a given policy is, there might be charges an anticipative tax five years before maturity, instead of at maturity, on tax-deductible pension savings. This money will be taken out of the reserves five years before the policy maturity date. This is especially important because any premiums paid after that point may still be tax deductible but will not be taxed later.

3.8.2 Mortality tables

Mortality tables are similar to Germany. It must be shown that the assumed mortality is sufficiently prudent, otherwise the assumption on mortality must be adjusted.

3.8.3 Actuarial interest

Belgian law states that the maximum rate should be 85% of the 24-month average of the 10-year Belgian government rate *and* that the minister of economy should validate the maximum rate. In the low interest rate scenario of the past years, this would have implied a rate of below 2%. The National Bank of Belgium suggested in 2021 a rate of 0.75%. But due to the regulations on group insurance mentioned in 3.4 above, the minister ignored this suggestion and kept the rate at 2% to help pensions.

Many insurance companies still reduced the rates to as low as 0.5% but hesitated to do the same for group insurance policies. Additionally, it was confirmed that a rate below 0% would be possible.

3.9 REGULATIONS

Belgium follows EU regulations, in particular Solvency II (SII). Additionally, there are circulars which are required to be reported and usually use administrative information used in SII. There is also a requirement to send policyholders detailed information on their individual policies, including details on paid premiums, profit sharing, costs, and projections in the usual good, neutral, and bad scenario variants.

Finally, there is a requirement for insurers to upload information for policyholders to a government service called pensionpro, formerly DB2P, which is managed by Sigedis. It collects information from additional pension contracts.

To fulfill the reporting requirements of those regulations, some insurance companies use tools like AFM, Prophet, GPMS, and even Excel. If a new policy management software could solve those problems in addition to being a good policy management system, it might have an edge over the competition.

3.10 THIRD-PARTY ADMINISTRATION AND CROSS-BORDER BUSINESS

Third-party administration is not a significant aspect of the Belgian insurance market.

CONCLUSION

The Belgian insurance market is mostly like the German insurance market, with some key differences. The lack of anything as complicated as the German Riester product gives the German standard software providers a good position to enter the Belgian market. The three most problematic topics from a German software standpoint are the permanent premium offset due to changes in the mortality rate (see 3.3 above), and the different levels of guarantees in the Branch 21 products. The latter should be solvable with the above suggested solution of using different funds with constant given rates, and the first problem seems somewhat related to the process of a change in premiums by Beitragsanpassung (BAP) in the German health insurance market. The third problem is the legacy group insurance schemes. Without having detailed knowledge about all the possible configurations of concessions given over the time that those products have been sold, it is very difficult to judge the costs in time and personnel to implement those deals into a new policy management system.

German software providers might be able to capitalize on the age of UL3ACC to bring a new standard software to the Belgian market.

4. The Netherlands

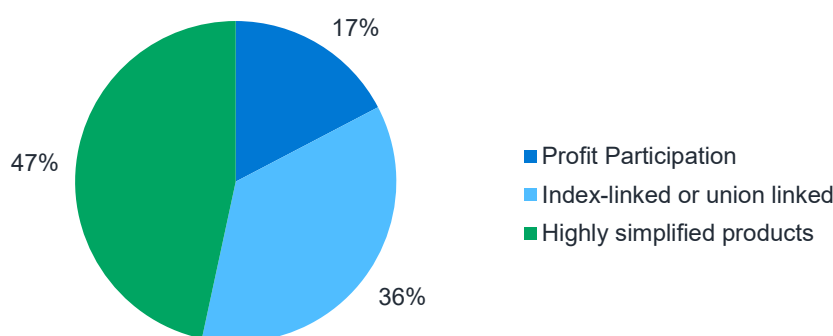
Key findings

- Sharp decline in new business, but huge old stocks also in life insurances.
- New chances for group life insurance business due to new pension law since summer 2023.
- Many variants of unit-linked products, including options for customers.
- For new business, disclosure of commission costs is highly regulated, while in other respects costs in general do not have strict limitations.

All comments are described in relation to differences from the German market and German policy management. Please review the first section on Germany above for reference.

The market for life insurance in the Netherlands is declining sharply. Consolidation in the market has led to a high concentration of market share in the top insurers; just Nationale Nederlanden and Aegon controlled 52% of the life insurance market in 2022. Particularly due to the low interest rate trend of recent years, many customers have switched to banking products. However, with approximately EUR 10.1 billion in premium income in 2021, there are still many legacy contracts that need to be managed. In view of the market situation in recent years, some life insurers have also switched to offering simpler savings products so as to compete with banks and save on administrative costs.

