The demand of money in Islamic context

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Abstract— *The demand for money differs in its conception, from one economic thought to another, the object of this article is to model this demand for money in an aspect that has practically not been made to know a modeling of the money demand and its balance with the money supply but under the Islamic context.*
Keywords— Economic, Demand, Model, Money, Islamic.

I. INTRODUCTION

This paper will focus on the determination of the macroeconomic balance in the money market but in an Islamic context, in other words we will try to answer the following question: is an economy governed by the Islamic religion can settle in economic equilibrium?

II. THE MONEY DEMAND

2.1: The money demand without speculation

If we denote by $M_T^d = f(R)$

$$M_T^d = \alpha_0 + \alpha_1 R$$

With; M_T^d is the money for transactions

α_0 is the money for minimal transactions

α_1 is the part of money for transactions

In addition let M_P^d is the money quantity for precaution, then we have $M_T^d = \alpha_2 R$,

α_2 is the share of money demand for precaution

Finally a money for investment denoted by M_I^d then $M_I^d = \alpha_3 \pi$

Where π is the profit, and its well known that investment depends on profit (α_3 is the part of profit). The global demand of money in an Islamic context M_G^d is determined by the equality $M_G^d = M_T^d + M_P^d + M_I^d$

Which implies the linear equation

$$M_G^d = \alpha_0 + \alpha_1 R + \alpha_2 R + \alpha_3 \pi$$
$$= \alpha_0 + (\alpha_1 + \alpha_2) R + \alpha_3 \pi$$

Let M^S the money supply, since at the equilibrium we have equality

$M_G^d = M^S$ then

$$M^S = \alpha_0 + (\alpha_1 + \alpha_2) R + \alpha_3 \pi$$

In particular, $if\ R = 0$ we have

$$M^S = \alpha_0 + \alpha_3 \pi$$

If we have $\pi = 0$, **then**

$$M^S = \alpha_0 + (\alpha_1 + \alpha_2) R$$

These points ($R = 0\ and\ \pi = 0$) described the (Islamic liquidity of money curve, the ILM curve).

2.2: The demand of money and Zakat

In other hand if the investment capital is subject to the≪ *Zakat* ≫, it must be siliced from the profit then

$$M_G^d = \alpha_0 + \alpha_1 R + \alpha_2 R + \alpha_3 \pi - \alpha_3 Z$$

M_G^d then we have $Z = zR$, so the global demand of money become

$$M_G^d = \alpha_0 + \alpha_1 R + \alpha_2 R + \alpha_3 \pi - \alpha_3 zR$$

Thus

$$M_G^d = \alpha_0 + (\alpha_1 + \alpha_2 - \alpha_3 z) R + \alpha_3 \pi$$

At the equilibrium we have

$M_G^d = M^S$

In particular cases when R=0, we have

$$M^S = \alpha_0 + \alpha_3 \pi$$

And if $= 0$, we have

$$M^S = \alpha_0 + (\alpha_1 + \alpha_2 - \alpha_3 z) R$$

The last equilibrium illustrate the Islamic liquidity of money curve (ILM curve).

III. THE DEMAND OF MONEY WITH SPECULATION

In the second part of this paper we consider an approach with speculation.

Consider $M_T^d = f(R)$, the money demand for transactions and $M_R^d = f(R, r)$ the money demand of reserve,

where r is the income of whatever participation because in Islam the interest is prohibited. If we denote by $M_S^d = f(r)$ the demand of money for speculation, then the global demand of money is obtained by

$$M_G^d = M_T^d + M_R^d + M_S^d$$

IV. EQUILIBRIUM

At the equilibrium we have $M_G^d = M^S$ then we see that

$$M^S = \varphi R - \mu r$$

Hence

$$M^S - \varphi R - \mu r = 0$$

In this case we have

$$R_{ILM}^* = \frac{M^S - \mu r}{\varphi}$$

In particular if:

r=0, $R_{ILM}^* = \frac{M^S}{\varphi}$ and

if $R_{ILM}^* = 0$, we have $r = -\frac{M^S}{\mu}$.

V.   CONCLUSION

To conclude, it is enough to answer the previous question to say that in an Islamic context, the economy can settle in equilibrium, but under conditions

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