

# Factors affecting Decent Work in Egypt

Reem Ismail Elsybaey  
Statistical Analyst  
Central Agency for Public Mobilization & Statistics (CAPMAS)  
[www.capmas.gov.eg](http://www.capmas.gov.eg)  
Cairo – Egypt  
8/9/1983, 32 Years  
reemismail\_2008@yahoo.com

## **Abstract:**

Everyone in the world is trying to find a work; exactly a decent work that ensures human dignity and stability, whatever the personal skills or work experience. The main objective of this research paper is to examine the factors affecting decent work in Egypt and measuring the disparities between males and females or urban and rural regions according to some characteristics like age, level of education and working sectors. The Sources of Information on decent work is the Household labor force survey 2013 (LFS) carried out using a sample of households. The methodology of this paper depends on descriptive analysis to describe the basic features of the data and also the correlation analysis. Moreover Logistic Regression Model was selected as a method of determining the relation between variables. The paper concluded that there is a disparity between males and females according to unemployment rate with percentage (9.8% for males and 24.2% for females). Also there is a disparity between working males and females in having a health insurance. Finally, the private sector occupied the first level in having employed persons who are working excessively more than 48 hours.

**Keywords:** disparity, labor force, logistic regression.

## **1. Introduction:**

Everyone in the world is trying to find a work; exactly a decent work that ensures human dignity and stability, whatever the personal skills or work experience. The work is an essential part of human life because it helps to actively participate in economic life and it's also the main source of income for all members of society. The primary goal of the ILO today is to promote opportunities for women and men to obtain decent and productive work, in conditions of freedom, equity, security and human dignity (ILO, 1999a).

The concept of decent work is to confirm four elements: employment, social security, workers' rights and social dialogue. According to social security it intended to protect against the risk of losing income. For basic rights at work, it is related to freedom of association, non-discrimination in work, and the absence of forced labor and child labor in bad conditions. The Social dialogue refers to the right of workers to get in discussions with employers and authorities over issues that affect their work. Thus the concept of decent work is applicable not only to workers in the formal economy but also to "unregulated wage workers, the self-employed and home workers".

The main objective of this research paper is to examine the factors affecting decent work in Egypt and measuring the disparities between males and females or urban and rural regions according to some subpopulation like age groups, level of education and working sectors.

The concept of Decent Work leads to a number of questions such as what are the factors that may affect decent work? How does gender impact on decent work? What are the factors that influence decent work much?.

The research hypothesis that the unemployment is higher for females than males, Place of residence has an effect on employment, there is a disparity in working sectors according to having social and health insurance, there is a disparity in stability at work according to gender, excessive working hours is higher for males than females and level of education has an impact on contract type.

There are many factors that affect decent work such as, level of education, place of residence and a lot of other factors. Therefore the data of labor force survey 2013 will be used due to available data concerning with decent work.

## **2. Review of literature:**

The determinants of employment status in Egypt and decent work and poverty eradication have received the most attention in the literature on employment and decent work.

(Assaad et al. 2000) discussed the determinants of employment status and the increase in policy concerns in Egypt in recent years towards creating job opportunities for young people. In conjunction with population growth there are a large numbers of young job seekers whom are more educated than previous generations. The paper stated that in the last two decades, the secondary education was a secured way to get a stable job, whether in government or in state-owned enterprises. But the conditions didn't last long in accordance with gradual suspension of employment in public sector, which led to an increase in the numbers of educated unemployed members. There is an evidence of a disparity in terms of gender in the labor market trends where the more educated young women are affected negatively compared to their male counterparts in

order to join employment in the private sector. Also in 1990s, unemployment rates among females increased remarkably while it has been fairly stable for males.

**(Ghai, 2002)** discussed the different concepts and indicators of decent work and also stated that there are three main features concerning with employment which are opportunities, remuneration and working conditions. The indicators used to measure employment opportunities are labor force participation rates, employment-to-population ratios and unemployment rates. According to remuneration it's an element of quality of work and it's different according to the society and material prosperity of a country. Also work conditions related to a lot of factors such as working hours, weekly rest and paid leave, but in real life it's concerning with occupational safety and health.