FIGURE 11: NETHERLANDS LIFE INSURANCE MARKET



In addition to policies managed by life insurance companies, there is an interesting and still huge market for employer-provided pensions in the Netherlands, which will be discussed in more detail in section 4.2 below.

4.1 POLICY MANAGEMENT SYSTEMS IN THE NETHERLANDS

LeanApps,¹⁴ a firm that develops and delivers web-based standard software for general administration and policy administration for life insurance and pension funds, is active in the Dutch market. With LeanApps software, insurance companies can quickly launch new products and distribution channels, significantly reduce operating costs, and position themselves well for future technologies. But so far migration projects to modern software solutions have not been carried out over all existing portfolios; there are still IBM or Siemens mainframes in wide use and upgrades to modern solutions are possible. Some insurance companies even maintain old in-house software. SAP Policy Management is also in use by some Dutch insurance firms. Group life contracts yield additional requirements for policy management systems due to pension law requirements to make certain statistics available on a high-frequency basis, including future expected pension benefits based on a set of scenarios.

¹⁴ See <https://www.theleanapps.com/>.

4.2 PRODUCTS

In principle, all the same types of principal insurance that are offered in the Netherlands are also common on the German market. Asset-building products, such as classic savings products, term insurance products, or unit-linked products combined with a mortality risk product, are the most preferred life insurance products.

As far as pensions are concerned, the Dutch market has a special feature: there are either company-based pension schemes or industry-based schemes, in which about 87%¹⁵ of employed people (excluding the self-employed) are represented. The combination of a government pension scheme and an employer-based pension scheme results in relatively high pension benefits for the average Dutch pensioner compared with the rest of Europe. Most of these contracts, e.g., pension schemes, are not managed by insurance companies, but are part of pension funds. However, a new pension law introduced in the summer of 2023 is expected to lead to movement in the sense of portfolio transfers, maybe to established insurers.¹⁶ Appropriate management of collective policies is therefore an important aspect of a future portfolio management system.

There are no state-subsidized products in the form of grants, but pension tariffs are afforded tax advantages.

4.3 PROFIT SHARING

Profit sharing was not and is currently not mandatory in Dutch life insurance products. Mainly smaller companies, some of which have been absorbed into key players, used profit sharing. This has led to considerable diversity in subsections of many companies' portfolios. In most cases, however, profit sharing does not play a significant role.

4.4 GUARANTEES

In addition to guarantees relating to typical classic insurance products, unit-linked products can also contain guarantees or options for the policyholder: for instance, a minimum guarantee of gross premium, or a minimum guarantee of a certain percentage return on investments made into a bond-based fund. Sometimes it even depends on the chosen fund or funds within a fund portfolio whether guarantees are given. The most important aspect here is that, in the case of guarantees, the insurer must reserve money to account for any drop in the value of the fund. This is an aspect that is mapped individually for each company and for each fund composition in the portfolio management system.

4.5 RIDERS AND SUPPLEMENTARY INSURANCE

Accident covers were commonly added to life policies for a while back in the 1980s and are still in portfolios. The benefit for a long-term disability rider, which is an independent product, is often a percentage of the sum insured by the main insurance plus a fixed amount, and in contrast to Germany is usually not paid as a pension or exemption from contributions to the principal insurance. Concerning funeral insurance, additional benefits on top of coverage for funeral expenses are common in existing portfolios as supplementary riders.

Apart from these covers, other supplementary insurances that are common on the German market (e.g., occupational disability or supplementary risk insurance) are listed in separate principal insurance policies.

4.6 PARTITIONING OF INSURANCE BUSINESS

Analogous to Germany, in the Netherlands there are separate life, property and casualty (P&C), and health insurance licenses. There is no exchange of information between the divisions of management systems.

¹⁵ DeNederlandscheBank. Werken zonder pensioenopbouw. Retrieved December 10, 2023, from <https://www.dnb.nl/media/ft2pioiv/werkenden-zonder-pensioenopbouw.pdf>.

¹⁶ Crowson, J., van Delft, L., Manning, K. et al. (November 3, 2023). Global Pension Risk Transfer Market Outlook. Milliman Report. Retrieved December 10, 2023, from https://www.milliman.com/-/media/milliman/pdfs/2023-articles/11-7-23_global-prt-market_risk-transfer.ashx.

4.7 TRANSACTIONS ON DEMAND

Products before 2008, which are relevant for potential portfolio migration projects, have varying flexibility, for instance they can typically be terminated earlier at a fixed expense, in which case an outstanding zillmerization reserve may also be accounted for or even tax penalties. To maximize tax benefits, policyholders will often change an individual pension savings product into an annuity at retirement.

