# Militarism and Welfare Distribution in the Middle East and North Africa

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#### Abstract

Most of the Middle Eastern and North Africa (MENA) countries display a significant contrast with the industrialized countries in terms of welfare distribution. This study sheds light on the political economic structures leading to good and poor welfare efforts spent in the MENA region with a particular emphasis on the militaristic aspects of states. The analysis of causal relationships between different configurations of conditions and welfare efforts spent by states is performed with a systematic method of inference making called the fuzzy set Qualitative Comparative Analysis (fsQCA). For this comparison, eight countries—namely Algeria, Egypt, Jordan, Lebanon, Morocco, Syria, Tunisia, and Yemen—are selected based on their relevance to the topic and availability of the relevant data.

The model includes seven condition variables and two outcome variables. Social expenditure as of central government expenditure and social security coverage are both included as indicators of welfare distribution. Hence, two separate fsQCA analyses are implemented with these two outcome variables. Outputs of the fsQCA analyses support the hypotheses asserting negative relationship between militarism and welfare efforts. Frequently, the absence of militaristic

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aspects such as high amount of military expenditure, high number of armed forces personnel and praetorian relationship between the military and the government are associated with good welfare distribution. Since this is a qualitative study, it does not provide explanation about the net effects of each variable on the welfare distribution. It could, however, serve as a preliminary study that provides insights to future research on militarism and welfare distribution in the MENA region.

**Keywords:** Middle East and North Africa, militarism, welfare distribution, social policy, political economy, qualitative comparative analysis

## Introduction

The Middle East and North Africa (MENA) region has been going through a series of chaotic events since the beginning of the process called "Arab Spring" or "Arab Awakening". Apart from the factors like oppressive treatments of authoritarian regimes to the people, unfair elections, and corruption, the great discrepancy in terms of social welfare between the Western European countries and the MENA countries—excluding wealthy Gulf monarchies—seems to be one of the fundamental reasons behind these events (Ardic, 2012).

Most of the MENA countries perform below the world average in terms of the extent and scope of social welfare provision (Alami and Karshenas, 2012). While this is the case for welfare indicators, majority of the MENA countries rank quite higher than the world average with regard to the military expenditures (BICC, 2014). A simple analysis of these two features of the region raises questions regarding the relevance of their militaristic aspects with their poor welfare distribution performance.

The general, landscape of welfare provision in the world illustrates a significant role of countries' economic capacity on their state's welfare provision efforts. The total public social security expenditure of high income countries are amounted to be about 19% of their Gross Domestic Products (GDP), while middle and low income countries respectively spent 7%

and 4% of their GDPs in 2009 (ILO, 2011: 2). The significant difference between social expenditure suggests a strong correlation between income level and social policy performances. Nevertheless, low and middle income countries' poor performance could not be reduced to their economic capacity. In an environment where persistent inter-state and intra-state conflicts take place, many MENA countries would spend excessive amounts on military personnel and equipment. MENA countries have limited their economic capacities and this excessive military burden on central government budgets might have negative consequences on well-being of their citizens.

This article attempts to answer the question in which ways the militaristic aspects of their systems might constraint or enable welfare distribution by the governments. To reveal the dynamics of this issue, the study employs a comparative approach. For this comparison, eight MENA countries named Algeria, Egypt, Jordan, Lebanon, Morocco, Syria, Tunisia, and Yemen are selected based on their relevance to the topic and availability of the data. This study argues the variation between the MENA countries in terms of abovementioned aspects of militarism that might provide an explanation for the variation in their social welfare distribution. With its qualitative comparative analysis of the eight MENA countries, this study would contribute to the literature by making researchers familiar with region-wide dynamics of welfare distribution. In addition, in the literature, the fuzzy set Qualitative Comparative Analysis (fsQCA) will be used for the first time to understand the relationship between militarism and welfare distribution in the MENA region.

This article consists of four parts. The first part focuses on the militaristic aspects of the countries. In the second part, social policy and welfare distribution in the MENA region will be discussed. The third part is devoted to methodology and data. In the fourth part, outputs of the (fsQCA) analyses produced by the software will be elaborated, and three countries (Egypt, Lebanon, and Syria) will be briefly discussed.

## Militarism and Welfare Distribution

The distribution of welfare and social policies have been most commonly studied within the mainstream welfare state literature, which to a certain extent has achieved to isolate itself as a separate social scientific discipline. The inclusion of militarism in the welfare state literature necessitates a political economic approach, which mainly deals with the implications of political power on political economic outcomes (Holden, 2005).