Another element related to decent work is social security which is designed to provide the necessary needs to live and to face emergencies. In general there are two types of indicators to assess the appropriateness of the social security which are public expenditure on social security as a percentage of GDP, and the sufficiency cover workers with regard to emergency issues.

The research program which carried out by the **(Social Research Center, 2009)** stated that, in spite of all the development efforts to widen the educational base and increasing in health care as well as institutional reforms of laws and regulations that have been made in Egypt in recent decades, the participation of women in labor force is still low. This low participation of females in labor force faced by a high unemployment rate among females compared to males where the rate among females was 24.8% in 2014, while it's 9.2% among males, which refers to existence of disparity between males and females.

**(Bell & Newitt, 2010)** discussed the relation between decent work and poverty eradication and stated how to recognize the importance of decent work for poverty reduction. The MDG1 includes a target for "achieving full and productive employment and decent work for all, including women and young people" with four measurable indicators related to the amount of work, and also its quality according to level of wages for workers and the extent of informality. Finally the study recommended that donors should support the government's commitments to reform the minimum wage, freedom of association, health and safety and labor law implementation. Also ensure that programs that aim to create employment through the informal economy should also take into account quality of employment, as reflected by the decent work agenda.

### **3. Methodology:**

Descriptive analysis will be used to describe the basic features of the data and also the correlation between some variables will be determined.

Logistic regression analysis is selected as a method for determining the relationship between variables. Logistic regression method is one of the most commonly used tools for applied statistics and discrete data analysis. Logistic regression can treat with all sorts of relationships, because it applies a non-linear log transformation to the predicted odds ratio.

The form of logistic regression as follows:

$$\log\left(\frac{p(x)}{1-p(x)}\right) = \beta_0 + x \cdot \beta \quad (1)$$

$$p(x; b, w) = \frac{e^{\beta_0 + x \cdot \beta}}{1 + e^{\beta_0 + x \cdot \beta}} = \frac{1}{1 + e^{-(\beta_0 + x \cdot \beta)}} \quad (2)$$

There are some assumptions for binary logistic regression which requires the dependent variable to be binary and ordinal logistic regression requires the dependent variable to be ordinal. Since logistic regression assumes that  $P(Y=1)$  is the probability of the event occurring, it is necessary that the dependent variable is coded accordingly and the factor level 1 of the dependent variable should represent the desired outcome. Logistic regression assumes linearity of independent variables and log odds and requires quite large sample sizes.

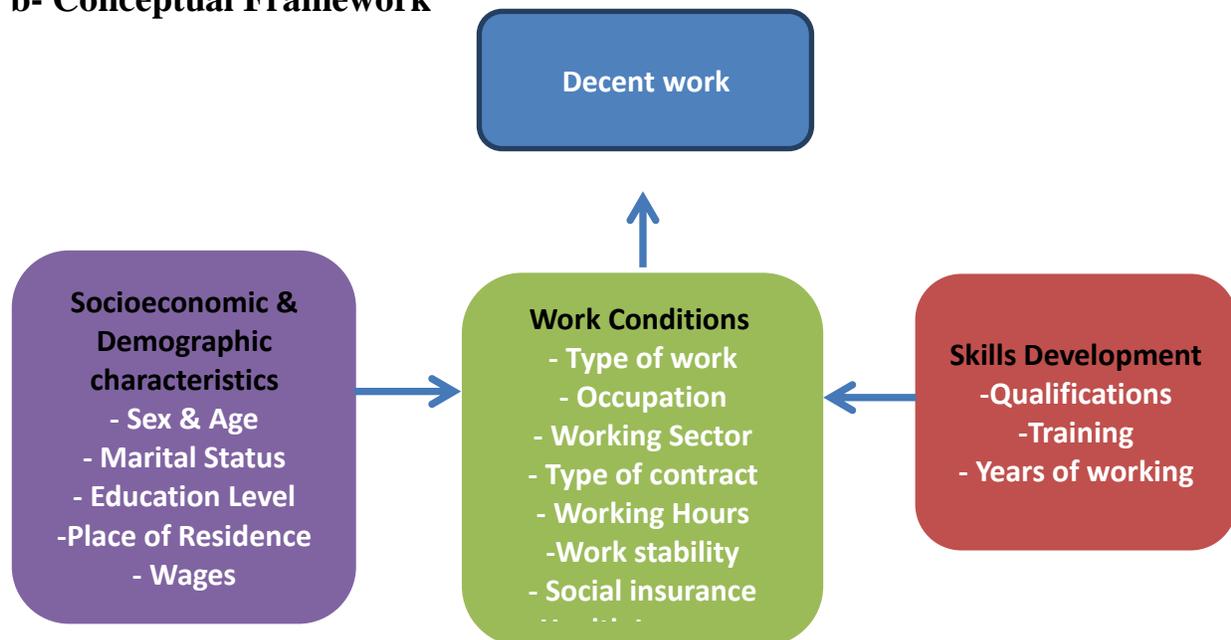
The research paper consists of two logistic regression models the first one is for excessive hours which is fitted with employed persons who are working more than 48 hours per week.

