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**THE PATTERNS OF EARLY RETIREMENT
AMONG JORDANIAN MEN**

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Abstract

Utilizing detailed data from Jordan Labor Market Panel Survey (JLMPS), this study examines early retirement patterns among Jordanian men. It explores the demographic and economic characteristics of the early retirees and their tendency to return to the labor market after retirement. The study finds that nearly 85% of the living retirees had retired early. It also shows that around 45% of male early retirees return to the labor market and occupy jobs characterized to some degree by informality (e. g. no health insurance, no social security, comparatively lower wages, no paid leaves). However, they are concentrated in limited number of occupations, notably sale workers, drivers and protective services workers. Economically active early pension receivers, however, appear to suffer from high unemployment rates, amounting to 20%, particularly those retiring from the private sector. The main findings of the study also show that both more education and bigger family size tend to increase the propensity of early retirees' returning to the labor market. The study sheds some light on the retirement decision at the individual level.

JEL Classification: J26, J21

Keywords: Early retirement, labor force participation, informal sector

ملخص

باستخدامات البيانات التفصيلية من المسح التتبعي لسوق العمل في الأردن (JLMPS)، تبحث هذه الدراسة أنماط التقاعد المبكر بين الرجال الأردنيين. وتكشف الخصائص الديموغرافية والاقتصادية للمتقاعدين في وقت مبكر، وميلها للعودة الى سوق العمل بعد التقاعد. وجدت الدراسة أن ما يقرب من 85% من المتقاعدين الأحياء كان قد تقاعد في وقت مبكر. لكنه يظهر أيضا أن حوالي 45% من المتقاعدين في وقت مبكر من الذكور يعودون إلى سوق العمل ويشغلون وظائف تتسم إلى حد ما بالغير رسمية (على سبيل المثال لا يوجد تأمين صحي، أو أي ضمان اجتماعي، أجور منخفضة نسبيا، وأجازات غير مدفوعة). ومع ذلك، تتركز هذه الأعداد في عدد محدود من المهن، لا سيما العاملين في البيع والسائقين وعمال الخدمات الوقائية. ولكن يبدو أن تعاني هذه الفئة من النشاطين اقتصاديا ذوى المعاش المبكر، من ارتفاع معدلات البطالة لتصل إلى 20%، ولا سيما المتقاعدين من القطاع الخاص. النتائج الرئيسية لهذه الدراسة تبين أيضا أنه كلما زاد المستوى التعليمي وزاد حجم الأسرة يكون هناك ميل إلى لدى المتقاعدين في وقت مبكر، أن يعودوا إلى سوق العمل. تلقى الدراسة أيضا بعض الضوء على قرار التقاعد على المستوى الفردي.

1. Introduction

Labor force participation (LFP) contributes to the economy's capacity to produce goods and services. The prevalence of a high rate of early retirement lowers LFP and has consequences on the economy (Glomm et al. 2009; Conde-Ruiz and Gallaso 2004; Gruber and Wise 1998). Therefore, there is a growing interest in early retirement behavior and patterns in developed economies (Oorschot and Jensen 2009). However, existing studies on developing countries are limited (Glomm et al. 2009; El-Hamidi 2007).

Jordan has been noticeably confronted with low LFP even in comparison with developing countries. The average observed LFP is around 40% even in high growth periods. Two categories of workers contribute significantly to this phenomenon: women and men older than 40. Female LFP, which is as low as 15%, has received sufficient consideration at all levels. In contrast, little systematic assessment has been conducted to handle the LFP of elderly males and the early exit of middle-aged male workers from the labor market.

Early withdrawal from the labor market for Jordanian men is particularly exceptional and deserves more attention from academic and policy-making circles. The available evidence shows that the incidence of early retirement has increased over time and has become the rule rather than the exception [Social Security Corporation (SSC) 2009]. This is also confirmed in Assaad and Amer (2008) who documented that the decline in activity rates in Jordan starts as early as age 40, and the propensity toward early exit also seems to have been increasing over time. Figure (1) graphs male LFP trends in Jordan by age group. It clearly shows that participation rates for those aged 40 to 54 had fallen from 85% in 2001 to 81% in 2009 and that participation rates for those aged 55 to 64 have remained very low at around 45%.

In light of the preceding discussion, the current study is timely as it examines early retirement among Jordanian male workers. This is not only useful as an academic exercise but is also important for policymakers who need to understand the phenomenon to implement successful labor market and social insurance reforms. To the best of our knowledge, this is the first study to offer a microdata-based analysis of early retirement in Jordan.

The fundamental questions raised and examined in this study are the following:

1. What are the general characteristics of male early retirees?
2. What do early retirees do after retirement? Do they return to the labor force?
3. What kind of jobs do male early retirees occupy after retirement? Do early retirees take up other more informal employment?
4. Is the phenomenon of early retirement limited primarily to public and military employees and service members? Does it extend well beyond these groups?
5. What differentiates economically active and inactive men receiving early retirement pensions?
6. What can be learned from the available evidence regarding retirement decisions at the individual level?

The paper proceeds as follows. Section 2 examines the legal background of retirement in Jordan. Methodological and data issues are discussed in section 3. Section 4 is concerned with the data analysis. Finally, section 5 critically employs the results of the study to explore potential determinants of early retirement decisions in Jordan.

2. Institutional Background

Currently, there are three major retirement legislations covering civil servants and workers in public and private sector as well as the military and public security forces. These are: the Military Retirement Law (MRL), the Civil Retirement Law (CRL), and the Social Security Law (SCL). Other accompanying private occupational pension schemes also exist for a few

labor unions (e.g. Jordan Engineers Association). Employer and employees' monthly monetary contributions constitute the main sources of financing pension funds in Jordan.

