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The effect of religious expenditures on the Money demand of Iran

[1]Parisa Mohamadi and [2]Kambiz Hozhbar Kiani

[1]Department of Economics, Abhar Branch, Islamic Azad University, Abhar, Iran
[2]Department of Economics, College of Management and Economics, Tehran Science and Research Branch, Islamic Azad University, Tehran, Iran

Abstract
Exploring the money demand function in solving macroeconomic problems and making appropriate policies matter. And adopting fiscal and monetary policies on the economy of every country is based on considering the demand for money in that country. Various Studies have been conducted on money demand function, and its effective variables on the developed and developing countries, whereas a true understanding of this function can lead the Economic policy makers to adopt appropriate fiscal and monetary policies in order to obtain the economic goals. In this thesis, using Vector Auto regression Distributed Lag (ARDL) method and the annual data in 1991 to 2013, we have studied the effects of religious expenditure variables on the money demand function; therefore, results suggest that these variables have a positive and meaningful effect on the money demand function in the long term and short term as well. In addition, GDP relationship with the money demand represents the positive effects on the money demand. Furthermore, the interest rate and the negative currency rate indicate a reverse effect on the money demand.

Key Words: Iran, religious expenditures, money demand function, ARDL method

1. Introduction

Demand for money and the effects of monetary policy has an important role in macroeconomic each country and is one of the most important components of any monetary system and the impact of these components on other components of a system is undeniable. Each country to achieve its economic goals idol considering the economic, political, social and economic policies adopted in the framework of the special program. Several studies have been done on the demand for money and the views and attitudes of many economists have been expressed about raising money. Study in the experimental study of the demand for money in Iran. In the present study tries to identify a new variable costs that religion to attend the demand for money to be paid. To clarify whether religious expenses in a money demand function is effective or not can be effective in drawing macroeconomic policies in the monetary sector.

Clarify whether religious Drtab costs money demands effect or not can be traced to some sort of macro-economic policies in the financial sector contribute. One of the people's economic behavior that is resulting from their faith in God, God is the way to spend part of their

income in the form of obligatory spending done Yamsthb.gs such as zakat, charity, fifth, helping orphans and individual interests.... in addition Drrftaraqtsady Muslim societies is economic growth and even spiritual growth.. (Falahi and Arshadi 1389) .dramvz·h religious people are bred in such a way that the moral desirability of helping the poor gain and this reduces their costs and increase aid to poor waste and willingness to pay for Zakat and charity funds and so on. Consciousness understanding of the factors influencing the demand for money will be the country's macroeconomic decision-makers in taking appropriate monetary policy crises.

The aim of this study was to investigate the effect of costs on the demand for money in Iran is religious. This variable Chqdrdr know the money demand function is effective and how effective the implementation of monetary policy is a controversial case.

2. Theoretical Foundations

Since the emergence of the knowledge economy has diverse views on the demand for base money raised and economists theoretical foundations gave money demand within different lines of thought. Classical monetary theory is introduced in the form of the quantity theory of money. The classical view of money in the long-run equilibrium as a neutral variable is introduced.The classical economists believe that changes in the amount of money available only affect the price level ‹The classical economists believe that changes in the amount of money available, only affect the price level (Mojtaged and Hasanzade ,1384).

Quantity theory of money theory of monetary economics is the oldest and celebrities. Which was presented by economist Ricardo nineteenth century, According to this theory, the general level of prices directly proportional to the amount of money in the economy.

Ricardo quantity theory of money can be with the relationship (1) stating:

$$P = \frac{M}{T} \qquad M = P.T$$

Where M total supply or the amount of money in circulation at a given time and P: the general price level and T: the volume of all transactions done during a period.

Accordingly concludes that under conditions of full employment, ie fixed volume of transactions, changes in the quantity of money directly reflected in changes in the general level of prices.

This means that if the value of M is added, P will increase by the same amount, and vice versa however reduce the volume of M, P will be reduced to the same size (Mojtaged and Hasanzade ,1384).

Stuart Mill in the mid-19th century and thirty years after Ricardo's theory to correct him. In her view, money is neutral, and the velocity of money must also be factored equation. For the coin or currency note, usually one year, not once but several times during the period equivalent to the means of payment. That some money as a relationship equation (2) is.

$$2)\ M.V = P.T$$

Where V is the velocity of money.

Later by Fisher's quantity theory of money became more elaborate,He introduce his monetary theory based on his famous equation.