The independent variables are Sex, Place of residence, marital status, working in a private sector, working without contract, age groups, education level, social insurance, health insurance. The second logistic regression model is concerned with work stability as a dependent variable which related to persons who are working regular or irregular and the independent variables are Sex, Place of residence, marital status, age groups, education level, and working sector.

### a- Data source

The Sources of Information on decent work is the Household labor force survey 2013 (LFS) carried out using a sample of households. The LFS in Egypt constitute the main data collection methods for statistics whether on employment or unemployment. The sample of Labor Force Survey 2013 is a two-stage stratified cluster sample and self-weighted. Its designed size is 22608 households for each round allocated among governorates and their urban/rural components in proportion to size. The cluster size is 18 households per each primary sampling unit (PSU).

### b- Conceptual Framework



### **3-1: Descriptive Analysis for Decent Work**

Decent work is related to many aspects such as employment opportunities, work stability, work conditions, social- health security and decent working hours.

The descriptive analysis will concentrate on describing some aspects of decent work like work stability which concerned with persons who are working regular or irregular, , working hours , social & health insurance and working sectors. Also examine the relationship between some variables such as excessive hours, work stability as dependent variables and some independent variables like sex, place of residence, age, education and marital status.

**Figure (3-1-1): Work stability by sex:**

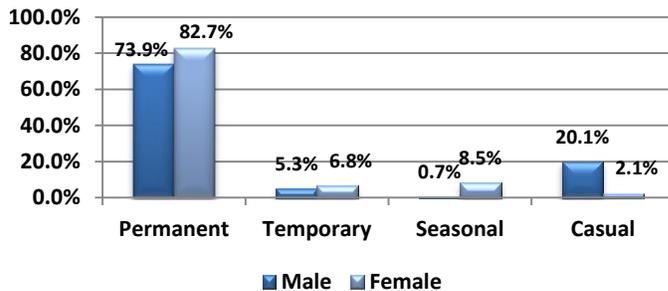


Figure (3-1-1) shows that there is work stability in term of working as permanent for both males and females as the percentage is 73.9% and 82.7% respectively.

According to casual work the percentage of males is about ten times greater than female.

