

## **The Zakat management structure and economic development**

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### **Abstract**

This study examines the impact of the management structure of Zakat (Zakat's investment, Zakat collected from enterprises, and the number of Zakat beneficiaries) on Economic development social assistance, official development assistance. A sample of 8 countries from the Middle East and the North Africa (MENA) was examined during the period 2011-2014 to achieve our goal. The study found that there is a significant positive relationship between the social assistance, zakat collected from enterprises, the number of beneficiaries and the Gross Domestic Product.

**Subject Areas:** Economics

**Keywords:** Domestic Product; zakat; Social assistance; MENA; Investment.

### **1. Introduction**

Islam is one of the monotheistic cults whose numbers have been growing continuously for almost half a century, with a community representing more than one fifth of the world's population. Indeed, the last fifty years, which mark the beginning of the fifteenth century of the Hegira era, have witnessed a genuine desire to return to fundamental Islamic values in many parts of the Muslim world. However, despite the extent of Islam throughout the world, the vast majority of non-Islamic societies are largely unaware of this much talked-about faith. At best, their knowledge is limited to broad concepts, and at worst, their ignorance contributes to the prejudice against it. In such a climate of hostility, largely fuelled by media pressure, it is therefore not surprising that the emergence of a new financial system in the Muslim world has remained totally unknown to the Western public.

Abdelrahmen Lahlou (2015) [1] argues that in Muslim countries around the world, however, it is conventional bankers who are on the defensive as Islamic institutions claim a growing share of deposits. Islamic banking is a reality that regulators and competitors can no longer ignore.

Zakat is more than just an individual religious duty; it is a fundamental institution of the Islamic State that must comply with certain rules, especially in its collection and distribution. In the Qur'an, God not only imposes zakat and its collection by the Islamic State, but also specifies to whom it should be redistributed. Certain rules for the collection and distribution of zakat

The Nissâb is the minimum threshold of wealth from which the Zakât Al Maal is obligatory. If the value of the goods in your possession for 1 year exceeds the Nissâb, then you must pay 2.5% of this amount. The Nissab is pegged to the price of gold or silver. If the majority of schools base themselves on the price of gold to determine the value of the Nissâb, i.e. the equivalent of 85 grams of gold, others refer to the price of silver, i.e. the equivalent of 595 grams of silver. When to pay Zakat Al Maal?

As soon as your wealth exceeds the Nissâb. You can then choose the date of payment of your Zakât Al Maal. Some people choose the beginning of the Hijri year, others the end of Ramadan or Eid al Adha. It is advisable to keep a list of the amounts paid during the year.

In this research, we attempt to describe the relationships between variables and test them for commitment when tested against the reality of our sample. Thus, the central question of our research will be: How does the structure of Zakat management influence Gross Domestic Product?

The objective of this research is then to explain the relationship between the Zakat management structure (Zakat investment, Zakat collected from businesses, social assistance, official development assistance, and the number of Zakat beneficiaries) and economic development.

In the economic literature, several theories exist on zakat, its definition, distribution, collection and management. We will expose the most relevant ones. In this part we will focus on the details of zakat and its effects on the world and the economy.

Review of the literature and Hypotheses

## 2. The relationship between investment and GDP:

### 2.1. Modern forms of investment in zakat:

Investment is part of the aggregate demand that changes its value very quickly and very often. Investment can be defined as a financial cost (money) used for the actual formation of capital (buildings, machines ...).

Traditionally, zakat is collected either formally or informally. The formal way means that zakat is collected by official institutions recognized by the state. At the time of Caliph Umar ibn al-Khattab, zakat was collected by the Islamic government's treasury (Bayt al-mal) and then allocated to several areas (grants for the poor and needy, family allowances, etc.). Nowadays, zakat is collected by public social banks or by Islamic banks. The latter have a social solidarity service whose role is to collect zakat and redistribute it to enable the realization of development projects, such as building hospitals, contributing to the equipment of universities and schools, or to provide the poor with the means to make their pilgrimage journey. These banks include the Nasser Social Bank in Egypt and the Faisal Islamic Bank. On the other hand, the informal way is to pay zakat to trusted individuals who are responsible for redistributing it. Indeed, many doubt the efficiency and fairness of the public sector's use of zakat money while trusted individuals are closer to the needy and therefore can better know their needs. (Abdelkhalek, 2013) [2]

Finance at the service of the economy favoring the partnership relationship between savers and investors. This so-called ethical, participatory or socially responsible finance, however, remains a finance, which aims above all the profit and creation of wealth through the financing of the economy. (El Marzouki and Rouijel, 2018) [3]

In this regard, there are modern forms of zakat management that are not part of the public sector but have the technical and administrative qualities to invest and grow zakat well. Several Muslim-majority countries (United Arab Emirates, Qatar, Saudi Arabia, Algeria, Jordan, etc.) have established **zakat funds**. These are religious and social institutions that work under the supervision of the government to guarantee their legal coverage. Their objective is to collect the zakat money to spend it for the benefit of poor families through a quarterly, half-yearly or annual allocation. They also use these resources to finance investment projects for the poor and to acquire equipment for small businesses (Zaïd, A., Abdelkhalek, T., Ouelhazi, Z., 2013) [4].

