

THE ROLE OF ZAKAT IN OVERCOMING INFLATION AND UNEMPLOYMENT: REVISITING THE TRADE-OFF THEORY

*Mohammad Syafi Antonio**

*Mohammad Mahbubi Ali***

*Jebel Firdaus****

Abstract: The present study aims to examine the role of *zakat* in addressing unemployment and inflation, while also revisiting A.W. Phillips' trade-off theory. The study adopts a qualitative methodology, using library research to critically analyse how *zakat* could address unemployment and inflation. The study argues that the optimal application of *zakat* could overcome the issue of unemployment while maintaining price stability. This is true since *zakat* can be distributed in two forms: consumptive and productive. Therefore, an increase in aggregate demand will always be followed by a rise in aggregate supply; the distribution of *zakat* in the consumptive form will increase aggregate demand, while the distribution of *zakat* for a productive purpose will increase aggregate supply. An increase in aggregate demand would in turn increase production, thus absorbing more labour as a result. This is where *zakat* addresses unemployment. On the other hand, a rise in aggregate demand will initially inflate the aggregate price. However, since the increase in aggregate demand is simultaneously followed by an increase in aggregate supply due to the distribution of *zakat* in its productive form, the price remains stable. Aggregate demand and aggregate supply cross at an equilibrium point. More importantly, the price is stable while the quantity of production is at its highest level. The findings of the study serve as a reference point for regulators formulating fiscal policy embedded in the *zakat* system.

Keywords: *Zakat*, Inflation, Unemployment, Trade-off, A.W. Phillips, Fiscal Policy

Introduction

Inflation and unemployment have become major macro-economic issues in many countries for two reasons.¹ Firstly, inflation and unemployment are the two most common economic indicators of how well a country is doing. Secondly, inflation and unemployment bring about an adverse impact on both developing and developed countries.

Many macro-economic studies explain how government policies address both inflation and unemployment. Many governments and policymakers have introduced policies, strategies, and models addressing both issues, and which conclude that inflation and unemployment cannot be overcome simultaneously. If the focus of a government policy is price stability, unemployment rates will increase and vice versa. This is known as the trade-off theory, introduced by A.W. Phillips in 1958.² In his article, 'The Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861–1957,' Phillips concluded: "when the demand for a commodity or service is high relative to the supply of it we expect the price to rise, the rate of rise being greater the greater the excess demand. Conversely, when the demand is low relatively to the supply we expect the price to fall, the rate of fall being greater the greater the deficiency of demand."³ However, Phillips' theory began to collapse when many developed countries in the 1970s and Asian countries in 1997 suffered from both high unemployment and inflation due to financial crisis.⁴ The question thus brought to the fore was: if Phillips' theory collapses when inflation and unemployment are concomitantly moving in a negative direction, is there any instrument that could address both inflation and unemployment simultaneously?

This article argues that *zakat*, the third pillar of Islam, can play a significant role in addressing both inflation and unemployment simultaneously. The potential size of annual *zakat* collections worldwide is enormous, being estimated at between US\$200 billion and US\$1 trillion.⁵ The World Bank and the Islamic Research and Training Institute (IRTI) of the Islamic Development Bank (IDB) estimate that the global potential of *zakat* is US\$550-600 billion per year. Nevertheless, official *zakat* institutions worldwide currently only collect US\$10-15 billion every year.⁶ As a sub-system of Islamic teachings, however, the optimal application of *zakat* could resolve the issue of unemployment while maintaining price stability. This is particularly true since the nature of *zakat* distribution addresses not just consumption, but also production. Consequently, an increase in aggregate demand will always be followed by an increase in aggregate supply; thus an equilibrium point is maintained.

Many studies have examined the impact of *zakat* on economic growth,⁷ while others explore the role of *zakat* in poverty alleviation.⁸ By contrast, a cursory review of the existing literature demonstrates that, to the best of the authors' knowledge, nothing has been written about the role of *zakat* in addressing both inflation and unemployment. This paper, therefore, aims to fill that gap in the existing literature. Following this brief introduction, the paper is organised as follows. After a review of the concepts of *zakat*, inflation, and unemployment, the paper examines past studies relevant to the subject in question, before

proceeding to delve into how *zakat* can impact both inflation and unemployment. This final part of the paper will also shed critical light on how the concept of *zakat* revises Phillips' theory. The concluding part of the paper presents a set of policy recommendations.

Literature Review

Zakat

Zakat comes from the Arabic word *zaka*, meaning 'to grow, increase, and purify.' Ibn Taymiyyah said: "the soul of the person who pays *zakat* becomes purified from greed and avarice, and the blessings in his wealth increase."⁹ Legally, *zakat* refers to the transfer of a portion of wealth to one or more rightful recipients (*asnaf*), as outlined in the Qur'an.¹⁰ As the third pillar of Islam, *zakat* is obligatory on every Muslim who owns assets of a minimum amount set by shariah (the *nisab*) and that is possessed for a year (*haul*).

The distribution of *zakat* is restricted to eight categories of beneficiary:¹² the poor (*faqir*), the needy (*miskin*), *zakat* personnel (*amil*), people whose hearts are inclined towards Islam (*mu'allafah qulub*), those in bondage (*fi al-riqab*), indebted people (*gharimin*), wayfarers (*ibn al-sabil*), and those in the path of Allah (*fi sabilillah*). The sources of wealth subject to *zakat* include: livestock, gold, silver, agricultural products, animal products, minerals, business inventories, capital goods, and the earnings of workers and professionals. The conditions for *nisab*, *haul*, and the rates of *zakat* vary across these categories. For instance, the *zakat* on agricultural products need not necessarily meet the condition of *haul* as it is levied immediately upon harvest. The rate also varies, being 10 per cent for crops watered naturally and 5 per cent for those watered artificially. Meanwhile, the rate of *zakat* on business inventories is set at 2.5 per cent of net asset value during the prevailing year.

Apart from its spiritual and moral dimensions, *zakat* is part of the socio-economic system of Islam. *Zakat* stimulates the economy by allowing the poor (*faqir*) and needy (*miskin*) to become economically productive. By instituting *zakat*, Islam prevents the widening of the gap between rich and poor, allowing a certain portion of the income of the wealthy to be channeled to the have-nots. *Zakat* can also be used for various additional socio-economic purposes, like education, healthcare, social welfare, and promoting the productivity of the poor. Therefore, from an economic point of view, *zakat* serves as an effective measure in the socio-economic system of Islam.

