MASTERS IN
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PROJECT

EQUITY RESEARCH:
AXA SA

JOÃO ARSÉNIO

JUNE 2023

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SUPERVISOR: MARIYA GUBAREVA

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Abstract

This undertaking mirrors an Equity Research endeavor following the structure and guidelines of ISEG, in conjunction with the recommendations and benchmarks outlined by the CFA Institute. Its primary aim is to conduct a comprehensive analysis and valuation of AXA SA, a globally renowned insurance enterprise.

AXA SA, a prominent force in the global insurance sector, holds a prominent position. Through its extensive array of insurance solutions encompassing life and savings (L&S), property and casualty (P&C), as well as health insurance, AXA provides all-encompassing coverage. In addition to insurance services, the company extends its purview to include retail banking products and services, thus broadening its scope to cater to diverse financial demands.

Based in Paris, France, AXA's influence spans across 51 countries, underscoring its international prominence. With a substantial customer base totaling 93 million individuals and a dedicated workforce comprising approximately 145,000 employees, the company's reach is indeed noteworthy.

AXA's business lines are geographically segmented as follows: France, Europe, Asia, AXA XL International, Transversal & Central Holdings. The core objective is to meticulously assess AXA's financial performance across segments, extrapolating these assessments until the culmination of 2027, in order to provide a recommendation for potential stakeholders invested in this valuation.

The ripple effects of the pandemic, military conflict, and environmental upheavals have reverberated throughout the economy in multifarious ways. Another key facet of this endeavor is to ascertain whether these factors hold critical implications for the sustainable operational viability of insurers.

In pursuit of this, a series of requisite valuation models specific to the insurance industry were executed, including the dividend discount model, residual income model and relative valuation method.

The central valuation model, the dividend discount model, yielded a projected price target of €34/share by the end of 2024, with forecasts extending through 2027. This culminates in an upward potential of 28.6% vis-à-vis the actual share price of €26.45/share as of May 31st, 2023.

Consequently, a BUY recommendation is being advocated for AXA SA believing they will create fundamental value for the forecasted period and improving significantly in earnings as well as by distributing them to shareholders. This recommendation stems from the alignment of its anticipated target price for 2024 coupled with a moderate associated risk.

JEL classification: G10; G32; G34.

Keywords: Equity Research; Valuation; AXA SA; Valuation models; P/E; P/B; DDM; Residual Income; Price Target.

Resumo

O presente projeto representa uma Equity Research que se guia pela estrutura e diretrizes do ISEG, em conjunto com as recomendações do instituto CFA que fixa como propósito uma análise e avaliação da empresa em causa, AXA SA.

AXA SA é uma seguradora reconhecida mundialmente, mantendo-se na linha da frente da indústria. Com a sua extensa cobertura de produtos de seguros que inclui vida e poupanças (L&S), propriedade e casualidade (P&C) e seguro de saúde. Adicionalmente, a empresa também fornece produtos de banca e serviços, expandindo o seu alcance de modo a servir diversas necessidades financeiras.

Sediada em Paris, França, a presença global da AXA é notável, com as suas operações em atividade em 51 países atualmente. A empresa possui uma impressionante base de clientes constituída por cerca de 93 milhões de indivíduos e uma rede concisa de aproximadamente 145,000 trabalhadores.

A AXA separa as suas linhas de negócio geograficamente distribuindo as suas operações pelos segmentos em França, Europa, Ásia, AXA XL (Resseguro), internacional, detenções transversais e centrais.

O objetivo é analisar os resultados financeiros da AXA e projetá-los até ao final de 2027 de modo a obter uma recomendação para qualquer parte interessada.

A pandemia, o conflito militar e catástrofes naturais/ambientais têm impactado toda a economia a vários níveis e um dos objetivos deste trabalho será compreender se estes fatores são críticos para a continuidade lucrativa das seguradoras.

Para tal, os modelos necessários para a indústria de seguros foram desenvolvidos, nomeadamente o modelo de desconto de dividendos, modelo de receita residual e modelo de avaliação relativa.

O preço alvo atingido através do modelo principal, o modelo de desconto de dividendos, foi de €34/ação em 2024F com projeções até 2027. Este indica um potencial de crescimento de 28.6% contra um preço atual de €26.45/ação em 30 de maio de 2023.

Consequentemente, uma recomendação de COMPRA foi deliberada para a AXA SA, crendo veemente que a empresa criará valor intrínseco desempenhando aumentos de ganhos assim como através da distribuição dos mesmos. Esta recomendação sustenta-se através do preço alvo para 2024 que se encontra entre 15%-30% de crescimento potencial com médio risco.

Classificação JEL: G10; G32; G34;

Palavras-Chave: Equity Research; Avaliação de Empresas; AXA SA; Modelos de Avaliação; Modelo de Desconto de Dividendos; Modelo de Receita Residual.

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List of Abbreviations

P&C	Property & Casualty
L&S	Life & Savings
H	Health
AM	Asset Management
B	Banking
Re	Reinsurance
TP	Target Price
Nat Cat	Natural Catastrophe
EIOPA	European Insurance and Occupational Pensions Authority
ECB	European Central Bank
EU	European Union
DDM	Dividend Discount Model
RI	Residual Income Model
EBIT	Earnings Before Interest and Taxes
P/E	Price to Earnings
P/B	Price to Book
NI	Net Income
ROE	Return on Equity
ROA	Return on Assets
SOP	Sum of Parts
CAGR	Compound Annual Growth Rate
YoY	Year on Year
MRP	Market Risk Premium
CRP	Country Risk Premium
CDS	Country Default Spread
FY	Fiscal Year
YE	Year End
GDP	Gross Domestic Product
CPI	Consumer Price Index
ESG	Environmental, Social and Governance
CEO	Chief Executive Officer
TV	Terminal Value
g	Terminal Growth
%	Percentage
€	Euro
€ … bn	Billion Euros
€ … mn	Million Euros
€ … T	Trillion Euro
c.	circa

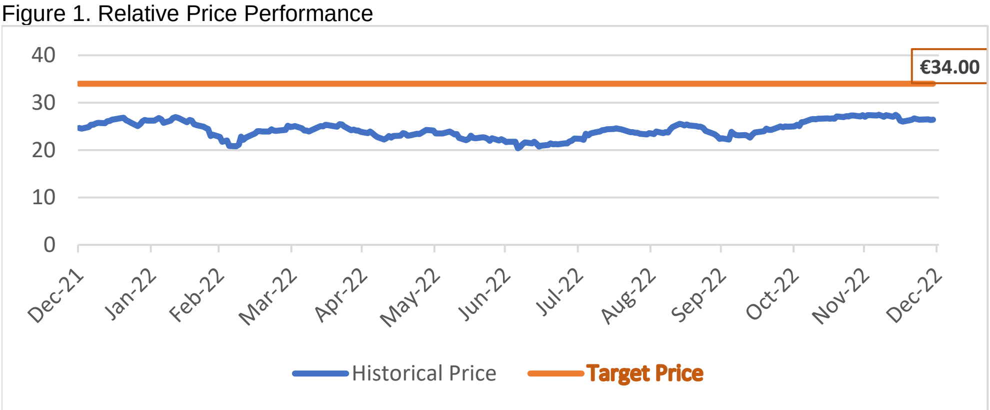
AXA, SA

Table 1. Risk Assessment		
Low	**Medium**	High

AXA SA: Ensuring certainty in uncertain times

1. Research Snapshot

Figure 1. Relative Price Performance



Source: *Yahoo Finance, Own estimates*

This valuation issues a BUY recommendation with medium risk (Table 1) for AXA S.A with a 2024YE price target of €34 (Figure 1) following the Dividend Discount Model, implying a c.28.6% gain potential against the half year May 31st, 2023, closing price of €26.45 (Table 2) and also complemented by two other valuation methods (Figure 2).

In a rapidly changing market environment, AXA is well positioned to benefit from its extensive global presence. The company has recently experienced a positive pricing response to counter the effects of inflation, which has enabled them to maintain and even expand their profit margins. Despite the cost increases, AXA's revenues grew by 2% from 2021 to 2022. This growth helped to offset the inflation-related expenses. Furthermore, AXA anticipates maintaining a strong and consistent average EBIT margin of 9% across all business segments. Additionally, the company's underlying earnings are expected to grow at a Compound Annual Growth Rate (CAGR) of 5.5% from 2023 to 2027. These projections suggest that AXA's business growth will be more stable and resilient compared to its historical growth patterns.

The group's selective strategy intends to reinforce its growth in the years ahead by intensifying its presence in high-growth markets, i.e., emerging markets. This goal implies redirecting operations towards value creation whilst at the same time disposing unprofitable segment operations. The Asian segment which is the continent with most potential countries to grow expects EBIT to grow at 3% CAGR with an average premium growth of 5.8%.

Margins at AXA XL to increase following the successful restructuring started in 2019 by the arrival of its new XL CEO Scott Gunter that has achieved remarkable success by effectively reducing risks regarding P&C Reinsurance by around 35%, shifting focus, and generating unprecedented profits since 2021.The aim is to continue growing premiums at a CAGR of 2.2% from 2023 to 2027, while maintaining an impressive EBIT margin averaging 6.4%.

Dividends to rise at a 5.46% CAGR 2023F-2027F, along with possible share buybacks with a €1.1Bn already announced for 2023 and a likely extra repurchase of €0.5Bn following the German Life & Pensions portfolio sale later in 2023. This retribution to investors reflects the foot of very good work by the company as well as a clear view of a remarkable performance and high confidence in its consistency, while always seeking to successfully drive value for shareholders (Figure 3).

Table 2. Recommendation

Investment Recommendation	
Price Target	€ 34
Upside Potential	28.6%
Closing Price (May 31st, 2023)	€ 26.45
Industry	Insurance
Ticker	AXAP.FA
52 Week price range	€ 20.33 - € 30.34
Shares Outstanding (€Mn)	228.6
Market Cap (€Bn)	61.04

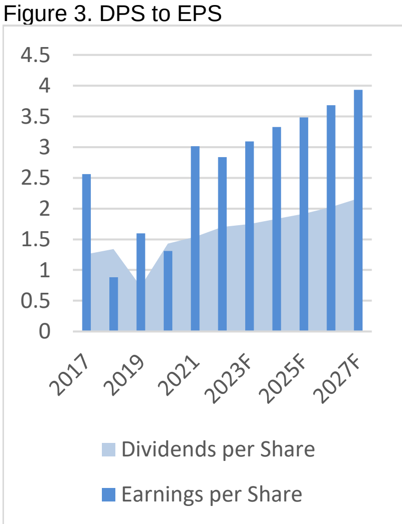
Source: *Yahoo Finance, Author's Estimation*

Figure 2. Price Target 2024F

Valuation methods	TP 2024F
DDM	€ 34.00
Residual income	€ 30.20
Predicted P/B	€ 36.19
Predicted P/E	€ 30.25

Source: *Author estimates*

Figure 3. DPS to EPS



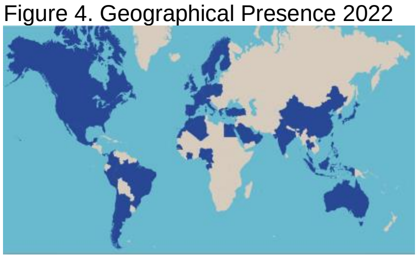
Source: *Author estimates*

2. Business Description

AXA SA is one of the leading insurance companies known around the globe. It covers a remarkable catalogue of insurance products, namely: life & savings(L&S), property & casualty(P&C) and health through its systematized network of subsidiaries, apart from retail banking products and services.

It harnesses various channels, with a streamline of agents, brokers, independent financial advisors, and direct sales. AXA is headquartered in Paris, France, and serves 93 million customers with around 145,000 employees, performing in 51 countries that vary from emerging to developed economies as disclosed in their 2022 annual report.

Figure 4. Geographical Presence 2022



Source: *Company website*

History

AXA was originally, in 1816, the amalgamation of several French regional mutual insurance companies, known as “Les Mutuelles Unies”. It was only in 1985 when the brand rename to AXA was confirmed. From there, through mergers, acquisitions and disposals, the company grew substantially.

In 1994 it enlarged its product portfolio, scoping diversification, by establishing AXA Asset Management Europe. In 2010, AXA delisted from the NYSE and SEC, and disclosed its largest sale, referring to its UK Life Business for $4.1Bn. Its major acquisition to date was the XL Group for $15.3Bn, in 2018, creating the number 1 global P&C commercial lines insurance platform.

Drivers of Profitability

The keys to an insurer’s profitability can vary among analysts since there are many factors that drive value among all the fields that an insurance company such as AXA relies on. However, there are a few that stand out.

Premium Growth: One of the primary drivers of profitability for AXA is the growth in insurance premiums. AXA focuses on expanding its customer base, increasing market share, and introducing innovative insurance products to drive premium growth.

Effective Risk Management: AXA's profitability is heavily dependent on its ability to effectively manage risks. This involves accurately assessing and pricing risks, maintaining a diversified portfolio, and implementing robust risk mitigation strategies. By effectively managing risks, AXA minimizes the likelihood and severity of claims, thereby improving profitability.

Cost Efficiency: Operational Costs control and efficiency optimization is critical for AXA’s profitability. This requires streamlining processes, leveraging technology, and implementing cost-saving measures across the group. By managing expenses effectively, AXA can enhance its underwriting margins and improve overall profitability where the lack of it can lead to severe claims and harmful losses.

Investment returns management: As an insurance company, AXA invests premiums collected from policyholders' premiums in a diversified portfolio of assets (alternative and regulated investments by EIOPA) to assure reserves for the claim’s coverage on the float. The income generated from these investments, such as bonds, equities, and real estate, contributes to AXA's profitability.

These drivers vary significantly along this spectrum and depend on how risks are allocated between the insurer and the policyholder.

Operational Segments

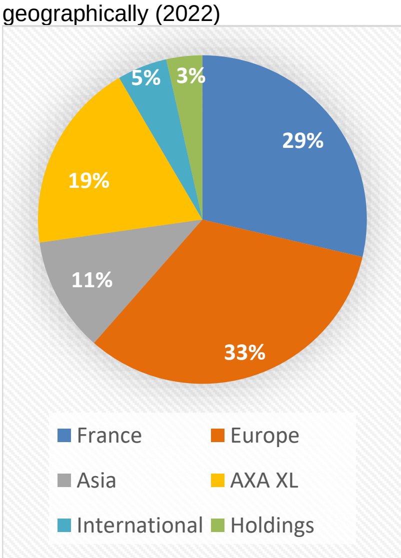
The segmental analysis of an insurer can either be classified by product: Life & Savings, Property & Casualty, Health, Asset Management (AM), or by a region-based classification.

Since 2015 the company adopted the latter method, i.e., business lines segmented by France, Europe, Asia, AXA XL(Re), International and Transversal & Central Holdings (AM&B). The latter reflects six operating business segments, determined based on geographies or transversally for entities operating in various jurisdictions.

The nature and level of competition vary among the countries where the company operates, since given its size, reach and diversity in product offering, it competes with insurance companies along with banks, asset management companies, investment advisors and other financial institutions.

Regarding geographic revenue distribution, as per 2022, AXA gets 29% from France, 33% from Europe excluding France, 19% from AXA XL, 11% from Asia, 5% from International and 3% from Transversal & Central Holdings (Figure 5).

Figure 5. Revenues distribution geographically (2022)



Source: *AXA SA*

Property & Casualty

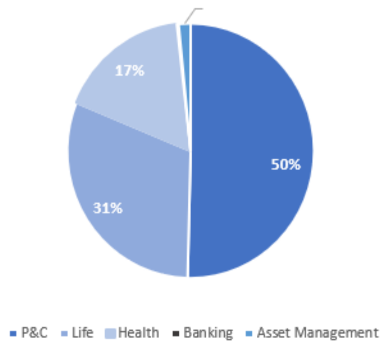
Property and Casualty is the business line in charge of protecting the tangible and intangible assets of individuals and companies. It is the product that creates the most cashflows, i.e., the one with the highest focus.

Property insurance within the P&C insurance category typically covers unit-linked and commercial lines of accident. Physical assets such as buildings, homes, vehicles, and personal belongings against risks such as fire, theft, vandalism, natural disasters (e.g., hurricanes, earthquakes), and other specified perils.

Casualty insurance, on the other hand, focuses on liability risks. It protects policyholders against legal obligations, credit and costs resulting from third-party claims for bodily injury or property damage.

Approximately 50% of AXA's gross revenues are derived from P&C (Figure 6) while underlying earnings account for 54%.

Figure 6. Revenues distribution by product (2022)



Source: *AXA SA*

Life & Savings

Life insurance and savings encompass two primary domains: savings and retirement. These areas involve investing, managing, and growing the funds entrusted by policyholders. The focus is on effectively allocating the money to generate returns over time.

It is important to differentiate between the general account and unit-linked business in this context. In the general account approach, the insurance company manages the funds and assumes the investment risk, distributing the returns among policyholders. On the other hand, unit-linked policies offer policyholders more control over their investments, allowing them to choose from various options.

As of 2022, L&S comprises 31% of AXA's revenues and 32% of underlying earnings.