After several basic principles of zakat distribution, one can make investments. Zakat investment is an activity that uses zakat for the purpose of increasing zakat. (Ahmad and Shamsiah Mohamad, 2012) [5]

There is a positive relationship between GDP growth and investment growth (Jean Gadrey, 2010) [6]. For a better understanding of the Chinese growth process, it seems important to consider the reciprocal effect between foreign investment flows and economic growth. This is the originality of our study which, starting from the statistical observation of the existence of an interrelation between foreign investment and the growth of gross domestic product (GDP) (Sylvie Demurge, 2012) [7]

This analysis concludes that there is a positive relationship between Zakat investment and GDP.

H1: Zakat investment has a positive and significant impact on GDP

## 2.2. The relationship between social assistance and GDP

The major role of Zakat as one of the solutions of soaring phenomena of unemployment and poverty in Muslim countries and this, because of its properties through the diversity of its collection sources on one hand, and spending on the other side /hand .So Zakat is a whole system adaptable to the times and places, as well as the current requirements. (Sofien and abd, 2020) [8]

One of the first conditions for obtaining departmental social assistance, regardless of the type of assistance, is that the applicant's place of residence must be in the department where the application is submitted. According to the law, the place where the applicant has resided for three months without interruption is the place of residence. The status of emergency residence is lost in case of voluntary absence from the place of residence for 3 consecutive months. Voluntary absences do not include hospital stays,

stays in a medical social institution, or placements (Le Figaro Premium, 2015) [9]

For some benefits, such as social assistance to the elderly for accommodation, a contribution from the obligated persons (children, sons-in-law, daughters-in-law, or even grandchildren in some departments) is required. All persons who have been placed in child welfare care for 36 months during the first 12 years of their life may be exempted from this obligation (Berthet, 2002) [10].

Cash benefits may be paid to different types of households for a variety of reasons, such as because people are retired, disabled, unemployed, or have no source of income, to help households with the costs of raising children, or to help households that interrupt their work to care for very young children or sick and/or elderly relatives. Receiving benefits can therefore depend on various situations and increase household GDP, it does not necessarily mean that households receiving these benefits are poor (Maxime Ladaïque, 2011) [11].

Therefore, the following hypothesis is formulated:

H2: Social assistance has a positive and significant impact on GDP

## 2.3. The relationship between ODA and GDP

Inequality of conditions leads to inequality of wealth, but inequality of wealth does not lead to inequality of needs" (Anthelme Brillat-Savarin, 2007) [12]. Hunger, lack of health care, illiteracy, not having the opportunity to work, and lack of freedom are all representative of poverty according to the World Bank. (Cling, 2006) [13].

In general, poverty has declined over the years. But inequalities between countries have increased as has the concentration of poverty in certain regions (Heshmati, 2007) [14].

Generally speaking, Official Development Assistance (ODA) is a transfer of resources from industrialized countries to poor countries for the purpose of development. More concretely, it is a precise statistical concept created to measure the cost borne by donors and not the resources actually transferred to developing countries. The term ODA was officially defined by the Development Assistance Committee (DAC) in 1969. The DAC wanted to have an international instrument to measure the efforts made by its member states to support the development of the world's poorest countries. Since then, the DAC has been collecting and analyzing data provided by member countries.

Humanitarian aid aims to provide emergency assistance to populations that are victims of natural or technological disasters, as well as to victims of conflicts (refugees, displaced persons). (Lechevallier et al. 2007) [15]

The money spent on zakat by believers moves from the hands of a socio-professional category (CSP) that reaches or exceeds the basic consumption threshold to the hands of a CSP that is characterized by a strong propensity to consume basic commodities. It is important to note that the payment of zakat is driven by faith and conviction, as the motivating element is the search for purification of the soul and possessions. It is not an economic decree of positive law with a narrow economic focus. (Lahlou, 2015) [16]

The eight categories of zakat beneficiaries are the priorities of Muslim society at the time of revelation, and reveal the predominance of social spending, represented by the poor, the destitute, the indebted and the destitute travelers, in addition to an accessory category that are the agents of collection and redistribution.

The increase in public development aid in the form of investments followed by the donor countries of the aid, gives the right to each individual to have access to employment and therefore to an income which results in an increase in the GDP and at the same time reduction of poverty (Olivier Ray, 2011) [17].