Inflation

Inflation refers to a substantial and consistent increase in the general price level of goods and services over the long term.¹³ In other words, inflation is a process of continuous decrease in the value of currency. It is a process, not merely a high or low price level at a point in time. A high price level does not necessarily indicate inflation. It can only be considered inflation if there is a persistent increase in the general price level over time.¹⁴

In conventional economics, two diametrically opposed views exist concerning the sources of inflation, the Keynesian and the Monetarist. The Keynesian school recognises three types of inflation: demand-pull inflation, cost-push inflation, and expected inflation.¹⁵ Demand-pull inflation occurs when aggregate demand for goods and services exceeds aggregate supply. Cost-push inflation is an increase in aggregate price level due to a decline in aggregate supply, thus increasing production costs. Theoretically, if productivity decreases, aggregate supply drops and price levels increase.¹⁶ Expected inflation is an aggregate increase in price level in tune with expectations about the overall price of goods and services over a certain period.¹⁷ In contrast to these three categories, the Monetarist school acknowledges only one determining factor in inflation: excessive money supply. Therefore, a government can control inflation either by easing or tightening money policy.

In Islam, inflation is defined as an increase in general price levels due to excessive money supply.¹⁸ Al-Maqrizi (766-845AH/1364-1441CE), a Muslim economist who was a disciple of Ibn Khaldun, divides the root causes of inflation into two: natural inflation and human error inflation.¹⁹ Natural inflation results from natural factors a government cannot control. It is caused by either an increase in aggregate demand or a decrease in aggregate supply. An increase in aggregate demand for goods and services pulls up demand for production, which in turn causes an increase in production costs/prices. At this juncture, in full employment situations, inflation occurs due to an increase in aggregate demand. In a conventional economy, this is called demand-pull inflation. Similarly, a drop in average production levels would also push up price levels due to an increase in aggregate demand. In a conventional economy, this is called cost-push inflation. In a nutshell, therefore, natural inflation originates from either excessive money supply or a decrease in production due to natural disasters, wars, or embargoes.²⁰ Apart from natural factors, inflation can also be triggered by human factors, such as corruption and bad administration, excessive taxes, and excessive seignorage.²¹

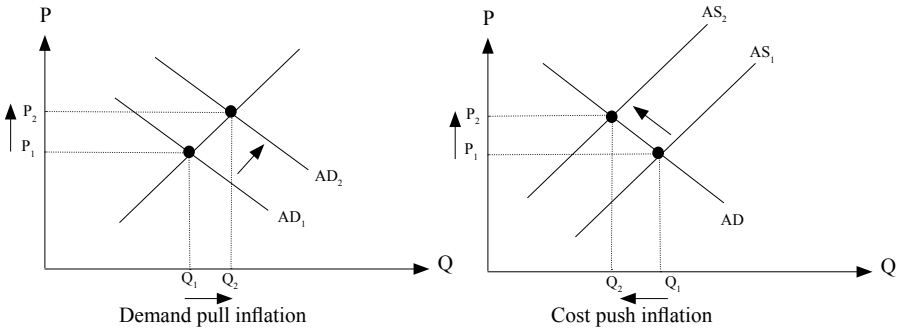


Figure 1: Types of Inflation

Source: Karim, 2004

Unemployment

The word ‘unemployment’ did not come into use until the end of the nineteenth century; according to the Oxford English Dictionary, the term was first used in 1895. Etymologically, ‘unemployment’ signifies a state of involuntary idleness, where a person remains jobless for various reasons over a certain period. The International Labour Organisation passed a resolution in 1982 that an individual is deemed unemployed if he/she is jobless for a particular period, despite being available for work and actively seeking a job.

Generally, there are three forms of unemployment:²²

1. Frictional unemployment, or when workforces are temporarily unemployed or not working. This may be due to persistent movement, whether from one area to another or one job to another, or due to different stages in life cycle.
2. Structural unemployment, or a situation where there is a mismatch between demand and supply for a workforce. This mismatch might emerge when demand for certain types of labour either increases or diminishes. While structural unemployment is also a form of frictional unemployment, it normally lasts longer.
3. Cyclical unemployment, which occurs due to a decrease in demand for goods and services, causing a drop in production, often resulting from economic recession. In response, employers might reduce their workforce.

The Phillips Theory

Inflation and unemployment are major economic problems in both developing and developed countries. Theoretically, the two problems cannot be resolved concurrently as pushing a country's economy into full employment will invoke inflation. This is because economic development requires investment in infrastructure projects; government spending on investment increases demand for goods and services, which in turn increases production and, ultimately, employment. This again causes an increase in demand for goods and services, inflating general price levels.

On one level, governments can increase interest rates to reduce inflation. When interest rates rise, investors are reluctant to invest their money in the real sector, preferring to place it in financial institutions. As a result, money circulation reduces, aggregate demand falls, the economy slumps, and the price of goods and services decreases. Yet, unemployment rates will increase under these circumstances because employers reduce their workforces due to drops in aggregate demand. This is what economists call a trade-off.

As mentioned, the trade-off theory linking inflation with unemployment originated with British economist, A.W. Phillips. His study examined the relationship between unemployment rates and inflation in England between 1861 and 1957. The study found a negative relationship between unemployment and inflation; if inflation was low, unemployment was high, and vice versa.²³ This theory was further examined and substantiated by Samuelson and Solow, using empirical data from the United States covering the period 1900 to 1960.²⁴ The Phillips theory is illustrated by the following curve, known as the Phillips curve:

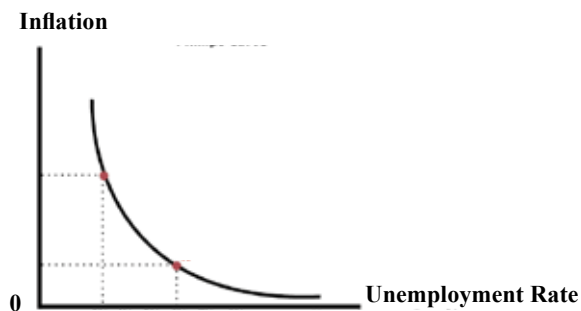


Figure 2: Phillips Curve

Source: Phillips, 1958

The horizontal line represents the workforce unemployment rate, the vertical line inflation. With low unemployment, inflation is high. If inflation is low, unemployment is high.²⁵

Previous Studies

A cursory review of the available literature reveals several studies examining the impact of *zakat* on economic growth, public welfare, and poverty alleviation.²⁶ For example, Sarea explored *zakat* as an indicator of economic growth, arguing that it can contribute to economic development in terms of poverty alleviation and reduction of both unemployment and inflation.²⁷ Furthermore, Mahat and Warokka, using macro-economic data from 19 Muslim countries produced between 2004 and 2010, concluded that *zakat* is a powerful, implementable economic growth policy.²⁸

Yusoff, examining panel data from the 14 states in Malaysia, discovered that both *zakat* and education play a significant role in GDP (Gross Domestic Product).²⁹ In a similar vein, Azam et al. discovered that *zakat* has a positive impact on economic development in Pakistan. In particular, micro evidence suggests that *zakat* impacts positively and significantly on household welfare, while macro analysis indicates a positive effect on economic growth.³⁰ In contrast, Khasandy et al. found that *zakat* distribution in Indonesia did not contribute significantly to economic growth or social welfare.³¹

