

The Effects of Risk Management on Performance of Euro Mediterranean Insurance Firms

Attard Maria, Caruana Yanica, Dalli Gonzi Rebecca[✉], Galea Chantelle, Girlando Alessandra, Grech Janice, Soar Aliscia, Teuma Joseph, Simon Grima

DOI: <http://dx.doi.org/10.35474/ibarj.v5i1.160>

Department of Insurance, Faculty of Economics, Management & Accountancy, University of Malta

Info Articles

History Articles:
Submitted 5 November 2020
Revised 24 December 2020
Accepted 16 January 2021

Keywords:
Insurance firms, Mediterranean region, risk management, Solvency II directive, financial

Abstract

The aim with this paper is to show the differences in the performance of eight insurance companies in the Mediterranean region and how each country deals with risks. Risk management is crucial in insurance companies because if risks are not mitigated, the company will suffer financial losses and poor performance within the company. With the introduction of the Solvency II Directive, consumer protection is improved by law at European Union. This paper shows the steps of risk management and comparison of these eight Mediterranean countries before the Solvency II directive and after it came into force. The eight Mediterranean countries are Spain, France, Greece, Cyprus, Italy, Slovenia, Malta and Croatia and the economy of each country and the economy of insurance is presented. The aim of this study is to examine the different risk management practices adopted by insurance companies and how risk management affects the performance of insurance companies in these countries, as well as the relationship between risk management and insurance.

[✉] Address Correspondence:
E-mail: rebecca.e.dalli-gonzi@um.edu.mt

INTRODUCTION

With globalisation, competition is increasing, risks are increasing, and risk management is becoming an integral part of business success. This is especially applied in the insurance industry due to high-risk businesses, as the risks are associated with each customer in the business and their own risk (Kokobe and Gemechu, 2016). Insurance companies are in the risk business hence they provide coverage for different types of risks to individuals, businesses and companies. It is beneficial for insurance companies to manage their risk exposure and carry out proper analysis to avoid losses due to claims by the insured (Omasete, Catherine Asemeit, 2012). According to Kadi (2003), insurance companies cover insurable risk but do not carry out proper analysis of expected claims by customers.

If risk management is not well maintained and is poor, claims from customers may accumulate leading to increased losses and poor financial performance (Magezi, 2003). Risk management activities are influenced by the risk behaviour of managers. A strong risk management framework can help organisations reduce their risk exposure and strengthen their financial performance (Iqbal and Mirakhor, 2007). Implementing risk management, can help improve communication and provide management with a summary of threats to assist them in decision making.

RESEARCH PROBLEM

Insurance companies are at the heart of risk management. Companies manage their clients' risks as well as their own. To do this, risk management must be integrated into the companies' systems, processes, and culture. Various stakeholders put pressure on companies to manage risk effectively and report it transparently.

This study focuses on the performance of Euro Mediterranean insurance companies in terms of risk management, which aims to address the challenges of new risks in the sector.

By examining different practices, insurance companies can deal with the different types of risks they face. This study aims to fill the knowledge gap on how risk management affects the performance of insurance companies in Euro Mediterranean. The main objective is to discover the relationship between risk management and insurance companies' performance in Euro Mediterranean.

BACKGROUND

Insurance and solvency II

Insurance is an agreement between an insurance company (insurer) and its customers (insured) in which the insurance company agrees either to pay the customer or to pay certain expenses when an event occurs. Such an agreement or contract must be made in good faith. Basically, insurance is a safeguard against unforeseen events. To cover losses that may occur unexpectedly, one takes out insurance by paying an insurance premium. This means that the insured pays a sum of money to the insurer every year. The Solvency II Directive came into force on 1 January 2016. It focuses on capital requirements, risk management and prudential rules. The main principles of Solvency II are to improve consumer protection, modernise supervision, deepen EU market integration and increase the international competitiveness of EU insurers. With reference to the three pillars, it is a comprehensive programme of regulations for insurers. The three pillars are Financial Requirements, governance and supervision, and reporting and disclosure.

Risk Management

Risk is the combination of the probability of an event occurring and its consequences. The knowledge of risk and the possibility that it may lead to losses leads to uncertainty and a sense of insecurity. Uncertainty is at the core of risk. One is uncertain whether an event is likely to occur or not. One is also uncertain what the consequences would be if such an event occurs. The greater the risks taken, the higher the return that can be achieved.

According to Rejda (2008), risk management is the process by which a company identifies exposures to losses and selects the most appropriate treatment techniques. Moreover, as risk management is pursued in the context of project management, it is becoming increasingly important as companies move towards globalisation and increasing competition (Ahmed et al., 2007). In order for a company to have effective risk management, there is a 5 step process to follow. First and foremost, risk must be identified. The responsible team must identify and report risks that could affect the company's project in the future. Secondly, the risk must be analysed to determine the probability and outcome of each risk. The next step is to evaluate the risk. This is done by determining the magnitude of the risk, which is the combination of the probability and impact of the risk. The fourth step is to address the risk, or also known as risk action planning. In this step, the risks are assessed and a plan must be created to address the risks. The final step is to monitor and review the risk. The risks must be monitored to ensure that the changing situations do not change the priorities of the risk (Saleem, 2011). By implementing risk management can reduce unforeseen and costly surprises and allocate resources more efficiently. It improves communication and gives management an accurate view of the threats the organisation may face and ultimately helps them make better decisions (Saleem, 2011).

Risk Management and Company Performance

The performance of effective and integrated risk management should improve the performance of the company. To carry out effective risk management, a huge mobilisation of resources is required (Mohammed and Knapkova, 2016). As stated by Pagach and Waarr, 2011, a company expects better improvement in performance that follows from the risk management system used. It is clear that effective risk management improves the firm's understanding of the risks that are expected to challenge the firm and treat risk as an opportunity rather than a threat. The better the

firm recognises its inherent risks, the more its confidence grows to follow the opportunities. Risk management success improves accountability among stakeholders, which increases management efficiency and strategic competitive advantage.

Insurance Companies in Euro mediterranean

The Mediterranean Sea encompasses the west of the Atlantic Ocean, the east of Asia, and at the same time separates Europe from Africa. In 2008, the European Commission wrote a report on the implementation of the Euro-Mediterranean Charter for enterprise. The ninth dimension states the improvement of Euro-Mediterranean networks between businesses and between business service providers. The entire countries in Euro-Mediterranean are treated equally by private sector organisations at Euro-Mediterranean level such as UMCE Business MED and Mediterranean Association of Chambers of Commerce and Industry.

In this study, the authors focus on 8 countries out of all the countries in the Mediterranean region. These form the following: Spain, France, Italy, Greece, Cyprus, Slovenia, Malta and Croatia. From these countries, it was studied that from 2016 to 2017, a total of 26 companies collapsed, while 1 company in Cyprus has increased.

LITERATURE

Risk has been defined in various ways that are almost never quite right or wrong but are useful tools for abstracting and creating common foci (Rosa 1998 in Habegger, 2008). Contingency theory states that there is no ideal way or best way to run an organisation. There are too many external and internal constraints that change what is really the best way to lead in a given situation (Business.com, 2017) These constraints are usually dependent on the situation of the organisation. This theory was developed by Fred Fiedler following the Contingency Trait Theory.

Determinants of Performance

Financial performance is a subjective measure of how well a company can use the assets of its primary type of business and generate revenue (Investopedia, 2018). It has been found that performance is determined by several factors. A study by Ahmed (2011) concluded that leverage, size and risk are the most important determinants of performance while Malik (2011) concluded that there is a significant positive relationship between performance and size. Both studies were evaluated using return on assets (ROA) ratio.