**Figure (3-1-2): Social & Health insurance by sex:**

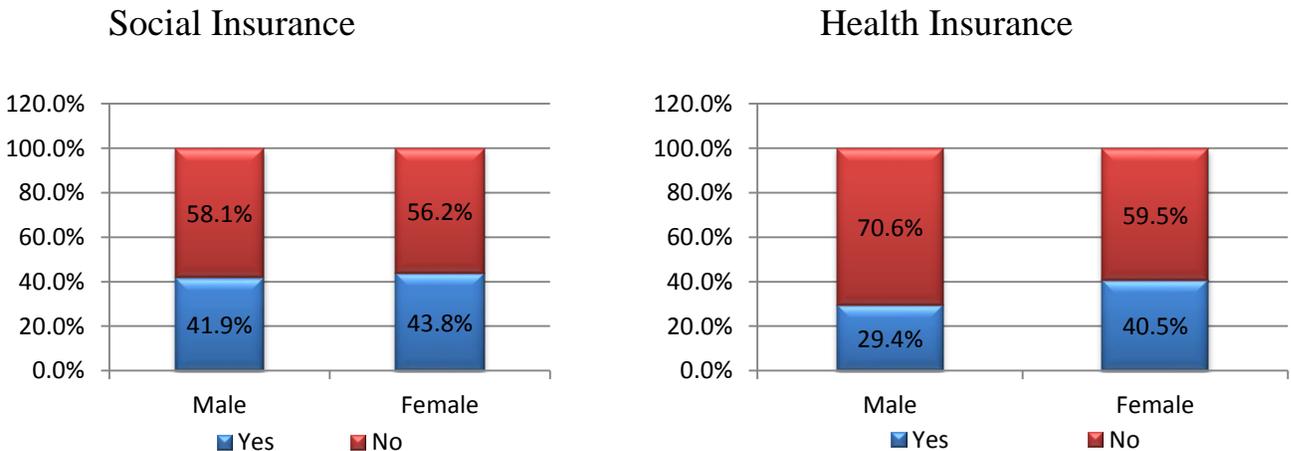


Figure (3-1-2) shows that there is no big difference between males and females in term of having social insurance while for health insurance the percentage of employed persons who are having health insurance is about 29.4% for males and 40.5% for females. There are a high percentage of employed males who are not having health insurance which is about 70.6% which is an evidence of indecent work in term of health protection.

**Figure (3-1-3): Excessive hours by contract type:**

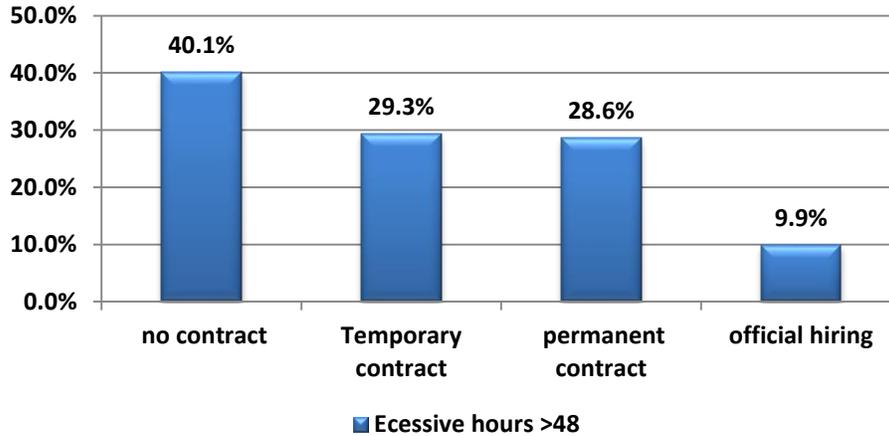


Figure (3-1-3) shows that 40.1% of employed persons who are working excessively more than 48 hours are working without any contract.

**Figure (3-1-4): Excessive hours by sector:**

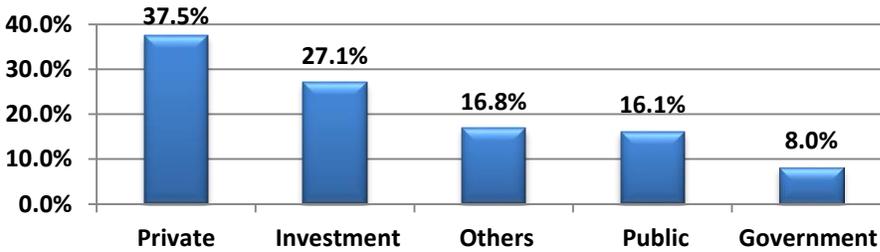


Figure (3-1-4) shows that private sector occupy the first level in having employed persons who are working excessively more than 48 hours with percentage 37.5%.