### **This suggests our hypothesis:**

H3: ODA has a positive and significant impact on GDP

#### **2.4. The relationship between CZE and GDP**

CZE is a novel idea in Islamic history, the adoption of which requires a number of factors that can be positive or negative. Previous research has shown that the adoption of innovation is influenced by many factors. In our own context, we want to see what the effects of all these latent variables were on the adoption of CZE in Malaysia. (Guo and Barnes, 2007) [18]

In Muslim minority countries, the base is not wide enough, so zakat money paid by the subjugated in rich Muslim countries is used because generally not all zakat can be spent in their own countries, due to the lack of poor and deprived population: transfers are made through international associations (Lahlou, 2015) [16].

The collection and distribution of Zakat funds should be a continuous improvement. Zakat fund is an important source of funding for the country, as it provides aid and generates and directs the economic activities of the country by increasing each purchasing power and GDP of households. (Muhammad Firdaus et al, 2012) [19]

So our hypothesis will be like the following:

H4: The CZE has a positive and significant impact on GDP

#### **2.5. The relationship between the number of beneficiaries and GDP**

Allah says: "It is We who distribute among them their sustenance in this world and raise them in ranks one above the other so that among them some exploit others". We can deduce that the collected Zakat is very useful and necessary for the welfare of individuals, the societies in which they live and the Muslim community as a whole, the proper exploitation of the collected Zakat ensures a deterioration of poverty and at the same time increase of beneficiaries of Zakat not only individuals through the increase of GDP, but also failed companies, sectors such as the construction of schools and the minimization of illiteracy rate. (M. Kahf, 1993) [20]

The potential for using zakat to reduce poverty is less effective in countries with low GDP per capita and large numbers of poor people. Institutions can play an important role, if the number and size of people involved in social protection activities can be increased. (Bashir Ali Khallat, 2003) [21]

The type of beneficiaries and the programs to fight poverty are discussed. The payment of zakat is a solution to solve the problems faced by the poor. (Habib Ahmed, 2004) [22]

H5: The number of beneficiaries has a positive and significant impact on GDP

Research model:

The objective of our research was to test, empirically, the effect of Zakat management structure on GDP. The sample of 8 countries from the Middle East and the North Africa (MENA) was examined during the period 2011-2014 to achieve our goal To achieve this objective, we will test this model:

#### Equation 1

$$GDP = \beta_1 I_{it} + \beta_2 AS_{it} + \beta_3 APD_{it} + \beta_4 ZC_{it} + \beta_5 Nbr B_{it} + \beta_6 Nbr h_{it} + \mu_{it} \quad \text{With}$$

I: Investment

AS: social assistance

ODA: official development assistance

ZC: Zakat collected

Nbr B: number of beneficiaries

Nbr h: number of inhabitants

### 3. Result and interpretation

In this section, we will first check the underlying conditions of the regression with the variables. Then, our data will be successively processed in a univariate and a multivariate analysis phase.

#### 3.1. Descriptive statistics and correlation analysis

##### 3.1.1. Correlation analysis of variables

Multi-linearity occurs when there is a perfect or near perfect linear relationship between two or more explanatory variables in the model. In this situation, it is not possible to measure the separate impact of each explanatory variable on the variable being explained. Multi-linearity reflects data problems rather than model problems. It usually appears when there is little variation in the variables within the sample.

**Table 1:Correlation test between variables, Pearson correlation matrix**

	Invest MD	AS	AP D	ZC	Nbr B	Nbr H
Inve st MU SD	1.0000					
AS	0.4730	1.0000				
AP D	0.8642	0.3276	1.0000			
ZC	0.7038	0.2682	0.7712	1.0000		
Nbr B	0.7566	0.2190	0.6886	0.3132	1.0000	
N br H	0.0989	0.2629	0.1029	-0.0459	0.0882	1.0000

Examination of the Persian correlation coefficient in the table above shows that there is no strong and significant correlation between the independent variables ZC, AS, and Nbr B.

Several researchers argue that there is no correlation when the threshold is less than 0.5 namely Godard (2001) [23], Akrou (2010) [24], and Valen E. Johnson (2013) [25]. With the exception of the correlation between investment and the other variables. This means that we did not introduce the variables that have a strong correlation in the same model. This does not require the use of an additional multiple linear regression model for the other independent variables.

### 3.1.2. Descriptive statistics

In this step we will present the descriptive statistics for the independent variables studied, and we will use the correlation matrix to analyze the effect of each explanatory variable on the other.

