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# Retirement Preparedness in Saudi Arabia

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#### ABSTRACT

This paper studies the behavior towards retirement of a sample of workers from Al Jouf Region in Saudi Arabia. This is, in particular, to identify socioeconomic factors put forward in preparing for retirement. Data collected via questionnaires are analyzed using factor analysis. Beyond the general perception which associates retirement to something negative, the concepts of freedom, family connectedness and leisure are frequently highlighted by respondents. The results show the lack of financial planning despite the possible deterioration of their economic situation worried by most respondents. Moreover, investment in financial products attracts future retirees in spite of their lack of knowledge of the related risks.

Keywords: Retirement Planning, Savings, Risk and Expectations

JEL Classifications: D14, J26

# 1. INTRODUCTION

Social security systems face several challenges. On the one hand, demographic changes have implications on the labor market and impose additional costs to social insurance institutions and pension funds. On the other hand, the concerns of actual or potential beneficiaries' vis-à-vis risks (retirement, unemployment, sickness, accident) continue to evolve accordingly. Recent years have witnessed many pension reforms in number of countries. Substantial funds are now managed by the private sector. However, the Organization for Economic Co-operation and Development (OECD, 2012) is a bit pessimistic because today's workers live what could be the golden age of pensions and pensioners, due to the increase in life expectancy and investment risks associated with defined-contribution (DC) plans. From future pensioners view, retirement planning becomes crucial in post-retirees' welfare.

Although the trend is toward homogenization of pension systems, it remains that each country sees retirement issues through its own prism. Some countries offer generous pension provisions where other better manage assets. Moreover, the impact of social factors is not negligible. Saudi Arabia, which is a member of the G20 countries, manages substantial assets through its two pension funds. The "Retirement Pension Department" created in 1958, currently known as Public Pension Agency (PPA), a public organization with legal personality and its own budget, is

one of the two funds which manage the pension system in Saudi Arabia. The organization has set as its main objective to secure the financial resources to civilian and military state workers and their beneficiaries. According to the 2014 PPA report, the number of pensioners affiliated to the public sector scheme reached 617,080 by the end of 2013 where the total of benefits amounted for SR45,312,000 (\$12,083,000), including pensions and lump-sum payments. The second fund denominated General Organization for Social Insurance (GOSI) established in 2000 covers workers in the private sector and includes a social insurance system. It consists of two branches: Occupational hazards and annuities. The number of establishments covered under the social insurance scheme by the end of 2013 reached 419,485. The organization claims 20,892,137 contributors. Since its inception, the fund has paid nearly SR100 billion (\$26 billion) pension in favor of over 2 million beneficiaries. The proportion of assets invested in the banking and industrial sectors reached 71% at the end of 2013. The demographic changes underway will not help absorbing the large implicit debts of pension funds if measures are not taken.

In 2013, Saudi Arabia population was estimated at about 30 million based on the 2010 population census. According to the 2012 edition of World Population Prospects (United Nations, 2012), the 2010-2015 projections for life expectancy are 73.8 and 77.5 years respectively for men and women and should reach 80.9 and 83 years respectively in the horizon 2045-2050. The working-

age group (15-64) will represent 68.7% of the total population by the end of 2015 while the percentage of elderly population (65+) will be 3%. These rates will be respectively 65.7% and 18.4% in 2045-2050. The percentage of youth (15-24) is expected to decline from 22% of the working-age population in 2015 to 14.6% in 2050. The unemployment rate is 6.1% for men. It reaches 33% for women. According to the United Nations report mentioned above, the changing structure of the pyramid is not clear regarding a possible "demographic dividend" because of migration into the country. HSBC (2009) expresses a different view: "Like most countries, Saudi Arabia is faced with an aging society. In line with many emerging economies, its society is still relatively young and will benefit from the demographic dividend... This gives Saudi Arabia the time to prepare for retirement before the adult population subsequently moves into retirement. It is critical that Saudi Arabia makes the most of this opportunity."

On the other hand, the question appears: How workers consider retirement and how do they prepare it? With the population growth and the requirements of urban life, the concerns of workers (employment, education, health, housing...) tend towards uniformity.