Empirical Evidence

Greece

In 2004, there was a change of government in Greece. The debt crisis in Greece began in December 2009 when its credit rating was downgraded. In 2011, the crisis deepened as leaders insisted on a bailout. In 2013, the unemployment rate rose to 26.8%, which was the highest rate in Europe. In 2015, Greece remained in a crisis spiral and creditors agreed to the third bailout package, which mandated further spending cuts to avoid bankruptcy and exit from the eurozone. In 2017, the employment rate was still 22%, which meant that a third of the population was living below the poverty line. In 2018, we can currently see a growing economy and increased political stability. During this time, many countries refused to export to Greece, so the country could not attract new foreign direct investment in such an unstable situation.

In 2003, a total of 107 insurance companies, brokers and agents were operating in Greece, 20 in the life sector, 74 in the non-life sector and 13 mixed. 73 of these were incorporated in Greece and 34 were foreign subsidiaries, of which 6 were non-EU companies. The Greek crisis was a noteworthy fact that affected the course of significance, 45 insurance companies exited. So, as the author states, the number of insurance companies decreased by more than 40%, which is a significant amount. In 2016, there were 43 registered insurance companies and in 2017,

there were 42, so only one company exited (Table 1). Table 2 and figure 1 show the decrease in premiums.

The prudential framework for (re)insurers was fundamentally changed by Law 4364/2016, which harmonised Greek law with the EU Solvency II Directive (2009/138/ EC). As part of the implementation of the new law, the Bank of Greece issued a number of relevant regulatory decisions and adopted a number of European Insurance and Occupational Pensions Authority guidelines. The implementation of the rules for the EU Solvency II Directive have direct impact on the Greek economy, especially after the long economic crisis.

In this paper, the authors focus on four insurance companies to compare and determine the impact of risk management especially in terms of Solvency II;

- ERGO Insurance Co.
- Allianz Hellas General Insurance Co.
- AXA Insurance PLC
- AIG Insurance Co.

After the acquisition of ATE Insurance (Agricultural Insurance) in 2016, ERGO became the largest general insurance group in Greece with a turnover of more than 228 million euros and more than 900,000 policyholders. Allianz Insurance is a global company based in Germany with a very strong international presence. With over 140,000 employees worldwide, Allianz Group serves 88 million customers in more than 70 countries (Allianz.com, 2018). Allianz entered the Greek market back in 1991 by acquiring the RAS portfolio. Then in 1998, it had acquired Helvetia Insurance to merge with AGF insurance a year later. AGF was a non-life insurance company and the merger with Allianz led to the activation of a mixed-activity insurance company in 2007.

AXA insurance plc was formed in 1999 through the merger of Emporiki Insurance and Greek-British Life and Damages, and belongs to the ALPHA BANK Group. In 2007, it was renamed AXA because it was previously called Alpha insurance. It has 465 employees, 422,000 customers and a turnover of 148 million euros.

AIG is a long-term insurer with a history that began in 1935. With a steady course and growth, AIG meets the needs of more than 500,000 individuals and businesses, offering products and services that meet their needs through its offices in Athens and Thessaloniki.

The Greek crisis has affected all industries, and since insurance touches all industries, it has had a major impact. One of the most affected industries is the construction industry. When examining risk management, it is necessary to diagnose not only how well a company is prepared for unexpected situations and related crises on a project-by-project basis, but also how it deals with factors that influence and affect the external environment of companies, as was the case with the recent economic recession.

In the aftermath of the crisis, the risk management approaches of insurance companies have changed; actions on each of the risks insurance companies face (insurance, market, credit, operational and reputational), but also their integrated view to determine the total capital needed for the overall risk, need to be embedded in the day-to-day business and be strategic rather than operational. The International Association of Insurance Supervisors has also enacted the Standard in order to facilitate regulatory and supervisory impetus for enterprise risk management in insurance companies.

The top risks that Greece was facing with regards to the insurance industry are as follows:

- *Risks due to changes in regulation required following Brexit*
- *Fire and explosion which increased by 20% from the previous year*
- *Natural catastrophe*
- *Macroeconomic developments*
- *Business Interruption (increase of 8% from previous year)*
- *Environmental risks*
- *Power blackout*
- *Theft and corruption (a new risk compared to previous year)*
- *Product risks*

France

France is one of the greatest economic powers in the world. It is considered a very modern country and sees itself as a leader in Europe. The intervention of successive governments to protect or promote different types of economic activities. Currently, the unemployment rate is 9%. France's economy is diversified, led by tourism, industry and pharmaceuticals. The government has partially or fully privatized many large companies, but maintains a strong presence in sectors such as energy, public transport, and defense (Heritage.org, 2018).

Insurance company earnings were €9.7 billion in 2016, but rose to €10.6 billion in 2017.

- Agence Eaton, Générali Assurance
- GMF Assurance
- Aviva
- GAN Assurance

Generali started in 1996 and consolidated its reputation in France over 20 years of uninterrupted growth, achieved by 32% of new clients being recommended by existing satisfied clients. All employees are English-speaking.

GMF assurance has been in business for over 80 years with 6600 employees and nearly 3.5 million members. With more than 180 years of experience, Aviva France, a subsidiary of one of Europe's leading life and health insurers, is a general insurer serving 3 million customers.

The oldest insurance company on the French market, GAN assurance offers policies tailored to the needs of 1 million customers. The history of Gan Assurances began with the creation of two insurance companies: La Royale (1786) and Le Soleil (1829). In 1968, the group National Insurance (GAN) was created, a merger of the National, the Sun and the Fund of Fraternal Capitalization. Thirty years later, in 1998, after a privatization process, Groupama acquired Gan. Groupama is one of the market leaders in the insurance sector and consists of three brands. Gan Assurances has 1,026 branches across the country. It has nearly 1,000

general agents, 2,000 agency staff and 1,700 salaried employees.

The Solvency II Directive brought new requirements for insurance companies in the form of Regulation 2015-378. These were primarily audit, reporting, outsourcing and contract governance requirements. These new requirements entailed changes in French Insurance Code as well as in the Social Security code, Mutuality code and Monetary and Financial Code (Lexology.com, 2018). These new requirements included an obligation for a company to measure its solvency, strengthen its governance, and assess, manage, and report the risks to which it is exposed. This was done to ensure that each company knew its risk profile and risk appetite. Once the risk profile is established, one can apply the capital requirements to one's risk profile to ensure that it complies with the requirements of the Solvency II Directive requirements.

France has put more pressure on companies than other member states and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) has required its insurance companies to conduct an Own Risk and Solvency Assessment (ORSA).

Slovenia

Slovenia's economy is the 64th freest in 2018 with an economic freedom score of 64.8. Comparing the first half of 2017 and the first half of 2018, the economy grew by 4.6% in 2018. Exports and investments have increased, but private consumption growth is weaker. (ec.europa.eu, 2018)

The Insurance Market in Slovenia consists of 15 Insurance Companies with 2 reinsurers and 3 pension companies. It is also worth noting that in 2006 there were only 3 companies active in the insurance market; thus, most insurers in Slovenia are relatively young companies. First Bancassurance started in 2012 with a partnership between Zavarovalnica Triglav and Abanka. We see increased distribution of both insurance and banking products through their joint channels.

The insurance industry is regulated by Insurance Supervision Agency, which was established on June 1, 2000. The mission statement is to reduce and eliminate irregularities in the insurance industry, protect the interests of policyholders, and enable the operation of the insurance holding company and its positive impact on the economy as a whole.

The Slovenian Insurance Act (ZZavar-1) devotes a separate chapter to risk management, explaining different types of risks and setting standards for a risk management system. This contrasts with the Maltese Insurance Business Act, which makes no reference to risk management.

Chapter 4 of ZZavar-1 begins with a detailed description of the various risks to which insurance undertakings may be exposed and follows with basic risk management and the areas to be covered. The law requires an internal model that addresses underwriting, market, credit, operational, liquidity, and all other risks to which an insurance company is exposed. Article 156 deals with own risk and solvency assessment. Insurance undertakings are required to have procedures in place to define and assess short and long-term risks to which the undertaking is exposed. The act infers responsibility on management to approve and monitor risk management policies and written rules. A risk management plan should include: "Internal risk management procedures, risk management measures and internal procedures for implementing those measures, and internal procedures for monitoring the implementation of risk management measures." These procedures must be established for each type of risk faced by the company and should be proportionate to the likelihood and impact of such risk occurring.

