

**THE SOCIO-CULTURAL UNDERPINNINGS OF THE LIFE INSURANCE MARKET IN
KAZAKHSTAN**

**СОЦИАЛЬНО-КУЛЬТУРНЫЕ ОСНОВЫ РЫНКА СТРАХОВАНИЯ ЖИЗНИ В
КАЗАХСТАНЕ**

**ҚАЗАҚСТАНДАҒЫ ӨМІРДІ САҚТАНДЫРУ НАРЫҒЫНЫҢ ӘЛЕУМЕТТІК-МӘДЕНИ
НЕГІЗДЕРІ**

by

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NAZARBAYEV UNIVERSITY

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

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Summary

This thesis analyzes the determinants of the life insurance demand in Kazakhstan. The aim of this study was to find how Kazakhs perceive life insurance as a market product and how the perception impacts the consumption pattern of life insurance. For this research, two methods of analysis were employed: quantitative and qualitative. In the first chapter, econometric tools were used to determine the change in the demand across individual characteristics such as age, gender, marital status, occupation and place of residence. Also, macrolevel determinants of demand such as average income and urbanization rate were determined. In the second and third chapters, in-depth interviews with representatives of local population and sales agents were used to determine cultural features of Kazakh society that serve as a barrier for the development of the life insurance market in Kazakhstan. Certain patterns of consumption are determined across macrolevel personal and characteristics in the first chapter. The explanation for these patterns are found further in second and thirds chapters.

Strong influence of social norms on the way the product is perceived by Kazakhs. Apart from social norms, strong impact of historical experience is observed in the perception of life insurance. Local norms strongly impact the risk and death perception of Kazakhs that are central components for the realization of need for life insurance.

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INTRODUCTION

The life insurance industry

Life insurance is a product that allows for the protection of people that are financially dependent on an individual. The peculiarity of life insurance is that it allows for the protection of dependents even in the event of an insured individual's death. The insurance contract is signed to provide financial benefits to a person of an individual's choice if they should die in the period of insurance coverage. The amount of financial benefit paid is determined by the type of coverage that an insured chooses.

Life insurance is a financial cover for cases of contingency related to human life such as death, accident, disability or retirement. A human is constantly subject to the risk of death due to various causes. Regardless of income size, no one is aware of what will happen in the future. Many people die unexpectedly from accidents or illness and in case a person is the only breadwinner in the family their death may have disastrous consequences for their family members. Therefore, buying life insurance can be an important step in planning for financial well-being. Purchasing life insurance is regarded as one of the widespread tools to secure economic well-being of a family.

Generally, life insurance is purchased to provide for the well-being of dependents in case of death. However, there are other types of policies that allow an individual to access the cash invested in life insurance in case he lives until the end of the policy term. This feature of life insurance is called a "living benefit". It is the living benefit that adds to life insurance the character of a saving instrument. It is important to indicate this saving feature of life insurance because in this study it turns out to be a central reason why life insurance is consumed by Kazakhs.

Possession of life insurance to large extent contributes to the financial stability of families despite unforeseen circumstances. On a larger scale, it is an important tool because it allows to

sustain society's welfare. On state level, possession of life insurance eliminates the threat of increase of poor families, therefore lessening the state's responsibility for caring for widows and orphans. Although deemed economically rational, the development of the life insurance industry has followed inconsistent pattern across countries. In no country life insurance has been accepted immediately by society. The idea of insuring life is very complex and perceived differently across nations. In the United States it was initially rejected because it 'offended a system of values' and was perceived as a profanation of death. People perceived life insurance as a tool that turned a sacred event into commodity (Zelizer, 1978). Later, owing to several changes in values, the understanding of life insurance changed among US citizens leading to the prosperity of this enterprise. In the Chinese society, life insurance was rejected because of the local taboo on thinking about death. However, life insurance companies changed their strategy of marketing. They presented life insurance as saving instrument after which it experienced considerable growth (Chan, 2012). From these central studies in this field, it becomes clear that for the product to be accepted by society, compliance with social norms is compulsory.

Life insurance in Kazakhstan

In Kazakhstan the first signs of life insurance activities appeared in early 2000. Although life insurance existed in the Soviet Union, it was not until early 2000s that life insurance companies were able to function according to market economy rules. The law on the insurance activities was accepted in 2000, and the first signs of the life insurance consumption became observable in 2003, reaching 0.01 percent of the GDP. As for 2015, penetration rate of life insurance is still very low – 0,14 percent of GDP while in OECD countries it is 4.6 percent. If to consider 2001 as the introduction date of this product to people, it has been 17 years since the product is being sold to the local population. In Kazakhstan, the life insurance market consists of seven companies.

In Kazakhstan, life insurance penetration rate is low by international standards¹. The low demand might be justified by the better interest rates on savings that bank deposits offer. However, life insurance is a risk-management instrument and offers more privileges than mere saving account. Therefore, it remains difficult to justify the low demand for product that allows individuals to care and provide for well-being of relatives in case of your own death.

Contribution of Thesis

This main aim of this research is to find the roots of the low demand for life insurance in Kazakhstan. This study allows for a close look at the life insurance market in Kazakhstan, seeing the regional distribution of purchased policies and individual characteristics of life insurance consumers. The determinants of life insurance demand have been studied thoroughly by a considerable number of scholars and this study aims to determine whether consumption pattern of Kazakhs fits into the established general trend. Based on data of a local life insurance company, the first section of this study allows us to see the consumption pattern across regions, gender, age, types of marital status and occupations. These data are also compared to the income and urbanization levels of regions with the aim of observing the influence of these two important factors on demand. Overall, the detailed profile of consumers of life insurance is constructed in the framework of this study. Having employed quantitative methods of analysis to construct the profile of consumers, the second section of this study employs qualitative methods to uncover the reasons behind the consumption pattern found in the first section.

Although low, life insurance has been consumed by Kazakhs for more than a decade. Kazakhs' economic behavior in using risk-management tools has not been previously studied. The second section allows us to observe the attitude of Kazakhs towards using risk-management tools such as life insurance. Based on central studies of this field (Zelizer, 1978; Chan, 2012), this research considers economic behavior of a society to be shaped by social norms and shared

¹ <https://www.reuters.com/article/fitch-kazakh-insurance-market-offers-gro/fitch-kazakh-insurance-market-offers-growth-and-challenges-idUSFit998076>

values. In the framework of this research, the perception of life insurance by Kazakhs is analyzed through their shared norms and values and the mechanisms through which Kazakhs' social norms impact negatively the demand for life insurance are disclosed.

In such a manner, my thesis will enable us to understand reasons, other than economic, behind the low demand for life insurance among Kazakhs. Research on social norms is essential to understand motivations behind individuals' economic behavior, because with the sophisticated understanding of local values one can understand the reasons behind the low demand for economically rational choices which include life insurance.

Apart from social norms, this study shows the importance of the historical experience of Kazakhs in their current decision-making process. Kazakhs have lived in a socialist system for a long time before switching abruptly to a market economy. At this stage, the study of the economic behavior of Kazakhs is important. My research allows us to trace the impact of the long-lasting communist experience on current decision-making of Kazakhs that live in market economy.

To sum up, this study is essential because it gives a detailed image of the life insurance market in Kazakhstan. Moreover, it allows us to trace the impact of social norms on the demand for market products such as life insurance both, from potential customers' and suppliers' perspective. Overall, this study shows the importance of the cultural and social context in which an individual lives and the way it overrides the rationality factor.

Outline of Thesis

This study consists of three chapters. In the first part I illustrate the detailed profile of the life insurance market while in the second part I focus on the cultural and social norms regarding death and risk-perception. The first chapter is devoted for the analysis of the data obtained from the life insurance company, while the second and third chapters focus on the analysis of the interviews.

The profile of life insurance market is constructed in the first chapter. I use two databases in the first chapter, consisting of 36 000 and 72 000 observations. To analyze these databases, I use three methods of analysis: correlational analysis, means-comparison test and multiple regression analysis. In this chapter, I uncover how the demand for life insurance changes across place of origin and the occupation of an individual; his age, gender and marital status. Additionally, using this data I observe how demand pattern correlates with urbanization rates.

Having established patterns of consumption in the first chapter, I further use qualitative methods to understand the reasons behind those patterns of consumption. In the second chapter, I conduct in-depth interviews with Kazakhs that include already insured and uninsured individuals. The interviews are analyzed through the prism of rationality, risk perception and death perception. To analyze the interviews, I use thematic coding. In this chapter, by observing the local norms regarding risk and death, I identify the compliance of them with the idea of insuring life and outline several norms that serve as a barrier for acceptance of the idea of life insurance. Additionally, in this chapter, I find how Kazakhs perceive life insurance and their motivations behind buying life insurance despite the existence of norms that detract Kazakhs from insuring life.

The third chapter is concerned with the supply-side of life insurance service – sales agents. This chapter analyzes the interviews with sales agents and observes mechanisms that they employ to promote the product. Interviews with sales agents that have different experience of working in this field discloses barriers that they confronted and the strategies they employ to overcome these barriers.

Chapter 1. Microeconomic determinants of life insurance demand in Kazakhstan

Formation of the life insurance demand is a complex process. In many countries life insurance is a voluntary product and people face the choice of buying it or not. The fundamental motivation behind considering such an option is to assure probable loss of income after the death of the person who is the main breadwinner. Formation of the demand is generally analyzed within two different levels: individual and societal.

First, this chapter provides the broader profile of life insurance market in Kazakhstan, namely demand by regions and occupation. Further, impact of macro-level factors of demand such as average income level and urbanization rate are determined. Second, it outlines the micro-level individual factors affecting demand for life insurance. For this purpose, information about insured individuals are analyzed using quantitative methods of analysis. In this way, this chapter allows a reader to understand the geographic distribution of the insured, observe important macro and micro level determinants that have impact on demand.

1.1 Literature

Life insurance demand is examined since the second half of the 20th century. Two broad categories of studies can be distinguished. A first group of studies focus more on informal institutions that shape the demand for life insurance, while a second group of studies is conducted mostly by economists is concerned with measuring the degree of impact of certain factors on the demand. The second group of studies focuses on an extremely wide range of factors, which can be categorized into macroeconomic and microeconomic factors. Studies that examine macroeconomic factors observe the effect of variables as GDP, expected inflation rate, interest rates, availability of sound social security, banking sector development, private saving rate. Studies examining influence of the microeconomic factors observe the influence of the variables like age, dependency ratio, marital status, gender, occupation and origin of an insured. The majority of the studies that examine the effects of the macroeconomic factors conduct their studies on cross-country level, while studies examining

microeconomic factors focus more on the study of the individual households. Overall, empirical studies have tested the degree of impact of great range of variables, which could be classified into certain groups, e.g. demographic (family size, number of dependents, age), socioeconomic (income, employment) and cultural (religion) etc.,

1.2 Demographic factors

The demographic factors have an impact on demand. In this section I discuss the effects of three of them – age, dependency ratio and gender. Age is one of the most significant factors that influence the demand for life insurance. A number of studies have found strong correlation between age and the consumption of life insurance (Berekson, 1972; Truett and Truett, 1990; Showers and Shotick, 1994). The demand for life insurance increases at relatively young age and decreases later, reaching a peak at 43 (Outreville, Rossi and Luciano, 2015). This is consistent with Ando and Modigliani's (1963) hypothesis on the traditional life-cycle behavior of savings, that finds that the demand for saving instruments among 18-30 years old does not follow a constant pattern as not all people become employed after 18, some continue education while others work. Meanwhile, the 30-50 age groups spend most of their income on their dependents and on consumption of durable goods which include savings. After retirement there is very low rate of buying life insurance.

Heterogeneity of the demand across age groups through the prism of protection of dependents from the loss of income because of the unexpected death of a breadwinner. At younger age it is more likely that an individual does not have dependents which makes the purchase of life insurance less necessary. The same reason can be used to explain low demand among people of older ages - the older people become, the more mature are their children that implies that they can sustain their life even after premature death of parents (Hammond, Houston and Melander, 1967).

Another important factor that is considered to influence the demand pattern is the *dependency ratio* or the family structure. The dependency ratio is an indicator of the number of dependents. It is a measure that shows the share of people of not working age to the number of people of working age. In other words, the indicator groups people according to their potential to earn money. In the majority of countries, due to the employment regulations children under 15 are less likely to have own income and once people reach certain age they are considered at the retirement. Therefore, families with larger presence of children and retired are characterized as families with higher dependency ratio. Families with a higher young dependency ratio have been found to have higher demand for life insurance while families with older children, as mentioned above, tend to have lower demand for life insurance (Berekson, 1972; Burnett and Palmer, 1984; Browne and Kim, 1993; Showers and Shotick, 1994, Outreville, Rossi and Luciano, 2015). Scholars explain such findings arguing that the main aim of insuring life is to protect dependents from the unexpected loss of income which can be caused by unexpected death of the breadwinner. Therefore, the more dependents a person has the higher is the need for owning life insurance, as there is a larger number of people whose economic well-being is at risk of worsening in case of the breadwinner's premature death. With the same rationale, an individual that does not have dependents to support has lower need for insuring life is significantly small (Hammond et al., 1967).

The third demographic factor according to which, life insurance consumption was found to vary is *gender*. In comparison to other factors, studies examining influence of gender on life insurance consumption are rare (Goldsmith, 1983; Gandolfi and Miners, 1996). The common finding of these studies is that women tend to have less demand for life insurance than men. Studies explain the low demand among women by arguing that women are less risk averse than men. Their own death is not perceived as an important risk as the risk of losing "the head of family" because women do not tend to monetize their place in the family (Outreville, Rossi and Luciano, 2015). However, there are two additional different ways in

which gender impacts the demand. First, the demand for life insurance among women increases with the rise in the number of women in labour force. Second, in married groups if a wife has a high education or is employed then it leads to lower demand for life insurance on husband (Goldsmith, 1983; Showers & Shotick, 1994). If a woman is a main breadwinner then the potential loss from her premature death increases which makes life insurance as an alternative guarantee for the short-term well-being of dependents in the case of premature death. Therefore, demand for life insurance among employed women is higher mainly because the income of a wife increases the need of insuring money income rises proportionally. The negative impact of a woman's education and employment on husband's willingness to insure his life is explained by the wife's ability to take the role of the main income source in case of her husband's premature death. The main argument is that with education a woman can easily substitute for her husband in the labour market.

1.3 Socio-economic factors

As it was mentioned above, life insurance demand depends on various factors, which include also socio-economic factors, like income, level of education and employment.

Income has been the most frequently examined factor and has been consistently found to have significant influence on demand. In almost all empirical studies, income turned out to be a positive significant factor in shaping demand for life insurance (Burnett and Palmer, 1984; Browne and Kim, 1993; Showers and Shotick, 1994). Life insurance is perceived as the appropriate way to soothe the risk inherent to a household's income flow because of the uncertain lifetime of the breadwinner (Yaari, 1965; Fischer, 1973; Pissarides, 1980; Lewis, 1989). Therefore, income is the most relevant factor in relation to the demand for life insurance for two reasons. First, to make life insurance affordable a certain minimum level of income is needed. Second, income shows a household's total consumption which in its turn reflects the rational amount of life insurance according to theoretical models (Yaari, 1965; Lewis, 1989). Overall, income is an important factor influencing an individual's decision to

insure their life. This is because uncertainty from an individual's income is the dominant risk for household consumption (Campbell, 1980).

Employment status and *the type of occupation* have been found to have a certain degree of influence on the demand level (Hammond et al., 1967). It is assumed that according to the occupation group one can classify the affordability of buying life insurance. For example, in higher income groups there may be greater awareness about the life insurance while in low-income groups affordability and desire of buying life insurance can be limited only to group life insurance. Hammond et al. (1967) suggest relationship between an individual's choice of occupation and his attitude towards risk. Attitude towards risk is an important component of life insurance demand formation. A study of the Italian households illustrates the way in which choice of occupation can predict an individual's willingness to insure his life (Outreville, Rossi and Luciano, 2015). The category of traders, entrepreneurs and housewives were the ones among whom life insurance demand was the highest. Such result is reasonable if to rely on the study of risk-perception which argues that people can have the same attitude towards risk but different perception of risk. Entrepreneurs have more positive perception which explains their frequent involvement in risky matters (Weber and Hsee, 1988).

