Prioritize Monetary targets Based on impact of the stock returns

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ARTICLE INFO	ABSTRACT
	Central bank has different monetary goals Such as: inflation, interest rates exchange rates. This targets can affecting on stock returns. In real-world, is not necessarily, the data are definitive, and they are uncertainty and ambiguity. Due to statistical uncertainty, the fuzzy AHP approach to prioritization of monetary policy different goals different components of stock returns is investigated. The results of F.AHP index Shows: "ratio of market value to the nominal price," the most important variables in the stock return, more influenced by inflation.

Statement of the problem:

The monetary policy is capable of stabilizing the real economic variables. Central bank has different goals of economic short-term and long-term economic goals are divided. Short-term goals of monetary policy, exchange rate controls and control of interest rates. Long-term objectives of monetary policy in controlling inflation. When there is a specific shock in one of them, there will be a decrease in the stabilizing capacity of economic policy. We have to see which of these policies has a greater effect on stock returns.

To create conditions for investors that chose various alternative investments, securities firms is so important. Many countries before the launch of the capital market are beginning to stabilize the economy in a predictable environment for investment decisions [9]. The capital market plays an important role in the efficient allocation funds, to develop the countries' economies such as Iran, so facing to huge volume of capital on one hand and shortfall of productive investment opportunities on the other hand, investment markets.

This market against the changes in some emerging markets, such as coins, currency, housing and some monetary targets variables is faced to important and effective changes. Therefore, it is important to understand the factors affecting the optimal choice in stocks [13]. The subject of this study is to evaluate and prioritize the factors affecting the decision of investors to buy shares in the Stock Exchange. In this context the meaning of decision is to select the best and most logical option among of all options. The best decision is based on the desired criteria. investors decisions in exchange for their stock options is based on factors such as earnings per share, liquidity, market trends (the stock price), the ratio of price to earnings and etc. The important aspect of this research is to understand how the relative importance of these factors for investors. In other words, the main question that arises in this study is what the order of the prioritization of the most important factors in the selection of stocks in the capital market for investors in the stock market. By examining previous studies, are also seen many of these studies, concluded by correlation analysis and regression tests and using univariate and multivariate multiple ratio that Financial ratios based on profit and loss statements, indicators of profitability and ratio of price-to-earnings have significant correlations with each other. But the problem of all these studies is that the used data are not conclusive.

Important point is that the economic stability is the most important factor affecting investment in any country. And one of the issues that involved the capital markets in the world and also on the amount of investment in this market are macroeconomic variables and the fluctuations of them affected stocks returns [16]. This issue appears more in Iran. Stock market works in a larger system called Iran's economic and social system, so greatly affected from this. This influence is considerable; because the stock market is in terms of young and formation [12]. For this reason, takes effect a lot from environmental changes. Thus, factors such as economic growth, exchange rates, profit margins of the other economic activities, foreign exchange earnings of the country, the degree and intensity of liberalization and opening up of the economy and development, and increase the liquidity of the major environmental affect stock market [7].

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Therefore, the main aim of this study is to find out that is there any relation between the monetary targets variables, and indicators of stock returns in the Tehran Stock Exchange? What type is this relation? And what indicators have greater effect on the stock returns and should give the priority on policy?

Stocks return:

Stocks return is an important factor in choosing the best investment. One of the aspect to understanding this market. Identify the type of economic activity. The purpose of efficiency is the benefits that accrued during the period to a share. Usually the most important criteria for evaluating the performance of institutions, is the stocks return. This measure itself has the content and information for investors and used to assess the performance. When this measure is reducing, it's an alarm and does not show a good performance of the company. This criterion content a lot of information, because performance evaluation based on the market value, reflects investor's information well. Efficiency in the process of investors is a driving force that creates motivation and it is a reward for investors.

To calculate and determine the Stock returns, indicators and various components from different aspects such as liquidity, operating performance, growth prospects, profitability and risk are important. For example, evaluation the proportion of shares profitability ratios, operating efficiency activities placing through the company profits and investment

Monetary policy targets:

Monetary policy should concern itself with financial innovation because such innovation modifies the effectiveness of policy implementing and its ability to achieve predefined goals. Monetary policy should be effective, for example, lead to an increase in return on investment to be conducive to economic growth. Here are some of the objectives of monetary policy expressed.

Interest rates:

By far the most visible and obvious power of many modern central banks is to influence market interest rates; contrary to popular belief, they rarely "set" rates to a fixed number. Although the mechanism differs from country to country, most use a similar mechanism based on a central bank's ability to create as much fiat money as required.

It is also notable that the target rates are generally short-term rates. The actual rate that borrowers and lenders receive on the market will depend on (perceived) credit risk, maturity and other factors. Many central banks have one primary "headline" rate that is quoted as the "central bank rate". In practice, they will have other tools and rates that are used, but only one that is rigorously targeted and enforced.