The purpose of this work is to study the retirement readiness for a sample of Saudi workers from Al Jouf Region. Section 2 gives a literature review. Section 3 and Section 4 present the methods and of the motivation of the study. Section 5 analyzes the results. Section 6 gives the implications and the limitations of the research. Finally, Section 7 concludes.

# 2. LITERARURE REVIEW

The literature documents several measures of pension reforms, especially in Europe, Japan, and some emerging countries where the increase in life expectancy associated with low birth and fertility rates exerts pressure on pension funds expenditures. Recommended measures generally consist in delaying the retirement age, reducing benefits, or increasing the level of contributions. The expected impact of these reforms on the long-term sustainability of pension funds' expenditures is still being discussed. De la Fuente and Domenech (2013) analyze the expected results of the Spanish pension reform by the horizon 2027. This reform rises respectively the pensionable age and the number of years of contributions by 2 years. They conclude that these measures will reduce spending on pensions up to 1.4 percentage points of GDP. Fehr et al., (2012) find that the increase in retirement age in Germany delays the effective retirement only by 1 year and believe that the increase in the actuarial adjustment of benefits would had a better impact. Kitao (2014) argues that in its current state, the US social security system is not sustainable. She proposes four options: Increase payroll tax, reduce benefit replacement rate, increase normal retirement age, and make the system means-tested and benefits decline with income. This reduction of expenditures being supported by populations; the governments are pushing workers to take full advantage of financialization and employers to favor bridge-employment, i.e. the transition to full retirement. Wang and Schultz (2010) summarize the theoretical research on retirement in recent years through the concepts of the decision-making, adjustment process, career development, and human resources management. The first states

that retirement as decision-making assumes that future retirees begin by limiting psychologically their commitment to work before retiring effectively. The second assesses that adapting to changes occurring during the transition phase is realized through a process of adjustment. The third considers that retirement is not an end but the later stage of career development. Finally, the last conception emphasizes different aspects of retirement management by organizations. Empirical researches give an important place to retirement planning and bridge employment. Research centers like Transamerica Global Retirement Survey or Employee Benefit Research Institute study different aspects of retirement readiness and propose reliable indexes. Ameriks et al., (2003) and Lusardi and Mitchell (2007) find that planners are more likely to accumulate wealth than non-planners and report a positive relationship between retirement planning and welfare gains. Exploring, the decision process which leads to the wealth accumulation, Binswanger and Carman (2012) find similar results between planners and nonplanners. They argue that rule-of-thumb types behave "as if" they were planners and have accumulated similar amount of wealth. However, the amount of wealth accumulated by both categories is larger than those attributed to unsystematic types. Caliendo and Findley (2013) seek to quantify the welfare gains associated with improved retirement planning. They show that small improvements in planning can generate significant gains in presence of optimal social security program and heterogeneity in retirement decisions. The behavior towards retirement is often studied through the early retirement decision. Hernoes et al., (2000) show, in the Norwegian context, that early retirement decision depends on personal characteristics and financial incentives. Women, people with high level of education or private sector workers are more willing to retire early. Authors report taxes as possible causes of the early retirement decision. Instead, pension even combined with other income is less taxed than the revenue provided by full-time work. Allen et al., (2004) study the determinants of retirement decisions at the university, following the introduction of planned programs. The authors discuss the effect of such plans on the productivity of highly skilled staff from the University of North Carolina. Their results show an inverse relationship between the past productivity of teachers and the probability of joining a planned program. Farhi and Panageas, (2007) propose a model which captures the interaction between savings, portfolio choice and retirement. They assess that an agent enters early retirement when a certain level of wealth is reached. The option of early retirement reinforces saving incentives. The marginal propensity to consume out of wealth declines as wealth increases and early retirement becomes more likely. They posit that optimal portfolio is tilted more towards stocks. On the contrary, Hatcher (2008) finds conservative asset allocation portfolio for retired persons. Whitaker and Bokemeier (2014) observe that retirement planning is a lifelong process involving several factors including financial literacy. van Rooij et al., (2011) find that financial concepts knowledge is a significant factor in retirement planning in Netherlands. van Erp et al. (2014) examine the retirement decision in terms of non-financial determinants. They emphasize the importance of social norms, default options and default reference-dependent utility. The role of psychological factors is also documented (Milne, 2012; Topa et al., 2012; Wang and Shi, 2014). This view is also evidenced by Asebedo and Seay (2014) who find a link between psychology and retirement satisfaction. Woehrmann et al., (2014) revisit the social cognitive career theory to explore the post-retirement planning. They identify outcome expectations and facilitating factors (individual capability to continue working, job opportunity and social approval) as possible predictors. In contrast, Noone et al., (2013) apprehend the problem in terms of satisfaction and suggest using a holistic approach; the individual's planning does not necessarily ensure a better level of satisfaction.