Influence of the *level of education* on the willingness to insure life has also been tested in several studies (Burnett and Palmer, 1984; Headen and Lee, 1974; Truett and Truett, 1990; Browne and Kim, 1993; Gandolfi and Miners, 1996). Most of these studies have found significant positive influence of education on the demand for life insurance. These scholars present several ways that education influences positively on life insurance demand. Firstly, a higher level of education is generally associated with the higher degree of awareness of the desirability of life insurance in general. Moreover, education expands the stage of dependency as at the process of education there is usually no source of income, thus leading to higher number of dependents per family (Browne and Kim, 1993). In addition, financial literacy has

been found to have a positive impact on life insurance demand as it improves customers' understanding of the product (Cole et al., 2008). Scholars further explain the positive influence of education through its ability to foster awareness and facilitating objective analysis in the process of the life insurance purchase (Hammond et al., 1967). Moreover, parents with high education tend to anticipate the lengthier financial dependency of their children because of their own tendency to seek higher education. In this way, higher education influences desire to insure life as the number of dependents remain high due to the education expenditures.

The level of urbanization was reported to have significant positive influence on the demand level (Outreville, Rossi and Luciano, 2015). Urbanization is the indicator of the proportion of the population that lives in city/town in relation to the overall population. It is argued that the urbanization rate can be employed as an indicator of the access to the information about the product and the product itself. Therefore, the higher is the urbanization rate, the greater the probability of a high demand for life insurance. However, studies in the field of economic sociology interpret the influence of urbanization on life insurance differently (Zelizer, 1978). It is argued that urbanization leads to the weakening of neighborhoods and kinship ties which in turn results in a higher level of individualism. In individualistic societies, the support of community is perceived as weaker which enhances an individual's sense of responsibility for his children after his death, and promotes a desire to provide for their economic well-being by using life insurance mechanism.

1.4 Cultural determinants

Religion has also been one of the frequently examined factors in the analysis of the life insurance demand (Zelizer, 1978; Henderson and Milhous, 1987). While the influence of the religion is complex, religion has been found to have influence on an individual's choice to buy life insurance in two contexts – individual and societal.

The influence on the societal level can be observed from the case of Europe where society condemned this product on religious grounds until the 19th century. Life insurance used to be perceived as doubting in God's care. Currently, Islamic communities still express antagonism to buying life insurance (Zelizer, 1978). A considerable number of studies have tested the influence of Islam on the demand pattern (Wasaw, 1986; Browne and Kim, 1993) and found lower demand for life insurance within Muslim communities. Scholars explain such finding referring to Islamic regulation which condemns several elements of life insurance like gambling (maysir) and usury (riba).

A different group of studies observe a correlation between religious salience for an individual and life insurance demand. These studies find that the stronger an interest an individual has in religion the lower the level of demand for life insurance is (Burnett and Palmer; 1984). It is argued that stronger belief in God is associated with lower reliance on life insurance. Scholars to some extent relate the influence of religious salience to a fatalism inherent to religious people that makes them perceive a lack of control over their destiny which in turn results in lower demand for life insurance. On contrary, people who did not believe in fate and felt control over their destiny had considerably larger amounts of life insurance (Burnett and Palmer, 1984).

Apart from the groups of factors mentioned above, scholars unanimously agree on two broad features: bequest motive and a person's risk aversion to explain the differences in demand for life insurance. Bequest motive serves as an important motive for insuring life as

insurance serves as protection of dependents against financial adversities due to the loss of wage-earner (Inkman and Michaelides, 2012). However, in the framework of this research those two factors will be examined thoroughly in the second section that presents the qualitative analysis.

1.5 Data description

The objective of this section is to identify the key determinants of life insurance demand in Kazakhstan. In Kazakhstan there are thirty-two insurance companies operating, seven of which are life insurance companies. I employ two databases from a local life insurance company, share of which in the market of Kazakhstan is more than 20% (National Bank of Kazakhstan, 2016). Two requests for data were submitted and as result two different datasets were obtained. The size of datasets is different as the first dataset includes information only about origin and occupation of the insured, while the second dataset includes considerably more characteristics such as age, gender, marital status, year of buying insurance, premium amount contributed, term and periodicity of contributions. As reported by the company representatives, second dataset is much smaller in size because it includes more characteristics of the insured and due to the lack of information on some characteristics some observations were eliminated. Moreover, the first dataset includes information about the insured in the period between 2001-2017, while the second dataset is related only to the period between 2001-2009.

The information about the individuals in the datasets were gathered from surveys that individuals filled in before purchasing insurance. To comply with confidentiality rules, the company provided with deidentified data where name and surname of the insured were withheld. The main limitation of the data is that it covers information about the insured of only one company. Out of the seven functioning life insurance companies on the territory of Kazakhstan requests to provide with deidentified information about the insured were rejected, even on the condition that the data may withhold identifiable information about the customer.

The first database (sample I) has 72 936 observations. This dataset covers the place of residence of an insured and the economic activity in which he/she is involved. Table 1 presents the classification of economic activities. This sample will be employed to determine penetration level of life insurance market in Kazakhstan. The sample I shows that the average term for life insurance is 16.7 years. Term for life insurance stays for the length of the insurance contract, i.e. during this term an individual's life will be insured. According to the geographical characteristics, regional distribution is markedly unbalanced. Almost 20 percent of the insured in the dataset comes from South Kazakhstan region and more than 10 percent from Karagandy region. The lowest number of insured is from Central (Karaganda city and Zhezkazgan) and Northern regions (Kokshetau and Petropavlsk). More than 20% of the insured work as self-employed, almost 30% are employed in financial organizations while 18% work in the central (national) banks. Share of insured that are employed in other sectors of economy comprise small share of the sample.

Table 1. Classification of economic activities

Sector of economy	Description
1.Regional and local government;	Institutional units implementing management functions at the administrative division, city and district level, and organizations financed from regional (local) budgets
2.Central (national) banks;	An institutional unit that controls key aspects of the financial system, including emission of the national currency, management of international reserves, supervision of activities of financial organizations.
3.Other financial organizations;	Insurance (reinsurance) organizations, non-state cumulative pension funds, pawnshops, investment funds, some organizations that carry out certain types of banking operations, and other financial institutions, with the exception of organizations that are controlled by the state and / or engaged in public or charitable activities.
4.State non-financial organizations	The institutional units dealing with mainly market production and controlled by government authorities
5.Non-governmental non-financial organizations; Non-profit organizations	Institutional units dealing with mainly market production and are uncontrolled by government

serving domestic economy;	
6.Non-profit organizations serving domestic economy	Institutional units producing goods or services, but not yielding income or other financial benefits to institutional units that control such organizations
7.Households	Institutional units consisting of individuals, as well as from small groups of individuals (families) living together, (in whole or in part) their incomes and property and jointly consuming certain types of goods and services (housing, food products and others). This group also includes individuals engaged in entrepreneurial activities without the formation of a legal entity.

Note: The classification of economic activities by purpose of payment according to the National Bank of Kazakhstan

Table 2. Sample I. Summary

Region	Occupation							Total
	1	2	3	4	5	6	7	
Akmolinsk	280	515	186	985	141	93	610	2,810
Aktjubinsk	171	312	116	600	86	56	369	1,710
Almatinskaya	517	949	346	1,811	257	172	1,124	5,176
Almaty	607	1,118	404	2,128	305	202	1,318	6,082
Astana	380	695	254	1,328	189	127	821	3,794
Atyrauskaya	600	1,101	399	2,099	300	199	1,302	6,000
Baikonur	0	2	1	2	0	1	2	8
East Kazakhstan	660	1,209	439	2,311	331	219	1,429	6,598
Zhambyl	72	130	48	246	36	24	148	704
Zhezkazgan	2	4	2	8	1	0	9	26
West Kazakhstan	433	794	288	1,512	217	145	935	4,324
Karagandy	18	31	13	66	8	5	39	180
Karagandinskaya	776	1,426	516	2,715	388	259	1,684	7,764
Kokshetau	59	107	38	203	29	20	124	580
Kostanay	75	136	53	266	39	25	160	754
Kyzylorda	410	752	272	1,432	204	136	892	4,098
Mangystau	291	530	193	1,015	146	98	629	2,902
Pavlodar	139	255	94	492	70	46	304	1,400
North Kazakhstan	238	436	157	833	120	80	518	2,382
South Kazakhstan	1,466	2,686	977	5,125	732	489	3,171	14,646
Petropavlovsk	45	84	29	160	23	16	101	458
Total	7,239	13,272	4,825	25,337	3,622	2,412	15,689	72,396

The second dataset (sample II) covers 31 739 individuals insured between 2001-2009 with additional information about their age, premium amount, marital status, term of

insurance, gender and the year in which they insured their lives. Also, Sample II enables the tracking of the frequency of contributions.

Almost 70 percent of the insured were married, and 65 percent of the insured were women. I use this sample to uncover how demand varies by gender, marital status, age and place of residence. I use the premium amount to measure the demand for life insurance. In the majority of studies premium amount has been used to indicate the level of demand for life insurance, while in macroeconomic studies overall life insurance penetration in a country was used to indicate the demand. Therefore, as the first dataset is aimed at analyzing market on macro level by looking at regional characteristics, penetration level will be sought and its relation to income and urbanization.

The second dataset was modified. To compare means of premium amount by age, gender, marital status and region, firstly dummy variables were created. Age was categorized into 4 different groups: 18-30, 31-45, 45-60 and 61-71. I used this break down to test Ando and Modigliani's (1963) hypothesis on the traditional life-cycle behavior of savings which states that the demand for saving among 18-30 years old does not follow constant pattern as not all people become employed after 18, some continue education while others find jobs. 30-50 aged groups spend most of their income on their dependents and on consumption of durable goods, and after retirement there is very low rate of buying life insurance.

17 cities in the dataset were aggregated into five regions as in the Table 2. Dummy variables were created for these five regions.

Table 2. Regions

Eastern	Ust'-Kamenogorsk and Semey
Western	Atyrau, Aktau, Aktobe and Uralsk

Northern	Petropavlovsk, Pavlodar, Kostanay, Astana, Kokshetau
Central	Karaganda
South	Almaty, Taraz, Shymkent, Kyzylorda, Taldykorgan

Table 3. Sample II. Summary statistics

Variable	Observations	Mean	Std.dev	Min	Max
Age	20 904	44.11	11.06	18	71
Premium amount	20 904	144 921.3	84116.46	25 156	2 010 000
Term of the insurance	20 904	16.70	4.35	7	49
Male	7107	0.34	0.47	0	1
Female	13797	0.65	0.47	0	1
Married	14423	0.69	0.45	0	1
Single	6481	0.30	0.45	0	1
PA_north (tenge)	4 392	149 867	82961.39	25156	1 326 600
PA_Central (tenge)	1 934	123 438	64616.52	28155	1 000 000
PA_south (tenge)	8 240	140 060	82947.75	30000	2 010 000
PA_East (tenge)	1 432	121 871	62419.36	50000	1 007 000
PA_West	4 906	163 664	94118.88	30000	1 650 000

Note PA_(region name X) is for premium amount for particular region

The average insurance term is 16.7 years, and the average age of the insured is 44 years. On regional scale, we see that the number of insured from south comprises almost 40% of the company's sales, while northern and western regions around 20 percent. The number of insured from eastern and central regions have small share in the sales of the company – 6% and 9%, respectively (Table 3).

1.6 Research Hypotheses

The literature review identifies seven key socio-demographic variables that determine life insurance demand: age, income, dependency ratio, level of education, religion, employment/occupation, gender, income and urbanization rate. The dataset from the insurance company presents six characteristics of an individual: age, gender, marital status, origin, economic activity in which he/she is engaged, premium amount and the term of insurance. I use first five variables as explanatory variables in the analysis, while the premium amount is used as an indicator of the life insurance demand.

Second analysis which is conducted using dataset II which consists of characteristics of insured individuals, premium amounts will be used to indicate the demand. Other data will be used as explanatory factors for the differences in premium amount. Taking into account the findings of the former studies and range of data available, the following hypothetical assumptions are outlined.

The first and most frequently tested variable is age. The studies by Berekson (1972), Truett and Truett (1990), Showers and Shotik (1994) find that age has a positive impact on the life insurance demand. A study by Outreville et al. (2015) find that the demand for life insurance reaches its peak at 43 and continues to be high until retirement age. ***The first hypothesis of this study is that age has a positive effect on the demand for life insurance.***

To determine how the dependency ratio impacts the life insurance demand in Kazakhstan information about the marital status of the insured individuals is used as a proxy variable. Marital status of an individual is used to indicate the dependency ratio because married individuals are likely to have more dependents than single. As it was indicated before, life insurance is more actively consumed among those individuals that have larger number of dependents. ***The second hypothesis is that the life insurance demand is higher among the individuals who are married as compared to individuals who are single.***

The gender of an individual also has an impact on life insurance because of different risk attitudes among gender types. Female are found to be less risk averse and have tendency not to monetize their role in the family (Outreville, Rossi and Luciano, 2015). Therefore, to assess the role of gender in shaping demand for life insurance in Kazakhstan only the gender difference will also be tested. ***The third hypothesis will be that the demand among male individuals is higher than among female individuals.***

Type of occupation has direct influence on the demand for life insurance. Firstly, occupation can serve as proxy for an individual's risk-perception. As the study by Outreville

et al (2015), shows, the category of traders and entrepreneurs were the ones among whom life insurance demand was the highest arguing that these spheres require management of risks which is the sign of positive perception of risks. As the data is limited only to the sectors of economy and does not indicate the level of income, the following hypothesis will be based on analysis of the choice of occupation. ***Fourth hypothesis -individuals involved in the private sector of economy will be more likely to be insured.***

In the framework of this study to test the influence of the income and urbanization on demand, geographical origin of an insured will be examined. The average income level as well as the urbanization rate were obtained using the local statistics agency. This will be tested for the level of impact that they have on the premium amount. Based on the previous findings of scholars (Mantis and Farmer, 1983; Burnett and Palmer, 1984; Browne and Kim, 1993; Showers and Shotick, 1994), ***the fifth hypothesis is that income level and urbanization rate positively correlate with the premium amount.***

Overall, the following section will conduct empirical analysis to test the above mentioned five hypotheses.

1.7 Methodology

I use both samples for the analysis. First, I will determine penetration level and second, I will compare the demand for life insurance across different groups of people by age, gender, marital status and region.

Correlational analysis. Penetration rate is obtained as the ratio of the number of insured of region over the average number of population of region between 2009 and 2016. The average income/urbanization rate of each region was calculated using official statistical data for the period between 2009-2016. Almaty and Astana that have 100% urbanization rate were eliminated from the analysis. They are the city centers while others are regional administrative units. Additionally,

Baikonur and Zhezkazgan were dropped from the sample because these are also tiny city centers which can serve as outliers in the analysis.

Correlation is usually employed to define the nature of relationships between variables (Wooldridge, 2015). In this study, correlation is used to understand the nature of relationships between income and penetration/urbanization and penetration. Correlation coefficient 'r' is calculated through the following formula (1):

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2)}} \quad (1)$$

Where, x and y are values of variables, and n is size of the sample. Correlation coefficient can be interpreted as following: If 'r' is equal to 1, then there is strong positive correlation between two variables while if 'r' is equal to -1, then there is strong negative correlation between two variables and if 'r' is zero, then there is no correlation between the two variables. The correlation coefficient is sensitive to outlying points, and therefore the correlation coefficient is not resistant (Wooldridge, 2015). There are several advantages of using correlational analysis. Firstly, it allows data analysis from several subjects simultaneously. Secondly, correlation analysis can examine wide range of variables and interrelation between them. However, it also has some limitations. Findings of correlation cannot explain the cause of the relationship.

Hypothesis testing. Analysis with sample II involves hypothesis testing and multiple regression analysis. Two-sample mean comparison test of how premium amount varies across age, gender, marital status, region to observe how demand changed according to each group. For means comparison test, I use observations where frequency is annual, thus 20 904 observations are left. Considerable differences in premium amounts is observed between annual and single-premium contributions, as single-premiums are paid only once. The mean of single-premium contributions is almost 10 times higher than the mean of premiums of

annual contributions. Hence to rule out the influence of the periodicity factor only annual contributions were included in the analysis.

Classical statistical hypothesis testing is concerned with testing of null hypothesis. Generally, null hypothesis is interpreted as the lack of effect. The P -value is the cumulative probability under the null hypothesis of obtaining t -values from negative infinity to $-\tau$ added to the cumulative probability from τ to positive infinity. As the calculation involves the two tails of the test statistic distribution, this is generally called two-tailed or two-sided testing. If the calculated P -value is less than the specified level of type I error rate (α , commonly set at 0,05), then the null hypothesis of no effect is rejected. Such rejection implies that there is a difference between the means. The difference - which mean is larger than the other, is obtained by comparison of the means. The two-sided testing is employed because two-tailed is more appropriate when determining difference between two groups. The two-sided test is also used because it shows both negative and positive tails of distribution which in turn can provide with both positive and negative differences. The advantage of two-sided testing for an exploratory study like this is that it allows to test hypotheses without prior knowledge of direction while one-sided tests are applicable to studies with strong theory of relationships between samples (Wooldridge, 2015).

