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The Place and Dynamics of the Middle-Class in the MENA Region

The quality of employment in MENA countries : The place and dynamics of the middle class

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Aims and objectives (1)

- The concept of quality of employment (or job quality) has gained international prominence, both for the scientific community and for public authorities, in a global context of interlinked crises with the introduction of new forms of non-standard employment (Benach et al., 2014).
- In countries where the informal economy is widespread, such as MENA countries, traditional indicators such as the unemployment rate, participation rate, and wages are not necessarily the most representative of the dynamics taking place in the labor market (Deguilhem and Frontenaud, 2016).
- This paper wishes to analyse in particular the ongoing labour market dynamics for middle-class workers.
- We analyze socioeconomic conditions through the multidimensional employment quality index proposed by Huneeus et al. (2015) for Brazil in the period 2002-2011.

Aims and objectives (2)

- Assessing, measuring, and analyzing the quality of employment in MENA countries: Egypt (1998, 2006, 2012, and 2018), Jordan (2010 and 2016), and Tunisia (2014).

➢ Method: Construction of a multidimensional employment quality index (Alkire and Foster, 2009 and 2011).

- Identifying potential systematic relationships between workers' characteristics and the quality of their employment :

➢ Method: Econometric analysis (OLS with country fixed effects).

The Integrated Labor Market Panel Surveys (ILMPS)

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1) ILMPS data set integrates (harmonizes) three surveys, including:
-The 1998, 2006, 2012, and 2018 rounds of the Egypt Labor Market Panel Survey (ELMPS) ;
-The 2010 and 2016 rounds of the Jordan Labor Market Panel Survey (JLMPS) ;
-The 2014 round of the Tunisia Labor Market Panel Survey (TLMPS).

2) The harmonization is designed to create comparable data that can facilitate cross-country and comparative research. All the surveys incorporate similar survey designs, with data on households and individuals within those households (OAMDI, 2019).

Identification of the middle class in the MENA region

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- Among differents approaches, we use the one proposed by Dang and Ianchovichina (2016) as it is a more recent method with a common threshold across countries.

- Dang and Ianchovichina (2016) estimate the size of the middle class in Egypt, Jordan, Palestine, and Tunisia using an absolute income benchmark.

- Middle class status is assigned to individuals with income above a vulnerability line (i.e., the probability of falling into poverty over the 2005-2010 period) set at $4.9 per day per person in 2005 terms.

Multidimensional employment quality index, using the multidimensional poverty methodology

Multidimensional employment quality index, using the multidimensional poverty methodology (1)

The Alkire-Foster method can be intuitively introduced in 9 steps :

- ***Step 1*** : Choose Unit of Analysis. The unit of analysis is an individual.
- ***Step 2*** : Choose Dimensions and indicators.
- ***Step 3*** : Set Deprivation Cut-Off (a deprivation cutoff is set for each indicator, noted z_j).
- ***Step 4*** : Apply Poverty Lines in terms of job quality (noted k), such as $0 < k \leq d$.
- ***Step 5*** : Count the Number of Deprivations for Each Person (c_{it}). An individual is identified as low job quality if $c_{it} \geq k$.
- ***Step 6*** : Apply Cutoff k to Obtain the Set of Poor Persons and Censor All Non-poor Data in terms of job quality. The focus is now on the profile of the poor and the dimensions in which they are deprived. All information on the non-poor is replaced with zeros (0).
- ***Step 7*** : Calculate the Headcount, $H(k)$: divide the number of poor people by the total number of people.

Multidimensional employment quality index, using the multidimensional poverty methodology (2)

- ***Step 8*** : Calculate the Average Poverty Gap, $A(k)$: it is the average number of deprivations a poor person suffers.
- ***Step 9*** : Calculate the Adjusted Headcount $M_{0t}(k) = H(k) \times A(k)$

- This multidimensional employment quality index provides a single headline measure. It can also be broken down and analysed in powerful ways to inform policy.
- Decomposition by population group: It can be broken down by geographic area, sector of industries, or other sub-groups of a population, to show the composition of job quality within and among these groups.
- Breakdown by dimension or indicator: It can be broken down to show which types of deprivation are contributing to job quality within groups.

Multidimensional employment quality index, using the multidimensional poverty methodology (3)

Table 1. Dimensions, indicators, thresholds, and weights of the multidimensional indicator of (low) job quality in Egypt, Jordan and Tunisia.