Other studies have examined the impact of *zakat* on poverty alleviation.³² For instance, Hassan and Ashraf argue that both theoretical and empirical evidence substantiates *zakat*'s role in poverty alleviation. Theoretically, the object of *zakat* is to facilitate socio-economic justice, "so that the wealth may not (merely) make a circuit between the wealthy among you."³³ In this context, poverty alleviation is the main priority of *zakat*, with the poor and needy being the most important category of eligible recipient (*asnaf*).³⁴ It is not permissible, for example, to distribute *zakat* funds to the army while the poor and needy require food, shelter, and other necessities.³⁵ Metwally argued that *zakat* distribution increases purchasing power and consumption among the poor.³⁶

Empirically, Abdullah et al. used the BNDI (Basic Need Deficiency Index) to argue that *zakat* distribution can reduce poverty and inequality in Pakistan.³⁷ In a similar vein, Raimi found that *zakat* and *waqf* models serve as sustainable social safety nets in Nigeria,³⁸ with Hashem discovering a similar pattern in Egypt.³⁹ Sheikh and Ismail, meanwhile, concluded that *zakat* is supportive of sustainable goals (SDGs), including alleviation of: poverty, hunger, ill health, education inequality, unemployment, poor economic growth, and income inequality.⁴⁰ A study by Noor also confirmed that *zakat* is a powerful tool for attaining SDGs.⁴¹

Although these studies cover the role of *zakat* in economic growth, poverty alleviation, financial inclusion, and the attainment of SDGs, to the best of the current authors’ knowledge, no study examines the role of *zakat* in addressing inflation and unemployment. The present paper therefore aims to fill that gap, examining the impact of *zakat* distribution on inflation and unemployment, while also revisiting A.W. Phillips’ trade-off theory.

Discussion

The Role of *Zakat* in Controlling Inflation

Zakat can control inflation via two analyses: quantitative and qualitative.

Firstly, a quantitative analysis can address natural inflation. This type of inflation occurs due to a mismatch between aggregate demand and aggregate supply. In this context, as a fiscal instrument, *zakat* plays an important role in income and wealth distribution, stimulating consumption. While governments can allocate *zakat* funds to all eight eligible recipients (*ashnaf*) as prescribed by shariah, the poor and needy take priority. From a *zakat* perspective, the structure of society is divided into three classes:⁴²

1. *Muzakki*, or those with an excess of assets who are obliged to pay *zakat*. They have a spending pattern as follows:

$$FS = C - Z + In + Sh + Wq..... (1)$$

where FS is final spending, C consumption, Z *zakat*, In *infaq* (spending), Sh *sadaqah* (alms), and Wq *waqf*.

2. Middle classes, or those who are neither recipients nor payers of *zakat*. They have spending patterns as follows:

$$FS = C + In + Sh (2)$$

3. *Mustahiq*, or those who are eligible to receive *zakat*. They have two expenditure patterns:

1. $FS = Z$ where $Z = C$ (3)

2. $FS = Y + Z$ (4)

where Z is *zakat*, C consumption, and Y income. The first model signifies consumption that originates entirely from *zakat*. This category includes *faqir*, *ibnu sabil*, and *fi sabilillah*. The second model refers to the poor and needy, or those who have an income, but one that is insufficient to meet their basic needs. In this situation, their final spending exceeds their income level, making them eligible for *zakat*.⁴³

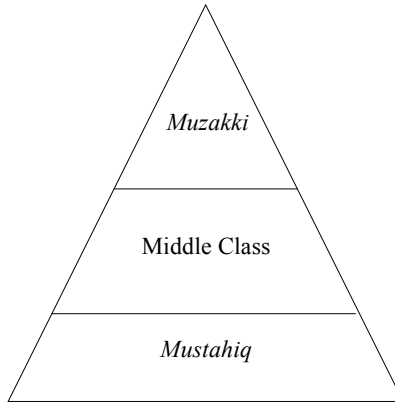


Figure 3: The Structure of Society from a *Zakat* Perspective
Source: Abu Ubaid's *al-Amwal*.⁴⁴

It is noteworthy that *zakat* not only aims to meet the basic needs of the poor, but also strives to enhance their productivity so they can meet their own needs. During the Prophet's lifetime, the distribution of alms therefore took the form not only of consumptive substance, but also productive capital. As a result, a *mustahiq* can elevate his status to the middle class and, eventually, *muzakki*. Thus, the above structure is expected to change into Figure 4:

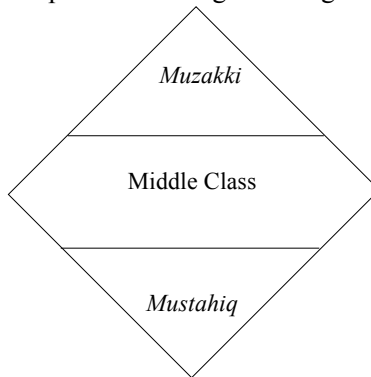


Figure 4: The Ideal Structure of Society from a *Zakat* Perspective
Source: Abu Ubaid's *al-Amwal*.⁴⁵

The distribution of *zakat* will therefore increase *mustahiq* income and purchasing power. In other words, according to Metwally, *zakat* will increase the consumptive power of *mustahiq*.⁴⁶ The following graph illustrates the impact of *zakat* on consumption:

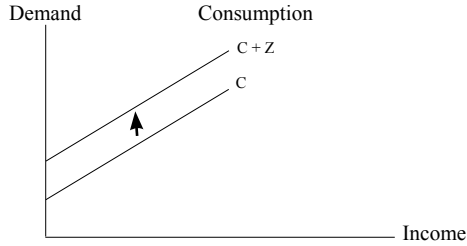


Figure 5: Impact of *Zakat* on Consumption
Source: Metwally (1992)

The transfer of wealth from the rich to the poor therefore increases the latter’s consumption; Line C of the curve consequently shifts upward to C+Z after inclusion of *zakat*. The distribution of *zakat* has, therefore, a significant impact on aggregate demand, as illustrated in Figure 6:

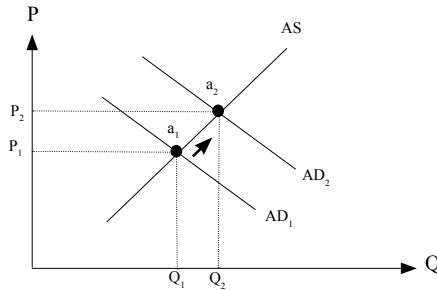


Figure 6: Impact of *Zakat* on Aggregate Demand
Source: Authors

An increase in income through *zakat* elevates the level of aggregate demand from AD_1 to AD_2 , thus shifting the equilibrium from a_1 to a_2 . At a glance, *zakat* therefore increases the price level from P_1 to P_2 due to a rise in aggregate demand. However, the distribution of *zakat* also increases productivity because it is distributed in both consumptive and distributive forms. Therefore, an increase in aggregate demand is concurrently followed by an uptrend in aggregate supply. An increase in aggregate supply will raise the output ($Q \uparrow$) and pull the price

(P) down. This corresponds to the law of demand and supply: the more goods are produced, the lower their price. Conversely, the less goods are produced, the higher their price. The impact of *zakat* on price stability is depicted in Figure 7:

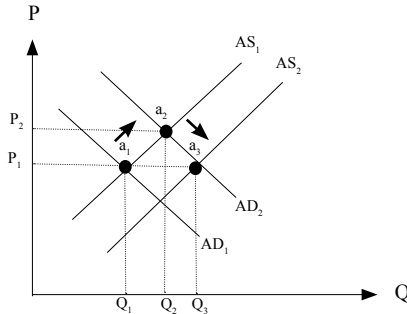


Figure 7: Impact of *Zakat* on Price Stability
 Source: Authors

Figure 7 illustrates the effect of *zakat* on a macro scale. The initial equilibrium (meeting point between AD and AS) is indicated at a_1 , where the *zakat* instrument does not function optimally. Under the influence of *zakat*, the equilibrium point shifts to a_2 (where the role of *zakat* is still not optimal) with the increase of AD_1 to AD_2 . At this point, it appears that prices hike from P_1 to P_2 . However, from the perspective of *zakat*, a rise in aggregate demand is followed by an increase in aggregate supply. Thus, the rise of aggregate supply from AS_1 to AS_2 moves the equilibrium point from a_2 to a_3 (where *zakat* works optimally). In this final equilibrium, a_3 pulls P down from P_2 to P_1 . From this we can conclude that the optimal application of *zakat* maintains price stability with an increase in Q (production quantity) from Q_1 to Q_3 at the highest level.

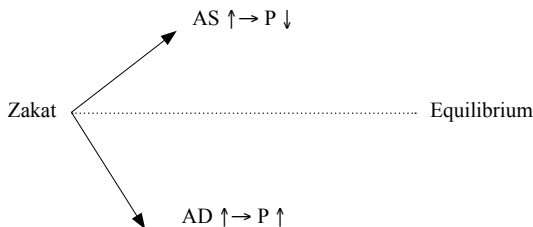


Figure 8: Impact of *Zakat* on Price Stability
 Source: Authors

Turning to qualitative analysis, this uses a socio-normative approach to overcome inflation due to human factors, such as corruption, poor administration, excessive tax collection, and printing money to generate excessive profits. *Zakat* plays an important role in overcoming inflation due to human factors based on the following arguments:

1. The collection and distribution of *zakat* is based on obedience to Allah. This serves as an internal control, avoiding corruption and mismanagement among administrators.
2. *Zakat* avoids poor administration via its spirit of efficiency, as reflected in the stipulation of a *nishab* and a clear set of *zakat* rates.
3. The rate of *zakat* is stipulated by the Lawgiver. As a result, the use of *zakat* as a fiscal policy instrument and source of state revenue does not create excessive taxation, which might cause inflation.
4. Printing money to attain profit is not supported by *zakat*, which stimulates economic growth via productivity and effectiveness.
5. Human error inflation is due to incompetence and lack of integrity. *Zakat*, on the other hand, encourages skillful human resources, professionalism, and integrity. The state also serves as *amil* (*zakat* manager) to manage *zakat* funds. Important requirements for the *amil* include competence, professionalism, and high integrity.

The Role of *Zakat* in Addressing Unemployment

Unemployment arises when demand for labour is lower than the size of the existing workforce. This might be due to a lack of skilled workers or an economic downturn that shrinks production by creating low demand. *Zakat* could address the issue of unemployment through the following aspects.

1. *Increased labour supply*

Labour plays a critical role in producing goods and services. Enhancing labour expertise eventually increases labour supply, which in turn increases national output. Figure 9 illustrates the relationship between labour supply and national output:

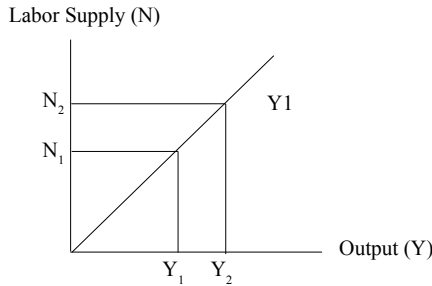


Figure 9: The Relationship between Labour Supply and National Output
 Source: Sukirno (2000)

This paradigm relates to how assets can be equally distributed, including how *zakat* can shift the status of *mustahiq* to *muzakki*. In this respect, the concept of *zakat* promotes productivity. For example, self-irrigated agriculture is subject to 5 per cent *zakat*, while rain-fed agriculture (with no productive activity) is subject to 10 per cent *zakat*. Additionally, *zakat* in the Prophet’s time and under Caliph ‘Umar bin ‘Abdul Aziz was not only distributed in the form of basic needs, but also as productive capital.⁴⁷

If the labour supply exceeds demand, increased expertise will eventually recreate demand. This is consistent with the law of Say, which states that supply will create demand.⁴⁸ From the perspective of *zakat*, increased supply will always be followed by an increase in demand, and vice versa.

2. *Increased labour demand*

As a fiscal policy instrument, *zakat* could be partly allocated to infrastructure development and social facilities. Some contemporary scholars like al-Qaradawi include this objective under the category of *fi sabilillah*. Infrastructure development will create new employment and increased national income. This can be analysed using the following mathematical equation:

$$Y_0 = \frac{1}{1-b(1-t)} = (a + I_0 + G_0) \dots\dots\dots (5)$$

where Y is national income, I Investment, and G government expenditure. Increases in government expenditure (ΔG) will increase national income to:

$$Y_0 = \frac{1}{1-b(1-t)} = (a + I_0 + G_0 + \Delta G) \dots\dots\dots (6)$$

Increases in real national income (ΔY), from as much as $Y_1 - Y_0 = \Delta Y$, can be calculated as follows:

$$Y_0 = \text{---} = (a + I_0 + G_0 + \Delta G) - \text{---} = (a + I_0 + G_0)$$

Or

$$\Delta Y = \frac{1}{1-b(1-t)} (\Delta G) \dots\dots\dots (7)$$

The effect of an increase in government expenditure on fiscal policy can be further explained using the following consumption function curve:

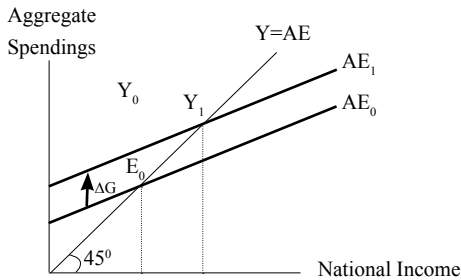


Figure 10: Consumption Function
Source: Sukirno (2000)

As indicated in Figure 10, aggregate expenditure is initially reflected by AE_0 , with the original equilibrium point at E_0 and national income at Y_0 . An increase in government expenditure of the amount ΔG will raise AE_0 to AE_1 . Thus, the new equilibrium point is E_1 and the new national income is Y_1 .⁴⁹

Based on this analysis, *zakat* expenditure for government infrastructure will increase national output. The national output signifies an increase in productivity that will ultimately increase demand for labour.

