

Political Attitudes and Participation Among Young Arab Workers: A Comparison of Formal and Informal Workers in five Arab Countries

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Abstract

Political participation by citizens is important to ensure good governance and the accountability of policy makers' decisions and initiatives. However, this issue may be especially difficult in contexts of high informal labour, defined in this paper as workers not enrolled in the formal social security system. This paper examines the topic of political participation among young workers in five Arab countries: Algeria, Egypt, Lebanon, Morocco, and Tunisia. It compares both formal and informal sector workers using secondary data from the European Union's 2018 SAHWA survey (http://www.sahwa.eu/). Amongst other variables, the paper tests the impact of informality on political participation. It uses four proxies for political participation to compare formal and informal workers in the case study countries: (1) affiliation to a political party or movement; (2) frequency of participation in political meetings/campaigns or participation in politics via the Internet; (3) frequency of speaking about politics and economic issues with peers; (4) voting in elections (both general and local). By controlling for demographic and socio-economic variables, the analysis uses discrete choice model to test the impact of this informality on the four proxies of political participation. An important contribution of this paper is to incorporate job satisfaction into the analysis. The results indicate that informal workers are less likely to participate in key political behaviours such as belonging to political parties, participating in political meetings and speaking about politics and voting with peers. The paper proposes some key policy implications arising from the analysis.

Key words: Informal workers, social security, political participation, voting, Arab countries.

Code JEL: D72. J46.

1- Introduction

The literature on informality is most closely associated with the study of labour markets in developing countries. It has mainly highlighted a dualist view showing the deep segmentation of labour markets between the formal and informal sectors (Do Soto, 1970; Harris & Todaro, 1970 Galiani et al, 2011). Assaad (2014) also characterizes the Arab labour markets as dualist due to the deliberate practices of their governments in using employment opportunities and benefits for political gain – also known more widely in the literature on Arab political economy as the "authoritarian bargain". Following this segmentation perspective, many authors have studied whether informality is a voluntary choice or a strategy of last resort (Gunther et al. 2012; Merouani et al, 2018). Some have also focused attention on the demographic and socio-economic characteristics of informal and formal sector workers (Ghalianni & Weinschelbaum, 2011 Shehu & Nilsson, 2014).

However, studies about the political attitude and behaviour of informal workers are scarce (Baker, 2018). A useful contribution is found in Rudra (2002) who examines the impact of informal labour on weak social security development and the quality of democratic politics in low or middle-income countries such as India, Egypt and Jordan. However, a gap remains in terms of developing more detailed and robust analysis of the political participation of informal sector workers. This is particularly the case in the Arab economies which have some of the world's highest rates of informal labour, reaching 75% by some estimates (UN-ESCWA) – a matter of heighted policy concern when these workers also take part in popular protests, as in Egypt in the 2011 uprisings.

Studies of the informal economy in the Arab context, let alone its political profile, remain few and fare in between. Statistics provided by international agencies such as the International Labour Organisation (ILO) or the World Bank point to very high rates of informality in general but also among women, in particular. Depending on how informality is measured, estimates of informal workers in the Arab region (excluding the Gulf states) vary between 45% and 65% (Chen and Harvey, 2017). Although informal employment in the Arab region as a whole is lower than other developing world regions, some individual countries such as Morocco and Algeria as discussed in this paper have some of the highest rates in the world at nearly 70% (Gatti, 2014, cited in Chen and Harvey, 2017). The impact of informality is felt strongly in relation to political mobilisation as was seen in the 2011 Arab Spring, a matter which rekindled the vexed debate on economic justice and its links to conflict in the Middle East (Chen and Harvey, 2017). Moreover, labour markets in the Arab region are directly and indirectly shaped by fluctuations in oil prices hence, it is not important not to underestimate the geo-political significance of labour and increasingly informality in the current climate of crisis facing the region.

Hence, the main aim of this paper is to fill a major knowledge gap by studying the impact of informality on political participation in five Arab countries: Algeria, Egypt, Lebanon, Morocco and Tunisia. These are all the countries present in the SAHWA survey and as such, this paper capitalizes on the availability of data to provide an in-depth comparative analysis. The countries are mainly low or middle-low income countries in North Africa and the Southern Mediterranean

which have suffered for many years from high levels of poverty or prolonged social protest that involve large number of informal workers. These issues are pertinent to our times since according to the dualist view mentioned above, the informal economy results in part from political exclusion but may also prove to become a strategy of survival as the affected groups (mainly women and the educated youth) navigate the job market to make ends meet. There are therefore, important policy implications for social protection and governance that can shed new light on the causes and consequences of civic unrest in the Arab region and informal workers fit within this wider picture of the labour market.

The paper is based on estimating discrete choice models using SAHWA survey data (http://www.sahwa.eu/). This survey was undertaken by the European Union in 2018 in the five Arab countries examined here and included 10,000 households. (2,000 in each country). It focused on youth (In each household one young was selected to respond the questionnaire) in the Mediterranean countries, giving particular attention to their way of life, socio-economic situation, migration, values, and political mobilization/participation The analysis presented here entails four logit models (denoted as A-D) with different dependent variables measuring political participation among formal and informal sector workers (see methods section for more detail). The results show that informality has a significant impact on political participation but that there is an interesting difference by age, gender and confidence t in the governments and political systems of the case study countries.

An important contribution of this paper is to incorporate job satisfaction into the analysis. The main findings of the four models are: Model A shows that informal workers are less likely to belong to political parties or movements; Model B shows they are less likely to participate in political meetings, campaigns or in politics via the internet¹; Model C shows that they are less likely to speak about politics, state affairs and economic issues with their peers and finally, Model D shows that informality affects voting behavior whereby informal workers are less likely to vote when general/local elections are called. Furthermore, the results confirm the significant impact of socio-demographic variables on political participation, indeed, that females, younger workers and workers with low educational attainment are less likely to participate in politics. A further important result is the significant positive impact of trust in government and the political system more generally on political participation, which is confirmed in the four models.