The MRL no. 33 (1959) and its amendments organizes retirement of the Jordanian armed and security forces. It permits early retirement after a limited number of years in service starting from 16 year (modified in mid-2004 to 20). Furthermore, individuals with special circumstances, like those with partial disability can retire after serving the military for at least 10 years. On the other hand, the law does not allow staff to continue in duty after the age of 60 except for very special cases. Also, it does not condition a minimum age for a service member to obtain pension and other related benefits. Thereby military men may retire in their early thirties or even before that. In 2003, the government started a new initiative to gradually make the Social Security Corporation (SSC) take over the responsibility of covering new entrants to the military. However, the arrangements applicable to military forces in the MRL remained in place.

Most of the public sector workers recruited before 1994 are covered by the CRL no. 34 (1959) and its amendments. Since 1994, new entrants to the public sector have been insured by the SCLs (see below). Under CRL, early retirement was allowed for men who have spent at least 20 years in service (modified in 2006 to 25 years). This law does not identify a minimum age for retirement, whereas it specifies 60 as the compulsory age of retirement for men. The law also gives flexible conditions for retirement for workers with special needs or partial/full disability.

A pivotal year in the formulation of social policy in Jordan and particularly in the development of the pension systems is the year 1978 when the government introduced a law for social security for the first time. A substantial proportion of private sector and public sector workers were not covered by the other two laws mentioned above. Therefore, it was of great importance for Jordan to widen social protection through the introduction of the SCL. The SCL was subject to some modifications in 2001 and to major restructuring and reshaping in 2010. The SCL no. 19 (2001) modified SCL no. 30 (1978), enhancing social protection but was arguably considered as very generous. The SCL no. 7 (2010) is less generous and applicable primarily to new entrants.

As far as male workers are concerned, SCL no. 19 and no. 30 set the early age of retirement at 45, and the old age retirement pension at 60 years of age. Those who do not have enough contributions may continue working until age 65 so as to benefit from a pension. The SCL 2010 adjusts retirement regulations by increasing the number of monthly accumulated contributions and the minimum age required to make one eligible for early retirement. New entrants to labor market will not be able to retire before the age of 50, except for some categories of labor (e.g. those employed under severe working conditions, such as mining workers).

3. Data and Methodological Issues

This study utilizes new original cross-sectional data obtained from the first wave of Jordan Labor Market Panel Survey (JLMPS), which collected micro-level information during the period from January to June 2010. The survey and its procedures were designed and administered by the Economic Research Forum (ERF) in co-operation with the Department of Statistics in Jordan (DoS) and the National Centre for Human Resources Development (NCHRD). JLMPS involves gathering detailed information on education, labor market experiences and behaviors, and demographic characteristics (e.g. employment status, household composition and income, parental education, education history, ownership of assets and monetary transfers and remittances, migration and marriage history). The survey

covers about 5000 households incorporating about 25000 individuals, and applies appropriate sampling methods to make the gathered data nationally representative.

In comparison to former surveys, the JLMPS contains, for the first time, novel features that make it suitable to study early retirement and elderly LFP. Surveyed individuals were asked to self-identify the amount and type of monetary transfers received by them or any of their household members, such as pension and other governmental transfers. The survey, furthermore, tracks retrospectively the employment status of workers. The participants in the survey, older than 6, were asked to indicate in detail their current, previous, pre-previous, and status in 1999 together with dates of entry to and exist from each of the aforementioned statuses. The survey also incorporates a variety of questions that directly address social security and pension coverage.

Those who receive pension were classified as retirees, with full awareness of the possibility of other sources of pension (e.g. inherited pension for children and dependants). The age of 60, which is the legal age for retirement in Jordan, was considered as the cutoff point between early retirement and old age retirement. In effect, early retirees were defined as those retirees whose received retirement pensions for the first time when they were below the age of 60.

4. Data Analysis

4.1 General characteristics of early retirees

Having determined retirees in the representative data of JLMPS, they were consequently classified into three categories representing the three major pension systems in Jordan. These are: retirees from the military and public security forces; retirees from the public sector, excluding the previous category, and retirees from the private sector.

Figure 2 demonstrates the cumulative distribution of male retirees in Jordan by source of retirement pension and age of retirement. It appears clearly that early retirement in Jordan is the rule rather than the exception. Most of the retirees, regardless of the sector receive retirement pensions well before the age of 60. In general, male retirement starts from the early 30s and noticeably after the age 33 for service members in military and security forces and by the late thirties for civilian public and private sector workers. Male early retirees comprise about 86% of the Jordanian living male retirees. Those who retire under the age of 50 comprise about 86% of the total number of retirees in military and similar forces, while they are about 40% and 45% for public and private sector civilian workers respectively.

Additionally, the data shows that the propensity towards early retirement has accelerated over time, as depicted in Figure 3. The ratio of early retirees to the total number of retirees increased by more than 25 percentage points for those born between 1945 and 1949, compared to those born before 1929. This finding matches well with the records of SCC, which points out to this pattern among recent pensioners covered by social security (SCC 2009). This is possibly partly attributable to the generosity of pension regulations in Jordan. However, the retirement decision is more sophisticated, and requires deeper and more effective investigation and forms a fruitful area of research in the future. In the following sections, we deal with some factors that contribute to the understanding of early withdrawal/inactivity of men in Jordan.

Table 1 displays general characteristics of early retirees. An important feature is that most early retirees, about 78%, have secondary and lower education. On the other hand, more than two thirds reside in urban areas.