In the literature, complexity of the relationship between militarism and political economic outcomes in addition to the economic growth and development has been analyzed. Deger and Sen (1995) theorize a comprehensive list of causal channels through which the militaristic aspects of states might affect economic growth. One of the causal relations is possible positive externalities which militaristic aspects of a political economy might create on the modernization of industries and technological development. In this regard, Benoit (1973; 1978) claims a positive relationship between militarism and economic growth in the context of developing countries. His arguments mainly revolve around the contribution of a high level of military mobilization on the processes of research and development in the industry. Bowman explains this complex situation as "while the conventional wisdom and the case study evidence conclude that large militaries are negatively associated with development, a large body of cross-national research finds that lots of soldiers are good for economic growth and equity in developing countries" (2002: 3).

According to Huntington (1957), militaries were seen as a tool for swift and effective modernization in education and technology in the Third World countries. High military expenditure, therefore, were beneficial for the economic progress of these countries. With the end of the Cold War, this question has become even more popular. The significant decrease in the level of tension was accompanied with a decrease in military spending in the U.S., Russia, and their former satellite states. This trend, however, did not last long because of the conflicts take place between the MENA countries (Cypher, 1991). This variation in military spending has created a better empirical ground for testing hypotheses about the guns versus butter arguments. While Bullock and Firebaugh (1990) and Weede (1992) argue the positive effects of militaristic aspects on development, Arias (1989) found a negative effect between militaristic aspects and development.

Abu-Bader and Abu-Qarn (2003) focused on Egypt, Israel, and Syria for inquiring the effect of excessive use of public resources for military purposes. Their multivariate analysis for a period around 30 years shows a negative relationship between military spending and long-term economic

growth. Among other studies attempting to make sense of the relationship, Bowman's (2002) study on Latin America also showed a negative relationship between these two variables. Another noteworthy study done by Acemoglu and Yared (2010) is analysis of militarism and trade volume. They empirically found that during the period between 1990 and 2010, the countries that had increasing military expenditure, which is measured by the proxy indicators like military spending and size of the military, have performed poor in terms of the growth in trade volume.

One common feature of the majority of works is their methodological orientation. They all inquire for the existence of a correlational relationship between military expenditure and economic growth or related outcomes. The lack of consensus among them in terms of the existence of a significant relationship or the direction of it stems from several factors. Firstly, they use different samples of cases for their cross-national analyses. The trend is testing hypotheses with a sample derived from countries in a specific region such as Eastern Europe or Latin America. Since the quantitative methods generally ignore contextual differences between regions, contradictory results for bivariate or multivariate relationship are not rare. Secondly, their economic growth models differ and that in turn might affect the results obtained by using the same data. Thirdly, definitional differences or the choice of indicators might result in contradictory results, as well.

Apart from the empirical works mentioned above, a policy making perspective might provide further insights to understand the functioning of militarism and the effects it produces on political economic outcomes. Policy making is a complex process in modern states whether it takes place in a democratic or non-democratic ground. In highly institutionalized democracies, a certain policy is finalized most often as a result of a multitude of interactions between the government, bureaucracy and social actors. However, in non-democratic or semi-democratic contexts, this process is less constrained by these actors. In authoritarian MENA countries, priorities of security domain are privileged over others. The allocation of resources for the expenses of each policy domain in such a context is likely to cause inefficient outcomes in economic growth or equity.

In contexts where formal employment are limited and mostly concentrated in public sector, a citizen employed in a state office is by far more likely to get social security coverage. Since a higher level of military personnel means a higher level of public employees too, this aspect of militarism sometimes might contribute to welfare efforts provided by states themselves. Particularly, in the early phases of state formation, many people benefit from state's welfare provision through their entitlements in the military. For instance, Skocpol (1995) illustrates how hard conditions of war propel states to behave more generous for their citizens involved in war and how this behavior is institutionalized as citizen rights after the hard times had passed.

Some studies focusing on this specific issue generally choose social spending or a closely related phenomenon as the dependent variable. Henderson (1998) finds a negative association between military expenditure and poverty, but points out declined social welfare spending as a reason why military spending leads to this outcome. Tongur and Elveren (2012) focus on different welfare state regimes and inquire if there is any association between military spending and the type of the regime. Their findings indicate that the emergence of social democratic welfare states, which are known with their very high level of welfare efforts, are negatively affected by their high military expenditure.

The relationship between military spending and social spending is an important topic that is not touched upon sufficiently in the empirical literature. It is particularly important for regimes in their early formation phase and for those who suffer from the lack of democratic or rational legitimacy in general. This issue is left mostly to literature of state formation and political legitimacy. For some classical thinkers such as Thomas Hobbes and Max Weber, states are entitled with three basic functions as follows: Security, representation of people in the politics, and the provision of welfare (Schwarz, 2008).