Multiple Regression Analysis. Finally, I run multiple regression analysis. Multiple regression analysis (MRA) is appropriate for this study as it allows testing several factors that affect the dependent variable simultaneously. The main advantage of this method is its capacity to accommodate several explanatory variables that can be correlated which allows for inferring causality while simple regression analysis could be misleading (Wooldridge, 2015). Moreover, the MRA incorporates considerably general functional forms, while the simple regression model can incorporate only one function. MRA is widely used tool for empirical studies in economics and social sciences. Ordinary least squares (OLS) is used for estimation of the parameters of regression model. In the OLS method estimates are chosen in the way to lessen the sum of squared residuals.

For this study the following equation is constructed:

$$\text{Log (premium)} = \beta_0 + \beta_1 (\text{age}) + \beta_2 (\text{age}^2) + \beta_3 (\text{marital status}) + \beta_4 (\text{gender}) + \beta_5 (\text{frequency of contributions}) + \beta_6 (\text{year of insuring}) + \beta_7 (\text{region of residence}) + \beta_8 (\text{term}) + u \quad (2)$$

Table 4. Description of variables used in MRA

Variable	Description
Dependent variable	
Premium amount	The amount of money that an insured consents to pay for the period of insurance
Independent variables	
Age	The age of the insured at the moment of buying insurance
Age ²	The square of age of the insured at the moment of buying insurance
Term	The number of years that an insured is going to make premium contributions
Marital status	
<i>Married</i>	<i>1 if an insured is married, otherwise 0</i>
Gender	
<i>Female</i>	<i>1 if an insured is female, otherwise 0</i>
Region of residence	
<i>South</i>	<i>1 if an insured is from southern cities, otherwise 0</i>
<i>North</i>	<i>1 if an insured is from northern cities, otherwise 0</i>
<i>Central</i>	<i>1 if an insured is from central cities, otherwise 0</i>
<i>West</i>	<i>1 if an insured is from western cities, otherwise 0</i>
<i>East</i>	<i>1 if an insured is from eastern cities, otherwise 0</i>
Year of buying insurance	
<i>2001-2009</i>	<i>1 if an insured purchased policy in 2001-2009, otherwise 0</i>
Frequency of contributions	
<i>One-off</i>	<i>1 if an insured paid the sum as one-off contribution, otherwise 0</i>
<i>Annual</i>	<i>1 if an insured pays the sum on annual basis, otherwise 0</i>
<i>Quarterly</i>	<i>1 if an insured pays the sum on quarterly basis, otherwise 0</i>
<i>Monthly</i>	<i>1 if an insured pays the sum on monthly basis, otherwise 0</i>

I use the data in Sample II to uncover the determinants of premium amount. For the multiple regression analysis all observations in the sample are included.

Table 4 provides description of variables. Age and length of term are continuous variables and gender, marital status, region of residence, year of buying insurance are categorical

variables. Categorical variables need a special coding to indicate that they are categorical. For this I use dummy coding. Dummy coding is conducted in dichotomous (two-category) way, one category is attached the number 1, and the other 0 on a single predictor. As dependent variable logarithm of premium amount (ln_PA) is employed to transform a highly skewed variable into more approximately normal (Table 4).

Before running regression, analyses of normality, multicollinearity and heteroskedasticity were performed. Normality test showed that there is a normal distribution of residuals (Appendix B, Graph 1). Collinearity diagnostics, namely Variance Inflation Factors (VIF) was conducted to detect multicollinearity. It detected low level of multicollinearity between variables, except age variables (Appendix B, Table 1). These variables were not omitted because of the risk of omitted variable bias which will serve as violation to regression assumption. To test the presence of heteroskedasticity Breusch-Pagan test was conducted and the result was positive ($p=0.00$). Therefore, to control for heteroskedasticity we run robust regression that lessen the impact of the outliers on estimates of regression coefficients.

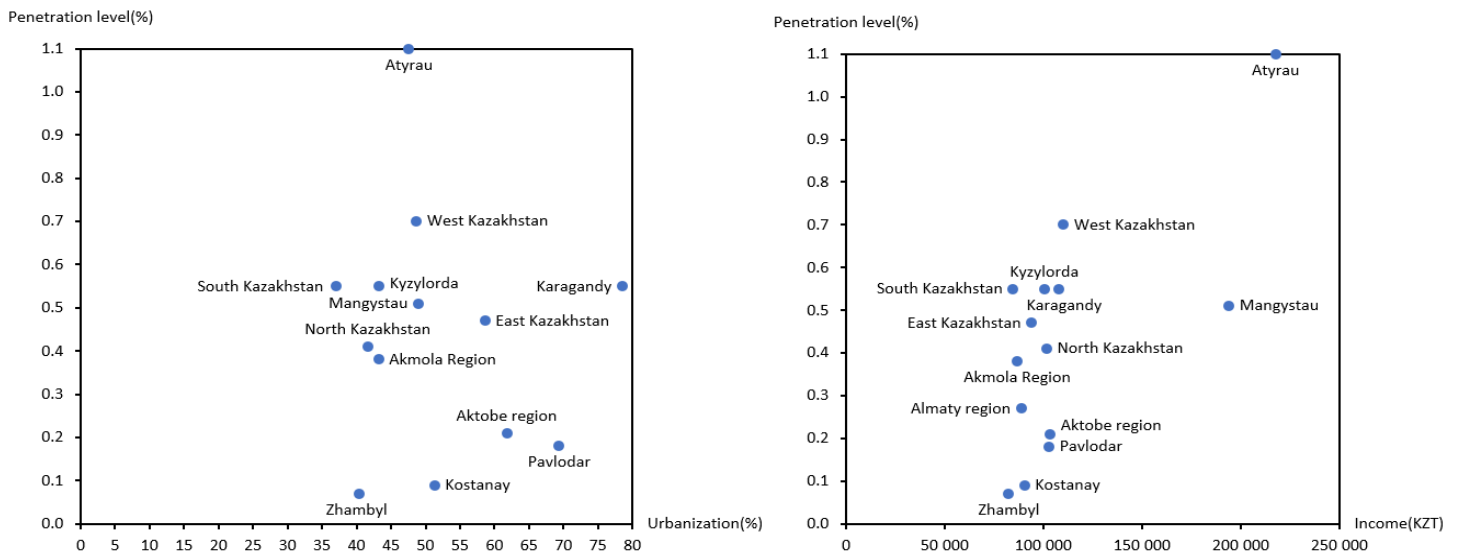
1.8 Results and Discussion

This section presents results of analysis on the demand for life insurance, namely correlation, hypotheses testing and multiple regression.

Correlation between the penetration level and urbanization/income

The analysis of the company's database shows that 0.43% of Kazakhstani population purchased life insurance from this company. On the regional level, the leading position takes Atyrau region with the level of penetration at 1.1% and the lowest ratio of insured is detected in Zhambyl region – 0.07% (Figure 1, for detailed data across regions see Table 1, Appendix A).

Figure 1. Penetration level and urbanization/income level of regions



Note: for further detailed information see Appendix A, Table 1

The results of correlation confirm our hypothesis about income's impact. Firstly, by the occupational profile we observe more than 70 percent of insured are occupied in three sectors of economy – private, financial organizations and banks. More than 20% of individuals in the study are occupied in private sector which comprises considerable share and confirms our hypothesis that life insurance remains to be a popular product among entrepreneurs and self-employed as their choice of occupation reflects a positive attitude towards risk that in turn leads to using risk-management tools like life insurance.

Apart from self-employed, life insurance turned out to be equally popular among people working in financial organizations and banks - more than third in sample work in financial organizations and 20 percent are employed in banks. The high demand among people occupied in financial organizations, presumably can be an outcome of closeness to financial institutions and higher literacy about the saving instruments. Interviews with individuals (chapter 2) revealed that the awareness about the existence of financial risk-management tools serve as one of the serious obstacles for the spread of this product in the market. Therefore, possibly owing to proximity to information, penetration of life

insurance among individuals working in financial sectors is higher, comprising half of the insured in the sample.

Correlation analysis results point to the strong relationship between penetration level and income, but insignificant between penetration rate and urbanization. The average income level is found to have significant positive influence ($p=0.007$) on the demand for life insurance, while urbanization has insignificant negative impact on life insurance demand ($p =0.9$). As seen in graph 1, there is an increasing linear trend between average income level and penetration level, while no trend is detected in the relationship between urbanization and penetration level.

The results of analysis confirm our hypothesis that life insurance demand increases as income increases. Firstly, life insurance becomes affordable as there is a certain minimum level of income. Secondly, income shows a household's total consumption which in its turn reflects the rational amount of life insurance according to theoretical models (Yaari, 1965; Lewis, 1989).

Results of correlation between urbanization and penetration rate did not confirm our hypothesis that with the rise of urbanization rate the demand for life insurance increases. Some regions with highest urbanization rates have a similar penetration rate as regions with lower urbanization rate (Graph 1), and some regions with lower urbanization rate turned out to have higher penetration of product. It is argued that urbanization rate can be employed as an indicator of the access to the information about the product and the product itself. Therefore, the higher is the urbanization rate the greater is the probability of the demand to be high. Moreover, it is argued that urbanization leads to the weakening of neighborhoods and kinship ties which in turn results in the higher level of individualism. In the individualistic societies the support of community is perceived as weaker which makes

an individual's sense of responsibility for his children after his death and provide for their economic well-being by using life insurance mechanism.

The lack of relationship between urbanization and demand for life insurance shows that the transfer of information to consumers does not much depend on institutional factors as urbanization but is possibly dependent on the network ties of sales agents. This is further confirmed in Chapter 3 where sales agents report *recommendations* to be main tool for reaching for potential clients. By *recommendations* they mean friends and relatives of clients whom they promote the product. Also, lower demand for life insurance in highly urbanized regions possibly reflects the persistence of strong kinship ties that limit the desire to use risk-management tools. Apart from the persistence of kinship ties, in the next chapter we find that life insurance does not comply with the local taboo on discussion and planning for death which is possibly another reason why demand continues to be low even in urbanized regions where it is supposed to be high.

Means comparison

The analysis based on sample II shows that the mean age for the insured is 43.7 years which confirms the outcomes of majority of studies that indicated peak for demand for life insurance as 43 years (Outreville, Rossi and Luciano, 2015).

The two-sample mean comparison test shows that among age groups there is a significant difference in the premium amount they contribute. Premium amount is highest among the people from group aged 31-45 and 46-60 and lowest in group aged 61-71 (Table 6). Such trend by age is consistent with arguments of scholars that analyse demand by age through traditional life-cycle model of saving (Ando and Modigliani's, 1963). The sharp difference in premium amounts between these two groups confirms our hypothesis about age. At younger ages it is more likely that an individual does not have dependents which makes purchase of life insurance less necessary. The same reason can be used to explain the lower

demand among the older ages - the older people become, the more mature are their children which means that they can sustain their life even after premature death of parents (Hammond, Houston and Melander, 1967). As an additional reason for high demand in these two age groups can be the large share that these age groups comprise in country's employed population – 68% for the last five years (Committee on Statistics).

Comparison by gender confirms our hypothesis. There is significant difference found in the premium amounts of men and women with difference in mean premium amounts of men considerably outscoring women's. This is consistent with other studies' findings where it was found that men are more likely to insure their lives rather than women (Table 6a).

Scholars explain the low demand among women by arguing that women are less risk averse than men. Their own death is not perceived as an important risk compared to the risk of losing the head of family mainly because women do not tend to monetize their place in the family (Outreville, Rossi and Luciano, 2015). Additionally, the demand for life insurance among women increases with the rise in the number of women in labour force (Goldsmith, 1983; Showers & Shotick, 1994). In Kazakhstan, although discrepancy in unemployment rate has been decreasing, women unemployment is still higher than of men, being 8.7 and 5.9 respectively in 2016(Committee on Statistics). Therefore, the demand possibly is higher among men than among women because of the large ratio of women that does not participate in labor force.

Insignificant difference in premium amounts was also found by marital status groups (Table 6b). Our hypothesis that life insurance demand is higher among married groups rather than single because married tend to have larger number of dependents is not confirmed. However, the share of married comprises almost 70% of insured in the sample. This shows that there is a higher concern about the dependents among married. However, by premium amount contributed there is not much difference. Possibly, the insignificant difference in

premium amounts occurs because married have larger spending because of several dependents and have less amount of income for saving.

Table 5. Description of means of variables

Variable	Description	Obs	Mean	Std. Dev.	Min	Max
PA_age18_30	Premium amount of aged 18-30	2723	144333.6	84981.86	3300	1 650 000
PA_age31_45	Premium amount of aged 31-45	8315	145472.5	82563.65	3043	1 326 600
PA_age46_60	Premium amount of aged 46-60	8651	145312.5	87865.3	1285	2 010 000
PA_age61_71	Premium amount of aged 61-71	1215	124308.5	70658.22	1557	740 000
PA_female	Premium amount of women	13797	140655.5	79895.96	2250	2 010 000
PA_male	Premium amount of men	6481	150298.4	92598.58	1285	1 500 000
PA_married	Premium amount of married	14423	143800.3	82194.84	3040	2 010 000
PA_single	Premium amount of single	6481	144326.5	89897.04	1285	1 650 000

Note: values are given in tenge (KZT)

Table 6. Mean comparison test results by age

Mean	E(PA_age18_30)	E(PA_age31-45)	E(PA_age46-60)	E(PA_age61-71)
E(PA_age18_30)	x	$p=0.73$	$p=0.69$	$p=0.00$ ***
E(PA_age31-45)	$p=0.26$	x	$p=0.45$	$p=0.00$ ***
E(PA_age46-60)	$p=0.00$ ***	$P=1.00$	x	$p=0.00$ ***

Note: E (XXX) is expected value of variable; p-value stays for the significance of the hypothesis that mean of population in the first column of table is higher than the mean of population on the first row; ***-high significance, **- medium significance, *- low significance, no star – not significant

Table 6a. Mean comparison test results by gender and marital status

Mean	E(PA_female)	E(PA_single)
E(PA_male)	$(p=0.00)$ ***	x
E(PA_married)	x	$(p=0.66)$

Note: E (XXX) is expected value of variable; p-value stays for the significance of the hypothesis that mean of population in the first column of table is higher than the mean of population on the first row; Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, denoting statistical significance at 1, 5 and 10 percent

Table 6b. Mean comparison test results by region

Mean	PA_North	PA_Central	PA_South	PA_East	PA_West
PA_North	x	p=0.00***	p=0.00***	p=0.00***	p=1.00
PA_Central	p=1.00	x	p=1.00	p=0.24	p=1.00
PA_South	p=1.00	(p=0.00)** *	x	(p=0.00)** *	p=1.00
PA_East	p=1.00	p=0.75	p=1.00	x	p=1.00
PA_West	(p=0.00)** *	(p=0.00)** *	(p=0.00)** *	(p=0.00)** *	x

Note: E (XXX) is expected value of variable; p-value stays for the significance of the hypothesis that mean of population in the first column of table is higher than the mean of population on the first row

Significance levels: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, denoting statistical significance at 1, 5 and 10 percent

On regional scale, demand for life insurance is highest in western cities, while it is the lowest in central and eastern cities. Northern cities and southern cities come second and third by the mean amount of premium amount (Table 6b). High indicator of northern cities premium amounts is surprising, considering that by penetration rate northern region takes lowest positions. The southern regions as seen in Table 3 outscore in number of insured individuals however means comparison shows that mean premium amount of southern region is significantly lower than of western and northern (Table 6b). High number of insured in low urbanized southern regions is a paradox, because high urbanization is one of the pre-conditions for the formation of demand. This finding can imply that life insurance is spread in southern regions not owing to demand but owing to supply. Taking into account that sales agents reported the use of *recommendations*, possibly promotion of life insurance by network ties is most efficient in southern regions. This is further supported by the general recognition of southern regions as more traditional where kinship ties remain stronger than in other regions. Uniqueness of promotion by recommendations is that it can lead to purchase of life insurance just for the reason of personal reciprocity rather than for insuring life.