"The rate at which the central bank lends money can indeed be chosen at will by the central bank; this is the rate that makes the financial headlines." [8]. A typical central bank has several interest rates or monetary policy tools it can set to influence markets. Deposit rate, generally consisting of interest on reserves and sometimes also interest on excess reserves. The rates parties receive for deposits at the central bank. These rates directly affect the rates in the money market, the market for short term loans.

According to mainstream economic theory, rising (declining) interest rates should adversely (favorably) affect the macro economy through two important channels: (1) the supply and demand for credit; and (2) relative demand for foreign (versus domestic) goods and services.

Thus, when the central bank takes a contractionary stance, it becomes more costly for banks to supply credit – given that it will now be more expensive for banks to acquire the reserves that must be held against newly created deposits.

Similarly, higher interest rates should, ceteris paribus, reduce the demand for bank credit - given the assumed (inverse) relationship between the quantity of credit demanded and the price of credit. Simply put, then, tight money policy should discourage bank lending as well as private sector demand – especially from the business sector – for credit-financed spending Many non-mainstream economists have argued that if the conventional wisdom regarding interest rate effects is not robust – that is, if rising interest rates are not predictably associated with declining investment and a worsening of the current account – then monetary policy can yield unexpected macro outcomes (that is, rising rates might have little or no effect on GDP.)

Our aim is to push the critique a step further, seeking the conditions under which a far more peculiar outcome might occur.

Specifically, we are interested in a truly perverse interest rate effect, one in which GDP rises with monetary restraint or contracts with central bank easing.

With this in mind, we proceed by hypothesizing that when the government's debt is large, appropriately distributed and sufficiently short-dated in its maturity, rising (declining) interest rates can be expansionary (contractionary), due to income, budget and portfolio effects.

Below, we provide some preliminary evidence to support our hypothesis.

When monetary authorities adjust short-term interest rates, the impact on fiscal expenditures can be large. This is especially true when interest payments are variable (for example indexed) or when there is a large

proportion of short-term debt that must be rolled over at the new rate. In the event that policy is contractionary, bonds will be rolled over at higher rates of interest.

But interest rate policy will also affect asset values and the liquidity of portfolios. At the end of the day, the spending and lending propensies of those with relatively large public debt holdings may determine the policy outcome.

Exchange rate:

To influence the money supply, some central banks may require that some or all foreign exchange receipts (generally from exports) be exchanged for the local currency. The rate that is used to purchase local currency may be market-based or arbitrarily set by the bank. This tool is generally used in countries with non-convertible currencies or partially convertible currencies. The recipient of the local currency may be allowed to freely dispose of the funds, required to hold the funds with the central bank for some period of time, or allowed to use the funds subject to certain restrictions. In other cases, the ability to hold or use the foreign exchange may be otherwise limited.

In this method, money supply is increased by the central bank when it purchases the foreign currency by issuing (selling) the local currency. The central bank may subsequently reduce the money supply by various means, including selling bonds or foreign exchange interventions.

Price stability:

In the 1950s, economists focused on the irreducible minimum rate of unemployment, which soon gave way to the unemployment and inflation trade-off debate. Full employment as a sufficiency of jobs was further undermined by the expectations-augmented Phillips curve of Friedman and Phelps, which spearheaded the resurgence of pre-Keynesian macroeconomics. Friedman's Natural Rate Hypothesis (NRH) alleged there was 'no long-run, stable trade-off between inflation and unemployment'. Full employment prevailed with a natural rate of unemployment unless there were errors in interpreting price signals. This left little or no room for discretionary management of aggregate demand. A related concept emerged – the non-accelerating inflation rate of unemployment (NAIRU). In practical Inflation is defined either as the devaluation of a currency or equivalently the rise of prices relative to a currency. terms the two concepts equally undermine the pursuit of full employment defined as a sufficiency of jobs.

Various theoretical structures can support the conclusion that unemployment above a certain level will be associated with declining rates of inflation. It can arise within simple excess demand models, as in Modigliani and Papademos, or in Marxist-inspired conflict-theory models of inflation. In either case there is some (cyclically-invariant) unemployment rate at which price inflation stabilizes for discussion of the cyclical invariance assumption). With the NAIRU concept (or its Marxist equivalent) dominant, full employment as initially conceived was abandoned.

Since inflation lowers real wages, Keynesians view inflation as the solution to involuntary unemployment. However, "unanticipated" inflation leads to lender losses as the real interest rate will be lower than expected. Thus, Keynesian monetary policy aims for a steady rate of inflation.