The MENA countries usually fail to fulfill all of these functions sufficiently. For example, rentier states such as Saudi Arabia and United Arab Emirates are sufficiently good in terms of security and welfare, but they usually ignore representation function. To offset this deficiency, they sometimes resort to repression, but also try to increase their legitimacy through generous welfare provision that they finance by renting their natural resources out, and achieve to keep their weakness at sustainable levels. Authoritarian countries such as Egypt and Syria do not enjoy the excessive

resources and are not able to spend much on welfare provision. Therefore, they could not derive as much legitimacy as their resource abundant counterparts from the welfare function. They face a critical trade-off between their security and welfare budgets. These countries usually tend to prefer the former and channel excessive resources to military and police. This exacerbates their legitimacy crisis, but they tend to respond this situation by allocating more resources for security (Ardic, 2012).

## Welfare Distribution in the MENA Region

There is a growing body of social policy literature about the MENA region; however, they mostly concentrate on individual cases (see for example, Bayat, 2006; Jawad, 2009). This work with its comparative analysis would contribute to the literature by making researchers familiar with region-wide dynamics of social policy making and welfare distribution.

Contrary to the Social Democratic and Continental European welfare regimes, social policies in the MENA region have not been based on norms of social citizenship or rights of the workers. According to Marshall (1964), these social rights had been achieved largely by labor movements, and thus created a close relationship between class and social welfare. Welfare distribution in the MENA countries has been under influence of many domestic and external factors such as economic capacities of the states, ideological orientations of regimes, level of vulnerability to social upheavals, the size of public sector compared to private sector, or forces of globalization, which are among more significant ones. To a certain extent, the poor state of social policies in the region could be explained with these variables. Nevertheless, a study ignoring the phenomenon of militarism and a political feature that is more particular to this region will have a limited explanatory capacity. In many countries, nation state building and the formation of national identity, which are mostly achieved through populist and redistributive measures, are more direct and they explicit goals in countries such as Algeria, Egypt, Morocco, and Tunisia (Karshenas and Moghadam, 2006; 2009).

Globalization, the legitimation crises and religion are some of the important determinants of welfare distribution in the MENA region. Eco-

nomic liberalization programs that became popular around the world in the 1980s after the neoliberal turn have been very common in the region. Baylouny (2008) points out the contraction of welfare provision as a result of structural adjustment policies, but also the expansion of military and other security services in the case of Jordon. Prior to neoliberal reforms, social policies of the regime were important sources of political legitimation and they had a considerable base of support in the society. After these reforms, Baylouny (2008) argues, the military and people benefiting from this expansion have replaced the old base of support.

Another popular determinant is the effect of religion on welfare distribution. Islamic social movements constitute an important element of the social and political landscape of the region. Similar to political regimes, a significant source of support for them is welfare provision to poor people. Dean and Khan (1997), Jawad (2009), Jawad and Yakut-Cakar (2010) provide descriptions of religious dynamics of welfare provision in the region. This literature has developed mainly as a reaction to the dominant rentier state arguments in order to explain the welfare effort dynamics in the region. They mainly argue that rentier state framework cannot capture the complexity of welfare provision dynamics in the MENA region and the broader set of actors involved in the process of welfare (Jawad, 2009). They draw attention to non-state actors motivated by their religion to improve the welfare of poor in their societies. While welfare state literature does a good work in terms of expanding the scope of welfare studies, they fail to combine their cultural elements with political ones and to generate a more comprehensive framework that accounts for both political and nonpolitical dynamics of welfare provision in the region.

Another group of works consists of individual case studies. They generally employ a historical or cross-sectional perspective, and describe the problems of social policies in the selected countries. A comprehensive work on the social policy in Egypt analyses the changes took place in social policies from the period of Nasserist socialism to neoliberal transformation after 1990s (Bayat, 2006). Among other notable examples, there are more studies in the literature such as the studies on Tunisia conducted by Romdhane (2006), on Algeria by Layachi (2006), and on Morocco by Ennaji (2006), respectively. This work differs in terms of its interest in region-wide dynamics of welfare efforts, its emphasis on political factors, and its sys-

tematic comparative technique. While most of the studies offer particularistic explanation for each case, this study will attempt to make at least a modest generalization about the determinants of welfare distribution.