3. *Maintaining the balance between labour supply and labour demand.*

As stated earlier, unemployment emerges partly due to an imbalance between labour supply and labour demand. This issue can be overcome by increasing labour demand via incentives to create new jobs. This will reintroduce a

balance between labour demand and labour supply. To analyse this balance, we use the following labour market graph:

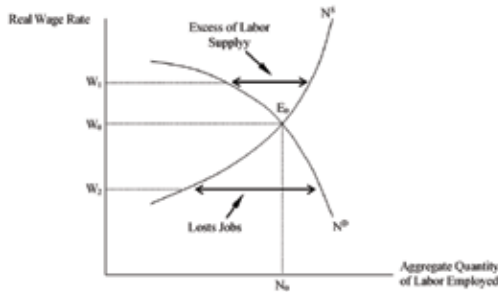


Figure 11: The Aggregate Labour Market and Effect of Minimum Wages
 Source: Sukirno (2000)

Here, curve N^D represents labour demand, while N^S is labour supply. The equilibrium point of the labour market can be realised if labour demand is at par with labour supply. This condition occurs at point E_0 , where wage rate = W_0 and job level = N_0 . If the wage rate increases to W_1 , there will be labour oversupply, which means that some of the workforce will be unemployed. According to classical economists, this unemployment will decrease wage rates. This decrease in wage level will then increase labour demand, reducing labour supply. This adjustment process stops if both demand and supply for labour again reach their equilibrium point at E_0 . Conversely, if the wage rate is at W_2 , labour demand will rise. This will lead to an increase in wage levels, which in turn leads to an increase in labour supply while reducing labour demand. Eventually, the demand and supply for labour will likewise return to the equilibrium point at E_0 .⁵⁰

If we fuse this labour market law with *zakat*, we find that the latter will always pull conditions to the equilibrium point by increasing both aggregate demand and aggregate supply. This is true since *zakat* is distributed in two forms: consumptive and productive. The former will increase aggregate demand while the latter raises aggregate supply. High aggregate demand encourages producers to increase their productivity. The higher their productivity, the greater the demand for production factors, including labour. This will pull down W_1 to W_0 . Thus, an excess in labour supply can be minimised. On the other hand, *zakat* will also push up aggregate supply. This increase in goods and services signifies a rise in production, which in turn increases labour demand. This will pull down W_2 to W_0 (equilibrium point).

Revisiting the Trade-off Theory via *Zakat*

According to the trade-off theory, unemployment and inflation cannot be solved simultaneously. A country can achieve lower unemployment only if it is willing to face higher inflation rates, and vice versa. This theory is illustrated by the Phillips Curve, as shown in Figure 2 (above). The Phillips Curve illustrates a negative relationship between unemployment and inflation. But, how does this happen? In conventional economics, the Phillips Curve can be rationalised through labour market theory, as follows:

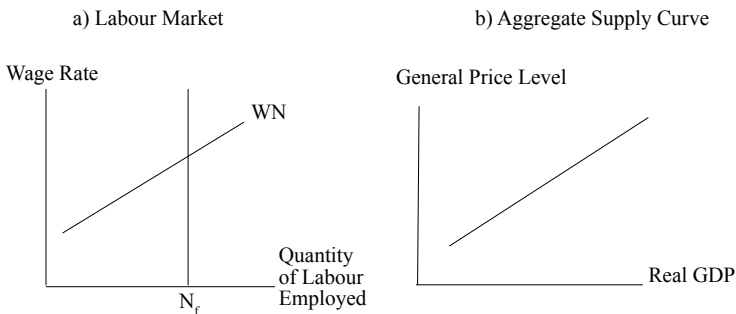


Figure 12: Labour Market and Aggregate Supply Curves
Source: Samuelson (1986) and Jacobsen and Skillman (2004)

The Phillips Curve concludes that the lower the unemployment rate, the higher the increase in wage prices. The WN (wage-employment) curve illustrates the nature of this relationship: the higher the level of employment, the higher the wage level. When this happens, the N_f in Graph (a) illustrates how increased labour costs makes production more expensive. As companies are established to make profit, higher production costs will force an increase in the price of goods, which in turn effects real GDP. In other words, if employment opportunities increase, real national production also increases, which inflates wages. A rise in wages increases production costs, which in turn raises the price of goods, as illustrated in Graph (b).⁵¹

The response to this situation is as follows: if an increase in wages also increases price levels, this signifies that, although the nominal income of workers is higher, their real income is not. This is particularly true if the increase in nominal wage is smaller than the rate of inflation. In an Islamic economy, when *zakat* is implemented optimally, this situation should not exist because an increase in productivity follows an increase in wages. This conclusion is further substantiated by productivity analysis, where price (P) is a function of total cost

(TC) divided by total production (Q), as follows:

$$P = \frac{TC}{Q} \dots\dots\dots (8)$$

If TC increases without a rise in Q, P will inflate. However, since under *zakat* an increase in Q follows a rise in TC, P remains stable. This increase in Q is the ultimate objective of *zakat*. An increase in Q via *zakat* will be due either to cost efficiency or improved labour expertise, thus increasing productivity. Additionally, Q will reach its optimal point because it is followed by an increase in aggregate demand. This indicates an increase in real wages, reflecting better welfare.

Furthermore, because price levels are associated with aggregate goods and services, we can employ Irving Fisher’s assumption that $MV = PQ = Y$, where M is money supply, V the speed of money circulation, P price level, Q the quantity of goods and services, and Y real GDP. Based on this equation, we can conclude that P will not rise when Q increases. This is because M also rises, while V remains unchanged.⁵²

On the other hand, the Phillips Curve says that decreased unemployment will increase income. An increase in income will increase aggregate demand, thus creating inflation. Figure 13 illustrates the impact of aggregate demand on inflation:

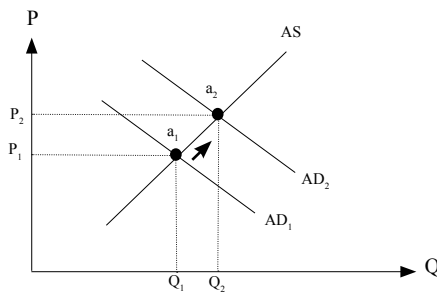


Figure 13: Impact of Aggregate Demand on Inflation
 Source: Authors

As discussed, *zakat* can resolve inflation due to an increase in aggregate demand. This is because the distribution of *zakat* raises aggregate demand while also pushing up aggregate supply. The distribution of *zakat* in a consumptive form will raise aggregate demand, while the allocation of *zakat* as productive capital

will boost aggregate supply. A rise in both aggregate demand and aggregate supply will establish an equilibrium point, rendering price levels stable. In other words, when the implementation of *zakat* is optimal, prices remain stable and Q (production quantities) shifts from Q_1 to Q_3 at its highest equilibrium point, as illustrated in Figure 14:

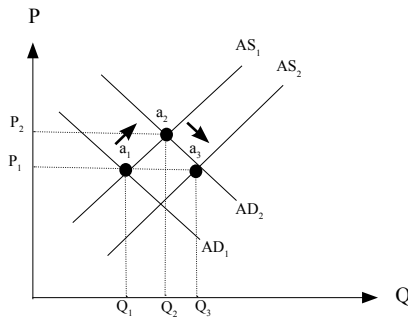


Figure 14: Impact of *Zakat* on Inflation

Source: Authors

Based on the above analysis, we can conclude that *zakat* could become the anti-thesis of Phillips' trade-off theory, with the optimal distribution of *zakat* overcoming both unemployment and inflation simultaneously.