The social security programs in the Middle East countries have many similarities. The insurance systems in the region are traditional defined benefit (DB) programs, and contrary to European and North American countries, funding problems are not put forward. Turner and Lichtenstein (2002) note that high fertility rates reduce the effects of population aging. Some rich countries in the region (Kuwait, Saudi Arabia) offer generous benefits. However, in addition to existing structural problems (e.g., pensions design, transfer from low income workers to high or middle income workers, low cover rates, and lack of transparency), there is mismatch between benefit promises with the contribution rates and retirement age (Robalino, 2005). Moreover, in Gulf Cooperation Council (GCC) countries, expatriates constitute the bulk of the workforce and the practice is for companies to provide expatriate employees with an end of service lump sum based on the number of years of service (Jaffer, 2014). The sustainability of the pension in the long-term is now evoked. These issues affect the behavior of individuals towards retirement. Towers Watson (2013), in a recent survey, draws a map of savings and retirement attitudes in MENA countries. The main findings point out that saving rates in the region are considerably low when compared to emerging markets of India and China. GCC countries are not better with saving rates below the average with differences of attitudes towards saving among nationals and expatriates. The report also highlight that housing is a major concern.

# 3. METHODOLOGY

According to the last population census, Al Jouf region is populated by 483,138 inhabitants. Unlike industrial cities in major urban centers, the province derives most of its business from agriculture. However many industries from various sectors are operating in now. Their number reached 50,174 in 2012 (89% of very small businesses and 11% of SMEs). The private sector employs 111,025 people against 4466 to public sector (Central Department of Statistics and Information Statistical Report, 2012). On average, 2% of public sector retirees come each year from this region. Data are collected through questionnaires distributed during May 2014. The choice of the variables was performed on the basis of several criteria: The discussion with a random sample, the existence of comparable surveys worldwide, and information drawn from local newspapers dealing with retirement issues. Questions, in Arabic and English side by side, were administered directly or through employee's hierarchical superior and target public administrations (university, schools, and public agencies), banks and financial institutions, industries. Most of questionnaires were collected back within 7 days.

The objective is to study important socio-economic factors involved in the preparation for retirement. 201 questionnaires

were analyzed from a sample of 283 initially distributed. Table 1 gives a sample profile of variables of interest.

The questionnaire is structured to cover main information areas: Basic knowledge on retirement, perception of retirement, retirement planning, firm support to employees phasing to retirement and, post-retirement concerns regarding potential risks.

The questionnaire consists of closed questions like "Do you know the beneficiaries of pensions?" Questions with multiple modalities like, "which of the following words better describe the retiree life?" Likert scales measuring, for instance, the degree of confidence "When thinking about retirement, would you say that you are very confident, confident, fairly confident or not confident at all regarding the following propositions?" The choice of 4-point Likert scale is justified by the necessity to obtain specific responses. Closed questions are coded 0 (No) and 1 (Yes). Different values are assigned to each modality of multimodal questions. Likert scales are ranked on a range of 4-1 (very confident to not confident at all). The questionnaire includes 49 variables distributed as follows:

- Identification: 6 items
- Basic knowledge of pension systems: 6 items
- The perception of retirement: 13 items
- Work environment and support programs implemented by companies: 7 items
- Products used for retirement and products intended to use after retirement: 16 items.

Table 2 summarizes the list of the variables.