On 1 January 2016, the Solvency II directive was introduced in Slovenia for the insurance market there. This imposes stricter capital requirements on Slovenian Insurance Firms. As SloveniaTimes reported in June 2016, just six months after Solvency II came into force, Slovenian insurers had capital of €1.471 billion, 61% more than required by the EU

directive. When analysing individual insurers, some exceeded the criteria by 20%, others by almost 600%. The head of Insurance Supervision Agency also commented that this was a clear indicator that the insurance market in Slovenia was in good shape; he even noted that no insurer had needed state aid in the last 25 years.

This may be a clear indicator that Risk Management regulation embedded in national legislation has helped Slovenian insurers to remain solvent and properly manage their risk. This can be seen in the over-solvency of the insurance market. This could be an indicator that Slovenian insurers are not managing their risks properly, but are too cautious with their investments, keeping too much capital in the business. While this is not necessarily unhealthy for the insurer, it could represent missed opportunities in the long run, which could prove detrimental to the company.

Adriatic Slovenica

Adriatic Slovenica is the third largest insurance company in Slovenia. The company is exposed to a number of risks, including financial and underwriting risks. When implementing Solvency Directive II in January 2016, Adriatic Slovenica used the standard formula set out in this directive to calculate the capital requirement for each risk module. (Adriatic Slovenica d. d, 2017)

Adriatic Slovenica has developed a set of risk management measures and these measures include internal risk management procedures, internal implementation procedures and risk management plans. The role of risk management is to develop appropriate policies for strategy development and processes aimed at identifying, monitoring, measuring, managing and reporting certain risks that may have a negative impact on the company's operations. The company must provide practicable assurances to manage the risks. Other responsibilities include calculating the Company's capital adequacy and capital requirements and preparing and managing the risk profile. In accordance with the requirements of Solvency II, the Company has established

three lines of defence: Risk Management is the first line of defence that complements the capital of Adriatic Slovenica by ensuring compliance and avoiding situations that could put the company at risk, the second is the actuarial function and the third is the internal audit function. (Adriatic Slovenica d. d, 2017)

Underwriting risk is managed through internal audits and the implementation of internal controls for operating effectiveness. The control function is the basic function within the company. Other organisational units include compliance, the risk management department and the controlling department. The internal audit function has control over the operations of the company by evaluating the effectiveness and adequacy of the company's risk management, governance and control procedures for management improvement by implementing strategic decisions, monitoring and managing risks, and applying the company's values and ethics. Risk appetite is the basic concept of risk management strategy, which is the level of risk that the company is willing to take in managing its strategic objectives and business (Adriatic Slovenica d. d, 2017).

Zavarovalnica Triglav

Triglav, another insurance company in Slovenia, has built in a comprehensive risk management system that ensures control of risk taking and also safe operations. In times of stress situations, a risk assessment is carried out using the standard formula related to solvency II, which shows the flexibility of the Triglav Group. In the Triglav Group there are three committees for risk management, and these are: Non-Life /life insurance and actuarial, Risk Management and the Compliance Office. This risk management system at the group level has improved the quality of data and reporting as a result. (Triglav, Risk Management, 2018)

Capital adequacy monitoring includes regulatory authority Solvency II with the following objectives: Identification, measurement, monitoring and management of assumed or potential risks. These objectives help in the use, amount and return of economic

capital, therefore, there is a development of the capital structure (Triglav Risk Management, 2018).

Compared to previous years, the Group's risk profile has hardly changed. Due to the increase in the non-life insurance portfolio and losses from catastrophic weather events, changes in exposure mainly result from underwriting risks. Claims ratio increased in the context of market risks (Triglav, Risk Management, 2018).

The risk management system is an integral part of the Group's functioning, as it helps to ensure the achievement of Triglav's strategic objectives and takes into account the principle of proportionality. It enables the timely identification of risks and a set of standardised procedures to understand potential risk consequences. The quality of all this system is linked to the process of solvency assessment and its own risk. The basis for developing strategic decisions is a risk assessment that defines the impact of current and/or future capital requirements. In the first line of defence, risks are partially controlled, which allows quality assessment of future and even current risks (Triglav, Risk Management, 2018).

The group conducts regular stress tests all types of risks and monitors and analyses the potential impact of a stress situation. During the year, the Group and the Company compared risk exposure with risk appetite. In addition to sustainable growth, the Group's objective is to monitor, analyse and find appropriate responses to current and future challenges. Triglav Group aims to strengthen its risk management system and also make business decisions and improve strategic planning. (Triglav, Risk Management, 2018)

The group will face all levels of risks and challenges, including cyber risks, with increased risks expected. The first line of defence consists of business functions. The second line of defence consists of decision-making bodies and business functions that form the risk management system. The third line of defence consists of the internal audit function. Annually, Solvency II is analysed to verify the adequacy of performance

related to risk. (Triglav, Risk Management, 2018) (Figure 2).

SAVA Re:

Sava Re is one of the largest insurance companies in Southeastern Europe. Like Adriatic Slovenica and Zavarovalnica Triglav, Sava Re uses three lines of defence for effective and efficient risk management and clear separation of responsibilities. The first line of defence ensures that risks are reduced and eliminated by carrying out operational risks. The second line of defence comprises three functions, namely the compliance function, the risk management function and the actuarial function. The third line of defence is the internal audit function which is responsible for the effectiveness of risk management (Sava Re, d.d. 2017).

Risk management consists of risk strategy, own risk and Solvency Assessment (ORSA) and first and second line of defence within the risk management process. The Group measures risk through ORSA, stress testing, Solvency II and various risk measures that enable monitoring and measurement of the risk profile. The process of ORSA includes the identification of the risk profile of the company and the adopted standard formula, the stress test, the own assessment and the link between capital management and risk profile. The reason why ORSA is performed is to understand and analyse the changes in the risk profile of the company and the standard formula. ORSA contributes to the company's business strategy and business decisions (Sava Re, d.d. 2017).

The Company uses the standard Solvency formula II for the quantitative assessment of health and non-life underwriting risks. €94.1 million is the amount of non-life underwriting risks to which the Company was exposed in 2017 (Sava Re, d.d. 2017).

Malta is known as a strong partner for financial companies due to its location, economy, competitiveness, market access, infrastructure and lifestyle (Finance Malta, 2018). It is a small island located halfway between Europe and North Africa. As the island

is consistently ranked as one of the best performing economies in Europe, it proves that a country does not have to be big to be prominent. (Finance Malta, 2018). Malta offers investors a safe and transparent business environment to either start or expand. The country has adopted business-friendly policies based on a legal and regulatory framework that is fully compliant with EU law

In recent years, Malta has been able to show positive growth figures and has regularly been among the best performing economies in the EU. Figures from 2017 show that the economy in Malta grew by 6.6%. Growth of 5.8% is forecast for the end of 2018 and 5.1% for 2019 (Finance Malta, 2018). This surplus can be described by the high growth rate of present income, including tax revenues and revenues from the Maltese citizenship programme, which contributed 2.6% to the country's GDP (Finance Malta, 2018).

According to Finance Malta (2018), the number of insurance companies that have been registered in 2017 are 63.

It can be summarised that insurance companies are increasing along the years. The total number of 63 companies includes 8 captives and 15 Protected Cell Companies. Most of these companies, a total of 47 offer Non-Life products. The remaining 16 companies are Life, Reinsurance and Composite insurance companies. Insurance companies sell their products either directly or indirectly. This means they can either sell their products themselves or sell them through intermediaries such as brokers, agents, bancassurance. In 2016, there were €3.84bn. This resulted in a €3.63bn difference in premiums in twelve years (Insurance Europe, 2018)

Malta being a member of the EU and EIOPA, continuously contributes to the development of Solvency II. Pillar II states that national regulators have to ensure that insurance firms take the suitable steps to build an effective system of governance. In 2016, the Solvency II ratios were as follows (Table 3):

MAPFRE Middlesea Insurance (MMS) observes and identifies any material risks the

company might encounter by taking an 'Own Risk and Solvency Assessment (ORSA).' Such result is then broken down into a process to identify, measure, manage, monitor and notify the risk. MMS measures its Solvency Capital Requirement using the standard formula (MMS,2017).