Conclusion and Recommendations

Inflation and unemployment are the two main problems facing both developed and developing countries. On the basis of A. W. Phillips' work linking these two issues, conventional economic theory argues that these two problems cannot be solved concurrently.

This paper has argued that *zakat* could serve as the anti-thesis to Phillips' trade-off theory. The optimal distribution of *zakat* could resolve both inflation and unemployment by addressing the latter via increases in both labour supply and demand, while also maintaining a balance between these two things. *Zakat* can also control natural inflation because it is distributed in both consumptive and distributive forms, meaning an increase in aggregate supply will be followed by a rise in aggregate demand. An increase in aggregate supply raises output ($Q \uparrow$) and pulls prices (P) down. In addition, *zakat* addresses inflation due to human factors because it is based on obedience to Allah and efficiency. The system also stimulates economic growth by inspiring productivity and effectiveness. It also

encourages skillful human resources, professionalism, and integrity.

To assist *zakat* in addressing the above issues, the paper recommends the following:

1. *Zakat* be managed by the state as an integral instrument of fiscal policy.
2. *Zakat* be obligatory. In this respect, *zakat* should be administered by a dedicated ministry as a deductible variable for tax.
3. *Zakat* institutions be managed by qualified, professional, and accountable '*amil* for effective functioning.
4. *Zakat* institutions need to explore the possibility of allocating *zakat* funds for productive purposes and job creation. For example, a portion of *zakat* should be designated for development, especially in disadvantaged or remote areas. This will eventually open up more employment opportunities.

Notes

* Mohammad Syafii Antonio, Chairman of Tazkia Islamic University College, Indonesia. He can be contacted at: msantonio@tazkia.ac.id.

** Mohammad Mahbubi Ali, Associate Fellow and Head of the Economics, Finance, *Awqaf* and *Zakat* division at IAIS Malaysia. He is also a lecturer at Tazkia Islamic University College, Indonesia. He can be contacted at: mahbubi@iais.org.my.

*** Jebel Firdaus, Masters Student at Tazkia Islamic University College, Indonesia. He can be contacted at: maulaya11@gmail.com.

1. Richard G. Lipsey and Colin Harbury, *First Principles of Economics* (New York: Oxford University Press, 2004).
2. A. W. Phillips, 'The Relation Between Unemployment and The Rate of Change of Money Wage Rates in The United Kingdom, 1861–1957,' *Economica* 25, no. 100 (1958): 283-99.
3. *Ibid.*, 283.
4. M. Ramesh, 'Economic Crisis and Its Social Impacts,' *Global Social Policy* 9, no. 1 (2009): 79-99.
5. Obaidullah and Shirazi, *Islamic Social Finance Report 1436H/2015* (Jeddah: IRTI IDB, 2015).
6. World Bank and Islamic Development Bank Group, *Global Report on Islamic Finance: Islamic Finance: A Catalyst for Shared Prosperity* (Washington, DC: World Bank, 2016).
7. Adel Sarea, 'Zakat as a Benchmark to Evaluate Economic Growth: An Alternative Approach,' *International Journal of Business and Social Science* 3,

- no.18 (2012): 242-5; Mohammed B. Yusoff, 'Zakat Distribution and Growth in The Federal Territory of Malaysia,' *Journal of Economics and Behavioral Studies* 4, no. 8 (2012): 449-56; Muhammad Azam, Nasir Iqbal and Muhammad Tayyab, 'Zakat and Economic Development: Micro and Macro Level Evidence from Pakistan,' *Bulletin of Business and Economics* 3, no. 2 (2014): 85-95; Mohammed B. Yusoff, 'Zakat Expenditure, School Enrollment, and Economic Growth in Malaysia,' *International Journal of Business and Social Science* 2, no. 6 (2011): 175-81; Bilal Ahmad Malik, 'Philanthropy in Practice: Role of Zakat in the Realization of Justice and Economic Growth,' *International Journal of Zakat* 1, no. 1 (2016): 64-77; Nor Idayu Mahat and Ari Warokka, 'Investigation on Zakat as an Indicator for Moslem Countries' Economic Growth,' *Journal for Global Business Advancement* 6, no. 1 (2013): 50-8.
8. M. Kabir Hassan and A. Ashraf, 'An Integrated Poverty Alleviation Model Combining Zakat, Awqaf and Micro-Finance,' in *Seventh International Conference—The Tawhidic Epistemology: Zakat and Waqf Economy*, Bangi, Malaysia (2010): 261-81; M. Kabir Hassan and Juanyed Masrur Khan, 'Zakat, External Debt and Poverty Reduction Strategy in Bangladesh,' *Journal of Economic Cooperation Among Islamic Countries* 28, no. 4 (2007): 1-38; Farah Aida Ahmad Nadzri, Rashidah Abd Rahman and Normah Omar, 'Zakat and Poverty Alleviation: Roles of Zakat Institutions in Malaysia,' *International Journal of Arts and Commerce* 1, no. 7 (2012): 61-72; Nasim Shah Shirazi, 'Integrating Zakat and Waqf into the Poverty Reduction Strategy of The IDB Member Countries,' *Islamic Economic Studies* 130, no. 1155 (2014): 1-30; Lukman Raimi, Ashok Patel and Ismail Adelopo, 'Corporate Social Responsibility, Waqf System and Zakat System as Faith-Based Model for Poverty Reduction,' *World Journal of Entrepreneurship, Management and Sustainable Development* 10, no. 3 (2014): 228-42; Mohd Rodzi Embong, Roshaiza Taha and Mohd Nazli Mohd Nor, 'Role of Zakat to Eradicate Poverty in Malaysia,' *Jurnal Pengurusan (UKM Journal of Management)* 39 (2013): 141-50; Isahaque Ali and Zulkarnain A. Hatta, 'Zakat as a Poverty Reduction Mechanism among the Muslim Community: Case Study of Bangladesh, Malaysia, and Indonesia,' *Asian Social Work and Policy Review* 8, no. 1 (2014): 59-70.
 9. Muhammad Zulfiqar, *Zakat according to the Quran and Sunnah* (Riyadh: Maktaba Dar al-Salam, 2011).
 10. Norazlina Abd Wahab and Abdul Rahim Abdul Rahman, 'A Framework to Analyse the Efficiency and Governance of Zakat Institutions,' *Journal of Islamic Accounting and Business Research* 2, no.1 (2011): 43-62.
 11. Hukmiah Husain, Nasir Hamzah, Ambo Asse and Muslimim Kara, 'Yusuf Al-Qaradawi Concept on Professional Zakat,' *International Journal of Multicultural and Multireligious Understanding* 6, no. 6 (2019): 1-9.
 12. Qur'an, 9:60
 13. D.N. Dwivedi, *Macroeconomics Theory and Policy*, 3rd ed. (New Delhi: Tata McGraw Hill Education, 2010), 453-6.
 14. Ibid.
 15. Ascarya, 'The Determinants of Inflation under Dual Monetary System in Indonesia,' *Working Paper Bank Indonesia*, (2009).
 16. Frotz Machlup, 'Another View of Cost-Push and Demand-Pull Inflation,' *The*