Health

Health insurance, often referred to as personal protection, plays a vital role in supporting individuals during their healthcare journeys. This type of insurance coverage is designed to provide financial assistance in the event of illness, injury, or accidents. Similar to property insurance, health insurance operates by assessing the risk associated with insuring an individual and determining the appropriate premium to be paid by the policyholder. This kind of coverage can be taken out by individuals for themselves or by companies for their employees.

Health accounts for 17% of revenues and 9% of underlying earnings, 2022FY.

Asset Management

The asset management business involves investing and managing assets for the group's insurance companies and their clients, as well as for third parties, both retail and institutional, where the main goal is to obtain the best possible return on invested assets, based on the risk profile and investment timeframe chosen. This encompasses several asset classes, such as equities, bonds, hedge funds, private equity, and real estate.

This segment composes 2% of revenues and 5.5% underlying income showing good margins and potential for growth.

Banking

AXA is primarily known as an insurance company, but it also offers a range of banking services to its customers. AXA's banking services encompass both traditional banking products and digital banking solutions.

It's worth noting that the specific range of banking services offered by AXA was reduced to merely in France following its objective of disposals from unprofitable businesses, proceeding with disposal of those services in the International segment in 2022.

This segment in the most recent year accounted for 0.24% of revenues and -11% of underlying earnings following the abovementioned disposals and market volatility.

2022 Overlook

Total revenues were up 2% driven by Property & Casualty (+2%), with growth in Commercial lines Insurance (+5%) from continued favorable price effects, as well as in Personal lines (+4%), driven by higher revenues from favorable price effects in both Motor and non-Motor, partly offset by AXA XL Reinsurance from natural catastrophe exposure reduction (-27%) supporting underwriting margins and a very good momentum as well.

Health (+16%), with strong growth across all geographies. This was partly offset by Life & Savings (-5%), as growth in Protection was more than offset by lower revenues in General Account Savings, mostly in France, Italy and Japan and in Unit-Linked, including from the non-repeat of a large Group contract in France (Figure 7).
Asset Management (-3%) with lower performance and management fees, reflecting unfavorable market condition.

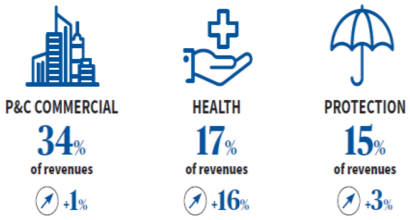
Given current market conditions, it is expected that Health might take a higher quota share of AXAs revenues over the years (from 17% in 2022 to 20% in 2027, Figure 8), due to factors like population growth, urbanization, and greater awareness of healthcare needs. This increased demand fuels the need for health insurance as individuals seek financial protection against the rising costs of medical treatments, hospitalizations, and medications.

Strategy

In its current 3-year plan "*Driving Progress 2023*" (Figure 9), AXA is focused on the delivery of five strategic actions:

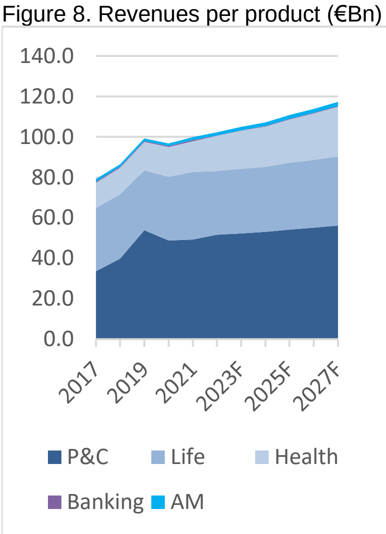
Expand Health and Protection | Aiming for a solid global growth in the sector pushed by the implementation of the Digital Health Platform to reach a strong leading position both in domestic and international markets and seeking to develop more inclusive offers and products for vulnerable populations.

Figure 7. 2022 product growth



Source: *Author estimates*

Figure 8. Revenues per product (€Bn)



Source: Own estimates

Figure 9. AXAs Strategy

Source: Company's Website

Simplify customer experience and accelerate efficiency | Through digitalization of customer journeys and organizational simplification, it's expected to turn proprietary distribution channels into a fully 'phygital' model, expecting overall acceleration on efficiency and product simplification.

Strengthen underwriting performance | By reaching for excellence in combined ratios, improved by a strong price-increase strategy and successful re(insurance)-underwriting measures at AXA XL Re changing its risk appetite and aiming towards significant reductions of NatCat exposure by 35%.

Sustain climate leadership position | By the implementation of an Index that tracks AXA entities' ESG impact and acceleration in ESG investments marked by new initiatives to preserve biodiversity, including forests (DEFRA deforestation pledge) and oceans (ORRAA BackBlue commitment). There is also the intent to follow the Green Premiums plan that supports the transition towards a more sustainable and less carbon-intensive economy.

Optimization of cash efficiency across the Group | Disposals of several branches, employing efforts to guarantee a solid financial performance, including dividend growth and high Solvency II ratio, in a strictly regulated environment, and an execution of a Share Buy-Back program for up to €1Bn reflecting balance sheet strength.

As the preparation of the next strategic chapter, AXA intends to follow a plan close to a continuation of the actual one. As expectations are rising on corporate responsibility, strengthening leadership and engagement on ESG topics, both in terms of target setting and impact measurement, AXA strives to make sure that all fields are checked remarkably. The main goal follows the company's slogan and purpose aiming to "*act for human progress by protecting what matters".*

Also, the company's' CEO, Thomas Buberl, added some expectations for the near future strategy: "2023 is a pivotal year for AXA as it marks the end of our plan Driving Progress and the start of a new strategic cycle for the coming three years. We are on track to exceed the objectives of our current plan and I would like to thank all my leadership team for this remarkable performance, despite an often uncertain and difficult environment. (…) This renewed team confirms the strength and diversity of AXA's internal talent pool. It also gives us the opportunity to evolve the perimeters of some of our markets and central functions, to prepare the Group for the implementation of our new strategic ambition and our long-term priorities." (Annual Report 2023, AXA SA).

Overall, AXA's prominent position in the insurance industry, extensive product catalog, and well-established network of subsidiaries and channels highlight its commitment to providing reliable and comprehensive financial solutions to a vast international customer base.

Shareholder Structure

AXA outlines the distribution of shares among various shareholders, including individuals, institutions, or other entities that hold ownership stakes in the company. Currently, AXA holds 87.2 million shares accounting for 3.71% of the company through treasury shares, whilst employees and agents keep 4.20% (c.98.9 million). Its largest shareholder is Mutuelles AXA, composed of AXA Assurances IARD Mutuelle and AXA Assurances Vie Mutuelle, that collectively vote their shares in AXA, owning 15.37% of capital and 25.67% voting rights. The remaining 76.72% of shares are held by general public (Table 3).

Table 3. Shareholder Structure

Shareholder	# Shares (Mn)	Cap. Own.	Voting Rights
Mutuelles AXA	361.5	15.37%	26.67%
Employees	98.9	4.20%	6.00%
AXA	87.2	3.71%	3.09%
Gen. Public	1,804.10	76.72%	65.24%
Total	2,351.7	100.00%	100.00%

Source: *Yahoo Finance, Author Analysis*

3. Management and ESG

CEO and Director of AXA Dr. Thomas Buberl holds a Master of Economics, MBA, and PhD in economics from the University of St. Gallen and achieved the CEO mark in September 2016. In 2008, he was nominated Young Global Leader by the World Economic Forum and successfully proved his worth, ranging through several high positions, not only in AXAs' branches, but also as manager, COO, director and in more than 5 different occasions, CEO, since his start in 2000 as consultant for the banking & insurance sector in Germany.

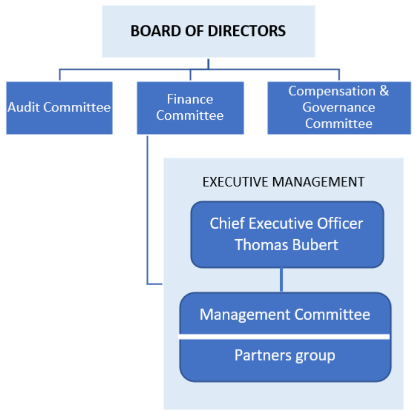
Board Structure

On April 28, 2022, the Board of Directors was comprised of 17 members among which 11 were qualified as independent. The average tenure and age are 2.3Y and 63.5Y, respectively.

Board members present a range of stock ownership from 0,00015% to 0,029%, being the largest shareholder, the CEO. Regarding his compensation, it is due €1,650,000 fixed plus a target cash variable of €1,750,000 totalizing €3,400,000 target cash-based compensation. The other members of the Board of Directors shall merely receive a fixed annual remuneration.

The Board is assisted by three Board Committees: Audit Committee, Finance Committee and Compensation & Governance Committee (Figure 10). Implementing sound corporate governance principles has been a priority at AXA for many years. In this context, AXA chose to adopt, in 2008, the Corporate Governance Code for French corporations, the one tier Afep-Medef code.

Figure 10. Board Structure



Source: Annual Report, AXA SA

Gender Parity

The Group is fully committed to continue to progress towards gender parity at all levels of the organization with a strong focus from managers and leaders across all the organization. This is illustrated by AXA Group commitment to reaching gender parity amongst the GLN (Global Leadership Network) by the end of 2023.
2022 saw progress towards gender balance in its GLN population. The proportion of women in top executive positions is at 39%, up 3 points from 2021.

ESG

The framework of the Group's sustainability strategy is focused on two priorities: climate change and inclusive protection.

AXA aims to protect the environment and society in an inclusive manner through its purpose *"Act for human progress by protecting what matters" (*Figure 11*)* that entails sustainable value creation. It seeks to be at the forefront of bringing innovative solutions to the market like identifying and mitigating pollution and environmental risks for companies. This, by combining the expertise of risk consultants, machine learning and artificial intelligence applications to turn environmental and climatological data from a variety of sources into actionable risk insights. Its asset management segment is also managed in line with the Net Zero standards that apply to ESG principles, from stock selection to corporate actions and culture. The company even integrates ESG criteria in the compensation packages of its employees on the short and long-term components.

Figure 11. Environmental

Source: Annual Report, AXA SA

Additionally, on September 14, 2022, AXA announced the launch of the "AXA Forests for Good" program to help restore damaged forest ecosystems and make them more resilient to climate change which is a 3-year program that will account with the support of several French players, namely, Reforest'Action, France Nature Environnement, Inrae, Jura Nature Environnement, AgroParisTech and Société

Alpine de Protection de la Nature-France Nature Environnement Hautes-Alpes. The main goals of this program are to assess the impact of global warming and land artificialization on the loss of biodiversity. It aims to restore the forest and consequently strengthen AXA's leadership on climate and biodiversity issues as well as to contribute to a better awareness of the role of forests for human life.

The company has also further developed its most focused ESG funds ("ACT"), increasingly invested in green assets (Figure 11). It also ensured eligible funds and strategies launched within Equities, Fixed Income and Multi-asset fall into Articles 8 and 9 of the Sustainable Finance Disclosure Regulation. Thus, AXA Sustainability Strategy aims to fulfill two main goals: act as a leading force against climate change and expand our health and protection businesses as an inclusive insurer.

Hence, by deploying its sustainability strategy in each of Environmental, Social and Governance areas, AXA was rewarded with the highest rating in the insurance sector in the S&P Global Corporate Sustainability Assessment and generally ranks close to the top in its industry and its SRI ratings from Standard Poor's "Dow Jones Sustainability Index" ranking 91/100 against a sector average of 40/100, and from FTSE ESG ranking 3.7/5 (Annual Report, AXA SA) (Figure 12).

Figure 12. ESG SRI Ratings 2022

Agency/Organisation	Scores & ratings
S&P Global CSA ranking	91/100
Vigeo Eiris	67/100 - Sector leader
FTSE ESG	3.7/5
Sustainalytics	ESG Risk Rating: 16.7 – Low risk
CDP	B
MSCI	AAA

Source: Annual Report, AXA SA

4. Industry Overview and Competitive Positioning

Macroeconomic indicators

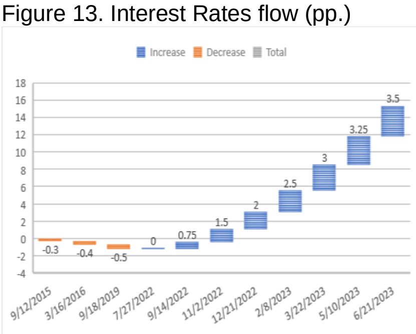
The era known as the Great Moderation, which spanned four decades characterized by stable economic activity and inflation, has come to an end. The global economy is currently facing notable challenges, with the year 2022 being marked by extreme market volatility and geopolitical uncertainties.

As 2023 unfolds, there appears to be a more optimistic outlook for the global economy, although it may not be the most prosperous path to recovery. Given the ongoing military conflict, inflation has seen some decreases, but not to the extent initially anticipated and central banks interest rates are still increasing, even though at a lower pace.

Despite a gradual normalization of the COVID-19 crisis and its associated uncertainties, the Russia-Ukraine military conflict then triggered additional supply-side disruptions, resulting in soaring inflation, energy prices, and interest rates, which consequently led to a volatile macroeconomic landscape. Nevertheless, the challenging environment still poses various threats and opportunities for the insurance industry. Surge in raw materials, food, and essential goods prices resulted in a reduction of Global Growth and even reached an Inflation state that is the highest seen in several decades.

To combat these challenges, central banks are implementing tighter monetary policies and raising real interest rates (Figure 13). As of the end of 2022, the FED funds rate is ranging between 4.25% and 4.5%, with an expected average rate of 5.1% for 2023, supported by a 5% rate in March 2023. In Europe, rates currently range between 2.5% and 2.75%, but are projected to reach 4.25% by the end of 2023, with a March 2023 rate of 3.5%.

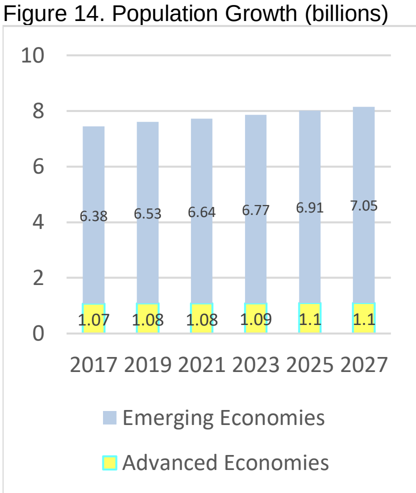
Figure 13. Interest Rates flow (pp.)



Source: *ECB*

Moving forward, both the United States and Europe are expected to experience a growth slowdown. On the other hand, major Asian emerging-market economies are anticipated to contribute to nearly three-quarters of global GDP growth in 2023 (OECD, 2023). This suggests that insurers in the Asian region may witness higher growth compared to their counterparts in the US and Europe.

Figure 14. Population Growth (billions)



Source: *IMF*

Population growth

From 2017 to 2022, population growth increased from 7.45 to 7.78 billion (Figure 14), at a CAGR of ~9%, where in that period, emerging markets rose from 6.38 to 6.7 billion (0.98% CAGR) and advanced economies from 1.07 to 1.08 (0.19% CAGR).

Looking ahead to the period from 2022 to 2027, projections indicate that the population in advanced economies will reach a point of stabilization with a CAGR of approximately 0.37%, climbing from 1.08 to 1.1 billion.

On the other hand, emerging markets and developing economies are expected to continue their growth trajectory, expanding at a CAGR of 1.02%. Hence, while advanced economies are expected to experience slower population growth and eventual stabilization, the population in Emerging markets and Developing Economies is anticipated to continue expanding at a relatively higher rate. A growing population means a larger pool of potential customers for insurance companies.

For insurance companies, these population trends have significant implications. In advanced economies, where population growth is slowing down, insurers may need to adapt their strategies to focus on customer retention.
These insurers may need to address the unique requirements and preferences of these regions, including affordability, accessibility, and localized risk factors.

Overall, population growth has a profound impact on the insurance industry by expanding the customer base, increasing demand for insurance products, and influencing market dynamics. Insurance companies need to stay attuned to population trends and adapt their strategies to effectively serve the evolving needs of a growing population.

GDP Growth

Global GDP growth is forecasted to decelerate from 6.0% in 2021 to 3.1% in 2022, which is approximately half the pace observed during the rebound from the pandemic. It is projected to further slow to 2.2% in 2023 (Figure 15), significantly below the pre-war expectations.

In 2024, global growth is expected to reach 2.7%, supported by initial steps to ease policy interest rates in various countries. However, these forecasts need to be reevaluated due to unforeseeable events that could disrupt the financial sector, such as the collapses of Silicon Valley Bank and Credit Suisse Bank.

This growth profile is the weakest since 2001, excluding the global financial crisis and the acute phase of the COVID-19 pandemic.

Consumer Price Inflation

Regarding consumer price inflation (Figure 16), headline rates in major advanced economies are projected to moderate from 6.3% this year to approximately 4.25% in 2023 and 2.5% in 2024. This reduction is a result of tighter monetary policies taking effect, diminishing demand pressures, and the normalization of transport costs and delivery times. However, the pace of decline will vary across countries.

In Europe, these values are heavily dependent on the behaviour of energy markets and the level of stored energy, as energy prices have a substantial impact on inflation and economic growth (Figure 17).

