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THE INSURANCE SECTOR DURING AN ECONOMIC CRISIS

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1. INTRODUCTION

When I was considering the wide range of options regarding the topic for my Thesis, it was certain that it will have some connection to my current workplace. During my internship, I had the chance to join a subsidiary of Generali, called Roar. The time spent there made me learn a lot about the insurance industry and I concluded that the best idea would be to include it in my Thesis. Before the outbreak of the COVID-19 in Europe, I have already decided that I want to examine how the sector is affected by an economic crisis. Since I have started writing my Thesis, the COVID-19 threat in these days, makes it still uncertain how will this pandemic affect the economy and the insurance business as well, the events support the relevance of the topic. The aim of my Thesis is to introduce the reader what are the characteristics of an economic crisis, what factors could contribute to generate one and what are its macroeconomic effects. Afterwards, my focus will be on the insurance sector during an economic crisis. In this part I will use the data of the 2008 world crisis through examples of an insurance company, Generali, and Hungary compared to other European countries. In the following section I present the results of my primary search on how the crisis affected people in 2008 and 2020, so far and on their attitude towards insurance products. In the final section with the method of the S.W.O.T. analysis I summarize the potential outlook of the insurance sector.

2. METHODOLOGY

2.1 Literature overview

I searched for publications about the characteristics of economic and financial crisis amongst the OECD articles. Furthermore, I looked for analyzes published by leasing economists about the causes of the 2008 crisis. Annual reports of Geneali in 2008 and 2009 were used to present, how the crisis affected an insurance company. Afterwards to introduce how did the crisis affect the Hungarian insurance sector compared to other European countries the report of MNB was used.

2.2. Primary research

I constructed a questionnaire to examine how the 2008 and 2020 crisis affected people. The responders also had to answer the question what type of insurances they had back in 2008 and this was compared to the current situation, which gives an insight into the trends of the consumers' attitude over the years. The questionnaire was spread through social media in April and early May. Neither the age nor occupation categories were defined to whom the questionnaire was sent, as I was hoping that sufficient number of responses would arrive from each group. I have received over ninety responses online. However, most of the answers came from young adults, who were under 24, in 2008 and most of them is still a student. The responders were not asked about where do they live. Therefore, the research is not representative. Despite the fact that the survey was not representative, the answers were worth to analyse, and it revealed a lot about the situation of the people. The survey could be representative if the responders would be asked about their place of living and the age group of them would be balanced. This could be possible if the survey would be distributed through e-mail. The questions were asked in Hungarian, for the sake of getting as many answers as possible. I present the results as percent of all or sub-group of the responders.

2.2. S.W.O.T. analysis

I examined the possible effects of COVID-19 pandemic on the insurance sector, assuming, that the virus will not affect the whole industry very seriously for the upcoming years. S.W.O.T. is a widely used strategic planning technique applicable to any business operation. It is designed for preliminary stages of decision making and for evaluation of the strategic positions.

I prepared S.W.O.T. analysis to overview the strengths, weaknesses, opportunities, and threats of the insurance industry in the coming years.

3. ECONOMIC CRISES

3.1. Economic crises in general

Every person at least once in his lifetime come across this expression in the developed societies. Although, a lot fewer of them know what an economic crisis exactly means. Economists are considering an economic crisis when there is a significant amount of deterioration in one or several countries' economies. Furthermore, the asset prices experience a sudden steep fall regarding their market value, and a shortage of liquidity appears among the financial institutions. During this time, the given nation/nations GDP, employment level, economic growth is representing a negative tendency in other words it declines. This kind of contraction of GDP created the term: "Economic downturn". This downturn has several consequences, such as the decline of property prices or the demand for credits, the plummet of stock prices, unemployment rate rises, and overall, the companies invest less, or they might even go bankrupt. These are the main reasons for recession to occur. An economic crisis to become recession must maintain the contraction of GDP for two consecutive quarters. Most of the economists believe and it is also widely acknowledged that recession is part of the economic phases. Handling it properly is crucial otherwise it can transform to depression, which is much more severe than recession. This adds up a simple "timeline", that first there needs to be an economic crisis, followed by recession, then the depression occurs (Kenton, 2019).

3.2. Financial crises vs economic crises

Since in the following chapters I will examine the insurance sector during an economic crisis, it seems reasonable to highlight the differences in regards to a financial crisis. The two expressions are similar, they are distinctive. The insurance industry is part of the financial sector and is more exposed to financial turbulences.

In the case of a financial crisis, the issue occurs in the finance sector or in the banking sector. The parties of the finance and banking sectors are the currency market, banks, capital markets, etc. During the crisis, asset prices experience a sudden steep fall, liquidity shortage appears among the investors, financial institutions and neither consumers nor businesses can pay their debts anymore. The so-called "bank run" occurs, when a huge amount of people want to withdraw concurrently their deposits or funds mostly from banks and from other financial institutions, as they fear that the price of their assets will decline. Another type of financial crisis is the speculative bubble, which if bursts, it can cause serious damage. Currency crisis, crash in the stock market and "Sovereign Default" can also occur, which is the failure of repayments of some countries' governments to the lending nation(s). A financial crisis can be worldwide but also sometimes it is only limited to smaller regions or banks only. (Kenton, 2019)

The key takeaway is that, if a financial crisis lasts long it will affect the macroeconomics and it will transform into an economic crisis.

Many economists examined this topic, e.g. Bussière, et al. 2013, Blankenburg et al. 2009, Allen & Carletti 2010, Helleiner 2011, van Gool & Pearson 2014, Junankar 2011, Antolin & Stewart 2009.

3.3. The 2008 Economic crisis

In 2008 a unique marvel shook the whole financial world and highlighted problems that were never seen before. The 2008 economic crises rooted in the U.S. subprime mortgage market and affected the whole world's financial situation and almost every people's lives around the globe. Since the Great Depression, this is considered the most severe economic crisis by many well-known economists. In most of the advanced countries, the crisis was followed by massive government interventions, fiscal interventions and the support of many financial institutions by the central bank(s). It highlighted many key points, like the importance of international transmission channels of economic disturbances, and the need of an efficient policy-making response for large economic shocks of dysfunctional financial markets and cross-country linkages. (Bussière, Imbs, Kollmann and Rancière, 2020) How did the situation elevate to a worldwide level? What were the main causes of the situation? How did it look like in practice? What does the aftermath teach us? In the following part I will examine first the macroeconomic factors, then the financial ones which led to the crisis. Since the crisis rooted from U.S.A, it will be mainly introduced from that perspective.

3.4. Macroeconomic factors

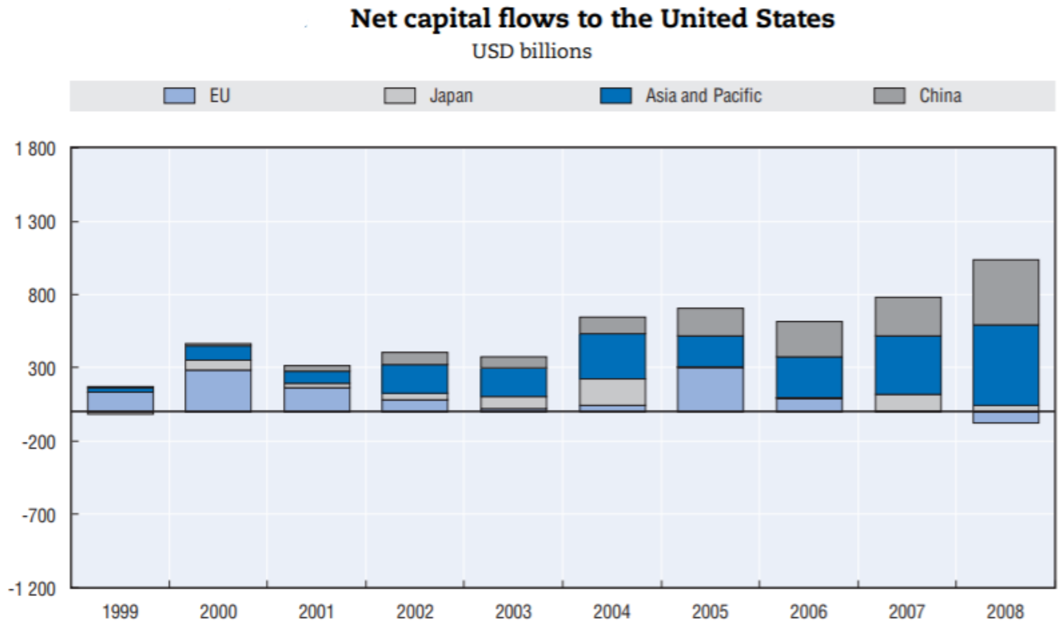
Policy rates and credits

The decline of the short-term interest rates was one of the first fore sign of the crisis, which was affected by several factors. The oldest one reaches back to 1990, when the central banks began to focus on creating policies, which regulated inflation. "Taylor rules model represented perfectly, that the interest rate as a function of the deviation from targeted inflation and the output gap served well in empirically describing the behavior of central banks" (Ramskogler, 2015).

During this period, the disintegration of the Soviet Union and the increasing measure of Chinese economic integration to the world, led to a positive labor shock worldwide. Since the bargaining power of the labor unions in the industrial markets decreased, this combination resulted in downward pressure, among the wages and prices. Besides, the developments in the IT sector helped the reduced pressure in prices and increased productivity. All these events together are the so-called "Great Moderation", which enabled central banks to cut interest rates even further. While a clear correlation between expansionary monetary policies and financial leverage could not be verified (Merrouche and Nier, 2010; Dokko et al., 2011), the likely contributor to the substantial increase in wholesale funding was low policy rates which were observed in the banking sector. As wholesale funding is rather information-sensitive, as a result, it becomes more unstable during a crisis. The jump in wholesale funding has made the financial system much more vulnerable, especially among US investment banks which relied on wholesale markets for up to a quarter of their funding.

The direction of international capital flows and their effects

It is certain, that allocative investor decisions are formed by long-run interest rates, policy rates only determine the expectations about them. The long-run interest rates are affected by international capital flows, which generated a downward pressure. China’s gradual opening was made up by export-oriented growth and managed exchange rate, as a result it ended in an accumulation of essential foreign reserves. Meanwhile a large Current Account crisis across South-East Asia occurred, from accumulating foreign reserves and the IMF had to intervene with economic adjustment programmes. “Historically, it can be shown that IMF programs trigger an accumulation of foreign reserves in the affected economies” (Bird and Mandilaras, 2011). “One possible reason for this is that foreign reserves are one of the few robust indicators that reduce the propensity and severity of financial crises” (Frankel and Saravelos, 2010). This was also a trigger during the 2008 global economic crisis. Consequently, current accounts of Asian (and OPEC) economies were recycled back into Western financial markets (Blundell-Wignall and Atkinson, 2008). If a country accumulates such foreign reserves, it will experience capital inflows of the preferred reserve currency. “Given the preference for dollar reserves in Asia (see e.g. ECB, 2013) net capital inflows from Asia to the US grew rapidly”. (Ramskogler, 2015) Figure 1 represents a sharp increase in net capital inflows to the US from Asia and the Pacific and China from 1999 until 2008. This phenomenon is called “savings glut” and is related to asset price inflation in the United States (Ramskogler, 2015)

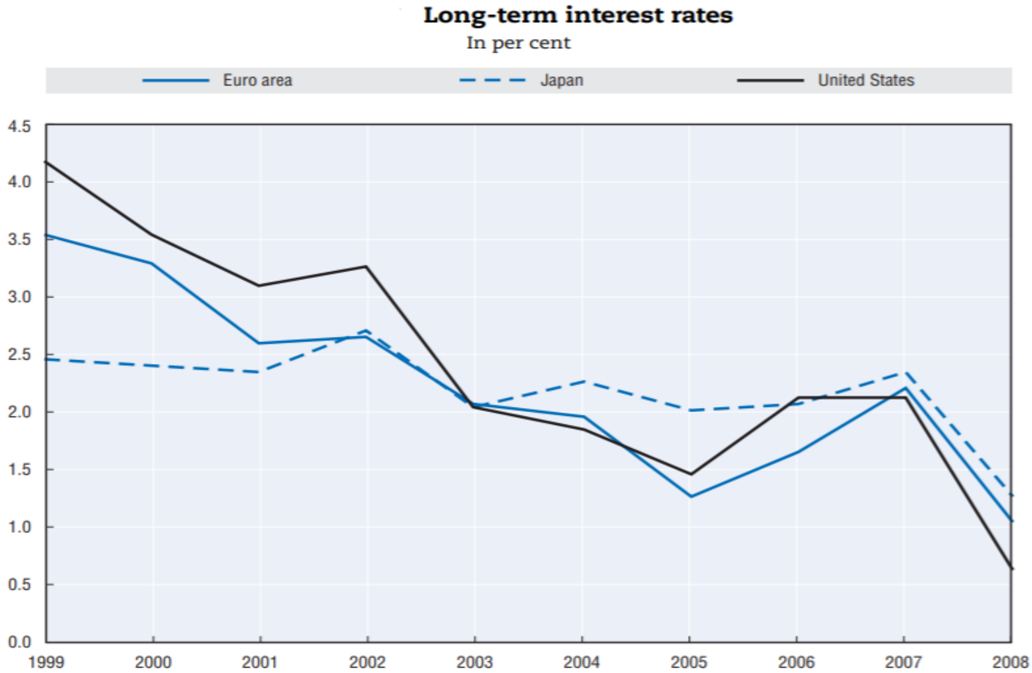


Source: Ramskogler, 2015

Figure 1.