4.2 Do early retirees return to labor market after retirement?

The statistical analysis shows that a considerable fraction of male early retirees return to the labor market after receiving their retirement pension. On average, regardless of the sector of

retirement, nearly 45% of those classified as early retirees are currently economically active (see figure 4). LFP is around 55% for early pensioners from military and other similar forces. Of course, this observation is not strange as most of them retire very early relatively, suggesting that there is an age factor in determining the economic activity behavior for this worker group. It appears that as male pensioner in Jordan gets older, he is more likely to become inactive. In other words, LFP tends to decline dramatically as the ages of pensioners increase, as shown in figure 5. This pattern is furthermore confirmed by the LFPs of male early retirement receivers from both the private and public sectors, who have a higher age of retirement on average, as presented in figure 4. A little over 30% of the latter two categories continue in the labor market after they get their early retirement. This age trend is consistent as well with the overall LFP of men in Jordan which drops as the age increases, as reflected in figure 1.

In addition, figure 4 reveals the employment status of male early retirees in the case that they reappear again in the labor market. Generally, nearly 52% become wage employees, while the others are distributed either as self-employed (35%) or employers (13%). The analysis also shows that wage employees come mostly from those returning from the public sector and particularly from military and public security forces. On the other hand, self-employment serves as the chief labor market route for private sector early retirement receivers. Such a trend probably indicates some labor market opportunity differences available for these different groups and may reflect some deficiencies in pension systems in Jordan. For instance, public sector workers and the armed forces covered by MRL and CRL retain the right to be socially covered by the SCL if they return to the labor market, unlike private sector workers. Further discussion will be offered in the sections below.

It is also evident from the figure that private sector retirees are at higher risk of unemployment if they return to the labor market. Their rate of unemployment exceeds their counterparts from the other two categories (20% compared to 8% and 11% for public sector and military forces, respectively). Education tends to contribute to differences in unemployment and activity rates among returnees after withdrawing early from the labor market. Early retirees from the public sector, excluding military and security forces are found to have higher education levels comparatively (see below).

As far as the economic activity is concerned, in addition to the results shown in figures 4 and 5, there are other interesting results. The following points summarize them:

1. LFP of early pension receivers is 57% for those aged below 60 at the time of the survey (66%, 42% and 34% for military and security forces, other public and private sector; respectively).
2. Urban early pension receivers have a higher LFP (44 % compared to 51% for rural); however they have lower unemployment rates (10.6% against 12.6%). This is possibly due to the fact that public and military careers comprise the main source of employment in rural areas.
3. Some 21% of inactive early retirement pension receivers identify illness, old age and disability as the reasons they are out of the labor force, while 78% of them mention the availability of income as the chief factor for economic inactivity. Such patterns suggest that health and disability are somewhat responsible for the early withdrawal from the labor market and the inability of retirees to return to employment again. On the other hand, the availability of income may render support to the notion that retirement legislations are generous in Jordan.
4. Not many engage in secondary jobs (1.7%).

4.3 Economic activities of active early retirement pension receivers

Figure 6 presents the economic activities of those early retirees returning to work in comparison with other Jordanian workers in the economy and reveals some interesting patterns. First, active early retirement pension receivers are concentrated mainly in wholesale and retail trade in addition to the transportation and storage sectors. These activities involve private and informal occupations as examined below. Second, agriculture-related activities seem to attract Jordanians more after securing pension entitlements. This is one of the main sectors that typically incorporate foreign labor. Nevertheless, construction activities, which are also foreign-labor intensive, unsurprisingly, is negligible in importance for active pensioners. The same common work obstacles that apply to other workers probably deter this group of retirees from taking up jobs in the construction sector. Occupations in this sector are characterized by hard work and severe working conditions, despite the reasonable level of wages relative to other sectors. Such circumstances expectedly tend to exert a stronger impact on active retirement pension receivers.

4.4 Occupations taken up by active male early retirement pension receivers

The analysis finds that a substantial proportion of early retirement receivers end up in informal occupations once they re-enter the labor market. The classification of the employed from this group according to major and sub-major occupations corroborates this observation (see figure 7 and table 2). More than 33% of the employed engage in service and sale occupations, while nearly 22% work as plant and machine operators and as assemblers (a category which includes drivers). Also, as mentioned above, agricultural occupations employ a disproportionate number. These major occupations attract retirement pension receivers more than other employed men in the economy. This is of great importance and gives rise to the issue of unemployment in Jordan and the procedures to formalize such occupations in order to make them more attractive to domestic workers. Early retirement receivers are more likely to end up in informal employment since some of them—particularly the private and public sector civilian retirees—cannot take up jobs covered by social security without losing their early retirement benefits. Social and other retirement schemes in Jordan incorporate the benefits of health insurance for workers and their dependents even after retirement. This is probably among the main determinants of the type of occupations taken up by male retirement pension receivers.

The distribution of sub-major occupations, as reflected in table 2, identifies more precisely the jobs captured by pensioners returning to work. There tends to be an occupational concentration among them, as they crowd into a limited number of jobs. The most common are drivers and mobile plant operators, protective services workers and sale workers. Having broken down the distribution by sector of retirement, the analysis additionally finds that almost 14% of employed public sector pension receivers become business and administration professionals, while 9.6% of the private counterparts become health professionals. An important feature of the analysis presented in the table is the limited occupational choice available to those retiring from the private sector, compared with the other two groups. This is in line with the discussion provided above on the role of social security regulations in distributing labor market opportunities. Of course, other variables, for instance accumulated human capital, may intervene as well. Actually, there exist some differences in educational levels between the three groups, but not enough to explain these differences in occupational choices, (see below).

Further examination of the characteristics of the occupations of the early retirement pension receivers reveals interesting findings confirming the informality of most of the jobs they acquire post-retirement. About 80% of the jobs are private, and 66% are individual activities. The majority of the employed, about 73%, work in unskilled jobs, while 91% of them are not

members of a syndicate or trade union. Social security covers about half of the jobs taken up by those currently employed and previously retiring from public sector and military forces, unlike private counterparts who are not entitled to such coverage. Overall, health insurance in the new jobs is available for only 34%. On the other hand, 59% have no paid vacations in the jobs occupied after returning to employment.