Multiple regression analysis of demand. To uncover the determinant factors of demand for life insurance MRA is employed. The results of regression showed partially confirmative results to hypotheses of this study. When the premium amount is regressed on seven principal groups of factors, the estimated coefficients are positive except gender, term, age² and y2008 (Table 7). The adjusted R² increased from 0.698 to 0.757 when component of year was added, while adding regional characteristics did not change at all. All variables, except marital status, term have significant effect. Our hypothesis that married are more prone to insuring life is not confirmed as married have insignificantly positive influence on demand in comparison to single. Gender turned out to have significant impact on demand, with significantly negative relationship of female to the demand. Age is found to be a significantly influential factor – the demand according to age increases at decreasing rate. In other words, demand for life insurance is high until certain period of time and then it starts decreasing. This confirms our hypothesis that demand is high among middle-aged groups as younger people usually do not have many dependents and older people have dependents that can sustain themselves on their own.

The results also show that with increase of frequency of premium contributions, the premium amount tends to increase two-fold. The regression of years on demand shows that from 2001 the demand has followed decreasing trend. With previous findings this confirms our assumption that life insurance is promoted using personal relations. Such case was observed in China, where sales agents motivated by commission-based system started promoting life insurance among his acquaintances which became inefficient in the long-run as they have exhausted their personal ties (Chan, 2009). This can be a case for Kazakhstan – the decreasing demand for life insurance can be the impact of local sales agents' promotion strategy.

Table 7. Life insurance demand regression model

	ln_PA	ln_PA	ln_PA
age	0.0199*** (10.73)	0.0177*** (9.81)	0.0181*** (10.04)
age ²	-0.000244*** (-11.41)	-0.000158*** (-7.65)	-0.000162*** (-7.87)
term	-0.00853*** (-11.12)	-0.000811 (-1.15)	-0.000276 (-0.38)
female	-0.0618*** (-9.48)	-0.0623*** (-10.60)	-0.0619*** (-10.55)
married	0.00130 (0.20)	0.00140 (0.25)	0.00155 (0.27)
One-off	4.451*** (45.20)	4.645*** (46.07)	4.652*** (46.03)
annual	2.407*** (242.33)	2.495*** (269.43)	2.492*** (267.70)
Half-year	1.592*** (125.77)	1.766*** (140.10)	1.769*** (139.71)
quarter	1.126*** (93.67)	1.121*** (96.27)	1.123*** (96.44)
y2000		0.825*** (67.08)	0.816*** (59.90)
y2001		0.740*** (54.76)	0.722*** (52.60)
y2002		0.636*** (51.75)	0.622*** (49.96)
y2003		0.530*** (42.24)	0.520*** (41.07)
y2004		0.425*** (35.36)	0.418*** (34.47)
y2005		0.345*** (24.70)	0.338*** (24.07)
y2006		0.256*** (16.73)	0.252*** (16.49)
y2007		0.0811*** (4.77)	0.0734*** (4.31)
y2008		0.00387 (0.29)	-0.00365 (-0.27)
west			0.0868*** (8.23)
east			0.0204 (1.57)
north			0.0403*** (3.86)
south			0.0313** (3.18)
Cons	9.148*** (217.78)	8.464*** (198.39)	8.416*** (193.03)
N	31700	31700	31700
R2_A	0.698	0.757	0.757

t statistics in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

1.9 Conclusion

There were two main objectives in the beginning of this section. The first - to draw the profile of the life insurance market customers. The second – to determine individual factors that have influenced the demand and to indicate the degree of their influence. The results of the first analysis show that on regional scale the demand is unbalanced, and that penetration level is high mainly in the western and in some southern regions. Moreover, comparison of penetration level by average urbanization and income of each region showed that they had a considerably positive influence on the demand.

Overall penetration level is extremely low among almost all regions except Atyrau. The slight differences in the penetration level by regions to some extent can be explained by the influence of income level while urbanization rate has insignificant influence on the outcome of the life insurance demand. Influence of these factors may indicate that life insurance is consumed mostly as a financial instrument to save money, which is confirmed with the low level of urbanization rate's influence on demand. As most of the scholars explain the positive influence of urbanization rate on life insurance consumption claiming that in highly urbanized communities' ties between kins and neighborhoods become weaker which makes breadwinner take responsibility for the well-being of his dependents after his death. Analysis shows that urbanization does not impose significant influence on the demand for life insurance in comparison to income level. Although highest urbanization rates are reported to be in Karagandy region, East Kazakhstan and Pavlodar their indicators of penetration level are not among the highest. On the contrary, Pavlodar has one of the lowest levels of penetration. Western regions that have leading positions in penetration rate have urbanization rates lower than the average country level. This allows to conclude that urbanization does not influence the life insurance market as the weakening of kinship ties with the increase of urbanization rate or supposed strength of kinship ties in low urbanized communities does not result in increase or decrease in the demand,

respectively; therefore, life insurance is more likely to be practiced as a financial saving instrument. According to occupational profile majority of insured were representatives of the private sector of economy –households and unregistered entrepreneurs. Additionally, financial organizations also had significantly higher demand than other occupational categories. Demand among people employed in private sector is reasoned to be the outcome of the positive risk-perception of people working in the sector. Demand among financial organizations is possibly an outcome of people's understanding of the product owing to financial literacy due to working in financial organizations and being close to this field.

Individual characteristics of an individual turned out to be influential in making decision to buy life insurance. In Kazakhstan, an increase in age leads to increase in demand. However, increase of demand with age is observed only until the retirement age. After 60, the demand for life insurance starts decreasing which is possibly an outcome of a lack of income which can be invested and in most cases people at this age either do not have dependents or their children are mature to feel responsibility for them even after death. The effect of other individual factors like gender and status are consistent with the findings of other scholars. Married groups tend to pay higher amounts of contributions for insurance in comparison to single groups. This can be explained by the possibility that married people have more dependents than single groups. Similar to findings of previous studies, demand differs significantly by gender being more popular among men than among women. The fact that in most cases the main breadwinner in families are men can possibly explain such differences in demand by gender. However, although men outscore women by the premium amount, the share of women in the sample is much larger than of men. Such an unexpected outcome leaves room for the further study of the life insurance perception by men and women in Kazakhstan.

Overall, life insurance in most cases is employed as financial instrument rather than insurance which is confirmed by the correlation of penetration level and income.

Additional explanations can be drawn from the later chapter where sales agents claim that people are not willing to accept this product as a tool for soothing negative effects of breadwinner's premature death. People are more attracted by the feature of this product which offers payment in case of trauma or disability. Further, product remains more attractive to people that have dependents and to men who are in most cases are the main breadwinners of a family. On regional scale, northern and western regions lead in terms of premium amounts contributed to life insurance. Presumably, high premium amount in western region is the influence of income which is considerably higher than the average country income level.

Employing data from insurance agency, this section aimed to build the overall profile of life insurance market in Kazakhstan and determine factors that influence the demand pattern. There has been no study that examined life insurance market in Kazakhstan. The main contribution of this section is that it provides with the detailed profile of the Kazakhstani life insurance market and allows to observe the main consumers of life insurance in the local market. As well, my research has several limitations. The first and primary limitation is the representativeness of data. The analysis includes information about the insured of only one company. Unfortunately, only one company agreed to cooperate in the framework of this study, while in other companies rejected my request for data due to lawfulness concerns. However, the company that shared information has considerable share in the local market therefore allowing to claim that results can be generalizable. The second limitation is that the whole section analyzes only the insured population while leaving aside characteristics of uninsured. The next limitation is that in the framework of this section data about the use of other financial instruments, like deposit accounts were not considered. Taking into account that in Chapter 2 we find that life

insurance is mainly employed as saving instrument I would recommend to study life insurance market in the context of saving habits of Kazakhs.

Chapter 2. Life insurance from individuals' perspective

Huge number of studies consider macroeconomic and microeconomic factors to be influential in the formation of demand for life insurance. In the previous chapter those factors' impact was tested and most influential ones were determined.

There is another group of studies that consider the formation of life insurance demand within society to be dependent on that society's social and cultural norms (Zelizer, 1978; Chan, 2012). Therefore, it is important to understand individuals' perception of life insurance and the meaning they attach to this product. There are two important concepts that need to be examined to understand the attitude towards life insurance – risk and death perception. Life insurance is a risk-management tool and requires an individual's desire to plan for economic security of his dependents after his own death. Therefore, it is important to understand Kazakhs' attitude towards managing risks and death consequences to explain the demand pattern of life insurance.

Life insurance market is extremely dependent on the local norms and shared values; therefore, the prosperity of life insurance industry mainly depends on compatibility with them. Interviews with the two groups of people – insured and uninsured were conducted to understand the way Kazakhs perceive risks and manage them. Moreover, their attitude towards death planning are sought.

People view this product to be distant from their environment, while insured groups buy it mainly as a saving instrument for the future expenditures of their children. Objectively, the insured buy life insurance as risk-management tool - they contribute premium amounts and possess insurance for the period of the contract. However, subjectively, what people think they buy, is as a saving instrument for potential future expenses.

There are several reasons behind the lack of a subjective perception of this product as life insurance tool. Firstly, the collectiveness of society and the strength of kinship ties influence the formation of risk-perception and attitudes toward it. Kazakhs have a positive attitude towards risk, which is a direct consequence of the strong kinship ties that play the role of a cushion in

case of contingencies. In turn, individuals do not share a strong fear of risks which fails to cause any demand for risk-management tools.

Secondly, life insurance industry was resisted in different societies due to its incompatibility with their shared values concerning death. In case of Kazakhstan, the idea of insuring life is also experiencing resistance, mainly because of its incompatibility with the local taboo on thinking about premature death and even worse making plans after it. The local people do share the idea of what Zelizer (1978) describes as a “responsible death” – the provision for the well-being of your dependents even after your death. However, responsible death is practiced implicitly, as the local norms prohibit thinking about and preparing for premature death, as it can be interpreted as intrusion into destiny of an individual.

2.1 Life insurance industry

In Kazakhstan, life insurance companies offer insurance services starting from life insurance and pension insurance to a wide range of policies, like for education of a child, for loan repayment in case of premature death, for organization of wedding, term insurance for a child and others. Such variety of products indicates to what extent the product line has been modified.

In the United States, for instance, life insurance initially was created by church to protect wives and children of priests in case of their premature death (Zelizer, 1978). Now, it has become versatile product which does not make focus only on death, but also on saving for future, for retirement period and others.

We can derive from these significant changes that modification of products happens to comply with values of demand side. Chan (2012) argues that on macrolevel the role of culture in shaping economic action is not visible directly. Insuring life touches upon cultural aspects like death and risk perception, makes people organize and discuss death in financial terms.

Perceptions of death and risk vary from one country to another, from society to society.

Therefore, insuring agencies may experience strong demand in some countries while in others

there will be no demand. For instance, Chinese people have a strong taboo on talking about death. Not familiar with local taboo foreign companies started promoting life insurance as a tool to mitigate financial consequences of breadwinner's premature death. Certainly, companies did not witness any demand for this product from Chinese community (Chan, 2012). However, Chinese possessed another cultural trait – strong saving habit for their future. Being aware of the local norms, domestic companies started promoting life insurance as saving-instrument and could observe strong demand for this product. From case of China the role of culture in shaping economic action is remarkable. Local norms and values were able to shift economic behavior of both demand and supply side.

Reviewing websites of Kazakhstani life insurance companies, I noticed several commonalities in their products. They had an insurance of mortgager's life, insurance packages called wedding plan, education, for an event in your child's life, earning dividends and finally insurance against fatal accidents. Variety of products that companies offer is likely a reflection of the demand, which, as argued above, is formed directly by culture. Before moving towards discovering the way cultural norms influence life insurance demand the next section will observe other countries' story of life insurance development.

2.2 Evolution of life insurance industry throughout the world

Initial birth of life insurance industry is different from country to country. Zelizer (1978) argues that life insurance in the United States appeared among the poor families whose main breadwinner worked for church. To provide for the economic well-being of wives and children of priests and clerks people initiated this instrument to assist widows and orphans collectively (p.595). The earliest form of the life insurance industry occurred in the United Kingdom in the beginning of 16th century before spreading to other countries (Collette, 1990). Primarily it functioned as a tool to cover funeral expenses. Due to the lack of restrictions on whom industries insured, life insurance industry in the United Kingdom took character of gambling. People started insuring those who were at higher risk of death due to various reasons: illness or

incurable disease. In this way they bet on a person who was under higher risk of death to make money. Gradually, life insurance industry became more organized - new legislations (Life Insurance Act of 1774) in the UK eliminated the gambling feature of life insurance by setting requirements for a person to insure his life.

Life insurance industry did not establish its legitimacy immediately. Although by the 18th century legislation stipulated life insurance enterprises as legitimate sector of economy, it was not so a popular product within local population. Only by the end of the 18th century both in the USA and in the UK, with the shift of social norms people with high incomes but no savings realized the desirability of the future protection of their dependents. Insurance gained common acceptance and established a stable demand (Zelizer, 1978; p.595; Collette, 1990). The role of government in the growth of life insurance industry was not unimportant. For example, the government of UK provided tax relief for insurance that was aimed at paying pensions. The model of UK tax relief has been applied worldwide, Kazakhstan is not exception also.

The studies show that it took almost two centuries for the industry to set itself in the market of the United States (Zelizer,1978) and more than a century in the Chinese market (Chan, 2012). There is a common trend in the way life insurance was established in the market with the shift of social norms in these countries. Initially, the idea of insuring life was rejected by societies because “putting death on the market offended a system of values that upheld the sanctity of human life” (Zelizer, 1978, p. 594). In 18th century United States buying life insurance was perceived as “profanation of death” which was discerned as sacred because “the insured were seen as betting with their lives against the company” (Zelizer, 1978, p.597). Zelizer (1978) relates the spread of life insurance to urbanization which changed the family system. The urban family was not able to rely on informal social arrangements in the period of crises. If previously it was the responsibility of community to care about orphans and widows, after massive urbanization people started relying on formal, bureaucratic and impersonal paid mechanisms which included life insurance.

In such a manner, life insurance, which was deemed profane in the 18th century America, by the beginning of the 19th century became an institutional response to economic and social uncertainties of a middle-class that lacked property and were reliant exclusively on the breadwinner's income. In the past, before the massive urbanization when people used to live in agrarian and rural areas, people were engaged in close relationship with their families and neighbors. In times of financial hardship, one could rely on parents and other family members for financial assistance. In such circumstances there was not a strong need for insuring the life of a breadwinner. With increased rates of urbanization, the process of weakening of kinship ties took place which in turn led to stronger self-reliance for well-being of your dependents (Zelizer, 1978).

More recent studies (Chui and Kwok, 1989) name this process differently while interpreting the development pattern of life insurance industries among countries: the demand for life insurance is higher in individualistic societies rather than in collectivistic. In China, the life insurance companies entered in the late 19th century, but it was not until the end of 20th century that they started functioning sufficiently. As in the United States, the idea of insuring life was rejected by a society which deemed speaking about death a taboo. However, life insurance companies adapted their policies taking into account local social norms and pioneering a personal and commission-based agency sales system. Commission-based sales system worked perfectly in the environment of *guanxi* (interpersonal relations or connections) which boosted life insurance sales as the local population used personal relations to achieve economic transactions. Later towards early 2000s, sales agents stopped selling to close people and spent more time on impressing existing clients for referrals. Chan's (2012) hypothesis is that sales agents could have exhausted their intimate acquaintances and moved to outspread this product to a wider pool of clients. Life insurance as a commodity was not accepted by the Chinese population and transactions took place only within strong ties where "trust, affection and asymmetric obligation are the core relational properties" (p.716).

Although both groups of scholars find different explanations for discrepancies in demand for life insurance across countries, one common feature of their arguments is the influence of social norms within communities. Among other more “flexible” factors that influence the demand for life insurance we find formal institutional (legislation, social security), individual awareness about the existence of product (advertisements, number of insurance companies in a country), an availability of other financial instruments and others. By “flexible” I mean the factors that the government or insurance companies have power to control and change. All these factors have considerable influence on the demand, however one feature which is common across societies is the following: unless socio-cultural norms do not reject the idea of insuring life, fixing flexible factors will not increase the demand for this product. However, if the local norms reject the idea of insuring life then the life insurance industry has less chances of expanding no matter how decent the flexible factors are.

In the framework of this study I looked at three aspects of social norms - rational economic behavior, risk-perception and death perception. Hopefully, analysis of these three aspects will allow to draw the mechanisms through which local culture influences the life insurance market.