On top of the typical transactions like increasing or decreasing premiums or adjusting the risk coverage, there is a high flexibility in funds-linked or unit-linked products to change the financial assets according to the customer's requests. Usually, there are monthly options to alter the fund's investment profile. In addition, there are possibilities to finance the premium payment in whole or in part by withdrawing it from the fund capital. While this is only available for older products and is very rarely requested, it should nonetheless be considered for a policy management system.

One should also mention that it is customary to charge the customer for certain change requests and those charges have to be supported by an administrative system.

4.8 ALLOWED ACTUARIAL BASIS

In addition to general information on an insurance policy's status, which is also customary in Germany, positive, neutral, and negative scenario-based capital at policy maturity must be shown for individual life products that are unit-linked-based. This is required for policyholders to be able to compare products. This was introduced by the Authority of Financial Markets in the Netherlands. For group life, there are even more stringent rules and mandatory scenario calculations.

4.8.1 Costs

In the Dutch market, great importance is attached to the comprehensibility of costs. Therefore, modern products typically have a one-off fee to be paid in cash at the start of the policy, followed by a low regular explicit maintenance fee. Also the costs for the insurance agent must be paid by the client directly for transparency (by law), often in hourly fees. Therefore, the need for communication with a commission administration system can be reduced (for new business) compared to German administration systems. As a result, the costs within a life insurance contract are generally much simpler and lower.

Across old portfolios there is a huge plethora of options. In addition to acquisition costs, whether one-off or set over a few years, it is particularly worth mentioning that there may also be sales expenses to be paid back over the lifetime of the policy.

4.8.1.1 Taxes

The tax rules can essentially be distinguished for pensions and all other types of insurance. Because of their structure, annuities do not count toward the wealth tax. In general, tax benefits on pension products are essentially a deferral of taxes from payment of premium to the maturity of the contract. This reduces the burden of tax management and tracking on the policy management system.

4.8.2 Mortality tables

There are mortality tables made by the Dutch actuarial association, for males and females, including trend for future decades. Most Dutch insurance firms today are large enough to create their own mortality tables or define their own adjustments to this Dutch average or to use correction factors fitting their customers. Unlike in Germany, there is no rule as to which tables must be applied. However, for Solvency II most insurance companies are using the mortality tables published by the Dutch actuarial association.

4.8.3 Actuarial interest

There are no specific limitations or regulations on interest rates set by Dutch financial authorities. This allows a straightforward implementation in the policy management system, setting the interest rate as a fixed parameter for each contract.

4.9 REGULATIONS

Regulation is in line with the EU standard. IFRS17 and Solvency II are applied.

4.10 THIRD-PARTY ADMINISTRATION AND CROSS-BORDER BUSINESS

Neither plays a role in the Dutch life insurance market as of publication.

CONCLUSION

The fund management of Dutch portfolios is certainly much more varied than is known on the German market. Nevertheless, it can be a valuable step for policy management software providers to develop their expertise based on markets that are already more advanced in this segment. In many other aspects, there are no significant differences between the Dutch and German environments. Particularly with regard to tax policy management, there are opportunities to simplify the system landscape that is common in Germany, which can lead to a marketable price for software solutions. The fact that no extra functionality for managing state-subsidized benefits is required within the policy management system also has an impact (see Riester pension description under the Products section at the beginning of this report).

5. Luxembourg

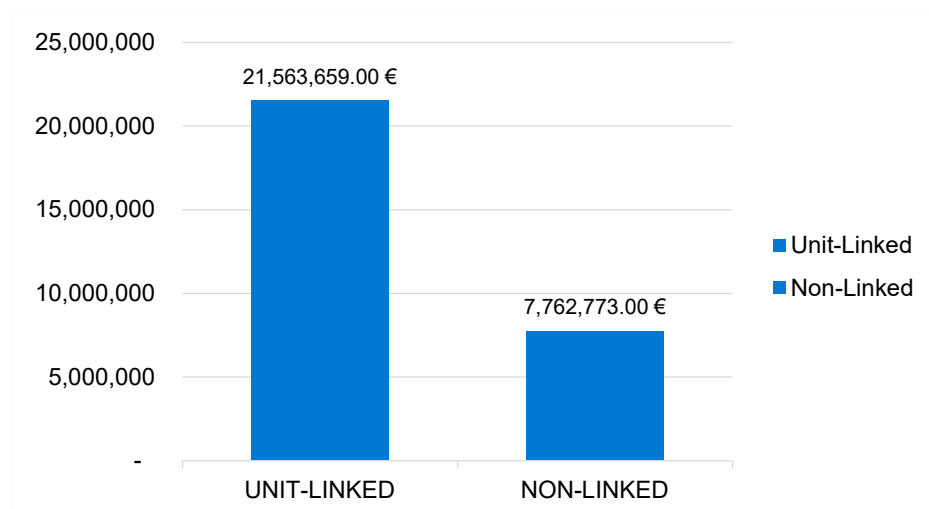
KEY FINDINGS

- Savings products are large one-time premiums with optional top-up premiums.
- Large portion of business is inbound cross-border from other EU countries.
- Products and product portfolios are more focused on unit-linked than non-linked; otherwise very similar to Germany.