The paper is organised as follows: the next section examines the wider literature on the topic; section two sets out the data and methods on which this paper is based, section three presents the empirical results and the final section sums up the key arguments of the paper and its main policy implications.

2- Research Context and Rationale

The literature shows that there has been little scholarship on informality in the Arab region in comparison to other parts of the world (Solati, 2017) and that the endeavor has been led by

¹ No additional information is provided in the survey about the internet platforms.

international development agencies who have access to Arab labour market statistics. As such, this section refers to the scholarship that exists and uses this as the platform for the analytical orientation undertaken in this paper.

Current estimates of informality in the Middle East and North region as a whole are at 45% on average, with 37% of women and 47% of men noted as having informal work (Chen and Harvey, 2017). The rate is even higher for some individual countries such as Egypt and Iran. Rural employment is especially vulnerable to informality in the Arab region, though much less is known about urban informality (Solati, 2017). The overall rate of informality in the Arab region is the lowest in comparison to other developing regions of the world and is in part accounted for the large public sector employment rate (Chen and Harvey, 2017). It is important to note the direct and indirect impact of oil prices on the revenues of Arab nations and thus, the size of the public sector. This dependency creates volatility and contributes directly to the growth of informal employment in the Arab region (Chen and Harvey, 2017).

The countries chosen for this paper also have differing political contexts. In Algeria, 20 years of rule under previous President Bouteflika (1999-2019) severely limited political participation and protests in Algeria until February 2019 when the "Hirak" (social mobilization) started, leading to the dissolution of Bouteflika's regime. Hirak has broken what can be described as a barrier of fear in Algeria and Algerians started protesting again to express their political and social needs. However, this informal mobilization at the street level did not lead to formal political participation as demonstrated in the 2020 presidential election which had a turnout of less than 40%. A similar situation can be found in Egypt in relation to President Moubarak's rule although according to Refaei (2015) participation in elections has increased. In Lebanon, a prolonged economic crisis marked by soaring of living costs and sectarian divisions has fueled riots and anti-government movements representing all segments of society. nearly every class, sector, age and gender (Nassif, 2020). This protest has led to the resignation of the prime minister Saad El Hariri in October 2019.

In Morocco, after the movement of protest in 2011 calling for better social conditions and standard of living, King Mohamed VI revised the constitution and held legislative elections. These elections have given more power to the parliament and local authorities. However, these haven't improved formal political participation because in the parliamentary elections 2016, voter turnout did not reach 43%. In the meantime, many protests have taken place as observed according by NDI [1] and MEMO [2]. In contracts, Tunisia witnessed the most successful democratic transition following the Arab uprisings. Indeed, since the dissolution of the Ben Ali regime in 2011, Tunisians have become more aware of their rights and more determined to practice them. While the different presidential and parliamentary elections that have taken place were held in a transparent manner, there has been a decrease in voting turnout between 2014 and 2019 [3]. This may reflect frustration with the traditional Tunisian parties and their failure in resolving problems of unemployment, poverty and the low standard of living. A key constituency of these countries' popular protests are the educated Middle Classes who continue to suffer from the loss of jobs or

lack of opportunities and as such, are a key part of the informal economy of Arab states (Assaad, 2014). This paper will incorporate anlaysis of this section of the Arab populations.

Against this dire economic and political background, studies on the informal economy in the Arab context, let alone its political profile, remain few and far in between. Albadawi et al. (2008) provide a general description of Arab informal labour and analyse its causes and consequences. They argue that informality is a "complex multi-faceted phenomenon" resulting from the high cost of formal work in Arab countries resulting from complex regulatory frameworks, taxes, and other organizational burdens. Hence, Albadawi et al. (2008) argue that informality has a significant effect on economic growth, on the performance of micro- and small enterprises and on poverty. Beyond this, much of the focus of the literature is on gender differentials and the larger share that women occupy in the informal economy of the Arab world owing to patriarchal practices in the countries (Solati, 2017). The gender issue in the Arab informal about market has been examined in greater depth than informality in general. As seen in Lindsay et al. (2015), there is strong evidence on the low political participation of women compared to men in Algeria, Egypt, Libya, Morocco and Tunisia. It is also well-known that Arab women have the lowest rates of employment in the world.

In terms of the international literature, Nie et al. (1969) set the tone for a new generation of researchers when they stipulated that economic development makes a country's organizational infrastructure complex and its population more organized into different work groups (trade unions, professional bodies), or leisure groups (youth organizations and voluntary associations), or civil society associations. This enables them to coordinate the interdependence between economic and social life and increases their political participation. Furthermore, Nie et al. recognise that social status is an influential predictor of organizational involvement and thus, of political participation.

Following Nie et al. (1969) many authors have studied the issue of political participation and its importance. Binder (1977) recognises that political participation varies according to socioeconomic status; Rudra (2002) shows that labour surplus in developing countries is the origin of the low unionization of low-skilled workers, which in turn had a negative impact on government social spending. Campbell (2002) focuses on senior citizen's political participation by analyzing social security-motivated voting and argues that while political participation by the general population increases with income, senior citizens are the exception. They are more likely to participate when their income is low as they are dependent on social security benefits from the state. Aguilar et al. (1998) challenged the issue of political participation of informal workers in Costa Rica and Mexico arguing that informal workers who are involved in occupational bodies are more likely to participate in political activities such as volunteering in political campaigns or engaging in political protest. Welch (1977) has investigated the gender gap in political participation and provides three main explanations for the low participation of women compared to men: firstly, political socialisation discourages women from participating in politics; secondly, women have more family responsibilities and thirdly, women are less likely to be in sectors that are associated with political participation. While many authors state that the socioeconomic

characteristics of workers are the main determinants of political participation (Lipset 1981; Milbrath and Goel 1977; Verba and Nie 1972), Arrighi et al. (1994) argue that workers who enjoy a certain level of control and responsibility at work (namely professional and managerial positions) are more likely to participate in politics than manual or low skilled workers. These authors also make a strong link between labour union membership and participation in politics.