The search for a simple linear relationship between militarism and social welfare in the literature has produced contradictory results. This study differs from the dominant quantitative tradition in the literature, and attempts to bring a less ambitious explanation that is not generalizable to all contexts. In many MENA countries, along with limited economic capacities, nature of political regimes seems to be the most significant constraint on social policy making. The phenomenon of militarism that constitutes a significant pillar in most of these regimes is popularly cited among the foremost of those constraints. This qualitative study analyzes which combinations of militaristic aspects and some relevant contextual characteristics might lead to the size of welfare distribution.

## Data and Method

#### Cases

In this study, mainly the relationship between militaristic characteristics of the countries and their welfare efforts are being examined. For having a sufficiently homogenous set of cases in terms of contextual characteristics, it is better not to include the states, which have monarchical political economic structure. What monarchies have in common is the enormous income they derive from the export of oil and natural gas, and small populations compared to the rest of the region. Thanks to their excessive financial resources and their rentier political economic structures, they are able to implement very generous welfare policies over their relatively small populations. Therefore, they have a totally different welfare regime path compared to other countries in the region. Furthermore, some countries such as Iraq, Libya, Palestine, and Sudan do not collect or reveal data about their political economic performances, characteristics, or outcomes. Given these conditions, these four states also will not be included in the study. After excluding the Gulf Countries and these four states, eight states remain for conducting a comparative analysis. These countries are Algeria, Egypt, Jordan, Lebanon, Morocco, Syria, Tunisia, and Yemen, respectively.

When a deep attention is devoted exclusively to them, they exhibit a remarkable variation on the outcome of interest, namely the welfare distribution, and on the factors that might be relevant for the explanation of variations on the outcome. In general, all are militarist countries, but they vary in degree. The difference becomes more evident when the phenomenon of militarism is disintegrated into its components. These features make this sample of cases a convenient one for applying a comparative method.

## Data

This study benefits from various resources for measuring the aforementioned outcomes and relevant conditions towards them. For the outcome variables, namely the social expenditure as of central government expenditure and social security coverage, the data obtained from the International Labour Organization (ILO) will be utilized. Heritage Foundation's (2014) Index of Economic Freedom includes government spending as a variable, and it provides data about that indicator. The data for social security coverage are provided in the World Social Security Report 2010/11 published by the ILO.

The most renowned institution measuring the militarism indicator is the Stockholm International Peace Research Institute (SIPRI), and its data on military expenditure will be compared to the government expenditure data obtained from Heritage Foundation. For the condition variable of military recruitment, World Bank's (WB) indicator of armed personnel will be used as a percentage of total labor force (WB, 2014). Data for GDP per capita will be also provided by the WB. Government effectiveness is an indicator exclusively measured by the World Bank as part of its Worldwide Governance Indicators project (WB, 2014). Public sector employment data will be borrowed from a working paper published by the IMF (Behar and Mok, 2013). It is given as a ratio of private sector employment, but since the two makes up the total employment, it is possible to calculate the public employment as a percentage of total employment. Lastly, data on the foreign military aid variable will be obtained from the U.S. Department of State (U.S. Department State, 2014).

## Technique

The analysis is performed with a systematic method of inference making called the fuzzy set Qualitative Comparative Analysis (fsQCA). It is a theoretical and qualitative technique, and therefore it is based on a configurational understanding of causation. Conclusions of the study will put forward which configurations lead to good or poor welfare distribution efforts.

QCA systematizes the context dependent and configurational causality of the qualitative research with the tools borrowed from mathematics and logic. It bears the word qualitative, because it is a case oriented method. Its final conclusion does not give information about net effects of individual variables on dependent variable. However, unlike the traditional qualitative methods, its technical aspects enable to include more than a couple of cases into a comparative analysis. This feature also helps to achieve modest generalization across cases, which is not much possible in the traditional case study methods.

As its name suggests, it is built on fuzzy logic and fuzzy set theory, which enables to go beyond the binary nature of classical logic and crisp sets. In fuzzy sets, an object does not have to be either a full member or full non-member of a set, but it could have a degree of membership and non-membership to it. When this is applied to QCA, a qualitative state could be observed with a degree of presence and absence in a case, and the case could have a degree of membership or non-membership to the set defined by a certain condition. The state of full membership and full non-membership are respectively coded as 1 and 0, and the values between these two extremes are assigned to the objects or cases that are neither full member nor full non-member of a set.<sup>3</sup> The subset relationship between fuzzy sets is the critical property for establishing a causal relationship between a configuration, which corresponds to the intersection set of conditions making it up, and the set defined by the outcome. When a case's membership score to the former becomes lower than the latter, a subset relationship is con-

<sup>3</sup> For example, if fuzzy logic is applied to the set of high income countries, a country such as Mexico will be less member of this set than the United States. While the U.S. would have a fuzzy set membership score close to 1, the Mexico would probably have a score around 0.5, which denotes the state of ambiguity between the two extremes.

stituted and if this relationship holds consistently true across cases, then a causal relationship could be defined. In fsQCA, there are some confidence measures for reliability of the causal relationship. Consistency and coverage measures are the two ways introduced by Ragin (1987) for achieving a greater level of sophistication in fsQCA analysis. The consistency measure indicates how consistently the fuzzy subset relationship is observed across cases, and the coverage measure indicates in what portion of a sample of cases a certain consistent relationship is observed.