Net capital flows to the United States 1999-2009

Furthermore, the analysis represents that great part of the foreign investment is for the securitized bonds on the market. In the U.S.A., the mortgage market allocation of funds was not originated from China. (Bernanke et al., 2011; Shin 2012) It means that the link between the U.S. housing bubbles and the mentioned capital inflow from Asia is not direct, meaning that its effects are indirect on the mortgage business across U.S.A. The long-term interest rates have been pretty much squeezed (Fig. 2) as the inflow of capital from Asia to the U.SA. were invested in treasuries. This affected the market in such, that investors aimed for higher yields, by investing in securitized bonds. (Bertaud et al., 2012).



Source: Ramskogler, 2015

Figure 2.
Interest rates 1999-2008.

Nevertheless, nothing represents more the nature of the investors' behavior that interest rate on securitized bonds has declined. Meanwhile this is the point where Europe comes to the equation. European investors were those who moved their funds to securitized bonds. (Bernanke et al., 2011; Shin 2012). Since the Americans issued 80% of it and Europeans took hold of 60%, how did this unbalanced situation go unnoticed? It did not. Since current account imbalances were also present, the capital flow imbalances got less attention. It is represented in Figure 1 that before the 2008 crisis such capital flow was much infinitesimal.

The European borrowings are capital outflows from the US point of view. “Thus, somewhat peculiar, the rise in US wholesale funding by European investors disguised, through aggregating and netting, the hike in European investment in securitized bonds” (McGuire and von Peter, 2009; Bernanke et al., 2011).

Increasing demand for mortgage back securities

As the greed of the investors began taking over, the tendency for risky assets in return for higher yields have increased. These kinds of intensions increased the number of risky assets on the market. Since there is a co-movement between the inequalities and the debts (Fig. 3), this could suggest that this was one of the reasons for the number of credits in the states.

Source: Ramskogler, 2015

Figure 3.
Inequality and debt

This marvel can be explained by several things. One of them relates to the well-known economist Milton Friedman's theory. The theory focuses on the fact that the households tend to smooth their consumption over their lifetime. This explains why incomes seem volatile. In practice many young adults who aim to study in a university take a loan to provide the fees of their studies and in a later stage of their life, they pay back their debt. This is a transitionary state for the low-income students. The real reason behind is that as they advance in life with their accumulated experience and competency, they will be paid better. The salary of them shifts from a low-income group to a higher one. It could cause inequality, but the group is likely to pay back their debt.

Other economists disagree with the theory, since instead of this transitionary income inequality, it looks much like a permanent income is behind the inequality (Primiceri and Rens, 2009; Kopczuk et al., 2010; Debackeret al., 2013). In other words, if someone enters either a low-income group or a high one, there is rarely a shift from one category to the other. This theory fails when the focus is on the pre-crisis situation in the U.S. since most likely consumers were getting loans to balance their level of consumptions, which led to the level of indebtedness amongst the middle, low-class households. This could suggest that, "people's well-being depends on relative consumption in addition to absolute levels of consumption" (Luttmer, 2005).

The “conspicuous consumption” states that society tends to copy what the wealthier part of it are doing in terms of spending. The outcome is overpaying in these households. Also, higher inequalities represent greater spending and higher non-performing loan numbers. This inequality is related to hikes in the household debts.

3.5. Financial market factors

The securitized bonds

One of the key points in this section is that in several industrial countries, the opportunity to increase leverage was on a rise in 2008 and even the decades before. A triggering factor was the excess liquidity, which was generated by low policy rates and reserve accumulation (Blundell-Wignall et al., 2009). Also, the excess of elasticity in the financial system has occurred which was caused by increased sustainability of capacity to create credit (Borio et al., 2010). It led to the fact that credit creating capacity of the financial systems was quiet confine, because of the equity of such credit creating institutions and the lack of interplay amongst leverage/capital ratios. Equity raise would be sufficient for the banking sector to extend their credit creating, but “when banks sell credit-based assets, however, even for a given level of equity, they can reengage a given amount of capital in the credit-creating process over and over again even before any of the created debt has been redeemed” (Ramskogler, 2015). When banks transform loans to tradable securities, it is a prime example to this case. Before the crisis one of the main issues was that financial institutions relied on trading income (rather than interest income), which resulted in a growing demand for credit creation in the U.S.

There is a huge difference between securitized bonds and traditional goods on the spot market. The debtor’s creditworthiness defines every bond, which makes it a “trust” game. This credit worthiness varies over time and can cause panic-induced radical shifts. The real problem comes to the scene when long term assets are financed with short term liabilities. The banks always aim to turn the short-term liabilities to long-run assets. However, it generates mistrust between the customers and financial institutions and bank runs can be generated. Bank run resembles a panic amongst the customers who withdraw their money as they have lost the faith regarding the safety of their money. The related banks have to fire sales of their assets even if it causes them loss. Since deposit insurance exists, the bank runs are highly unlikely. Term-transformation function will be outsourced though if they sell securitized bonds. The popularity of term-transaction was one of the main factors which led to the crisis since it also involved many non-bank parties. Constructing a big market for the securitized bonds was not an obstacle for the banks, as many investors wanted to spend their money. This was generated by the growing number of institutional investor and their increasing number can be traced back to two factors.

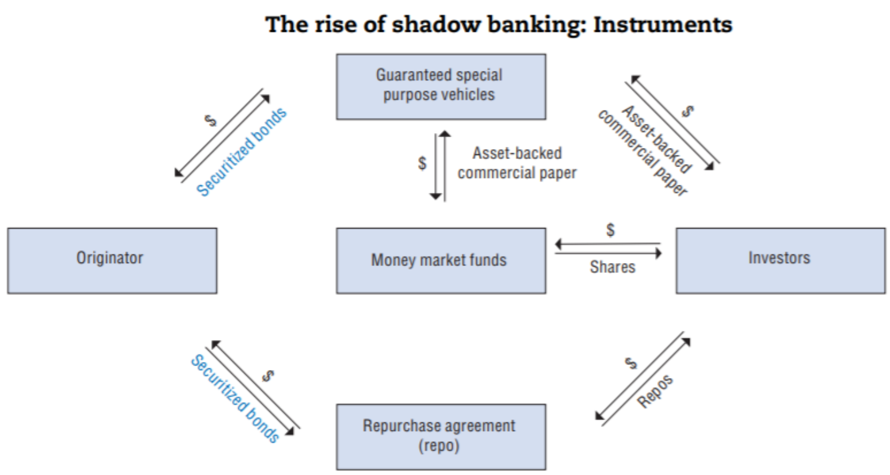
- There was a positive shift towards the capital-based pension schemes and the growing number of cross-border investments
- The growing number of cash pools among corporates and high net worth individuals "added to the rising demand for institutional investments, as did the increase in financial wealth more generally" (Poszar, 2011).

Concerning the Euro area, the households with better financial situation tended to keep their money in riskier assets (e.g. shares) (Arrondel et al., 2013). The outcome was that the cash reserves controlled institutional investors increased at a great pace and they highly invested in securitized bonds.

Avoiding institutional investors and the mortgage markets

Avoiding a direct exposure by mortgage assets, industrial investors are secured by policies. The so-called "indirect channel" played a huge part, it served as an intermediary between institutional investors and the securitized bonds market. This indirect channel is provided by the so-called shadow banking sector that contains term transformation, while during this period of time, institutional investors are not covered by deposit insurances or by the lender of last resort of an institution.

There are 3 types of channels how investors have indirect holdings of such securitized bonds as is shown in Fig. 4.



Source: Ramskogler, 2015

Figure 4.
Shadow banking instruments

- Money market funds

The funds started to grow rapidly from the end of the 1990s, holding USD 1.7 trillion of total assets in 2006 (Kaperczyk and Schnabl, 2013). Most of these funds were invested in a broader set of assets (e.g. commercial papers, agency debts), to minimize the risk, but also, these are representing a strong connection to the mortgage market. The activity of money market funds to cover their finances basically contains selling shares to investors guaranteeing that they will buy it back for at least their original purchase price and the underlying asset serves as collateral.

- Asset-backed commercial papers

The investors were investing in securitized bonds (indirectly) through this pattern which was also used by money market funds. Usually banks create such paper by transferring the securitized bonds to a kind of special purpose vehicle. The "special purpose" of this vehicle is to hold the assets and issue commercial paper backed by them" (Ramskogler, 2015) The respective origin of this paper issues the guarantee for it. Originators balance sheet did not have to indicate it, since the papers were not binding to the default. Certain slow-moving variables could indeed rule out the default. The close-knitted interdependence was defined by the interdependencies of the stock prices and the exposure of related special purpose vehicles (Acharya et al., 2013).

- Market for repos

This might be the most significant channel, where the indirect exposure appeared, still there are very few data available. What we do know that it doubled its size from 2002 to 2008 and accounted 65% of the euro area GDP until the crisis. "An incomplete account of the US estimates the market capitalization of repos at 70% of US GDP". (Hördahl and King, 2008) The idea behind repo market is that a party sells an asset and agrees to re-purchase it on a later date for a slightly higher price. The difference can serve as an interest rate and used for collateral among the failing banks. The repos were usually based on securitized bonds (Gorton and Metrick, 2012). The transactions were labeled as safe, although the credit rating agencies had a concern. Mainly, it was the rating of a single-name corporate finance, however they rated securitized bonds on the way to the financial crises with the same rating methodology and the exact ordinal scale for corporate bonds. The whole situation seemed like they try to fill water to an old bottle, plus in addition the probability of default among the individual underlying loans, with the birth of most securitized bonds were attached with assumptions about the joint probability of default. This has a higher potential for mistakes. As there are changes in the ratings information, it leads to an inevitable change in investor decision making, in this case for higher risk-taking.

- Old Bank Run restructured

Before the 2008 crisis the direct and indirect exposure of institutional investors in the U.S. to securitized bonds has risen and for European investors as well. The fundamentals of the indirect channels were as follows: repos, commercial market paper and money market funds. Although, these term-transformation instruments were not covered by deposit insurance or lender of last resort, the aftermath tells that it was crucial indeed. Backstops like this worked just like the securitized bonds, provided collateral, which later substituted the deposit insurance and the result was far from satisfying. This became even more obvious when during the crisis, bonds could not protect against the tail risk. Since the substitute of deposit insurance was not suitable for the task when the confidence was gone for securitized bonds, the market experienced a shattering capital flight. The outcome was that "instead of a direct run on commercial banks, what ensued was a run on repos (Gorton and Metrick, 2012), a run on money market funds (McCabe 2010; Figure), in direct relation to that a run on commercial paper (Kaperczyk and Schnabl, 2010; Figure) and as a result, the threat of a run on wholesale markets at large" (Ramskogler, 2015). The short-term debt position of banks, which were wholesale funding originated has experienced a complete disaster. European banks have suffered even worse, since they did not receive financial boost as the result of bank runs and they were highly wholesale funding based.

What could trigger a future financial crisis?

In this section, after the examination of what caused the 2008 crisis, the focus will be on what factors can cause it in the future. In the following a few critical factors will be mentioned.

Global pandemic

As I am writing these lines today, the COVID-19 pandemic numbed almost the whole world's economy. Jeff Cox, the economist of CNBC estimates that about 47 million total job losses can occur. This data alone is scary enough and not mentioning the fact that there are certain sectors where the business operation is impossible because of the virus (e.g. catering, tourism, hotels, cinemas, etc.). The fact that this pandemic caused a recession in many sectors to the measure that was seen last in 2008 the near future of the global economy seems critical. The experts argue about the date, when the COVID-19 virus effect will be less severe, and the economy can get back to the regular circle. It can be around summer, most of the European countries can dismiss their quarantine policies. The damage by then cannot be avoided and after a global pandemic, a global economic crisis will occur.

Political issues

The relationship of the world's two biggest economies, China and U.S.A. was determined by their Trade War. Donald J. Trump never forgets to mention that China always benefits from the two countries deals. Since China subsequently bans American brands just like Apple and Facebook in a response the U.S.A. banned Huawei. As for Europe's perspective the migration crisis divided the EU in two, as for the political view. On one hand, there are against globalization, just like Viktor Orbán or Recep Tayyip Erdoğan. Their view is that every country should protect its borders and stop the wave of people coming from mostly Syria. On the other hand, we can find the pro-liberalization representatives just like Angela Merkel the chancellor of Germany. She helped the people from day one who fled from their warzone countries, while Germany has already given home to millions of Turkish needing labour. Emmanuel Macron the president of France shares the same liberal standpoints and criticises mostly the V4 countries for their lack of sympathy regarding the crises. Brexit is also a key political issue is. Since June 2016, the majority of the British voters decided to leave the EU it has made lots of controversies. On January 31the deal has been finalized after almost 4 years of negotiation. This move may destabilize the EU and the UK and they became very much vulnerable in case of a crises.