Elden (1981) adds to the above literature on political participation by studying satisfaction with work as a predictor of political participation. This variable forms an important pillar of the present analysis. This issue is generally ignored by the current literature except for some studies that look at the impact of life satisfaction on political participation (Flavin and Keane, 2012). Indeed, Flavin and Keane (2012) show that the populations that is satisfied with their life start to think about others' wellbeing and participate in politics in order to improve this. One other reason given by these authors as to why the general population who are satisfied with their life (including their job) engage more in politics is to secure personal gain through the political process. Not all studies on informality and political participation provide convincing results. Daenkindt et al. (2019) note that voting alone is not a sufficient measure of political participation. Indeed, Thornton's (2000) study of Mexico does not adequately explain the different impacts informality has on belonging to professional bodies, voting behavior or political support.

Notwithstanding the importance of other forms of non-formal political participation such as involvement in civic organization, participation to protest, and activism (Siemiatycki, Myer et al, 2003; Bekaj et al 2018), this paper focuses on formal political participation which refers to activities in relation to governments, politicians, or political parties. Hence, this paper seeks to present a robust analysis of the relationship between informality and formal political activity by using new and more reliable measures of political participation that are especially insightful for the Arab region. The paper makes two key contributions to the literature as follows:

- (1) By adding an Arab country perspective on informality and political participation which is missing in the existing literature
- (2) Providing a more robust measure and analysis of political participation beyond the limited scope of voting (Daenkindt et al, 2019), and adding other measures such as frequency of discussion of political topics, amongst others.

3- Method and Data

Methodological approach

This paper uses logit models (four in total) to predict political participation and test the impact of each of the predictors on the four dependent variables. The first of these variables is a dummy with the value of one if respondents belong to a political party or political movement. The second dummy variable is made up of a combination of three other dummy variables asking respondents (formal and informal workers in our sample) whether they have participated in political party meetings, election campaigns or whether they participated in politics via the internet during the last 12 months. The third variable is a "Cronbach's alpha" (Arrondel and Masson, 2004) combining three ordinary variables: (i) the frequency of speaking about politics with peers and family members about national and political affairs, (ii) the frequency of speaking about international and regional political affairs and (iii) the frequency of speaking about economic issues. The fourth dependent variable asks respondents whether they vote in elections. The variable of informality is measured in this paper using the ILO (International Labour Office) definition [4] which asks where workers are enrolled in are entitled to social security. The full definition as developed by the ILO for the International Labour Conference (ILC) in 2002 and endorsed by the 17th ICLS in 2003, argues that workers are considered to have informal jobs if their employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits.

Using logit models, we regress the variable of informality on the four dependent variables of political participation and we control for other sociodemographic and behavioural variables such age, gender, education and job satisfaction. This last variable is the second key variable after the variable of informality of this article.

We estimate the following model.

$$PP_{i,k} = \beta + \gamma INF_i + \theta JS_i + \sum_{k=1}^{r} \phi_k SD_{i,k} + \varepsilon_i (1)$$

Where $PP_{i,k}$ is the political participation of individual i, k=1 to 4, representing the four proxy variables for political participation which this paper relies on. The formula uses a set of exogenous variables: the key predictor, in this article, is the variable of informality (INF_i) , it is a dummy equal to 1 if the respondent i declares not having social security coverage, hence, working informally. The hypothesis of this article rests on this last variable which is expected to confirm the negative impact of informality on political participation The second key variable is job satisfaction (JS_i) which is an ordinal variable reflecting the job satisfaction [5] of the individual i, SD is a vector of sociodemographic control variables (age, gender, education). Finally, β is a constant and ε_i is an error term.

We estimate the odds ratio $(\gamma, \theta, \emptyset_k)$ for the model above. For example, we may suppose that PP is a voting variable reflecting whether the respondent declares that he/she takes part in elections. If $\gamma = 2.66$, this means that informal workers are 2.66 times more likely to vote than formal workers. If \emptyset_k is 0.73 (Odds ratio **inferior** to 1 means that the relationship between the dependent and the independent variable is negative) and SD is a gender dummy equal to 1 - if the individual i is a female - this means that females are 1.36 (1/0,73) **less likely** to vote. We run four regression models corresponding to the four variables of political participation by using SAHWA survey data.

Finally, we are aware of the potential collinearity problem in our models. To avoid it, we calculated Variance Inflation Factors (VIF) for each model. A multicollinearity problem exists only when the VIFs are higher than 10 (Mansfield and Helms, 1981). The result, reported in Table 1 of the Appendix shows that all VIFs are low hence, no multicollinearity problem exists in our models. To demonstrate the general robustness of our models, the logit postestimation tests (see Appendix: Table 2) shows that the ability of prediction of the four models varies from 64% for the fourth model to 87% for the first model. In accordance with the results of the econometric models, the paper's concluding section proposes some policy measures to enhance political participation in the Arab region.