The leading life insurance company in Malta, MAPFRE MSV Life insurance is responsible to ensure that the Risk Management system is effective to determine the company's risk profile and tolerance limits. MMSV bases Risk Management on the three lines of defense model (MMSV, 2017).

Further, the risk governance of GasanMamo Insurance makes part of an integral [Enter Table 4 Here]

part of the risk management framework. This is set up in a way that ensures clear responsibility boundaries, proper segregation of duties and that conflicts of interest are avoided at all levels of the company. The solvency ratio for GasanMamo in 2017 was 234% (GasanMamo, 2017).

For Atlas Group to achieve its objectives, it takes risks and manages them. What the company does is accept volatility in operational profit to make profits in the long term. The BOD and Senior management measures Risk Appetite by assessing the level of risk to be taken, the highest level of risk to be allowed and the level of risk that is intolerable. Such company is registered under the Solvency II regime for group reporting and the Solvency Ratio in 2017 was 241% (Atlas, 2017).

Italy

Italy has the world's eighth-largest economy, made up of small and medium-sized companies producing high-technology and high-quality products. The economy has suffered badly because of the financial crisis, the effects of which have been felt in Italy in recent years, but it now shows the first indications of improvement (Table 4 and 5).

Since the start of 2013, all insurance undertakings have been regulated and supervised by IVASS (Istituto per la Vigilanza sulle

Assicurazioni), which replaced ISVAP (Istituto per la Vigilanza sulle Assicurazioni Private). IVASS is materially involved in supporting changes to Italian regulation to comply with Solvency II regulatory framework. The country risk mostly reflects Italy's real and nominal economic growth prospects, and high financial system risk owing to the difficult conditions in which the Italian financial sector operates. Country risk is related to the factors of economic risk, political risk, financial system risk, and payment culture and rule of law.

Most Italian insurers are large institutional investors in the domestic government and financial sector. These insurers are highly exposed to domestic sovereign credit risk and to domestic financial market volatility, which has been higher than in most European countries in recent years. In addition, the growth and earnings prospects of the Italian insurance industry are correlated with Italy's level of prosperity, fiscal policy and economic policies.

Insurers are still heavily dependent on bonds (77% of the total investment portfolio), even though the shift to alternative investments such as funds and loans is still ongoing. In addition, the adoption of Solvency II has shifted the focus to capital adequacy and optimisation. Insurance companies continued their efforts to improve reporting, controlling and risk management.

For example, Fintech and healthcare represent major disruptions for the insurance sector with business affected recording double digit growth. With the introduction of Solvency II, and the new IVASS Regulation n.24, insurers are now free to choose the most appropriate investment instruments and will need to find the right balance between investments in riskier assets, in order to ensure adequate returns for their clients, and the new strict capital requirements imposed by Solvency II.

To overcome this situation, insurers are undertaking various strategies such as switching to new multiline (hybrid) products, which combine the guarantee of traditional products with the higher returns of unit-linked, while reducing capital absorption.

Insurers are also trying to improve cost management as well as investing in convertible bonds, which benefit from a lighter capital requirement by Solvency II. Rising interest rates should improve life insurers' cash flows, relieving some of the pressure related to reserving.

Poste Italiane Example:

The risk management function of Poste Italiane is separate and independent from other operating units and identifies the different types of risks. It also recommends the necessary risk mitigation measures consistent with the company's risk appetite. The second level of control includes the actuarial department, which coordinates and manages the technical provisions with the analysis of the reinsurance strategy, also applying an appropriate risk management system. The third level of control is assigned to the Internal Auditing department.

The types of risk to which Poste Italiane is usually exposed are interest rate risk, equity risk, real estate risk, spread risk, market risk concentration, currency risk and diversification within the market risk module. From 31 December 2016 to the end of December 2017, total market risk decreased by 3%. However, this indicates that the company should work on reducing its currency, real estate and equity risks as these increased by more than 50% each from 2016 to 2017. In addition, Solvency Capital Requirement increased from €2.7m in 2016 to €3.1m in 2017, reflecting an 11% increase at Solvency Capital Requirement. The minimum capital requirement also increased by 11% from 2016 with the value of €1.3 million to €1.4 million in 2017.

Assicurazioni Generali S.P.A Example:

The Board of Directors is responsible for establishing Assicurazioni Generali S.P.A.'s internal controls and risk management strategies and policies. The Board must also ensure that these controls, strategies and policies are still appropriate, complete, functional and effective from time to time. The Board of Assicurazioni Generali S.P.A. updates its risk management

system annually. Therefore, it looks at the current risks and either ensures that its current risk management system is still appropriate or updates its risk management system accordingly if the risks to which it is exposed have changed.

The internal control and risk management process of Assicurazioni Generali S.P.A. operates according to the following three lines of defence: The heads of the operating departments ensure the correct management of risks and the implementation of controls related to the activities carried out in the respective operating departments. The Group Risk Management, Group Compliance and Actuarial functions continuously monitor the main risks that are not of an operational nature. This means that Group Risk Management, Group Compliance and the actuarial functions take into account the risks that are not acted upon by the heads of the operating departments, which thus ensure effective risk control.

Finally, the group internal audit monitors and assesses the adequacy and efficiency of the Internal Control and Risk Management System.

The Solvency Capital Requirement of Assicurazioni Generali for the financial period of 2016 decreased from €23,222 million to €22,224 million in 2017. Furthermore, its Minimum Capital Requirement also decreased from €18,460 million in 2016 to €17,982 in 2017.

Cyprus

Cyprus, being an EU member state, benefits from a sound legal and regulatory framework.

Insurance/Reinsurance International companies can set up a Cyprus company following a transparent and straightforward application process. The Cyprus insurance industry is highly regulated, with the Cyprus Superintendent of Insurance requiring insurers to submit periodically regulatory returns, some of which should be audited by externally appointed auditors.

Top 10 Insurance Companies in Cyprus:

- EuroLife
- General Insurance of Cyprus
- Commercial General Insurance

- CNP Cyprialife
- Royal Crown Insurance
- Hydra Insurance
- Prime Insurance
- GAP Insurance
- Universal Life Insurance
- Atlantic Insurance

PwC Cyprus CEO Evgenios Evgeniou (2016) said in his speech, "The new legislation is a major challenge for all of us, and especially for the insurance sector, as it brings changes that directly affect the European rules on the solvency of insurance companies.

The Director General of Insurance Association of Cyprus, Ms Stephie Dracos, said: "The central objective of this piece of legislation is to ensure strong governance for insurance companies, *i.e.* to create all the conditions necessary for healthy and modern insurance companies in all aspects. This new framework aims to improve the quality of company audits to make their governance more effective and strengthen entrepreneurship, which will contribute to further economic growth." As speakers pointed out, 'the new institutional framework has brought about the biggest change in the regulatory framework relating to the solvency of the European insurance sector', as it requires companies to submit more information and subjects them to stricter controls. The provisions of the new law create challenges, but they could make the sector easier to understand and assess, which in turn could help overcome the conditions of uncertainty and lack of comparability that characterise the sector.

CypriaLife Examples:

The Company is committed to continuously improving its overall risk management and internal control system and believes that its system is appropriate for the complexity and size of the Company. CNP CypriaLife's risk is predominantly driven by life underwriting risk and market risk, as the solvency capital of the two risks represents 75.29% of the base capital SCR before diversification. Nevertheless, given the diversity

of its products, the company benefits from a diversification of its risks.