2.3 Methodology

For the qualitative part of the research the main data collection method was in-depth interviews with representatives of the local population. Qualitative methods of collecting data are employed when the phenomenon is ill-defined and deeply rooted (Merriam, 2005). Therefore, the use of qualitative methods is suitable in this case because culture and social norms are not always fixed and explicit. Interviews were conducted in two different cities: South Kazakhstan Oblast and Karaganda. South Kazakhstan Region (SKO) was chosen because the highest number of insured people – more than third in the sample – were from Shymkent. The second site, Karaganda, was chosen because it is the 4th city in the country according to population and the majority of people work in heavy industry which places their lives under risk. Nevertheless, the

number of the insured people is twice lower than in Shymkent which makes Karaganda an interesting site to explore. Overall, 6 interviews with individuals were conducted. Three out of six respondents did not have life insurance at the moment of interview whereas the other three respondents had a life insurance policy (see Appendix C, Table 1 for detailed information about the respondents). Random sampling was applied for gender of an interviewee. The marital status of all respondents was married. The focus was only on people that were between 30-50 years old as most people at this age according to life-cycle hypothesis spend dominantly on dependents and on durable goods like life insurance (Ando and Modigliani's,1963). As the main idea behind insuring life is to provide for dependents in the long-run, this age group fits best to understand the general perception of life insurance. Moreover, this age group is more likely to have permanent job and stable income.

Interviews were transcribed and underwent three stages of coding for constructing grounded theory (Charmaz, 2006). In the first stage interview were coded by paragraph with words that reflect the idea of that paragraph. In the second stage, based on the codes tentative categories were formed. In the third stage, axial coding, relationship between these categories were determined. The interviews had a semi-structured format and consisted of four parts. In the first part questions to uncover the social background of the respondents were asked. The second part predominantly focused on respondents' notion of risk. Respondents were asked about his/her way of managing risks and negative outcomes from emergencies. Also, respondents were questioned about his understanding about the source of security. Questions were aimed to understand the role of kins' support in formation of risk perception. The third part focused on the saving habit of respondents and more narrowly on the awareness of the financial instruments like life insurance. Additionally, the influence of the local economic situation or government regulations on decision to save money were sought. The fourth part of the interview focused on the idea of life insurance. In this section the general understanding of the respondent about the notion of insuring life was sought. Questions were aimed at finding the respondent's society's

attitude towards the life insurance. The same data analysis method was used for the interviews with sales agents that will be discussed in Chapter 3.

To ensure validity of the study number of measures were employed. Firstly, interviews were conducted with two different groups of respondents that are involved in the process of insuring life – sales agents and ordinary individuals that included insured people. Secondly, the sampling for interviews was conducted with an attempt to achieve maximum variation in the profiles of respondents. Therefore, participants were representatives of different ages and gender. Moreover, study was conducted in two different regions of the country. Third, all the interviews were recorded and transcribed.

The research did not impose any hazards to the participants. All the information was secured and kept confidential. Only the researcher had access to data. Informed consent was taken in the written form. The only shortcoming is that some questions like “in case of contingency...” were difficult to ask in a way that it did not cause negative emotions. Respondents were informed in advance about it and were warned that he could skip them if wishes. No financial compensation for participating in interview was provided. All the groups of respondents (both insured and uninsured) were recruited using snowball method.

To comply with research ethics rule, an application for ethical approval was submitted to the Research Ethics Committee at Nazarbayev University. Participation in the study was on voluntary base, all the participants signed written consent form prior to the start of the interviews. General information about the study and its purpose were openly reported to the participants. Confidentiality of the participants was provisioned by the researcher; no names of the respondents were revealed in the study. Instead, fictional names were assigned to respondents.

2.4 Life Insurance as Rational choice

The purchase of life insurance is an economic decision. Rational choice theory which is predominantly employed by economists tends to assume that actors are instrumentally rational in their economic behavior and tend to maximize their utility. The fact that people are rational has been recognized by most sociologists. However, they also recognize the fact that people are also involved in non-rational actions claiming that they are outcome of value-oriented action (Scott, 2000).

According to the theory of rational choice the low demand for life insurance in Kazakhstan would be incomprehensible, because this product would be extremely appealing to a rational individual as it allows to maximize the utility even of his death. However, throughout 17 years that life insurance industry functions in Kazakhstan, it has not observed constant rise in the demand, its premiums remaining at around 0.1% of GDP. Biggart (2002) claims that rationality is limited to the cognitive capacities of human beings and bounded by the context in which they are embedded. The idea of embeddedness of market actions in networked relations is promoted by scholars from economic sociology field (Granovetter, 1985; Uzzi, 1996 and others). Embeddedness scholarship argues that for people to come together and interact they need a sense of purpose which in turn makes market meaningful for them (Biggart, 2002). So which aspect of life insurance market is not meaningful for the local people?

The common feature that respondents share is their concern about future. Both the insured and uninsured groups have their vision of future in the well-being of their children. Among the insured, the main incentive behind buying life insurance is to save for expenses for future events of their children. These expenses include sound education, organization of a decent wedding and buying an apartment. Kazakhs are confident that they will have considerable expenses in the future. The following two quotes indicate it:

*“...It will be difficult to find such money at once. In order not to take out a loan and then pay out for years, like some, we decided to start saving from now.
(Maira, insured)*

*“ Well, if you take holistic things then, it is appropriate education, it is an apartment, real estate should be with her...getting married all these moments.”
(Bekzat, not insured)*

For Kazakhs, the main financial concern is the spending required for their children's education and wedding. They perceive themselves to be responsible for these expenditures and preparing in advance is considered as relieving the financial burden.

It is clear that the potential expenses are primarily children-oriented in their vision. The firm children-oriented attitude to future is also explicit in other interviewee's responses. Moreover, the respondents themselves feel the continuing support from their own parents.

The saving feature of life insurance is more appealing to people. People are clearly aware of future expenditures that they will have and investing money in life insurance is mainly used as a tool to lessen the financial burden in the future. Risk-management through buying life insurance is not mentioned by informants at all. For an economic actor in this case rationality is framed by his desire to prepare for the future potential expenses that will certainly occur.

Providing for the well-being of children and their own retirement is the central focus of Kazakhs in the long-run and they turn out to be the ones which need huge sum of money at once. For actors, life insurance is bought out of interest to maximize benefit – being ready for the expenses that will certainly take place in the future and which are accepted as conventions within local community.

According to Weber (1968, p.326) custom or habit can sometimes be transformed into the “dignity of oughtness” which, as he refers to, becomes convention. In other words, customary behavior turns into expected behavior. In this case, the customary behavior is to provide for the well-being of children. Responsible parenthood is expressed in the form of education they provide and the wedding that they organize for their children. As one of the main goals of

parenthood is associated with such actions that consider huge financial expenses, the demand for life insurance, first of all rises out of the need to be ready for the expected expenses.

Certainly, it is not only feature that influences the willingness of Kazakhs to insure life. To some extent unfamiliarity with the product and perception formed about life insurance serve as another reason for this product to be last option in choosing the way you express responsibility for dependents even after death. The general awareness about the life insurance is significantly low: some informants had no idea about this product, except some who mentioned other types of insurance – medical and automobile. Informants, especially uninsured, had a vague understanding of how this mechanism works. When the idea of life insurance was explained to informants their reactions were different. Some respondents claimed to be hearing about life insurance for the first time:

“... this is what I need. If I knew that such thing exists, I would have insured myself. I work as policeman and there is no confidence in tomorrow” (Murat, not insured).

Murat has four children and worked as policeman in Karaganda. When he was told about the product he became enthusiastic about insuring his life. Working as policemen he says is a very risky job. Murat shared strong sense of responsibility for the future of his dependents which was uncertain as his job which placed him under constant risk of unexpected circumstances.

Other uninsured respondents had quite different perception of insuring life. For some of them life insurance was associated with medical insurance, while for others it something distant that they have heard in films.

“When in foreign films something happens, they say they have insurance and it covers expenses. Well, then only, for a couple of seconds think why we do not have or why we don't invest. (Bekzat, not insured)

From these quotes we can see how the perception of life insurance varies considerably. The product is to some extent unfamiliar to Kazakhs in details. The idea of buying life insurance appeared to be appealing to one uninsured informants, however there are other factors that lessen

the willingness to buy it. Firstly, perception of life insurance as a luxury good that is very expensive and is bought only by the rich. Moreover, the idea of insuring life turns out to be distant from the reality, mainly due to the lack of the insurance in the surrounding community of an individual. Such perception of insuring life possibly is reflection of the lack of what Weber (1968) calls habitual disposition. Insuring life does not reflect the general firmly rooted habit of society which in turn constitutes custom. Schumpeter (1934) argues that essential role plays the new knowledge in breaking with customs that serve as impediment for development because it allows to shift from the customary way of thinking. In the same way, life insurance is not practiced in an individual's surrounding and the idea of insuring life seems too distant to be reality. As we see from interviews inculcation of the habit of insuring life is impeded by the lack of detailed knowledge about life insurance and its conceptual distance from local lifestyle. So, next rises the question about what is the local customary way of thinking that does not cause the need for insuring life?

2.5 Life insurance from local death perspective

It was mentioned before that life insurance emerged out the need to overcome hardships in case of premature death of breadwinner. Among respondents, the issue of expenses for the dependents in case of their premature death did not emerge as a reason to insure life. The respondents did not express much concern about the financial well-being of their children after possible premature death. In the context of what Zelizer (1978) calls "responsible death" one can interpret this as the lack of understanding of responsible death among Kazakhs. However, this does not indicate that Kazakhs do not bear the idea of "responsible death", which means providing for the financial well-being of dependents after death (Zelizer, 1978). Instead, the understanding of responsible death considerably differs considerably from what Zelizer (1978) sees in US society after 19th century. This is demonstrated by the following statements from respondents.

“This life insurance was always present in our society, but it was not in a sense where a certain amount of money was supposed to put aside.” (Bekzat, not insured)²

“This is not only life insurance, where you put money on your account, you can invest in another alternative, cars or... for example, all the money that you invest in for him to educate somewhere.” (Aidar, not insured)

From these quotes we see that Kazakhs, being child-centered in their future planning, practice responsible death in a different way – investing not in financial assets but in other material assets such as real estate. Moreover, respondents feel their major responsibility is the provision of decent education and organization of a sound wedding. This is supported by two other respondents that report feeling the need to provide their children with a decent education or a wedding. Additionally, they consider providing their children with an apartment will allow them to have a place to live in the future while education is considered as source of income sustainability. Kazakhs have clear understanding of “responsible death”. However, it is practiced in an alternative way, like providing for the primary assets that will allow to live on in case of their premature death.

The sense of fulfilling responsibility that buying life insurance gives to breadwinners appear to be obtained from different sources among Kazakhs. This sense is derived from ensuring that dependents have a primary asset to survive on their own in case of premature death, mainly real estate and education. It is important to note that respondents do not refer to premature death directly, instead they say, “in future” or “in case something happens to us (parents)”. Kazakhs avoid talking about their death; additionally, their actions indicate that they are not death-denying society.

Life insurance can be regarded as innovative new way of expressing responsibility for the well-being of one’s dependents, however, in the case of Kazakhstan this approach did not succeed in changing the local habit of practicing responsibility for dependents. Conventional practices (taken for granted norms and forms of conduct) of a community can be seen to be

² For detailed information about the respondents please see Table 2, Appendix C

functioning as a “foundation for stability” insofar as they limit the crippling effects of interactional uncertainty (Biggart, 2002). Conventional practices, in the form of building a house and providing for the education of a child, that in turn can serve as asset are quite strongly established in local society. In fact, life insurance is bought mainly with the intention to cover future planned expenses such as educating a child or organizing a wedding but not bought with the intention to provide for the well-being of dependents in case of premature death. For the cases of premature death other informal measures, such as buying durable material goods are employed.

Purchasing life insurance involves people into discussion of consequences of death and makes them evaluate the consequences of their death on dependents. Therefore, purchasing life insurance can be considered as an act of planning premature death. Therefore, apart from possessing a sense of “responsible death” it is important to analyze the way death is discussed within society. Death is an ever-present process in our lives. Death is generally associated with older aged people. However, usually people “remain characteristically uncomfortable with the facts of mortality” (Shilling, 1993, p.423).

A common pattern in interviews with respondents was an unwillingness in the way that they discussed their opinions about death. In order to follow ethical practice, I asked questions to extent that respondents felt comfortable. Informants expressed an accepting attitude towards mortality and even had a clear understanding of premature death as the will of destiny. However, when issue of death was approached more closely, informants had uncertain answers and expressed unwillingness to discuss the topic. A pattern of response regarding death smoothly shows up: people share understanding and strive towards what Zelizer (1978) calls “responsible death’, however they are unwilling to discuss or plan death in financial terms.

Kellehear (1984) warns against thinking that denial of death by an individual necessarily entails that he lives in a death-denying society. Due to the universality of fear of death, the denial

of death is often a primary way of coping with it. Still, there is a debate among sociologists on whether all societies are death-denying or whether some societies accept death (Aries, 1975; Illich, 1976). Scholars describe denial as “avoidance of reality” (Kellehear, 1984). Kellehear (1984) includes reluctance to talk about death as one of the features of death-denying societies. People tend to think that they shun death by eliminating it from conversation. Kephart (1950), however, argues that sometimes denial of death arises out of desire for smooth relations, which is “sociologically” functional rather than a psychiatrically sound practice. Kephart (1950) argues that until social norms value tolerance and polite communication of death, death denial will serve as a substitute for individuals’ responses. Therefore, the reluctance of respondents to discuss death does not necessarily mean that they live in a death-denying society.

Kazakhs, sharing an understanding of “responsible death”, cannot be attached to a group that avoids the reality of death. They have a clear understanding of possibility of premature death. Therefore, unwillingness to discuss and plan for death possibly arises out of social norms which prohibit explicit communication of this custom. For example, the insured group never mentioned the feature of life insurance in which it pays final sum of money in case of premature death. In other words, life insurance has little to no association with the premature death of an insured. Informants from the insured group do not touch the theme of death and the benefits that life insurance gives to their dependents in case of their premature death. If explicit communication is prohibited by local norms, buying life insurance as a tool for planning death could be perceived as a serious breach of local norms.

There are particular reasons behind the lack of willingness to talk about death. The following quotation of one of the respondents precisely reflects the reason behind Kazakhs’ unwillingness to talk about death:

... It is not said without purpose that good words are half a ritual. Surely, we think about death, we know that we are all mortal. However, it is wrong to discuss our own death. We never know how and when happens and discussing death is wrong. (Maira, insured)

From this quote we see that people perceive discussion of death as a wrong act. In interviews there was only one response which reflected why it is wrong to discuss own death – discussion of death is perceived as intrusion into the will of destiny. When asked about what the respondent thinks about death one of the respondents answered briefly:

“Peshenemizde ne zhazylgan sol bolady” (It is impossible to escape fate), (Aigul, insured)

This means that life will go as it is written in predestination. This saying turned out to be very popular generally among Kazakhs. These two quotes provide evidence of an unwillingness to discuss one’s own death and that even planning is considered as serious intrusion into the will of destiny. Therefore, death is an extremely sensitive topic among Kazakhs and talks and wording of death should fit certain norms.

If discussing negative process as death is a social misconduct, then purchasing death management tool is a severe offense. Having found that talking about death is a strict issue among Kazakhs, it is surprising that there are still people that buy life insurance. The demand for life insurance exists for life insurance not as a risk-management tool but as a saving tool, mainly because it is perceived more as a saving instrument for the future well-being with no intersection with a future after death. Therefore, predominantly the small share of the population that buys life insurance are objectively buying a risk-management tool, while subjectively buying a saving instrument. This is confirmed in Chapter 3 by the way sales agents present the product to customers – they focus on saving element of life insurance rather than on insuring element.

2.6 Life insurance through the prism of risk perception (Cultural theory of risk-perception)

From the previous section it became evident that life insurance is used as saving instrument, but not as a risk-management. It is mainly bought to mitigate the financial hardships that can arise at some point in the future, say due to education expenses or loss of income after retirement. This is further supported by the fact that death is a sensitive topic for Kazakhs and discussion of it is a taboo, therefore, placing life insurance in the category of norm-destructing instruments. Therefore, life insurance is an essential financial tool for Kazakhs to use as a saving instrument but not as risk-managing.