It is worth looking as well to relative earnings of the jobs occupied by this group of workers. Figure 8 distributes current wage workers by wage categories taking into account whether or not they are early retirement pension receivers. There appears to be a clear disparity in favor of the other wage workers in the economy aged 30 and over. In other words, those who return to the labor market after early retirement tend to accept comparatively lower wages. The investigation of earning differences certainly requires more rigorous estimation procedures. However, the results are suggestive of a general picture with important policy implications (discussed in the last section).

4.5 Economic activity/inactivity of early retirees

The previous sections considered some of the variables that account for activity decisions of those currently receiving early retirement pensions. Participation in the labor market is more prevalent among younger retirees suggesting age as an important determinant of participation of economic activity. Economic activity is also apparently determined by the institutional source of retirement pensions, with those formerly working in the army and security forces being more likely to remain active (see figure 4). Also, living in rural areas appears to increase the probability of returning to the labor market, resulting, however, in a higher risk of unemployment. Moreover, the data shows that sickness and disability encourage inactivity, and may be a cause of the early retirement itself.

In this sub-section, we delve more deeply into examining economic activity after retirement by handling two important factors: the amount of pension entitlement and education. In addition, it sheds some light on the potential influences of family size and household variables. Income sufficiency is singled out by early retirees as a principal determinant of their economic inactivity, as reported above. The monthly amount of pension usually makes up the prime source of income for most retirees in Jordan. On the other hand, education lies at the heart of labor market theories. It augments earnings through either enhancing productivity or signaling innate ability. Also, educated workers are theorized to be more efficient in job search, on-the-job training and to be more capable in accumulating experience. Finally, family size and the availability of other breadwinners, either working or retired, in households may act together with the previous variables in determining inactivity/retirement and returning to labor market.

As far as early retirees are concerned, the descriptive analysis of JLMPS concludes that, on average, active pension receivers differ from inactive ones in terms of monthly pension entitlements. Higher pensions are likely to result in lower participation for those retiring early, as graphed in figure 9. The figure shows the categorical cumulative distribution of pension by activity status. The two distributions do not intersect and the curve representing active pension receivers lies below the other one standing for the active ones. Accordingly, 16% of the inactive early retirement receivers attain monthly more than JD300 as pension payments compared to 10 % of the active ones. Similarly, those who obtain more than JD500 are 4% and 2% of inactive and active respectively.

This finding raises important questions, requiring further research, on the real level of generosity and the incentive structure offered by pension schemes in Jordan. Obviously, the magnitude and direction of effects of the net discounted monetary differences between old-age and early pensions on retirement decisions must receive particular attention. In this

regard, one would expect higher early withdrawals from the labor market if current earnings (e.g. wages, overtime, bonus, incentives and so on) and other monetary and non-monetary benefits do not deviate much from eligible early pensions. Nevertheless, studying voluntary retirement decisions is certainly multifaceted and requires well-defined modeling.

More education appears to be associated with a higher propensity for returning to the labor market. Figure 10 indicates that those holding higher levels of education are to some degree more likely to join the labor market again. An exception is those with post-secondary education (intermediate diploma) who compose 10% of the early retirees. Inactivity is more acute among less educated early retirees as shown in the for the graph bars corresponding to illiterate and reads and writes individuals.

The role of education is less clear when one concentrates on unemployment intensity by education level (see figure 11). More education does not in general guarantee lower chances of unemployment. Yet, the figure indicates that early retirement receivers with university education and higher are less likely to experience unemployment once they return to the labor market.

Expenditure obligations facing households amplify with larger family size and therefore may influence individuals' decisions on early withdrawal and returning to the labor market. This factor interacts with other income variables, such as other sources of income, pension and the number of workers or retirees in a household. The study finds that family size differs among retirees according to retirement type and labor market participation. Almost 58% of households of early retirees are found to be larger than five persons in size compared with 52% for the other labor force in the same age group. This implies a potential role for family size in retirement decisions. Moreover, nearly 52% of households of inactive early retirement receivers consist of less than five compared to only 30 % for the active. This means that family size may also increase the possibility of those retiring early from the labor market to return to it again.

On the other hand, the analysis shows that 93% of households of male early retirees contain only one retiree, with negligible differences between active and inactive, and in comparison with old-age retirees. Households of male early retirees also vary to some extent based on whether or not wives currently work. The results of the study indicates that 9 % of active early retirees' wives are employed compared to 10% for inactive early retirees.

5. Voluntary and Involuntary Early Retirement Decisions

The analysis of retirement decisions does necessitate further in-depth analysis principally through multivariate estimation. Such an analysis requires detailed data on monetary, and perhaps nonmonetary, incentives and opportunities created for workers by both pension schemes and the labor market. Typically, the variables of retirement decisions are classified into push and pull (supply and demand) variables. There are myriad financial, occupational, institutional, personal and health factors determining early retirement (Blundell et al. 2002). Macroeconomic cycles and circumstances also intervene in shaping retirement decisions, particularly on the push side (El-Hamidi 2007; Glomm et al. 2009). Employment policies that come with macroeconomic restructuring and privatization are also reported to induce early exit from the labor market (El-Hamidi 2007).

As emphasized in the introduction, the current study aims to uncover some parts of the phenomenon of early retirement by means of descriptive statistics. Also, some of the important factors of retirement behavior are not captured by JLMPS (e.g. pension entitlements on retirement and push variables at the firm level). Therefore, econometric estimation of retirement decisions at the individual level is beyond the scope of this study. However, capitalizing on the results extracted from the JLMPS and other general information

on the Jordanian economy, one can shed light on some of the driving forces of early retirement in Jordan.

First, it is evident from the analysis that the military and security forces are more likely to exit early. Future research on this issue must take into account that decisions vary by economic sector and more emphasis should be placed on those retiring involuntarily and are outside the military sector. Accordingly, studies on and initiatives of pension reform in Jordan must extend to the systems covering military forces. Excluding the military sector where the vast majority retires early, about 70% of the retirees from the public and private sectors exit early from the labor market.