Fragility in the European banking system

This was one of the main reasons of the 2008 crisis. Lack of measures taken by the ECB to change the situation could be a trigger point for another crisis. In 2008 the risky loans aka the mortgage crisis infected both U.S. and the European economy, which made inter-bank landing almost numb the whole world. After 12 years the European banking system is just as fragile as it was before. The ECB has still no clear policies what to do if a crisis would hit the continent. In addition, the same macro and fiscal policies are outdated to apply them in case of a new crisis. The European banks are also overwhelmed with non-performing loans, which adds low interest rates with overcapacity. It seems like the policymakers have not paid enough attention to what caused the 2008 world crisis. The loose regulation by the European Central bank can lead the continent down on a dangerous path.

4. INSURANCE SECTOR DURING AN ECONOMIC CRISIS

4.1. The insurance sectors

Before examining how does a crisis possibly affects the insurance sector, first its role in the economy needs to be clarified.

Risk management is the fundamental element of the insurances. Companies, institutions, individuals, and public sectors are seeking protection against their possible sudden financial loss. These commitments made by both the insurance company and the customers are non-negotiable. In most cases there is an agent who connects the two parties. After the legal agreement is born, the company pays the premium of the agent and the risk transfers to the insurer. Anything being defined as “insurable” should be measurable in the aspect of its level of damage, the probability of its occurrence and its maximum cost. Besides, one of the most important aspect is that the individual risk must be idiosyncratic, meaning the policyholder cannot have a decisive influence over the insured event (Baluch, Mutenga and Parsons, 2011). Property and casualty insurance might be the most well-known insurance types. Homeowner’s insurance protects against risks just as earthquakes, storms and other natural disasters that might damage the home. Insurance covering the risks which could occur in relation to automotive vehicles is popular as well. The health insurance covers against risks such as occupational disability, morbidity, and other biometric risks. The life insurances not only cover mortality, but also can be constructed as a savings portfolio. The demand for these types of savings are on the rise in Hungary since pension savings are getting more and more important as the pension system is near to a collapse. Furthermore, the government provides benefits to those who decide to contract such saving, with the favorable tax refund policy.

The insurance companies use the methods for their operation called “pooling” method, applying to homogenous groups. The parties of these groups face the same measure of risks, in regard of the insurance type. Idiosyncratic appear to be evened out in the groups long term (Law of large numbers). (European systematic risk board, 2015). Another method used by the companies is to transfer the risk to those whose ability to bear it is greater. It is because the seller of protection has income that is positively correlated with risk-bearing. Furthermore, companies reduce their risk by portfolio diversification. The goal of insurances is to ease on an individual’s problem, without causing extra cost for others. An effective method to keep the system working is behind the reinsuring business. Through this, the companies avoid a kind of exposure by passing some of the risk to another, which is pool risk on a wider scale. "The risk pool can be expanded internationally to cope with aggregate risks at a national level, i.e. where idiosyncratic risks do not cancel each other out" (Ahrend and Moeser, 2011). Reinsurers also moderate the risk during international transactions, which is beneficial for other sectors as well. The risk pool can also have a macroeconomic cyclical relevance, since on behalf of the policy holders, it creates reserves in times when the economy is growing and use them when the economy is on a downturn. This approach is also very useful for non-insurance companies as well. Because of this longer horizon, insurance companies can cope better than the rest of the market, with their unique cycle smoothing capabilities. Also, in order to protect creditors from the great impact of credit defaults, credit insurance can serve to spread the risk, preventing credit shocks.

Complementary structure does also exist. There can be substitute products to insurances in certain cases. These can be self-insurance or public sector insurance provided by society in certain cases. For instance, if a massive natural catastrophe hits, the government should also help to cover the costs and stop the possible further severe consequences. The government acts rather slowly and usually offer loans to the victims, what other institutes would not do because the people who suffered are already in a hard situation. This is a different help from that provided by the risk insurance, where insurance claims are fast, and the beneficiaries have no other financial duty towards the company. Another example for public insurance is that European governments provide a minimum level of health care and pension for their people. The mentioned examples are the easier to be substituted but let's give examples on those which are not, because require special knowledge about idiosyncratic and premium schemes, the pillars of insurance companies, to prevent or at least limit adverse selection, moral hazard, all in the perspective of the customers demand. The ship or truck cargo insurances is one of these, which needs to be very well structured since it cannot be issued without a detailed research. Most of the substitutes do not offer any insurance contract. To represent it through the hurricane disaster, the governments can compensate the people without asking for returning the money, and for prevention to minimize the risk and limit the disaster (Ahrend and Moeser, 2011).

4.2. Role of insurance sector in the economy

First responders

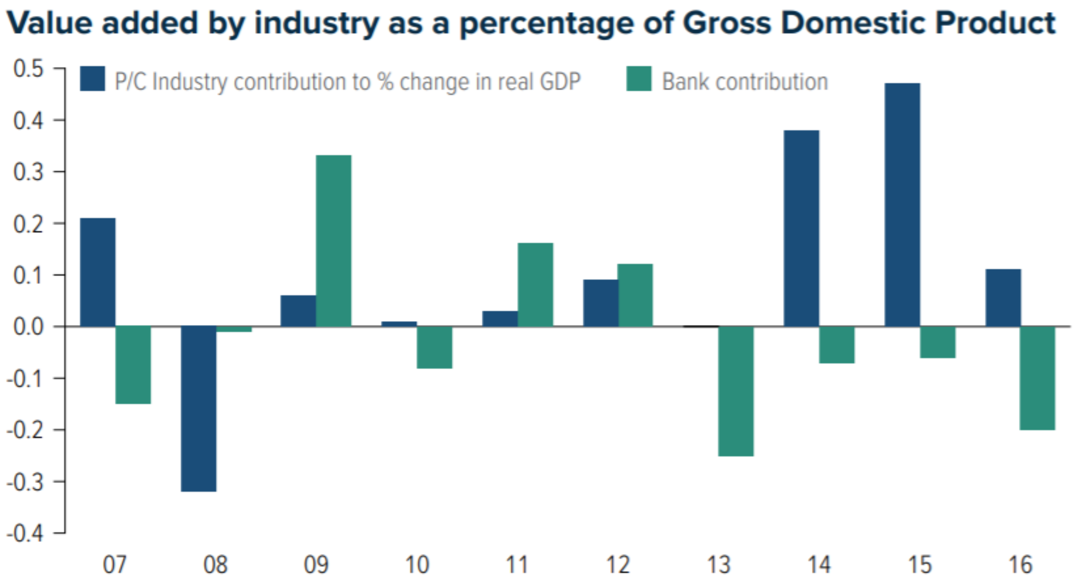
It is crucial from a macroeconomic standpoint that insurance companies pay the claims to the beneficiaries as quick as possible, to either rebuild their homes or repair their car, finance their business, etc. Furthermore, not only these mentioned beneficiaries gain from this situation. If someone wants to repair the car, the money which covers her/his losses provided by the insurance will land at the car repair shop. The same case happens if someone's house burns down, the major part of the claim lands in the pocket of the construction company. Since these businesses pay taxes and employ people, the economic growth is helped by insurance companies. Insurance Information Institute constructed a survey asking people, "Will the government pay for damage to your home that is not covered in your homeowner's policy?" 65% of them believes that the government in the U.S.A. will pay for their losses and because of this, they are not paying insurances (Weisbart, 2018). On a bigger scale, this kind of mentality setbacks the economic growth.

Risk Soften

As the nature of the job requires, the insurance companies collect and analyze data. They use safety engineers to prevent losses. For example, in case of housing sector they highlight the importance of fire suppression systems, or in the automotive section, warn people the danger of drinking and driving. In the U.S.A., the educational cooperation of leading life insurance groups and a non-profit organization took it to the next level. The so-called, Life Happens provides free courses on health and car accidents. "Smoking rate among adults in the U.S. dropped from 20.9 percent in 2005 to 15.5 percent in 2016. Furthermore, since 1959, roughly half a million deaths in auto crashes have been avoided" (Weisbart, 2018).

Capital protectors

During an economic crisis, insurance companies, because of their unique structure, help stabilize the economy. Insurance companies have greater stability than investment/commercial banks. It is represented in Figure 5, that from 2007 until 2016, only one month in 2008 did not contribute positively to the GDP, while the banking sector showed this negative tendency 7 years from 10 years.



Source: Weisbart, 2018

Figure 5.

Value added by industry as a percentage of GDP in U.S.A.

From 2005 until 2016, A.M. Best identified 89 insurers who became “impaired.” During the same period 525 banks were taken over by the Federal Deposit Insurance Corp.” (Weisbart, 2018).

Social policies

Insurance companies often take part in socioeconomic campaigns. Automotive insurance by itself can be considered as a social call, since if drivers do not have liability insurance, the ones who suffer from the accident, might not get a quick compensation. The same method can be applied, when the workplace signs a health and accident insurance for their workers. In case of any injury or disease the workers can get a financial cover, which in countries where the healthcare is not provided by the government, is essential. All the parties get benefits from this since the workers get compensation through the insurance and the employer does not have to pay wage. By this method going to the court can be avoided as well, which in the U.S.A has a high probability, in case of injustice.

Supply chain sustainability

In the supply chain, parties are dependent on one another. Manufacturers are dependent on those ones who make the components. Manufacturers are also dependent on stores to sell their products, just like the stores on manufacturers to produce them the goods. Since the technological innovations spreads risk rapidly, sectors are more dependent on each other, than ever. The WTO also backs up this growth, and statistics show that from 2005 to 2015 commercial services and trading merchandises almost doubled their value in global trade. Since production and consumption is stimulated by commercial trade, which overall drives the economic growth it has risks. To prevent disruptive financial events from occurring in the supply chain, insurance companies offer business/contingent coverage. The system becomes even more vulnerable, as it is faster and more complex. “The more sophisticated a technology, the narrower the range of tolerable error because accidents and managerial failures have more severe consequences.” (Weisbart, 2018).

Development aspects

Insurance companies are one of the main long-term investors in the financial market. They finance it with their premium income that is generated by the fee of their services. Singlehandedly in the U.S. in 2017 they invested through bonds, common stocks, and other investments, which accumulated to a grand total of 5.8 trillion USD. Also, through investing in municipal bonds, they enable to help lower the borrowing costs, increase in job creation, reduce taxes, overall growth in the economy.

Furthermore, developers of businesses might fail because they are lacking financial cover to compensate their workers after a possible accident. Even in case of a national disaster, sometimes the damage can take such measures, that even the recovery of the project takes much more money, than the core project. It is evident how crucial is to have a proper insurance, to cover the damages of tools, raw materials and in case of injury, the workers medical treatments. Every major music festival also has insurance, since during such event, many problems can and will occur (Weisbart, 2018).

These days the world evolves in such dynamics that there is always an innovation around the corner. Genetic engineering, space travel and many more projects as such, need to have financial stability, so they can sustain their growth. Insurance firms support different industrial revolutions by providing risk transfer and risk analysis services that enable innovators to have the financial safety that they need. Because of the unique nature of the job, there is no homogeneous group, where the classic insurance mathematics could be applied, yet they encourage such activity, offering risk transfer/analysis, overall better resource allocation, stimulating job creation as well.

As for the credits, insurers help private persons and institutions to get a better loan rate if they have insurances, as to start a business, usually it takes a large investment or buying a new home. “Commercial and industrial loans, real estate loans, consumer loans and all other loans at all

U.S. commercial banks was $9.1 trillion as of Jan. 2018.” (Weisbart,2018) The extra money by insurers helps business spending, which first creates workplaces, then consumer spending and overall, economic growth. Another contributor is the life insurance segment, where individuals can use it as a safety net against credits. Even with bad credit ratings, in case of a sudden death tragedy, the loan is covered by the insurance. This is a reason, why although the value of a human life cannot be determined by certain amount of money, but the financial gap, which he/she leaves to the household can be (Weisbart, 2018).

Overall, insurance is a crucial part of the economy, performing a variety of important functions. Insurers provide financial security mainly to households and businesses. They are a vital source of long-term capital, providing stability to financial markets and the economy. Insurance is a necessary precondition for most economic activities that would not take place otherwise. Without insurance and reinsurance, most businesses could not operate as they do. Most consumers would not be perceived as good credit risks and could not borrow money from lending institutions. Indeed, the list of contributions made by the insurance industry is extensive, benefiting all aspects of the global economy.

4.2. How the insurance sector is affected by economic/financial crises

Previously there was always a clear distinction between the insurance sector and banking sector. It has changed in the past 10-15 years as financial companies, banks and insurance companies have much more ties in their businesses and bancassurance was created. The method roots primarily in Europe and the U.S.A, and later was adopted by Asia as well. Previously, activity where insurance firms and banks had connected operation was forbidden in Asia. The co-operation has multiple benefits, but the crisis in 2008 highlighted that if these sectors are close-knitted in case of a banking financial crisis, an insurance crisis can be born as well. The exposure created by the mortgage crisis in 2008 did not affect the solvency of the insurance companies unlike for the banking sector. Primarily the rating and valuation of investment portfolios have been affected as the result of the crisis. Even though the crisis was mainly in the banking sector, the insurance companies had their fair share of negative effect of the crises (Schich, 2009).