Data

Using the SAHWA project dataset (2018), the paper explores the following variables:

The dependent variable: political participation

We construct four indexes of political participation: the first index "involvement" combines the variable of whether the respondents belong to political party [6] and the variable of whether the respondent belong to political movement [7]. The second index (participation) is made by three variables asking the survey respondents whether they participated to political campaigns [8], whether they participated in electoral campaigns [9], and whether they have participated in politics via the internet [11]. This (participation index) is dummy equal to one if the respondents have participated in one of the three political activities at least once a year. The third index (talk politics) is made by calculating "Cronbach's alpha" (for more details, see Arrondel and Masson, 2004) of three variables; the frequency of speaking about national political affairs with parents and peers [11], the frequency of speaking about international political affairs with parents and peers[12], and the variable asking about the frequency of speaking about economic issues with parents and peers [13]. The three variables of speaking about politics and economics are ordinal variable [1] Regularly [2]. Often [3]. Sometimes [4]. Rarely [5]. Never. This variable is predicted using ordered logit model. Finally, we use voting behavior as the political participation index "voting index". This index is measured using the following question: Do you vote when elections are called? [1] Always [2] Often [3] Sometimes [4] Rarely [5] never. We codify this variable into dummy equal to one if the responses are from 1 to 3.

The independent variables

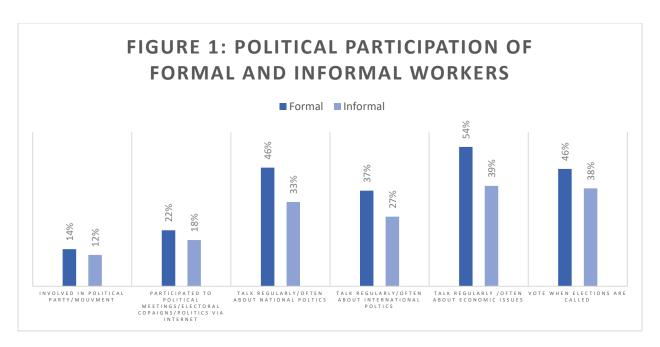
We regress the four indexes above on informality variable which is derived from the question asking whether the workers are covered by the social security system [14]. Informal workers are those who declare their job not covered by social security system (ILO, 1993). Following Elden (1981), Peterson (1990) and Delli et al. (1983), we use the variable of Job satisfaction as the second variable of interest in this article. It is measured, in the survey, using the following question:

Are you satisfied with your job? [1] Very satisfied [2] satisfied [3] dissatisfied [4] Very dissatisfied. Last but not least, we control for sociodemographic variables to compare our result with the previous literature. The results of the econometric models are presented in the following section.

Finally, it is worth noting the limitations in the data: the SAHWA survey only includes youth aged 16 to 29 years for whom political participation is quite different from older citizens. The second limitation is the sample size which is not very large given that we focus only workers and the high youth unemployment rate in the respective countries. Also, using subjective questions to measure some variables such as job satisfaction could be a limitation because of some hidden information. This might be due to the context of the survey or the way the question was asked could push the respondents to hide their real level of job satisfaction. On this matter, further research would need to be done to better understand what elements led to job satisfaction and to what extent access to social security benefits fed into this.

4- Empirical analysis

We start our empirical analysis with some descriptive statistics describing the main variables of this study. After cleaning the data, the sample size was reduced to workers (2485 respondents/workers- 67% of them are informal). It's worth noting that we run weighted models. The weighting allows to make our sample representative of the general population and handle the issue of over representation or underrepresenting some groups of workers. Also, some variables could be missing for some individuals, the software automatically delete/ignore the observation (respondent). This is why this sample size change slightly from a model to another. In order to highlight the relationship between informality and political participation, we display the differences between informal and formal workers with regard to political participation in Figure 1 below.



Source: SAHWA survey - www.Sahwa.eu

The figure above displays the proportions of formal and informal workers that participate in political activities. It clearly confirms that formal workers are more likely to participate in such activities. The figure shows that 14% of formal workers are involved in political party or movement. This proportion is lower for informal workers (12%). However, the gamma test[15] (Gamma=0,09) show that the difference is not significant. The figure also shows that 22% and 18% of formal and informal workers have participated to political meetings or electoral campaigns or have participated to politics via the internet, this difference is also non-significant according to the gamma test (Gamma=0,06). Furthermore, formal workers seem to be more likely to talk about politics and economics; 46% of them (33% of informal workers) declare they speak regularly or often about national politics with their parents and friends/colleagues (Gamma test = 0.23). Formal (37%) workers speak more frequently about international political affairs than informal workers (27%) (Gamma test = 0,19). When it comes to economic issues, 54% of formal workers declare they speak regularly or often about economics issues while only 39% of informal workers declare they speak regularly/often about economic issues (Gamma test = 0.23). Finally, we notice the difference in voting participation between formal and informal workers. The descriptive statistics shows 46% of formal workers go to the urns when elections are called. This proportion is lower (38%) for informal workers (Gamma test = 0,12)

Even if the Gamma test are not very high when we test binary relationships, the descriptive statistics above show that informal workers are less engaged in formal politics and this is observed in the five Arab countries (see Table 3 in the Appendix). However, to test the significance of the differences highlighted above, we include other variables and run four econometric models: the first one is a binary logit model which has the first index (involvement) of political participation as a dependent variable. Model B has the second index (participation) as dependent variables.

Model C is an ordinal logit model, it has the third index (talk politics) as a dependent variable, and finally, Model D predicts voting behavior. These are displayed in Table 1 below.