Second, as the private sector is weaker in rural areas and military and public sectors create most of the jobs available for residents of the countryside, the area of residence tends to contribute to early retirement decisions. Workers living in rural areas are found to be more likely to retire early (more than 80% compared with about 75%).

Rural retirees are more likely to return to the labor market, but are placed at a slightly higher risk of unemployment, as reported above.

Third, inactive early retirement receivers identify illness and disability as motives for remaining out of labor force, which means that health variables may have induced them to withdraw from work originally.

Fourth, inactive early retirement pension receivers also report that income availability make them inactive after their early withdrawal. Nonetheless, solid conclusion on the role of monetary incentive and the generosity of early retirement pensions cannot definitely bring us to the current finding. Workers may retire before the formal age of retirement not because of sufficient pension entitlements, but rather because of the insufficiency of current earnings. This is supported by the results discussed in the previous section, which show that the amount of pension is lower among active early retirement pension receivers.

Fifth, the analysis reveals that financial pressures and household expenditure obligations may also determine differences in retirement decisions as well as post-retirement labor market participation at the individual level. More than 12% of male old-age retirees have working spouses compared to about 9.5% for early retirees. Additionally, households of early retirees are found to be larger than other labor force in the same age group, as mentioned in the previous section. In effect, retirement and after retirement labor supply decisions are probably taken at the household level.

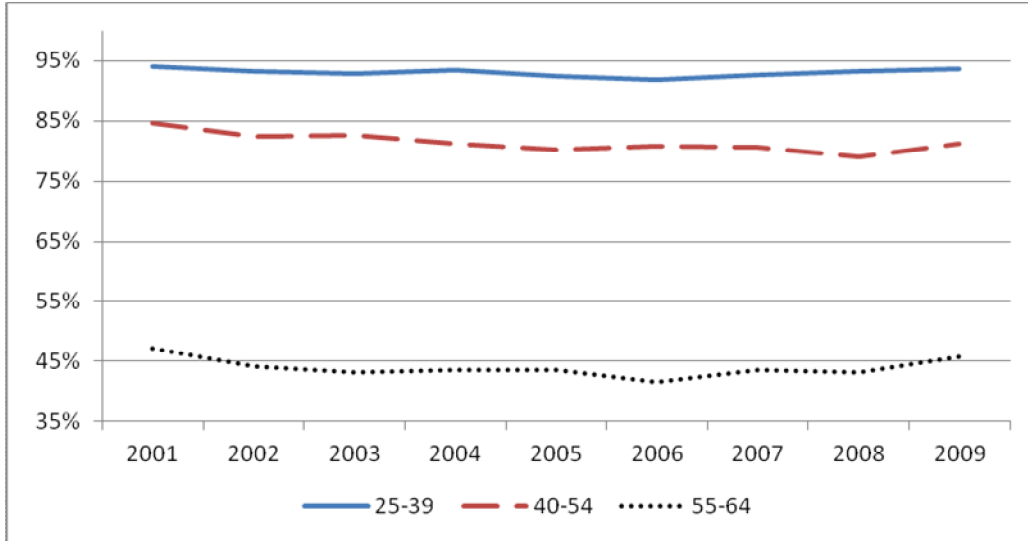
Finally, other variables have probably been partly responsible for the increasing propensity to retire early in Jordan. Many formerly public-owned corporations and projects have been privatized and have undergone major restructurings. For example, the selling of the Jordanian Cement Factories Company involved labor arrangements allowing for generous early retirement schemes. This extends to other institutions, particularly the overstuffed phosphate sector which is undertaking similar arrangements for laying off workers. Push variables are of the utmost importance particularly in the aftermath of macroeconomic restructuring or recessions. During economic downturns in general one would expect firms to pressure older employees to get early retirement once they reach the age at which early retirement becomes available.

To overcome the scarcity of information, future research on retirement decisions needs to gather detailed, retirement-focused and representative data, may be through a self-reporting survey.

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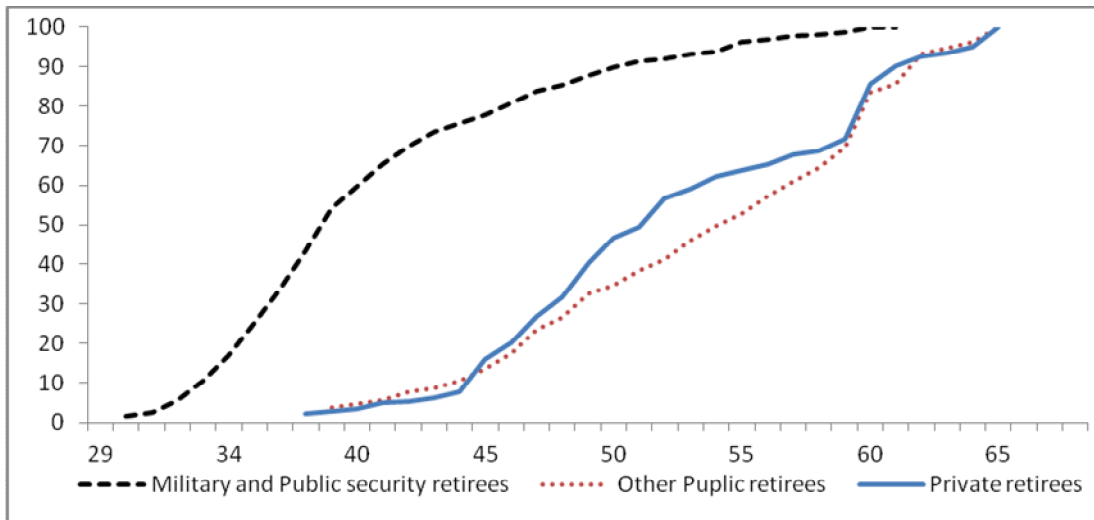
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Figure 1: LFP of Jordanian Men for Selected Age Groups (2001-2009)