Credit insurance

Whether it is direct or indirect cover, many insurances cover against credit risk. Mortgage Indemnity Insurance, as its name indicates, provides cover for the lenders in case of loss as the result of the defaults of mortgagors. The lender receives an asset worth less than the mortgage loan. For the borrowers, there is the Mortgage Payment Protection Insurance, which covers against e.g. loss of employment. Granting mortgage loans which are very high in relation to the value of the property is very risky because in a recession house prices usually drop besides the sharply rising unemployment. As a result, claims will rise (Baluch, Mutenga and Parsons, 2011). This happened in the case of the U.K. Mortgage Indemnity insurers who realized huge financial losses therefore they hedged their positions by credit insurance cover. Granting such mortgages with a high loan to value ratio helped generate the bubble in the house prices and the credit boom.

One of the main methods of how insurers and reinsurers underwrite credit is through credit insurance, which focuses on the insolvency of the clients. Furthermore, this insurance also covers for commercial defaults and even certain amount of them to political risks. In this section, three market leader needs to be mentioned: Euler Hermes 37%, Credito y Caucion 31% and Coface 18%. Interestingly while North America only accounts for 6% in terms of demand, Europe accounts for roughly 74% of it (Baluch, Mutenga and Parsons, 2011). Credit insurers are not directly affected by a financial crisis, but rather by the growing tendency of bankruptcies consequences of the crisis. Claims against credit insurers not only arise from financial transactions, e.g. borrower defaulting on a loan, rather from the default of customers who cannot pay for services or goods. Besides financial crisis, an economic crisis overall can hurt the sector as well. When the recession hits, credit insurers experience huge wave of claims.

Systematic risk in the insurance sector

Insurers are exposed to market volatility and the attached correlations, just as a credit crunch which was originated from the U.S. in 2008. As it is mostly generated by the decline of derivative value, the subprime real estate collateral, left firms entirely exposed to the so-called systematic risk. Csiszar’s widely accepted definition states that, “the risk that the failure of a participant to meet its contractual obligations may in turn cause other participants to default, with the chain reaction leading to broader financial difficulties” (Csiszar, 2002).

Micro systematic risk is based on a sort of domino effect. Firm number 1’s default cause firm number 4’s, through 2 and 3. Macro systematic risk is independent of such cumulative loss of function contrary to the micro economic one. In this case, to stick with the previous example, the default of firm 1 affects firm 2, 3 and 4 at the same time. This is what exactly happened during the Lehman bankruptcy in 2008, which led to a worldwide credit crisis. Historically system risk appears to threaten the banking sector, as equity returns represent a direct positive correlation with credit links in the interbank lending markets. The investment portfolios of the insurance companies suffered significant losses because of the mortgage crisis, while it was thought that systematic risk could not hurt the insurance sector separated from the financial one. A notorious example is when one of the largest insurance company, AIG was bailed out by the government for 85 billion USD, since they could not fulfill their obligations, regarding their investments. Instead of systematic risk, the insurers are rather threatened by the underwriting cycle. Underwriting cycle is the fluctuation of the business over a period, the cycle goes from boom to bust and vice versa.

4.3. How the 2008 crisis affected an insurance company – an example

Although the financial crisis mainly affected the investment portfolios of insurance companies, it is also interesting, how the performance of the two main business branches of their activities: the non-life insurances (P&C) and the life insurance segment was influenced by the crisis. As I am working for the subsidiary of Generali, it seems straightforward to present how these sections of the company performed during the greatest financial turbulence of the modern-day economy. Before any further examination, some basic data needs to be introduced about Generali.

Imperial Regia Privilegiata Compagnia di Assicurazioni Generali Austro-Italiche, or simply Generali was founded on December 26, 1831 in Trieste. The Italian company became one of the largest insurance company both in Italy and in Central Europe. Generali primarily operates in Europe, Middle East and East Asia. It obtained large market shares in Italy, Hungary, Germany, Poland, Austria, France, Netherlands, Croatia, Slovenia, Serbia, Spain, Switzerland, Romania, Japan, China, Bosnia and Herzegovina and Israel. Generali's United States operations are focused to financial products management. Their main global competitors are AXA, Allianz, and Zurich.

Strategy of Generali for 2008

Before focusing on the life and non-life segments, it is interesting to overview the strategy of Generali for 2008 published in their annual report.

The main distribution goals for the year were to avoid exposures caused by bancassurance and to create a proprietary multichannel approach. Also, to emerge as market leaders in Germany, Hungary, France and in Italy. Among the product mix goals was that the P&C segment's non-automotive section outgrows the automotive one in growth and profit. Decrease of the Variable Annuity and Life portfolio products with limited exposures in the Unit-Linked segment and high percentage of guaranteed annual premiums. The geographical strategy was to avoid exposures in the US sectors and to sustain the growth on the local markets. Aimed efficiency enhancement factors were efficient adaptation of skill & scale-based programs, reorganization of the German activities and merging Toro and Alleanza.

Strategy of Generali for 2009

After the breakout of the 2008 world crisis Generali had to implement certain new tactics. A key area was the customer-centric operation. This involved: client retention, regulation tightening on UL products and for safer investments, leverage customer base loyalty and strong attention on retirement business. For the process part, Generali embraced the centralization of accounting, administrative and portfolio services, reduction of material. For the product side, the firm was aiming for disciplined profit-sharing policy, improving business mix profitability, focus on automotive profitability enhancement and finally, focus on profitability with emphasis on traditional and pension products

Characteristics of non-life (P&C) insurances

Car insurance or housing insurance, during an economic downturn usually experience a huge disadvantage because of exaggerated claims or even false claims would occur in a higher number and in crisis less time would go unwanted. While it is safe to say that there are very few replacements on the market for non-life insurances, demand is relatively inelastic. For instance, in any country if you purchase an automotive or a motorbike, you need to have an insurance as soon as you obtain it. Despite of this relative inelasticity, a financial crisis and subsequent recession could alter the situation. In case of demand fall insurers have to cut their operation costs to sustain their business well-coordinated and profitable.

Performance of Generali non-life insurances in 2008 and 2009

The revenue development in the P&C insurances accounted for 20.845 million € in 2007 and grew to 21.990€ by the end of 2008. This is a 5.5% growth, compared to the year before. In 2008, a joint venture collaboration with PPF Holding started and the company gained positions in CEE. This action helped Generali to stay profitable in these hard times as is shown by that the CEE's 519.9% growth made it possible for the non-life insurance sector to achieve a 5.4% development in their operating result.

Generali P&C operating results in 2008 and contribution of the main markets (Euro m)

Table 1.

Country	Year 2007	Year 2008	Difference in %
Italy	718.4	493.1	-31.4
Germany	304.6	317.2	+4.1
France	370.5	332.4	-10.3
CEE	72.5	449.6	+519.9
Spain	191.2	172.1	-10.0
Austria	63.3	105.6	+66.8
Switzerland	41.5	60.5	+45.7
RoW	246.7	187.0	-24.2
Total	**2,008.9**	**2,117.6**	**+5.4**

Source: Generali Annual Report 2008

The revenue development in 2009 experienced -0.5% compared to the previous year, it decreased to 21,636 million € from 21,990 million € in the non-life segment. The operating result has shown a huge drop. Generali experienced a 38.6% decrease.

Generali P&C operating results in 2008.

Table 2.

Euro (million)	Year 2007	Year 2008	Difference in %
Technical result	554	274	-50.6
Investment result	1,702	1,252	-26.5
Other	138	226	-63.5
Operating result	**2,118**	**1300**	**-38.6**

Source: Generali Annual Report 2009

The profitability of the segment experienced considerable loss, indicating that the crises had an impact longer time on these types of insurances. A reason behind this can be that the customers insolvency appeared rather a year later from the outburst of the crisis. This also caused the demand to drop inevitably and the company could not increase the price.

Characteristics of life insurances

Situation of life insurance section during crisis differs from that of the non-life section. As claim-payments perspective is regarded, there is no rising tendency during a downturn. However, the demand declines for new contracts, especially for various saving plans just as pension savings or future educational savings. The companies will aim to reduce costs during this period and enforce the sales of classic insurances as they are not linked to the financial market. But the falling global output and world trade in the last quarter of 2008 financial crisis depressed confidence and sales expectations.

Performance of Generali life insurance section in 2008 and 2009

In 2008 revenue development has risen by 3.2% from 45,373 million € in 2007 to 46,815 million €. While there was a 27.7% decrease in the operating result of life insurances, the CEE countries considerably offset the loss accumulated from the rest of the world since the growth in life insurance segment in the region was 609.2%.

Generali Life operating results in 2008 and contribution of the main markets

Table 3.

Country	Year 2007	Year 2008	Difference in%
Italy	1,427.9	1,207.0	-15.5
Germany	316.7	140.4	-55.7
France	427.5	345.5	-19.2
CEE	17.6	125.1	+609.2
Spain	82.8	100.2	+20.9
RoW	465.4	61.7	-86.8
Total	**2,737.9**	**1,979.7**	**-27.7**

Source: Generali Annual Report 2008

Unlike the P&C segment, the life insurances in terms of revenue development grew by 9.5% to 48,894 million € in 2009. Subsequently, this means that there was also an increase in their operating result.

Generali Life operating results in 2009

Table 4.

Euro (million)	Year 2008	Year 2009	Difference in %
Technical result	6,073	5,984	-1.5
Investment result	1,005	1,627	+61.9
Other	5,251	5,159	+1.7
Operating result	**1,827**	**2,451**	**+34.2**

Source: Generali Annual Report 2009

The 2008 crisis made life insurances linked to equity markets a loss. The complete opposite has happened in the year 2009, when the equity markets have restored from the financial downturn. While the market has had an enormous restore in value, it still did not reach the 2007 level. The well-being of these financial markets is highly independent of a sole actor, but rather on a collective action plan by the central banks and financial institutions.

4.4. How the 2008 crisis affected the insurance sector in Hungary compared to Europe

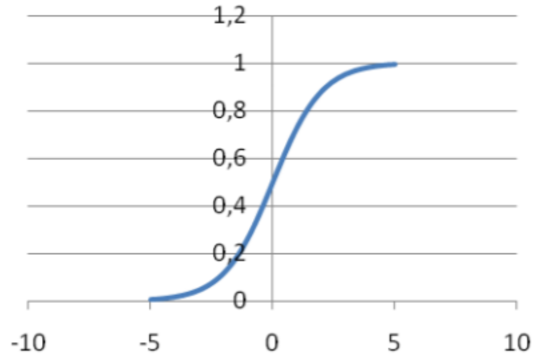
In this section I mainly use the research of the Hungarian National Bank to show the performance of Hungary compared to other European countries.

Development during the crises

This aspect can be approached from quite a few viewpoints. A so-called measure is the insurance penetration rate, which equals the gross premium revenue divided by the GDP. Interestingly, this rate dropped from 3.3% (2008), to 3.2% (2009) in Hungary, while the European insurance market represented an increasing tendency during the same period from 8.5% to 8.9%. The reason behind is that, the extent of the GDP’s shrink was greater than the decrease in the insurance revenues, amongst the EU member states. The rate amongst the less developed countries was 3.3%, which leads to the conclusion that penetration seems to be dependent on economic development. Because of this marvel, to decide whether Hungary is over or under insured, regression model was introduced which represents every country’s own position in regard of the correlation between insurance penetration and the GDP. The linear line would mean that a country spends all its income on insurances, which is surreal. The appropriate line can be found between curves that highlight a decreasing growth rate of penetration, while the GDP grows. In the following two trends will be explained, which was observed amongst the EU countries.

Logistic regression

The use of this regression is explained by an assumption: a country with a poor financial situation hardly spends money on insurance, and a rather wealthy country will not increase the quantity of insurance within GDP beyond an extent (Molnár, Rácz and Regős, n.d.)



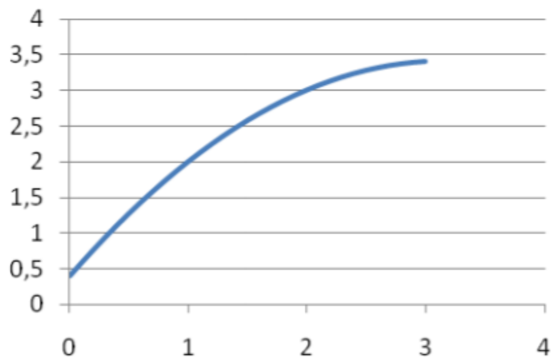
Source: Molnár T, Rácz I, Regős G. 2010

Figure 6.