# 4. MOTIVATION OF THE STUDY

According to the IMF (2014), the pension system is sustainable under current demographics, but need to be monitored in the long-run to face future shifts. Saudi Arabia public expenditures on pensions will grow from 2.2% of GDP up to 7 by 2050. Today, the system is characterized by high replacement rates and gaps in coverage rates. Recently the portability rules between private and public schemes have been implemented. Although the population is young, the life expectancy continues to increase. The increase

Table 1: Sample profile

Variable	Description	Number (%)
Sex	Male	132 (65.7)
	Female	69 (34.3)
Age (years)	Mean (SD)	40 (15)
Education level	Primary	14 (7)
	Secondary	65 (32.4)
	Post-secondary or higher	122 (60.6)
Specialty	Business	82 (40.8)
	Engineering	15 (7.5)
	Medicine/health	27 (13.5)
	Other	77 (38.3)
Sector of activity	Public	150 (74.6)
	Private	51 (25.4)
Working experience (years)	Mean (SD)	10 (5)
(years)		

Table 2: Description of the variables

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List of variables	Variables contents
Gender	Male/Female
Age (years)	Four classes: Lower (<30); upper (50+)
Degree	Below secondary; secondary; bachelor; master; doctorate
Specialty	Business; engineering; medicine/health; other
Sector of activity	Public or private
Working experience (years)	Four classes: Lower (<5); upper (15+)
Pension knowledge	Yes/No
General knowledge	Yes/No
Pension calculation	Yes/No
Benefit compensation	Yes/No
Affiliation scheme	Public/Private
Existence of post-retirement associations	Yes/No
Confidence/healthcare	4: Very confident-1: Not confident at all
Confidence/future independency	4: Very confident-1: Not confident at all
Confidence/future life conditions	4: Very confident-1: Not confident at all
Confidence/level of the pension	4: Very confident-1: Not confident at all
Score expected source retirement income	1: Property, 2: Income, 3: Bank loans, 4: Other
Retirement perceptions (positive or negative words)	1: Positive, 0: Negative
Intended post-retirement activity if any	0: Nothing, 1: Volunteer, 2: New business, 3: Other
Confidence/friends and family time	4: Very confident-1: Not confident at all
Confidence/physical activity	4: Very confident-1: Not confident at all
Confidence/new place of residence	4: Very confident-1: Not confident at all
Confidence/maintaining a good health	4: Very confident-1: Not confident at all
Confidence/financial resources	4: Very confident-1: Not confident at all
Confidence/choosing when to retire	4: Very confident-1: Not confident at all
Government pensions and social insurance	Score range: 4-1 Primary→Secondary
Saving accounts	Score range: 4-1 Primary→Secondary
Property	Score range: 4-1 Primary→Secondary
Equity	Score range: 4-1 Primary→Secondary
Real estate	Score range: 4-1 Primary→Secondary
Bonds	Score range: 4-1 Primary→Secondary
Mutual funds	Score range: 4-1 Primary→Secondary
Business project	Score range: 4-1 Primary→Secondary
Real estate mortgage	Score range: 4-1 Primary→Secondary
Other (precise)	Score range: 4-1 Primary→Secondary
Saving for retirement	Regularly/Irregularly/Still have time/No
Product against loss of initial capital	4: Strongly agree - 1: Strongly disagree
Product offering steady income/lifetime stream	4: Strongly agree - 1: Strongly disagree
Product covering against Inflation risk	4: Strongly agree - 1: Strongly disagree
Product against low investment returns	4: Strongly agree - 1: Strongly disagree
Product offering long-term health coverage	4: Strongly agree - 1: Strongly disagree
Comfortable salary	4: Strongly agree - 1: Strongly disagree
Less job pressure	4: Strongly agree - 1: Strongly disagree
Job initiative	4: Strongly agree - 1: Strongly disagree
Chance to maintain job	4: Strongly agree - 1: Strongly disagree
Firm's support to employees about to retire	4: Strongly agree - 1: Strongly disagree
Plan to stay in the same place until retirement	4: Strongly agree - 1: Strongly disagree
Feel a strong sense of belonging to company	4: Strongly agree - 1: Strongly disagree
reer a strong sense of belonging to company	4. Subligiy agree - 1. Subligiy disagree

of the mandatory retirement age from 60 to 62 years is discussed. At the same time, the percentage of workers choosing the early retirement option reached 44.2% in 2013 and most of them leave at the age between 45 and 55 (PPA report, 2014). The present work examines the preparation of the retirement at the individual's level. HSBC (2009) tackled the problem and provided meaningful figures. It appears that 84% of Saudi workers do not feel very well prepared for retirement. Only 12% save for retirement and 27% cite debt as impediment to save. More than half of the respondents say they have no access to financial guidance. Like US, Canadian, and Chinese workers, people in Saudi Arabia prefer cash to equity investments according to the same study. When asked about needed pension reform, 18% want to increase retirement age and 23% wish the government to encourage more private savings.