The Company is exposed to Pillar 1 risks (market, counterparty default, life underwriting, health underwriting and operational risks) as well as risks not fully covered by Pillar 1, such as strategic, commercial, liquidity, legal, compliance and reputational risks. The Company uses its standard formula to calculate its Pillar 1 risks and revised its normal and stress scenarios in 2016. In 2016, the Company successfully filed Day 1 Quantitative Reporting Templates (QRTs) and quarterly QRTs with the Superintendent of Insurance.

In 2016, the company's capital position was very strong, as the company's own funds increased from approximately €92 million to €133 million at year-end, following the application of Solvency 2 requirements. In addition, Minimum Capital Requirement reached €8.8 million, while Solvency Capital Requirement was €35 million.

CNP CypriaLife has a risk management function and a dedicated Risk Officer, which is responsible for policy development and implementation, as well as for the culture of risk awareness within the business. The RMF also provides key insights into current and future risks. The Company has enhanced its risk management framework to ensure that all risks are effectively managed and measured against a defined risk tolerance in accordance with the Enterprise Risk Management methodology. Risk appetite is integrated with other risk management tools such as the ORSA and stress testing to ensure consistent risk management. They aim to achieve an appropriate balance between capital requirements and resources.

EuroLife Examples:

The company evaluates its position in relation to various risks to which it is or may be exposed through a Risk Register. This type of assessment covers all types of risks, including less quantifiable risks, and aims to show the risk profile of the company, taking into account its risk appetite. It is therefore based on both

qualitative and quantitative criteria, as well as on empirical value and expert judgements.

Its Risk Committee comprises a Chairman who is an independent Non-Executive Director and reports to the Board on the activities of the Risk Committee. It also comprises three Non-Executive Directors, two of whom are independent. The purpose of this Committee is to review, on behalf of the Board, the overall risk profile of the Company including performance against risk appetite for all risk types and to ensure that both the risk profile and risk appetite remain appropriate for the Company. In order to strengthen internal controls, the Company has established a risk management, actuarial, compliance and internal audit function in accordance with Solvency 2 requirements..

At the end of December 2017, the company's solvency position was 219%, well above the company's risk appetite limit. The solvency capital requirement at 31 December 2017 was approximately €64 million, an increase of €6 million compared to the previous year. The minimum solvency capital requirement increased to approximately €16 million as at 31 December 2017 compared to the previous year's figure of €14 million.

Similar to many other companies, EuroLife is exposed to market risk, equity risk, real estate risk, etc. However, the main types of risks to which they are exposed are:

Credit Risk: The company ensures that it does not transact with low credit quality customers to ensure high credit quality for both unit-linked and other assets. In addition, the Company monitors past due creditors at an individual and aggregate level and ensures that collections are tracked against previous months.

Liquidity Risk: As the Company seeks to ensure limited appetite for liquidity risk, liquidity ratios are calculated on a regular basis.

Operational Risk: Once risks are identified and assessed, appropriate action plans are put in place to mitigate these risks and they are continuously monitored to keep these risks up to date.

Croatia

The Croatian Insurance Bureau was established in 1992 as National Green Card Bureau for the Republic of Croatia. In the last 20 years its tasks have expanded considerably and today the CIB fulfils the role of; the association Insurance Companies in Croatia, the Guarantee Fund, the information centre as well as the Compensation Body.

A total of 20 insurers are active in Croatian Insurance Industry, with five focusing exclusively on life insurance, seven on non-life insurance and the remaining eight underwriting both life and non-life risks. In 2017, Croatia Osiguranje D.D dominated the market with a market share of 28.91% and gross premiums written of €350.9 million. Allianz Zagreb D.D and Euroherc Osiguranje D.D positioned themselves behind CO with market shares of 12.66% and 10.11% respectively.

Risk Management is a prominent term in the Croatian Insurance Act. The act makes reference to the rules of risk management and emphasizes that companies adhere to them. Applications from persons trying to obtain a qualifying holding in an insurance company may be rejected if a person and his or her actions in accordance with the rules of risk management could harm the company. The Act also lists what is considered a breach of the risk management rules and what action the regulator may take if an insurance undertaking is deemed to be in breach of those rules. Apart from this, the Act contains a chapter specifically on risk management, listing reinsurance and the rules for calculating adequate capital and solvency.

According to a CIB report, Gross Premiums Written reached 1.2 billion in 2017, a significant increase of 3.4% compared to 2016, but total premiums are still a very insignificant part of Croatia's total GDP. At 2.6%, this figure is about a third of the European Union average (7.6%) and half of Slovenia's (5%).

Life insurance stands at a third of non-life business with €394 million in life premiums written for €819 million of non-life premiums. Motor Vehicle liability leads the non-life business followed by Land vehicles and Fire &

Natural Forces. The biggest of Croatian insurers, Croatia Osiguranje, was founded in 1884 and currently employs over 2,600 employees. With 17 branches and €150 billion in assets it is the leader in the Croatian insurance market, but one has to note that the Croatian government was the majority shareholder until 2014.

In 2015, pre Solvency II, Croatia Osiguranje reported a return on equity of 4.85%. In 2016, the implementation of the Solvency II had a positive impact on the firm. It reported a return of equity of 7.12% in 2016 and 9.17% in 2017, increases of 2.27 and 2.05 percentage points respectively.

The second largest insurer is Allainz; an international financial services provider, who has been established in Croatia since 1999. Allianz has formed a strategic partnership with Zagreb Bank to provide the mandatory and voluntary pension funds and now control about 40% of the market in pensions.

Spain

Spain is considered a well-developed country, as it was severely affected by the global economic downturn. Prior to 2008, the country Gross Domestic Product (GDP), had experienced high growth rates. This growth was fueled by the construction sector and also by the availability of cheap labour. Spain has recovered quite well from the recession and is in fact the fifth largest economy in Europe and the fourth largest in the Eurozone; according to nominal GDP statistics. The country is a member of the European Union and also a member of the World Trade Organisation. Spain has a mixed capitalist economy and has performed quite well in recent years. Spain is also classified as a high income economy as it is listed 25th in the United Nations Human Development Index. In terms of GDP per capita, Spain is ranked 28th and is thus considered a high human development country. The Economist stated that Spain has the 10th highest quality of life in the world, which is considered a very good ranking.

The organisation of Insurers and Reinsurers in Spain is known as UNESPA. Insurance market in Spain is characterised by

the high degree of competition. The premium volume on the Spanish insurance market amounted to €63.41 billion in 2017, which is 0.7% lower than the previous year due to the decline of -5.6% in the life insurance segment which was greatly affected by the persistence of a low interest rate environment, among others (Fundacion MAPFRE, 2018). The Spanish insurance companies invested €292,064 billion by the end of 2017, representing an increase of 1.4% over 2016. (Fundacion MAPFRE, 2018).

By the end of 2017, the number of insurance companies registered in the Administrative Register of Insurance Companies totalled to 228 firms. From studies done by Fundacion MAPFRE, it shows that the leading insurance company in Spain, year 2017, was VidaCaixa. It led the insurance group with total premium volume of €9.666 billion and a market share of 15.2%. Following VidaCaixa are MAPRE and Mutua Madrileña (Fundacion MAPFRE, 2018).

Risk Management is very important and useful because of the benefits it provides to the business. It prevents impact of risks that can lead to threat to the objectives of the company. Risk management is becoming increasingly complex and necessary in companies, especially those around the world (Toneto, 2017). In Spain, the preliminary draft law on the organization, supervision and solvency of insurance and reinsurance companies was recently published, introducing important developments in the current legislation. This draft will eventually be implemented in Spanish Law Solvency II Directive 2009/138/ EC (HoganLovells, 2014).

VidaCaixa is a company wholly owned by its sole shareholder CaixaBank S.A. (VisaCaixa, 2018). Risk quantification under Solvency II allows customers to observe significant risks to which VidaCaixa is exposed by evaluating the Solvency Capital Requirement or the SCR. The identification, assessment and documentation of each risk map is reviewed and updated at least once a year (VidaCaixa, 2018).