Illustration of a logistic line

Quadratic regression

The growth in the explanatory variable means that the outcome will either increase or decrease. As at the previous regression, an assumption can be also built, which states that in a wealthy country, ratio of insurance within the GDP will be increased to a smaller extent. (Molnár, Rácz and Regős 2010)



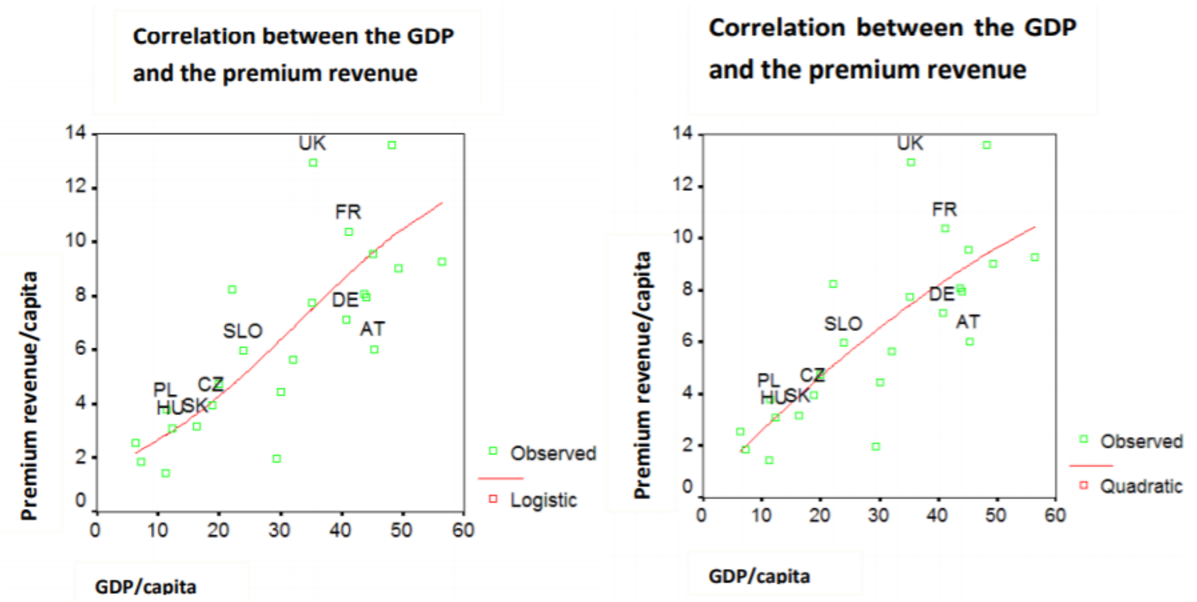
Source: Molnár T, Rácz I, Regős G. 2010

Figure 7.

Illustration of a quadratic regression line

If a score of a county is over the regression line, it is over-insured, if it is under, it is underinsured. The efficiency of each regression felt between 0 and 1, which was measured by R^2. In this model non-life and life insurances together were examined in proportion of GDP as are shown in Fig. 8.

A B



Source: Molnár T, Rácz I, Regős G. 2010.

Figure 8.

Correlation between GDP and premium revenue A: logistic model B: quadratic model

As Hungary's result is on the trend line, it means that the country is neither over-insured nor underinsured. "The diagrams represent that the insurance markets of Hungary, the Czech Republic are adequately insured, while Slovenia and Poland are over-insured" (Molnár, Rácz and Regős, 2010).

Products and the market

Life insurances

Average structures of the Hungarian life insurances significantly differed from that of the EU countries and CEE region's as well. While the so-called "classic" life insurances made 60% on average and the unit-linked products, which are connected to investment portfolios was about 35% on average in the EU and other CEE countries, in the Hungarian market the situation was just about the opposite. More than 60% of the products were unit-linked structured, while the others were the classic life insurance. Amongst the CEE countries, the overall life insurance level of Hungary was low as well. The possible reason behind this is the low return on the classic life insurances, while for unit-linked products it was higher and has been boosted by interest tax. Table 5 and 6 show the distribution of gross written premiums in life insurances in the V4 and other European countries, respectively in 2009.

Distribution of gross written premiums in life insurance in 2009 in Visegrad 4 countries

Table 5.

Gross direct premium written	CZ	HU	PL	SK
Non linked life insurance	57,3%	39,0%	63,6%	71,1%
Linked life insurance	38,6%	61%	21,2%	27,1%
Group pension assurance	0,0%	0,0%	0,0%	0,0%
Other	4,1%	0'0%	15,2%	1,8%

Source: Molnár T, Rácz I, Regős G. 2010

Distribution of gross written premiums in life insurance in 2009 in European countries

Table 6.

Gross direct premium written	BG	EE	LT	LV	RO	SL	AT	BE	EU
Non linked life insurance	84,2%	38,3%	33,8%	84,3%	65,3%	44,4%	64,4%	87,6%	59,4%
Linked life insurance	4,7%	43,6%	66,2%	12,1%	34,7%	45,9%	35,6%	9,6%	31,0%
Group pension assurance	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%
Other	11,1%	18,1%	0,0%	3,6%	0,0%	9,7%	0,0%	2,8%	9,6%

Source: Molnár T, Rácz I, Regős G. 2010

In 2009 because of their costly product structure, the demand for pensions savings was basically non-existent. The reason behind the high fees was the increasing life expectancy, and as for the demand, many European countries had a well-functioning pension system, through social security. Nevertheless, there were certain products that could be considered somehow as a substitute to it. Those were certain life insurances having fix annuities and insurance upon death. These were either unit-linked or classic life insurance structures.

In 2008, gross premium revenues fell by 11% in all over the European market. This was followed by a 1% growth in the following year. However, the results varied amongst countries. The recession mostly affected those life insurances, which were linked to investment portfolios, but individual countries were also influenced by different factors. Products linked to investment

in the United Kingdom, as the result of withdrawal of the tax allowances, suffered from around 12% decline in the premium revenues. In countries, where increasing premium revenues were registered, the observed expansion was usually explained by an increasing demand for guaranteed products and for short-term liquid investment products (Italy, Germany).
Regardless of the crisis in the CEE countries, life insurance premium revenues rose by 29% in the year 2008. The reason behind the sharp increase was linked to the Polish market. The life premium revenues grew by nearly 54% although in the Baltic states considerable, 30% decline was measured and 10% in the Hungarian market. During 2009, the premium revenues decreased almost everywhere except for the Czech Republic, where it grew by 15% on average. As for the structure, investment product types were observed to gain share against classic life insurances before the crisis amongst CEE-10 countries. The process was stopped by the economic crisis. Recession of premium revenues was the most crucial for unit-linked structured products, followed by a growing ratio of traditional insurances with guarantee. These ones can often serve as short-term liquid investment products.

Non-life insurances

The economic crisis did not have a sudden effect on the products. In fact, in 2008, 1% growth was measured. In 2009 as demand has dropped for such products, the premiums have decreased by 6%. The CEE countries were able to sustain growth in both years, 11% growth in 2008 and 0.9% growth in 2009. The market dynamics of the member states also differed on a huge scale, for instance Lithuania experienced a 35% drop. Since Hungary have underperformed in both years, in 2008 by 2% and in 2009 by 4%, in comparison of its region, the statement can be made that the crisis affected Hungary severely.
Examining the distribution of the premium revenues among business lines, the results show that the biggest weight in the European market was the accident and health insurance product, which was about at the same level as the automotive insurance branch. This was followed by insurance against natural disasters and various property insurance which was the third greatest branch in 2009. The CCE-10 was characterized by a different product mixes, characterized by the underdevelopment of the health insurance segment (Table 7.). Property insurance branch dominated the non-life market with 78%.
The difference of the measure in accident and health insurances compared to CEE region is related to a different financing of health care services. The Western European systems are based on mainly self-provision in comparison with the CEE.

Distribution of gross premium earned in non-life insurance in 2009 in Visegrad 4 countries

Table 7.

Gross direct premium earned	**CZ**	**HU**	**PL**	**SK**
Accident and health	5,5%	4,7%	7,1%	3,4%
Motor vehicle third party liability	29,0%	31,5%	35,9%	30,2%
Motor vehicle other classes	19,9%	21,7%	25,2%	31,1%
Marine, aviation and transport	0,2%	0,9%	1,2%	1,6%
Fire and other damage to property	23,7%	33,7%	17,6%	24,1%
General liability	14,0%	4,5%	5,4%	5,5%
Credit and suretyship	3,0%	1,1%	3,2%	1,4%
Other non-life insurances	4,7%	1,9%	4,6%	2,8%

Source: Molnár T, Rácz I, Regős G. 2010

Distribution of gross premium earned in non-life insurance in 2009 in European countries

Table 8.

Gross direct premium earned	**BG**	**CZ**	**EE**	**LT**	**LU**	**RO**	**SL**	**AT**	**BE**	**EU**
Accident and health	1,5%	5,5%	3,2%	5,6%	20,2%	1,3%	36,7%	29,0%	29,0%	32,2%
Motor vehicle third party liability	28,5%	29,0%	28,1%	33,5%	52,8%	28,9%	23,1%	20,7%	19,9%	18,6%
Motor vehicle other classes	43,2%	19,9%	38,2%	25,3%	5,1%	47,6%	16,4%	12,6%	12,1%	9,5%
Marine, aviation and transport	2,0%	0,2%	0,9%	0,6%	0,3%	1,2%	0,6%	0,1%	0,3%	3,0%
Fire and other damage to property	18,8%	23,7%	24,8%	24,6%	14,8%	15,2%	15,5%	0,0%	21,6%	15,7%
General liability	2,0%	14,0%	2,1%	4,9%	2,7%	2,0%	3,4%	8,5%	6,7%	8,0%
Credit and suretyship	2,3%	3,0%	1,4%	4,7%	1,7%	2,7%	3,0%	2,3%	2,7%	3,0%
Other non-life insurances	1,6%	4,7%	1,4%	0,8%	2,3%	1,1%	1,4%	26,8%	7,6%	10,0%

Profitability

The economic crisis shook Europe on an adverse scale. The business experienced setback on the capital markets in 2008, which was followed by profitability in 2009. In 2008 the average return on equity (ROE) equaled -4.6% for the entire EU, improved in the next year to reach 11.4% increase. It needs to take into equation that European insurers appraise their assets based on market prices. Subsequently, decreased profitability in the life insurance industry was mainly caused by losses incurred on invested assets, with a peak in repurchases. The key factors regarding non-life insurances were strong competition and weak demand. This resulted in shrinking premium revenues and deteriorating technical results. Among certain member states, decreasing interest rates also resulted in declining profitability, which ultimately led to decreasing gains or losses in relation to the yields promised on numerous savings. Characteristics of CEE countries was the profitability levels were above those of the developed markets, and the crisis was not severe to them. The average ROE exceeded the European average and was approximately 12.5% in 2008 and 16.7% in 2009. As the countries are being analyzed one by one, the results show huge differences. Hungarian insurers' profitability has changed slightly from 2008 to 2009. It exceeded the average of the CEE countries. Although, the difference is considerable, majority of the profit was generated by few major market actors. Also, high profitability was backed up by factors with the on-off effects in both years. The stability was mainly related to domestic regulation, as government securities were a dominant force in the Hungarian insurers' portfolios. "These are retained until their maturity, for instance ignoring subsequent market appraisal, as which can result in negative processes. The government securities market was represented in a "cushioned" form in insurers' profits." (Molnár, Rácz and Regős, 2010.)

5. RESULTS OF THE PRIMARY RESEARCH

My aim with the primary research was to examine what percentage of the responders were affected by the 2008 crisis in regards of gender, age group and type of occupation. The responders also had to answer what type of insurances they had back in 2008 and this was compared to the current situation, which gives an insight into the trends of the consumers' attitude over the years. In the following, my questionnaire was focusing on the actuality of COVID-19. I asked first whether the responders were expecting a crisis before the pandemic, the rest of the questions are directly related to the situation created by the virus. After examining what percentage of the responders have already been affected by it their views about their perspective in the near future were asked. The final question was fascinating, since asking people what kind of new insurance product they would find useful, tells the most about their situation.

Before presenting the results, a key factor needs to be mentioned. The research cannot be considered representative because of the limited number of responses (92). Another important factor is that since I was aiming to get my answers through social media, many answerers were less than 24 years old in 2008 which biases the results. 20% more female has answered to my survey and the majority of responders are from Budapest, also making the survey non-representative. Nevertheless, the open-end questions gave me fair amount of insight of how the people perceive the past and current crisis

Results

More answers to the questions came from women (62%) than men as is shown in Fig 10.

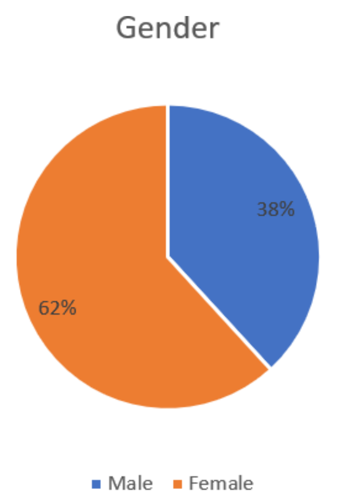


Figure 9.

Distribution of responders in terms of gender

Since mostly my friends and fellow university students answered the survey, majority of the responders were under 24 in 2008. The second-largest age group was the 41-55 (Fig 11).

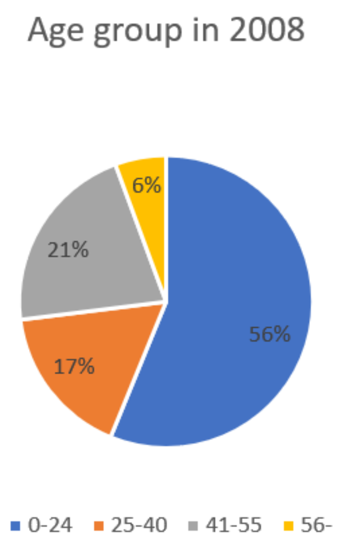


Figure 10.

Distribution of responders in terms of age group

According to the main age group, most of the answerers were students (52%) followed by employees 22 % (Fig12).