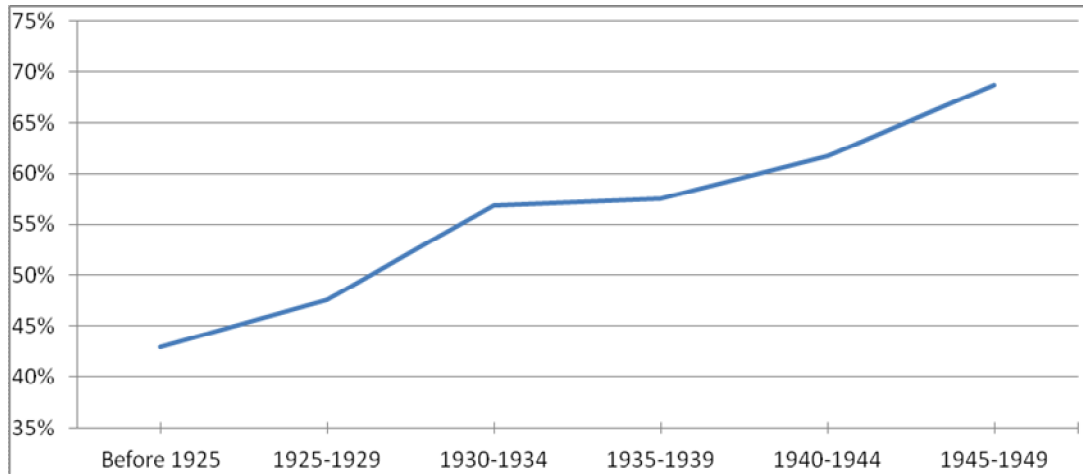
Source: Employment and Unemployment Survey (2001-2009), Department of Statistics in Jordan (DoS) website (www.dos.gov.jo).

Figure 2: Cumulative Distribution of Male Jordanian Retirees by Sector and Age of Retirement



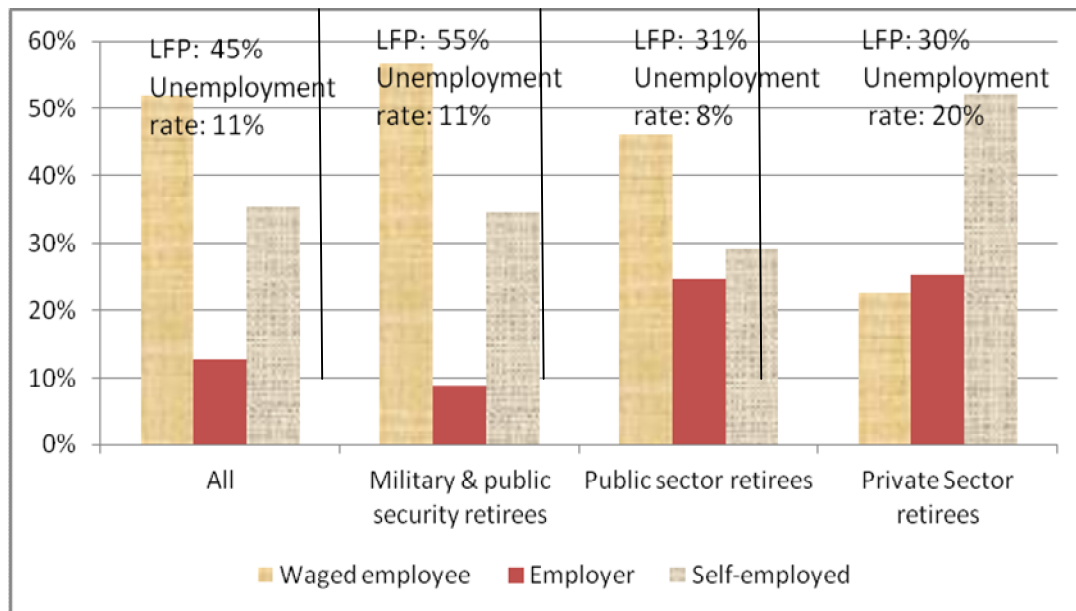
Source: Author's calculations based on JLMPS

Figure 3: The Share of Male Early Retirees to Total Number of Male Retirees for Those Born before 1950



Source: (Author's calculations based on JLMPS)

Figure 4: Employment Status Distribution of Early Retirement Receivers after First Retirement



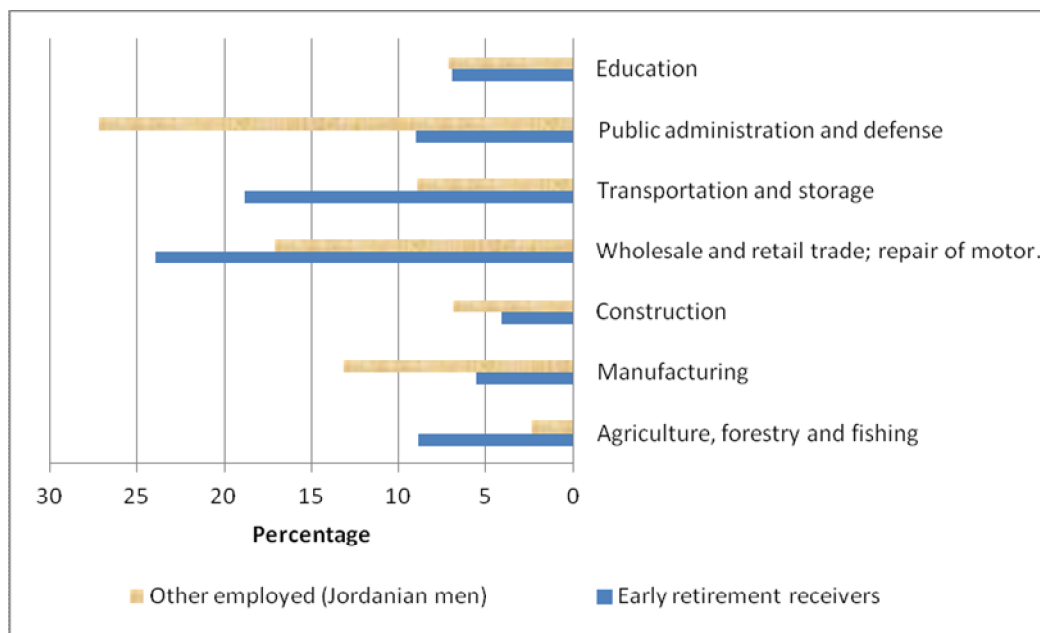
Source: Author's calculations based on JLMPS