All comments are described in relation to differences from the German market and German policy management. Please review the first section on Germany above for reference.

The insurance industry in Luxembourg is mostly domestically owned, holding approximately 78% of the market by premiums in 2021. Of companies leading the market, Lombard International, Cardif Lux Vie, La Mondiale Europartner, Sogelife, CALI, and Wealins represent almost 70% of the 2021 gross premium written for the life insurance market. However, as seen above, business is mostly cross-border, with no significant amount of third-party administration.

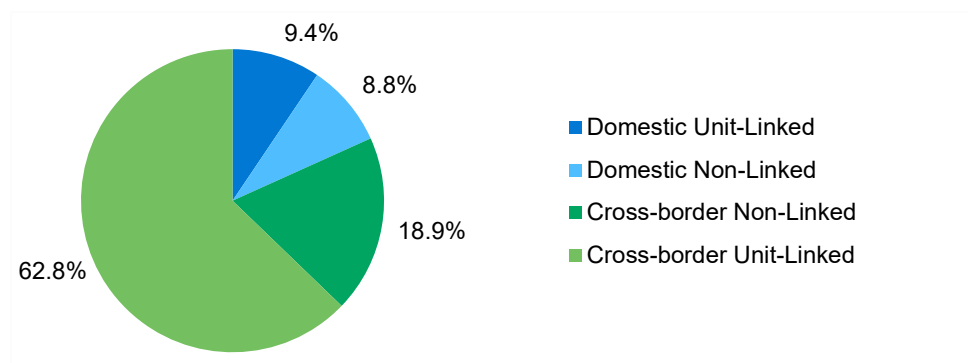
FIGURE 12: LUXEMBOURG GROSS WRITTEN PREMIUM, 2021



Most of the cross-border business comes from Belgium, France, Germany, Italy, and Spain, with the remaining cross-border business coming from other EU nations. Gross written premiums of life insurance in 2021 was EUR 29,326 million, about 74% of which are unit-linked and the remaining 26% are with profit sharing.

There has been some publicly known mergers and acquisitions (M&A) activity in the last decade, mostly policies going to runoff platforms. As such, Monument has acquired Omega and Foyer has acquired Globality.

FIGURE 13: LUXEMBOURG DOMESTIC AND CROSS-BORDER PREMIUMS, 2021



5.1 POLICY MANAGEMENT SYSTEMS IN LUXEMBOURG

The information available on Luxembourg policy administration system is limited. The information we were able to gather seems similar to the German market. The internal policy update cycle is usually monthly or biweekly, with the client /policyholder side usually only getting yearly updates. Accounting is usually managed in a separate system.

5.2 PRODUCTS

Modern saving products are unit-linked or universal life and are usually sold as a large one-time premium with the flexible option of top-up premiums. Retirement products get state subsidization only in the form of tax deductions. There is no direct payment from the government into private policies. Most of the retirement and saving products are term products with a run time of 10 to 20 years. Standalone annuities are hardly sold anymore but may be sold in employer pension schemes. In a way that is similar to the Irish system, there is a legal requirement for insurance products to cover some sort of risk. To qualify for insurance, riders are used, and for unit-linked products this most often is done by a rider for death cover.

Older and classic products do still exist due to the long lifetimes of the contracts.

Products for employer pension schemes in which the employer and possibly also the employee pay into the policy do exist and also qualify for tax deduction. This is similar to the German market.

There are generally only two types of riders for policies available. The above-mentioned death rider, most often 1% of the net asset value (NAV) or total premium paid and a disability or long-term care rider. The latter is most often reinsured and the reinsurer takes care of calculations. Those products either come in the form of a leveled premium or a yearly risk premium.

Unit-linked products in Luxembourg invest in three types of funds: specialized insurance fund (FAS), dedicated internal fund (FID), and internal collective fund (ICF).¹⁷

A FAS does not include a return guarantee and serves as a support for a single contract. It allows the subscriber to directly choose the underlying assets from an investment universe, e.g., stocks and bonds, units of mutual funds, or even structured products and nontraditional investments, subject to prior acceptance, defined in advance.

A FID allows the policyholder to set up individual management under a discretionary mandate, i.e., the subscriber must appoint an approved management company, which will determine his profile and his investment strategy and then take charge of the financial management of his Luxembourg life insurance contract. In principle, the FID is dedicated to a single contract.