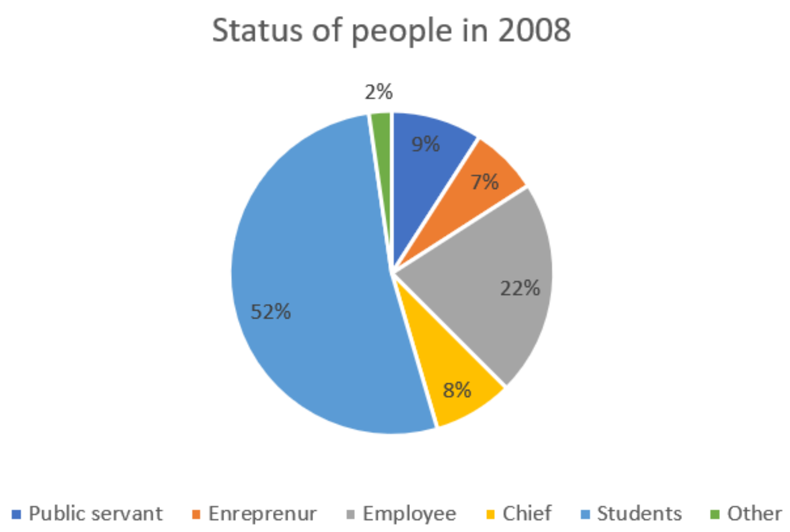


Figure 11.

Distribution of responders in terms of their occupation

The responders' reaction about the effects in their life of the 2008 crisis was very different and most of the responses came from people who were underage during this time. As a result they simply do not remember anything about it. To be fair personally, I am on this side, with no memories about the crisis as a 12-year old high schooler. After further analyzation of the answers it seems I was amongst the luckier since some people mentioned that while they were young, their parents were affected badly by the crisis mainly financially and emotionally. Hungary has suffered from a credit crisis during this time as the currency of the Forint was deteriorated against CHF, many credit products based on. This meant that in the answers there were people mentioning their difficulties keeping up with the pay checks. Many employees, lost their jobs, got reduced pay checks or simply they were uncertain about how long they will be employed as the crisis was rising. There was a certain amount of entrepreneur who had to give it up and change to an employee job as the result of the crisis.

40% of the responders felt affected by the crises. 35% of them were in an employee status and 28 % of them students. Majority of employees (61%) were badly affected as is shown in Fig. 13. Although, few entrepreneurs were among the responders, more than half of them had difficulties by the crisis. The most affected age group were from 25 to 40 and over 65. From the total number of people who have been affected by the 2008 crisis, more than 71% were women.

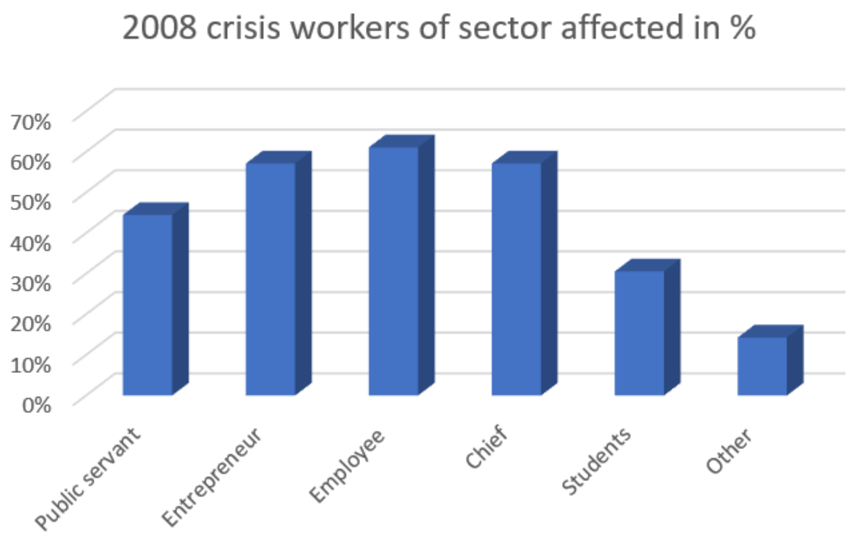


Figure 12.

Distribution of responders affected by 2008 crisis in terms of occupation

About 30% of the responders were not expecting a financial crisis before the appearance of the COVID19. The rest of them were expecting a recession and aimed saving money, as they were expecting such financial turbulence. These savings were either liquid or fix annuity for even short term. Another popular response was that people prioritized keeping their workplace, so they could gain as much capital as possible before the crisis hits. Receiving these results suggest that the responders were indeed preparing in a larger number than I expected, even before the global pandemic.

50% of the responders has already been affected financially by the COVID-19 pandemic, mainly entrepreneurs (69%), employees (50%) and students (50%) as is shown in Fig. 14 It is no surprise considering the fact, that many restaurants and other catering facilities had to close because of the regulations of the local governments. Among the mentioned reasons there were the closing of the workplace or because of the reduced operation, some people had to go. The answers highlight as key problems the insolvency of business partners or the lack of demand by consumers.

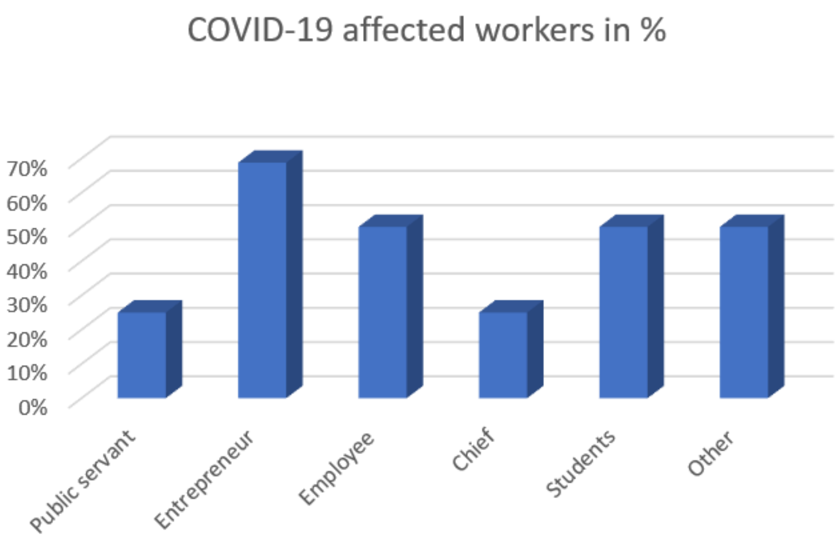


Figure 13.

Distribution of responders affected by COVID-19 in terms of occupation

Afterwards, people were asked whether they expect any change in their financial situation in the upcoming year. 40% of the responders do expect a certain type of change. Whether it is positive or negative, majority of them think it is a temporary state, which we experience as the pandemic forms our everyday life. Most of those who believe in some change, expects going on with their previous job or acquire a new one. These are the positive feedbacks. The negative ones suggest that they do not believe that they can go on with their previous work, as the crisis gets even more severe.

I compare next the type of insurances which the responders had back in 2008 and currently.
In 2008 most people did not have any insurance, which accounted for 54% of the responders. A reason behind this can be that many responders were too young to have for example a flat, requiring a home insurance or a car to have automotive one back in 2008. The number of people,

who do not own an insurance dropped, currently only 28% of them does not have any. The distribution among the insurance types in 2008 is shown in Fig. 15.

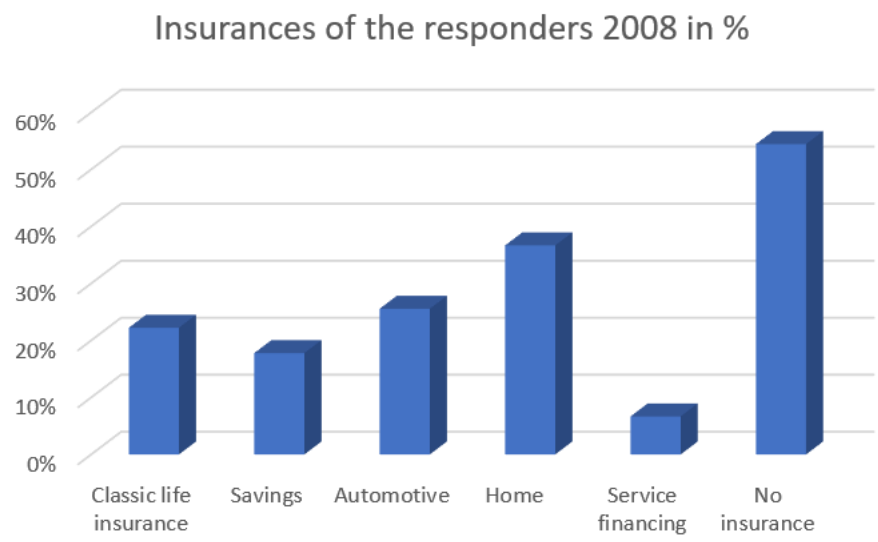


Figure 14.

Distribution of insurance types owned by the responders in 2008

Currently half of the responders have home insurances. This proves that they find it essential to keep their homes safe even in a financially uncertain situation. This type of insurance was also the most popular in 2008 with 37% which also support the theory that people value their homes the most amongst their assets.

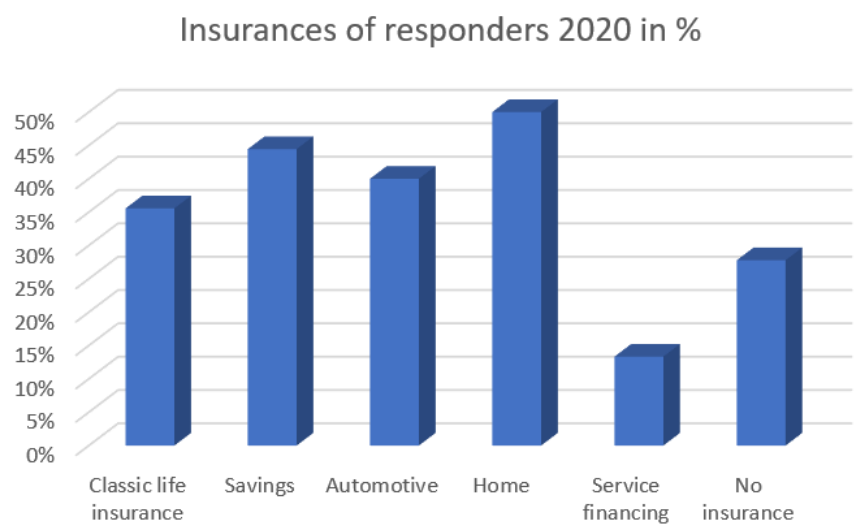


Figure 15.

Distribution of insurance types owned by the responders in 2020

In both 2008 the second and 2020 the third most common insurance type was the automotive insurance indicating that automotive is the second most valued asset of the responders. A car could mean the way of transport of a whole household, especially in areas, where the population is low and there is no proper way of transportation. This seems to be constant from demand side, regardless of a crisis. In 2008 26% and in 2020 40 % of responders have this type of insurance. The 14% rise can be also explained by ageing of the responders.
Saving products are on a 26% rise from 2008 to 2020, from 18% to 44%. The explanation behind this can be the aftermath of the previous crisis as it showed how important is it to have such product. It is also important to mention that the sample is young, so it is not a surprise that teenagers did not have savings.
Classic life insurances finished 4th on the popularity list, which also showed a growing tendency, from 22% to 36%. This type of insurance covers against sudden death tragedies or disability in the family. It is especially useful if that person has one, who provides the most for the family, since if they stop providing, their income will be missed the most. During an unstable economic prospect, a product like this can save the whole household.

The question after this segment was about what extent their insurances could provide a financial protection, in the responders' opinion. The answers were really separated into two sections, as half of the responders believes that even if for a short period of time it can serve as a cover. The other part of people sees it almost useless, regarding their future.

At last, but for not least, the final question was aiming to find out, what new insurance products could help people in a situation like this. A great percentage of the responders believe that a certain type of insurance that cover against sudden unemployment would be very useful, as many of them lost their workplace because of the COVID-19 pandemic. It is interesting that in most of the life insurances there is an option for such cover, even some home insurances has such additional service. People are probably not aware of it. An overall pandemic insurance is needed as well according to the responders, which contains the loss of workplace as an insurable event.

The research has provided me results that I was approximately expecting. The 2008 crisis did indeed affect the employees, as lots of them lost their workplace, next to the students, who felt tension in their households. Just like the COVID-19 pandemic affected the same group of responders, next to the entrepreneurs, who tended to be affected by the virus severely. These results agree with what I have learned from the publications and reports, that during an economic crisis many jobs are lost, and the unemployment rate rises. The increasing number of insurances among the responders suggest that they find them useful even keeping them during a financially hard situation in their life. Ideas about new type of products are interesting, since it shows that even a business, like insurance, which originates back to hundreds of years, still has room for improvement, as the changing environment results in changing demands. Analysing the policy of Generali after the 2008 crisis, they adjusted to the situation by modifying their portfolio, providing new type of insurance products, with favourable cost-value bases. As a result, their number of customers increased, while the aim was to avoid exposure to the financial market. The survey confirms that there is a demand for new products and possibly, the insurance companies are already working on new the elaboration of new ones.