## Variables

Welfare distribution can be broadly defined as any policy and programs implemented by countries to increase the well-being of their society through providing benefits and securing them against social risks. However, the scope and extent of the definition is disputed in the literature and there is not a standard aggregate measure agreed upon by researchers. There are some indicators such as social expenditure and social security coverage that are popularly used to estimate the level and quality of welfare distribution. In this study, two fsQCA analyses will be conducted. First one is with the social expenditure as the outcome variable, and the second is with the social security coverage as the outcome variable, respectively.

The fuzzy set for social expenditures as a percentage of the central government spending will be defined as high social spending, and the country having the highest raw value for this variable will get a fuzzy score close to 1, and the country having the lowest raw value will get a fuzzy score close to 0. Therefore, this analysis will take the relative difference among them into account, but not the differences relative to a universal standard. Another measure for estimating the level of welfare distribution is the social security coverage. It gives information about how many of the ten branches<sup>4</sup> of social security are covered by a state. Based on this measure, countries are distributed into four categories ranging from com-

<sup>4</sup> These ten branches defined by the ILO are as follows: Protection in sickness, medical care, income support in the form of cash sickness benefits, protection in disability, protection in old age, protection of survivors in case of a death of a breadwinner, protection in maternity, protection in responsibility for the maintenance of children, protection in unemployment, protection in case of employment injury, general protection against poverty and social exclusion.

prehensive social security to very limited statutory provision. In this study, a case belonging to the highest category will get a fuzzy score of 0.95, and it will descend to 0.65, 0.35 and 0.05, respectively, for lower categories.

Explanatory variables are presented in two groups: Those related with the main focus of the study, namely militarism, and contextual variables that might be relevant for the qualitative variation of the outcome. Militarism can be measured as share of military expenditure in the central government expenditure. The country having the highest ratio will get a fuzzy score of 0.95, while the lowest one will get a score of 0.05, respectively, and the other countries will score between these two extremes. Other militaristic aspects included in this study are the high ratio of military personnel in total employment, and a highly interdependent relationship between the military elite and central government regarding their survival. Similar to previous assigned scores of variables, for these variables, the country having the highest ratio will get a fuzzy score of 0.95, while the lowest one will get a score of 0.05, respectively, and the other countries will score between these two extremes. In addition to these outcome and explanatory variables, there are also some contextual variables as follows: GDP per capita, government effectiveness, public sector employment, foreign military aid.

Except for the condition variable of military government relationship (milgov) and the outcome variable of social security coverage (soccov), the data about any condition or outcome variable in this study is not available in the fuzzified form. Hence, firstly the raw data and details about their measurements are presented and then the table including fuzzified version of the data is constructed. Table 1 includes the raw data for 8 cases (countries), 7 conditions (independent variables), and 2 outcomes (dependent variables), respectively. As long as the raw data are available, values have been measured as average of five years from 2006 to 2010. This interval covers a time period before the eruption of recent upheavals that created a new political context. For other variables, the values given in Table 1 belong to years for which data were available within this period.

Table 1: Main Characteristics of the Selected MENA Countries

Country	GDP per capita (gdppc) <sup>1</sup>	Government effectiveness (govefc)	Public sector employment (pubsec) <sup>2</sup>	Foreign aid (foraid) <sup>3</sup>	Military expenditure (milexp) <sup>4</sup>	Military personnel (milper) <sup>5</sup>	Military government relationship (milgov) <sup>6</sup>	Social expenditure (socexp) <sup>7</sup>	Social security coverage (soccov) <sup>8</sup>
Algeria	4028	-0.55	33	0	12.59	2.98	0.7	24.09	0.9
Egypt	2130	-0.37	28	1300	6.86	3.44	0.6	38.84	0.7
Jordan	3587	0.20	24	300	13.69	7.12	0.7	33.54	0.1
Lebanon	7039	-0.36	16	100	12.74	5.28	0.4	3.27	0.7
Morocco	2611	-0.13	9	9	14.72	2.14	0.4	8.94	0.7
Syria	1919	-0.70	29	0	17.08	7.00	0.9	8.63	0.1
Tunisia	3976	0.40	10	15	5.07	1.28	0.2	38.06	0.9
Yemen	1236	-0.95	12	0	9.31	2.30	0.4	8.46	0.3