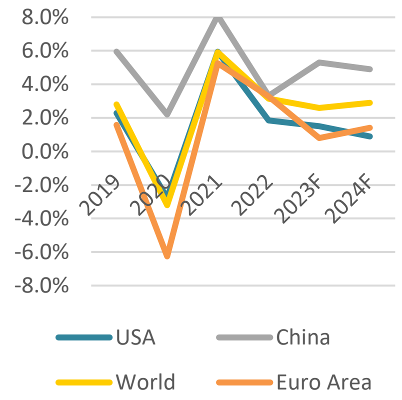
Evolution of insurance

Europe

In terms of the growth in written premiums for European Life and Non-Life insurance, there has been a notable difference in their respective compound annual growth rates (CAGR) from 2017 to 2021.

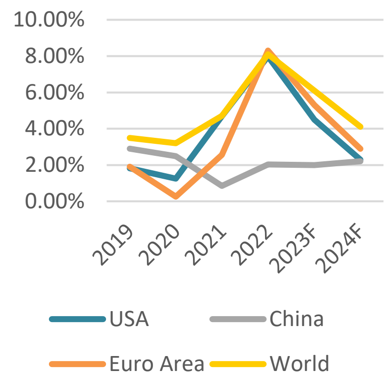
The CAGR for Life insurance premiums recorded a rate of 2.75%, while Non-Life insurance premiums experienced a higher growth rate of 6.01%. This indicates that the Non-Life insurance sector has been expanding at a faster pace compared to the Life insurance sector. (Figure 18).

Figure 15. Forecasted GDP Growth



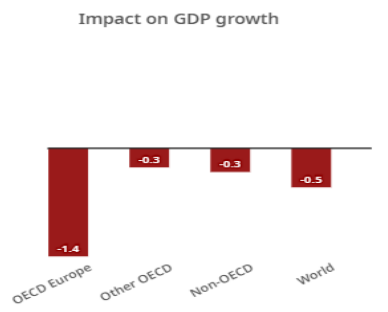
Source: *OECD*

Figure 16. Forecasted Inflation



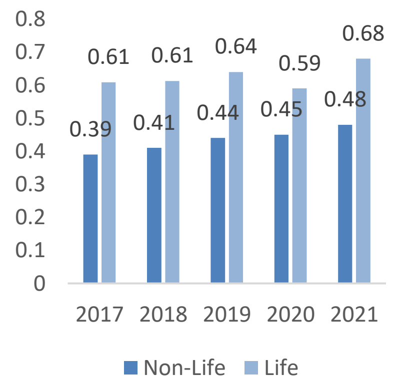
Source: *OECD, IMF*

Figure 17. Impact of further energy price hikes



Source: *OECD*

Figure 18. EU Written premium (T)

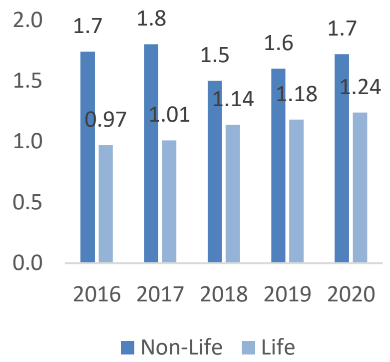


Source: *OECD*

United States

Between 2016 and 2020, data (Figure 19Figure 18) reveals that the non-life insurance sector in the United States generated higher premium amounts compared to the life insurance sector. The difference between these two sectors amounted to $0.48 trillion. This finding contradicts the situation observed in the European Union. Furthermore, there was a decline of 0.29% compound annual growth rate (CAGR) in the non-life sector, while the life insurance sector experienced a notable increase of 6.37%. These figures indicate that the disparity mentioned earlier was even greater in previous years.

Figure 19. US Written premium (T)



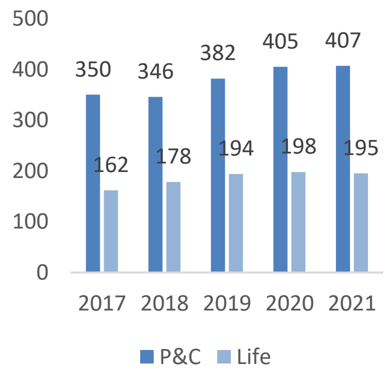
Source: *OECD*

China and India

In many cases, the economies of two countries serve as a representative measure for analysing emerging markets as a whole. Therefore, when examining the growth of the insurance industry in these markets, industry data from these two countries (Figure 20) will be taken into account to make generalizations. This is because there is a lack of precise information regarding the overall Asian landscape.

From 2017 to 2021, there was a noticeable rise in the demand for risk protection. Given that these two countries have the largest populations in the world, this trend translated into a compound annual growth rate (CAGR) of 3.84% and 4.74% respectively.

Figure 20. China India
Written premium (T)



Source: *OECD*

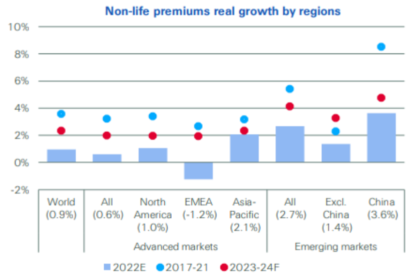
Global expectations

Non-life insurance premiums experienced positive growth in all markets, with a global increase of 0.9% in 2022 (estimated, Figure 21). However, the Europe, Middle East, Africa (EMEA) region was the only exception, as it witnessed a decline in premiums. This decline can be attributed to the repercussions of the Ukraine-Russian War, which had a detrimental impact on the region's demand and supply chain. As a result, there was an increase in prices of basic commodities, leading to a decrease in people's ability to invest.

Looking ahead, it is expected that most regions will face a slight shortage in premium growth. However, overall, the majority of economies are projected to remain close to the 2% mark without reaching negative values, thus maintaining stability in premium growth rates.

Among the forecasted regions, Asia Pacific stands out significantly compared to its historical five-year performance. It is expected to experience growth comfortably in the future.

Figure 21. Non-life premium real growth

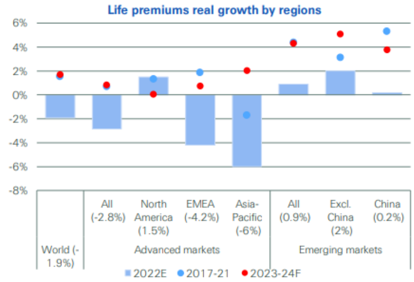


Source: *Swiss Re Institute.*

In terms of life insurance, there is a projected overall decrease of 1.9% compound annual growth rate (CAGR) worldwide (Swiss Re, 2022). This decline is primarily influenced by advanced markets in the Asia-Pacific region (including Japan, Australia, New Zealand, Hong Kong, and Singapore) and the EMEA region. However, in emerging markets excluding China, there is a continued trend of growth, with a 2% increase observed and a forecasted growth of 5% in 2023-24.

The global life market is anticipated to develop at an almost 2% CAGR (Figure 22). This indicates that the weight of emerging markets in the overall sample offsets the declines seen in EMEA and Asia-Pacific, suggesting growth projections.

Figure 22. Life premium real growth by regions



Source: *Swiss Re Institute.*

In 2021, following the recovery from the Covid-19 pandemic, most countries observed an increase in total gross written premiums. Specifically, the Index linked & unit linked business segment experienced the highest increase at the line of business level.

Solvency II

Since January 1, 2016, the European Union (EU) has implemented Solvency II, a regulatory framework that establishes new solvency requirements and risk mitigation measures for insurance companies.

This framework determines the amount of funds and assets that insurers must hold, considering investment risks, liquidity, and the ability to withstand adverse scenarios and losses with a 99.5% confidence level. Additionally, Solvency II introduces governance, transparency, risk management, and reporting regulations for insurance companies operating within the EU.

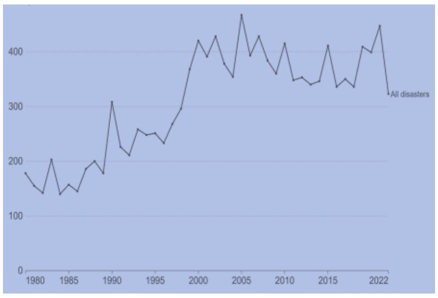
Furthermore, Solvency II calculates a risk margin, which represents the difference between technical provisions and the best possible estimate of liabilities. AXA, in its 2022 fiscal year, reported a Solvency II ratio of 215%, surpassing the threshold of 190% by a significant margin. This indicates that AXA's ability to meet its obligations and capital requirements is highly positive.

However, it's worth noting that with the rise in interest rates, the present capital requirements are expected to decrease due to a higher discount rate. Nevertheless, the overall value of capital requirements may lean towards an increase due to the heightened risk of interest rate fluctuations.

Natural Catastrophe load

Natural catastrophes and Nat Cat load are an imminent risk for insurers since they cause huge claims and usually affect large numbers of individuals. Its frequency is increasing (Figure 23) and that makes a challenging reinsurance marketplace for insurers. In 2022 there were impacts in several directions being the first and most noticeable, inflation, that makes the load increase. Also, less capacity on the reinsurance market, which also increases the load.

Figure 23. Number of Recorded Natural Disaster events, 1980 to 2022



Source: *EM-DAT, CRED.*

Another impact comes with the decision to reduce significantly (again) the Nat cat exposure of AXA XL Re by about 35% and increase the market share of AXA XL on P&C. The culmination of these effects is that the Nat cat load is almost unchanged (3.7 pts 2021/2022 to 3.9 pts 2022/2023).

Overall, there is increased retention in primary insurance to be mostly offset by further reducing exposures and Property quota shares increase at AXA XL.

Asset Portfolio

On liquid assets there is a cautious portfolio of only 2% of BBB- based on the benchmark, being more conservative than peers. On alternative assets, a rigorous process, significant exposure to real estate where what’s important is quality, prime location, green assets, and expectations for the Real Estate market to be in a better condition than the equity market.

Non-liquid credit portfolio leads to believe a good position following an extreme discipline on guarantees and leverage. On infra equity the focus is green projects whereas on private equity the focus is positive EBITDA companies so low exposure investments.

Overall, an asset portfolio that may have looked too cautious some years ago, is now considered adequate given the uncertain circumstances lived around the globe.

Demand and supply

Demand drivers

Legal Requirements & Economic Outlook

The truth for most of the offered products by insurers concerning demand side is that people will always need insurance, in some cases (motor, property), they are obliged to. That added to the current economic outlook of uncertainty, surging prices and unforeseen events, when it comes to what assets are the most important to secure, people should look to insurance for the comfort of "being insured" once it provides means of turning large, unexpected costs into manageable smaller payments.

Aging Population & GDP growth

As the population ages and GDP per capita continues to grow, addressing health concerns becomes a pressing priority which drives demand for insurers as recently spotted. Insurers operating in Emerging markets and Developing Economies have the potential for a larger customer base due to the projected population and aging growth.

Supply Drivers

Costs for claims coverage services

The supply for insurers is mainly affected by the costs that are implied into every claim and what it takes to fix each specific issue, since the cost-income relation is crucial for an insurer. These can be defined in costs related to health care entities, car repair shops, property repair and specific solving procedures. An unexpected surge in inflation can force these expenses to grow which may damage companies' financials, profitability, and revenues if the adjustment in premium prices isn't fast enough.
Huge changes in policy quantity are not expected but while demand changes might not move prices as much, changes in supply could cause higher damage along with unpredicted inflation, and policyholders can take a turn to low-cost protection and reduce quantities then.

Distribution Channels

Distribution channels used to extend lines of business contribute to the chain of supply acknowledging that suppliers such as agents, brokers, financial advisors, partnerships and its bargaining power can have a large impact in insurers profits, whereas on one hand, if they are prudent, efficient, and proactive can leverage results and bring higher margins, while on the other, if they are too demanding, unaware and lacking in professionalism the impact is inversed.

Thus, supporting the fact that value creation through underwriting is crucial and insurers rely deeply on their method of distribution in order to create positive value.

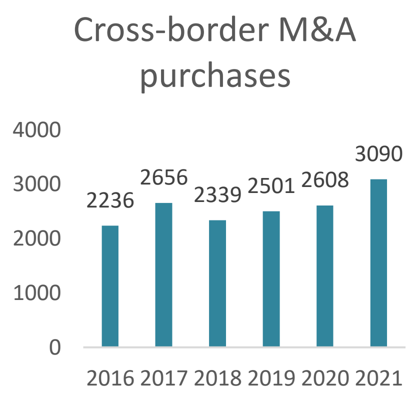
Mergers & Acquisitions

Prominent participants have established a dominant foothold in the market by offering a wide range of products and achieving numerous accomplishments. The industry is characterized by a significant level of mergers and acquisitions (Figure 24), allowing players to enhance their market standing by expanding their network, diversifying their product lineup, and extending their market reach.

Furthermore, companies adopting a more specialized strategy are expected to outperform those solely focused on size, where disposals/sales of unprofitable business lines is as important as expanding to new markets. Consequently, insurance companies and consolidators should strive for growth while prioritizing the acquisition of portfolios that align with their own strengths or enable them to develop the necessary expertise to enhance operational efficiency.

On a global scale, there has been a notable 33.3% increase in the number of transactions from 2016 to 2021. However, for the year 2023, the uncertain economic and political landscape worldwide is anticipated to have a dual effect on cross-border deals. It will serve as a driving force for some deals while reducing the overall volume.

Figure 24. M&A Deals



Source: *Statista, Author Analysis*

Nevertheless, the persistently high inflation rates are putting pressure on the profitability of non-life insurers, impeding their ability to achieve organic growth. This circumstance may compel more insurance providers to pursue expansion through mergers and acquisitions.

Within the life insurance sector, players in all regions are expected to persist in divesting non-essential business portfolios. This strategic move allows them to redirect resources and concentrate on core product offerings or upgrade their technological capabilities, as AXA intends to proceed in both fields.

Additionally, life insurance companies facing challenges posed by outdated technologies may seek opportunities to acquire or establish partnerships with InsurTech firms, aiming to expedite the process of digital transformation.

Trends

Digital Transformation

For an extended period, insurers have found value creation primarily through their distribution channels, and this trend is expected to persist. As industries worldwide undergo rapid digitalization, coupled with the growing consumer demand for enhanced services like cyber insurance, the insurance sector cannot afford to lag behind.

Furthermore, the emergence and rapid expansion of InsurTech companies pose a significant threat to the traditional insurance model, compelling insurers to adapt in order to maintain profitability.

Risk Awareness shifts attention towards coverage

In recent times, a growing number of individuals who previously showed minimal or no inclination towards obtaining personal risk coverage, health insurance, or life insurance have gradually come to recognize the potential impact of public health challenges and retirement pensions on their future. The global pandemic, in particular, has played a significant role in this shift. Consequently, there has been a remarkable surge in the demand mainly for health, but also for other products, thereby presenting favorable opportunities for insurers.

Sustainability

Insurers should proactively align their strategies with Environmental, Social, and Governance (ESG) standards in order to distinguish themselves from their competitors. This involves setting ambitious objectives and actively seeking fresh opportunities that go beyond just investment choices, such as engaging in green bonds.

Insurers should also focus on making a tangible impact on climate change, fostering workforce diversity, promoting inclusivity, and enhancing transparency in their governance models. By adopting this approach, insurers can differentiate themselves and demonstrate their commitment to sustainable practices and responsible business conduct.

Reshape of investments

In the recent past, investments have been characterized by low interest rates. However, as interest rates are expected to remain elevated in the foreseeable future to combat rising inflation, this presents an opportunity for insurance companies, particularly those in the life sector.

Companies can take advantage of their ability to reinvest at higher rates than their liabilities. As a result, they can generate greater asset turnover, leading to a wider spread and enhanced investment outcome. The prevailing market conditions offer insurance companies the chance to optimize their investment strategies and potentially achieve more favorable financial results.

Competitive positioning

Peers Analysis

In order to make informed decisions regarding suitable peers (Table *4*), we conducted a comprehensive comparison of multiple companies. Factors taken into account included Market Cap, Revenues, Assets, Employees, Customers, Solvency Ratio, Combined Ratio, Services offered, and the regions where these services are provided.

It is important to acknowledge that no two companies are identical or exceptionally similar. Bearing this in mind, we have selected the following peers: AXA, Allianz, Generali, Zurich, Munich Re, and Talanx.

Each of these companies operates across multiple regions including EMEA, Latin America, North America, and APAC. They provide a wide range of similar services such as Property & Casualty Insurance, Health & Life Insurance, Savings Insurance, Asset Management, and Business Insurance.

Among these companies, AXA, the company in study, differentiates itself by offering Banking services in addition to its insurance offerings, which sets it apart from the other groups.

When examining the Peer group's performance, we observe that the Combined Ratio ranges from 93.20% to 98.90%, indicating the efficiency of underwriting and claims management, while the Solvency Ratio ranges from 201% to 265%, reflecting the financial strength and ability to meet obligations.