Dimensions	Indicators	Suffering from deprivations if…	Weighting
I) Benefits	Health insurance	Job does not provide health insurance	$1/3$
	Annual paid leave	Job does not offer paid holiday leave	$1/3$
	Paid sick leave	Job does not offer paid sick leave	$1/3$
II) Stability	Tenure	Less than 3 years of tenure in job for workers ages 25–64, Less than 1 year of tenure in job for workers ages 18–24	$1/2$
	Permanent employment	Employment is temporary, not permanent	$1/2$
III) Working conditions	Social security	Job is not associated with any type of social security	$1/3$
	Written contract	Employment is not bound by written contract	$1/3$
	Excessive working hours	Individual exceed more than 48 weekly hours	$1/3$

- ✓ $Job\ quality\ measure = (Health\ insurance * 1/3 + Annual\ paid\ leave * 1/3 + Paid\ sick\ leave * 1/3 + Tenure * 0.5 + Permanent\ employment * 0.5 + Social\ security * 1/3 + Written\ contract * 1/3 + Excessive\ working\ hours * 1/3)$
- ✓ Equal weights are assigned to each dimension, and equal weights are also assigned to each sub-dimension (indicators).

Multidimensional employment quality index, using the multidimensional poverty methodology (4)

- The Job Quality Measure (JQM_i) can be formally expressed as follows :
- $JQM_i = \sum_{d,i} w_d I_{d,i}$ (1)

➢ where JQM_i is the JQM for individual i; $I_{d,i}$ is an indicator function set equal to 1 if individual $i's$ job is deprived in dimension d, and w_d are the weights assigned to each dimension.

➢ **JQM_i is the same as the counting number of deprivations for each person (c_{it}) :**

JQM_i adds up the deprivations across dimensions and assumes equal weights of unity for each dimension.

✓ A higher Job Quality Measure (JQM_i) value indicates poorest job quality.

Multidimensional employment quality index results for the MENA region

Multidimensional employment quality index results for the MENA region

- **Deterioration of employment quality from 1998 to 2018 in Egypt:**

✓ H_1 : in 1998 = 34.8 % ; in 2006 = 43.6 % ; in 2012 = 51.2 % ; in 2018 = 62.4 %

✓ A_1 : in 1998 = 68.3 % ; in 2006 = 64.5 % ; in 2012 = 69.2 % ; in 2018 = 69.2 %

✓ $M_{0t}(k) = H(k) \times A(k)$, so $M_0(k = 1) = 0.24$ in 1998 and $M_0(k = 1) = 0.28$ in 2006