After the Solvency II Regulation has entered into force, the MAPFRE Group calculates the Solvency Capital Requirement

(SCR) in line with the requirements of the standard formula. For the major risk categories, this total SCR is considered a good tool for measuring exposure to risk. In 2017, the Non-Life underwriting and market risk accounted for 74.8% of the SCR risks. The solvency ratio for MAPFRE SA in 2016 and 2017 were 209.8% and 200.2% respectively (MAPFRE S.A, 2018).

Zurich Insurance Company faces a number of risks including: Underwriting risks, Market risk, Credit Risk, Liquidity Risk, Operational risk, Pension risk, expense risk, strategic risk and Reputational risk. The Risk policy sets out requirements, roles and responsibilities, to monitor and report procedures for each type of risk and outlines the parameters for acceptable risk-taking. As at 31st December 2017, the available financial resources were €2,615m and the SCR ration was 135%. Since Solvency II framework came into effect, the Company is required to hold economic capital to cover the impact of a 1 in 200 years' adverse event of adverse advents. (Zurich Insurance plc, 2018).

METHOD

Population of the study

For a more detailed account of risk management, various companies in eight countries Euro-Mediterranean countries have been selected to be studied in more detail. The countries selected are Greece, France, Slovenia, Italy, Cyprus, Croatia, Malta and Spain. The most prominent companies were selected from the above countries. For example, MSV life was selected as it is the leading life insurance company here in Malta. Similarly, both Italian and Cypriot insurance companies have been selected i.e. Assicurazione Generali, Poste Italiane, Cyprialife and EuroLife which top the rankings in Italy and Cyprus respectively as indicated in the above Literature Review Chapter.

As there is a limited number of insurance companies in Malta, the three insurance companies were randomly selected to avoid bias in the sample. In addition, the Croatian

companies (Croatia Osiguranje D.D and Allianz Zagreb D.D.) were selected by examining the highest market share in the Croatian insurance industry. Therefore, it can be clearly stated that the selected companies were carefully and judiciously chosen to explain the regulation in the insurance industry across Europe.

Data Collection

For the purpose of this study, secondary data was mainly used as a research source. This involved researching data that had been previously collected and was accessible to researchers. This secondary research provided information on the countries under discussion Euro Mediterranean, information on the leading insurance companies in these countries and their respective impact on risk management, especially after the application of the Solvency Directive II. Secondary data was used as the main source for this study as the financial statements and reports of the respective insurance companies were made publicly available.

Data Analysis

With the help of secondary research, it was deduced that the Return on equity and return on assets ratios should be used to calculate the results of the respective insurance companies. The Return on equity ratio evaluates how efficiently a company manages the money that its shareholders have given it. The Return on assets ratio analyses how efficiently a company's management uses its assets to generate income.

In order to assess the impact of risk management on the performance of Euro Mediterranean Insurance companies, the Return on equity and Return on assets were calculated for the years before and after the application of the Solvency II Directive.

Limitations of study

The limitation of this study is that only secondary data were used. However, on the other hand, the information regarding the impact of the Solvency II Directive on the

respective insurance companies was calculated correctly using appropriate secondary data.

RESULTS

Return on equity (ROE) and return on assets (ROA) were used to calculate company performance before and after the implementation of Solvency II.

Spain: an analysis of MAPFRE Group in Spain showed that ROE was 8% in 2015, increased to 8.8% in 2016 after the implementation of Solvency II and decreased again to 7.9% in 2017. This shows that company performance remained relatively constant before and after the implementation of the Directive. Analyzing Zurich Insurance Company in Spain showed different results. ROE was at a low 6.4% in 2015, rose to 11.8% in 2016 and then fell to 10.9% in 2017. Common to both companies is a steep increase after the implementation of Solvency II in 2016 and a subsequent decrease in 2017. While the ROE of the MAPFRE group fell back to pre-Solvency II levels, Zurich Insurance Company managed to improve its performance in a sustainable manner, reaching 4.5 percentage points above 2015 levels.

France: Looking at Aviva in France, it can be noted that the ROA was 2.48% at the start. In 2016, after the implementation of Solvency II, the ROA increased to 3.15%. One year after the implementation of Solvency II, we see that the ROA fell again, to 3.03%, but higher than the values before Solvency II.

Malta: In Malta, almost all the firms studied showed the same pattern. For both Atlas Group and Gasan Mamo it can be noted that ROA fell by about two percentage points from 2015 to 2017. Atlas Group started with an ROA of 3.79% in 2015 and fell to 2.25% in 2016 and 1.45% in 2017, less than half of its starting value in 2015. GasanMamo started with a slightly lower ROA of 3.05% in 2015, fell to 2.18% in 2016, and fell further to 1.48% in 2017. In contrast, when examining MAPFRE Middlesea and MAPFRE MSV Life, both of which are part of the MAPFRE group, significant differences can be seen. Middlesea, MAPFRE's non-life

business in Malta, started with an ROA of 3.72% before Solvency II, fell to 3.3% in 2016 but recovered to an impressive ROA of 5.82% in 2017. MSV Life started at 2.74% in 2015, also fell to 1.88% in 2016, but then followed Middlesea and rose to 2.37% in 2017. One can only guess if further growth will be realised.

Slovenia: The analysis of three insurance companies in Slovenia ROE shows that between 2015 and 2017 there was a decrease in the solvency ratio in %. Adriatic Slovenica : Before the implementation of the new directive, which came into force at the beginning of 2016, stress tests showed that the insurance company was already safe due to proper risk controls. The available capital of AS at the end of 2015 significantly exceeded the required minimum of Solvency I. Comparison of the return on equity of 2015 (Solvency I) with 2016 and 2017 (Solvency II): in 2015, ROE was 13.7%. Capital adequacy remained at a high level in line with Solvency 1 as the capital adequacy index reached 172.0 in 2015. In 2016, ROE was 12.1% and in 2017 it was 11.9%. In SavaRe when comparing the return on equity of 2015 (Solvency I) at SavaRe with 2016 and 2017 (Solvency II), it can be noted that ROE was 12.0% in 2015. Capital adequacy remained at a high level in line with Solvency 1 as the capital adequacy index reached 172.0 in 2015. In 2016, ROE was 11.3% and in 2017 it was 10.3% and the projected ROE of 2018 is 11%. In 2017-2019, Sava Re's target is to achieve a growth of 10% and a net profit of maximum 40% of the Sava Re Group. The ROA of SavaRe is 1.7% in 2017.

Triglav: From the diagram below it can be noted that the ROE of Triglav Group decreased each year in %.

In 2017, a more conservative approach was introduced. In relation to the Solvency II Regulation the methodology used in 2017 shows a decrease in the solvency ratio.

Italy: The analysis of two insurance companies in Italy shows that there was a decrease in % from ROE. Comparing Poste Italiane and Assicurazioni Generali shows that in Poste Italiane there was a decrease in % of ROE between 2015 and 2017, with 30% and

28% respectively. In Poste Italiane, there was a slight decrease in % from 14% in 2015 to 13.4% in 2017.

Cyprus: in the analysis of the insurance company EuroLife, there was also a decrease at ROE. The ROE of 2017 is 13.8%, which is very similar to the ROE of Italy and Slovenia.

Croatia: In Croatia, between 2016 and 2017, the insurance company Croatia Osiguranje recorded an increase in return on equity of 7.12% and 9.17% respectively compared to the previously mentioned insurance companies.

CONCLUSION

In this paper, the impact of solvency II and risk management on the performance of Euro Mediterranean countries is analysed. For this purpose, the economic situation of 8 Euro Mediterranean countries has been analysed and the ROA and ROE have been calculated to analyze the effect of solvency II directive.

The ROA and ROE ratios were used to evaluate performance as both measure return on investment and although they appear similar, they do not provide the same measurement. However, this means that when they are evaluated together, they provide a clearer representation of a company's performance (Investopedia, 2018). Return on equity measures whether the investor's money is being well managed by the company's management. Return on assets is a measure of how much profit the company makes on each dollar of assets.