- Review of Economics and Statistics* 42, no. 2 (1960): 125-39.
17. Ascarya 'The Determinants of Inflation.'
 18. Al-Maqrizi, *Ighathah al-Ummah Bi Kashf al-Ghummah* (Riyadh: Maktabah al-Usrah, 1999).
 19. Ibid.
 20. Adiwarmar Karim, *Ekonomi Islam: Suatu Kajian Ekonomi Makro* (Jakarta: The International Institute of Islamic Thought, 2002).
 21. Adiwarmar Karim, *Sejarah Pemikiran Ekonomi Islam* (Jakarta: Rajawali Pers., 2004).
 22. Sukirno, *Makroekonomi Modern* (Jakarta: Raja Grafindo Persada, 2000).
 23. Phillips, 'Relation between Unemployment,' 283.
 24. Johannes A. Schwarzer, 'Samuelson and Solow on the Phillips curve and the "Menu of Choice": a Retrospective,' *Æconomia: History, Methodology, Philosophy* 3, no. 3 (2013): 359-88.
 25. Paul A. Samuelson and William D. Nordhaus, *Ekonomi* (Jakarta: Erlangga, 1986).
 26. Sarea, 'Zakat as a Benchmark'; Yusoff, 'Zakat Expenditure'; Azam et al., 'Zakat and Economic Development'; Yusoff, 'Zakat Distribution and Growth'; Elleriz Aisha Khasandy and Rudy Badrudin, 'The Influence of Zakat on Economic Growth and Welfare Society in Indonesia,' *Integrated Journal of Business and Economics* 3, no. 1 (2019): 65-79; Mahat and Warokka, 'Investigation on Zakat.'
 27. Sarea, 'Zakat as a Benchmark.'
 28. Mahat and Warokka, 'Investigation on Zakat,' 50-8.
 29. Yusoff, 'Zakat Expenditure,' 175-81.
 30. Azam, Iqbal and Tayyab, 'Zakat and Economic Development,' 85-95.
 31. Khasandy et al., 'Influence of Zakat on Economic Growth.'
 32. Hassan and Ashraf, 'Integrated Poverty Alleviation Model,'; Shirazi et al., 'Integrating Zakat and Waqf,'; Raimi et al., 'Corporate Social Responsibility,'; Embong et al., 'Role of Zakat to Eradicate Poverty,'; Ali and Hatta, 'Zakat as a Poverty Reduction Mechanism,'; Mohamad Soleh Nurzaman, *Zakat and Human Development: An Empirical Analysis on Poverty Alleviation in Jakarta, Indonesia* (Doha: Center for Islamic Economics and Finance, Qatar Faculty of Islamic Studies, Qatar Foundation, 2010), 1-26.
 33. Qur'an 59:7
 34. Qur'an 9:60
 35. Al-Qaradhwawi, *Spektrum Zakat*, trans. Sari Narulita (Jakarta: Zikrul Hakim, 2005).
 36. M. M. Metwally, 'Fiscal Policy in an Islamic Economy,' in *Fiscal Policy and Resource Allocation in Islam*, ed. Ziauddin Ahmed, Munawar Iqbal, and M. Fahim Khan (Islamabad: Institute of Policy Studies, 1983), 59-81.
 37. Naziruddin Abdullah, A. Mat Derus and Husam-Aldin al-Malkawi, 'The Effectiveness of Zakat in Alleviating Poverty and Inequalities: A Measurement Using a Newly Developed Technique,' *Humanomics* 31, no. 3 (2015): 314-29.
 38. Raimi et al., 'Corporate Social Responsibility,' 228-42.
 39. Eman Ahmed Hashem and Shaimaa El-sha'er, 'Can Zakah Help to Enhance Financial Inclusion? Case Study Egypt,' *International Journal of Education and Research* 3, no. 3 (2015): 413-32.

40. Salman Ahmed Shaikh and Abdul Ghafar Ismail, 'Role of Zakat in Sustainable Development Goals,' *International Journal of Zakat* 2, no. 2 (2017): 1-9.
41. Zainulbahar Noor and Francine Pickup, *The Role of Zakat in Supporting the Sustainable Development Goals* (Jakarta: Baznas-UNDP, 2017).
42. Karim, *Ekonomi Islam*.
43. Ibid.
44. Abu Ubaid, *Kitab al Amwal* (Beirut: Dar al Fikr, 1988).
45. Ibid.
46. Metwally, 'A Behavioural Model of an Islamic Firm,' in *Readings in Macroeconomics: An Islamic Perspective*, ed. Sayyid Tahir and Aidit Ghazali (Longman Malaysia: Kuala Lumpur, 1992).
47. Abdul Hamid Mahmud, *Ekonomi Zakat: Sebuah Kajian Moneter dan Keuangan Syariah* (Jakarta: Raja Grafindo Persada, 2006).
48. Steven Kates, "'Supply Creates its Own Demand": A Discussion of the Origins of the Phrase and of its Adequacy as an Interpretation of Say's Law of Markets,' *History of Economics Review* 41, no.1 (2005): 49-60.
49. Sukirno, *Makroekonomi Modern*.
50. Ibid.
51. Samuelson and William, *Ekonomi*.
52. Sukirno, *Makroekonomi Modern*.

Bibliography

- Abd Wahab, N. and Abdul Rahman, A. R. 'A Framework to Analyse the Efficiency and Governance of Zakat Institutions.' *Journal of Islamic Accounting and Business Research* 2, no.1 (2011): 43-62.
- Abdullah, N., Mat Derus, A. and al-Malkawi, H. 'The Effectiveness of Zakat in Alleviating Poverty and Inequalities: A Measurement Using a Newly Developed Technique.' *Humanomics* 31, no. 3 (2015): 314-29.
- Abu Ubaid. *Kitab al Amwal*. Beirut: Dar al Fikr, 1988.
- Al-Maqrizi. *Ighathah al-Ummah Bi Kashf al-Ghummah*. Riyadh: Maktabah al-Usrah, 1999.
- Ali, I. and Hatta, Z. A. 'Zakat as a Poverty Reduction Mechanism among the Muslim Community: Case Study of Bangladesh, Malaysia, and Indonesia.' *Asian Social Work and Policy Review* 8, no. 1 (2014): 59-70.
- Al-Qaradhawi. *Spektrum Zakat*. Translated by Sari Narulita. Jakarta: Zikrul Hakim, 2005.
- Ascarya. 'The Determinants of Inflation under Dual Monetary System in Indonesia.' *Working Paper Bank Indonesia*, 2009.
- Azam, M., Iqbal, N., and Tayyab, M. 'Zakat and Economic Development: Micro and Macro Level Evidence from Pakistan.' *Bulletin of Business and Economics* 3, no. 2 (2014): 85-95.