An ICF is an internal fund in which several subscribers can invest. The ICF allows the implementation of collective management under a discretionary mandate.

Other products like variable annuities, principal disability insurance, mortality cover, and dread disease have been sold in Luxembourg and may still exist in portfolios but don't play a large role in new business.

Underwriting groups in the form of unions do exist and their assets are most likely in a ring-fenced portfolio.

¹⁷ These three options are defined by the regulatory framework of circular 15/3 of the Commissariat aux Assurances du Luxembourg (CAA).

5.3 PROFIT SHARING

Profit sharing in Luxembourg covers only non-linked products and is discretionary in a way that is similar to Belgium. There are no minimums that need to be shared but there might be maximums defined for certain products. Once the shared profits are paid into the contract, they belong to the policyholder and act like a top-up premium.

5.4 GUARANTEES

There are guarantees in classic products. Similar to the system in Belgium, there is an option that guaranteed rates are not necessarily locked in until the given premium is paid. This may pose a challenge in the policy management system, as there may be many different guaranteed rates in a single policy.

Guarantees relating to typical classic insurance products can be mixed in with unit-linked products, for instance a minimum guarantee of gross premium, or a minimum guarantee of X% return on investments made into a bond-based fund. Older unit-linked products allowed clients to pick from different funds and allowed them to switch between funds (free from one to three times a year, then with an additional fee). Only the units bought of a specific type would yield a guarantee. Some guarantees would only be applied if the policy was paid up.

5.5 PARTITIONING OF INSURANCE BUSINESS

Analogous to Germany and the Netherlands there are separate life, P&C, and health insurance licenses. There is no exchange of information between the divisions of management systems.

5.6 TRANSACTIONS ON DEMAND

Transactions in the policy management systems are similar for the most part to Germany.

For group pension insurance there is the option to keep a policy dormant or to transfer the reserve to a scheme of a new employer.

For life insurance contracts there is a 30-day time window to revoke the guarantee, whereas this is only two weeks for other insurance products.

5.7 ALLOWED ACTUARIAL BASIS

No significant difference to actuarial bases used in Germany.

5.7.1 Costs

The cost structure on products in Luxembourg is relatively similar to the German market. Costs often come as a combination of fixed unit costs and some percentage-based costs applied to premiums or reserves.

5.7.1.1 Taxes

There are several taxes that apply in the Luxembourg insurance market. There is tax on premiums, tax on profit sharing, and a terminal tax on tax-deductible pension savings. Those taxes are either directly paid by the policyholder or deducted from the benefits by the insurer.

5.7.2 Mortality tables

Mortality tables are similar to Germany. It must be shown that the assumed mortality is sufficiently prudent, otherwise the assumption on mortality must be adjusted.

5.7.3 Actuarial interest

The maximal actuarial interest in Luxembourg is bound within a corridor. The maximum possible rate is set by law and the minimum rate is 0%.

5.8 REGULATIONS

Luxembourg follows the Solvency II regime of the EU and uses standard software like Prophet for calculations and projections.

5.9 THIRD-PARTY ADMINISTRATION AND CROSS-BORDER BUSINESS

Third-party administration is not a significant aspect of the Luxembourg insurance market.

Cross-border business is to other EU nations, mostly to Belgium, France, Germany, Italy, and Spain. This business is regulated by the Commissariat aux Assurances du Luxembourg (CAA).¹⁸

CONCLUSION

The Luxembourg market is basically a simpler version of the German market. The main differences are the focus on larger one-time premiums with the option for top-up premiums and a more general trend toward unit-linked products. Neither should be a problem for the standard German software providers for policy administration. The three types of funds used in Luxembourg are at the very least unusual from a German point of view, but we are sure that the potential problems in asset management and allocation can be overcome. The increasing use of runoff platforms over the last years seems to suggest that there is some momentum in the market and that insurers are looking into marketing old portfolios. Those projects often involve policy migration and, hence, we see a great opportunity for German software providers to enter the Luxembourg market.

¹⁸ See <https://www.caa.lu/>.