Understanding of risk is essential in to realize the need to insure one's life. Apart from death, life insurance covers expenses if an insured has detected serious illness or suffers from an injury after which he cannot work, and this income flow stops. The realization of risks to general well-being is a necessary aspect to consider purchasing life insurance. This section will focus on factors that shape local people's perception of risk and look at cultural features that influence this process is discuss them through the prism of risk-formation.

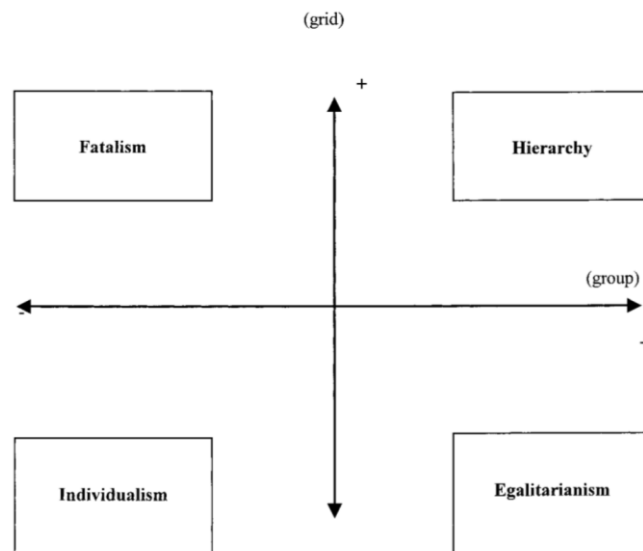
Risk is defined as a condition that bears the possibility of detrimental deviation from a desired expected outcome (Vaughan and Vaughan, 1996). Risk is an important factor in shaping the demand for life insurance mainly because the logic of insuring life rises out of realization of risk of premature death.

The study of risk perception generally employs two approaches: psychometric paradigm and cultural theory (Douglas and Wildavsky, 1982). Although the psychometric approach derives interesting results it neglects cultural and social factors that influence risk perception. This cultural study of risk arose in the 1980s (Rippl, 2002) and the most elaborate theory was produced by British and American anthropologists, Douglas and Wildavsky.

In their view, perception of risk is framed socially and culturally. In other words, values of certain social and cultural groups shape an individual's perception of risk. Therefore, due to the embeddedness of an individual in his social context, cognitive patterns play the role of filters in evaluating information about risk. This is the case because shared values construct interpretation (Stern et al., 1995). The cultural theory of risk is based on an assumption that members of groups possess common outlook and tend to enforce order on reality. In this context, the cultural theory of risk-perception states that people choose what to fear with regard to the culture that they belong to, therefore, the cultural theory is essential in understanding the social construction of risk.

Douglas and Wildavsky (1982) claim that currently the world is less hazardous in comparison to 50 years ago justifying it with the fact that most people in economically and politically developed countries live longer. However, in these developed countries where risks have been decreased systematically people feel themselves more at risk arguing that this feeling at risk is social in origin. They identify four types of cultures by grid/group typology, with each having features of behavioral patterns of social relations followed by cultural bias: egalitarians, individualists, fatalists, hierarchists (Figure 1). By group, they mean the extent that an individual is integrated into bounded units: the stronger the integration, the more an individual's choice depends on group determination. By grid, they mean the degree to which individual choice is confined to prescriptions imposed by external actor (Thompson et al., 1990). The grid is responsible for an individual's general behavior. Actions of people with high grid will be more routinized while in low grid refers to contexts where an individual will personalize his action.

Figure 1. Classification of societies by Cultural Theory



Within the Cultural Theory of risk, egalitarians score high on the group axis, i.e. they share a high interest in group relations but score low on the grid axis which shows their disapproval of social relations constructed by social differences or hierarchy. Hierarchists also score high both on group and grid axes, sharing both high interest in group relations and in hierarchical social relationship. Individualists are not sympathetic towards both hierarchic structures and group attachment thus scoring low on both group and grid axes. Meanwhile fatalists lack sense of group attachment but are flexible towards the idea of hierarchy (Douglas and Wildavsky, 1982).

In the context of risk-perception, modes for each of these four types are constructed. People from hierarchic social constructs usually tend to accept risks as long as their risks are rationalized by government authorities. They usually tend to fear risks which threaten social order. Egalitarians oppose risks which carry an irreversible threat but are skeptical towards risks that are forced externally by small elite or governmental authorities. Fatalists avoid knowing and worrying about risks, especially those that they believe they cannot do anything about. Individualists, however, have a positive risk perception and even see risks as an opportunity, fearing only risks that limit their freedom (Douglas and Wildavsky, 1982).

In the typology of Douglas and Wildavsky (1982) Kazakhs have the characteristics of a “hierarchy” society. The presence of parents’ and kins’ support in times of hardships is strong across all respondents. All the respondents claim their parents and friends to be a source of support in case of emergencies. The fact that the primary source of support is informal ties instead of formal institutions shows high group attachment. The high group attachment is a feature of hierarchic and egalitarian societies. As one informant reported:

“I feel confident that they will give me hand of support, because it is confirmed by many moments of my life” (Aidar, not insured).

Such material support from relatives is common across all respondents. Some even claim that parents try not to make their assistance explicit by giving essential needs in form of gifts.

The influence of group attachment on perception of risk is also found to be strong in another cross-country analysis by Weber and Hsee (1998). They find that collectivist (China) and individualistic (the USA) have the same perception of risk. However, in collectivist China, like among Kazakhs, the attitude towards risk is more positive than in individualistic United States. This is the case because the former has stronger network ties to rely on in case of negative result. In case of Kazakhstan we observe a strong influence of the sense of belonging to a group on risk perception and risk attitude. The role of group as cushion is a potential reason for disregard of risk-management tools like life insurance. The strong support of group ties, especially of kins was reported before by respondents which confirms that the positive attitude towards risk has preconditions to exist in as the role of kinship ties serve as cushion in case of emergencies. Kinship ties and support from them play the role of insurance in mitigating potential risks. In more individualistic societies, where ties are not as strong, ties cannot fulfill the role of insurance therefore people rely more on alternative tools like life insurance. Therefore, in the United States life insurance industry developed only after massive urbanization that weakened kinship ties and made people rely on themselves (Zelizer, 1978).

Kazakhs also score high in the grid axis. Their risk-management and risk-perception is shaped by external actor, namely the government. People show strong reliance on state in cases of contingencies. Moreover, when it turns to the question of security respondents shift the responsibility to the government. Respondents see the State as a crucial in financial, health and physical security. One respondent, Aigul, feels a risk of getting sick. For her, the perception of risk to her health originates from the lack of trust to the state medical institutions. She considers the poor qualifications of medical workers to be a threat for her health.

“I feel a great risk to get sick. I have less and less trust, for example, I cannot determine what kind of gynecologist to turn to when I have problems, because you do not know to which one to go. One will say one thing, another will say other.” (Aigul, insured)

From Aigul’s case fear from potential risks are caused by external actor.

Other respondent mentions state allowances as a primary assistance for children that are left without a caretaker. Employment in state institution makes Bekat feel safe in his future economic well-being.

“Basically, as they say, only in the civil service in principle, you are sure that next month they will pay wages, there will be no delays and you will not be groundlessly dismissed from your position such as in oil structures or in private spheres.” (Bekzat, not insured)

The government’s presence in the life of Kazakhs is strong because the government shapes their perception of future, economic well-being and health security. The role of government in constructing the perception of the future stability is considerably large. People consider the state as the source of stability and financial aid in case of unforeseen circumstances. Some respondents even claimed that unless the quality of life is not enhanced by state the insuring life will not make a change to their life.

Overall, the prescription of the role of “guarantor of stability” to the state and a strong feeling of group attachment indicates that Kazakhs’ risk-perception mode is similar to what Douglas and Wildavsky (1982) call “hierarchy” societies. The perception of state as “guarantor

of stability” is possibly an echo of the historical experience under the Soviet Union where state provided with decent social security.

2.7 Conclusion

Life insurance is abstract and complex as it requires an individual’s realization of risks and willingness to discuss consequences of his premature death. Life insurance has developed differently in different markets across nations. In some countries, for example America, it was resisted by people as a market product because the idea of insuring life did not coincide with the local social norms and cultural values. In other countries, for example China, it developed although speaking about death is taboo mainly owing to the dense network ties. Sales agents, seeking commissions from selling, used to employ interpersonal ties to promote the sale of the product which in turn led to short-period rise in the demand for life insurance in China (Chan, 2012). Kazakhs also have some peculiarities in the development of life insurance market.

Life insurance turned out to identify with luxury good, that is remote from the local consumption. The remoteness of this product for people can be both the result of the work that local companies do in promoting the product, but still the lack of habitual disposition towards new financial instruments within society takes considerable place in the way people consider this product. It is important to note the issue of awareness plays considerable role in the way life insurance is known and perceived.

Overall, this section showed that life insurance, the demand for which forms predominantly owing to perceptions of death and risk, is not a popular product among Kazakhs. If to consider life insurance as a gesture of what Zelizer (1978) calls “responsible death” it cannot be claimed that the lack of demand for life insurance necessarily means the lack of notion of responsible death. The local understanding of responsible death has not still transformed to taking measures that are bureaucratic, formalized, institutionalized and industrialized, like buying life insurance. The conventional behavior asserts the accumulation of material capital in

the form of real estate or automobiles for dependents in case of unforeseen circumstances. The lack of transformation towards formalization of the management of death risk is hindered by the local norm that prohibits explicit communication of death and planning for it. Therefore, people use other methods of ensuring the well-being of their children that will not be condemned by local norms.

By risk-perception people in Kazakhstan can be attached to hierarchical society in the scale of Cultural Theory of Douglas and Wildavsky (1982). Kazakhs possessing strong sense of group attachment recognize risks that are externally-driven and tend to unload responsibility to external actor in form of state. Moreover, they attain positive attitude towards risks due to high expectations for support from kins and state. These findings regarding perception of risk and attitude towards it allows us to understand the reason behind the low demand for life insurance.

Overall, there are two broad reasons why life insurance lacks high demand. First, life insurance is a death-management tool and the practice of death management contradicts local norms concerning the discussion of death. In a society where talking about one's own death is interpreted as bad behavior; the management of death would be a severe violation of local norms. Second, life insurance lacks demand as a risk-management tool because within Kazakh society there is no precondition for the use of such tools. To put it simply, the context in which they live does not necessitate an individual manage potential risks through financial institutions.

Chapter 3. Kazakhstan life insurance market from sales agents' perspective

Life insurance industry in Kazakhstan started early in the period of the Soviet Union. The Soviet society had an effective social security that provided for the basic needs of citizens: employment, education, pensions, and healthcare. (Myers, 1959). Therefore, it is hard to believe that Soviet people had demand for life insurance. Life insurance market in the Soviet space existed only formally despite the decent size of it. Life insurance market consisted of one supplier – *Gosstrakh*. The functioning of life insurance market in the USSR was different from Western countries. However, in reality it was a mere “rationalized bookkeeping” because the State used to cover all the losses of Gosstrakh as well as taking in all the profit annually (Pye, 2000). Overall, in the Soviet Union the insurance market was completely monopolized, and state was the sole provider of policies.

After the collapse of the Soviet Union, the insurance market experienced some changes as did the whole economic and social space of post-Soviet Kazakhstan. In post-Soviet Kazakhstan, the first insurance companies appeared in 1990 and their organizational structures developed from cooperatives and partnerships to joint-stock companies, which corresponded to Western standards. By 1993 with the adoption of the Law of the Republic of Kazakhstan "On Insurance" the foundations of the insurance legislation of the Kazakh state were laid. However, this legislation was not the best solution as experience shows. The legislation stated that there was no special state insurance and that in all cases insurance should be considered as a kind of entrepreneurial activity. Consequently, the number of insurance organizations reached 900. However, many of them were linked only the name to insurance. Only 13 insurers were able to comply with the requirements set by the law. In such a manner, the need for a regulatory organ appeared in Kazakhstan.

The decree of the President of the Republic of Kazakhstan dated April 19, 1994 "On organizational and legal measures for the formation and development of the insurance market" solved the need for regulatory organ by introducing Insurance Supervision Department. The

establishment of the Insurance Supervision Department was an essential step in ensuring a transparent and organized functioning of insurance sector.

By 2001, after adoption of regulations, the number of insurance companies for this period decreased to 34. However, the financial indicators of the insurance market have improved significantly. Insurance organizations operated on the basis of permits issued by the Agency for Financial Supervision and Regulation of the Financial Market of the Republic of Kazakhstan. At present there are 34 insurance companies, 7 of them are life insurance. As we see, life insurance market has its own local history.

3.1 Life insurance in Kazakhstan: what is it?

Life insurance is a general term that can be broken down into types of insurance that provide for insurance payment in cases of death of the insured person or for survival before the end of the insurance period or specified by an age in the insurance contract.

There are two types of voluntary life insurance: endowment life insurance or term life insurance. Endowment life insurance allows not only the insured to get the insurance sum in case of an accident, but also save money until a certain date. Upon the expiry of the contract, the accumulated amount is paid with interest. The sum insured is determined independently by the insurance contract, this amount depends on the amount of contributions that insured will pay. In this type of insurance, an insurance event is a survival to the age specified in the life insurance contract or premature death.

The second type – term life insurance, is paid only if a person is injured or passed away during the validity of the insurance contract. If the insured has lived to the specified date in full health, he receives nothing. At the same time, the insurance premium is significantly lower than in endowment insurance. The difference can be up to 10 times.

Apart from voluntary life insurance there is life insurance which is compulsory by Kazakhstani legislation, which includes insurance of liability for damage to life and health of employees and other types. This type of insurance gives employees a guarantee that if they suffer in the process of production, they will be paid compensation. It gives an employer opportunity to protect themselves from damages in such cases. The insurance amount is set at a rate not less than the annual amount of the employee's salary. That is, if an employee loses his ability to work, he receives a salary at least for a year.

A notable share of insurance sector in the economy of Kazakhstan is primarily owing to non-life insurance premiums which comprises half of the insurance market, while voluntary and compulsory life insurance premiums comprise nearly 25% each. This study focuses on voluntary life insurance because in comparison to compulsory life insurance the demand for it is driven by consumers. Focusing on voluntary life insurance will enable us to see the underlying attitude of the local population towards insuring life.

3.2 From the perspective of life insurance supplier in Kazakhstan

The analysis of the legislation and statistics revealed the history and current situation of life insurance industry functioning. Closer examination of this industry is revealed by the analysis of the interviews with three sales agents that had 5, 7 and 17-years-experience. The interview guide for the sales agents was completely different than that used with consumers. It was aimed at finding out information about the background experience of respondents, the main techniques used in promoting the product, the reasons behind using those techniques, and a description of the way in which the product was perceived by people generally. Additionally, the interview guide included questions about barriers that sales agents confronted during their work in this field and how the barriers changed from time to time.

The following section will describe the life insurance market from the viewpoint of sales agents. Interviews with sales agents were employed as a primary source since they provide

“important indicators of public opinion” and present this field of industry (Zelizer, 1978). The most important aspect to mention here is that although there are officially seven companies operating as suppliers of life insurance policies, they have considerably different profile. When sales agents claimed that they were the only company selling voluntary endowment life insurance policies they were asked about other six companies who also have considerable share in the life insurance market. As it turned out the primary target of some large companies were corporate life insurance policies which were compulsory by law for some types of enterprises.

3.3 Dense network ties as promotion tool

Sales agents have a clear understanding that the development of the insurance sector is essential for the economic development. They employ set of tools for selling life insurance. Strikingly, advertisements have never been a tool for promoting this product. The reason is that the idea of life insurance is complex. The product is too complex to convey its idea in one-minute commercials. This is understandable taking into account that life insurance is a product that lasts for years and there needs to be an accurate presentation of it rather than a short advertisement. Therefore, life insurance companies consider advertisements to be inefficient.

“Even you produce one-minute commercial on TV, you will not be able to sell the product which is fifteen years long. It is impossible to fit in one-minute commercial the complex explanation why a person needs life insurance.” (Sales agent A)

Traditional tools such as advertisements or commercials are not used to inform potential consumers about the existence of life insurance and its necessity for economic security. Sales agents employ a different method for reaching people - “*recommendations*”. Promotion by *recommendations* implies promotion within the networks of their acquaintances. Sales agents actively employ this tool and perceive it to be more efficient than advertisements.