3) $M . V + m' v' = p. T$ (3)

(M) amount of money,

(V)velocity of money

(m') the total deposits of the Czech transport

(v') the velocity of the Czech company

Keynesian theory of money demand: Drnzryh Keynes and actual monetary sectors of the economy have been synthesized for the first time And changes in each of these sectors, affecting the performance of other sectors.

In the classical theory of money, demand for money based solely on the role of money as a medium of exchange was emphasized. While Keynes recent addition to operating as well as the other two main motivations and affecting the demand for money emphasized.

Keynesian demand stimulus money Ranashy three knows: Trading motive, precautionary motive motivation speculation

So within the framework of Keynes's theory of money demand equation will be:

4) $\frac{M^d}{p} = \bar{l} + k(y) - h(r)$

L demand an independent and stable money demand ky transaction or exchange money, keeping money under the precautionary motive transaction is essentially the same titles used And the demand for money deals a direct and positive relationship with income Because of increases in the income of their daily trading becomes more and more new expenses will be.Hr speculative demand for money and called the section inversely with interest rates is negative. (Keynse,1936)

Friedman money demand theory: Friedman in 1959 with a view to solicit tried Keynesian theories provide a more comprehensive theory of speech a more complete view of the demand for money and Cambridge School of present.

Friedman's perspective real money demand equation (5) is:

5) $\frac{M^d}{p} = f\left(y_p, \frac{W_H}{W_{NH}}, r_b^e, r_s^e, \rho\right)$

In this function $\frac{M^d}{p}$ real demand for money

y_p permanent income

W_H Human resources

W_{NH} Non-human

r_b^e expected return bonds

r_s^e expected stock returns

ρ is the rate of inflation.

The relationship of each variable in the equation Friedman money demand can be summarized as follows:

Permanent came in direct relationship with money demand. In the sense that increased demand for money increases permanent income.

$\frac{W_H}{W_{NH}}$ Correlation with money demand. The ratio of human capital to non-human wealth is, the more desire there is no money for maintenance, so does the demand for money increases.

The expected return on stocks and bonds are inversely related to the demand for money.For example, increasing rse, rbe raise the opportunity cost of holding money, thus reduces the demand for money. Inflation also leads the variables that are inversely related to the demand for money. With higher inflation, money demand decreases. (Friedman, 1956)

Baumol and Tobin's theory: Baumol's theory of inventory and demand money by minimizing the cost of the portfolio (total opportunity cost of holding money and the cost of selling bonds) relative to the amount of money earned..(Baumol,1952)

According to Tobin, everyone expects an interest rate at a reasonable and moderate long-term interest rates corresponding And are sensitive to changes in market interest rates has a positive relationship with it .At the same time, the pattern Tobin, a crisis is that if interest rates lower than market interest rates, the person all your cash assets for bonds keeps Of course, as a representative of bonds and other financial assets is determined monetary wealth ,When the critical value rates, market interest rates higher. Assets into cash are kept. So the demand for money in terms of the demand curves of individuals obtained Tobin and decreasing function of the interest rate. (Tobin, 1958)

3. Research history

Experimental studies on the money demand function in Iran and other countries are as follows:

Hag & Locas (1996) The stability of demand for Canada in the period 1953-1990 and concluded that the actual amount of money, real GDP and short-term interest rates stable relationship exists.

Muscatell & Hurn (1996) Using quarterly data to estimate demand for money in the UK using maximum likelihood method Johansen - Juselius began. In this study money supply, national income, the level of prices and interest rates of treasury bills were used. The results of this procedure confirm a long-term equilibrium relationship.

Bahmani Oskooee and Chiwing Ng (2002) To estimate the long-term demand will return your money using a distributed lag model (ARDL) went to Hong Kong. They have shown that long-term Tqazabray money in this country is a function of GDP, domestic interest rates and the exchange rate.

Choi and Oxley (2004) Using data Country New Zealand in the period (1990-2000) to estimate the money demand function Johanson- Juselius co-integration and error correction model Kshvrba using their income, indicating that the demand for money function, the level of nominal interest rates is price.

Latif (1370) In a study money demand in Iran from beginning to Dvqsm one for economic affairs and charitable (Khums and Zakat and alms, etc.) demand for investment and trading division can be used. In other words:

$$M = M_{\alpha} + M_{\beta} = f(y,w,P^{0}) + f(\rho)$$

In this regard M_α of living and demand money for charity is a function of income y, wealth and inflation w 〖P〗 and 〖M 〗 ^ 0 _β to earn money demand is a function of ρ is the internal rate of return on capital.