6. Italy

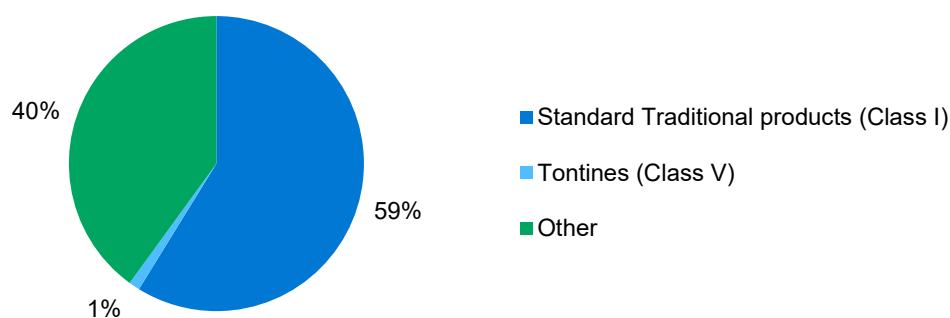
KEY FINDINGS

- A large amount of consolidation has recently taken place, with foreign companies exiting the market, and other foreign subsidiaries (and some domestic companies) acquiring the sold portfolios.
- Outbound cross-border business, much of it with Ireland, is significant, mostly unit-linked products.
- Domestic business is mostly traditional products and comprises 60% of the market by premiums.
- Although an Italian insurance provider may be authorized to conduct both life and non-life business, policy management systems are kept separate.

All comments are described in relation to differences from the German market and German policy management. Please review the first section on Germany above for reference.

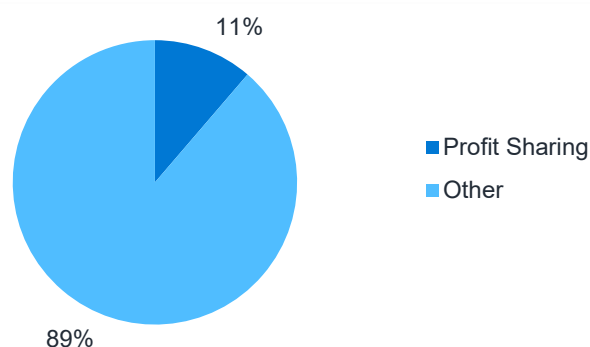
The life insurance market in Italy is a mostly domestically owned market where most of the largest undertakings are not subsidiaries of foreign corporations, with the exception of HDI and Eurovita. The top three insurers, Generali, Intesa Sanpaolo Vita, and Postevita, together made up 47.8% of the life insurance market in 2020. However, the cross-border business conducted in Italy is relatively high-volume; outgoing cross-border business, which consists mostly of unit-linked products, made up 41.6% (or EUR 65.2 billion) of collected life and non-life premiums in 2020. Meanwhile, Italian-owned companies collected EUR 43.6 billion in premiums from abroad, EUR 26.6 billion thereof in life insurance. The products sold domestically are mostly traditional policies, which took in EUR 63.5 billion in gross written premiums in 2021, making up 60% of the Italian life insurance portfolio. In the range of countries studied in this project, Italian life insurance is in important aspects similar to German. Although the regulations have significant differences, the product market has less of a focus on unit-linked products than other countries in our study, for example Ireland or Luxemburg. Italians also subscribe to the three-pillar pension model as in Germany: governmental pensions, employer pensions, and private pensions.

FIGURE 14: ITALIAN GROSS WRITTEN PREMIUM, 2021



Standard traditional products (Class I) take up the vast majority of that 60% and tontines (Class V),¹⁹ an insurance product where funds are distributed equally to all participants (thus increasing benefits as participants exit the policy), make up the remaining portion of all traditional products.

¹⁹ Classification according to Annex II in <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02009L0138-20211019>

FIGURE 15: MARKET SHARE BY NUMBER OF PRODUCTS*

* based on a selection of top Italian providers

6.1 POLICY MANAGEMENT SYSTEMS IN ITALY

The leading Italian policy management system is UNIVERSO,²⁰ which is provided by Be Shaping The Future, a financial support services company with offices in Turin, Milan, and Rome. Although it is the clear market leader for policy management in Italy, its systems are aging, and many of its client systems are more than 20 years old. For cross-border business, often the same policy management system is used, but is managed by a different team. This is a point of interest because cross-border business is mostly unit-linked, which gives us insight of the functionality of a policy management system that would have to manage mostly traditional products in the domestic market and also the cross-border market of unit-linked policies. One particular feature of unit-linked policies is the ability to transfer the products to profit-sharing funds. This would be of particular interest in policy management.

Projections that are required by regulation in Italy include Solvency II, ALM, and own risk and solvency assessment (ORSA), with the real-world rate. Other projections that are often implemented include minimum guaranteed rate revaluation, projections without future premiums, and projections without dynamic policyholder behavior. These projections are usually implemented outside the policy management system. While German policy management systems can carry out projections, in Italy the projections would require significant calculation as well as a high communication volume with asset management and liability systems, making this feature, while appealing, challenging to adapt to Italian standards.