Figure 5: LFP of Male Early Retirement Pension Receivers by Current Age (Moving Average Trend)



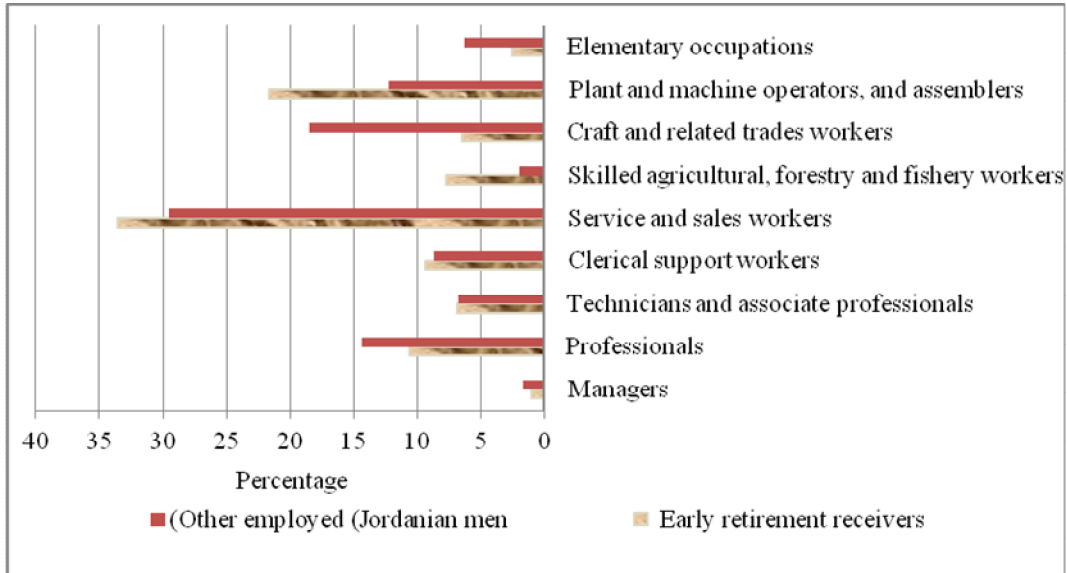
Source: Author's calculations based on JLMPS

Figure 6: Distribution of Economic Activities Returned to by Early Retirement Receivers & Employed Workers in the Economy



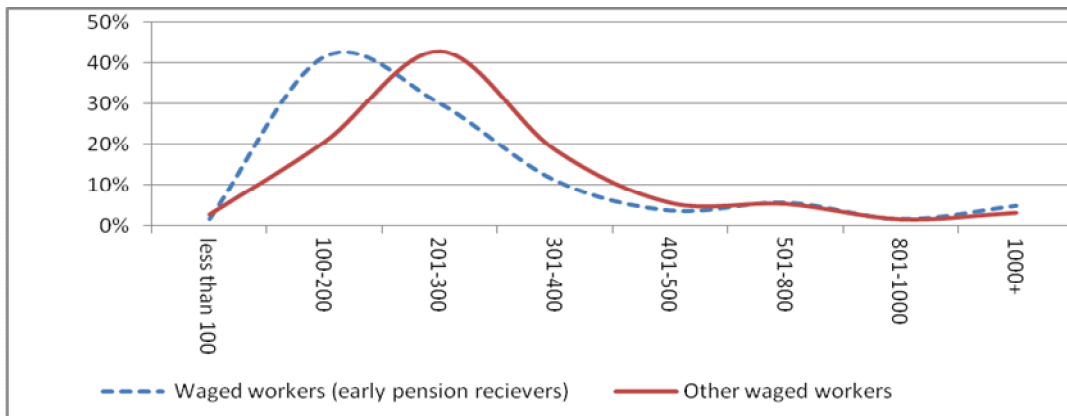
Source: Author's calculations based on JLMPS

Figure 7: Major Occupational Distribution for Jobs Taken Up by Early Retirement Receivers after Returning to the Labor Market Compared With other Employed Workers in the Economy



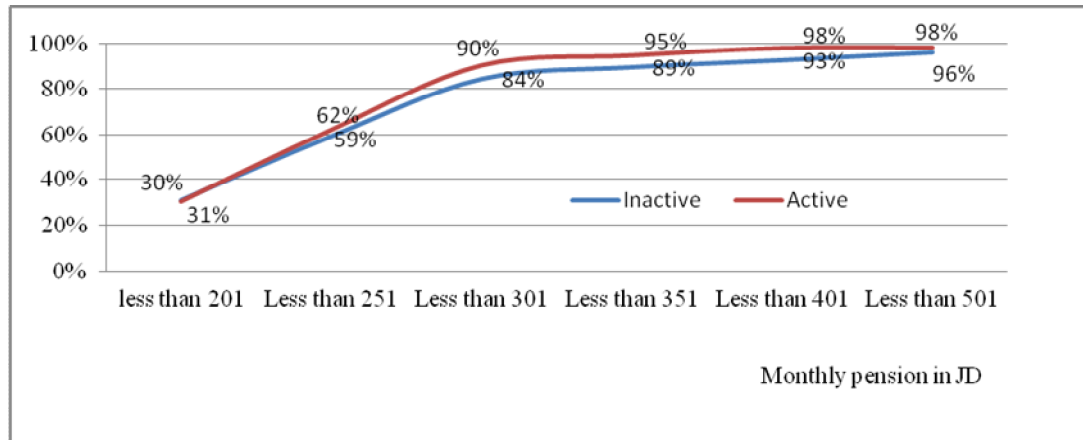
Source: Author's calculations based on JLMPS