#### Notes:

- GDP per capita values present the average of five years from 2006 to 2010 and they are in current U.S Dollar.
- For some cases, public sector employment data does not belong to 2010, but to years close to 2010.
- Foreign military aid is measured in millions of U.S. dollars and belongs to 2010.
- <sup>4</sup> Military expenditure are given as a percentage of central government expenditure.
- Military personnel is given as a percentage of the total employment.
- 6 *milgov* is already in the fuzzified form, because its values are not assigned based on a pre-measured raw data.
- Social expenditure as of government expenditure data belongs to the year 2011.
- <sup>8</sup> *soccov* is already in the fuzzified form, because its values are not assigned based on a pre-measured raw data.

After constructing Table 1 and giving main characteristics of the selected countries, the next step is fuzzifiying these values, so that the fsQ-CA technique is applied. To convert these values into fuzzy scores, the *calibrate* operation built into the software is used.

In the below, functional expression, the input "name" corresponds to the label of variable, and the following inputs  $x_1$ ,  $x_2$  and  $x_3$  correspond to the raw data values that respectively determines the upper bound of the membership status, the ambiguous state for membership, and the lower bound of the membership status.

## calibrate (name, $x_1, x_2, x_3$ )

To give an example, the fuzzification of the values for government effectiveness variable is conducted as in the functional expression at below.

Firstly, the variable labelled *govefc* is inserted, and then 1.5, 0, and -1.5, respectively, that are the values representing the upper bound, state of ambiguity and the lower bound for membership, are replaced with  $x_1$ ,  $x_2$ , and  $x_3$ . After inserting these values, the function produces fuzzified version of the raw data as the output.

## calibrate (govefect, 1,5,0,-1,5)

In Table 2, the output of the above function for all condition and outcome variables is presented. Since QCA is a method based on set theory, conditions and outcomes are defined as sets, and their defining property is made up by a theoretically determined qualitative state. The result of the analysis associates certain combinations of these qualitative states with outcomes that represent a certain qualitative state too. For instance, the variable *pubsec* in Table 2 represents the condition of high public sector employment within the total employment. A case's degree of membership to this set is determined by the degree it displays the condition of high public sector employment. Therefore, as the value of a case for the *pubsec* increases, the degree of public sector employment observed in that case also increases. If the case was defined as low level of public sector employment, then it would be vice versa. This logic applies to other variables given in Table 2.

Table 2: Fuzzy Membership Scores of Cases to Conditions and Outcomes

Country	GDP per capita (gdppc)		Public sector employment (pubsec)	Foreign aid (foraid)	Military expenditure (milexp)	Military personnel (milper)	Military government relationship (milgov)	Social expenditure (socexp)	Social security coverage (soccov)
Algeria	0.45	0.25	0.95	0.05	0.62	0.33	0.7	0.62	0.95
Egypt	0.12	0.32	0.85	0.95	0.11	0.39	0.6	0.94	0.65
Jordan	0.35	0.6	0.68	0.23	0.73	0.93	0.7	0.88	0.05
Lebanon	0.93	0.33	0.22	0.08	0.64	0.72	0.4	0.05	0.65
Morocco	0.18	0.44	0.05	0.05	0.82	0.23	0.4	0.12	0.65
Syria	0.10	0.20	0.88	0.05	0.93	0.93	0.9	0.11	0.05
Tunisia	0.44	0.69	0.06	0.05	0.05	0.15	0.2	0.94	0.95
Yemen	0.06	0.13	0.10	0.05	0.27	0.25	0.4	0.11	0.35

## Hypotheses

This study offers three hypotheses about the relationship between militarism and welfare distribution in the MENA region. Firstly, a high level of military spending as of central government spending has a negative relationship with welfare distribution of governments. Allocation of excessive public resources to military expenses narrows the share of budget available for welfare expenses. Secondly, the size of military personnel relative to the size of total employment primarily has a constraining effect on welfare distribution, but in some cases it might have a contributory effect. Out of the risks, military profession poses to human life and well-being and military personnel are provided with comprehensive welfare programs. When the ratio of military personnel to population is significantly high, more people benefits from the welfare programs provided by military, and that increases the legitimacy of governments' military spending policies, which in turn makes them less in need of deriving political legitimacy through social spending on the rest of the society. Finally, a praetorian relationship between the military and the government negatively affects latter's welfare programs. Military absorbs extravagant public resources; in turn it provides security to the regime against domestic and external threats. These are the characteristics about armies that are present in the MENA countries with different configurations.