6.2 PRODUCTS

Traditional products are the standard in Italy. However, unit-linked products are the main portion of cross-border business and are therefore still important for adapting a policy management system. Unit-linked products can only be linked to funds that may be either internally or externally managed. Policyholders choose different risk levels, and may change their risk profiles, although there is no market or regulatory standard regarding this kind of flexibility. Flexibility between unit-linked and non-linked is also allowed, as policyholders can transfer units to traditional segregated funds (see below) with profit sharing. Multi-risk products are currently popular and in general the products found in portfolios are mostly long-term or whole life insurance along with whole life products with high guarantees in runoff. Traditional products include Pure Endowment and Endowment, which combine survival and mortality and pay out in either case; the German market has analogous products. Traditional funds are supported by Gestioni Separate (segregated funds), which consist mostly of bonds and stable securities. Of the retirement products on offer, there is a special category of subsidized closed pension funds that are restricted to members of specific professions, sometimes even specific to employees of a particular company. There are also preexisting pension funds, pensions that were created before the three-pillar pension model was established. Due to this, there is a wide variety of potential structures of preexisting pension funds. In Italy, in contrast to Germany, disability and dread disease insurance are considered as kinds of health insurance but may still be applied as riders to life insurance policies.

²⁰ See <https://www.eng.it/en/our-platforms-solutions/universo>.

6.3 PROFIT SHARING

Profit sharing exists in the Italian market, but not as a class of product; rather, profit sharing is often a feature that may be—but is not required to be—included in a variety of products, and it is not guaranteed. Usually, the level of profit sharing is decided by taking profit sharing, marginal return, and minimum guarantee into account, and is set as a percentage of the reserve. Profits may be shared out in different ways: it may be held as an interest-bearing asset, it can be applied to benefits, or paid out via a bonus system. Premium offsetting, although a standard option in Germany and other countries, is not offered for profit sharing in Italy. Ownership of shared profits is not standardized in Italy; profits may be paid out at maturity of a contract or be paid out in periodic coupons.

6.4 GUARANTEES

A common guarantee in Italy is “best-of,” which provides the insured with the greater of the capital revalued with the returns of the segregated funds, mentioned in 6.2 above, and the capital revalued at the minimum guaranteed in case of surrender and/or death. This kind of guarantee is not offered in Germany. While best-of guarantees are ubiquitous in current and recent policies—the best-of guarantee was introduced around 2013—older policies have other guarantees, including minimum guaranteed return, 100% of premiums paid, and a contractual rate for annuities. Another guarantee is “DAS,” or automatic deferral at maturity, which allows the policyholder to defer the maturity of their policy to a future date, usually one, three, or five years past the original maturity. The corresponding transaction for DAS is described further in 6.7 below, Transactions on Demand.

6.5 RIDERS AND SUPPLEMENTARY INSURANCE

Although considered health insurance, dread disease and disability are common riders on non-retirement annuities. Other riders such as special cause of death (i.e., auto accident), accident or hospitalization, waiver of premium due to hospitalization, and waiver of premium for collateral protection products may also be added to life insurance products. Most riders have analogous supplemental products in Germany, although not all: dread disease, for example, is not sold as a supplemental product in Germany. Riders on life insurance products, whether life or health, such as disability, are managed in the life insurance policy system. A company can also include a life rider on a non-life policy.

6.6 PARTITIONING OF INSURANCE BUSINESS

In Italy, an insurance provider may acquire authorization to conduct both life and non-life business, if its total capital is equivalent to or greater than the sum of the necessary capital for each individual insurance undertaking. While many companies do this, it does not affect what is the primary focus of this study: the policy management system is kept separate and its functions are not combined with any other management systems.

6.7 TRANSACTIONS ON DEMAND

In general, there is a fair amount of flexibility allowed regarding payment of premium. Premiums may be suspended as required by regulation, as well as timing of payments. As mentioned earlier, DAS, translated to automatic deferral at maturity, allows the policyholder to defer the maturity of their policy. The policyholder decides whether to defer the maturity for a set period, often one, three, or five years, or indefinitely, with the deferral automatically renewing every year until it expires or the policyholder cancels the deferral. Activating the DAS maintains the possibility of best-of revaluation until the new maturity date. Other than DAS, common transactions are similar to those in Germany.

6.8 ALLOWED ACTUARIAL BASIS

To handle changing actuarial bases, technical assumptions are updated annually, while market assumptions are updated and calculated quarterly. While the updating of technical assumptions is similar to Germany, market assumptions are not so strictly updated, with update schedules potentially varying by product or fund. Any new components to a contract, however, are based on the original actuarial assumptions that were made.