While analysing the above results, it was found that most of the countries have a decline of ROE % after Solvency II. This does not give a positive picture as this shows that under solvency II companies have been using investors money less adequately than in previous years.

FUTURE RESEARCH

Further research on the topic could be conducted to evaluate the actual risk management practices before and after Solvency II. This would explore the question of whether

the above changes are due to the general economic situation of countries or whether this is a result of the singular changes that each company has made to its risk management processes.

REFERENCES

- A guide to insurance in France. (n.d.). Retrieved from https://www.expatica.com/fr/finance/A-guide-to-insurance-in-France_101160.html
- A. (2017). Solvency and Financial Condition Report For 2017. Retrieved November 13, 2018, from [https://www.as-skupina.si/documents/442360/458067/Solvency and Financial Condition Report for 2017/31e8f665-ae27-4955-aa3c-86c6ebaf4e0f](https://www.as-skupina.si/documents/442360/458067/Solvency%20and%20Financial%20Condition%20Report%20for%202017/31e8f665-ae27-4955-aa3c-86c6ebaf4e0f)
- Ahmed, N., Ahmed, Z., & Usman, A. (2011). Determinants of performance: A case of life insurance sector of Pakistan. *International Research Journal of Finance and Economics*, 61(1), 123-128.
- Allianz Risk Barometer. (2018). [pdf] Allianz. Available at: https://www.agcs.allianz.com/assets/PDFs/Reports/Allianz_Risk_Barometer_2018_APP_ENDIX.pdf
- Allianz.com. (2018). At a glance. [online] Available at: https://www.allianz.com/en_GB/about-us/who-we-are/at-a-glance.html
- American International Group Inc. (AIG) (n.d.). Retrieved from <https://www.aig.com.gr/about-us>
- Ania.it. (2015). [online] Available at: <http://www.ania.it/export/sites/default/it/pubblicazioni/monografie-e-interventi/Standard-Poors-Review-2015-del-settore-assicurativo-Italiano-Rami-Danni-e-Vita.pdf>
- Ania.it. (2015). Italy's Property/Casualty Sector Carries A Moderate Insurance Industry And Country Risk Assessment. [online] Available at: <http://www.ania.it/export/sites/default/it/pubblicazioni/monografie-e-interventi/Standard-Poors-Review-2015-del-settore-assicurativo-Italiano-Rami-Danni-e-Vita.pdf>
- Annual Report (2017). Retrieved November 13, 2018, from [https://www.as-skupina.si/documents/442360/458067/Letno poročilo ENG 2017/5607518a-6bb1-40f7-8160-899e6338a7e0](https://www.as-skupina.si/documents/442360/458067/Letno%20poro%C4%87ilo%20ENG%202017/5607518a-6bb1-40f7-8160-899e6338a7e0)
- AXA Insurance Greece (n.d.) Retrieved from <https://www.axa.gr/el/axa/axa-greece-insurance/>
- Challenges of Solvency II in Croatian Insurance Market Retrieved from https://web.math.pmf.unizg.hr/cqd/files/2012/CQD2012_Solvency2Cro_IS.pdf
- Chepkemoi, J. (2017). The Biggest Insurance Groups In Italy. [online] WorldAtlas. Available at: <https://www.worldatlas.com/articles/the-biggest-insurance-groups-in-italy.html>
- Cnpcyprialife.com. (2017). [online] Available at: https://www.cnpcyprialife.com/images/media/filename_el/1audited%20SFCR%20CNP%20CYPRIALIFE_.pdf
- Commission, E. (2018, November). European Economic Forecast. Retrieved November 26, 2018, from https://g8fip1kplyr33r3krz5b97d1-wpengine.netdna-ssl.com/wp-content/uploads/2018/11/ECForecast_Autumn18_Light2.pdf
- Companyreporting.com. (n.d.). [online] Available at: https://www.companyreporting.com/sites/default/files/annual-report-index/assicurazioni_generali_spa-annual-report-2015.pdf
- Croatia Osiguranje Retrieved from <https://www.crosig.hr/hr/>
- Croatian Insurance Bureau Retrieved from <https://www.huo.hr/eng/>
- Cyprus Insurance. (n.d.). Cyprus Insurance Companies. [online] Available at: <https://www.cyprusinsurance.com>
- Eurolife.com.cy. (2018). [online] Available at: <https://www.eurolife.com.cy/globalassets/home/eurolife/2017-solvency-and-financial-condition-report--website.pdf>
- Gan.fr. (n.d.). Gan Assurances, un pionnier sur le marché français. Retrieved from <https://www.gan.fr/presentation-de-l-entreprise>
- Generali. (n.d.). Financial Data - Generali Group. [online] Available at: <https://www.generali.com/investors/financiale-highlights>
- Generali.sk. (2018). [online] Available at: https://www.generali.sk/files/o_nas/generali_annual-report_2017_final.pdf
- Getting The Deal Through. (2018). Italy Risk & Compliance Management – Getting The Deal Through – GTDT. [online] Available at: <https://gettingthedealthrough.com/area/96/jurisdiction/15/risk-compliance-management-italy/>

- Groupe Aviva. (n.d.). Retrieved from <https://www.aviva.fr/aviva-france/nous-connaitre/groupe-aviva.html>
- Gurufocus.com. (n.d.). Assicurazioni Generali ROA % (ARZGF). [online] Available at: <https://www.gurufocus.com/term/ROA/ARZGF/ROA-/Assicurazioni-Generali>
- Heritage.org. (2018). France Economy: Facts, Population, GDP, Unemployment, Business, Trade. [online] Available at: <https://www.heritage.org/index/country/france>
- Integratedreport2016.generali.com. (n.d.). Balance Sheet | Generali Financial Report 2016. [online] Available at: <http://integratedreport2016.generali.com/en/content/balance-sheet#start>
- Integratedreport2016.generali.com. (n.d.). Income Statement | Generali Financial Report 2016. [online] Available at: <http://integratedreport2016.generali.com/en/content/income-statement#start>
- Integratedreport2017.generali.com. (n.d.). Solvency Position | Generali AR 2017. [online] Available at: <http://integratedreport2017.generali.com/en/risk-report/solvency-position>
- Poste.it. (2018). [online] Available at: https://www.poste.it/files/1476464031029/SFCR-Gruppo-PV_2017.pdf
- Posteitaliane.it. (2016). [online] Available at: <https://www.posteitaliane.it/files/1473807829991/annual-report-2015-eng.pdf>
- Posteitaliane.it. (2017). [online] Available at: <https://www.posteitaliane.it/files/1476466517020/Annual-Report-2016.pdf>
- Posteitaliane.it. (2018). [online] Available at: <https://www.posteitaliane.it/files/1476480224631/annual-report-2017.pdf>
- PwC. (n.d.). The impact of new European legislation on the insurance sector. [online] Available at: <https://www.pwc.com/cy/en/press-releases/2016/the-impact-of-new-european-legislation-on-the-insurance-sector.html>
- T. (2017). Risk Management. Retrieved November 16, 2018, from <https://annualreport.triglav.eu/storage/doc/201803/risk-management.pdf>
- T. (2018, March). Investor Presentation 2017 Results. Retrieved November 16, 2018, from http://www.triglav.eu/c020eeca-fb8f-47bd-a8c5-b5003019f6ba/Triglav_Group_Investor_presentation_2017_.pdf?MOD=AJPERES&C
- Pwc.com. (n.d.). [online] Available at: <https://www.pwc.com/it/it/publications/italian-insurance-market/doc/pwc-the-Italian-insurance-market.pdf>
- Pwc.com.cy. (2016). [online] Available at: <https://www.pwc.com/cy/en/publications/assets/delivering-excellence-to-the-insurance-sector-december-2016.pdf>
- Rouse, M. (n.d.). What is secondary data? - Definition from WhatIs.com. [online] WhatIs.com. Available at: <https://whatis.techtarget.com/definition/secondary-data>
- S. (2016, April 6). Audited Annual Report Of The Sava Re Group And Pozavarovalnica Sava D.D. 2015. Retrieved November 22, 2018, from https://www.sava-re.si/media/objave/dokumenti/2016/Translation_of_the_Audited_Annual_Report_of_the_Sava_Re_Group_and_Pozavarovalnica_Sava_d_d_2015.pdf
- S. (2017). Sava Re Group Solvency And Financial Condition Report 2017. Retrieved November 20, 2018, from https://www.sava-re.si/media/objave/dokumenti/2018/Sava_Re_Group_Solvency_and_financial_condition_report_2017_Group_SFRCR_.pdf
- S. (2017, December 22). Sava Re Group And Sava Re, D.D. 2018 Plan. Retrieved November 20, 2018, from https://www.sava-re.si/media/objave/dokumenti/2017/Sava_Re_Group_and_Sava_Re_Annual_Plan_2018.pdf
- Sava Re Group 1-3/2017 Results. (2017, May 16). Retrieved November 22, 2018, from https://www.sava-re.si/media/objave/dokumenti/2017/1_3_2017_Results_Sava_Re_Group_webcast_16_6_2017.pdf
- Solvency II and the functions of the Actuary Retrieved from <http://www.dani-osiguranja.huo.hr/wp-content/uploads/2014/11/Baldauf-Croatian-Insurance-Days.pdf>
- ACHEID=c020eeca-fb8f-47bd-a8c5-b5003019f6ba
- The ERGO Group (n.d.) Retrieved from <https://www.ergohellas.gr/pages/company/ergo-group>
- Thelawreviews.co.uk. (2017). Italy - The Insurance and Reinsurance Law Review - Edition 5 - The Law Reviews. [online] Available at: <https://thelawreviews.co.uk/edition/the->