6. WHAT COULD THE FUTURE HOLD FOR THE INSURANCE SECTOR? S.W.O.T. ANALYSIS

It is evident that COVID-19 has shaken the world and restructured the everyday life around the globe. The loss of workplaces has spread even faster than the virus itself and the macroeconomic effects will be much more severe than any of us could imagine in April-May 2020. In sectors like tourism, catering, several companies went bankrupt, and even in the production of oil, the virus made loss in operation. In this unique situation many sectors are in danger, regarding their future, finances and so on. In the last main section, the focus is on the upcoming years, and how could it shape the insurance sector and affects its place in the economy. It is rather early to make grounded statements about how the pandemic will really affect the economy, only assumptions can be made. Possible implications will be discussed next.

Insurance companies view on COVID-19

Immediate concern of insurance companies is protecting the health and safety of employees, the agents as their work is based on face to face meetings. Insurers face a huge challenge to update their crisis management plans and to sustain the business the safest possible manner. It is essential for insurers to establish an emergency decision-making squad to coordinate the company's actions, set safety protocols, and ensure rapid actions as conditions continue to develop worse. A well-functioning communication system should also be established to keep employees and clients up to date about the status of business continuity plans and instructions on how to remain safe in this environment. Perhaps the greatest challenge could be adapting alternative work conditions for the employees, while sustaining business continuity.

To contain the infection rate of COVID-19 means enabling insurance company staff, agents to work from home. This approach can create new systems and workflows in the sector. While negotiation with the possible clients might be easier, since there is no need to travel, the lack of personal contact can be a disadvantage, furthermore filing important documents are complicate, especially if the employees are not geared up with the office tools, e.g. printer, scanner. Cybersecurity's importance emerges as exchange of confidential information are via e-mail or another digital platform. Firms' aim is to help their workers in this unique environment and ensure them the required tools to be efficient during home office. This can be applied to various companies, not solely for the insurance companies. The followings are essential for the work from home and usually are provided by the firms if they are not already in the possession of the employees.

- Desktop computer or a laptop is a must, but usually every employee already has one, if no, the company should provide one.
- Accessibility to private network for the secure use of business applications and certain video-audio programs for the flawless day to day meetings

- As problems with these systems always occur an IT support team I also crucial to have, for answering employees' questions and help them resolve the problems occur.

Agents during COVID-19

The COVID-19 pandemic challenges the sector, mostly because the agents cannot meet the clients, which requires a whole new strategy. With this lack of face to face contact, new methods need to be applied, and the sales methods also need to be evolved. This will be the everyday challenge as the pandemic still is on emerge, which should enable agents to offer faster and more comprehensive services to their clients. Those firms and agents are going to be successful on short term, who adapt quicker, to the unique demand of the customers, who might suffer financial difficulties, as the pandemic evolves. With sufficient digital tools, (mentioned above) this period can be very lucrative to those, who make an advantage of it. This period can also serve as time for planning, training, and search for a new group of potential customers.

Chances of the insurance company in the coming years - S.W.O.T analysis

Business environment is needed to be mapped continuously for success of an organization. Its importance acquires a whole new meaning during the time of an economic downturn. Competitive advantage occurs at those companies, that can continuously detect where their “room for improvement” is and how to successfully adapt it, so it can become a strength. In the following I overview the present situation of the insurance companies using S.W.O.T analysis.

Strengths	**Weaknesses**
Good product portfolio No systematic risk	Underwriting cycle Possible irresponsible work of the agents
New business operation methods Time for innovation	Unstable economic prospect Possibility for another wave of pandemic
Opportunities	**Threats**

Strengths

<u>Good product portfolio</u>

Due to the lack of substitute products, unless it will not change in the future, insurance products experience a certain kind of monopoly in the market, as they are the only ones guarantee fast claims in case of an insured event. Because of the structure of insurances, the customers are much better off than the insurers in this case. Examine first a car crash, in case of a car liability insurance. For example, a person causes an accident, which results in destruction of the other party’s brand-new Lamborghini. A car like this, costs around 200.000 € and if the police report states that the accident was the fault of the other party, he/she must pay for the car. A liability insurance of this type is determined by different factors. In Hungary, the cost of it on average is around 150 € per year. The difference between the price of the Lamborghini and the price of the insurance represents that for individuals it is essential to have one. As car insurances are mandatory, the second example might have more relevance, why should households consider having at least one life insurance in the family. In the previous section I examined, what a life insurance could serve for, perhaps taking into consideration the numbers make a better argument for it. Mainly, the products are designed to protect families financially in case if one of the members is suddenly not able to contribute to the family budget. Usually people associate life insurances that somewhat expensive. In the following my aim is to prove this statement is wrong. That person needs to be insured who makes most of the money in a household. Disability claims level should be around 10x of the yearly income, while death claims should be around 5x. In this case it is important to mention that the disability results in the loss of workplace. In case of fatality a roughly 15.000 € claim's yearly fee is around 500 € in Hungary, at Generali, for middle-aged customers. Some people might state that 500 € for something that is not beneficial at the moment or will guarantee money later is a wasted money. In case if the person who contracts the insurance is lucky enough, he/she will never have to claim, since it means that the family have not suffered any of the above mentioned. For such fee, there is no other substitute product on the market, which could guarantee such service. As it is shown by these examples, insurance products have good cost-value ratio for the customers. Besides, there are many different kind products offered, the customers can choose what fits their requirement the best. Huge product portfolio helps the insurers to get in a beneficial position as their operation varies on a huge scale.

No systematic risk

Unlike in the financial sector, where the entities are very much dependent on each other, to operate successfully, the insurance sector is differing in this aspect. Especially through systematic risk, financial entities are vulnerable to the credit shocks which can spread rapidly. They are dependent on each other's operation as well, as the failure of one party can mean the subsequent failure of many other financial firms. The insurance companies are not exposed to the financial market like this. Through their long investments, the insurance companies can ease the financial shocks in their operations, with the reserves accumulated during a peak in the economy. Although their operation stays "unbothered", their returns in the financial market can be damaged during a financial crisis. The life insurances which are linked to equity markets will realize losses, as the financial market hits a bottom. Even in a case of a financial turbulence the demand for both non-life and life insurances are inelastic. Nothing represents the resilience more than this factor. The demand does not get affected only the returns on investments.

Weaknesses

Underwriting cycle

Underwriting cycle is the fluctuation in the insurance sector. Usually it spans a number of years, as the market for the underwriting business goes from boom to bust and vice versa. It can occur because majority of insurance companies prefer short-term profit over long-term stability. This means selling insurance without monitoring what happens when the so-called "soft" market ends. The real danger can be the greed of such firms since the only way to avoid the underwriting cycle is to ignore short-term profitability and aim in saving assets. There is a so-called "rainy day" approach, where the insurance firms aim to save up as much capital as possible, to use it during a downturn. This regulated efficiency can establish a firm's financial stability and cooperation long-term with business partners. Even though the methodology behind “rainy day” seems reasonable, it is usually ignored, which can not only damage the company itself, but in certain cases the customers too. In this case for example if a natural disaster occurs, insurance firms with short term investments might experience liquidity issues and they will be unable to provide a fast claim for the customers or in worst cases not at all.

Possible irresponsible work of the agents

During the time I was working as an agent this point seemed to be one of the biggest downsides. In Hungary, the reputation of agents still suffers from their careless operation in 1990s, which still lives in the mind of the elder people. With the end of socialism, the market had opened to the products of the west, as Austrian insurance companies attempted to obtain a market share in Hungary. The products were in the currency of Austria which by that time was the schilling, and the agents taunted people with the promise of greater final claims, to cancel their Hungarian based savings portfolios to sign an Austrian one. This resulted in a loss, since instead of waiting for the maturity they cancelled it and the Austrian insurance costed much more than the Hungarian one, because of their product structure and the difference in currency. The whole situation drew a somewhat prejudice towards the whole sector, which is still present amongst people in Hungary.

Opportunities

Covid-19

As much difficulties the global pandemic means to the sector, it holds various opportunities as well. In a previous section I have already mentioned how the insurers and the agents aim to overcome the challenges. This situation serves as a perfect opportunity for the companies to explore, how they can operate on daily basis without personal contacts. The present operation can be regarded a trial and various methods can be adapted in the future. For instance, as the pandemic limited the operation, Generali had to issue majority of the paperwork online without using sheets of paper. On one-hand this is much faster and on the other hand an environment friendly approach. The pandemic also made necessary all meetings to held online. This was a very lucrative aspect for the companies providing such video chat program like e.g. Zoom, Google Hangouts, Microsoft Teams. Nevertheless, it is a tendency and insurance companies might find a better approach to adapt, since meetings can take place almost as efficiently online and the time of travel can also be spared, which can be used for further work. COVID-19 made the insurance companies re-structure their contract signing methods. In the absence of personal meetings, the agreement between the parties can be executed faster. It is not ideal in all situations, but in majority of cases through smart devices, it can be easily solved. This is another opportunity to adapt for the future operations.

<u>Time for innovation</u>

This is the point where the insurance companies with the smartest leaders can benefit from the uncertainties. As the global economy is on the verge of a global financial crisis, those who act first to the new business environment will have a competitive advantage against their competitors. As there are already several people who lost their jobs because of the pandemic, the demand for a certain insurance type, specifically covering this type of risks would be useful. Evidently, in numerous countries, the governments do support those who lost their jobs and while they are in a search for a new workplace. This is hardly enough in most cases since the time is limited, just as the amount of the fund. Once again to mention the pandemic as an example, the demand for private hospital services has grown as people realized the benefits of them, when the capacity in the public hospitals reached the maximum and they can expect a better care. There is already a type of insurance which is based on the contract with the private hospitals and enables the customer to access the healthcare cheaper, than if he/she would pay for the service directly to the hospital. Since these hospitals are unable to treat patients with disease such as cancer, there is a huge room for improvement to gain more customers.

Threats

<u>Unstable economic outlook</u>

Even before COVID-19, lots of economists were forecasting recession in near future, as the number of risky loans were appearing in the financial sectors just as in 2008, which lead to insolvency. The situation seems even worse since the central banks lack taking regulatory actions to stabilize the economy. While it seems that many people do not learn from the past, that another financial turbulence can hit anytime, and as the SARS-Cov2 infected the whole world, another downturn seems unavoidable. Just like any type of firms, insurance companies must be prepared in their business plan for such challenging times. While the insurance companies are not exposed directly to the systematic risk, the underwriting cycle creates uncertainty for their future operations. This can mainly be a threat if such firms prioritize short-term gains, instead of long-term investments. In case of severe recession, when claims rise, those companies can be even driven out of business, who are not capital based enough. The financial turbulence, which affects the financial market does very much determine the "well-being" of one of the main products of the life insurance segment, which is the unit-linked savings portfolio. As the stock prices are unstable, to sign a contract like this is even riskier, without the proper knowledge about, where to invest the money. As the insurance firms earn a fair amount of share from the savings portfolio, the recession can alter their earning and the returns on investments.

Possibility for another pandemic

Threats are usually external factors and mostly hide in the near or distant future. It is inevitable to express its importance for any business activity that has great ambitions to the future. The present pandemic exposed the whole insurance market and showing some threat that no-one could be prepared for. The unemployment rate has risen, causing a huge problem primarily to people who lost their jobs and to the firms around the globe, whose operation is determined by the customers demand. In case of a long-term or another severe pandemic, insurance companies will experience a set-back in the demand and claims level will rise. This pandemic so far was relatively soft to the insurers even though there are no financial reports available from this period as it is still affecting the sector, but from my experience the work is still very much feasible from the agents side. Perhaps if in the future a pandemic would take even worse measures, meaning more people are losing their jobs, can result in a huge financial loss for the insurers. Especially, concerning the fact that the lockdown situation only lasted for about two months in all over Europe, except for Belarus, where there was not at all. In case if a same kind of restriction would last for 2 or 3 times longer, with the blooming recession an even more devastating time comes. Nevertheless, this pandemic showed that no country in the world is prepared if a new type of virus begins to spread.

With the help of the S.W.O.T. analysis, it was perhaps easier to get an insight of the insurance sector as it is in 2020 and what are the possible measures to take adjusting to the present situation. The insurance sector still stands strong because of their uniqueness, but a crisis can reveal its mentioned weaknesses in the changing environment. This duality makes it crucial to constantly map the opportunities occurring, taking threats into account.

7. CONCLUSION

In certain time periods economic crises do appear in the world. Whether it is local, regional or global, the economy tends to have ups and downs. Financial turbulences can also evoke an economic crisis. Economies try to smooth these periods with various fiscal, monetary policy tools. Central banks around the globe also aim to support the suffering countries. As economies suffer, subsequently the financial sector has downturn, which makes businesses like the insurance sector vulnerable. A financial turbulence affects insurers somewhat differently than other sectors. Systematic risk is a threat to financial entities such as banks and not the insurance companies, but through their investment portfolios they can also be severely affected. This is what happened during 2008 crisis as it is demonstrated by my presented examples. While the demand during the crisis was not significantly reduced, the returns on investments suffered considerable losses. As a result, insurance companies aim to keep the balance amongst the possible investment options they offer for their clients through their portfolios. Because of their experience in the 2008 crisis they have risen the fix annuity pension savings and the classic life-insurances.