#### Results

The output in Table 3 includes the intermediate solution for the model having high social security expenditure as the outcome. The counterfactual assumptions that are benefited for the inclusion of logical remainders are given in the table. Based on these assumptions, the intermediate solution indicates three paths to the outcome of high social expenditure in the MENA region. The frequency cutoff was set at 1, since the number of empirical cases is limited. It has a satisfactory level of consistency with 0.866071, which describes the extent of causal paths' membership to the set of outcome. It is measured in a scale ranging from 0 to 1. While the lower bound denotes full non-membership, the upper bound denotes full membership. A value close to 1 is acceptable for establishing causal connection between configurations and outcome.

Table 3: Analysis of Causal Paths to High Social Expenditure\*

	raw coverage	unique coverage	consistency			
milper * PUBSEC	0.432361	0.175066	0.881081			
PUBSEC * GOVEFC	0.408488	0.151194	0.855555			
milgov * milper *	0.445623	0.188329	0.844221			
milexp * GOVEFC						
solution coverage: 0.771883						
solution consistency: 0.866071						
$* Counterfactual \ assumptions \ are \ milgov \ (absent), milexp \ (absent), FORAID \ (present), GOVEFC \ (present), GDPPC \ (present).$						

The first combination associates high public sector employment and low level of armed forces personnel as of total employment with high social security spending. This result is in line with the hypothesized effects of these two conditions. Based on the membership scores of cases to the set defined by the intersection of these two conditions, Algeria and Egypt are the two cases displaying this configuration. They have membership scores greater than the state of ambiguity represented by 0.5, or in other words, their scores are greater than the most common threshold used to determine membership status of a case to a set. The substantive meaning of this causal path is that the similar outcome in these two cases could be explained with the combination of high public sector employment rate and low armed forces personnel rate. However, the rate of military expenditure and the nature of civil military relations are not relevant to this outcome.

The second result does not require the presence of any militaristic aspect for the emergence of the outcome, but the third one includes all aspects of militarism and associates their absence with the outcome of high social expenditure. While the second configuration is displayed with a degree of membership greater than 0.5 by the cases of Jordan and Tunisia, the third one is only observed in the case of Tunisia. Since the two combinations have different numbers of conditions, Tunisia's membership in two different combinations has become possible. The similar outcome in Jordan and Tunisia could be explained with high government effectiveness and high public sector employment.

Overall, this solution suggest contextual variables such as GDP per capita and foreign military aid do not lead to a qualitative difference in the outcome variable of social expenditure. On the other hand, the other five variables combine in three ways towards the emergence of high social expenditure; or in other words, good welfare distributions in regional standards. Effective use of resources and good governance, measured as government effectiveness, seems to be an important predictor of high social spending.

The solution for the second model, *soccov* as the outcome variable, is presented in Table 4. This solution with a frequency cutoff of 1 and a 0.988235 degree of consistency indicates two paths to the outcome of comprehensive social security coverage. The fsQCA analysis of the model with *soccov* apparently has greater level of explanatory capability due to the higher level of consistency and having a more parsimonious expression as the intermediate solution.

In this solution, only three out of seven condition variables are found to be relevant for emergence of the outcome. The first configuration specifies the absence of a praetorian relationship (*milgov*) combined with the absence of high level of military personnel (*milper*), and the second one combines the absence of *milper* with the presence of high public sector employment.

Table 4: Analysis of Causal Paths to Comprehensive Social Security Coverage\*

	raw coverage	unique coverage	consistency				
milgov * milper	0.646512	0.360465	0.985816				
milper * PUBSEC	0.420930	0.134884	0.978378				
solution coverage: 0.781395							
solution consistency: 0.988235							
* Counterfactual assumptions are milgov (absent), milexp (absent), FORAID (present), GOVEFC (present), GDPPC (present).							

Morocco and Tunisia are two countries having a degree of membership greater than 0.5 to the first one, and the second one is observed with a degree of membership greater than 0.5 in the cases of Algeria and Egypt. Similar to the solution for the first model, this one does not find the

contextual variables such as GDP per capita and foreign aid as relevant to the outcome, but additionally the government effectiveness and the military expenditure are added to the array of these irrelevant variables. Based on this solution, it could be argued that high public sector employment and low degree of militaristic aspects enable these MENA countries, which have limited economic capacity, to allocate more resources for welfare programs, as measured by social security coverage.