Kayani Hojabr and Hlafy (1380) In an article entitled the relationship between the deficit and the demand for money in the economy by using Johansen Juselius and Autoregressive distributed lag (ARDL), Long-term relationship balance the budget deficit and demand money for the economy, period (1338-1377) Krdnd.ntayj estimates of both Vjvdyk proved a long-term relationship between the two variables is positive balance.

Hossein and bakhshi (1385) In order to study the factors affecting demanded money with the use of a 42 - year period of statistics, the demand for money. Between demanded money and an interest rate of long - term deposits inverse relationship exists.

Jafari samimi and alami and sadegh zade (1385), Using the data (1338 -1381) function to examine the stability of the money in Iran. Results from their study suggests that balance is a long - term relationship between the variables research balance of the money, i. e. the real gross domestic product , the inflation rate, the rate of exchange and the state budget deficit . variable sign of gross domestic product in function of positive demanded money variables and the rate of inflation and the black market exchange rate of the state budget Shortage Sign function, asking for money .

Dadgar and nazari (1385) In research to test function of the Iranian economy demanded money during the period (1353 - 1385) Co-integration Johansson method. In this research has shown that between the variable demanded money with four variables real GDP , and the exchange rate of inflation rate in the market and Ginny factor in Iran is a long - term relationship. in total, results suggest the fact that the biggest factor affecting demanded money transaction demand in Iran and other results of this study suggests that a variable factor of Ginny appropriate and necessary function in Iran in demand for money , so should function in analysing the money to be included .

Izadi ,dehmorde (1388) In research to examine the stability of the nose and function function demanded money in Iran for the period 1350 -1388 to ARDL . Results show that long - term relationship between the variables in the balance, there is a direct relationship and dependent variable gross domestic product and inverse relationship variables and an inflation rate of exchange rate on the function of asking for money are stressed . as well as the stability of the test on this function , the results of the tests indicate that a function of the debate in the long term structural stability .

4. The introduction of the variables and research: Variables used in this study includes two independent and dependent variables that is as follows:

Dependent variable: a set of money (cash deposits and meeting notes and Coin in

the hands of the people) and quasi - money (types of bank deposits in the short term and long - term).

Independent variables

Of gross domestic product: According to studies made in developing countries due to the lack of access to the statistics of wealth and special conditions of their economies , The estimate asked for money function of GDP variables used in this study variable therefore of gross domestic product is used as a Variable scale. it is important to note that in most studies conducted coefficient of gross domestic product (GDP) , significant positive effect on the subject is asked for money.

Inflation rate variable: economic in Iran that inflation Up to long years of experience inflation rate could be a suitable criterion for keeping money opportunity cost . Thus, in this study , we also inflation rate, as opportunity cost, maintenance , we use the money . Most studies conducted in the rate of inflation factor has had a negative effect on the demand for money.

Floating exchange rate: despite the relationship between the rate of exchange money supply by mandel (Mundel) , 1963 . due to be positive and negative relationship with requests for money exchange rate to the effect of wealth and succession . Exchange rate variable in a model used on the mark that there is no consensus. The exchange rate can be positive effect and have the opposite effect.

Bank interest rate variable: Import interest rates in demand for money close ties with the opportunity cost maintenance money. the interest rate increases, the opportunity cost increases keep money and to save money and reduced demand for money . and in the studies that factors affecting demanded money evaluated , the findings indicates the existence of a long - term balance the relationship between the actual demand money and macro - economic variables . in which the actual demand to long - term interest rates on deposits , long - term extension and minus the strain indicate an inverse relationship between the actual demand money and interest rates . variable religious expenses: Muslims in the world costs are also to be referred to as the religious costs , according to the divisions in the plan will cost and income urban households, one of the costs of annually collected at the level of the country's provinces , which will be announced religious expenses .

religious expenses, including for cash payments Religious like khoums and zakat and donations charity and cash payments to social institutions (Tkaya, mosques, schools, etc.) and donations to the revolutionary institutions and charities and aid to those affected by the earthquake and the flood and ... is that all of them with the objective of the realization of social justice and humanism humans) takes place kia alhasani (1388). So with regard to maximize the desirability of demand for money finally logarithmic form in the majority of studies, which is used in this study, is also used. Finally form can estimate the (8) to:

$$Ln(Md)=\beta_1+\beta_2 \ln(GDP)+\beta_3 \ln(P)+\beta_4 \ln(e)+\beta_5 \ln(i)+\beta_6 \ln(re)+\varepsilon_t \quad (8)$$