6.8.1 Costs

Acquisition costs, as they are sometimes structured in Germany, are the sum of a percentage of premiums and a flat fee. Also similar to Germany, management costs are calculated as a sum of the maintenance cost, which is a percentage of the reserve, the flat maintenance fee, and any liquidation costs. Closing costs for Italian insurance products do not usually lead to negative reserves, so zillmerization, which is often used by German insurance providers, or similar methods, are not necessary; in outlying cases of negative reserves, providers are allowed to defer costs.

6.8.1.1 Taxes

Tax administration is taken on by the insurance provider, as required by regulation. Tax rates on accrued returns vary and depend upon contract periods and the kind of underlying asset linked to the contract. For all savings and investment products, the insurance provider must apply a substitute tax of 26% on capital gains upon partial surrender, total surrender, or maturity. Furthermore, for index-linked, unit-linked, and capitalization products after 2001, there is a stamp duty due upon partial or total surrender or claim. Stamp duty is calculated based on the value of the investment as of December 31 of the previous year.

6.8.2 Mortality tables

Based on our sources, there is no indication that mortality tables are used in Italy differently than how they are used in Germany.

6.8.3 Actuarial interest

By Italian regulation for life products, the maximum rate that can be guaranteed is calculated by discarding the historical series of monthly observations of the annual gross rates of return of BTPs with a maturity of 10 years. In particular, the minimum between the last annual rate of the series and the simple arithmetic mean of the last 12 monthly observations of the historical series is considered. Exceptions to these considerations are contracts with general provisions of assets, which have a minimum of 60% of what was described above and a maximum of 4%, pure risk products without profit sharing, which have a strict maximum of 4%, and single premium non-pure risk and capitalization products, which for the first eight years of the contract have a minimum and maximum of 75% of the return for contracts with general provisions of assets.

6.9 REGULATIONS

The Italian regulatory agency, IVASS,²¹ and the private insurance code, Codice delle Assicurazioni Private,²² do not generally set regulations significantly above what is required for Solvency II. There are no regulations restricting maximum management costs. Inspections for money laundering and financing of terrorism are conducted concurrently with checkups on financial management and solvency. Italian insurance providers are required to adhere to the following principles: monitoring the regulatory framework to build compliant processes, preventing the risk of judicial or administrative sanctions, financial losses, and reputational damage, providing strategic advice to top management, and overseeing proper customer relations. Regulations establishing the Italian three-pillar system were enacted in 1993. As mentioned earlier, many funds from before 1993 were grandfathered into the system and are currently referred to as preexisting pension funds. Regulatory reforms since 2005 have attempted to integrate preexisting pension funds into the three-pillar system standards, mostly by way of deregulation to make room for the variability of those funds.

²¹ See <https://www.ivass.it/homepage/>.

²² The full text of the insurance code is available at <https://www.ivass.it/normativa/nazionale/primaria/CAP.pdf>.

Communication of the contract status with the policyholder is required for unit-linked products and revaluable products. For unit-linked products, the total premium paid, the number and value of units, the details of premiums paid, and, where applicable, the value of the guaranteed benefit that must be reported to policyholders is required annually. It is also required in the case of a reduction of the value of units exceeding 30% of premium amount. For revaluable products, the annual statement must include the accumulation of premiums paid and the value of the benefit, details on premiums paid in the previous year, details of partial lapses reimbursed in the previous year, the redemption value at the date of reporting, the annual rate of return realized, the recognized retrocession rate, and the annual rate of return retrocession and of revaluation of benefits.

CONCLUSION

Necessary adaptations to a German policy management system could potentially make it competitive in the Italian market. Further, the aging of UNIVERSO systems could provide a market opportunity to introduce a new policy management system. Still, flexibility to include or exclude profit sharing from non-linked products would be required, as well as the ability to handle a high proportion of unit-linked products for cross-border business while also maintaining a focus on traditional products for domestic business. Specific adaptation would be necessary for best-of guarantees and DAS guarantees and their corresponding transactions, but this would not likely be insurmountable for a German system provider. Also, the inclusion of projections and the extent of their capabilities would need to be reevaluated with respect to the different needs of Italian providers.

Outlook and next steps

Based on our results for each country, discussions between different Milliman-offices, software providers and insurance companies can arise to determine future business opportunities; both for new business and for migrating existing policies to modern management software.

Contributors

The authors would like to take this opportunity to thank all contributors who provided us with input from the various regions of Europe. Of course, the goal is to involve Milliman offices in further analyses or projects across national borders, as the umbrella organization Milliman combines both system understanding of the software that may be offered and in-depth knowledge of local market and regulatory characteristics.



Milliman is among the world's largest providers of actuarial and related products and services. The firm has consulting practices in life insurance and financial services, property & casualty insurance, healthcare, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

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