However, studies on the attitudes towards the retirement in the MENA region in general, and Saudi Arabia in particular, are rare. This work is a contribution to the understanding of retirement aspects in the country and addresses the following questions:

- How the Saudi perceive retirement?
- How do they plan for?
- How employers help people nearing to retirement?
- What they think are the best sources of retirement income?

Although the literature suggests some specific variables, exploratory approach is chosen given the specificity of the sample. A principal component analysis (PCA) is run to determine the latent structure of the data and reduce variables.

# 5. RESULTS

The trends of this study will be compared, where possible, with international surveys such as those in Aegon Retirement Readiness (2014) or HSBC "Future of retirement" series (2009, 2015) assuming that our results are generalizable to the whole population of the Saudi workers.

# 5.1. Descriptive Statistics

# 5.1.1. Socio-demographic characteristics

The analysis shows that 65.7% of respondents are male. Those under 40 years account for 65.7%, of the 40-50 age class represents, in turn, 27% of the respondents. Older persons (50+) represent 7% of the sample. Concerning the sector, 74.6% work in the public sector against 25.4% working for the private sector; 26% of the respondents have <5 years' experience. More than half of respondents report a working experience comprised between 5 and 15 years. With regard to the education level, university and secondary graduates account for 67% and 29% respectively. More than half of them followed specialties related to business and administration. In terms of the pension system, 48% of respondents are affiliated with the PPA whereas 20% claim an affiliation to the private scheme (GOSI). The remaining 32% don't know their pension scheme. This rate is indicative of the percentage of workers who have no idea about the methods of calculation of benefits (58%) or compensation (55.2%). In the aftermath of the previous answers, 63% of respondents don't know whether there are associations in charge of helping retired persons.

#### 5.1.2. Perception of retirement

Thinking about retirement, 60% of the respondents of our sample are optimistic for health costs coverage against 40% of pessimists; 66% do not worry about their future independence but only 45% are optimistic about their post-retirement life; 61% are afraid of not having sufficient resources after retirement. 48% of the respondents do not believe to their means to enjoy an early retirement. Nevertheless, only 25% of respondents claim to have a saving; thirty percent think it is unnecessary to save for retirement. The rest of the sample (45%) say they still have time to start saving. The amount of the pension worries 69% of the respondents. To prepare for retirement, 58% prefer an income whereas 39% think that property is a priority. The general sentiment vis-à-vis retirement is negative for 58% of respondents. However, over 80% are optimistic about the opportunities to keep in the touch with family and friends; to maintain physical activity; or to have liberty to choose a new residence. Only 26% of respondents are concerned about their health after their retirement. Regarding the post-retirement work, 26% want to be volunteers whereas 24% think to start a new business.

# 5.1.3. Workplace conditions and firms' assistance for pre-retirees

Descriptive statistics show that job characteristics are rated positively by 45% of the respondents. The rest of the sample mention factors like arduousness of the job and lack of initiative (16%), stress (14%) or low chance of staying in the same job (8%). However, many are those wishing to stay until retirement (64%) and 45% of respondents manifest a strong sense of belonging to their

company. Regarding programs targeting employees in the early retirement phase, 55% of respondents believe that the company is not helping them enough. In contrast, 11% of respondents argue that companies allow a shift from full to part-time. The same proportion of respondents argues that employers assign less stressful tasks to employees nearing retirement exactly. The existence of counseling and other educational contents is also mentioned by 11% of the respondents of our sample, whereas 15% of respondents report the existence of health insurance programs.

#### 5.1.4. Products and risks

This section aims to test respondents' preferences for some financial products in view of their future retirement and to determine what their strategy of risk is, if any. They were asked to classify products as primary or secondary sources of subsistence in the post-retirement life. For 64% of respondents, the pension comes first as primary source of income before property (55%). Other products are considered secondary sources of income by the majority of respondents: The savings accounts (69%); stocks (90%); real estate (70%); bonds (82%); mutual funds (90%) and, real estate mortgage (76%). In terms of investment risk, the majority of respondents (84%) say a product that can provide them with a steady income interests them. Others prefer hedging against initial investment losses (73%), or against low investment returns (65%). Hedging against inflation and health insurance costs are mentioned respectively by 65% and 81% of respondents.