Nowadays we are already on the verge of another economic crisis, which was forecasted even before the COVID-19. Responders to my survey were expecting such downturn and they increased their savings. The virus spread made several business operations impossible, a huge number of people lost their jobs. More than 40% of the responders has already experienced some kind of difficulties. Although the situation affects the operation of insurance companies, it also holds possibilities. New ways of operation have been introduced successfully, product developments have emerged, and possible introduction of new products may raise the demand. Nevertheless, the life insurances which are linked to the equity markets needs to be continuously mapped to avoid losses. This can be determined also by what type of recession may hit. In case of a V-shaped recession, the economy experiences sharp but short period of economic decline backed up by a strong recovery. This can be considered as the typical recession, where the strength of economic recovery is typically related to the severity of the recession. For insurance companies this would not mean a huge impact in their operations as they are mostly long-term investors, and the V shaped recession is for short term. It could mean a drop in the demand, but since the non-life products are relatively inelastic, the effects are also mild. Investment portfolio losses connected to the equity markets can restore as soon as the economy restores as well. Next type is the U-shaped recession which lasts longer than a V-shaped one and has an undefined trough. The shrink of the GDP may last for several quarters and the recovery is slow. This recession holds greater dangers for the insurance companies as a long-lasting recession can hurt their profitability, especially in the unit-linked life insurance segment. The “rainy day” method is useful in a longer recession, as the firms can compensate the negative effects of the recession with their reserves. Investment portfolios needs to be supervised, since many investors can realize huge losses in the stock markets. A W-shaped recession, as known as double-dip recession is when the economy falls into recession, then recovers from it, but shortly after a slight growth it falls back into recession before the final recovery. This quick fluctuation’s effect on the insurance can have several results. If the first recession was severe, then the permanent upturn can mean an increase in their operation’s profitability, but the second recession can modify that shortly after. A short first recession could mean that their operation’s profitability is not affected severely and as the second crisis has a greater impact, that could mean a bigger threat. It all depends on the strategy of the firm, how severe this period can be. The fluctuation can be very well observed in the equity markets, with sudden steep falls and rises. The L-shaped recession is observed when an economy has a severe recession and the full recovery might take years if ever it will recover fully. This is considered as the most severe recession type, which can lead to depression. This type of recession has major affects on the insurance business as their profitability decreases by the financial welfare. As the capital of customers decrease, the demand for insurances will also drop. Savings products will lose their relevance as people live day-by-day. A certain drop can be expected in the non-life segment as well, as people may have the tendency to sell their cars for instance to raise capital.

The writing of the Thesis helped me to reach a better understanding of the topic. Now it is significantly clearer, that what can cause hardship to the sector and what can serve as an advantage. Through my primary research I have got insight about people’s difficulties and their expectations in the present situation with the thread of COVID-19. I hope to use these knowledges and be better in my work.

SOURCES

Acharya, V., P. Schnabl and G. Suarez (2013), "Securitization Without Risk Transfer", Journal of Financial Economics, 107, pp. 515-536. [Accessed 19 Mar. 2020]

Allen, F. and Carletti, E., 2010. *An Overview Of The Crisis: Causes, Consequences, And Solutions*. [ebook] Available at: <https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1468-2443.2009.01103.x> [Accessed 10 April 2020]

Antolin, P. and Stewart, F., 2009. *OECD Library | OECD Working Papers On Finance, Insurance And Private Pensions*. [online] Oecd-ilibrary.org. Available at: <https://www.oecd-ilibrary.org/finance-and-investment/oecd-working-papers-on-finance-insurance-and-private-pensions_20797117> [Accessed 13 April 2020]

Arrondel, L., L. Bartiloro, P. Fessler, M. Haliassos, P. Lindner, T. Mathä, C. Rampazzi, F. Savignac, T. Schmidt, M. Schürz and P. Vermeulen (2013), How do Households Choose to Allocate their Wealth? Some Stylized Facts Derived From the Household Consumption Survey, mimeo, available at www.ecb.europa.eu/events/pdf/conferences/131017/papers/Session_1_Household_Assets.pdf?195e996a8e08c4a26eeefd7ee31a34a9. [Accessed 19 Mar. 2020]

Baluch, F., Mutenga, S. and Parsons, C., 2011. Insurance, Systemic Risk and the Financial Crisis. *The Geneva Papers on Risk and Insurance - Issues and Practice*, 36(1), pp.126-163.

Bird, G. and A. Mandilaras (2011), "Once Bitten: The Effect of IMF Programs on Subsequent Reserve Behaviour", Review of Development Economics, 15/2, pp. 264-278. [Accessed 18 Mar. 2020]

Blankenburg, S. and Palma, J., 2009. *Introduction: The Global Financial Crisis*. [ebook] Cambridge Journal of Economics. Available at: <https://watermark.silverchair.com/bep038.pdf?token=AQECAHi208BE49Ooan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485ysgAAAmswggJnBgkqhkiG9w0BBwagggJYMIICVAIBADCCAk0GCSqGSIb3DQEHATAeBglghkgBZQMEAS4wEQQM1KWZ-pvf2rFHb9hOAgEQgIICHhBKC1F5aYbOlunt5OJSr8GhxbwEXZyisDOjjHR2zQ6wSignGlClT3CPTZRSEB7fG4P1ZqlYLma4DbVltuzCyyDO00hjrblJ7Sr4ZH4fBCbZgo0dbUpepFnw-i9LAfiLMGS3J1Qz5wIoIW1pEvP6_y2jhl7zTm1P8R1qdWIhnspwGz-WjOK_vdzCh-bauzCvSUKGwWB01DYBzJsJyhfPa0eMKh6kcKWgwQYpCBcPoboMc8s3TdBiSNalPWH-0EXEUn2yYytoqv6qedCtuMnzN9FHlVotl8FLVHJjbDHqEi9O2kGCmDhPIK4gzvWILoyq

AxvmY0Xj9kQkOsnjM9as-eiBAvpog74W-XwxEBW6xCc5Nr50SBJQu0CLpEGe-aCS2ZAJ5bNwXq6GnvWo531t-LNouiperkua7NxUOm30QRsVsrQXCReB-jMcMGNRWYwGHexgE9II0xXkXaK1BGRV0jvH9XP-QHR1TBn_8y9HcS9ziNJwuOhgQodukariDKKDbOlYGZ53uQMLZBdhrZtPKt36d7bS8CYwwQF1uB-MEag6qGHyODJYvp236FZsBgtq0iPtN2LR352PXQr4dtAiJXh-4HXV9Gif149hHDAG678cuSqu5eWpw7rTd827xXYrPbCsGI6srMYOScUUjuviDYYdVF8LZpmHq75bfFmFqCtahCVKG0LJ6hakxkKz8N3SboY9fdVHev339sPOLw95> [Accessed 5 April 2020]

Blundell-Wignall, A., P. Atkinson and S.H. Lee (2009), “The current financial crisis: Causes and policy issues”, OECD Journal: Financial Market Trends, Vol. 2008/2, http://dx.doi.org/10.1787/fmt-v2008-art10-en. [Accessed 18 Mar. 2020]

Borio, C. and H. Zhu (2008), “Capital Regulation, risk-taking and monetary policy: A missing link in the transmission mechanism?”, BIS Working Papers, No. 268, available at www.bis.org/publ/work268.pdf [Accessed 18 Mar. 2020]

Bussière, M., Imbs, J., Kollmann, R. and Rancière, R., 2020. [online] Robertkollmann.com. Available at: <http://www.robertkollmann.com/KOLLMANN_PUBL_BUSSIERE_IMBS_RANCIERE_AEJ_MACRO_2013.pdf> [Accessed 26 March 2020].

Csiszar, E. *SYSTEMIC RISKS AND THE INSURANCE INDUSTRY*. Available at: http://www.oecd.org/finance/financial-markets/1939448.pdf

Dokko, J., B.M. Doyle, M.T. Kiley, J. Kim, S. Sherlund, J. Sim and S. Van Den Heuvel (2011), “Monetary policy and the global housing bubble”, Economic Policy, Vol. 26, Issue 66, pp. 237-287.

Drake, P., Neale, F., Schorno, P. and Seeman, E., 2016. [ebook] Available at: <http://www.fmaconferences.org/Lisbon/Papers/Risk_and_insurance_2016_11.pdf> [Accessed 17 April 2020].

European systematic risk board, T., 2015. *The Role Of The Insurance Sector In The Economy*. [ebook] Available at: <https://www.esrb.europa.eu/pub/pdf/reports/2015-12-16_esrb_report_annex_1.pdf> Ahrend and Moeser, 2011 [Accessed 19 April 2020].0

Frankel, J. and G. Saravelos (2010), "Are Leading Indicators of Financial Crises Useful for Assessing Country Vulnerability? Evidence from the 2008-2009 Global Crisis", NBER Working Paper, No. 16047. [Accessed 18 Mar. 2020]

Gorton, G., S. Lewellen and A. Metrick (2012), "The Safe-Asset Share", American Economic Review: Papers and Proceedings, 102/3, pp. 101-106. [Accessed 19 Mar. 2020]

Helleiner, E., 2011. *Understanding The 2007–2008 Global Financial Crisis: Lessons For Scholars Of International Political Economy*. [ebook] Available at: <http://www.ir.rochelleterman.com/sites/default/files/Helleiner%202011.pdf> [Accessed 14 April 2020].

Hördahl, P. and M.R. King (2008), "Developments in repo markets during the financial turmoil", BIS Quarterly Review, December, available at www.bis.org/publ/qtrpdf/r_qt0812e.htm. [Accessed 19 Mar. 2020]

Junankar, P., 2011. *The Global Economic Crisis: Long-Term Unemployment In The OECD*. [ebook] Available at: <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1955397> [Accessed 5 April 2020]

Kaperczyk, M. and P. Schnabl (2010), "When Safe Proved Risky: Commercial Paper during the Financial Crisis of 2007-2009", Journal of Economic Perspectives, 24/1, pp. 29-50 [Accessed 19 Mar. 2020]

Kenton, W. (2020). *Financial Crisis*. [online] Investopedia. Available at: https://www.investopedia.com/terms/f/financial-crisis.asp [Accessed 18 Mar. 2020].

Luttmer, E. (2005), "Neighbours as Negatives: Relatives Earnings and Well-Being", The Quarterly Journal of Economics, 120/3, pp. 963-1002.

Merrouche, O. and E. Nier (2010), "What Caused the Global Financial Crisis? – Evidence on the Drivers of Financial Imbalances 1999-2007", IMF Working Paper, WP/10/265, available at www.imf.org/ external/pubs/ft/wp/2010/wp10265.pdf [Accessed 18 Mar. 2020]

Molnár, T., Rácz, I. and Regős, G., n.d. *The Hungarian Insurance Market In An International Comparison*. Available at: https://www.mnb.hu/letoltes/insurance-market-hun.pdf

Pozsar, Z. (2011), "Institutional Cash Pools and the Triffin Dilemma of the U.S. Banking System", IMF Working Paper, WP/11/190, available at www.imf.org/external/pubs/ft/wp/2011/wp11190.pdf [Accessed 19 Mar. 2020]

Ramskogler, P., 2015. Tracing the origins of the financial crisis. *OECD Journal: Financial Market Trends*, 2014(2), pp.47-61.

Schich, S., 2009. *Insurance Companies And The Financial Crisis*. [ebook] Available at: <https://ideas.repec.org/a/oec/dafkad/5ks5d4npxm36.html> [Accessed 13 April 2020].

van Gool, K. and Pearson, M., 2014. *Health, Austerity And Economic Crisis: Assessing The Short-Term Impact In OECD Countries*. [ebook] Available at: <https://www.oecd-ilibrary.org/docserver/5jxx71lt1zg6-en.pdf?expires=1589453813&id=id&accname=guest&checksum=BE50BF0386B914A0B53485DE59C3B88C> [Accessed 14 April 2020].

Veress, J., 2012. *A Gazdasági És Pénzügyi Világválság Gazdaságpolitikai Következményei*. [online] Available at: <http://www.ksh.hu/statszemle_archive/2013/2013_04/2013_04_345.pdf> [Accessed 17 April 2020].

Weisbart, S., 2018. *HOW INSURANCE DRIVES ECONOMIC GROWTH*. [online] Insurance Information Institute. Available at: <https://www.iii.org/sites/default/files/docs/pdf/insurance-driver-econ-growth-053018.pdf> [Accessed 17 April 2020].

ATTACHMENTS

The questions and responses of my survey are available at the following link:
https://docs.google.com/forms/d/1DuG9rhiA-XVvGbpzHbs2sFxsq9wFRdWUpCR9wF7-tvE/edit?fbclid=IwAR2CaqwqL2_QjVFpoqiT5iDE5Un_N4zYPFwVqZmPEC0OpcD7CQuI6APXrgs

The translation of the questions are as follows:

1. What is your gender?
2. In which age-group were you in 2008?
3. What was your type of occupation?
4. How did the crisis affect you (if it did at all)? What was the hardest during this time?
5. What type of insurance you had?
6. Have you noticed any signs before COVID-19, that there is a possibility for a recession? If yes, have you prepared for it? How?
7. What is your type of occupation now?
8. Did COVID-19 affect your financial situation?
9. If the previous question was answered yes, how exactly?
10. Do you expect any change during the next year in your job?
11. If the previous question was answered yes, how exactly?
12. What kind of insurances you have currently?
13. How big of security could insurances mean in the current situation?
14. Do you see the need for new types of insurances? If yes, what kind of?