- **Deterioration of employment quality from 2010 to 2016 in Jordan :**

✓ H_1 : in 2010 = 31.1 %; in 2016 = 33.9 %

✓ A_1 : in 2010 = 59.1 % ; in 2016 = 61.2 %

✓ $M_0(k = 1) = 0.18$ in 2010 and $M_0(k = 1) = 0.21$ in 2016

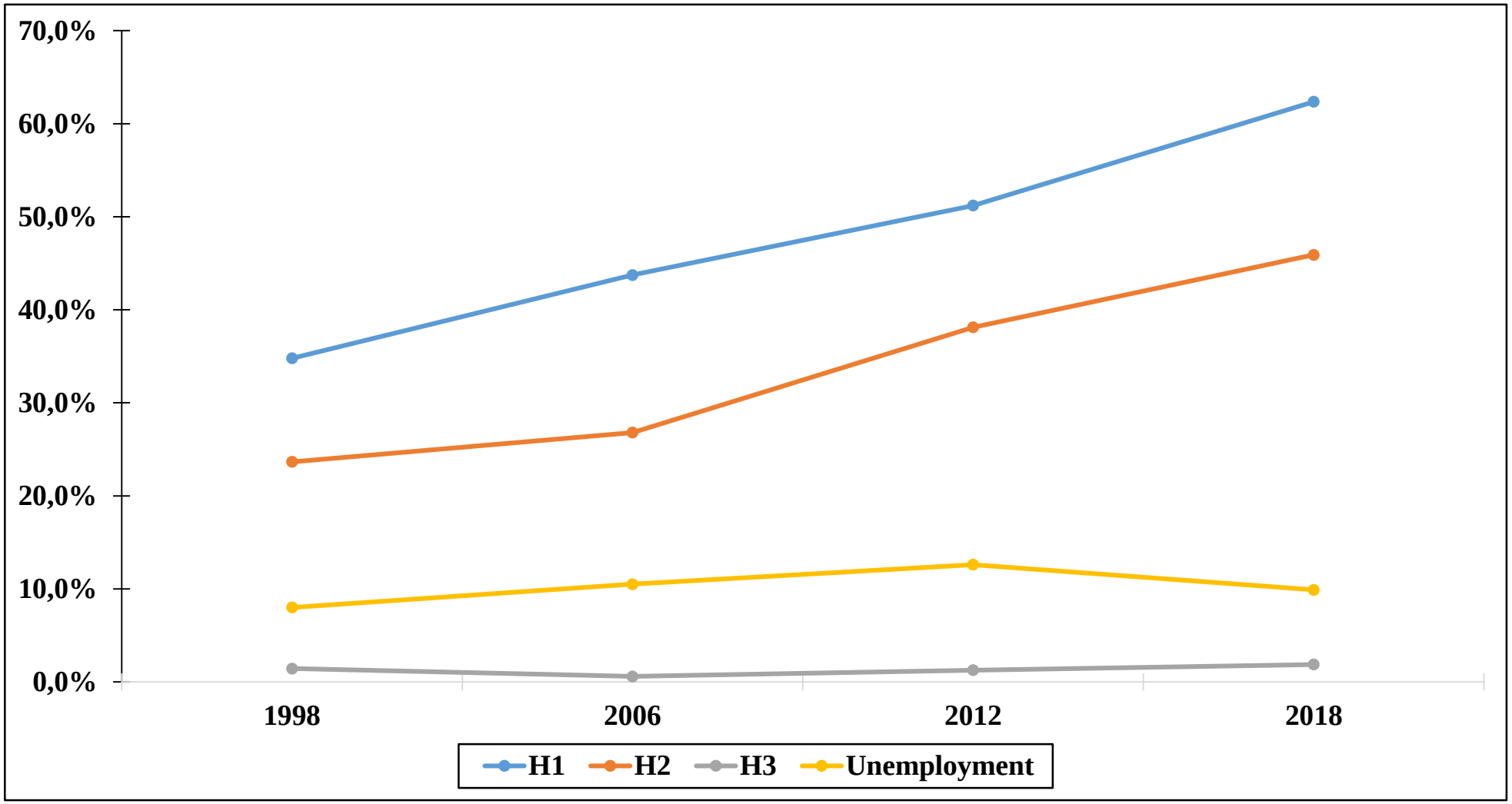
- **Employment quality in Tunisia in 2014 :**