“...we tried to do advertisements, but nothing came out. (Sales agent C)

“... when a person becomes a broker on trainings he is asked to make a list of 100 acquaintance. (Sales agent A)

From these quotes we see that widespread marketing tools such as commercials or advertisements are not used by local sales agents. They recognize these tools to be inefficient in the promotion of life insurance because the underlying idea is considered to be too complex. Recommendations are the most preferred marketing tool by sales agents and the preference of this tool is not incidental. According to sales agents, the process of purchasing life insurance is more successful when a sales agent approaches a client through recommendations. They mention that they had several cases when the name of a person who recommended a certain person could make people buy insurance instantly without long sessions explaining the essence of it.

The next advantage of selling within one's own network is the issue of trust. Trust in insurance companies was a complex issue for sales agents until late 2010 primarily because of historical factors. As noted previously, there was a compulsory insurance in the Soviet Union and more than half of the population had an insurance, which was called the system of Gosstrakh. For each child it was compulsory to save up to 1000 rubles until he is 18. When the Soviet Union collapsed, the system also collapsed, and the money saved disappeared, while before the collapse money used to be returned. According to interviewees, insurance companies were associated with Gosstrakh by potential consumers:

"...people used to claim that we were like Gosstrakh, and that association with Gosstrakh made life insurance agencies less credible. People used to claim that this system will also collapse, and they will lose money.

In such a manner, the historical experience of the unforeseen collapse of this insurance company led to the lack of trust towards insurance agencies.

Perception of life insurance in the Soviet Union still influences Kazakhs' understanding of life insurance. In a country where the state had decent social security provisions, life insurance was not to a large extent a product for which there was a high demand. Nevertheless, it was compulsory for all to invest money for each child until he reaches 18. Therefore, this life

insurance was a sort of obligation of a citizen in front of his state. People were made to pay unconscious of the reasons why they were paying for it. To make matters worse all the savings vanished with the collapse of Gosstrakh which took place right after the collapse of the Soviet Union. Overall, prior to 1990s, for citizens of a country that provided with employment, social security, health security and other goods, life insurance was the last thing to consider. However, the way it was implanted in lives of people and the way it disappeared formed perception of it as formal obligation in front of government which stopped being obligation after the Soviet state disappeared. In this way, life insurance existed in the mindset of people and disappeared without being understood as a financial instrument.

The influence of political institutions on the formation of trust towards life insurance industry was also significant after the collapse of the USSR. Until 2000, there were constant changes in regulations with changing requirements for financial organizations. This period of fluctuations has created some form of distrust towards financial organizations as with each new legislation the number of licensed companies decreased tenfold. Legal fluctuations were followed by economic fluctuations in the form of heavy devaluations after 2010 which became another reason for distrust towards not only institutions but also towards local currency.

The economic experience of Kazakhs serves as a strong barrier in the formation of the demand. People distrust financial institutions and informal ties help the sales agents overcome this barrier. Therefore, the collectiveness of Kazakhs in the form of dense network ties appear to be not only as a barrier as it was mentioned in previous chapter, but also a catalyst for development of life insurance industry. An intermediary person has a stronger power to make a person trust to a company than an official license given by government agencies, which indicates the strength of informal institutions over formal.

This pattern of marketing explains why there is low correlation between demand and urbanization rate as found in Chapter 1. Zelizer (1978) argues that urbanization leads to the

weakening of social ties which results in the increase of the demand for life insurance. However, in Kazakhstan we observe no correlation between the penetration rate and urbanization (Graph 1, chapter 1). Possibly life insurance demand does not decrease in line with low urbanization rates because in under-urbanized regions informal ties are used in favor of life insurance promotion. In such a manner, we can see how the single local norm has dual impact on life insurance demand thus deviating from the general trend associated with urbanization rate.

However, marketing through recommendations also has a negative influence. Life insurance is a long-run product and needs thorough examination before purchasing. However, as reported by sales agents, when approached by recommendations life insurance is usually purchased to “keep up good relations with a person who recommender”.

“...People usually buy it not thinking about the essence, just to keep up good relations with the recommender. Of course, this is not universal among all ...” (Sales agent B)

When sales agents approach a potential customer by recommendations of intermediary person, the potential customer perceives refusal to buy as disrespect to the intermediary person. Therefore, he pays a symbolic amount of money to fulfill their moral obligation in front of the intermediary person. As sales agents report, customers to that they approach by recommendations usually buy cheaper insurance policies. It appears that this kind of marketing makes people buy because of a moral obligation to the person who recommended. The decreasing impact of marketing through recommendations is reported by all three sales agents.

“Recommendations are both good and bad, good is that it is easier to approach a new client because of the intermediary person who recommended the potential client does not want to decline the offer, therefore buys it but buys policies with cheaper premium amounts.” (Sales agent B)

This approach has some negative influence on the process in the long-run. According to sales agents, each year approximately 20 percent of the insured stop their contracts and take back

money with certain amount of it lost due to transaction costs. A larger number of contract withdrawals can be the result of buying life insurance out of moral obligation towards the person that recommended him. If people bought this product with the intention to insure their lives the retention rate would possibly be much higher.

In this way, the development of the life insurance industry is hindered by local norms and simultaneously promoted by them. As it was discussed in the previous chapter, strong kinship and social ties hinder the formation of the demand for life insurance by the cushion effect it creates. At the same time, it is the strong ties that can solve the issue of trust to financial organizations and attract more customers owing to the large networks that a person has. Findings of the quantitative analysis also indicate this trend. More traditional, southern regions comprise considerable share of the insured however if to look at the mean of the premium amounts southern regions considerably lag behind. Possibly, in the northern regions, which are comparatively higher urbanized people buy this product as a tool to insure life, while in southern regions it is bought out of the moral obligation in front of the intermediary person. Therefore, southern regions outscore in number of the insured but lag in the amount of contributions made to insure life.

3.4 Life insurance as intrusion to the will of omnipotent

Apart from a focus on mechanisms that life insurance agents use to promote the product, there is an interesting aspect in how they present the product. When describing the issue of advertisements insurance agents mentioned how they present the product to customers:

“...Therefore, sales agents come in, explain a potential customer that he will have to educate his children in fifteen years, that in twenty-five years he will have to survive on his pensions and purely on this broker sells the product. It is impossible to fit in one-minute commercial the complex explanation why a person needs life insurance.” (Sales agent A)

The need of buying life insurance is justified by potential expenses. From this extract we cannot see key concepts as death or life, instead the central aspect that sales agents focus on is the saving feature of the product. Reluctance to discuss death is one of the barriers in promoting

the product as risk-management instrument for agents. Therefore, in order to achieve higher sales, agents concentrate more attention on its saving feature.

In this respect, endowment life insurance is a more preferable product as it carries an idea of investing into the future. Life insurance agents report that when presented as investment into the future, people have a more positive perception of this product. The most efficient tool in presenting this product is asking leading questions, to which people answer themselves and recognize the need for insuring life.

“... that is why on presentations we made focus firstly on the future not on death. We used to tell that it is an instrument to save for education of children, for pensions on retirement. Gradually we move to explaining the part which is concerned with death. After explaining about life insurance as saving instrument we propose case of a person that does not have relation both to the sales agent and customer where a person hypothetically passes away unexpectedly and explain further conditions of insurance package. We never touch this topic personally, we never say in case of a client’s death. It is always hypothetical.” (Sales agent A)

The sales agents frame the presentation of the product to fit the rationality to which individuals are bound within the context in which they live in. They do not present the advantages of life insurance in case of premature death as directly as advantages of life insurance as saving instrument.

Although people are not ready to assume possibility of death and plan towards it, in sense that they are not mature to discuss it openly, they are ready to accept the risk of an injury which will impede their ability to earn money. However, readiness to speak about death is comparatively smaller. The best thing in buying life insurance for Kazakhs turned out to be coverage in case of injury/disability. Comparatively higher focus on this feature of life insurance emphasizes the extent to which individuals are reluctant to speak about death. The interest in life insurance for cases of disability is much higher.

“Death makes people think about buying life insurance but not all. But possibility of having disability as result of injury has stronger power in making people think about buying life insurance.” (Sales agent A, 17 years)

It turns out that people concede the possibility of income loss as result of injury while they do not consider death to be a reason to buy life insurance.

The religious context that Kazakhs live in also imposes difficulties in accepting life insurance as a market product. As agents report, promoting life insurance among religious people is the least productive. This product is completely rejected by them due to the small dividends they will receive in the end, relating that it is *haram*, which refers to the forbidden. The implicit influence of religion is considerably strong among all groups of population. As sales agents report people express strong reliance on God.

“...Everything is in God’s hands. If we die, then will die. God will help. God knows better – they say...” (Sales agent B)

In some cases, sales agents say, people are firm in their decision not to plan their future. Most of them claim that the future is what is predestined by God and that interfering in destiny is useless. More surprising is the fact that such assertions are claimed by “ordinary” people like sales agents.

“...It is not only religious people that refer to God to reject the offer to insure life. Even women like me, simply not practicing Muslim, usually refer to God. Majority say that future is in God’s hand and that even they insure their lives it will not change the course of life prescribed by God.” (Sales agent A)

By “ordinary” they mean people whose religious faith is Islam but they are not practicing Muslims. Such attitudes towards the future and reliance on God’s will are argued by scholars to be an integral part of Islam (Ringgren, 1967). It is widely accepted that Islam as a religion is fatalistic in nature which means that “everything is predetermined in advance and that man is unable to anything about it” (Ringgren, 1967; p.52). For scholars like Weber, there is an affection between Islam and worldview of some cultures which are fatalistic. A fatalistic mindset leads to the weakening of self-empowerment and individualism as it puts the burden of the future in the hands of divine. Manguelle (2000) claims that control in Muslim societies is usually detached from an individual’s will and placed in the authority of omnipotent. The tendency for

Kazakhs to shift of responsibility for the future to the will of the divine is another reason why the idea of insuring life is rejected. This fatalistic nature of the local culture is possibly derived from the central principle of Islam – “submission” (Elder, 1966).

An important role in shaping demand is played by the local perception of death and perception of future. Members of local society avoids thinking of life after their death. As death is a delicate topic to sell, sales agents firstly promote the product as saving instrument for a customer’s economic well-being after retirement while the issue of death is left for the end of presentation. If to consider the content of product presentation, life insurance is presented as a saving instrument with one additional benefit – obtaining the whole sum of money in case of premature death of an insured. Strong interest in the product as insurance is invoked when people are told about covering the loss of income as a result of injury. Absence of readiness to think about death and life of dependents after death is crystallized by this strong interest of covering the losses after an injury. According to sales agents, death is being associated with older age and perceiving life insurance as a tool that could be employed after an individual’s death makes him uncomfortable. Exley (2004) states that dying is always abstract in discussions and people are aware that they will encounter it at certain point in the future. Thinking about life insurance and buying it makes an individual confront the reality of this process. When the society is not willing to speak of this issue as a process that they will encounter in the future life insurance is a complex topic to talk about and even more so to think of buying it. Therefore, the saving element of life insurance is more openly accepted and supported by consumers of life insurance in Kazakhstan. Uncertainty towards death is not the only impediment for the life insurance industry to grow. Apart from uncertainty towards death, there is a vestige of fatalism that can be traced as a response to life insurance.

Agents report that while presenting information about life insurance that it is not only the risk of death that is difficult to explain to client. Information about the loss of money in case of

termination of contract is also very difficult to accept. It indicates that the product is mainly perceived as a financial tool to save money. When presented with the product, people firstly come up with question of whether they can return money and what percentage of it they lose in case of termination. This order of questions reflects that life insurance has not evolved as a risk management product at all, in most cases it is still an option for saving. This confirms one of the central finding of the previous chapter – people objectively buy life insurance but subjectively buy a saving instrument.

Overall, death perception turns out to be a considerably strong barrier is the development of the life insurance industry as risk-management tool. Reluctance of members of the local population to talk about death and even plan it urges sales agents to make a stronger focus on its saving feature rather than its risk-managing features.

3.5 State reliance as life insurance substitute

The analysis of interviews revealed an additional aspect of life insurance market that was quite unexpected. From viewpoint of sales agents, Kazakhs resist buying life insurance because of an “excessive” reliance on state. Reliance on state for future provision is present within population. Even more, sales agents argue that reliance on state is transferred from parents to children which leads to the lack of personal responsibility for the future. This is indicated in the next excerpt:

“...life insurance market is waiting for a period when decent pensions will end, when people will go only with what they have accumulated, and this will be a very difficult period, because at that time many people will not have saved anything, and they think so anything, my parents were supported by state. Remember in the Soviet Union was a period when they equated those who worked and had a long record of service and those who did not work, like housewives. This period will not happen again. Nobody will give to those who did not save anything. The state supported them, realizing that beggars was waiting for them, and they could not afford the status of poor pensioners. Now this is impossible, because the state gives all the possibilities and tools to save!” (Sales agent B).

Reliance on state, according to sales agents is exhibited in the lifestyle of people. Life insurance promotes self-care, self-reliance and self-responsibility over an individual’s life which

completely contradicts local understanding of the state-individual relationship. To some extent, life insurance agents play the role of agents promoting capitalism. The perception of the state as a supplier of security is to large extent the influence of Kazakhs' historical experience under the USSR. The shift to market economy occurred abruptly which possibly slows down the realization of self-responsibility for one's own future.

If in the previous section it was claimed that theologically people put the burden of future on the hands of divine, in this part we can see that practically people shift the burden to the state. High expectancy of state support is not the only way how state influences the demand. Previous policies of it still exert influence on the demand for life insurance, but from another aspect – trust to financial organizations. This was discussed earlier in this chapter.

3.6 Conclusion

Apart from demand for life insurance, the process of supplying life insurance also has its own peculiarities. Life insurance has been present in lives of Kazakhs since the Soviet Union. Since then, considerable changes have happened in the political and economic terrain of Kazakhstan.

The life insurance industry has followed a long period of reformation and even re-birth in a new economic environment after the collapse of the Soviet Union and the abrupt shift to a market economy. Formal institutions were reformed, and legislation changes were adopted for the legitimate existence of this sector. Although the creation of formal conditions for the proper functioning were created, life insurance companies still have some barriers to overcome in the promotion of life insurance in Kazakhstan.

The primary barrier is the historical perception of life insurance that was formed in the Soviet Union. Based on their past experience people perceive life insurance as a state-initiated product which does not have any beneficial implications for them. Moreover, the loss of money with the collapse of Gosstrakh impaired the perception of life insurance and its benefit for

people. This is further compounded by the issue of a lack of trust to financial organizations. The huge amount of financial organizations unregulated by state institutions in 1990s resulted in distrust towards them. The end of 1990s has witnessed considerable number of legal acts that were aimed at making financial regulation more transparent and reliable. However, the past experience has continued to serve as strong barrier.

The strongest barrier that is still present is a fatalistic attitude towards the future and planning of future. People consider planning of future, especially death as intrusion into the will of God. Therefore, potential customers usually decline the offer to insure their life arguing that they are incapable of managing the future and measures taken at present will not influence the outcome that is already prescribed. Apart from fatalistic approach to planning for the future, excessive reliance on state also hinders the formation of decent demand for life insurance.

Despite significant political changes, the state continues to function as a source of economic and social security while sales agents call for self-responsibility in planning one's own future.

The mentioned barriers are rooted strongly in Kazakhs' historical past and cultural features. Still, sales agents manage to promote the product. They overcome these barriers by employing the local feature of social interaction – dense network ties. They employ cultural features of Kazakh society to promote the product successfully, while simultaneously these cultural feature – dense kinship ties – serve as a substitute for life insurance. In such a manner, we can observe to extent that local norms can shape the economic behavior of society.

Overall, this chapter aimed to look at the life insurance industry from the perspective of suppliers. The findings confirm and complement arguments of previous chapters. Kazakhs' understanding of death is a critical factor in shaping the demand. In the previous chapter it was found that Kazakhs consider planning for the management of their death as an unethical conduct. In this chapter it was determined that Kazakhs consider planning for the future as useless due to

a belief in predestination. Institutional factors, such as state support also turned out to be an important aspect in planning for future economic well-being.

4. CONCLUSION

Overview of Thesis

The demand for life insurance is formed by the combined impact of wide range of factors. Literature on life insurance finds that the demand for life insurance varies by demographic, socio-economic and cultural factors. This study aimed to understand influence of each of these factors and describe the functioning of the life insurance market in Kazakhstan.