According to the last HSBC report (2015) cash deposits and properties emerge as the major source of retirement funding in a sample of 15 countries. Other sources of funding such insurance products, personal pension schemes and employer pension schemes are also popular among respondents.

# 5.1.5. PCA

The above analysis gives a general idea of the study, but does not explore the latent structure of data. To do this, a PCA is run. Based on the inter-items correlation matrix, the number of variables is reduced to 15. The Pearson coefficients of correlation of the new matrix are shown in Table 3. It also appears that the determinant of the matrix is 0.003, higher than the recommended value of 0.00001. Consequently multicollinearity is not reported for these data. Kaiser-Meyer-Olkin (KMO) values between 0.7 and 0.8 are considered good to perform factor analysis as in this case (KMO = 0.717, approximate  $\chi^2$  = 8.98, df = 105). Bartlett's test is significant (P = 0.000), confirming that the correlation matrix is not an identity matrix. It is assumed, here, that the factors are independent; hence the use of an orthogonal rotation (varimax) to maximize the loading of each variable on the selected factor is done. Five out of the 15 identified linear components (the number of variables) have eigenvalues >1 (Table 3).

Table 4 shows that the five factors account for 69.5% of the total variance. After rotation, the proportion of variance explained by factor 1 is 22.925%. The remaining four factors explain respectively 13.993%, 11.362%, 11.315%, and 10.005%. This shows that the first factor explains the largest portion of the variance. The examination of the communalities after extraction

Table 3: Co	Table 3: Correlation matrix	atrix													
Items	Confidence	Confidence	Confidence	Confidence	Saving	Equity	Real	How firms	Stay in	Protect.	Lifetime	Protect.	Protect.	Health	Other
	about life conditions	pension level	financial	early retirement	accounts		estate	accompany pre-retirees	the same job until retirement	capital loss	stream	inflation	low returns	coverage	
Confidence about life	1.000	0.673	0.580	0.458	-0.147	0.154	-0.155	990'0	0.257	0.155	0.129	0.063	0.179	980.0	0.372
conditions Confidence	0.673	1.000	0.730	0.574	-0.142	0.114	-0.199	-0.089	0.483	0.145	0.138	0.072	0.186	0.094	0.264
pension level Confidence financial	0.580	0.730	1.000	0.732	-0.153	-0.021	-0.276	0.061	0.562	0.189	0.047	0.031	0.265	0.133	0.237
resources Confidence	0.458	0.574	0.732	1.000	-0.094	-0.077	-0.307	0.211	0.510	0.240	0.129	-0.127	0.144	0.061	0.299
early retirement Saving	-0.147	-0.142	-0.153	-0.094	1.000	0.254	0.222	-0.039	-0.275	0.099	-0.173	-0.042	-0.072	0.134	0.163
accounts Equity Real estate How firms	0.154 -0.155 0.06	0.114 -0.199 -0.089	-0.021 -0.276 0.061	-0.077 -0.307 0.211	0.254 0.222 -0.039	1.000 0.230 -0.102	0.230 1.000 -0.085	-0.102 -0.085 1.000	-0.120 -0.283 0.064	0.045 -0.123 0.423	0.023 -0.327 0.158	-0.065 0.222 0.007	-0.235 -0.023 0.061	-0.066 -0.009 0.096	0.178 -0.173 0.255
accompany pre-retirees Stay in	0.257	0.483	0.562	0.510	-0.275	-0.120	-0.283	0.064	1.000	0.184	0.157	0.164	0.331	990.0	0.029
the same job until															
retirement Protect	0.155	0.145	0.189	0.240	0.099	0.045	-0.123	0.423	0.184	1.000	0.437	0.082	0.393	0.485	0.223
capital loss Lifetime	0.129	0.138	0.047	0.129	-0.173	0.023	-0.327	0.158	0.157	0.437	1.000	-0.052	0.180	0.282	0.272
stream product Protect	0.063	0.072	0.031	-0.127	-0.042	-0.065	0.222	0.007	0.164	0.082	-0.052	1.000	0.484	0.165	-0.253
inflation Protect low	0.179	0.186	0.265	0.144	-0.072	-0.235	-0.023	0.061	0.331	0.393	0.180	0.484	1.000	0.523	-0.044
returns Health costs	980.0	0.094	0.133	0.061	0.134	990:0-	-0.009	960.0	990.0	0.485	0.282	0.165	0.523	1.000	0.051
coverage Other	0.372	0.264	0.237	0.299	0.163	0.178	-0.173	0.255	0.029	0.223	0.272	-0.253	-0.044	0.051	1.000