Table 4: Peers metrics

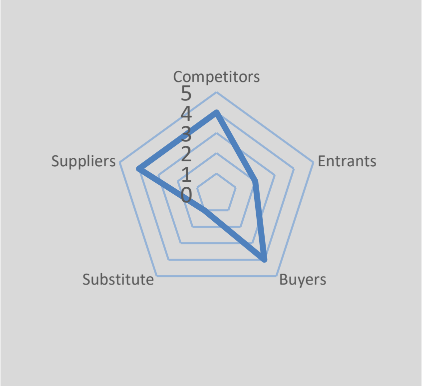
Company	*Combined Ratio*	*Solvency Ratio*
AXA	*94,60%*	*215%*
Allianz	*94,20%*	*201%*
Generali	*93,20%*	*221%*
Talanx	*98,90%*	*208%*
Zurich	*94,30%*	*265%*
Munich Re	*96,20%*	*260%*

Source: *Author Analysis.*

Porters 5 Forces

Regarding the 5 forces of porter (Figure 25) and how they apply in the insurance sector, it can take tricky reasoning to achieve a plausible rationale. While Porters' concepts were not conceived specifically with the insurance industry in mind, there are still some ways to analyze the trends and events causing a change in the industry today. The goal is to obtain competitive advantage based on operational efficiency, product leadership, customer intimacy and system lock-in of the customer.

Figure 25. Porters 5 forces



Source: *Author Analysis*

<u>Rivalry Among Competitors: HIGH (4)</u>
Competition shows to be a strong and solid force mainly because there are numerous well-grounded insurance companies similar in size and power in the sector competing, as well as with government insurance programs, risk retention groups, and self-insured entities.

Slow growth precipitates fight for market shares that show to be close to one another, little product differentiation and its highly regulated prices compel insurers to find ways to differentiate themselves through the quality of policyholder services provided, advertising campaigns, in such a competitive environment.

<u>Buyers Power: HIGH (4)</u>
Buyer influence can be a force to be reckoned. While large corporate clients paying millions in premiums have bargaining power, with the internet of things getting in the way and access in a click, today's individual policyholders are also a force. With instantaneous awareness of coverages, pricing, and services, today's customer is well exposed to the integrity of services with ample knowledge and can demand

more personalized attention otherwise shifting without damaging switching costs towards a rival.

Summarizing, there is power to the extent that it can limit industry profitability by pursuing more value and requesting price reductions, better payment terms or additional features and services thereby driving up costs. High fixed costs and low marginal costs amplify the pressure on rivals to keep capacity filled through discounting.

Suppliers Power: HIGH (4)
Acting as an opposite polar against the power of buyers is the pressure that suppliers can apply on companies by selling higher priced or low-quality services or tightening product availability for control, seeking to capture more of the value for themselves. This directly affects the buying firms' profits because the more they pay added to switching costs in changing suppliers, the higher the coverage premiums must be, to maintain margins.

Distribution channels such as agents and brokers have historically leveraged the ability to influence policyholder choices and the need for experts makes it difficult for insurers to bargain with them, however with increasing front-end tools to reach potential customers directly through the digital movement, bargaining power of distributors is diminishing along with their ability to squeeze profitability out to those companies that are unable to pass on cost increases in its own prices.

Threat of New Entrants: LOW (2)
In an environment where barriers to entry by foot are huge, potential new entrants face major challenges to implement themselves in the market as well to gain market share and even their margins with the sharks.

Nevertheless, the InsurTech movement is giving a slow but foreseeable rise to new entrants, partnerships, and operating models through technology-driven underwriting products and usage-based insurance (UBI) for a faster integration and that creates a possible (but not yet foreseeable) window in the industry for technological enterprises such as Amazon and Google.

Threat of Substitutes Products: VERY LOW (1)
A substitute performs the same or a similar function as an industry's product by a different means. For substitutes in the insurance industry, companies have not had to deal with any since the need for insurance is part of our "usual guidelines". The alternative would be to accept the risk of what the insurance would cover.

Little differentiation makes this force a decrepit hazard for the companies in the industry. The innovation and evolution of services is not a substitute but merely an improvement in service offerings.

SWOT Analysis

Conducting a SWOT analysis (Table *5*) allows us to gain valuable insights into the company's internal strengths and weaknesses, as well as external opportunities and threats.

By examining AXA's position in the market, its competitive advantages, potential challenges, and areas for growth, we can better understand the factors that contribute to its overall performance and make informed strategic decisions. Let us delve into the SWOT analysis of AXA to gain a comprehensive understanding of its current standing in the industry.

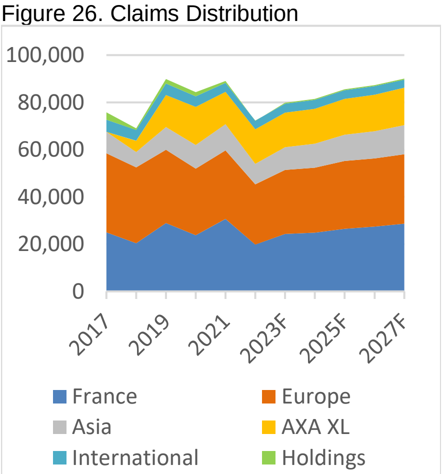
Table 5: SWOT Analysis

Strengths	Weaknesses
Market position, global presence, and strong brand recognition Robust financial performance achieving a 215% solvency II ratio in 2022FY, vastly above the established threshold of 190% Technological innovation added to product and service diversity	Exposure to economic and financial risks from the various markets the company is implemented in, where economic instability can negatively impact the company's performance. Complex organizational structure that can make decision-making and strategy implementation challenging. Struggles regarding cost management and efficiency.
Opportunities	**Threats**
Expansion to emerging markets can be explored and operations expansion where insurance penetration is low can bring opportunities for market takeover. Strategic mergers and acquisitions can enhance product offerings. Insurance demand expectations to increase due to uncertainty.	Regulatory changes can impact operations through cost surges. Natural disasters and catastrophic events can bring significant losses through colossal claims. Intense competitive environment which can affect market share and profitability.

Source: *Yahoo Finance, Own estimates*

5. Investment Summary

Figure 26. Claims Distribution



Source: *Author Analysis*

Cost Management

Highlighting the discipline shown on costs, AXA marked a €500 million expense reduction objective until 2023 and even with costs inflation, it was partially fulfilled (80%) with a decrease of €400 million.

From 2021 to 2022, consolidated claim expenses dropped from €88.4Bn to €71.4Bn (Figure 26), thus, performing a 19% decrease with the main segments reflecting these actions taken being France, Asia, and Europe with a 35%, 23% and 12% claim decrease in each business line, respectively, highlighting the efficient strategy and focus on the main segments cost management.

The target reduction is a challenging plan to fulfill within the temporary target given the circumstances, but the company is confident that all the fees will be overcompensated through price increases and by the expected increase in investment income, as proved in the results of the latest fiscal year. Altogether, there is a continued discipline on non-Commission expenses and a strong mitigation of inflationary pressures.

Inflation Reactions and Segment Profitability Distribution

As reactions to inflation for the most recent unstable market frictions, price increases over the last year remain ahead of loss trends, including P&C up +14% and loss trends between -6/-7% from claims inflation, added to +2% from increase in insured values. Commercial Lines have shown a favorable pricing environment, supporting underwriting margins and good momentum that leaves expectations of improvement across segments profitability, as disinflation takes place in the forward years.

Future expectations for the forecasted period indicate quota share growth in EBIT distribution (Figure 27) mainly for France (up 2% from 2022 to 2027) and overall consolidated EBIT to surpass the 10 billion marks in 2023 with 11.8% EBIT growth YoY.

Figure 27. EBIT Distribution

Source: *Author Analysis*

AXA XL

An important matter to highlight is the successful restructuring of AXA XL, the company's property and casualty insurance and reinsurance subsidiary. The comprehensive restructuring risk undertaken to enhance profitability and efficiency of AXA XL involving strategic portfolio optimization, exiting underperforming lines of business reducing property-cat risk, and focusing on higher-margin segments has delivered significant fundamental improvement over the past 2 years.

The segment is expected to keep improving at 6.4% average EBIT margin against an historic 0.23% given reinsurance losses following nat. cat exposures.

Valuation

It was achieved a price target of €34/sh using the dividend discount model by discounting the dividends (considered cash flows to an insurer), through the assumed dividend policy of 55% under the forecasted Net Income achieved through the Sum of Parts of each segment until the operating income and consolidated to the downside of the income statement, retrieving a 28.6% upside potential.

To complement the valuation, it also attained a PT of €30.20/sh applying the residual income method, reflecting 14.2% upside chance. Additionally, the multiple's valuation, two regression techniques were performed to achieve both a P/B and a P/E of 1.41x and 9.10x respectively. This analysis led to a Price Target of €36.19/share for the P/B regression and €30.25/share for the P/E regression.

The rationale behind these results is that expectations for AXAs share price are to increase in value, reflecting a consensus for all the applied valuation models.

Risk threats

Underwriting margins can be an eminent risk for the company if the current inflation pressures can't be covered by price increases across the segments which can cause significant harm. Additionally, fluctuations in financial markets or poor investment decisions can result in investment losses, which could adversely affect profitability. Risks associated with catastrophic events, such as natural disasters, large-scale accidents, or pandemics, can also lead to significant insurance claims and losses, putting pressure on profitability, however, the company has been taking severe measures following a strict strategic plan to reduce the exposure to this threat that has shown positive feedback.

It's important to note that AXA is a complex organization with diversified operations, and there may be other risks specific to certain lines of business or geographies, however, so far, the company has been able to offset these risks and present an efficient risk management.

For the recent past, AXA has shown a flexible capacity of adaptation against unforeseeable events which underscores the company's ability to navigate challenging market conditions make strategic decisions to optimize its performance. Investors can find confidence in AXA's pricing reaction to inflation, that helps to protect profitability along with the successful restructuring of AXA XL, which positions the company for long-term growth and improved financial results.

Given the abovementioned improvements and the bright expected future, it's believed that the actual share price appears undervalued and thus presents a BUY recommendation.

6. Valuation

Dividend Discount Model

For the valuation of AXA, it was performed a dividend discount model (DDM) based on the consistent dividend structure and company expectations towards the future as well as its intent to drive value for shareholders.

Given this, a price target of €34 was achieved, against a consensus of €33.3, assuming the company keeps their payout policy steady at 55%, as mentioned by the CEO to not deviate from the 55-65% range and attaining the most conservative payout for the forecasted period, showing an upside potential of 28.6% and an average future growth on dividends (TP g) of c.5.5%.

Cost of Equity

The Cost of Equity (Ke) was computed through the CAPM model (Table 6). The market forecasts for the 10-Y German Government bond yield is the benchmark assumed for risk-free rate and a weighted country risk premium (CRP, Appendix 19) was computed by considering AXA's operating weights and CRP of each country, added to a country default spread (CDS) for France (Headquarter country).

The choice for systematic risk exposure in the core region was the Damodaran Beta for European general Insurance of 0.94 retrieved from Damodaran's yearly database. The equity risk premium (ERP) attained was also from Damodaran and a reasonable 10.70% mark was obtained.

Table 6: Cost of Equity

CAPM	
Beta Levered	0.94
German bonds 10y	2.36%
ERP Damodaran	6.79%
CRP	1.33%
CDS (France)	0.60%
Cost of Equity	10.70%

Source: *Yahoo Finance, Own estimates*

Residual Income

Another applied and appropriate model to a financial institution valuation is the excess returns (or residual income) method (Appendix 21), which is a technique used to assess the intrinsic value of a company's equity or stock. This model's excess returns took a turn between 2021 and 2022, where in the former, returns were mainly negative due to a considerable equity charge that would surpass the net income and create a negative differential.

However, given the company's loss in equity of 36%YoY (10% to 7% of total assets), mainly reflected in the losses incurred through the item of "translation and other reserves" of the balance sheet, which results from the translation of financial statements of foreign subsidiaries, the performed method is now lower than the DDM but still reasonable, and it attains an upside chance of 14.2%, and a price target of €30.20, consistent with the recommendation of the other performed methods.

Table 7: Peer Group

Peers	Revenues (bn)	Market Cap
Munich RE 🇩🇪	68.45	45.28
Allianz 🇩🇪	152.7	85.99
Zurich 🇨🇭	41.75	65.84
Generali 🇮🇹	79.3	29.27
Talanx 🇩🇪	48.99	11.63

Source: *Yahoo Finance*

Relative Valuation

A regression using industry peers (Table *7*) was performed to achieve relative valuation multiples (Appendix 23) as a consolidation and complementary to the DDM method, prioritizing important financial institutions metrics such as P/B and P/E multiples. The predicted outcomes achieved were 1.41 and 9.10 8respectively, which shows consistency with the actual values of 1.14 and 8.47x, although a reduction in the gap between price and earnings, meaning the company is trading at a discount, being undervalued keeping its values below the industry averages. led to a Price Target of €36.19/share for the P/B regression and €30.25/share for the P/E regression.

Dividend Policy

AXA targets to stabilize its dividend policy apart from what was reported in pandemic year, with a range from 55%-65% of underlying earnings with the prudency of striking the appropriate balance between prudent capital management, reinvestment of previous results to support business development and reflect an attractive dividend for shareholders.

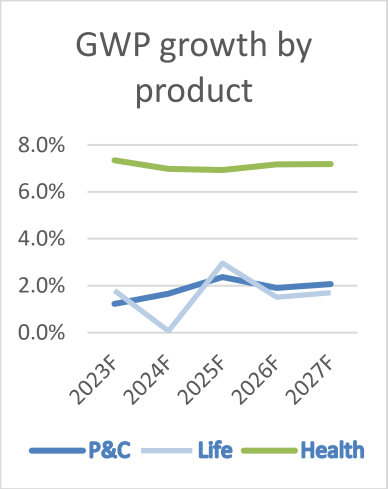
It was assumed a constant payout of 55% for the forecasted period to reflect a conservative behavior given current economic circumstances as well as to leave room for possible share buybacks.

Peer Group

For the AXA's peers scrutinization, factors such as market cap, overall revenue generation, assets, geographical reach, Regulatory Entity of the company (EIOPA) were considered (Appendix 22) to achieve 5 peers (Table 7).

Premium evolution

Figure 28. GWP growth by product



Source: *Author estimates*

Regarding product segmentation, the highlight expectation product is Health(Figure 28) with gross premium written expected to grow at approximately 7.1% CAGR between 2023F-2027F, slightly above the global expectations (6.80%, iMarc group) for the period, due to the conceptualized results shown by the company added to the high-growth regions including emerging markets that are intended to be focused on and the demand of the sector itself expected to grow.

P&C showed a premium growth of 4.5% in 2022, also related to pricing upward movements but expected to follow a steady CAGR of 1.86% for the forecasted period reflecting disinflation expectations added to a decrease in nominal premium growth in property & casualty compared to the latest fiscal year, thus assuming a stable and gradual growth, enhanced by inflation rates and transition costs to premium pricing, as well as the digitalization movement that anticipates higher costumer approach and underwriting results to increase.

L&S presents a lower growth than the other insurance products with a 1.55% CAGR 2023F-2027F, which translates in a change in consumer behavior given contracted financial conditions and about 90bps below to what's expected for global growth according to recent life insurance market analysis by SwissRe.

7. Financial Analysis

Facing inflation and geopolitical disruptions

Despite the drastic changes reported concerning inflation and interest rates, AXA is expected to keep costs and claims surge in pace with premium pricing increases, being able to maintain and even increase its margins.

Net profit margin and consolidated EBIT margin, in 2023-2027F period, expect an average growth of 6.3% and 9%, apart from 2022 net realized gains and losses decreases across all segments (-€11.3bn), but mainly in France, affected by the financial losses realized on investments classified as "fair value through profit or loss" which are presumed to stabilize gradually with lower market volatility expected for years to come than what was experienced in 2022.
The Interest Coverage Ratio averaging 21.6X for the projected period gives the idea that the company's' ability to cover interest has remained intact.

The Solvency II ratio, in accordance with the Solvency II regulations governing insurance group reporting and guidance from the European Insurance Occupational Pensions Authority (EIOPA), reinforces this metric with a mark of 215%, 25% above the target, again demonstrating the strength of the company's balance sheet and allows AXA to pursue an attractive capital management policy, accelerated this year with the successful transformation of AXA SA into an internal reinsurer.

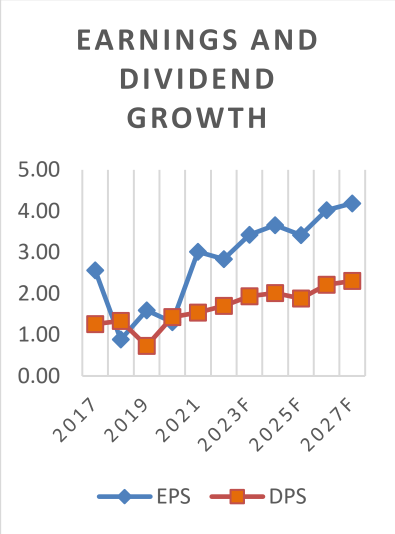
Profitability

Profitability ratios (Appendix 9) were also on target, dividends per share and EPS are expected to increase following CAGR of c.5.5% and c.6.8% 2022-2027F, respectively, confirming pragmatic expectations for the forecasted period (Figure 29).

EBITs are expected to increase across most segments over the next years, reflecting the efficient cost management and underwriting procedures as well as the selective strategic management shift, at a CAGR of 6.2% consolidated.