In a nutshell, the fsQCA analysis of the data conducted with two different outcome variables supports the hypotheses that associate militarism with poor welfare distribution, and more generally with poor political economic outcomes. The configurations associated with good welfare distribution given in Table 3 and Table 4 include the absence of militaristic aspects, and those associated with poor welfare distribution include the presence of these aspects. In conclusion, the absence or presence of militaristic aspects is found to be relevant for a qualitative difference in the outcome of interest in line with the hypothesized relationship.

However, out of several reasons, the results presented here should be treated as suggestive evidence for the negative relationship between militarism and welfare efforts. Firstly, the conversion of the raw data values into fuzzy set membership scores was conducted based on regional standards, that is, the scores reflect the relative states of cases for each condition and outcome variables. Therefore, this explanation could not be valid for all regional contexts. For example, GDP would probably be a significant factor to explain the qualitative variation across all countries in the world, but it is irrelevant when the focus is narrowed to the MENA context where there is not much variation in terms of economic capacity. Secondly, the designated causal paths to the outcomes were in such parsimonious level thanks to the inclusion of the logical remainders by making counterfactual assumptions about some condition variables. This is a common practice in qualitative tradition and in QCA methods, and is conducted on a theoretical or substantive basis. Finally, a challenging task faced by researchers of the MENA region is the lack or flaws of the data. Countries do not reveal their information for being able to measure many political, economic or social indicators, and institutions resort to estimations based on their models. However, sometimes this practice might lead to unreasonable measurements as mentioned previously in this chapter for Lebanon's social

expenditure level. Despite these limitations, the analysis offers an exploratory introduction to the guns vs. butters tradeoff between financing the militarism and welfare efforts. It might serve as a preliminary examination before conducting a more sophisticated study that is supported with more empirical cases and more reliable data.

A specific comparison of Egypt, Tunisia, and Syria might help to achieve a better understanding of the relationship. Syria is the case having the worst outcome in terms of welfare efforts, and Tunisia is the one having the best. While Syria allocated 8.6% of its central government budget on social spending, this value was 38.1% for Tunisia, respectively, in 2011. Additionally, social security coverage in Syria is qualified as very limited statutory coverage, but Tunisia has a comprehensive coverage (see Table 1). This strong contrast in outcome variables are matched with a strong contrast in many condition variables. Egypt shares some conditional characteristics with Syria and Tunisia, but it displays a far better outcome than Syria both in terms of social expenditure and social security coverage.

## Conclusion

Social policies in the MENA region have been one of the mostly suffering domains from the overburden of excessive military mobilization. The only way to have access to social security and welfare benefits has been to be employed by a public institution for many people. In the MENA region, states recruit significantly higher amount of people compared to the developed world, but still most of the people work informally in the private sector. Besides, military expenditure on high-tech equipment is excessive, but these countries generally lack domestic military industries that could channel military expenditure's positive effect on economic growth. Sometimes they get external financial aid for their military mobilizations, but the problems of ineffective public administration and low degree of accountability decreases the likeliness of deriving significantly positive contributions to lower the military's burden on economy in general, and more specifically on social policy expenditures. These contextual characteristics render militarism, which negatively affect welfare distribution of countries, and ultimately social development of societies.

This study has dealt with the relationship of conditions having to do with the militaristic characteristics of states and welfare distribution. It also attempted to reveal militaristic dynamics of welfare distribution in the MENA region. Three aspects of militarism were determined as condition variables, and four contextual political economic characteristics accompanied them in the analysis. The two outcome variables of social expenditure as of central government spending and social security coverage have been chosen as indicators of welfare distribution. Results of the fsQCA analysis indicated several paths to welfare distribution, and the combinations of conditions mostly included militaristic aspects like high military expenditure, high level of armed forces personnel and praetorian relationship between government and military. The inclusion of logical remainders to obtain modestly generalizable functional expression of the causal relationship eliminated some contextual variables such as GDP per capita, government effectiveness and foreign aid. This result does not mean that these factors do not have any effect on the outcomes analyzed in this study, but it means that they are not significant for the explanation of relative performances of the eight countries in terms of welfare distribution. This qualitative explanation for the variation of welfare distribution among some MENA countries analyzed here (Algeria, Egypt, Jordan, Lebanon, Morocco, Syria, Tunisia, and Yemen) does not provide a universal explanation that could be applied to another context, but it is significant for the specified context only. However, with the same methodology, but with a different causal model, a more universal explanation is possible.

Future studies could use this study as an introduction to the issue of militarism and welfare efforts in the MENA region. Sophisticated quantitative works inquiring net effects of political characteristics of states on welfare distribution could benefit from it for choosing the variables to include in their causal models. Further qualitative and quantitative researches are needed not only to understand the relationship between militarism and welfare distribution, but also to analyze welfare distribution in the MENA region as well as other regions.

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