We have:
GDP: Gross Domestic Product
P: inflation,
E: Currency

i: interest rate,
re: Religious costs
Md: liquidity is

5. The results and analysis

1-5 **Regression method exploitation of the** distributed with suspension (ARDL)

regression method with suspension exploitation of the distributed by boys and Shane 1995 in years was introduced in this way, contrary to the method jo honson and jo selios 1990 method, according to the degrees variables in the regression model is not important, instead choosing appropriate breaks for pattern is very sensitive process ardal approach has proved to be compared with two - step procedure parasite - Granger (1987).

in small specimens of greater efficiency and one of the most suitable methods for long - term estimates of is generally a dynamic model for estimating recursive himself with interruptions must first be distributed relationship with ordinary least squares method (ols) for all possible combinations on the basis of interruptions relationship variables by the researcher and taking into account the number of observations is determined by the next stage of the regressions based on an estimated four criteria to determine the coefficient aeek (AIC) Schwartz - bizin (SBC) and Hanan – Quinn (HQC) and determining factor ميماید choice and long - term factors , according to the pattern of selective mealy also achieved this method requires testing the recognition accuracy to examine the relationship and long - term and short – term (ECM) error correction.

2-5 Test unit root:

One of the necessary to estimate the regressions using time - series averages of the reliability of the time - series in order to ensure stable of a time - series variation of root test unit, which is one of the most common tests to determine stability is used the most important test methods for reliability test unit root dicky fooler (DF)

According to Table 1 reliability of state variables,

variable	kind of test unit root	T statistics	result
Md	Dicky-fooler extended	-3.246145	I(1)- not permanent
GDP	Dicky-fooler extended	-4.891477	I(0)- permanent
I	Dicky-fooler extended	-4.128321	I(0)- permanent
E	Dicky-fooler extended	-4.871000	I(0)- permanent
RE	Dicky-fooler extended	-3.280961	I(1) -not permanent

Reference: researcher findings

As is observed by comparison with critical values Makinon conditions of the reliability of the variables 0 or the 1 .

So if at least a regression vector between them is to be found using squares analysis for ARDL method will be allowed.

3-5 Model estimation results research :

Results from estimating the dynamic model method ARDL with the maximum

number of deadlock 2 described the 2 table

Important point in connection with the regression ARDL means is that when the dynamics of the variables breaks them, according to the report.

If the sum of the coefficients with suspension variables related to the smaller than 1 dependent variable is dynamic model to the long - term equilibrium model will tend) son shine 1995)

		Model of Ardl(1,2,1,2,3) use by schwartz-bilzin standard model	dependent variable (md)
(prob.)	T-ratio	ratios	dependent variable
[.000]	7.3855	0.6835	Md(-1)
[.000]	27.7851	1.1347	RE
[.000]	-8.0246	-0.86521	RE(-1)
[.050]	2.1984	0.07298	RE(-2)
[.000]	5.7491	0.17736	GDP
[.000]	-5.9631	-0.19186	GDP(-1)
[.167]	-1.4814	-0.00825	E
[.550]	-0.61624	-0.00171	E(-1)
[.000]	-4.9403	-0.01376	E(-2)
[.000]	-5.1262	-0.26127	I
[.000]	7.2165	0.54648	I(-1)
		.99999	The coefficient of determination
		2.3283	Durbin Watson
		131421.8[.000]	Prob.F

Reference: find of research

Must test be or not be longtime or regression function after estimate Dynamic models. According to seeing table (2), sum factors of variable related to depended variable is less than 1.

Of course, this issue should be resolved through testing and refer to Table brazen be confirmed that it was done. We can therefore say the dynamic model to the long - term pattern is convergence.

4-5. detection tests estimation accuracy :

Before the long - term factors, it is necessary to estimate the pattern of classical was elected ARDL seemed to test results from the long - term relationship between the variables. detection tests of estimates included test of solidarity , including test normality , including the right to form and function test variance of differentiation. That the results of the computation Microfit after the tests to describe the 3 table.

Table 3 (test results from estimating the recognition accuracy)

kind of test	Zero of theory	critical value	the possibility of rejecting the hypothesis 0
serial correlation	not including serial correlation disorder	0.9781	{0.226}
good form a function	good form a function	0.067809	{0.795}
normality	conditions , including sabotage has normality	1.12278	}0.569{
Differentiation variance	Differentiation variance of	0.597	}0.981{

Reference: Research findings

As is observed in all Tests 0 hypothesis is accepted, and therefore in terms of the regression estimates the above tests is a problem and reliable.