Additionally, the ROE metric (Figure 30) is expected to decrease by c.120bps even though the expected increase in net income for 2023 but due to the expected recovery after the drop in equity from 2021 to 2022. This gives a c.13.6% mark for 2024 and a 13.8% average until 2027. This upward movement in most metrics can be justified by the 5.46% CAGR on underlying earnings between 2022-2027F and aligned with company and analyst expectations.

Figure 29. EPS and DPS growth



Source: *Author estimates*

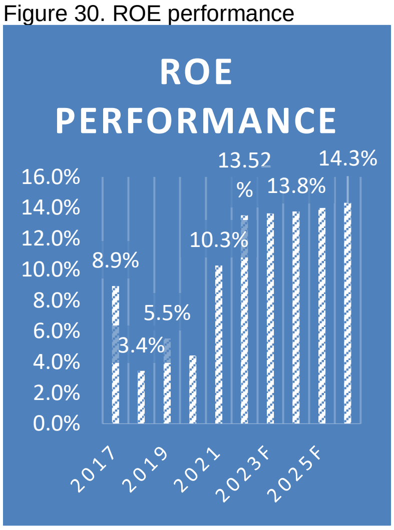
Focus in profitable business lines

The company with its large and solidified segments is expected to combat surging adversities related to low global economic growth whilst increasing revenue generation by 5.6% average for the forecasted period mainly related to core region activities growth.

Above all, important segments have experienced really strong growth, especially Health (+14.4% YoY) and averaging expected premium growth of 7.1% 2023F-2024F with expectations for mainly Asia with emerging markets booming and Europe to reflect the urge felt by consumers for covering risks.

AXA France presenting the highest EBIT margin with expectations of a bounce back in investment returns after the significant drop of 128% in “net realized gains and losses and change in fair value of investments at fair value through profit and loss” which compose mainly losses on currency translations of foreign portfolios causing a significant impact in the segments’ investment income, partly offset by the expense management.

Figure 30. ROE performance

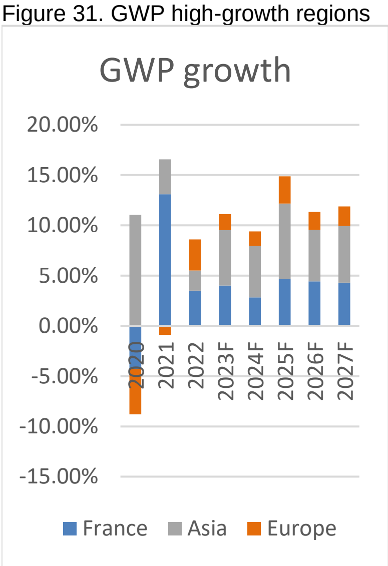


Source: *Author estimates*

This bounce back assumes the company can return to medium levels of investment income (50% of 2021FY), leading France EBIT margin to increase by an average of c.7.8%, presuming the company is able to keep its efficient cost management and increasing premium generation.

At AXA Asia expectations are promising, whereas the region has large potential to grow through demand for health and P&C mainly, hence, a 3.2% CAGR 2023-2027F is expected driven by operational focus and emerging markets growth (Figure 31) while expenses allowing to maintain an average EBIT margin of c.10.4%.

Figure 31. GWP high-growth regions



Source: *Author estimates*

Disposing and preventing

AXA, as already mentioned, has decided to direct its focus to its most profitable regions, choosing to diminish activity volume in non-core segments and even disposing of some activities such as operations in Singapore, AXA Bank Belgium, Gulf Region in 2022. This leads to a decrease in focus in the international sector that is expected to suffer a decrease in premium growth of 4% CAGR, 2022-2027F, following the drop between 2018-2022 of 6.7% CAGR.

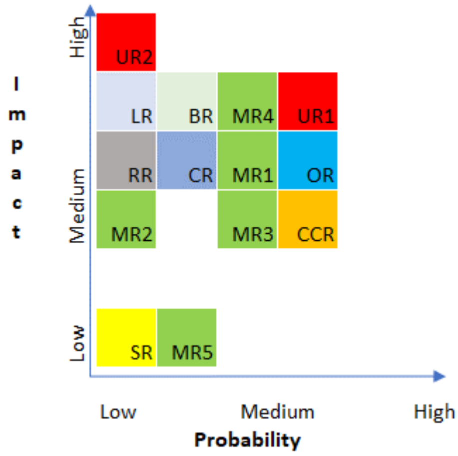
At AXA XL, the specialty risk division of AXA, property and casualty Reinsurance is also an exposure that is expected to take a less risky approach by deleveraging on policies taken where the risk of natural catastrophes is higher, confirmed by the previously announced target decrease of 35% of reinsured items until 2023.

This segment suffered severe changes since the arrival in 2019 of the new CEO of AXA XL Scott Gunter, a very experienced professional in the insurance industry that set hopes at a high level with the effective risk reduction and focus shift. It's measures increased profits from a -€1.7 Bn EBIT loss in 2020 related to Nat cat claims and restructuring measures, to reach levels that had never been reached, above the €1 billion mark (c.€1.5 Bn), in 2021.

Expectations are promising to maintain this aim, with premiums growing at 2.2% CAGR 2023-2027F and EBIT at 5.3%, turning XL one of the most profitable business lines of the company.

8. Investment Risks

Figure 32. Risk Matrix



Source: *Author estimates*

Investment Risks can take several faces when we talk about an industry that profits from taking the risk of customers as their own. Possible scenarios towards risk were assessed and a Risk Matrix (Figure 32) was composed.

Market Risk | As part of the insurance operations, after the collection of premiums from their policyholders, this amount is invested to hedge against future claims, therefore the investment in a diversity of assets is exposed to market frictions.

Interest Rate Risk (MR1) | Interest rate fluctuations have a significant impact on insurance companies because they affect both the income and obligations of these companies. When an insurance company reinvests its maturing assets at lower interest rates, it results in a shorter duration than the contracts for which they are liable. Consequently, this leads to a lower interest rate than the one advertised.

Inflation Risk (MR2) | Insurance companies are typically equipped to handle fluctuating inflation rates since they operate in that industry. However, unforeseen increases in inflation are challenging to anticipate and can have an adverse effect on insurance claims and expenses. If insurance premiums are not adjusted accordingly, this can result in reduced profitability for the company.

Equity Risk (MR3) | To achieve diversification, portfolios often include investments in equities. However, the unpredictability of the equity markets, combined with a decrease in stock prices and an increase in price volatility, can result in a reduction in the overall value of the portfolio.

Currency Risk (MR4) | Currency exposure arises from the fluctuations in exchange rates between different currencies when conducting international business operations and holding investment assets denominated in foreign currencies. These changes in exchange rates can impact the translation of one currency into another, thus affecting the overall value of the assets or liabilities held in different currencies. Given recent market volatility, this risk impacted AXAs statements causing drops in Equity and translation of foreign investments.

Real Estate Risk (MR5) | Given diversification, real estate is also considered an asset for the portfolio since it can provide long term returns, the risk that accounts for decreasing value and bubble exposure.

Credit Risk (CR) | Credit risk is defined as the risk that a third party in a transaction will default on its commitments. AXA monitors the 3 major types of counterparties, using methods suitable to each type: Investment portfolios held by insurance operations as well as by banks (retail credit risk) and holdings, receivables from reinsurance ceded by the company, credit, and credit-sensitive exposures on third party obligors.

Insurance underwriting Risk

Non-Life (UR1) | Risks linked to underwriting, pricing, and reserving bring responsibility for taking appropriate actions in response to changes in insurance cycles, political and economic environments. Among those are premium risk resulting from unforeseeable changes, fluctuations in the timing, frequency and severity of insured events, reserve risk, catastrophe risks embedding both natural events such as climatic or meteorologic phenomena or man-made.

Life (UR2) | Life risks contain mortality, longevity that comprises overestimation of mortality rates, lapses, disability, pandemics, among others that impact reserves.

Business Risk (BR) | Linked to the risk of costs, there is a potential for expenses associated with policy management to exceed expectations or for a decrease in new business volume to reach a level where it cannot sufficiently cover fixed costs. Additionally, policyholder behavior can also contribute to this risk.

Operational Risk (OR) | Refer to internal & system failures, nonachievement of legal and regulatory requirements that present a relevant weight in the way insurers act, human errors, and external events that damage the company related to the digitalization movement and cyber exposures.

Reputational Risk (RR) | Brand is one of the main factors for the prevalence of an insurer in the market through consumer trust and recognition, that in the eventual case of being broken (through polemics like litigious processes, capital whitening or fraud), can cause serious damage not only in the demand side, but also, in the supply where many might cut relations/connections with companies that incur in such situations and negative influence stakeholders' perception.

Liquidity Risk (LR) | Risk that future or present obligations cannot be met because of mistiming of cash in and outflows. Liquidity risk is the uncertainty emanating from business operations, investments, or financing activities, over whether AXA will have the ability to meet payment obligations in a full timely manner and sufficient capacity buffer to withstand a severe shock.

Climate Change Risk (CCR) | Catastrophic events following climate change are becoming more and more frequent like hurricanes, intense rain, earthquakes, eruptions, etc., that demand heavy experts' workforce to evaluate each potential claim and can impact on reinsurance on a major level.

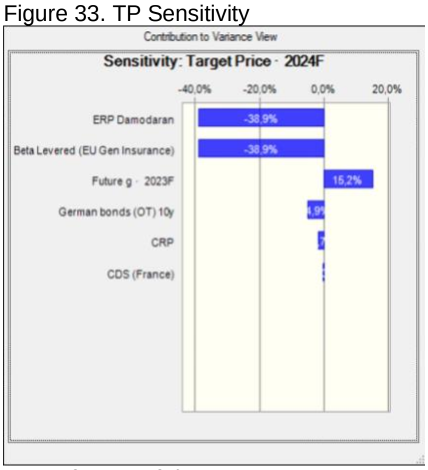
Sensitivity Analysis

Seeking to assess what model inputs had the most impact on the model itself, a sensitivity analysis (Table 8) was performed. The chosen variables for this analysis were depicted from the Crystal Ball software, that retrieved what were the inputs that by changing, impacted the model the most.

The variables that inflicted the greatest effect in the Target Price were: Beta; Equity Risk Premium; Risk-Free Rate; Future g; Country Risk Premium; and Country Default Swap.

From the conducted analysis, 2 inputs presented greater impact than the remaining (ERP and Beta), accounting for c.38.9% of the changes inflicted in the TP (Figure 33) Hence, those variables were used to perform the sensitivity analysis.

Figure 33. TP Sensitivity



Source: *Crystal Ball Software; Author's estimations*

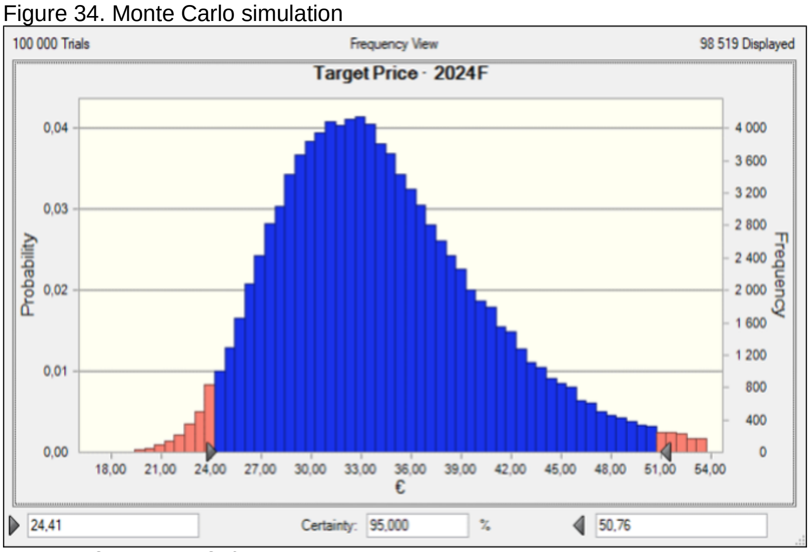
Table 8: Sensitivity Analysis

BETA \ EQUITY RISK PREMIUM	4.79%	5.29%	5.79%	6.29%	6.79%	7.29%	7.79%	8.29%	8.79%
34.0 €									
0.74	75.84 €	65.45 €	57.54 €	51.30 €	46.27 €	42.12 €	38.65 €	35.69 €	33.15 €
0.79	68.82 €	59.63 €	52.57 €	46.99 €	42.46 €	38.71 €	35.57 €	32.88 €	30.57 €
0.84	62.97 €	54.74 €	48.38 €	43.33 €	39.22 €	35.81 €	32.93 €	30.47 €	28.35 €
0.89	58.03 €	50.58 €	44.80 €	40.19 €	36.43 €	33.30 €	30.65 €	28.39 €	26.43 €
0.94	53.79 €	47.00 €	41.71 €	37.47 €	34.00 €	31.11 €	28.66 €	26.56 €	24.75 €
0.99	50.12 €	43.89 €	39.01 €	35.09 €	31.87 €	29.19 €	26.91 €	24.96 €	23.26 €
1.04	46.92 €	41.15 €	36.63 €	32.99 €	29.99 €	27.48 €	25.36 €	23.53 €	21.94 €
1.09	44.09 €	38.73 €	34.52 €	31.12 €	28.31 €	25.96 €	23.97 €	22.25 €	20.76 €
1.14	41.58 €	36.58 €	32.63 €	29.44 €	26.81 €	24.60 €	22.72 €	21.11 €	19.70 €

Source: *Author estimates*

From this analysis we can deduce that the target price centered within the table with the original input values is between the range of 15%-30% upside potential following the recommendation system (Table 9Table 9), coinciding with the issued BUY recommendation.

Figure 34. Monte Carlo simulation



Source: *Crystal Ball Software; Author's estimations*

To reinforce the results achieved above, a Monte Carlo simulation (Figure 34) was conducted by generating 100,000 random samples to approximate the behavior of the model under various scenarios. The retrieved values of this simulation (Table 11) presented a mean of €34.60 and a median of €33.55, finding that the base case (PT) stands in between these values. A standard deviation of €6.82 from the mean value was attained with a 95% confidence interval and a price range between €16.96-127.62€.

To apply this simulation, a normal distribution was assumed for the ERP, Beta, and future g, while for the CRP, CDS and the Risk-Free Rate the test was conducted through a log-normal distribution (Table 10).

To conclude, it is allowed to define that there is 95% chance that the 2024YE target share price for AXA SA is between €27.78 (still an upside movement from the actual price) and €41.42, supporting the issued recommendation of this report.

Table 9: Recommendation System

Investment recommendation	Threshold
Sell	-5% ≤
Reduce	>-5% & ≤5%
Neutral/Hold	>5% & ≤15%
Buy	>15% & ≤30%
Strong Buy	>30%

Source: *Author estimates*

Table 10: Monte Carlo Assumptions

ASSUMPTION	MEAN	STDEV
BETA	0.94	0.09
ERP	0.07	0.01
Future g	5.5%	0.6%
CDS	0.01	0.00
Risk-Free	0.02	0.00
CRP	0.01	0.00

Source: *Crystal Ball Software; Author's estimations*

Table 11: Monte Carlo Values

STATISTICS	FORECAST
Trials	100,000
Base Case	34.00 €
Mean	34.60 €
Median	33.55 €
STD. DEV.	6.82
10% percentile	27.06 €
90% percentile	43.36 €

Source: *Crystal Ball Software; Author's estimations*

Appendices

Appendix 1: Statement of Financial Position

BALANCE SHEET	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Total intangible assets	40,852	38,793	40,208	42,872	42,872	42,872	42,872	42,872	42,872
Investment Assets	**615,552**	**635,670**	**623,564**	**518,840**	**628,093**	**615,982**	**632,179**	**658,364**	**675,844**
Reinsurers'share in insurance and investment contracts liabilities	22,970	26,972	36,970	39,637	39,637	39,637	39,637	39,637	39,637
Assets held for sale or relating to discontinued operations	35,593	33,432	8,512	13,843	13,843	13,843	13,843	13,843	13,843
Other assets and receivables	43,962	41,487	41,187	55,340	49,085	50,007	52,228	54,388	55,239
Cash and cash equivalents	21,948	28,237	25,051	26,165	26,165	26,165	26,165	26,165	26,165
TOTAL ASSETS	**780,878**	**804,589**	**775,491**	**696,697**	**799,695**	**788,506**	**806,924**	**835,268**	**853,599**
Share capital and capital in excess of nominal value	26,126	26,165	25,354	23,027	23,027	23,027	23,027	23,027	23,027
Translation and other reserves	39,915	42,281	38,487	15,651	23,477	25,120	26,878	28,760	30,773
Net income for the period	3,857	3,164	7,294	6,675	7,271	7,601	7,963	8,418	8,994
Shareholders' equity	**69,897**	**71,610**	**71,135**	**45,353**	**53,774**	**55,748**	**57,868**	**60,205**	**62,794**
Minority interests	4,730	4,565	4,094	3,025	3,025	3,025	3,025	3,025	3,025
Total Minority interests and Shareholders' equity	**74,627**	**76,176**	**75,229**	**48,378**	**56,799**	**58,773**	**60,893**	**63,230**	**65,819**
Subordinated debt	11,294	9,279	10,449	11,804	11,804	11,804	11,804	11,804	11,804
Financing debt instrument issued	1,806	1,569	800	1,672	1,672	1,672	1,672	1,672	1,672
Total financing debt (LT-Debt)	**13,101**	**10,848**	**11,249**	**13,476**	**13,476**	**13,476**	**13,476**	**13,476**	**13,476**
Total liabilities arising from insurance and investment contracts	**539,630**	**556,557**	**559,750**	**507,703**	**588,119**	**589,483**	**598,393**	**626,591**	**641,471**
Liabilities from other activities (Banking)	14,649	15,284	14,643	12,944	21,010	4,181	8,618	3,877	1,830
Provisions for risk and charges	9,742	9,554	8,942	6,007	6,007	6,007	6,007	6,007	6,007
Minority interests of controlled investment funds and puttable instruments held by Minority interest holders	8,567	9,221	7,750	6,397	6,397	6,397	6,397	6,397	6,397
Other liabilities and payables	86,205	95,045	90,303	88,419	94,515	96,816	99,768	102,319	105,227
Liabilities held for sale or relating to discontinued operations	34,357	31,904	7,626	13,372	13,372	13,372	13,372	13,372	13,372
Total Liabilities	**706,251**	**728,413**	**700,262**	**648,319**	**742,896**	**729,732**	**746,031**	**772,039**	**787,780**
TOTAL LIABILITIES, MINORITY INTERESTS AND SHAREHOLDERS' EQUITY	**780,878**	**804,589**	**775,491**	**696,697**	**799,695**	**788,506**	**806,924**	**835,268**	**853,599**

Note: Acknowledging that the information needed to assess the Cash-Flow Statement for an insurance company under EIOPA regulations and requirements was not fully disclosed by AXA, CF Statement was not computed under the assumption that cash remains constant for the forward years. This accounts that the company through disposals of unprofitable operations and excess cash generations shall be offset by shareholder capital return through dividends and possible buybacks.