Table 1: Logit models predicting political participation

	(Model A:	(Model B:	(Model C:	(Model D:
	Involvement)	Participation)	Talk Politics)	Voting)
VARIABLES	odds ratio	odds ratio	odds ratio	odds ratio
I., £ 1	0.701*	0.664***	0 (50***	0.010**
Informal	0.791*	0.664***	0.650***	0.819**
T-1,4'C4'	(0.112)	(0.0896) 0.695***	(0.0575)	(0.0793)
Job satisfaction			0.896	0.767***
N. 1	1 124	(0.0848)	(0.0726)	(0.0748)
Male	1.134	1.594***	1.214**	1.211*
C C 1 : -	(0.172) 1.274***	(0.222)	(0.106) 1.507***	(0.121) 1.978***
Confidence in	1.2/4***	1.605***	1.50/***	1.9/8***
government				
&Political system	(0.112)	(0.125)	(0.1000)	(0.154)
A	(0.112)	(0.125)	(0.1000)	(0.154)
Age		0.988	1.042***	1.131***
T.1	1 207***	(0.0161)	(0.0120)	(0.0148)
Education	1.207***		1.255***	
M ' 1	(0.0844)	1.066	(0.0537)	1 264**
Married		1.066	1.274***	1.264**
211 1 1	1 420	(0.128)	(0.104)	(0.117)
2.Unemployed	1.429	2.114***	1.214	0.609***
2.04 1 4	(0.323)	(0.391)	(0.174)	(0.103)
3.Student	2.070***	2.918***	1.306*	0.584***
4 T	(0.433)	(0.528)	(0.198)	(0.117)
4.Inactive	1.370	3.954***	1.019	0.498**
0 F 1	(0.557)	(1.228)	(0.313)	(0.150)
2.Employee	0.533***	0.525***	0.803**	1.092
2.5. 11	(0.0763)	(0.0678)	(0.0743)	(0.117)
3.Family support	0.499***	0.421***	1.292*	1.237
and apprentices	(0.112)	(0.00(1)	(0.170)	(0.102)
T T 1	(0.113)	(0.0861)	(0.179)	(0.192)
Urban	1.337**	1.196*	1.225***	0.607***
T	(0.174)	(0.130)	(0.0912)	(0.0531)
Private		0.530***	0.945	
G		(0.0790)	(0.102)	
Constant cut1			0.743	
Q			(0.294)	
Constant cut2			2.191**	
G			(0.865)	
Constant cut3			6.711***	
			(2.661)	

Constant cut4			25.89*** (10.36)			
Constant	0.101*** (0.0453)	0.618 (0.349)	(10.50)	0.0270*** (0.0120)		
Observations	2,833	2,911	2,802	2,911		

Robust standard errors in parentheses [16] *** p<0.01, ** p<0.05, * p<0.1

Table 1 above displays the output of our econometric models. Our hypothesis, of the negative impact of informality on political participation, is confirmed by the four models. Indeed, informal workers may not be interested in politics given that their income and jobs don't depend on state politics. They would be indifferent toward government/policy changes because they have no interest in this area. This result is in line with Campbell's (2002) self-interest hypothesis in his USA study, which argues that given that elderly or pensioner-age-low income citizens are more likely to participate in social security-related voting because their income (interest) is mainly derived from social security system. The situation is similar in the workplace - given that they have little or no interest with government and political affairs, informal workers are not eager to participate to politics. One other explanation is related to Lipset's (1981) finding which recognizes that manual and low skilled jobs don't allow workers to develop their knowledge and understanding of politics, hence, they are less likely to be formally politically active.

A Similar relationship has been argued in Amat et al. (2020). Indeed, Model A in the table above shows that informal workers are 1.26 times (1/0.791) times less likely than formal workers to be involved into political party/movement. Model B shows that informal workers are 1.50 times (1/0.664) less likely to participate to political meetings, to electoral campaigns or to politics via the internet. Model C shows, that informal workers are 1.53 times less likely to talk about political and economic issue with parents and peers. Finally, Model D shows that informal workers are 1.22 times less likely to vote comparing to the formal workers.

Job satisfaction

Very few authors have payed attention to the impact of job satisfaction [17] on political behaviour. Peterson (1990) and Delli et al. (1983) are among the few authors to deal with this issue showing the significant impact of job satisfaction on political attitude and behaviour. The models above have tested the impact of job satisfaction on the probability of participating in politics. The results show that workers who are more satisfied with their job are less likely to participate to politics and state affairs Wich oppose Delli results who find that Dissatisfied individuals participate less to politics. Our result can be explained by the fact that workers who are satisfied with their job don't necessarily wish to change social and economic policies, hence, they don't participate in politics. Model B shows that workers who are satisfied with their job are 1.43 times (1/0.695) less likely to participate to political meeting, electoral campaigns or participate to politics via the internet. The

fourth model shows that workers who are satisfied with their job are 1.30 times (1/0,767) less likely to vote in elections.

Gender

The gender dimension with regards to political participation is highly documented in developed country scholarship (Roth et al, 2018). The results of our models (B, C D) are in line with these previous studies (Roth et al, 2018, Welch, 1977). Males are more likely to participate in politics compared to females in the case study countries. Indeed, the econometric results show that males are 1.59 times more likely to participate in political meetings, electoral campaigns and in politics via the internet (Model B). The third model shows that males are 1.21 times more likely to talk about politics and economic issues with theirs peers. The fourth model shows that males are 1.21 more likely to vote. This low political participation of women may be due, as explained by Welch, to the fact that women have more responsibilities at home, and they have jobs that don't enhance political participation. this result is consistent with Lindsay et al (2015).