**Figure (3-1-5): Unemployment rate according to sex:**

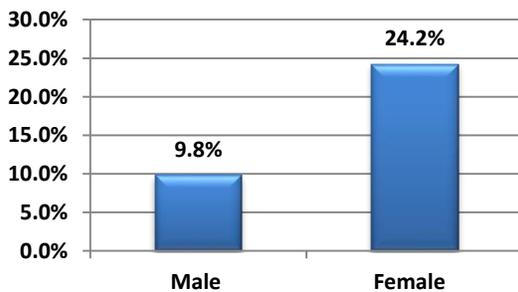


Figure (3-1-5) explain that there is a disparity between males and females according to unemployment rate with percentage (9.8%, 24.2%) respectively.

### **3-2 Logistic Regression Model:**

Two logistic regression models with two dependent variables which are work stability (regular =1 & irregular =0) and excessive hours (excessive hours >48 =1 & other =0) are fitted. The independent variables are sex, place of residence, marital status, literacy, age, social insurance and working sectors.

#### **3-2-1 Model (1): Excessive hours**

For determining the correlation between the dependent variable and other explanatory variables and also between independent variables together the Cramer's V test is used to detect the correlation between these variables. The Cramer's V test is a measure of association between two nominal variables, giving a value between 0 and 1. It is based on Pearson's chi-squared statistic. After determining the correlation between dependent variable which is excessive hours and the other independent variables using Cramer's V the results shows that there is a relation between working excessive hours and the other explanatory variables such as sex , education , social insurance and working sectors.

#### **Table (3-2-1): Logistic regression model for Excessive hours:**

The logit model for excessive hours consists of 8 explanatory variables which are sex, marital status, place of residence, literacy, social insurance, age and working sectors.

<b>Excessive hours</b>	<b>Odds Ratio</b>	<b>P - value</b>
<b>constant</b>	<b>0.2147</b>	<b>0.0001</b>
<b>female</b>	<b>0.1292</b>	<b>0.0001</b>
<b>Rural</b>	<b>0.6236</b>	<b>0.0001</b>
<b>literate</b>	<b>1.0983</b>	<b>0.021</b>
<b>Married</b>	<b>1.0579</b>	<b>0.375</b>
<b>divorced</b>	<b>1.6853</b>	<b>0.004</b>
<b>widowed</b>	<b>1.7183</b>	<b>0.0001</b>
<b>Public</b>	<b>1.4002</b>	<b>0.013</b>
<b>Private</b>	<b>5.7544</b>	<b>0.0001</b>
<b>Investment</b>	<b>2.7905</b>	<b>0.0001</b>
<b>others</b>	<b>2.7463</b>	<b>0.004</b>
<b>25-34</b>	<b>1.1913</b>	<b>0.005</b>
<b>35-44</b>	<b>1.1894</b>	<b>0.015</b>
<b>45-54</b>	<b>1.1125</b>	<b>0.139</b>
<b>55-64</b>	<b>0.8704</b>	<b>0.073</b>
<b>&gt;65</b>	<b>0.5137</b>	<b>0.0001</b>
<b>Social insurance</b>	<b>0.6787</b>	<b>0.0001</b>

The results of logistic regression in table (3-2-1) shows that the overall model is significant, most of explanatory variables are significant at 95% level of confidence. The employed persons who are married and the employed persons in age group (45-54) & (55-64) are insignificant.

The odds ratio for sex shows that the working persons who are females have 87% less odds of working excessively hours than those who are working males given all other characteristics constant. The employed persons who are working in rural areas have 38% less odds of working excessively hours than those who are working in urban areas given all other characteristics constant.

The employed persons who are literate have 10% greater odds of working excessively hours than those who are illiterates given all other characteristics constant. The employed persons who are divorced or widowed have about 70% greater odds of working excessively hours than those who are never married given all other characteristics constant and this is due to their livelihood conditions.