Appendix 2: Income Statement

Income Statement	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Gross Premiums	96,037	102,874	103,533	96,723	99,930	102,345	104,933	107,226	110,751	113,889	117,325
Property & Casualty	33,639	39,854	53,814	48,730	49,340	51,580	52,212	53,081	54,153	55,122	56,204
Life & Savings	31,364	31,801	29,692	31,523	33,306	31,514	32,082	32,104	33,055	33,553	34,124
Health	12,345	13,002	13,986	14,710	15,222	17,417	18,696	20,000	21,385	22,920	24,566
Banking	502	489	517	491	541	244	278	296	329	379	424

Asset Management	1,276	1,243	1,225	1,269	1,523	1,589	1,665	1,745	1,828	1,915	2,007
Net Investment Income	34,448	4,186	31,120	15,954	22,749	1,483	15,607	15,598	16,308	17,296	18,076
Reinsurance Income	-405	-653	-1,543	-331	-509	-128	-318	-150	-101	-212	-150
Revenue	130,080	106,407	133,110	112,346	122,170	103,700	120,222	122,675	126,958	130,973	135,251
Claims and insurance benefits/Losses	-103,262	-75,354	-102,602	-83,614	-88,434	-71,433	-85,496	-86,898	-89,926	-92,686	-95,434
Expenses	-21,186	-22,177	-23,204	-23,123	-23,051	-23,075	-24,388	-24,982	-25,744	-26,402	-27,153
Other expenses	-415	-7,071	-1,462	-257	-1,165	134	87	84	66	75	64
TOTAL EXPENSES	-124,863	-104,602	-127,268	-106,994	-112,650	-94,374	-109,797	-111,796	-115,604	-119,013	-122,523
EBIT	5,217	1,805	5,842	5,352	9,520	9,326	10,425	10,879	11,354	11,959	12,728
Non-operating interest income (loss)	265	286	504	400	144	-141	-141	-141	-141	-141	-141
Int expenses	-315	-562	-720	-878	-462	-477	-494	-511	-529	-548	-568
EBT	5,167	1,529	5,626	4,874	9,202	8,708	9,791	10,227	10,683	11,270	12,020
Income Tax	-1,083	-1,474	-1,419	-1,541	-1,689	-1,855	-2,362	-2,467	-2,577	-2,719	-2,900
Non-recurring loss	0	-428	-24	0	0	0	0	0	0	0	0
Net Income	4,084	-373	4,183	3,333	7,513	6,853	7,429	7,760	8,106	8,551	9,120
Min. Int	394	-2,513	325	167	214	180	158	158	144	133	126
Net Income after Min. Int.	**6,209**	**2,140**	**3,857**	**3,164**	**7,294**	**6,673**	**7,271**	**7,601**	**7,963**	**8,418**	**8,994**

Appendix 3: France Segment Income Statement (Until EBIT)

	France										
	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Gross Premiums	**24,475**	**25,175**	**26,182**	**25,064**	**28,349**	**29,338**	**30,518**	**31,385**	**32,851**	**34,301**	**35,772**
Property & Casualty	7,307	7,061	7,059	6,986	7,450	7,992	8,042	8,229	8,489	8,778	9,054
Life & Savings	13,151	13,542	14,325	13,001	15,264	13,972	14,439	14,489	14,960	15,267	15,578
Health	3,877	4,356	4,619	4,912	5,425	7,131	7,758	8,371	9,072	9,878	10,716
Banking	140	215	179	165	211	243	278	296	329	379	424
Net Investment Income	6,869	1,857	9,921	5,134	9,372	-2,612	**4,927**	**4,924**	**5,148**	**5,460**	**5,706**
Reinsurance Income	-120	-47	34	213	83	-105	70	80	34	67	70
Revenue	31,224	26,985	36,137	30,411	37,804	26,621	35,514	36,388	38,033	39,828	41,548
Claims and insurance benefits/Losses	-25,039	-20,375	-28,931	-23,805	-30,650	-19,803	-27,527	-27,809	-29,107	-30,574	-31,759
Expenses	-4,389	-4,340	-4,714	-4,899	-4,884	-4,792	-5,403	-5,556	-5,815	-6,072	-6,333
Other expenses	-12	-17	-41	-95	-135	-14	-69	-81	-91	-88	-92
TOTAL EXPENSES	-29,440	-24,732	-33,686	-28,799	-35,669	-24,609	-32,998	-33,445	-35,014	-36,735	-38,183
EBIT	1,784	2,253	2,451	1,612	2,135	2,012	2,517	2,943	3,019	3,093	3,364

Appendix 4: Europe Segment Income Statement (Until EBIT)

Europe

	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Gross Premiums	**35,992**	**36,508**	**34,415**	**32,860**	**32,562**	**33,570**	**34,114**	**34,611**	**35,358**	**35,928**	**36,566**
Property & Casualty	15,633	15,760	16,645	16,594	16,930	17,788	18,033	18,332	18,611	18,780	18,997
Life & Savings	15,215	15,450	12,268	10,582	9,746	9,449	9,317	9,055	9,033	8,909	8,769
Health	5,105	5,258	5,477	5,630	5,886	6,333	6,764	7,224	7,715	8,239	8,800
Banking	39	41	25	9	0	0	0	0	0	0	0
Net Investment Income	7,142	5,170	6,456	5,240	7,426	3,531	5,557	5,554	5,807	6,158	6,436
Reinsurance Income	-75	-99	-188	-16	-185	-285	-156	-171	-171	-205	-183
Revenue	43,059	41,579	40,683	38,084	39,803	36,816	39,515	39,994	40,994	41,882	42,819
Claims and insurance benefits/Losses	-33,465	-32,055	-30,991	-28,200	-28,973	-25,562	-28,535	-28,951	-29,576	-30,053	-30,586
Expenses	-6,347	-6,492	-6,667	-6,898	-6,868	-7,076	-6,844	-6,944	-7,094	-7,208	-7,336
Other expenses	-80	-95	-146	-122	-220	-10	-122	-124	-127	-129	-131
TOTAL EXPENSES	-39,892	-38,642	-37,804	-35,220	-36,061	-32,648	-35,502	-36,019	-36,797	-37,390	-38,054
EBIT	3,167	2,937	2,879	2,864	3,742	4,168	4,013	3,974	4,197	4,491	4,765

Appendix 5: Asia Segment Income Statement (Until EBIT)

Asia											
	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Gross Premiums	**8,985**	**8,973**	**9,860**	**10,950**	**11,329**	**11,559**	**12,193**	**12,816**	**13,777**	**14,486**	**15,305**
Property & Casualty	5,702	5,780	6,350	2,159	2,102	2,207	2,321	2,430	2,616	2,740	2,887
Life & Savings	1,313	1,245	1,353	6,379	7,021	7,057	7,422	7,770	8,366	8,761	9,231
Health	1,970	1,947	2,156	2,412	2,206	2,294	2,450	2,617	2,795	2,985	3,187
Net Investment Income	2,754	678	2,920	2,436	3,821	522	2,648	2,647	2,767	2,935	3,067
Reinsurance Income	-24	-199	-39	-15	69	117	-28	22	39	54	23
Revenue	11,715	9,452	12,741	13,371	15,219	12,198	14,814	15,485	16,584	17,474	18,395
Claims and insurance benefits/Losses	-9,017	-6,625	-9,614	-9,931	-11,180	-8,609	-10,613	-11,155	-11,992	-12,608	-13,321
Expenses	-1,550	-1,632	-1,827	-2,306	-2,286	-2,301	-2,386	-2,508	-2,697	-2,835	-2,996
Other expenses	-18	-151	-66	-90	-428	-62	-183	-192	-206	-217	-229
TOTAL EXPENSES	-10,585	-8,408	-11,507	-12,327	-13,894	-10,972	-13,182	-13,855	-14,895	-15,661	-16,546
EBIT	1,130	1,044	1,234	1,044	1,325	1,226	1,632	1,629	1,689	1,814	1,849

Appendix 6: AXA XL Segment Income Statement (Until EBIT)

AXA XL											
	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Gross Premiums	**0**	**6,287**	**18,741**	**18,530**	**18,763**	**19,232**	**19533**	**19896**	**20319**	**20800**	**21336**
Property & Casualty	0	5,148	14,064	18,345	13,955	15,859	16507	17181	17883	18614	19374
Life & Savings	0	45	188	183	175	160	152	144	136	129	122
P&C - Reinsurance	0	1,093	4,489	2	4,634	3,213	2874	2571	2300	2057	1840
Net Investment Income	0	322	1,079	912	1,248	863	1,058	1,058	1,106	1,173	1,226
Reinsurance Income	0	-222	-1193	-418	-114	494	-19	124	209	108	154

Revenue	0	6,387	18,627	19,024	19,897	20,589	20,572	21,077	21,634	22,080	22,717
Claims and insurance benefits/Losses	0	-4,731	-13,501	-16,094	-13,647	-14,633	-14,534	-14,804	-15,119	-15,477	-15,877
Expenses	0	-1,544	-4,157	-4,473	-4,616	-4,680	-4,652	-4,819	-4,926	-5,024	-5,154
Other expenses	0	-423	-613	-199	-174	-55	-149	-152	-155	-159	-163
TOTAL EXPENSES	0	-6,698	-18,271	-20,766	-18,437	-19,368	-19,335	-19,775	-20,200	-20,660	-21,193
EBIT	0	-311	356	-1,742	1,460	1,221	1,237	1,302	1,434	1,421	1,524

Appendix 7: International Segment Income Statement (Until EBIT)

	International										
	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Gross Premiums	**7,034**	**6,535**	**7,078**	**6,398**	**5,668**	**5,033**	**4893**	**4761**	**4607**	**4448**	**4326**
Property & Casualty	3,798	3,722	3,888	3,406	2,990	2,952	2877	2793	2720	2632	2541
Life & Savings	1,678	1,285	1,328	1,113	853	649	537	444	367	304	251
Health	1,235	1,295	1,550	1,562	1,495	1,431	1479	1524	1520	1512	1534
Banking	323	233	313	317	330	1	0	0	0	0	0
Net Investment Income	762	504	844	816	695	542	635	635	664	704	736
Reinsurance Income	-67	-128	-173	-105	-344	-319	-181	-192	-201	-218	-202
Revenue	7,729	6,911	7,749	7,109	6,019	5,256	5,347	5,204	5,070	4,934	4,860
Claims and insurance benefits/Losses	-5,198	-4,509	-4,993	-4,570	-3,847	-3,625	-3,890	-3,774	-3,718	-3,550	-3,458
Expenses	-2,166	-2,106	-2,193	-1,958	-1,545	-1,246	-1,124	-1,094	-1,064	-1,020	-991
Other expenses	-46	-36	-626	-171	-295	-10	-33	-24	-25	-18	-23
TOTAL EXPENSES	-7,410	-6,651	-7,812	-6,699	-5,687	-4,881	-5,047	-4,892	-4,807	-4,588	-4,472
EBIT	319	260	-63	410	332	375	300	312	263	346	388

Appendix 8: Holdings Segment Income Statement (Until EBIT)

	Transversal & Central Holdings										
	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Gross Premiums	**2,640**	**2,913**	**2,959**	**2,966**	**3,259**	**3,613**	**3683**	**3758**	**3839**	**3926**	**4020**
Property & Casualty	1,199	1,290	1,319	1,238	1,279	1,569	1557	1545	1534	1522	1511
Life & Savings	7	234	230	265	247	227	215	204	193	183	173
Health	158	146	184	194	210	228	245	264	284	306	329
Asset Management	1,276	1,243	1,225	1,269	1,523	1,589	1665	1745	1828	1915	2007
Net Investment Income	120	-128	-789	1,469	194	-1,315	**782**	**782**	**817**	**867**	**906**
Reinsurance Income	-5	24	-6	9	-17	-37	-5	-12	-13	-18	-12
Revenue	2,755	2,809	2,164	4,444	3,436	2,261	4,460	4,528	4,643	4,775	4,913
Claims and insurance benefits/Losses	-3,022	-764	-1,795	-1,752	-811	120	-397	-405	-414	-423	-433
Expenses	-3,412	-3,070	-3,485	-3,308	-3,669	-3,740	-3,979	-4,060	-4,148	-4,242	-4,344
Other expenses	364	506	454	770	495	713	643	656	670	686	702
TOTAL EXPENSES	-6,070	-3,328	-4,826	-4,290	-3,985	-2,907	-3,733	-3,809	-3,891	-3,980	-4,075
EBIT	-3,315	-519	-2,662	154	-549	-646	727	718	752	795	838

Appendix 9: Profitability Ratios

	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
EBIT Margin - Consolidated	5.83%	1.70%	4.39%	4.76%	7.79%	8.99%	8.67%	8.87%	8.94%	9.13%	9.41%
EBIT Margin - France	5.71%	8.35%	6.78%	5.30%	5.65%	7.56%	7.09%	8.09%	7.94%	7.77%	8.10%
EBIT Margin - Europe	7.36%	7.06%	7.08%	7.52%	9.40%	11.32%	10.16%	9.94%	10.24%	10.72%	11.13%
EBIT Margin - Asia	9.65%	11.05%	9.69%	7.81%	8.71%	10.05%	11.02%	10.52%	10.19%	10.38%	10.05%
EBIT Margin - AXA XL		-4.87%	1.91%	-9.16%	7.34%	5.93%	6.01%	6.18%	6.63%	6.43%	6.71%
EBIT Margin - International	4.13%	3.76%	-0.81%	5.77%	5.52%	7.13%	5.61%	6.00%	5.18%	7.01%	7.99%
ROE	8.9%	3.4%	5.5%	4.4%	10.3%	14.71%	13.52%	13.6%	13.8%	14.0%	14.3%
ROE Dupont	8.2%	2.9%	5.2%	4.2%	9.7%	13.8%	12.8%	12.9%	13.1%	13.3%	13.7%
ROA	0.7%	0.2%	0.5%	0.4%	0.9%	1.0%	0.9%	1.0%	1.0%	1.0%	1.1%
Cost to Income	94.2%	98.3%	95.6%	95.2%	92.2%	91.0%	91.3%	91.1%	91.1%	90.9%	90.6%
Gross Margin	5.8%	1.7%	4.4%	4.8%	7.8%	9.0%	8.7%	8.9%	8.9%	9.1%	9.4%
Net Profit Margin	4.7%	2.0%	2.9%	2.8%	6.0%	6.4%	6.0%	6.2%	6.3%	6.4%	6.6%

Appendix 10: Solvency Ratios

	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Financial Leverage	11%	22%	18%	14%	15%	28%	28%	24%	23%	22%	21%
Debt Ratio	91%	92%	90%	91%	90%	93%	93%	93%	92%	92%	92%
Interest Coverage Ratio	16.56	3.21	8.11	6.10	20.61	19.55	21.11	21.27	21.44	21.82	22.42
Solvency II	198%	193%	198%	200%	217%	215%	-	-	-	-	-

Appendix 11: Cost Ratios

	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Cost Growth		-16.2%	21.7%	-15.9%	5.3%	-16.2%	16.3%	1.8%	3.4%	2.9%	2.9%
Expense % of gross premiums	22.1%	21.6%	22.4%	23.9%	23.1%	22.5%	23.2%	23.3%	23.2%	23.2%	23.1%
Underwriting Loss % of gross premiums	107.5%	73.2%	99.1%	86.4%	88.5%	69.8%	81.5%	81.0%	81.2%	81.4%	81.3%
Combined Ratio proxy % of gross premiums	129.6%	94.8%	121.5%	110.4%	111.6%	92.3%	104.7%	104.3%	104.4%	104.6%	104.5%

Expense Ratio, Underwriting loss Ratio and Combined Ratio for each product weren't able to be computed because there wasn't found disclosure on expenses by product (P&C, H, L&S) but only by region, since the company transitioned from one way of segmenting revenues to the other in 2015, no public data has been found to unlock that issue yet. Thus, the available ratios for computation are only a proxy of written premiums over consolidated expenses, however, it should not be accounted as the combined ratio itself because AXA has and will (expected) perform in a ratio well below the 100% mark.