**Table 2: Descriptive statistics of continuous explanatory variables**

Variable	O bs	Mean	Std.De v.	Min	Max
Dependent variable					
GDP	32	3.7178 78	2.7713 33	- 2.2147 03	9.9589 33
Independent variables					
InvestMU SD	32	285.02 03	138.71 3	98.128	592.33
AS	32	3.5524 33	2.1900 73	0 .09897	8.8624
APD	32	6.2606 25	5.2746 65	0	18.258
ZC	32	130.52 42	60. 32225	26.328	240.05 8
Nbr B	32	5512.7 5	2670.4 16	821	9632
Control variable					
Nbr H	32	54.654 16	78.503 77	1.293	252.86 1

- \*Mean: average of observations
- \*Std.Dev: standard deviation of observations
- \*Min: minimum value of observations
- \*Max: maximum value of observations

The statistical results from **Table 2** on the descriptive statistics of the variables in our sample during the years 2011-2014.

**\*\*The independent or explanatory variables:**

**Investment:**

The calculated amount of investment in the countries of our sample is an average of 285 million dollars, with a maximum of 592 million dollars, which indicates that the amount of investment is quite high in some countries of our study sample, despite the existence of a minimum of 98 million dollars.

The Persian correlation coefficient suggests that there is no association between this variable and the other independent variables.

**Social Assistance:**

The figure of social assistance in our sample has an average equal to 3.55, a minimum of 0.09, and a maximum of 8.86. There is a difference between the figures of social assistance in the countries in our sample.

Official development assistance:

The amount of donations under the heading of official development assistance by the countries in our sample is on average 6.25, with a maximum of 18.26, and a minimum of zero. So in our sample there is one or more countries are not able to give official development assistance as Sudan, at the same time the maximum of official development assistance is 18.26 this amount is quite high in Saudi Arabia.

The correlation between this variable and the other independent variables by the Persen coefficient reflects that there is a strong correlation.

The Zakat collected from the Companies:

The amount of Zakat collected from companies in each country in our sample averages 130, with a minimum of 26 and a maximum of 240. The amount of Zakat collected is quite high in Saudi Arabia and Malaysia.

According to the Persian correlation the coefficient suggests a positive association between this variable and the other independent variables.

The number of Zakat beneficiaries:

The average number of Zakat beneficiaries is 5512 persons and/or organizations and/or companies and/or institutions, the minimum number of beneficiaries is 821 persons and the maximum 9632, by this last number we notice that there are many beneficiaries so the collected Zakat solve problems of poverty, unemployment, and investment.

**\*\*Control Variable:**

Number of inhabitants:

The average number of inhabitants in the countries of our sample is 54, the minimum is 1, and the maximum 252.

## **3.2. Global model estimation and result interpretation:**

### **3.2.1. Test of heteroscedasticity: Breush-Pagan test**

Many tests can detect heteroscedasticity, among which we can mention the Breuch-Pagan test and the White test (1980). These tests allow us to check whether the square of the residuals can be explained by the explanatory variables of the model. If this is the case, there is heteroscedasticity. Heteroscedasticity is a situation frequently encountered in the data, so it is important to know how to detect and correct it. Indeed, to test the heteroscedasticity in our model, we will use the Breush-Pagan test.

The objective of this test is to verify in the framework of panel data the existence of a heteroscedasticity problem or not.

H0: no heteroscedasticity in our model;

H1: Presence of heteroscedasticity in our model.

If  $(\text{Prob} > \chi^2) > 5\%$  threshold then we accept H0



Referring to the Breush-Pagan test for heteroscedasticity. According to **Table 3**, the Prob>chi2= 0.088, which is greater than 5%, the results of this test allow us to accept the null hypothesis so there is no problem of heteroscedasticity. We then use the ordinary least squares (OLS) method.

As a result, and after checking the assumptions for the application of simple linear regression, we can conclude that the ordinary least squares estimation is the best estimation of our model.

**Table 3: Heteroscedasticity test**

Chi 2(1)	7,21
Prob > chi 2	0,0872

### **Individual testing of each hypothesis separately**

In this step, we present and analyze the results of the regression estimation applied on the selected sample. During the estimation of the regression, we used the software (STATA 13.1).

\*Interpretation of regression results GDP, investment:

#### **Equation 2**

$$GDP = \beta_1 I_{it} + \beta_2 N_{it} + \beta_3 H_{it} + \mu_{it}$$

Table 4: Individual test of hypothesis n1

GDP	Coef	Std.Err	T	P>t
I	0.0072	0.0034	2.12	0,142
Nbr H	0.0056	0.006	0.94	0.357
Cons	1.350639	1.094711	1.23	0.227
Number of observations = 32				
F (2, 29) =2.92				
Prob>F = 0.0000				
R <sup>2</sup> = 0.1676				

\*significatif à 1%      \*\* significatif à 5%      \*\*\* significatif à 10%

**Table 4** presents the results of the regression on the investment variable of our sample, for the first hypothesis. The coefficient of determinant R<sup>2</sup> makes it possible to evaluate the degree of responsibility of the investment variable to explain the dependent variable the gross domestic product. This value R<sup>2</sup>=0,1676 and of order 17%.