The employed persons who are working in public, investment and private sectors are having greater odds of working excessively hours than those who are working in government sector for example those who are working in private sector are having 5.75 times greater odds of working excessively hours given all other characteristics constant and that due to the nature of private sector in decreasing the number of employees and government's lack of commitment towards conditions of private sector workers.

The employed persons who are in age group 25-44 are having about 19% greater odds of working excessively hours than those who are youth while the situation is different for those who are in age >65 as they have 50% less odds to work excessively hours given all other characteristics constant. The employed persons who are having social insurance have 32% less odds of working excessively hours than those who are not having social insurance given all other characteristics constant.

### **3-2-2 Model (2): Work Stability**

Before running the logistic regression model for work stability the correlation was determined between dependent variable which is work stability and the other independent variables using Cramer's V. The results show that there is a relation between work stability and the other explanatory variables such as sex, marital status, social insurance and private sector.

**Table (3-2-2): Logistic regression model for work stability:**

<b>work stability ( 1 )regular</b>	<b>Odds Ratio</b>	<b>P - value</b>
<b>Constant</b>	<b>58.2135</b>	<b>0.0001</b>
<b>female</b>	<b>1.9002</b>	<b>0.0001</b>
<b>Rural</b>	<b>0.8745</b>	<b>0.024</b>
<b>literate</b>	<b>1.5257</b>	<b>0.0001</b>
<b>Married</b>	<b>1.1132</b>	<b>0.056</b>
<b>divorced</b>	<b>0.8165</b>	<b>0.242</b>
<b>widowed</b>	<b>0.8445</b>	<b>0.112</b>
<b>25-34</b>	<b>1.2171</b>	<b>0.0001</b>
<b>35-44</b>	<b>1.6377</b>	<b>0.0001</b>
<b>45-54</b>	<b>2.6229</b>	<b>0.0001</b>
<b>55-64</b>	<b>4.6872</b>	<b>0.0001</b>
<b>&gt;65</b>	<b>7.6772</b>	<b>0.0001</b>
<b>private sector</b>	<b>0.0484</b>	<b>0.0001</b>

The results of logistic regression in table (3-2-2) shows that the overall model is significant, most of explanatory variables are significant at 95% level of confidence. The categories in variable marital status which are married & divorced & widowed were insignificant and don't affect work stability.

The odds ratio for sex shows that the working persons who are females have twice times greater odds of having regular or stable work than those who are working males given all other characteristics constant. The employed persons who are literate have 52% greater odds of having regular or stable work than those who are illiterates given all other characteristics constant.

The employed persons who are in age group (25-64) are having greater odds of having regular or stable work than those who are youth given all other characteristics constant. These results explain the obstacles that face youth to be able to having regular work which is a kind of disparity against youth and inequitable distribution of job opportunities.

The employed persons who are working in private sector are having 95% decrease in odds of having regular or stable work than those who are working in other sectors given all other characteristics constant. This result illustrates the situation of employed persons in private sector and their less opportunity to get a decent stable work.

### **Conclusions:**

There are 77.8% of persons who are working in private sector are without contract which evidence that there could be indecent work conditions in private sector regarding contract conditions. The employed persons who are working in private sectors are having 5.75 times greater odds of working excessively hours than those who are working in government sector given all other characteristics constant and that due to the nature of private sector in decreasing the number of employees and government's lack of commitment towards conditions of private sector workers.

The employed persons who are working in private sector are having 95% less odds of having regular or stable work than those who are working in government sector given all other characteristics constant. This result illustrates the situation of employed persons in private sector and their less opportunity to get a decent stable work.

The employed persons in private sector are having less opportunity to get a health insurance compared to the other employed in different sectors. There is stability in work for females more than males as there are 66.3% of females are official hiring and males are only 34.3%.

There are a high percentage of employed males who are not having health insurance which is about 70.6% which is an evidence of indecent work in term of health protection. There is a disparity between males and females according to unemployment rate with percentage (9.8%, 24.2%) respectively. There is a disparity between working males and females in having a health insurance.

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