- Dwivedi, D.N. *Macroeconomics Theory and Policy*, 3rd Edition. New Delhi: Tata McGraw Hill Education, 2010.
- Embong, M. R., Taha R. and Mohd Nor, M. N. 'Role of Zakat to Eradicate Poverty in Malaysia.' *Jurnal Pengurusan (UKM Journal of Management)* 39 (2013): 141-50.
- Hashem, E. A. and El-sha'er, S. 'Can Zakah Help to Enhance Financial Inclusion? Case Study Egypt.' *International Journal of Education and Research* 3, no.3 (2015): 413-32.
- Hassan, M. K. and Ashraf A. 'An Integrated Poverty Alleviation Model Combining Zakat, Awqaf and Micro-Finance.' In *Seventh International Conference—The Tawhidic Epistemology: Zakat and Waqf Economy*, Bangi, Malaysia (2010): 261-81.
- Hassan, M. K. and Khan, J. M. 'Zakat, External Debt and Poverty Reduction Strategy in Bangladesh.' *Journal of Economic Cooperation Among Islamic Countries* 28, no. 4 (2007): 1-38.
- Husain, H., Hamzah, N., Asse, A. and Kara, M. 'Yusuf Al-Qaradawi Concept on Professional Zakat.' *International Journal of Multicultural and Multireligious Understanding* 6, no. 6 (2019): 1-9.
- Karim, A. *Ekonomi Islam: Suatu Kajian Ekonomi Makro*. Jakarta: The International Institute of Islamic Thought (IIIT), 2002.
- . *Sejarah Pemikiran Ekonomi Islam*. Jakarta: Rajawali Pers., 2004.
- Kates, S. "'Supply Creates its Own Demand": A Discussion of the Origins of the Phrase and of its Adequacy as an Interpretation of Say's Law of Markets.' *History of Economics Review* 41, no.1 (2005): 49-60.
- Khasandy, E. A. and Badrudin, R. 'The Influence of Zakat on Economic Growth and Welfare Society in Indonesia.' *Integrated Journal of Business and Economics* 3, no. 1 (2019): 65-79.
- Lipsey, Richard G. and Harbury, C. *First Principles of Economics*. New York: Oxford University Press, 2004.
- Machlup, F. 'Another View of Cost-Push and Demand-Pull Inflation.' *The Review of Economics and Statistics* 42, no. 2 (1960): 125-39.
- Mahat, N. I. and Warokka, A. 'Investigation on Zakat as an Indicator for Moslem Countries' Economic Growth.' *Journal for Global Business Advancement* 6, no. 1 (2013): 50-8.
- Mahmud, A. H. *Ekonomi Zakat: Sebuah Kajian Moneter dan Keuangan Syariah*. Jakarta: Raja Grafindo Persada, 2006.
- Malik, B. A. 'Philanthropy in Practice: Role of Zakat in the Realization of Justice and Economic Growth.' *International Journal of Zakat* 1, no. 1 (2016): 64-77.
- Metwally, M. M. 'A Behavioural Model of an Islamic Firm.' In *Readings in*

- Macroeconomics: An Islamic Perspective*, edited by Sayyid Tahir and Aidit Ghazali. Longman Malaysia: Kuala Lumpur, 1992.
- Metwally, M. M. 'Fiscal Policy in an Islamic Economy.' In *Fiscal Policy and Resource Allocation in Islam*, edited by Ziauddin Ahmed, Munawar Iqbal, and M. Fahim Khan, 59-81. Islamabad: Institute of Policy Studies, 1983.
- Nadzri, F. A. A., Abd Rahman, R. and Omar, N. 'Zakat and Poverty Alleviation: Roles of Zakat Institutions in Malaysia.' *International Journal of Arts and Commerce* 1, no.7 (2012): 61-72.
- Noor, Z. and Pickup, F. *The Role of Zakat in Supporting the Sustainable Development Goals*. Jakarta: Baznas-UNDP, 2017.
- Nurzaman, M. S. *Zakat and Human Development: An Empirical Analysis on Poverty Alleviation in Jakarta*, Indonesia. Doha: Center for Islamic Economics and Finance, Qatar Faculty of Islamic Studies, Qatar Foundation, 2010.
- Obaidullah and Shirazi. *Islamic Social Finance Report 1436H/2015*. Jeddah: IRTI IDB, 2015.
- Phillips, A. W. 'The Relation Between Unemployment and The Rate of Change of Money Wage Rates in The United Kingdom, 1861-1957.' *Economica* 25, no. 100 (1958): 283-99.
- Raimi, L., Patel, A. and Adelopo, I. 'Corporate Social Responsibility, Waqf System and Zakat System as Faith-Based Model for Poverty Reduction.' *World Journal of Entrepreneurship, Management and Sustainable Development* 10, no. 3 (2014): 228-42.
- Ramesh, M. 'Economic Crisis and Its Social Impacts.' *Global Social Policy* 9, no.1 (2009): 79-99.
- Samuelson, P. A. and Nordhaus, W. D. *Ekonomi*. Jakarta: Erlangga, 1986.
- Sarea, A. 'Zakat as a Benchmark to Evaluate Economic Growth: An Alternative Approach.' *International Journal of Business and Social Science* 3, no. 18 (2012): 242-5.
- Schwarzer, J. A. 'Samuelson and Solow on the Phillips curve and the "Menu of Choice": A Retrospective.' *Economia: History, Methodology, Philosophy* 3, no. 3 (2013): 359-88.
- Shaikh, S. A. and Ismail, A. G. 'Role of Zakat in Sustainable Development Goals.' *International Journal of Zakat* 2, no. 2 (2017): 1-9.
- Shirazi, N. S. 'Integrating Zakat and Waqf into the Poverty Reduction Strategy of The IDB Member Countries.' *Islamic Economic Studies* 130, no. 1155 (2014): 1-30.
- Sukirno. *Makroekonomi Modern*. Jakarta: Raja Grafindo Persada, 2000.
- World Bank and Islamic Development Bank Group. *Global Report on Islamic Finance: Islamic Finance: A Catalyst for Shared Prosperity*. Washington, DC: World Bank, 2016.

- Yusoff, M. B. 'Zakat Distribution and Growth in The Federal Territory of Malaysia.' *Journal of Economics and Behavioral Studies* 4, no. 8 (2012): 449-56.
- . 'Zakat Expenditure, School Enrollment, and Economic Growth in Malaysia.' *International Journal of Business and Social Science* 2, no. 36 (2011): 175-81.
- Zulfiqar, M. *Zakat According to the Quran & Sunnah*. Riyadh: Maktaba Dar al-Salam, 2011.