Appendix 12: Common-Size Statement of Financial Position

COMMON SIZE BALANCE SHEET	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Total intangible assets	5.0%	5.4%	5.2%	4.8%	5.2%	6.2%	5.4%	5.4%	5.3%	5.1%	5.0%
Investment Assets	86.3%	80.7%	78.8%	79.0%	80.4%	74.5%	78.5%	78.1%	78.3%	78.8%	79.2%
Reinsurers'share in insurance and investment contracts liabilities	1.5%	2.8%	2.9%	3.4%	4.8%	5.7%	5.0%	5.0%	4.9%	4.7%	4.6%
Assets held for sale or relating to discontinued operations (c)	0.6%	2.8%	4.6%	4.2%	1.1%	2.0%	1.7%	1.8%	1.7%	1.7%	1.6%
Other assets and receivables	3.9%	4.9%	5.6%	5.2%	5.3%	7.9%	6.1%	6.3%	6.5%	6.5%	6.5%
Cash and cash equivalents	2.7%	3.4%	2.8%	3.5%	3.2%	3.8%	3.3%	3.3%	3.2%	3.1%	3.1%
TOTAL ASSETS	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Shareholders' equity	92.5%	85.2%	93.7%	94.0%	94.6%	93.7%	94.7%	94.9%	95.0%	95.2%	95.4%
Minority interests	7.5%	14.8%	6.3%	6.0%	5.4%	6.3%	5.3%	5.1%	5.0%	4.8%	4.6%
Total Minority interests and Shareholders' equity	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Total financing debt (LT-Debt)	1.0%	1.9%	1.9%	1.5%	1.6%	2.1%	1.8%	1.8%	1.8%	1.7%	1.7%
Total liabilities arising from insurance and investment contracts	82.6%	79.1%	76.4%	76.4%	79.9%	78.3%	79.2%	80.8%	80.2%	81.2%	81.4%
Liabilities from other activities	4.1%	4.2%	2.1%	2.1%	2.1%	2.0%	2.8%	0.6%	1.2%	0.5%	0.2%
Provisions for risk and charges	1.5%	1.3%	1.4%	1.3%	1.3%	0.9%	0.8%	0.8%	0.8%	0.8%	0.8%
Minority interests of controlled investment funds and puttable instruments held by Minority interest holders	1.1%	0.8%	1.2%	1.3%	1.1%	1.0%	0.9%	0.9%	0.9%	0.8%	0.8%
Other liabilities and payables	9.0%	9.8%	12.2%	13.0%	12.9%	13.6%	12.7%	13.3%	13.4%	13.3%	13.4%
Liabilities held for sale or relating to discontinued operations	0.6%	2.9%	4.9%	4.4%	1.1%	2.1%	1.8%	1.8%	1.8%	1.7%	1.7%
Total Liabilities	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Appendix 13: Common Size Income Statement

	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F
Gross Premiums	**96037**	**102874**	**103533**	**96723**	**99930**	**102345**	**104933**	**107226**	**110751**	**113889**	**117325**
Net Investment Income	35.9%	4.1%	30.1%	16.5%	22.8%	1.4%	14.9%	14.5%	14.7%	15.2%	15.4%
Reinsurance Income	-0.4%	-0.6%	-1.5%	-0.3%	-0.5%	-0.1%	-0.3%	-0.1%	-0.1%	-0.2%	-0.1%
Revenue	135.4%	103.4%	128.6%	116.2%	122.3%	101.3%	114.6%	114.4%	114.6%	115.0%	115.3%
Claims and insurance benefits/Losses	-107.5%	-73.2%	-99.1%	-86.4%	-88.5%	-69.8%	-81.5%	-81.0%	-81.2%	-81.4%	-81.3%
Expenses	-22.1%	-21.6%	-22.4%	-23.9%	-23.1%	-22.5%	-23.2%	-23.3%	-23.2%	-23.2%	-23.1%
Other expenses	0.4%	-6.9%	-1.4%	-0.3%	-1.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
TOTAL EXPENSES	-130.0%	-101.7%	-122.9%	-110.6%	-112.7%	-92.2%	-104.6%	-104.3%	-104.4%	-104.5%	-104.4%
EBIT	5.4%	1.8%	5.6%	5.5%	9.5%	9.1%	9.9%	10.1%	10.3%	10.5%	10.8%
Non-operating interest income (loss)	0.3%	0.3%	0.5%	0.4%	0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
Int expenses	-0.3%	-0.5%	-0.7%	-0.9%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%	-0.5%
EBT	5.4%	1.5%	5.4%	5.0%	9.2%	8.5%	9.3%	9.5%	9.6%	9.9%	10.2%
Income Tax	-1.1%	-1.4%	-1.4%	-1.6%	-1.7%	-1.8%	-2.3%	-2.3%	-2.3%	-2.4%	-2.5%
Non-recurring loss	0.0%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Income	4.3%	-0.4%	4.0%	3.4%	7.5%	6.7%	7.1%	7.2%	7.3%	7.5%	7.8%
Min. Int	0.4%	-2.4%	0.3%	0.2%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%
Net Income after Min. Int.	6.5%	2.1%	3.7%	3.3%	7.3%	6.5%	6.9%	7.1%	7.2%	7.4%	7.7%

Appendix 14: Balance Sheet Assumptions

Balance Sheet Assumptions	Assumptions

	Unit	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F	
Total Intangible Assets								0%	0%	0%	0%	0%	Same value as 2022
Investment Assets	% Reserves	114.3%	110.8%	114.1%	114.2%	111.4%	102.2%	107%	104%	106%	105%	105%	Average % of Reserves, considering a 2 year average to account for the most recent reaction of the company to the latest economic events
Reinsurers'share in insurance and investment contracts liabilities	YoY		97%	-11%	17%	37%	7%	0%	0%	0%	0%	0%	Same value as 2022
Assets held for sale or relating to discontinued operations (c)	YoY		426%	35%	-6%	-75%	63%	0%	0%	0%	0%	0%	Same value as 2022
Other assets and receivables	% premiums	37%	47%	44%	44%	43%	56%	47%	47%	47%	48%	47%	Average % of Premiums
Cash and cash equivalents													Same value as 2022
Share capital and capital in excess of nominal value													Same value as 2022
Translation and other reserves	YoY		-11%	17%	6%	-9%	-59%	50%	7%	7%	7%	7%	Assuming to return to increase by 50% of 2022 values and 7% CAGR for the next years (see comment)
Net income for the period													Net income
Minority interests	YoY		91%	-56%	-3%	-10%	-26%	0%	0%	0%	0%	0%	Same value as 2021
Subordinated debt	YoY		53%	4%	-18%	13%	13%	0%	0%	0%	0%	0%	Same value as 2022
Financing debt instrument issued	YoY		403%	-65%	-13%	-49%	109%	0%	0%	0%	0%	0%	Same value as 2022
Total liabilities arising from insurance and investment contracts	% premiums	714%	704%	540%	593%	578%	511%	560%	550%	540%	550%	547%	Average % of Premiums
Liabilities from other activities	YoY		10%	-59%	4%	-4%	-12%	0%	0%	0%	0%	0%	Same value as 2022
Provisions for risk and charges	YoY		-5%	-14%	-2%	-6%	-33%	0%	0%	0%	0%	0%	Same value as 2022
Minority interests of controlled investment funds and puttable instruments held by Minority interest holders	YoY		-22%	26%	8%	-16%	-17%	0%	0%	0%	0%	0%	Same value as 2022
Other liabilities and payables	% costs	339%	380%	372%	411%	392%	383%	388%	388%	388%	388%	388%	Average % of Costs
Liabilities held for sale or relating to discontinued operations (a)			459%	39%	-7%	-76%	75%	0%	0%	0%	0%	0%	Same value as 2022

Appendix 15: P&C Forecasting Assumptions

	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F	Assumptions
P&C France	6.86%	-3.37%	-0.03%	-1.03%	6.64%	7.28%	0.63%	2.32%	3.17%	3.40%	3.15%	We assume the change in general P&C nominal growth YoY as a spread added to an Historical Moving Average to consider as combination of market movements with company's historic performance in premium generation.
P&C Europe	15.32%	0.81%	5.62%	-0.31%	2.02%	5.07%	1.38%	1.66%	1.52%	0.91%	1.16%	We assume the change in general P&C nominal growth YoY as a spread added to an Historical Moving Average to consider as combination of market movements with company's historic performance in premium generation.

P&C XL	5.00%	0.00%	173.19%	30.44%	-23.93%	13.64%	4.09%	4.09%	4.09%	4.09%	4.09%	CAGR 2018-2022 following restructuring activities in the segment, switching focus from reinsurance to commercial lines to reduce risk exposure
P&C Transversal	1.25%	7.59%	2.25%	-6.14%	3.31%	22.67%	5.53%	5.53%	5.53%	5.53%	5.53%	Considering CAGR 2017-2022, accounting with the latest year results reflecting the market changes combined with historical data with expectations of growth since the segment in case focus on P&C and AM
P&C Asia	0.00%	1.37%	9.86%	-66.00%	-2.64%	5.00%	2.13%	3.21%	2.22%	1.91%	2.16%	Historical Moving Average with 2020 as an outlier (pandemic damage)+ P&C nominal change in growth whereas there is high potential for growth mainly in emerging markets but conservative given historical volatility.
P&C International	3.62%	-2.00%	4.46%	-12.40%	-12.21%	-1.27%	-2.54%	-2.92%	-2.62%	-3.23%	-3.44%	International segment to suffer decreases given the goal to focus on core geographical lines, thus it is considered the 2022 growth following disposals + P&C nominal change in growth

	2017	2018	2019	2020	2021	2022	2023 F	2024 F	2025 F	2026 F	2027 F	Comments
Real global GDP	**3.8%**	**3.6%**	**2.8%**	**-3.0%**	**6.0%**	**3.2%**	**2.6%**	**2.9%**	**3.4%**	**3.3%**	**3.2%**	IMF Forecast
Global Inflation	3.3%	3.6%	3.5%	3.2%	4.7%	8.1%	5.9%	4.5%	5.2%	4.7%	4.6%	IMF Forecast
Nominal global GDP	7.1%	7.2%	6.3%	0.2%	10.7%	11.3%	8.5%	7.4%	8.6%	8.0%	7.8%	
Euro Area inflation	1.5	1.8	1.2	0.3	2.6	8.3	5.7	2.7	2.2	1.9	1.8	IMF Forecast
European Union inflation	1.6	1.9	1.4	0.7	2.9	9.2	6.8	3	2.3	2	2	IMF Forecast
Europe inflation	2.2	2.2	2	1.1	3.5	9.8	6.9	3.4	2.6	2.3	2.3	IMF Forecast
East Asia GDP growth	**1.4%**	**1.8%**	**2.2%**	**1.7%**	**0.9%**	**2.4%**	**2.2%**	**1.8%**	**1.9%**	**1.9%**	**1.9%**	IMF Forecast
East Asia inflation	5.5	5.2	4.4	0.9	6.8	2.9	3.8	3.8	3.9	3.8	3.8	IMF Forecast
France GDP growth	**2.4%**	**1.8%**	**1.9%**	**-7.9%**	**6.8%**	**2.5%**	**0.7%**	**1.6%**	**1.8%**	**1.7%**	**1.4%**	IMF Forecast
France inflation	0.012	0.021	0.013	0.005	0.021	0.058	0.046	0.024	0.018	0.016	0.016	IMF Forecast
Euro Area GDP growth	2.6	1.8	1.6	-6.1	5.2	3.1	0.5	1.8	1.9	1.7	1.5	IMF Forecast
European Union GDP growth	3	2.2	2	-5.6	5.4	3.2	0.7	2.1	2.2	2	1.7	IMF Forecast
Europe GDP growth	**2.7%**	**2.3%**	**2.0%**	**-5.4%**	**5.4%**	**1.9%**	**0.3%**	**1.9%**	**2.0%**	**1.9%**	**1.6%**	IMF Forecast

P&C Global growth	2.80%	3.90%	4.20%	3.10%	2.60%	0.90%	1.80%	2.80%	2.4%	2.30%	2.20%	Real global growth, data from 2025F-2027F to resemble the difference between forecast of the average spread between GDP and P&C GDP
Spread GDP-PC	1.0%	-0.3%	-1.4%	-6.1%	3.4%	2.3%	0.8%	0.1%	1.0%	1.0%	1.0%	2025F-2027F, average spread without 2020
P&C Nominal (global)	6.22%	7.64%	7.85%	6.40%	7.42%	9.07%	7.81%	7.43%	7.72%	7.11%	6.90%	

Data from Swiss Re and IMF

Appendix 16: Life Forecasting Assumptions

	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F	Assumptions
Life France	13.2%	3.0%	5.8%	-9.2%	17.4%	-8.5%	3.35%	0.34%	3.25%	2.1%	2.0%	It is expected that Life sector will have ups and downs due to the uncertain environment following years to come, even in a core region, volatility following macroeconomic change impacts is expected as well as customer demand on insurance products to shift towards health thus it's assumed an Historical Moving Average + Life nominal change in growth
Life Europe	15.2%	1.5%	-20.6%	-13.7%	-7.9%	-3.0%	-1.4%	-2.8%	-0.2%	-1.4%	-1.6%	2022 growth to reflect most recent impacts in the European continent towards Life product + Life nominal change in growth
Life XL			317.8%	-2.7%	-4.4%	-8.6%	-5.2%	-5.2%	-5.2%	-5.2%	-5.2%	CAGR 2018-2022 since it's not a significant product in the segment and expected to decrease given market conditions and company shift focus
Life Transversal	0%	3243%	-1.7%	15.2%	-6.8%	-8.1%	-0.8%	-0.8%	-0.8%	-0.8%	-0.8%	CAGR 2017-2022 since it's not a significant product in the segment and expected to decrease given market conditions and company shift focus
Life Asia	0.0%	-5.2%	8.7%	371.5%	10.1%	0.5%	5.2%	4.7%	7.7%	4.7%	5.4%	Historical Moving Average (w/out 2020->outlier) + Life nominal change in growth reflecting company's historic performance in premium generation in the Asian continent (high for Life in normal condition and core product focus of the segment) and to follow expected market movements
Life International	1.2%	-23.4%	3.3%	-16.2%	-23.4%	-23.9%	-17.3%	-17.3%	-17.3%	-17.3%	-17.3%	CAGR 2017-2022 reflecting country operation disposals at a high rate for Life product as part of the company objective to deviate focus from unprofitable business lines (International Life)

Life Global growth	0.5%	2.0%	1.7%	-4.5%	4.5%	-1.9%	1.7%	1.7%	3.4%	2.9%	2.8%	
Life - GDP	3.3%	1.6%	1.1%	1.5%	1.5%	5.1%	0.9%	1.2%	1.8%	1.8%	1.8%	Swiss Re
Life Nominal	3.85%	5.67%	5.26%	-1.44%	9.41%	6.05%	7.70%	6.28%	8.85%	7.73%	7.52%	

Data from Swiss Re and IMF

Appendix 17: Health Forecasting Assumptions

	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F	Assumptions
Health Fr	4.2%	12.4%	6.0%	6.3%	10.4%	31.4%	8.8%	7.9%	8.4%	8.9%	8.5%	It is expected to keep growing at a higher rate, following an optimistic historical average. 2022 growth YoY (31.4%) considered as an outlier for the average since it was an unusual year that redirected a lot of demand for the product. Expected of growth slight above the forecasted market CAGR.
Health EU	5.1%	3.0%	4.2%	2.8%	4.5%	7.6%	6.8%	6.8%	6.8%	6.8%	6.8%	The market is expected to reach $2,599.8 Bn by 2028, exhibiting a CAGR of 6,8% during 2023-2028 (Source: imarcgroup). Once Europe historical CAGR is close to the market and growth for the region is expected.
Health Transversal	0.1%	-7.6%	26.0%	5.4%	8.2%	8.6%	7.6%	7.6%	7.6%	7.6%	7.6%	CAGR at transversal holdings since it's not the focus in that business line and Health is expected to grow across all segments
Health Asia	0.0%	-1.2%	10.7%	11.9%	-8.5%	4.0%	6.8%	6.8%	6.8%	6.8%	6.8%	The market is expected to reach $2,599.8 Bn by 2028, exhibiting a CAGR of 6,8% during 2023-2028 (Source: imarcgroup). Once Asia historical CAGR is close to the market and growth for the region is expected.
Health International	1.3%	4.9%	19.7%	0.8%	-4.3%	-4.3%	3.4%	3.0%	-0.3%	-0.5%	1.4%	Internationally kept decreasing in 2022 so it will grow following a moving average reflecting premium growth volatility. It is expected growth for Health but at the same time disinvesting intentions for the segment.