Figure 8: Wage Categorical Distribution of Wage Employed Early Retirement Pension Receivers and other Counterparts Aged 30+ in the Economy



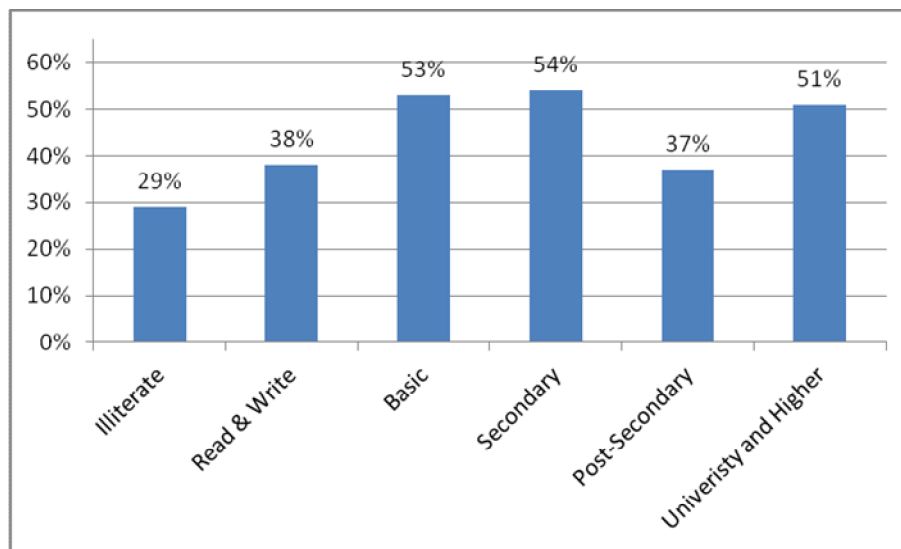
Source: (Author's calculations based on JLMPS)

Figure 9: Cumulative Distribution of Monthly Pension for Active and Inactive Men Early Retirees



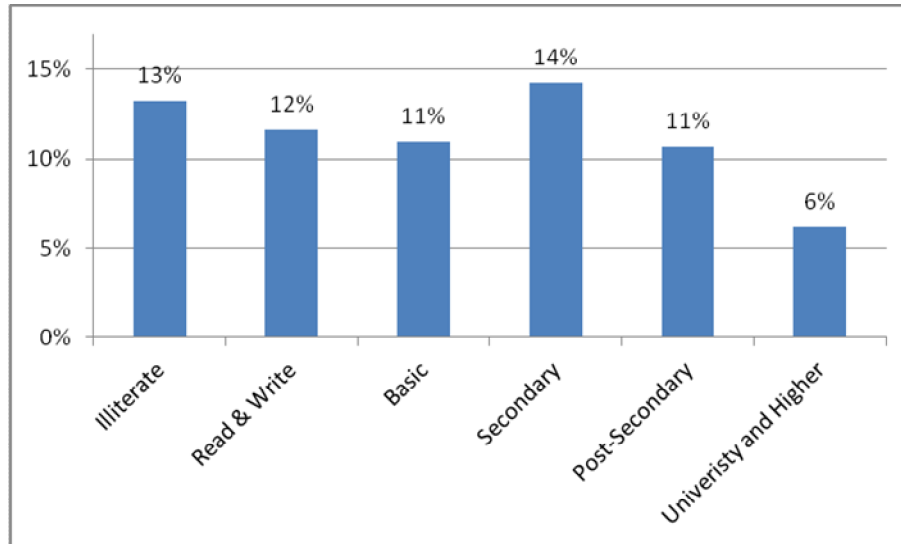
Source: Author's calculations based on JLMPS

Figure 10: LFP for Male Early Retirees by Level of Education



Source: Author's calculations based on JLMPS

Figure 11: Unemployment Rates for Male Early Retirees by Level of Education



Source: Author's calculations based on JLMPS

Table 1: Overall Characteristics of Male Early Retirees in Jordan

	Category	Percentage
Current education	Illiterate	8
	Reads and writes	24
	Basic	28
	Secondary	18
	Post-secondary	10
	University and higher	12
Sector of retirement	Public (including military)	84
	Private	16
Current area of residence	Urban	71
	Rural	29
Current marital status	Single	0.5
	Married	97.5
	Divorced	0.1
	Widowed	1.9
Current region of residence	Middle	45
	North	42
	South	13

Source: Author's calculations based on JLMPS

Table 2: Sub-major Occupational Distribution of Employed Early Pension Receivers by Sector

Military and public security forces	Public sector	Private
Drivers and mobile plant operators 22.6%	Drivers and mobile plant operators 11.4%	Drivers and mobile plant operators 29.5%
Protective services workers 15.7%	Business and administration professionals 13.9%	Health professionals 9.6%
Sale workers 17.2%	Sale workers 17%	Sale workers 21.9%
The other workers are distributed on other 24 occupations	The other workers are distributed on other 18 occupations	The other workers are distributed on other 6 occupations

Source: Author's calculations based on JLMPS