Confidence in government

One other interesting predictor of political participation is how much confidence workers have in government and political system (Grounlund et al 2007). This article builds a variable of confidence in government by calculating a Cornabach' alpha for the fives variables[18] namely: 1) confidence in political parties, 2) confidence in politics, 3) confidence in elected local officials, 4) confidence in government, 5) confidence in elections. The output variable was codified as follows: 1 - Not confident; 2 - Neutral; 3 - Confident. We include this output variable in our regressions above. The result shows that confidence in government and the political system enhance political participation. Model A shows that workers who are confident in government and the political system are 1.27 more likely to be involved in political party/movement. The second model shows that workers who have confidence government are 1.6 times more likely to participate to political meetings, electoral campaigns/ participate via the internet. Model C shows both formal and informal workers who trust government are 1.50 more likely to talk about politics and economics issue with their peers (parents, friends and colleagues). Model D shows that all workers (in the sample) ho have confidence in government and political system are 1.97 more likely to vote when elections are called. These results are in line with Torney-Purta et al (2004) and Sari (2012). This latter was interested especially in political participation via the internet and he found that confidence in government increases political participation via the internet.

Age

Age is a classic predictor of many individual behaviours. This paper has tested the impact of age on political participation, showing a positive relationship between the two variables, which is consistent with the literature (Bennett and Bennett, 1986). However, the Age variable in our

sample here has a small range since the SAHWA survey targeted only youth [19] (16-29 years old). Nevertheless, the econometric models show an interesting variation in political participation by age. The third (the fourth) model shows that an increase of age by just 1 year also increases the likelihood of talking about politics and economic issues (voting in elections) by 1.04 (1.13) times. This result is consistent with a survey conducted by one of the authors (BBC Media action survey, Merouani, 2019).

Education

The impact of education on political participation is also significant given that high level of education allows more understanding of politics and state affairs hence, more political activities/participation. This is confirmed by various previous studies (Flavin et al, 2011; Aghiri et al, 1994). The results of this article are in line with the literature showing a positive relationship between education and political participation. The output of the models (A and C)above shows that highly educated workers are 1.20 times more likely to be involved in political parties/ movement (Model A). Furthermore, they are 1.26 times more likely to talk about political affairs and economic issues with their parents, friends/ colleagues (Model C).

Marital Status

Marital status plays a role in political attitudes and orientations (Daenekindt et al, 2019; Kingston et al, 1987; Stocker et al, 1995). The result of our models (C and D) confirms the significant effect of marital status on political participation. Indeed, Model C shows that married workers are 1.27 times more likely to talk about political affairs and economic issues. Model D shows that married respondents are 1.26 more likely to vote when elections are held. These results are in line with Kingston et al. (1987) who find that married workers are more likely to vote in the USA.

Employment status

The result of the econometric analysis presented here shows interesting differences in political participation by occupational status. Compared to employed workers (reference variables in occupational status analysis), the unemployed are 2.11 times more likely to participate in political meetings and electoral campaigns. This can be explained by the fact that they have more free time and they would use this campaign to get access to jobs. However, when it comes to voting, employed workers are more likely to vote than unemployed, which is consistent with Sobel (1993) who supports "the spillover model." This model argues that participation in the workplace allows workers to learn how to participate in politics. The findings in this paper also show that students are 2.07 more likely to be involved into political party movement. Also, students are 2.91 more likely to participate to political meeting/ electoral campaigns (second model). The third model shows that students are 1.30 more likely to talk about economics. However, students are 1.71

(1/0.584) less likely to vote comparing to employed workers. Finally, inactive workers are 3.95 more likely (2 times less likely) to participate to pollical meetings/electoral campaigns (to vote).

The econometric analysis also shows that compared to self-employed and employer (reference variable) status, the employees in the sample are less likely to be involved in political parties/movement, according to the first model. Model B shows that employees are less likely to participate to political meetings/ electoral campaigns or participate to politics via the internet. Model C shows that employees are less likely to talk about politics and economic issues with their friends and family members. Furthermore, the two first models show that family support and apprentices are less likely to be involved in political parties/movements. They are also less likely to participate in political meetings/electoral campaigns. However, Model C shows that family support and apprentices are more likely to talk about politics and economic issues.

Urban vs Rural Differences

The urban/rural analysis shows that workers in urban areas are more likely to participate in politics according to the three first models (indexes), which is consistent with what we know from the literature and can be explained by the fact that the urban environment enhances political activities (Welch, S., 1977). However, workers in urban areas are less likely to vote. These results confirms the specific characteristic of voting activity and that focusing only on voting to measure political participation could be insufficient.

Private vs Public sectors

While the literature has paid limited attention to the relationship between sector of activity and political participation, we have tested this relationship in our models. The result here shows some evidence about the impact of the sector of activity on political participation. With the exception of the second model (Model B) which shows that private sector workers are 1.88 times less likely to participate in political meetings/electoral campaigns or participate in politics via the internet, the other models do not find a significant impact by sector of activity on political participation.

5- Discussion and Key Policy Recommendations

This article tackled the little-understood issue of informal workers' political participation in the Arab regional context, which is important for any successful transition to democracy, especially in the case study countries given the prolonged political unrest there which is in large part caused by economic injustices. We have highlighted the most significant predictors of political participation using advanced econometric models. These results can inform policy to enhance political participation of informal workers in the Arab world.

This article shows that political participation in the case study countries is low hence, policymakers may consider the social, emotional and psychological factors influencing political participation in

order to develop the best tools to help local populations to improve their political engagement. The paper highlights an important result which is that informal workers are less likely to participate in politics and state affairs, which poses a potential policy challenge given that these categories of workers are not well understood. Politicians in the case study countries need to consider the differential in political behavior between formal and informal workers. Engagement with informal workers could be improved through policy "nudges" such as making the political actions suitable to informal workers identities (Major, 2018. Bryan et. al, 2011). Political participation should also be made more accessible to women and youth, given that these categories have been found to be less engaged politically. Also, political participation should be made easier by providing access to information related to politics and related to policy that concern population and removing barriers like bureaucracy.