Table 4: Total variance explained

Component	Initial eigenvalues			Extra	ction sums of s	quared loadings	Rotation sums of squared loadings		
	Total	Percentage	<b>Cumulative %</b>	Total	Percentage	<b>Cumulative %</b>	Total	Percentage	<b>Cumulative %</b>
		of variance			of variance			of variance	
1	3.940	26.268	26.268	3.940	26.268	26.268	3.440	22.934	22.934
2	2.079	13.859	40.127	2.079	13.859	40.127	2.077	13.846	36.780
3	1.814	12.091	52.218	1.814	12.091	52.218	1.734	11.560	48.340
4	1.566	10.441	62.660	1.566	10.441	62.660	1.701	11.343	59.683
5	1.024	6.830	69.490	1.024	6.830	69.490	1.471	9.807	69.490
6	0.917	6.110	75.600						
7	0.734	4.892	80.491						
8	0.617	4.115	84.606						
9	0.510	3.403	88.009						
10	0.419	2.793	90.802						
11	0.354	2.359	93.161						
12	0.321	2.143	95.304						
13	0.288	1.917	97.221						
14	0.230	1.536	98.757						
15	0.186	1.243	100.000						

indicates that the proportion of variance associated with each question range from 56.9% to 82.4%. However, including all factors with eigenvalues >1 depends on the sample size or the number of variables. The average communalities need to be over 0.7, if the number of variables is inferior to 30; otherwise the size of the sample must exceed 250 individuals (See Henry F. Kaiser, 1974). In this case the average of communalities equals (10.441/15 = 0.6960) for a sample of 201 respondents, close to the theoretical limit. Based on the optimized axes, the following labels are assigned to each factor: Work constraints and retirement worries, perceived retirement risks, sources of retirement income, financial assets and saving accounts, and transition to retirement (bridge-employment) (Table 4).

#### 5.1.6. Work constraints and retirement worries

Respondents are concerned about their conditions of life after retirement and are worried about not having sufficient financial resources to meet their needs. The level of pension is also of concern for most respondents. It has been demonstrated that worries about retirement income are mostly driven by country-specific factors and are exacerbated by population growth and inequality (Hershey et al. 2010).

The working environment is also emphasized. The majority of respondents want to stay with their current employer until retirement even though many want to have control on their early retirement date. Liebermann et al., (2013) believe that job demand, perceived job resources, and health impact at varying degrees the decision to stay with the same employer. This decision depends on the age and employment status group (whitecollar versus blue-collar). It is clear that retirement has a negative symbolic for most respondents. It is seen as the final step, insofar, few among them are those who plan to work beyond. Some leaders also face this fear of future. Kets de Vries (2003), in what he calls "the retirement syndrome," evokes feelings of "nothingness," "principle of talion" and, other "subliminal fear of reprisals" associated to the idea of disengagement. In this study, retirement raises material questions: Standard of living, purchasing power, health expenditures etc. It also brings with it lot of convictions: Freedom of choice, family and friend's connectedness, leisure etc. But, despite their expectations, workers are not planning enough.

# 5.1.7. Perceived retirement risks

Respondents highlight the risks associated with the healthcare coverage and the post-retirement inflation assumed to impact their purchasing power. For those looking to invest in projects, they worry about the low returns that could generate such investments.

# 5.1.8. Sustainable sources of income

The majority of respondents carry their choice on long-term assets such as lifetime earnings and real estate for their post-retirement life. Despite the existence of a wide range of financial products, most of respondents prefer stocks. Logic suggests they move towards income generating securities in accordance with their goals. But as noted earlier, most respondents consider mutual funds and bonds as secondary sources of income. Financial literacy is an important element in the investment decision and it seems that respondents, which are mostly graduates, have not incorporated this. Today, financially literate retirees are supposed to evolve in DC schemes. However, even in these schemes, the lack of financial expertise is a recurrent problem (Dvorak and Haley, 2010).