insurance-and-reinsurance-law-review-edition-5/1141042/italy What is Research?(n.d.) [online] Available at:
<https://www.hampshire.edu/dof/what-is-research>

Table 1. Total number of insurers in 2017 and top insurance companies for 8 countries

Country	Total Number of Insurers in 2017	Top Insurance Companies
Spain	227	VidaCaixa Zurich
France	267	MAPFRE Agence Eaton Générale Assurance GMF Assurance AVIVA
Italy	103	GAN Assurance Assicurazioni Generali Poste Italiane
Greece	42	ERGO Insurance Co. Alliance Hellas General Insurance Co. Å AXA Insurance PLC AIG Insurance
Cyprus	33	CNP Cyprialife Eurolife
Slovenia	14	Adriatic Slovenica Triglav Sava Re
Croatia	20	
Malta	11	MAPFRE Middlesea MAPFRE MSV Life Atlas Group Gasamamo Insurance

Source: Authors own compiled data

Table 2. Decrease in Premiums from 2011 to 2016

GR	2011	2012	2013	2014	2014	2016
Life Premium €m	2155	1931	1675	1878	1799	1908
Non-life premiums €m	2711	2303	2086	1856	1717	1613
Health premiums €m	19	19	20	25	24	173
Life benefits paid €m	1865	2114	1750	1517	1600	1688
Non-life claims paid €m	1073	949	792	761	672	672
Investments portfolio €m	10432	11024	12867	12024	12867	13300
Penetration %	2.36	2.26	2.09	2.11	2.01	2.1
Density €	439	390	344	344	326	343

Source: Insurance Europe, *Decrease in Premiums from 2011 to 2016*. 2021, Statistical Analysis, Insurance Europe, Belgium

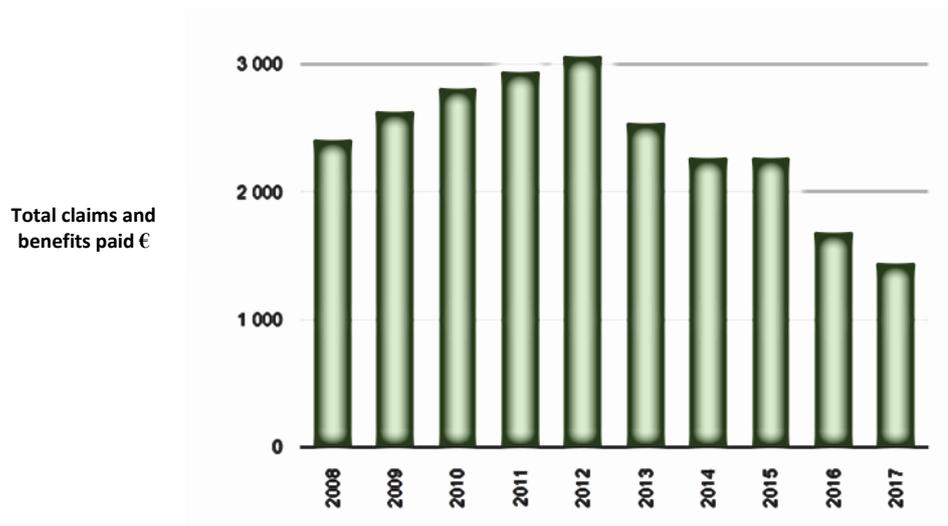


Figure 1. Total Claims and Benefits paid (€). Source: Insurance Europe, *Total Claims and Benefits paid (€)*, 2021, Statistical Analysis, Insurance Europe, Belgium

Table 3. Solvency II Ratios

	Minimum	Maximum	Average
General Insurers	89%	524%	218%
Long-term Insurers	152%	508%	304%
Pure reinsurers	183%	508%	353%

Source: Data from Icon Finance Malta (2016) *Solvency II ratios*. ICON

Table 4. Top 10 Italian Insurance Companies

Rank	Company	Headquarter	Premiums (€ mil.)
1	Assicurazioni Generali	Trieste	62,535
2	Unipol (UnipolSai and other subsidiaries)	Bologna	16,673
3	Poste italiane (Poste Vita and Poste Assicura)	Rome	13,244
4	Intesa Sanpaolo (Intesa Sanpaolo Vita)	Turin	11,948
5	Allianz (Allianz S.p.A. only)	Trieste	7,296
6	Banca Mediolanum	Milan	4,596
7	Cattolica Assicurazioni	Verona	4,221
8	BNP Paribas's Italian subsidiary	Paris	4,174
9	Reale Mutua Assicurazioni	Turin	3,539
10	CNP Assurances–UniCredit (CNP UniCredit Vita)	Milan	2,562

Source: Author's Compilation

Table 5. The Italian Insurance Market

€ million	FY12	FY13	FY14	FY15	FY16
Gross written premiums	105,128	118,787	143,318	146,951	134,209
Change in reserves	(9,540)	(29,174)	(59,579)	(52,844)	(48,559)
Incurred claims	(100,815)	(89,188)	(85,778)	(91,219)	(82,936)
General expenses	(11,871)	(11,971)	(12,411)	(12,672)	(12,614)
Investment Income	26,989	19,611	21,866	17,172	17,705
Other technical income (charges)	(885)	(930)	(908)	(987)	(926)
Technical result	9,006	7,134	6,508	6,401	6,879
Reinsurance result	925	(403)	(217)	(98)	(288)
Net technical Result	9,931	6,731	6,291	6,303	6,591

Source: Data from PwC., 'The Italian Insurance Market, 2012/2016 Technical Results PwC Analysis on ANIA data' *PwC Report* (PricewaterhouseCoopers Advisory SpA)

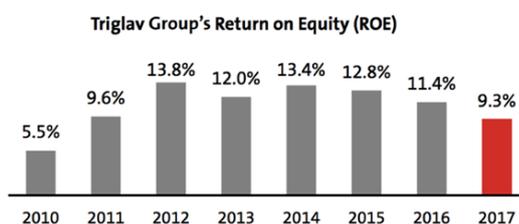


Figure 2. Triglav Group's Return on Equity. Source: Triglav, *Financial Highlights*, 2018 Statistical Analysis, The Triglav Group, Slovenia