Furthermore, awareness raising campaigns that target informal workers might be important to remind and educate them about the importance of political participation for democracy and good governance. This could be done through mass media campaigns as propagated by behavioral economists (Pop-Eleches et al., 2011). In addition, successful methods for encouraging informal workers to participate in politics could be achieved using phone calls, direct emails or social media (Green & Garber, 2015). In this sense, it is worth highlighting the positive impact of mass media on political participation in the Arab country contexts as found in our previous study (Merouani, 2019).

Moving now to some of the key policy recommendation: extending social security to all workers may make them more engaged in politics. According to Campbell (2012), social security could enhance informal workers' political participation by: (1) giving more income and free time for politics and (2) tying their well-being to government programs. As such, social security is considered an incentive for affiliated groups to be mobilized for political actions. This suggestion is important given that in one of the author's previous article's (Merouani et al, 2018), the SAHWA dataset was used to show that there is a part of the working population who is excluded from social security. Hence, extending social security to these categories of workers using a Beveridge-style strategy (Esping-Anderson, 1990) could enhance political participation.

Lastly, we mention areas for further research based on the findings reported in this paper. In this paper, we have tested the impact of informality on political participation showing that informal workers are less likely to be politically engaged. Based on this result we suggest that enhancing political participation could be done through some incentives such making participation easy and fitting workers identities, however, we could not rely only the previous studies to say that those incentives work; our future research should do experiment applying those incentives and observing if workers behave differently toward politics and voting.

6. Conclusion

This paper has tackled the important though under-studied issue of informal workers' political participation in five Arab countries: Algeria, Egypt, Lebanon, Morocco and Tunisia. We have used an original survey to build four indexes of political participation: 1) belonging to political parties, 2) participating in political meetings, 3) speaking about politics and 4) voting in local/general

elections. Those indexes constitute our dependent variables and have been analysed separately using logit models and explained by informality, job satisfaction, confidence in government and some other socio demographic variable. We have displayed the results of the models and proposed some policy recommendation based on these results. We believe our findings are meaningful for new policy reforms aiming to improve political participation. The paper makes two key contributions to the literature as follows:

- (1) By adding an Arab country perspective on informality and political participation which is missing in the existing literature
- (2) Providing a more robust measure and analysis of political participation beyond the limited scope of voting (Daenkindt et al, 2019), and adding other measures such as frequency of discussion of political topics, amongst others.

Footnotes

- [1]NDI website: https://www.ndi.org/middle-east-and-north-africa/morocco
- [2]The Middle East Monitor online article: https://www.middleeastmonitor.com/20200224-protests-in-morocco-demanding-improvement-of-social-and-human-rights-conditions/
- [3] According to http://www.electionguide.org/, the voter turnout decreased from 63% and 60% (second round) in 2014 to 48% and 54% in 2019.
- [4] The informal employment definition, as developed by the ILO for discussion by the International Labour Conference (ILC) in 2002 and endorsed by the 17th ICLS in 2003, argues that workers are considered to have informal jobs if their employment relationship is, in law or in practice, not subject to national labour legislation, income taxation, **social protection** or entitlement to certain employment benefits.
- [5] Job satisfaction variable was measured in the survey using the following question: **Are you satisfied with your job?** [1] Very satisfied [2] Satisfied [3] Dissatisfied [4] Very dissatisfied
- [6] Could you tell me if you belong to one of **political party** as a sympathizer, participant, donor or volunteer? The alternative of answers are the following [1] Yes, as a sympathizer [2] Yes, as a participant [3] Yes, as a donor [4] Yes, performing voluntary work [5] No [6] Never. This variable was recodified into dummy equal to 1 if the answer is equal 1 to 4.
- [7] Could you tell me if you belong to one of the **Political movements that is not a political party** as a sympathizer, participant, donor or volunteer? The alternative of answers are the following [1] Yes, as a sympathizer [2] Yes, as a participant [3] Yes, as a donor [4] Yes, performing voluntary work [5] No [6] Never. This variable was recodified into dummy equal to 1 if the answer is equal 1 to 4.
- [8] How often did you participate in **party political meetings or activities** before 2011? [1] Every day [2] More than once a week [3] About once a week [4] About once a month [5] A few times a year.
- [9] How often did you participate in electoral campaigns before 2011? [1] Every day [2] More than once a week
- [3] About once a week [4] About once a month [5] A few times a year.
- [10] How often did you participate politics via the internet before 2011? [1] Every day [2] More than once a week
- [3] About once a week [4] About once a month [5] A few times a year.
- [11] Using this card, how often do you speak about the national political affairs with parents, siblings, friends and colleagues?
- [12] Using this card, how often do you speak about the international political affairs with parents, siblings, friends and colleagues?

- [13] Using this card, how often do you speak about economic issues with parents, siblings, friends and colleagues?
- [14] Are you insured by the social security system? [1] Yes. [2] NO.
- [15] The stronger is the relationship between the two variables, the closest to 1 is the value of Gamma test.
- [16] Constant cut1 This is the estimated cutpoint on the latent variable used to differentiate lowest value of dependent variables from other values when values of the predictor variables are evaluated at zero.
- [17] Are you satisfied with your job? [1] Very satisfied [2] Satisfied [3] Dissatisfied [4] Very dissatisfied.
- [18] These variables are a Likert scale ordered from (0) Not at all confident to (10) very confident.
- [19] This is the reason why age's coefficients were not significant in the two first models.