✓ H_1 : in 2014 = 59.1 %

✓ A_1 : in 2014 = 62.7 %

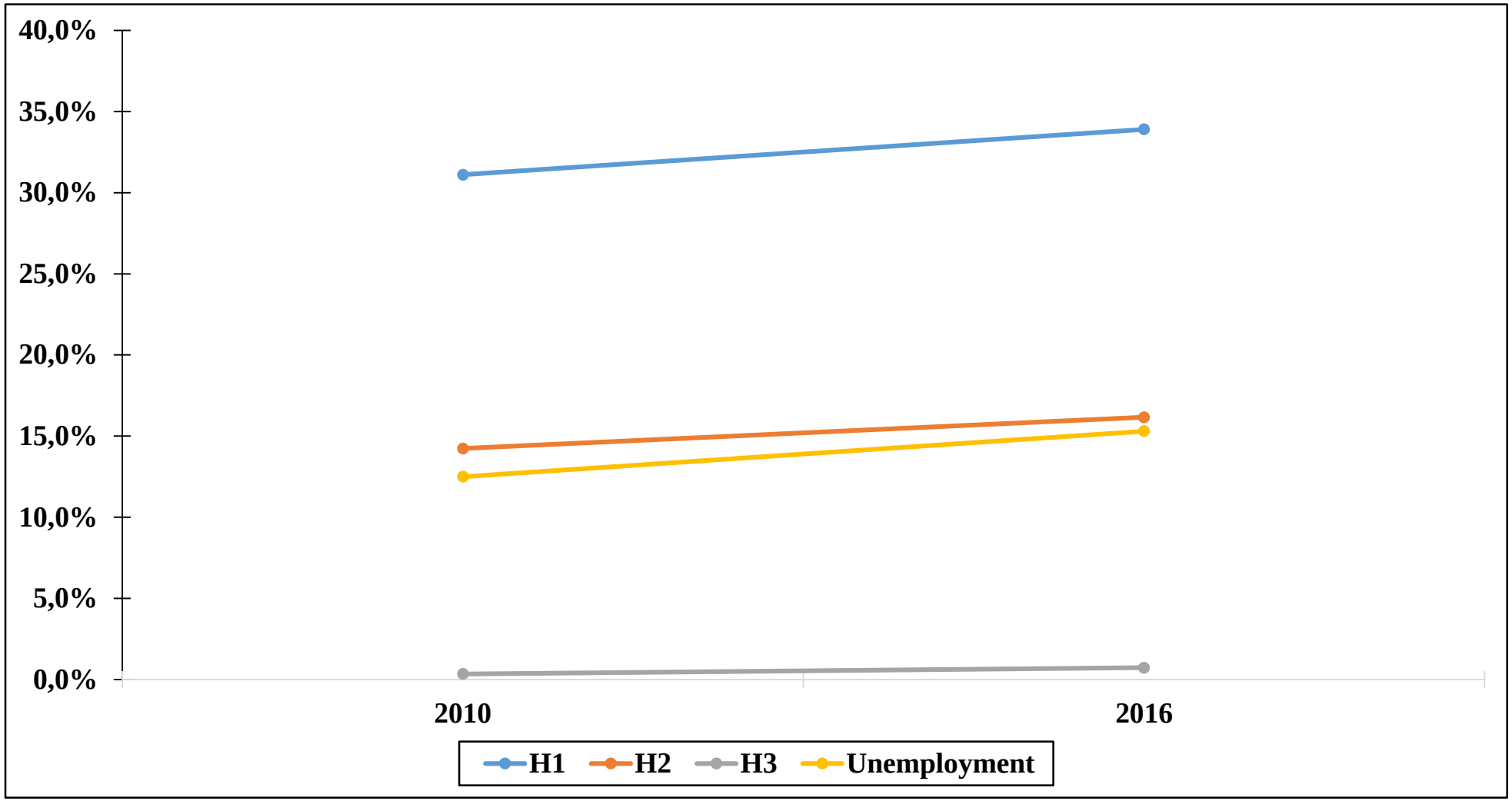
✓ $M_0(k = 1) = 0.37$ in 2014

Multidimensional and one-dimensional measures of employment quality in Egypt, 1998-2018



Notes : $H1$, $H2$ and $H3$ are frequency indicators (headcounts) for workers with 1, 2 and 3 employment quality deprivations, respectively.

Multidimensional and one-dimensional measures of employment quality in Jordan, 2010 and 2016



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The main correlates of job quality in the MENA region

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- Follows Brummund et al. (2018), we run the following regression to identify conditional correlations and to understand more clearly the characteristics that may be the main predictors of job quality :

- $JQM_{isoc} = \alpha + \beta X_{isoc} + \gamma_2 Sector_s + \gamma_3 Occupation_o + \gamma_4 Country_c + \varepsilon_{isoc}$ (2)

Where JQM_{isoc} is the level of job quality for an individual i.

The regressors in this equation are as follows :

✓ X_{isoc} is a vector of covariates with workers characterics.
✓ $Sector_s$ is a sector of employment.
✓ $Occupation_o$ is the occupation classification of employment.
✓ $Country_c$ is country fixed effects.

Table 2. Predictors of Job Quality across Egypt (1998, 2006, 2012 and 2018), Jordan (2010 and 2016) and Tunisia (2014)

Age	-0.017*** [0.000]
Male	0.087*** [0.009]
Education : Read and write (Ref. : Illiterate)	**-0.146*** [0.018]**
Education : Basic education	-0.259*** [0.014]
Education : Secondary education	-0.184*** [0.013]
Education : Post-secondary	-0.162*** [0.019]
Education : University	-0.082*** [0.017]
Education : Post-graduate	-0.035*** [0.017]
Urban	-0.038*** [0.007]
Union members	-0.510*** [0.009]
Production-based wage (Ref. : Fixed wage)	**0.522*** [0.009]**
Partially fixed wage	0.105*** [0.037]
Sector : Industry (Ref. : Agriculture)	**-0.377*** [0.035]**
Sector : Services	-0.424*** [0.034]
Occupation : professionals (Ref. : Managers)	**-0.047 *** [0.014]**
Occupation: Clerical support workers	-0.042*** [0.018]
Occupation : Elementary occupations	0.547*** [0.024]
Country fixed effects	**Yes**
Number of observations	**38 159**
Adjusted R^2	**0.5255**

Notes: The sample includes 3 countries (Egypt, Jordan and Tunisia). Wage employees 18-64. Robust standard errors in parentheses. *** ($p < 0.01$), ** ($p < 0.05$), * ($p < 0.1$).

Source: Integrated Labor Market Panel Surveys (ILMPS).

Results of the main correlates of job quality in the MENA region

- The models shows that there are significant differences in employment quality according to sector : wage employees have lower employment quality in agriculture.
- Wage employees have lower employment quality in rural area while women exhibits better job quality than men.
- Being unionized provides the highest protection against the risk of having lower-quality employment.
- Surprisingly, pursuing university studies does not provide any greater protection against having a low-quality job compared to simply have a basic education.
- In response to the question of “how wages in the longest main job are calculated?”, the results show that having a fixed wages is systematically associated with better job quality than production-based wage or partially fixed wage.