According to Fisher's test (R<sup>2</sup> significance test) Prob >F =0.000 tells us that the model is significant at the 1% risk level.

This variable (I) has no significant effect on GDP. Consequently, H1 is rejected. The interpretation of the result may be as follows: investment is undoubtedly one of the sources of fluctuations in growth and GDP, and we also note that these effects on productivity occur with a delay, generating in passing some disadvantages. On the one hand, investment overreacts to demand and makes growth irregular. When demand increases, companies invest to meet this increase, but if the rate of increase in demand slows down, then companies will have excess production capacity, which leads to a sharp decrease in investment and GDP. On the other hand, investment in new information and communication technologies did not lead to an improvement in welfare or an increase in GDP. Our result negates the interpretation of Sylvie Demurge (2012) [7], Zaid and Ouelhazi (2013) [4], and Abdelkhalek (2013) [2].

Hence H1 is rejected.

\*Interpretation of regression results GDP, welfare:

**Equation 3**

$$GDP = \beta_1 AS_{it} + \beta_2 Nbr H_{it} + \mu_{it}$$

**Table 5: Individual test of hypothesis n2**

GDP	Coef	Std.Err	T	P>t
AS	0.9803	0.1546	6.34	0.000*
Nbr H	-0.0003	0.0043	-0.07	0.044**
Cons	0.2518	0.6267	0.40	0.691
Number of observations = 32				
F (2, 29) =21.46				
Prob>F = 0.0000				
R <sup>2</sup> = 0.5968				

\*significatif à 1%      \*\* significatif à 5%      \*\*\* significatif à 10%

**Table 5** presents the results of the regression on the welfare variable in our sample, for the second hypothesis. The coefficient of determinant R<sup>2</sup> allows us to evaluate the degree of responsibility of the welfare variable to explain the dependent variable the gross domestic product. This value R<sup>2</sup>=0,5968 and of order 60%.

The coefficient of this variable (social assistance) is in the predicted direction and significant at the 1% level (P>t = 0.000), the sign of the coefficient (0.9803) is positive, so social assistance has a positively significant effect on gross domestic product, so our hypothesis is accepted. This is consistent with the results of Willem Adema (2012) [26] and Maxime Ladaïque (2011) [11].

Indeed, social assistance is often faster, more flexible, and easily adaptable to the situation of the people concerned, to improve their living conditions and increase the GDP of each individual, and it can complement some pricing systems to make them more equitable and more targeted.

Hence H2 is accepted.

\*Interpretation of the results of the GDP regression and official development assistance

**Equation 4**

$$GDP = \beta_1 APD_{+it} + \beta_2 Nbr_{-it} + \mu_{it}$$

**Table 6: Individual test of hypothesis n3**

GDP	Coef	Std.Err	T	P>t
APD	0.3426	0.07216	4.75	0.359
Nbr H	0.0045	0.0048	0.93	0.125
Cons	1.3262	0.6233	2.13	0.042
Number of observations = 32				
F (2, 29) =12.29				
Prob>F = 0.0001				
R <sup>2</sup> = 0.4587				

\*significatif à 1%      \*\* significatif à 5%      \*\*\* significatif à 10%

**Table 6** presents the results of the regression on the official development assistance variable in our sample, for the third hypothesis. The coefficient of the determinant R<sup>2</sup> makes it possible to evaluate the degree of responsibility of the official development assistance variable in explaining the dependent variable, gross domestic product. This value, R<sup>2</sup>=0.4587, is of order 46%.

According to Fisher's test (R<sup>2</sup> significance test) Prob >F =0.0001 tells us that the model is significant at the 1% risk level.

This variable (Official Development Assistance) has no significant effect on GDP. Consequently, H3 is rejected. The interpretation of the result may be as follows: official development assistance could indeed have a "compensatory" effect and mitigate the negative impact on growth and GDP. We observe that ODA was less effective in countries geographically close to the tropics, highlighting the fact that the returns induced by ODA, particularly in the agricultural sector, would be limited by too low a productivity caused by the difficult climatic conditions of these geographical areas. Our result negates the interpretation of Olivier Ray (2011) [17], Lahlou (2015) [16], and Heshmati (2007) [14].

Hence H3 is rejected.