APPENDIX

Table 1: Test of multicollinearity

Model 1		Model2		Model 3		Model 4		
	VI		VI				VI	
Variable VIF	F	Variable	F	Variable VIF		Variable	F	
	8.		1.		1.		1.	
Informal	31	Informal	35	Informal	41	Informal	23	
	3.		1.		1.		1.	
Gender	48	Job satisfaction	12	Job satisfaction	13	Job satisfaction	12	
Confidence in	4.		1.		1.		1.	
gouvernement	98		07	Gender	11	Gender	07	
	6.	Confidence in	1.	Confidence in	1.	Confidence in		
Education	87	gouvernement	01	gouvernement	01	gouvenment	1	
			1.		1.		1.	
Occupationnel stat	uts	Age	27	Age	35	Age	27	
	1.		1.		1.		1.	
Unemployed	15	Married	14	Education	28	Married	14	
	1.				1.			
Student 12		Occupational status	Married	14				
	1.		1.				1.	
Inactive 08		1 /		Occupational status		Unemployed	1	
			1.		1.		1.	
Job position		Student	11	Unemployed	11	Student	11	
	3.		1.		1.		1.	
Employee	91	Inactive	05	Student	17	Inactive	04	
Family support	1.				1.			
and apprenties	53	Job position		Inactive	05	Job position		
	2.		1.				1.	
Urban	6	1 2	46	Job position		Employee	45	
		Family support	1.		1.	Family support	1.	
		and apprenties	44		46	and apprenties	44	
			1.	Family support	1.		1.	
		Urban	07	and apprenties	43	Urban	07	
			1.		1.			
		private	15	Urban	08			
					1.			
				Private	16			
	3.		1.		1.		1.	
Mean VIF	5	Mean VIF	18	Mean VIF	21	Mean VIF	17	

Table 2: Postestimation test of the overall reliability of the models²

Model 1			Model 2		Model 4			
True			True			True		
Classified D Tot			Classified D 7			Classified D	Tot	
~D		al	~D			~D		al
+ 0 0		0	+ 34	29	63	+ 482 2	269	751
		283	3.		284	102		216
- 358 24	175	3	- 514 23	334	8	- 708 14	0	
	, -		<u> </u>			, , , ,		
Total 358		283	Total 548		291	Total 1190	l	291
2475		3	2363		1	1721		1
2.70			2000			1,21		
Classified + if predic	eted Pr	·(D)	Classified + if predi	cted P	r(D)	Classified + if predic	eted P	r(D)
>= .5		(2)	>= .5		1(2)	>= .5		1(2)
True D defined as Po	OL 61	!= 0	True D defined as P	OL 62	!= 0	True D defined as voteb != 0		
Trace B definied as 1	201	. 0	True D' definied de l'			True B defined as ve		
							40.	
Sensitivity	0.00		Sensitivity	6.2		Sensitivity	50	
Pr(+D)	%		Pr(+D)	0%		Pr(+D)	%	
(-)			(-)	98.			84.	
Specificity	100.		Specificity	77		Specificity	37	
$\Pr(-\sim D)$	00%		$\Pr(-\sim D)$	%		Pr(-~D)	%	
				53.			64.	
Positive predictive			Positive predictive	97		Positive predictive	18	
value Pr(D+)	.%		value Pr(D+)	%		value Pr(D+)	%	
				81.			67.	
Negative predictive	87.3		Negative predictive	95		Negative predictive	22	
value Pr(~D -)	6%		value Pr(~D -)	%		value Pr(~D -)	%	
							15.	
False + rate for true	0.00		False + rate for true	1.2		False + rate for true	63	
\sim D Pr(+ \sim D)	%		~D Pr(+~D)	3%		~D Pr(+~D)	%	
				93.			59.	
False - rate for true	100.		False - rate for true	80		False - rate for true	50	
D Pr(- D)	00%		D Pr(- D)	%		D Pr(- D)	%	
False + rate for			False + rate for	46.		False + rate for	35.	
classified + Pr(~D			classified + Pr(~D	03		classified + Pr(~D	82	
+)	.%		+)	%		+)	%	

_

² The model 3 is an ordered logit and post estimation test is different than the three other models. Rely on the individual significance of the coefficients/odds ratio which show estimation is good.

False - rate for			False - rate for	18.		False - rate for	32.	
classified - Pr(D -	12.6		classified - Pr(D -	05		classified - Pr(D -	78	
)	4%)	%)	%	
		87.			81.			66.
		36			35			44
Correctly classified	%	Correctly classified		%	Correctly classified		%	

Table 3: Percentage of formal and informal workers participating to political activities by country

			Participated in										
			political		Speal about		speak about		Speak about				
	Inv	olved	meeting	g/elector	national		international		economic		vote		
	in po	olitcal	al can	npaigns	politics		politics		issues		when		
	part	y/mou	/polites	s via the	regularly/offte		regu	ılarly	regu	larly	elec	election	
	vn	nent	inte	ernet	n	l	/o1	ften	/of	ten	are o	alled	
												Info	
Cou	For	Infor	Form	Inform	Forma	Infor	Form	Infor	For	Info	For	rma	
ntry	mal	mal	al	al	l	mal	al	mal	mal	rmal	mal	l	
Alge	6.1									39.3	55.		
ria	1	6.08	21.4	27.66	38	37.19	37.11	39.82	46.72	8	46	38.3	
Egy	8.5									34.8	73.	63.1	
pte	1	4.21	8.51	8.24	47.51	32.48	31.21	19.7	44.68	1	76	9	
Leb													
ano	20.	22.4								54.0	28.	15.6	
n	29	9	25	16.63	55.3	34.96	38.53	28.61	72.06	4	53	5	
Mor	34.	25.6								24.0	35.	30.7	
оссо	34	7	53.54	37.97	28.28	23.26	29.29	20.59	26.26	6	35	5	
Tun	6.9									44.0		33.3	
isia	6	4.41	7.59	4.96	48.73	36.91	44.93	31.68	53.16	8	50	3	

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