Appendix 18: Other Operations Forecasting Assumptions

	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F	Assumptions
P&C Reinsurance XL						-30.7%	-10.5%	-10.5%	-10.5%	-10.5%	-10.5%	It is expected to follow a CAGR 2018-2022 following intentions to gradually reduce risk exposure and to shift towards commercial P&C lines in the segment
Asset Management Holdings	1.2%	-2.6%	-1.4%	3.6%	20.0%	4.3%	4.8%	4.8%	4.8%	4.8%	4.8%	Since the company intends to focus on core business lines, it might not see explosive growth like in 2021. However, given consistent results we expect them to keep growing at a fixed conservative 5Y Average

Banking France	0.2%	54.3%	-17.1%	-7.8%	27.3%	15.7%	14.5%	6.5%	11.2%	15.0%	11.8%	Banking sector in France, being the only segment that keeps operating Banking services it is expected to increase at a high pace assuming AXA intends to focus on this product and performed in the last 2 years, thus, a 5Y Moving average is assumed
Banking international	0.2%	-27.9%	34.3%	1.3%	4.1%	-99.7%	0%	0%	0%	0%	0%	In FY2021, the company decided to disinvest of unprofitable operations disposing international banking.

Reinsurance Income to be forecasted as a Sum of Parts by a 5Y moving average for all segments except for AXA XL (of 3Y instead of 5) since they ceded operations in 2019 for Re and it wouldn't account for all reinsurance coverage taken by AXA.

Appendix 19: Investment returns Forecasting Assumptions

	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F	Assumptions
AAA Bonds	0.4%	0.4%	-0.3%	-0.5%	-0.3%	2.6%	2.48%	2.52%	2.57%	2.62%	2.66%	Investment Returns of the company's portfolio are expected to follow forwards 10y interest rates. The company historically presents higher returns than interest rates thus it's a conservative approach anf also the bigger proportion of assets in AXAs portfolio are fixed income instruments.
Investment Return	4.6%	0.6%	5.1%	2.5%	3.6%	0.3%	2.5%	2.5%	2.6%	2.6%	2.7%	

	Forward Rate
	2.66%

AAA bunds (17/05/2023)	
5y	2.30%
10y	2.43%

		31/12/2023	31/12/2024	31/12/2025	31/12/2026	31/12/2027	31/12/2028	Variation

15y	2.54%		10y rates	2.43%	2.48%	2.52%	2.57%	2.62%	2.66%	0.047%

Historical weight of Investment Returns by region	2017	2018	2019	2020	2021	2022	5Y average	2Y average	Assumptions
France	20%	44%	32%	32%	41%	-176%	34%	32%	Considering the 2Y average (2020 and 2021) weights of historical investment returns by region adjusted to the movements suffered in 2022 to forecast investment returns of each region through the relation of the AAA bond benchmark.
Europe	21%	124%	21%	33%	33%	238%	46%	36%	
Asia	8%	16%	9%	15%	17%	35%	13%	17%	
AXA XL	1%	26%	3%	8%	4%	71%	8%	7%	
International	2%	12%	3%	5%	3%	37%	5%	4%	
Holdings	0%	-3%	-3%	9%	1%	-89%	1%	5%	
United States	49.2%	-99.6%	34.6%	0.0%	0.0%	0.0%	-3%	0%	
Intersegment eliminations	-0.4%	-1.2%	-0.2%	-0.3%	-0.4%	-3.4%	-0.5%	0%	

Appendix 20: Expenses Forecasting Assumptions

France	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F	Assumptions
Claims and insurance benefits/Losses	102%	81%	110%	95%	108%	67%	90.2%	88.6%	88.6%	89.1%	88.8%	Since there was a massive drop of 41% in the claims/premiums from 2021 to 2022 Thus, we apply a 3Y moving average to account to slight changes in the ratio .
Expenses	18%	17%	18%	20%	17%	16%	17.7%	17.7%	17.7%	17.7%	17.7%	Expenses excluding claims to follow a 3Y average of the relation between general expenses and premiums once it is not impacted the way claims/premiums shows to be in terms of macroeconomic changes.
Other expenses	0.05%	0.07%	0.16%	0.38%	0.48%	0.05%	0.2%	0.3%	0.3%	0.3%	0.3%	

Europe	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F	Assumptions
Claims and insurance benefits/Losses	93%	88%	90%	86%	89%	76%	83.6%	83.6%	83.6%	83.6%	83.6%	We assume a fixed 3Y average to reflect the continent reaction to the most recent macroeconomic events that reflects a good
Expenses	18%	18%	19%	21%	21%	21%	20.1%	20.1%	20.1%	20.1%	20.1%	

	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F	Assumptions
Other expenses	0%	0%	0%	0%	1%	0%	0.4%	0.4%	0.4%	0.4%	0.4%	cost management from the company as shown in 2022.

Asia												
	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F	Assumptions
Claims and insurance benefits/Losses	100%	74%	98%	91%	99%	74%	87%	87%	87%	87%	87%	We assume a fixed 5Y average to reflect the continent reaction to the most recent macroeconomic events that reflects a good cost management from the company as shown in 2022. 5 years instead of 3 because it reflects better margins, which are expected for this segment.
Expenses	17%	18%	19%	21%	20%	20%	20%	20%	20%	20%	20%	
Other expenses	0%	2%	1%	1%	4%	1%	1%	1%	1%	1%	1%	

AXA XL												
	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F	Assumptions
Claims and insurance benefits/Losses		75.3%	72.0%	86.9%	72.7%	76.1%	74.4%	74.4%	74.4%	74.4%	74.4%	Accounting with the deep restructuring in this segment, expenses forecast should decrease for AXA XL. We consider the 4Y moving average (the restructuring program started in 2019) to resemble the company efforts
Expenses		24.6%	22.2%	24.1%	24.6%	24.3%	23.8%	24.2%	24.2%	24.2%	24.2%	
Other expenses		6.7%	3.3%	1.1%	0.9%	0.3%	0.8%	0.8%	0.8%	0.8%	0.8%	

Transversal & Central Holdings												
	2017	2018	2019	2020	2021	2022	2023F	2024F	2025F	2026F	2027F	Assumptions
Claims and insurance benefits/Losses	114%	26%	61%	59%	25%	-3%	11%	11%	11%	11%	11%	Being general expenses and fees higher than claims expenses due to expenses from asset management. Thus, for the forecasted period, we consider a 2Y fixed historical average of the expenses weight in total premiums of the segment, that resembles a close motion of when AXA redirected its focus to core activities.
Expenses	129%	105%	118%	112%	113%	104%	108%	108%	108%	108%	108%	
Other expenses	14%	17%	15%	26%	15%	20%	17%	17%	17%	17%	17%	

Since it wasn't found/achieved any disclosure regarding expenses by product (for the Loss and Expense Ratio computation that leads to the Combined ratio computation, which were not computed due to undisclosure), they are expected to keep the same margins(following a moving average) against premiums generation as in the past, thus, assuming AXA reaches the flexibility needed in terms of premium pricing control as recorded in 2022, in order to mantain margins and not incurr in losses given current economic outlook and inflation changes, accounting with the most recent year, 2022, that shows improvement and effective cost management (18% decrease YoY in premiums/claims margin, facing macroeconomic factors and disruptions at several fronts). Thus, we assume an average of the ratio Expenses/Premiums consolidated for the International Segment and a SOP to each of the other business lines acknowledging that each expense distribution (general, claims and other) changes from segment to segment.

Appendix 21: Country Risk Premium

Country	CRP	Weight of country	Consolidated CRP
France	0.85%	26.50%	0.225%
Europe			
Switzerland	0%	13%	0.000%
Germany	0%	9.30%	0.000%
UK & Irl	1.03%	5.30%	0.055%
Belgium	1.03%	3.60%	0.037%
Italy	3.79%	3.30%	0.125%
Spain	2.76%	3%	0.083%
Asia			
Japan	1.22%	8.70%	0.106%
Hong Kong	1.03%	6.40%	0.066%
Asia High Pot.		2.30%	0.000%
Thailand	2.76%	0.46%	0.013%
Indonesia	3.29%	0.46%	0.015%
China	1.22%	0.46%	0.006%
Philippines	3.29%	0.46%	0.015%
South Korea	0.85%	0.46%	0.004%
Worldwide	2.97%	13.10%	0.389%
International		5.10%	
Mexico	3.29%	0.85%	0.028%
Colombia	3.29%	0.85%	0.028%
Turkey	11.22%	0.85%	0.095%
Morocco	4.32%	0.85%	0.037%
Luxembourg	0%	0.85%	0.000%
Brazil	5.19%	0.00%	0.000%
TOTAL		100%	**1.326%**

The consolidated Country Risk Premium was computed through the weights of each country in AXA's adjusted net income and multiplied by the country risk premium of the respective country.

Country Risk Premium (Source: Damodaran)

Weights of each country as a % of adjusted Net Income (Source: Bloomberg)

Appendix 22: Dividend Discount Model

Year	2022	2023F	2024F	2025F	2026F	2027F	TP
Net income	6,673	7,271	7,601	7,963	8,418	8,994	
Payout	59.9%	55%	55%	55%	55%	55%	
Dividend	3,998	3,999	4,181	4,379	4,630	4,947	**99,642**
Shares	2,352	2,286	2,286	2,286	2,286	2,286	

DPS	1.70	1.75	1.83	1.92	2.03	2.16	**43.59**
g	10.4%	2.9%	4.6%	4.7%	5.7%	6.8%	**5.5%**
Ke	10.70%	10.70%	10.70%	10.70%	10.70%	10.70%	**10.70%**
Discount Factor			1.00	0.90	0.82	0.74	**0.74**
PV /(1+r)				1.73	1.65	1.60	**29.02**

Future g	5.5%
Target Price	**34.00 €**
Potential	28.6%
Analyst Consensus	**33.30 €**

The company has as a target payout for the future years between 55 to 65%, assuming a conservative payout of 55%.

Appendix 23: Residual Income Model

Year	2021	2022	2023F	2024F	2025F	2026F	2027F	2028F
Net Income	7,294 €	6,673 €	7,271 €	7,601 €	7,963 €	8,418 €	8,994 €	
Equity Charge	8,051 €	5,178 €	6,079 €	6,290 €	6,656 €	7,040 €	7,445 €	
Excess Equity Return	- 757 €	1,495 €	1,192 €	1,311 €	1,306 €	1,378 €	1,549 €	7,482 €
Cumulated Cost of Equity				1.00	1.11	1.23	1.36	1.36
Present Value of Equity Excess Return				1,311 €	1,180 €	1,125 €	1,142 €	5,515 €
Accumulated Present Value of Equity Excess Return				1,311 €	2,491 €	3,616 €	4,758 €	10,273 €
Beginning BV of Equity	75,229 €	48,378 €	56,799 €	58,773 €	62,194 €	65,777 €	69,565 €	
Cost of Equity	10.70%	10.70%	10.70%	10.70%	10.70%	10.70%	10.70%	
Equity Cost	8,051 €	5,178 €	6,079 €	6,290 €	6,656 €	7,040 €	7,445 €	

Price Target	
Equity Invested	**58.7**
PV of Equity Excess Return + Terminal Value (in Bn)	**10.27**
Equity Value (in Bn)	**68.97**
Number of Shares (in Mn)	**2.286**
Current Price (31/05/2023)	26.45 €
Target Price	**30.20 €**
Potential	14.2%

Appendix 24: Peer Selection

	AXA	Allianz	Zurich	Generali	Talanx	Munich
Headquarters	*France*	*Germany*	*Switzerland*	*Italy*	*Germany*	*Germany*

Market Cap (B $)	64.42	85.99	65.84	29.27	11.63	45.28
Revenues 2021 (B $)	102.35	152.70	41.75	79.30	48.99	68.45
Assets 2021 (B $)	696.70	1021.00	377.78	519.05	193.13	298.57
Employees	145000	159000	53000	82000	24000	41000
Clients (M)	93	122	55	68	20	200
Solvency Ratio	215%	201%	265%	221%	208%	260%
Services						
Property & Casualty Insurance	√	√	√	√	√	√
Health Insurance	√	√	√	√	√	√
Life Insurance	√	√	√	√	√	√
Savings	√	√	√	√	√	√
Banking	√	X	X	X	X	X
Asset Management	√	√	√	√	√	√
Business Insurance	√	√	√	√	√	√
Profitability Indicators						
P&C Combined Ratio	94.60%	94.20%	94.30%	93.20%	98.90%	96.20%
Regions						
EMEA	√	√	√	√	√	√
Latin America	√	√	√	√	√	√
North America	√	√	√	√	√	√
APAC	√	√	√	√	√	√

Appendix 25: Relative Valuation

Company	Beta 5 year	ROE	g	Payout	P/B	P/E	Predicted P/B	Predicted P/E
Allianz	1.09	10.10%	-2.52%	69.17%	1.57	12.36	1.26	12.05
Munchen	0.91	13.20%	10.41%	46.33%	1.99	12.34	1.96	10.34
AXA	1.46	11.10%	26.96%	61.57%	1.3	9.22	**1.41**	**9.10**
Zurich	0.93	14.30%	7.35%	78.45%	2.65	15.55	2.20	14.48
Generali	0.96	12.80%	8.07%	61.47%	1.59	9.05	1.87	12.01
Talanx	0.89	12.90%	13.61%	43.26%	1.50	9.57	1.90	10.11

Median	1.90	10.34
Average	1.87	11.21
Price Target	36.19 €	30.25 €

P/E Regression

SUMMARY OUTPUT

P/E = α + gEPS 5y + Payout – Beta

Regression Statistics	
Multiple R	0.750484924
R Square	0.563227621
Adjusted R Square	-0.091930949

Standard Error	2.669499157
Observations	6

ANOVA

	df	SS	MS	F	Significance F
Regression	3	18.37885069	6.126283563	0.859681377	0.577306162
Residual	2	14.2524515	7.126225751		
Total	5	32.63130219			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	9.755405251	7.125029977	1.369173924	0.304426392	-20.90112443	40.41193493	-20.90112443	40.41193493
Beta 5 year	-6.455299924	8.273307491	-0.780256256	0.516922421	-42.05246898	29.14186913	-42.05246898	29.14186913
g	1.614213588	19.22721191	0.083954637	0.940739438	-81.11380224	84.34222942	-81.11380224	84.34222942
Payout	13.52870175	11.34654404	1.19231915	0.355420756	-35.29153696	62.34894045	-35.29153696	62.34894045

P/B Regression

SUMMARY OUTPUT

P/B = α + ROE – Beta

Regression Statistics	
Multiple R	0.733069841
R Square	0.537391392
Adjusted R Square	0.228985653
Standard Error	0.42778204
Observations	6

ANOVA

	df	SS	MS	F	Significance F
Regression	2	0.63773954	0.31886977	1.742481817	0.314644804
Residual	3	0.54899242	0.182997473		
Total	5	1.186731961			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.71198799	2.963302564	-0.240268408	0.825604738	-10.14253929	8.718563305	-10.14253929	8.718563305
Beta 5 year	-0.188215469	1.14984607	-0.163687535	0.880383179	-3.847538847	3.47110791	-3.847538847	3.47110791
ROE	21.57049593	16.46309959	1.310232973	0.281407061	-30.82243455	73.9634264	-30.82243455	73.9634264

Beta is the 5 year monthly beta with Stoxx 500 as benchmark for every company; historic ROE; EPS 5 year average growth; historic payout policy; historic P/B; and historic P/E

Appendix 26: Share Buyback

	2023E	**2023E**
# Shares Outstanding	2,351,770,945	2,306,524,096
Average 2022 Price Performance	24.31	24.31
# Shares BuyBack	45,246,849	20,566,749
Purchased Volume	1,100,000,000 €	500,000,000 €
Final # shares	2,306,524,096	2,285,957,347
Share Capital %	1.92%	0.89%

Shares Annual Report	31/12/2021	31/12/2022
	2,421,568,696	2,351,770,945

The company announced a buyback of €1.1Bn for 2023 in the Shareholder Meeting and an expected share repurchase if the Life & Pensions Portfolio is sold for €633 million, expected to result in a Net Cash proceeds of €0.4 billion in the 4th quarter of 2023, intending to offset earnings dilution with the buyback.

Assuming this sale takes place, we expect an extra Buyback of €0.5Bn to occur in 2023.

Since the Driving Progress 2023 strategy ends in 2023 and there is no comments yet on buyback programs for the following years, we assume the company keeps retributing invested capital to shareholders through dividends and possible buybacks but no guarantee that the latter takes place.

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Recommendation System

Level of Risk	SELL	REDUCE	HOLD/NEUTRAL	BUY	STRONG BUY
High Risk	0%≤	>0% & ≤10%	>10% & ≤20%	>20% & ≤45%	>45%
Medium Risk	-5%≤	>-5% & ≤5%	>5% & ≤15%	>15% & ≤30%	>30%
Low Risk	-10%≤	>-10% & ≤0%	>0% & ≤10%	>10% & ≤20%	>20%