#### 5.1.9. Financial assets and saving accounts

Investment in financial assets (stocks) and savings appear to be a good alternative to the pension for the majority of respondents. Investment in assets like bonds or mutual funds raises limited interest. Kemp et al., (2005) identify financial, personal and, familial events acting as catalysts or constraints in the financial planning for a sample of mid-and later-life individuals. Fisher and Montalto (2010) and Fisher and Anong (2012) recall that there are many saving motives even if they find that retirement saving motives increase the likelihood of saving regularly. Along with many studies, respondents in our sample are not inclined to save for retirement even if they admit its importance. The family context motivates individuals through a process of socialization and variables such materialism, financial strain, religiosity,

determination of needs and, retirement savings interact at different levels (Payne et al., 2014).

#### 5.1.10. Transition to retirement

It seems to be an axis linking firm's support to employees nearing retirement and their apprehension towards the risks from their future investments. Employer's involvement in counseling and helping people approaching retirement is desired, but the previous results show that this is rarely the case. Most respondents regret the lack of information on issues related to retirement or the absence, at the firm level, of programs oriented towards pre-retirees. Firms must be involved in the management of the transition of their employees from active life to retirement and provide advice to those who intend to work beyond retirement. It is important to recall that only a small percentage of respondents think to launch a business project.

# 6. IMPLICATIONS AND LIMITATIONS

The contribution of the paper is outlined through the following dimensions. First, the extent at which our respondents are confident about retirement. It emerges from the results that the Saudis perception of retirement is negative. Second, the degree of retirement preparation, measured here through the existence of a saving plan, shows that only about one quarter of respondents (12% in HSBC 2009) claim to have a saving plan. These results are in phase with Towers Watson (2013) which, assess that the saving rates in the GCC countries are below the average compared to emerging markets like India or China. The respondents (64%) also manifest a strong reliance to state pensions as important source of retirement income even if the amount of the pension is a source of anxiety for many of them. For comparison, cash deposits and properties are highly regarded by Indians and Indonesians (see HSBC 2015). Third, employers do not promote enough, assistance to persons approaching retirement. Two-thirds of Saudi workers plan to stay with their current employer until retirement but, as stated earlier, 44% of male workers retire before the normal age. The impact of economic variables such as the income level, households' expenditures, or the current assets of future retirees on the decision to go to early retirement is not investigated. The degree of financial literacy explains the preparedness gap in numerous studies. While the education attainment of respondents is included in the analysis, the question of the degree of financial knowledge is not explicitly raised especially, as traditional DB systems are less demanding in terms of financial knowledge than DC systems. In addition, retirement planning can be hindered by socio-cultural factors. Pension systems provide social, financial and economic benefits. In the GCC countries, the social dimension prevails and is under the responsibility of the Government alone. When pension systems will face funding risk, the employee will support part of the expenditures or will be asked to work longer. The retirement packages should evolve towards more flexible schemes and should involve employees, employers, and policy makers.

# 7. CONCLUSION

Retirement is a milestone in the life of any worker. For many, it is the culmination of a long career, but also the beginning of

uncertainties. Such uncertainties concern employers and pension funds too. Therefore workers need to prepare themselves during their active life. This paper aims to investigate how a sample of workers from Al Jouf Region in Saudi Arabia prepares for retirement. The main levers at their disposal are savings and investments.

The results show a lack of planning for retirement for most of respondents despite the negative connotation of retirement and the pessimism about the future. This unpreparedness contrasts with their desire to have lifetime income, real estate or financial assets. The results also emphasize the lack of initiative at the firm level in counseling and assisting employees during the pre-retirement phase.

Dealing with these issues should start upstream by providing relevant information and encouraging workers to take their responsibility through careful planning. In the immediate future, policymakers should explore the possibility to index pensions with the purchasing power, reduce the cost of health insurance and put at the disposal of retirees housing units at reasonable prices. Moreover, retirees' expertise can be solicited in many fields.

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