5-5. The results of the coefficients estimates the long - term

After assessing the dynamic model ARDL, long - term factors in the model can be estimated that described in Table 4:

Table4 (the results of the coefficients estimates the long - term)

			ARDL(1.2.1.2.1) model using the speakers ought to Schwartz-bizin(SBC)	Md(dependent variable)
	(prob)	T-Ratio	factors.	dependent variables
	[.000]	23.4201	1.0820	RE
	[.020]	2.7146	/0045789	GDP
	[.048]	-2.2251	-/0074912	E
	[.025]	2.5946	-/090113	I

Reference: researcher calculations

What is given in Table 4 , the coefficient is estimated to cost variable religious is positive and significant . We can therefore noted that religious expenses liquidity is positiv e and significant relationship

On the other hand with regard to GDP coefficients, bank interest rates and exchange rates such decided that coefficient of gross domestic product (GDP) is positive and equal 0.04 shows that in return for a % increase in GDP, liquidity 0.04 increases

as well as the interest rate (-0.9 negative coefficient) , in exchange for one percent of raising interest rates , liquidity of the canal bank deposits 0.9 percent drop in as well as in the model of the relationship of

liquidity and exchange rates is achieved negative effect that represents a successor to exchange rates

5-6 Error correcting model ECM

Regression there between a set of economic variables based on the use of the model provides an error correction. Error correcting pattern, in fact, short - term fluctuations in the variables of their long - term relationship .

Micro fit tool in that it is possible that when the equilibrium model long associated with ARDL pattern was extracted, the pattern of related error correction to provide

Results from estimating the error correction factor in the short - term ECM is shown in Table 5 :

Table 5: Model estimation results error correction

		Model of Ardl(1,2,1,2,3) use by schwartz-bilzin	dependent variable (md)
(prob.)	T-ratio	ratios	the independent variable
[.000]	27.7851	1.1347	Dre
[.044]	-2.1984	.072980	Dre1
[.000]	5.7491	.17736	Dgdp
[.159]	-1.4814	.0082470	De
[.000]	4.9403	.013756	De1
[.000]	-5.1262	-.26127	Dl
[.004]	-3.4199	-.31650	Ecm(-1)

0.99319	determining factor
2.3283	Duvbin-watson
267.2007[0.000]	FROB

As shown in Table 5 results pattern is estimated error correcting the error correction number 0.31 shows that represents the moderating effect of liquidity in the index changes in the independent variables changes during the period of about 3 - year - old

6. Conclusions and recommendations: Examining money function in solving the problems of macro - economic policy and appropriate is important i. e. , financial and monetary policies adopted in the economy and appropriate policy in each country's economy is subject to the function of money in that country. One of the men of economic behaviors that their faith in God is due to spend part of their income on the way to God that is in the form of mandatory spending is minor or Based on this study with the aim of empirical study in Iran demand function money began its work .

In the current study trying to identify a new variable to be paid for function to clarify whether religious costs in function of the money or not can be reduced to a kind of macro - economic policy in drawing the monetary sector. The present study from a regression model BRS test Hypothesis model and also proposed method was estimated at ARDL by using the method of data mining documents variables for years to 1372 1392 of the site and the center of the Central Bank statistics Iranand calendar and the country's statistics estimate was preparing to go after the dynamic model estimate method ARDL regression conditions and long - term relationship variables investigated

According to the results from estimating the relationship of long - term and short - term , the proposed research variables that religious costs in the short term and long - term relationship with the demand for money.

We can therefore say consider religious costs will play a significant role in explaining the changing the money that the Iranian households with the results of our study 1370 has.

As well as the differential E and GPD with the results of the previous studies and research was conducted as well as short - term error correction factor model after testing the recognition accuracy was calculated and estimate that period of adjustment short - term changes in about three years old . So the dynamic model research in three years to the long - term equilibrium values are correct

Research limitations: Any study carried out by the obstacles that face to the way , including restrictions that faced the following:

Inflation rate variable due to be meaningless and consistent with previous research , as well as changes in other variables and the lack of success in the tests were eliminated from the model

Research proposals : At the end of the proposals based on the results of the study is as follows:

-1-Given the positive impact of households in religious costs money can be said that if macro policy makers want to contain inflation in an effective way , with Islamic institutions can create demand for اشی households of religious costs money to the production of well - intentioned push through this instead of cash injection to low - income categories and fuelling inflation needed goods production of charitable needs in the cortex .

-2- with regard to the opinions of well - intentioned among Muslim households can be targeted by religious costs, as was the case in the context of a plan of the policy makers in Islamic countries to eliminate the policies of the central bank in Islamic nations such as the publication of government bonds (nine) with joint efforts to justify control inflation.

-3- Based on the results obtained for future research proposed the application of religious costs in reducing poverty and better distribution of income in Islamic countries studied.

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