In the first chapter the demand for life insurance is found to vary according to individual characteristics, such as place of residence, age, gender, marital status and the field of occupation. Demand according to these characteristics changed as it was expected in our hypotheses, except marital status which was used as proxy for dependency ratio. The peak of demand for life insurance turned out to be at 43 which is consistent with markets around the world. Other findings concerning gender, income and occupation were also consistent with the hypotheses of scholars that have conducted research in this field. The striking finding was the lack of correlation between urbanization and life insurance demand because as argued by Zelizer (1978) urbanization serves as an important precondition for the increase of demand for life insurance. The reason behind the weak impact of such an important factor was found during interviews and discussed in chapter two and three. The first chapter aimed to draw the profile of an average customer of life insurance in Kazakhstan which was to large extent completed. Using the analysis of data, we could trace both the demand in the form premium amounts contributed and the penetration level in form of ratio to the overall population.

In the second chapter I aimed to understand the perception of life insurance among Kazakhs and specifically their attitude towards risk and death as the concepts of risk and death are core to the idea of life insurance.

An important finding of the second chapter is that the main reason behind the lack of high demand for life insurance is the positive risk-perception that Kazakhs possess. The local collective social order plays the role of a cushion that allows people to avoid management of risks in advance by using such tools like life insurance.

The risk perception of Kazakhs has a considerable impact in the realization (or not) of the need to insure life. Scoring high on both group and grid axis of the Cultural Theory scales, Kazakhs fit in the type of society identified as a “hierarchy”. This type of society usually has stronger group attachment and lower fear of risks, except externally driven ones. Fitting in the “hierarchy” type helps to explain the lack of a desire to insure life among Kazakhs - having strong group ties, they do not recognize risks other than those of formal institutions, which is supported by the respondents’ interviews. The perception of death and the attitude towards discussing death serve as another barrier for Kazakhs to accept the idea of insuring life. To decide to buy life insurance one needs to realize that there is a constant risk to their life and income. An individual needs recognition of the possibility of premature death and determination to manage its consequences. Kazakhs turned out to be reluctant to discuss life after death. Interviews with respondents revealed that discussing and planning for death is counted as misconduct that deviates from proper behavior. Discussion of death is perceived to advance the process of dying. Moreover, reluctance to manage life after death is interpreted as an intrusion to destiny’s will. Therefore, the prohibition of talking about death among Kazakhs crosses out the idea of insuring life insofar as life insurance is a formal act of planning for death.

It is important to mention that the reluctance to discuss and plan death does not imply that Kazakhs do not plan for well-being of dependents after their death which Zelizer (1978) refers to as “responsible death”. Responsible death among Kazakhs is practiced informally without resorting to formal institutions like financial organizations.

Kazakhs endeavor to provide their dependents with primary assets, like apartments, cars and education that will allow them to survive on their own in future.

Kazakhs' norms	Impact on demand
Strong child-oriented saving habit	High demand for life insurance as a saving instrument
Hierarchy society/strong kinship ties	Low demand for life insurance as risk-management tool
Taboo on talking/planning death	Low demand (life insurance is a formalized communication of death)
Informal practice of "responsible death"	Low demand (other form of practice of responsible death)

In third chapter, I come to an interesting paradoxical conclusion. The collectiveness feature of Kazakh society has a positive impact on life insurance development. This contrast with a finding in the second chapter that it had a negative impact on demand because of the cushion effect of kins' support. In this third chapter we found that sales agents employ strong network ties by reaching to potential customers through what they call *recommendations*. Sales agents employ dense network ties which allow them to reach new customers. Recommendations, it turns out, are the main tool to build bridges between sales agents and potential customers. Sales agents also find communication of death and the risk of premature death considerably difficult to discuss with prospective clients and therefore resort to focusing more on the saving feature of life insurance. An additional difficulty for the sales agents is the strong reliance of Kazakhs on the state. Kazakhs consider the state as a source of social stability.

Although small, there is still a share of population that buy life insurance. For them life insurance is a rational choice as saving instrument. Formally, they buy life insurance. However, insured people perceive life insurance as a saving instrument. Kazakhs do not consider life insurance economically beneficial after their death. They claim that they invest money primarily for the expenses of children and provision for decent retirement.

This exists in contrast to the central idea of insuring life to manage the well-being of dependents in case of premature death.

There are other saving instruments with more flexible terms that serve as good substitute for life insurance. Therefore, relying on data on life insurance demand, which is considerably small, we cannot claim that Kazakhs are not inclined to save money, while if to consider life insurance as death-management tool we can firmly claim that Kazakhs are not inclined to insure their lives.

Contribution of Thesis and Recommendations for further study

This research contributes both to the fields of economics and sociology. It allows us to observe how rationality is framed by the social context that an actor lives in. Despite being a beneficial instrument, in this study we see how socially accepted norms override the potential advantages of life insurance. This study shows the extent to which the compatibility of product with social norms is essential for the demand to exist.

The findings of this study contribute to studies concerned with the sociology of risk and death. Moreover, they could be used for shaping policies by both life insurance agencies and the Kazakh government. The active consumption of life insurance can relieve the government's burden of providing for the financial security needs of population. Therefore, it is essential to understand the Kazakh population's attitude towards the use of financial instruments in order to be able to choose the right strategy for promoting of the use of financial instruments. As each society has its own unique features, the detailed insight into Kazakhs' values and norms allows to shape society-specific measures and policies.

The purpose of this study was to determine the influence of social and cultural factors on the demand for one type of financial instrument - life insurance. As the study found that Kazakhs value the saving feature of life insurance, further research could focus

on other saving instruments and differences between the perception of them and life insurance which will enable to understand Kazakhs' attitude to saving more thoroughly.

Limitations of Thesis

Overall, the aim of this study was to understand the mechanisms through which Kazakhs shared ideas and values shape the demand for life insurance. Apart from contributing to this field of study, it has several limitations. First, for the quantitative analysis the data of only one company was obtained. Although the sample is quite big, it still has the risk of being not representative as there are other six life insurance companies functioning in Kazakhstan. Second, in the framework of this study, other saving tools were not analyzed to understand the saving habit of Kazakhs thus leaving space for future comparative study of saving and insuring habit. Third, Kazakhs' understanding of death is an extremely important feature of the society. In the framework of this study, perception of death was examined only in relation to economic decision-making, leaving space for studying sociology of death and the influence of religion on the perception of death. As there was no previous research in this field for Kazakhstan, it was difficult to build the conceptual framework.

There are also some methodological limitations in this study. Firstly, the study focused exclusively only on Kazakhs, leaving aside other ethnicities that also comprise considerable share of country's population. Moreover, the part of interviews regarding death were less revealing as this was sensitive topic to respondents.

References

- Ando, A., & Modigliani, F. (1963). The " life cycle" hypothesis of saving: Aggregate implications and tests. *The American economic review*, 53(1), 55-84.
- Auerbach, A. J., & Kotlikoff, L. J. (1989). How rational is the purchase of life insurance? (No. w3063). National Bureau of Economic Research.
- Berekson, L. L. (1972). Birth order, anxiety, affiliation and the purchase of life insurance. *Journal of Risk and Insurance*, 93-108.
- Browne, M. J., & Kim, K. (1993). An international analysis of life insurance demand. *Journal of Risk and Insurance*, 616-634.
- Burnett, J. J., & Palmer, B. A. (1984). Examining life insurance ownership through demographic and psychographic characteristics. *Journal of risk and insurance*, 453-467.
- Campbell, R. A. (1980). The demand for life insurance: An application of the economics of uncertainty. *The Journal of Finance*, 35(5), 1155-1172.
- Chan, C. S. C. (2009). Invigorating the content in social embeddedness: An ethnography of life insurance transactions in China. *American Journal of Sociology*, 115(3), 712-754.
- Chan, C. S. C. (2012). *Marketing death: Culture and the making of a life insurance market in China*. OUP USA.
- Chui, A. C., & Kwok, C. C. (2009). Cultural practices and life insurance consumption: An international analysis using GLOBE scores. *Journal of Multinational Financial Management*, 19(4), 273-290.
- Cole, S., & Fernando, N. (2008). Assessing the importance of financial literacy. *ADB Finance for the Poor*, 9(2), 1-6.
- Douglas, M., & Wildavsky, A. (1982). *Risk and culture: An essay on the selection of technical and environmental dangers*. Berkeley, Cal.: University of California Press.
- Duker, J. M. (1969). Expenditures for life insurance among working-wife families. *Journal of Risk and Insurance*, 525-533.
- Elder, J. W. (1966). Fatalism in India: A comparison between Hindus and Muslims. *Anthropological Quarterly*, 39(3), 227-243.
- Emmett J. Vaughan & Vaughan, Therese M (1996). *Fundamentals of risk and insurance* (7th ed). New York Wiley
- Etounga-Manguelle, D. (2000). *Does Africa need a cultural adjustment program?* (Vol. 71). New York: Basic Books.
- Exley, C. (2004). the sociology of dying, death and bereavement. *Sociology of health & illness*, 26(1), 110-122.
- Fischer, S. (1973). A life cycle model of life insurance purchases. *International Economic Review*, 132-152.
- Gandolfi, A. S., & Miners, L. (1996). Gender-based differences in life insurance ownership. *Journal of Risk and Insurance*, 683-693.

- Goldsmith, A. (1983). Household life cycle protection: Human capital versus life insurance. *Journal of Risk and Insurance*, 473-486.
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American journal of sociology*, 91(3), 481-510.
- Hammond, J. D., Houston, D. B., & Melander, E. R. (1967). Determinants of household life insurance premium expenditures: An empirical investigation. *Journal of Risk and Insurance*, 397-408.
- Headen, R. S., & Lee, J. F. (1974). Life insurance demand and household portfolio behavior. *Journal of Risk and Insurance*, 685-698.
- Henderson, G., & Milhouse, V. H. (1987). *International business and cultures: a human relations perspective*. Cummings & Hathaway.
- Inkmann, J. and A. Michaelides (2012), Can the Life Insurance Market Provide Evidence for a Bequest Motive, *Journal of Risk and Insurance*, 79(3): 671-695.
- Kellehear, A. (1984). Are we a 'death-denying' society? A sociological review. *Social science & medicine*, 18(9), 713-721.
- Kephart, W. M. (1950). Status after death. *American Sociological Review*, 15(5), 635-643.
- Lewis, F. D. (1989). Dependents and the demand for life insurance. *The American Economic Review*, 79(3), 452-467.
- Luciano, E., Outreville, J. F., & Rossi, M. (2015). Life insurance demand: evidence from Italian households; a micro-economic view and gender issue.
- Mellor, P. A., & Shilling, C. (1993). Modernity, self-identity and the sequestration of death. *Sociology*, 27(3), 411-431.
- Miller, M. A. (1985). Age-related reductions in workers' life insurance. *Monthly Lab. Rev.*, 108, 29.
- Myers, R. J. (1959). Economic Security in the Soviet Union. *Transactions of Society of Actuaries*, 11(31), 723-748.
- Palmer, D. A., & Biggart, N. W. (2002). Organizational institutions. *The Blackwell companion to organizations*, 257-280.
- Pissarides, C. A. (1980). The wealth-age relation with life insurance. *Economica*, 451-457.
- Pye, R. B. (2000). *The Evolution of the Insurance Sector in Central and Eastern Europe and the former Soviet Union*.
- Ringgren, H. (1967). Fatalistic beliefs in religion, folklore, and literature.
- Rippl, S. (2002). Cultural theory and risk perception: a proposal for a better measurement. *Journal of risk research*, 5(2), 147-165.
- Schumpeter, Joseph A. 1934. *The Theory of Economic Development*. Cambridge, MA: Harvard University Press
- Showers, V. E., & Shotick, J. A. (1994). The effects of household characteristics on demand for insurance: A tobit analysis. *Journal of Risk and Insurance*, 492-502.

- Stern, P. C., Kalof, L., Dietz, T., & Guagnano, G. A. (1995). Values, beliefs, and proenvironmental action: Attitude formation toward emergent attitude objects. *Journal of applied social psychology*, 25(18), 1611-1636.
- Truett, D. B., & Truett, L. J. (1990). The demand for life insurance in Mexico and the United States: A comparative study. *Journal of Risk and Insurance*, 321-328.
- Uzzi, B. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American sociological review*, 674-698.
- Wasaw, B., and R. D. Hill, 1986, *The Insurance Industry in Economic Development* (New York: New York University Press).
- Weber, E. U., & Hsee, C. (1998). Cross-cultural differences in risk perception, but cross-cultural similarities in attitudes towards perceived risk. *Management science*, 44(9), 1205-1217.
- Weber, E. U., & Hsee, C. (1998). Cross-cultural differences in risk perception, but cross-cultural similarities in attitudes towards perceived risk. *Management science*, 44(9), 1205-1217.
- Weber, M. (1968). *Economy and society*. In *Conceptual Exposition* (Vol. 1, pp. 956-1005).
- Wooldridge, J. M. (2015). *Introductory econometrics: A modern approach*. Nelson Education.
- Yaari, M. E. (1965). Uncertain lifetime, life insurance, and the theory of the consumer. *The Review of Economic Studies*, 32(2), 137-150.
- Zelizer, V. A. (1978). Human values and the market: The case of life insurance and death in 19th-century America. *American journal of sociology*, 84(3), 591-610.

Statistical collections from the Committee on Statistics:

- Women and men in Kazakhstan (2012-2016)
- Regions of Kazakhstan (2012 -2016)
- Economic activity of Kazakhstan population (2012-2016)

Appendix A

Table 1. Income, penetration and urbanization level of regions

CR	Penetration (%)	Urbanization level	Average income (tenge)
Atyrau	1.1	47.6	217 598
West Kazakhstan	0.7	48.68	110 157
Karagandy	0.55	78.49	107 830
Kyzylorda	0.55	43.26	100 442
South Kazakhstan	0.55	36.99	84 719
East Kazakhstan	0.47	58..6	93 971
Mangystau	0.51	48.97	193 999
North Kazakhstan	0.41	41.60	101 720
Akmola	0.38	43.2	86643
Almatinskaya	0.27	23..6	88 709
Aktubinskaya	0.21	61..76	103 461
Pavlodar	0.18	69.33	102 611
Kostanay	0.09	51.30	90 451
Zhambyl	0.07	40.31	82 451
Overall	0.43	49.83	111769

Source: own calculations (penetration level) and Committee on Statistics of the Republic of Kazakhstan (income and urbanization rate)

Appendix B

Graph 1. Test for normality of residuals

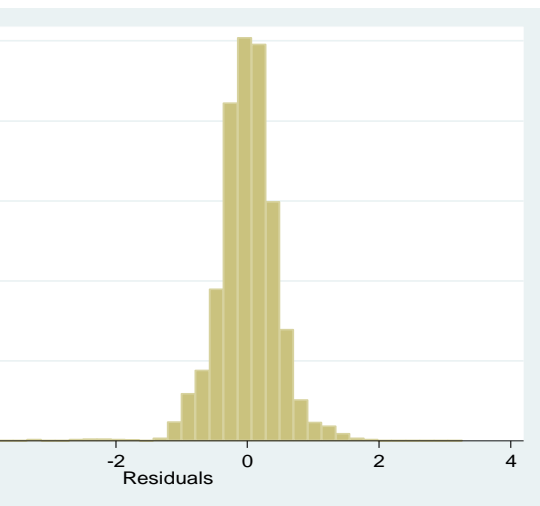


Table 1. Test for collinearity

Variable	VIF	1/VIF
age2	41.73	0.023961
age	40.73	0.024550
y2004	3.64	0.274573
y2002	3.59	0.278584
south	3.18	0.314747
y2003	3.07	0.325584
y2001	2.88	0.347386
y2008	2.75	0.363778
y2005	2.75	0.363784
west	2.63	0.379671
annual	2.52	0.397541
north	2.44	0.409843
y2007	2.13	0.470383
y2006	2.12	0.471371
halfyear	2.07	0.483545
east	1.70	0.588251
quarter	1.68	0.595611
term	1.26	0.794380
oneoff	1.04	0.965061
female	1.03	0.974603
y2000	1.00	0.999097
married	1.00	0.999826
Mean VIF	5.77	

Appendix C**Table 2. Information about respondents**

	Name	Age	Gender	City	Status	Working experience	children
1.	Aidar	33	M	Shymkent	Not insured	-	2
2.	Bekzat	39	M	Karagandy	Not insured	-	2
3.	Maira	47	F	Shymkent	Insured	-	3
4.	Murat	48	M	Karagandy	Not insured	-	4
5.	Aigul	40	F	Shymkent	Insured	-	3
6.	Gulmira	34	F	Karagandy	Insured	-	2
7.	Sales agent A	-	F	Karagandy	Sales agent	17	-
8.	Sales agent B	-	F	Shymkent	Sales agent	10	-
9.	Sales agent C	-	F	Shymkent	Sales agent	7	-