\*Interpretation of regression results GDP, zakat collected

**Equation 5**

$$GDP = \beta ZC_{1it} + \beta Nbr_2 H_{+it} + \mu_{it}$$

Table 7: Individual test of hypothesis n4

GDP	Coef	Std.Err	T	P>t
ZC	0.02590	0.0068	3.78	0.001**
Nbr H	0.0077	0.0052	1.48	0.050***
Cons	-0.0899	1.0358	-0.09	0.931
Number of observations = 32				
F (2, 29) =7.99				
Prob>F = 0.0000				
R <sup>2</sup> = 0.3109				

\*significatif à 1%      \*\* significatif à 5%      \*\*\* significatif à 10%

**Table 7** presents the results of the regression relating to the variable of Zakat collected from the companies of our sample, for the fourth assumption. The coefficient of determining R<sup>2</sup> makes it possible to evaluate the degree of responsibility of variable Zakat collected from the companies to explain the dependent variable the gross domestic product. this value R<sup>2</sup>=0,3109 and of order 31%.

The probability of the variable Zakat collected from businesses is statistically significant at the 5% level, P>t = 0.001. So H4 is confirmed. This variable (ZCE) appeared with a positive coefficient equal to 0, 026, which conforms to the studies of Muhammad Firdaus (2012) [19], Lahlou (2015) [16], and Guo and Barne (2007) [18] Such as, Zakat is the best form of mutual aid because this is how man discharges an obligation and renders a service to his brothers. Zakat makes the Islamic society one family where the strong helps the weak and the rich gives to the poor. This increases the purchasing power and GDP of the poor agents and/or organizations.

Hence H4 is accepted.

\*Interpretation of the results of the GDP regression, the numbers of beneficiaries

**Equation 6**

$$GDP = \beta_1 NbrB_{1it} + \beta_2 NbrH_{it} + \mu_{it}$$

**Table 8: Individual test of hypothesis n5**

GDP	Coef	Std.Err	T	P>t
Nbr B	0.0014	0.0002	2.24	0.033**
Nbr H	0.0057	0.006	0.96	0.046**
Cons	1.238	1.0922	1.13	0.266
Number of observations = 32				
F (2, 29) =3.19				
Prob>F = 0.0000				
R <sup>2</sup> = 0.4804				

\*significatif à 1%      \*\* significatif à 5%      \*\*\* significatif à 10%

It emerges from **Table 8** that the variable number of beneficiaries of Zakat exerts a statistically significant effect,  $P>t = 0.033$  at the threshold of 5%, and positively with a coefficient of 0.0014. This allows us to confirm our hypothesis H5, so the number of beneficiaries necessarily increases the GDP. Our interpretation is identical to that of Monther Kahf (1993) [20], Bashir Ali Khallat (2003) [21], and Habib Ahmed (2004) [22] which we find indeed the good allocation of zakat collected, draws an almost complete deterioration of poverty by solving the problems of the poor, and at the same time increases the number of beneficiaries of the zakat some people or companies and / or organization.

Hence H5 is accepted.

### 3.2.2. Multiple regression of uncorrelated variables

#### Equation 7

$$GDP = \beta_1 AS_{it} + \beta_2 ZC_{2it} + \beta_3 Nbr\ B_{it} + \beta_4 Nbr\ H_{it} + \mu_{it}$$

Table 9: multiple regression

GDP	Coef	Std.Err	T	P>t
AD	0.834	0.315	2.65	0.013**
ZC	0.270	0.023	1.17	0.051***
Nbr B	0.006	0.004	1.54	0.035**
Nbr H	0.003	0.005	0.62	0.042**
Cons	0.759	0.831	0.91	0.069***
Number of observations = 32				
F (4, 27) =11.70				
Prob>F = 0.000				
R <sup>2</sup> = 0.63				

\*significatif à 1%      \*\* significatif à 5%      \*\*\* significatif à 10%

**Table 9** presents the results of the multiple regression of the uncorrelated variables. The test of global significance gives us the coefficient of global determinant R<sup>2</sup> which allows us to determine the degree of responsibility of the independent variable to explain the dependent variable, this value is of order 63% which indicates that the model explains a significant amount of the variation of GDP. The results of the estimation inform us that the selected model is significant for a threshold of 1%, Prob>F = 0.000.

We note that for the social assistance variable the probability is in the predicted direction at the 5% level (P>t=0.013), the sign of this variable is positive (0.834), so social assistance has a significant effect on the Gross Domestic Product, hence hypothesis 2 is accepted.

We now turn to the variable of Zakat collected from firms, the coefficient of this variable is in the predicted direction, but only marginally significant at the 10% level, P>t=0, 051, the sign of the coefficient of Zakat collected is positive (0.270), therefore Zakat collected positively affects the Gross Domestic Product hence hypothesis 4 is accepted

Finishing now with the variable of Number of Zakat beneficiaries, which is positively significant at the 5% threshold (P>t=0.035), with a coefficient of 0.006 of that the number of beneficiaries has a significant positive effect on the Gross Domestic Product from which we accept hypothesis 5

### 3.3. Synthesis and discussion of results

Recalling that the objective of our research was to empirically test the effect of the Zakat management structure on gross domestic product. In our model, we used the variable gross domestic product as the dependent variable and the variables investment, social assistance, official development assistance, Zakat collected from enterprises, and number of Zakat beneficiaries as independent variables, and the number of inhabitants as a control variable.

Following the results that we can interpret to the estimation of our model we find that:

- Investment has no effect on gross domestic product, i.e. zakat has no impact on investment.

- Social assistance has a significant positive effect on the gross domestic product, i.e. Zakat represents a determinant of growth of social assistance and also of gross domestic product.
- Official development assistance does not have an effect on the gross domestic product, i.e. the variation of Zakat does not generate a variation of official development assistance and also of the gross domestic product.
- Zakat collected from businesses has a significant positive effect on Gross Domestic Product, i.e. growth in Zakat leads to growth in Gross Domestic Product.
- The number of Zakat beneficiaries has a significant positive effect on the gross domestic product, i.e. the increase in Zakat draws an increase in the number of beneficiaries and increase in the gross domestic product.

**Table 10** summarizes the empirical results for our study:

**Table 10: summary of empirical results**

The variables	Assumptions	The results of the regression	Expected sign	Sign observed
I	H1: Investment has a positive effect on GDP	Rejected	(+)	(+)
AS	H2: Social assistance has a positive effect on PB	Accepted	(+)	(+)
APD	H3: Official development assistance has a positive effect on GDP	Rejected	(+)	(+)
ZCE	H4: Zakat collected from businesses has a positive effect on the GDP	Accepted	(+)	(+)
Nbr B	H5: the number of beneficiaries has a positive effect on GDP	Accepted	(+)	(+)

#### 4. Conclusion

Every lunar year (Hegira), Muslims are faced with the "obligation" to give alms to the poor to support themselves, even non-Muslims, the rich in a state of financial crisis, and those employed to collect it, can benefit from it. Zakat is not only subject to gold or silver, but also to agricultural crops, livestock, and trade. The benefits of Zakat are not only limited to the purification of man from greed, or as a sacred bond between man and God, but it is also a factor of economic development. In the first place, Zakat combats hoarding (the excessive accumulation of money and goods), which is a fundamental aspect of capitalism. Hoarding means that money and natural resources remain limited to a social class, which enjoys wealth and well-being, while the poor are marginalized and impoverished, and labor is excessively exploited.

Zakat came to fight against hoarding and poverty. By giving an annual alms to the poor, the latter can consume more, and even acquire the tools of work. The increase in consumption is often accompanied by



an increase in production. In this way, Zakat money can create more investment and, at the same time, more employment. Zakat becomes a struggle against the accumulation of goods and money among the elite, against unemployment and impoverishment of the masses, and also for a social and economic balance. Thus, consumption becomes within the reach of everyone, without feeling the need to resort to bank credits, "so-called" payment facilities, and false advertisements that only aggravate the economic and social situation of the country. God says in the Holy Quran: "Announce a painful punishment to those who hoard gold and silver without spending anything in the way of Allah; the day when these metals will be brought to incandescence in the fire of Gehenna and will serve to mark their foreheads, their franks and their backs: "This is what you hoarded; taste what you hoarded! (Surah al-Tawbah, verse 34-35).

Throughout this research we have attempted to synthesize and articulate the management structure of Zakat and its effects on gross domestic product.

Thus, in the first part we have to expose a theoretical literature review on Zakat management structure, by presenting the definition, condition, and role of Zakat, and the presentation of the typology of Zakat background, and the notion of Zakat management. For the second part, we have the integration of hypotheses to address the research question "To what extent the structure of zakat management influences the Gross Domestic Product". And we have 5 hypotheses, whose dependent variable is the domestic product, and 5 independent variables such as the investment of Zakat, social assistance, official development assistance, Zakat collected from enterprises, and the number of Zakat beneficiaries. And a control variable that the number of inhabitants. With a sample of 8 MENA countries during 4 years from 2011 to 2014.

To conclude the concept of Zakat is a subject that has been included in the society for a long time.

The zakat management structure has a positive effect on the Gross Domestic Product, which is already explained in our study by the relationship between the variables social assistance, Zakat collected from companies, Number of Zakat beneficiaries, and the variable Gross Domestic Product.

This study also has some limitations due to insufficient information, the sample size of 8 eight countries during 4 years from 2011-2014 is one of these limitations. In addition, this study faces some major obstacles and also the research in Islamic finance in general. lacks in literature reviews. Some limitations the short duration of the trial and the small number of factors studied.

Using a larger sample and a broader set of information, or variables. Researchers could attempt to generalize this result further, and to better understand the effect of other factors not theorized in this study.

## Reference

[1] Abderrahman Lahlou. "Islamic economics is of spiritual essence and social depth"| Tuesday, July 21, 2015. Journal of Development Economics.

[2] The ATLAS collaboration., Abdelkhalek, G., Abajyan, T. et al. Measurement of the production cross section of jets in association with a Z boson in pp collisions at  $\sqrt{s}=7$  TeV with the ATLAS detector. Journal of High Energy Physics, 2013, 32 (2013). [https://doi.org/10.1007/JHEP07\(2013\)032](https://doi.org/10.1007/JHEP07(2013)032) [https://link.springer.com/article/10.1007/JHEP07\(2013\)032](https://link.springer.com/article/10.1007/JHEP07(2013)032)

[3] El Marzouki and Rouijel. " Zakat and taxes: relationship of substitution or complementary? 2018. JEMED.

[4] The ATLAS collaboration., Abdelkhalek, G., Abajyan, T. et al. Measurements of Higgs boson production and couplings in diboson final states with the ATLAS detector at the LHC. Physics Letters B, Volume 726, Issues 1–3, 7 October 2013, Pages 88-119. <https://doi.org/10.1016/j.physletb.2013.08.010> <https://www.sciencedirect.com/science/article/pii/S0370269313006369>

- [5] Ahmad and Shamsiah Mohamad (2012). Islamic forward exchange contracts as a hedging mechanism: an analysis of wa'd principle. International Business Management.
- [6] Jean Gadrey.L'aide au développement une fois de plus sous le feu de la critique. International Development Policy| Revue internationale de politique de développement, 2010.
- [7] Démurger, S. (2012). Mapping modes of rural labour migration in China. Rebalancing and Sustaining Growth in China, ANU E Press, Canberra.
- [8] Sofien and Abdul Rahman and al. "Contribution of zakat to economic and social development case study of the achievement of zakat until 2017". 2020. AJOL.
- [9] Le Figaro Premium 2015. Les «nouveaux réactionnaires» : mythe ou réalité ?
- [10] P.Berthet and al.2002. "Growth is Good for the Poor". Journal of Economic Growth.
- [11] Ladaïque. Maxime. (2011). OECD Social, Employment and Migration Working Papers.
- [12] Anthelme Brillat-Savarin, 2007 Piccola genealogia dei sensi.
- [13] JP.Cling, 2006 Commerce, croissance, pauvreté et inégalités dans les PED: une revue de littérature.
- [14] Heshmati, A. (2007). The relationship between income inequality, poverty and globalization. The Impact of Globalization on World's Poor. Palgrave Macmillan Ltd. Houndsmills. Basingstoke. Hampshire.
- [15] E.Lechevallier and al.2007. Mieux gérer la mondialisation l'aide publique au développement. Ellipses. Copstein, L., Fernandes, J. G., & Bastos, G. A. N. (2013). Prevalence and risk factors for stroke in a population of Southern Brazil. Arquivos de neuro-psiquiatria.
- [16] Abderrahmane Lahlou: « La zakât joue un rôle dans le développement économique et social »Jeudi 9 Juillet 2015. Journal of Development Economics.
- [17] Olivier.Ray et al. Effects of reducing gender gaps in education and labour force participation on economic growth in the OECD. 2011.
- [18] GM. Barnes and al.2007 .Why people buy virtual items in virtual worlds with real money. ACM Sigmis Database.
- [19] Muhammad Firdaus, Irfan Syauqi Beik, Tonny Irawan, Bambang Juanda. (2012) Economic estimation and determinations of Zakat potential in Indonesia. Working paper - Jeddah: Islamic Research and Training Institute. <https://isdbinstitute.org/product/economic-estimation-and-determinations-of-zakat-potential-in-indonesia/>
- [20] Kahf, Monzer (1993), Zakah Management in Some Muslim Societies, Background Paper No. 11, Islamic Research and Training Institute, Islamic Development Bank, Jeddah.
- [21] Bashir Ali Khallat, 2003, MONDE, D. U. (2008). L'ECONOMIE ISLAMIQUE.academia.edu.
- [22] Ahmed, H. (2004). Role of zakah and awqaf in poverty alleviation. Jeddah: Islamic Development Bank, Islamic Research and Training Institute.
- [23] B.Godard.2001.High Performance and the Transformation of Work? The Implications of Alternative Work Practices for the Experience and Outcomes of Work

[24] Fathi Akrouf.2010. Les méthodes des équations structurelles.academia.edu.

[25] Valen E. Johnson.2013. Revised standards for statistical evidence.Proceedings of the National Academy of Sciences.

[26]Willem Adema (2012) Setting the scene: The mix of family policy objectives and packages across the OECD. Children and Youth Services Review.