The mechanism to move the market towards a 'target rate' (whichever specific rate is used) is generally to lend money or borrow money in theoretically unlimited quantities, until the targeted market rate is sufficiently close to the target. Central banks may do so by lending money to and borrowing money from (taking deposits from) a limited number of qualified banks, or by purchasing and selling bonds. The goal of any investor is gain higher returns in the stock exchange business and if the investors are making decision logically to choosing stocks, they are able to achieve optimal efficiency [5]. Recently variety of tools and methods provided to help individuals to identify effective measures for invest in the capital market That each of them have limitations, for example in real-world, is not necessarily the data are definitive, and they are uncertainty and ambiguity [10].

Fiscal policy rule based on the output gap and inflation The main change to this new version of the fiscal policy rule is that we consider that national tax authorities are also explicitly concerned with the stability of prices and that they therefore alter the budgetary balance in relation to long term equilibrium according to the evolution not only of the output gap, but also of the inflation rate. Ultimately, this means that the fiscal policy rule adopts the same form as the Taylor rule for monetary policy. In our opinions, there are reasons for believing that this may be reasonable fiscal authority behavior.

Literature review:

So far, research on the effects of monetary targets variables on the efficiency of the exchange was conducted by econometric methods, but no research has been done on the priority factors affecting stock returns. Since the data is not conclusive of the real, so we are looking in the research phase that applied to the decision-making patterns. But have not been found similar models in Iran. Some of the researches are as follows:

Macroeconomic indicators AS Monetary policy targets affecting stock returns to inflation are mentioned as interest rates, exchange. So far, research on the effects of monetary targets variables on the efficiency of the

exchange was conducted by econometric methods. Some researchers that confirming the effects of macro-economic indicators and variables are as follow:

Table 1: Literature review.

Factors affecting the stock price and the (return on equity)	method	year	Researchers
Economics growth	Econometrics	2008	Abubader
Inflation and currency exchange rate	Time series	2008	Antony and qoam
The money supply, credit to the private sector, the currency exchange rate, the wholesale price indicators and money market rates	Econometrics	2008	Agrawalla & Tuteja
The interest rate, dividend return and Nekol spend	Econometrics	2009	Chang
indicators industrial production, the prices inside to out, the volume of money and the price of oil as an important macroeconomic variables and foreign currency, gold coin prices and housing prices	Regression	2005	Maloeean & Zare
inflation	Regression	2005	Bayati
Exchange rates, oil prices, inflation and industrial price index	Econometrics	2005	Osolian
Exchange rates, trade balance, inflation, currency and The interest rate	Error correction models	2005	Abasian
The liquidity and exchange rate	Cointegration	2006	Karim zadeh
Inflation, stock index growth, employment rate and GDP growth	Regression	2008	Kamali rezaee
inflation	Multivariate Regression	2008	Saeedi and kohsarian
GDP and inflation	Multivariate Regression	2012	Bahar moghadam and koaroyi
inflation	Regression	2013	Rajab zade and javadi kotiani
World prices of crude oil	The generalized Torques methods	2013	Mehrabian and borhani fard

Data analysis:

In this study, we define and identify variables affecting the stock, to analyze data and expected results used of Fuzzy AHP (F.AHP). The aim of this study was to evaluate the articles and books and publications and databases in cyberspace accuracy of the literature presented in the variables affecting the stocks and variables were identified and confirmed by experts and university professors. Experts are professionals on the stock exchange with experience over 10 years, and finally 6 main variables and 21 indicators were selected. The following chart shows the final research model that derived from the research study and based on the literature and the validity results of interviews Confirmed by experts and university professors.
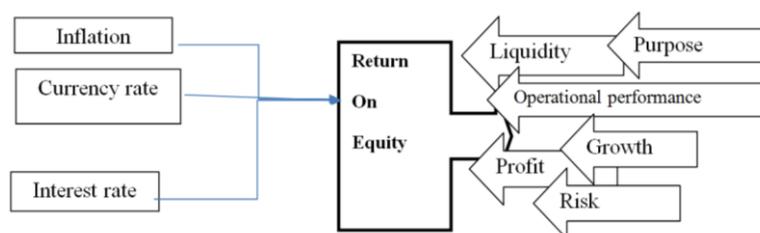

Chart 1: shows the research model.

It can be concluded that the indicator of "commercial risk" is the main feature of the "risk" in affecting variables on stock exchange.

After calculating indicators and variable weights of the study, for having same weights of indicators, we multiplied them in their variable weights, and then ranked them according to their weights. The results are given in Table 1.

Conclusions and recommendations:

The validity of the results for this study, variables affecting the stock exchange and review of the literature and the opinions was identified and confirmed by experts and academics. Then, the variables affect the relative importance of each phase was determined by Analytical Hierarchy. At this point the binary comparisons done and relationships and weight were specified. The results of analysis by hierarchical fuzzy showed that "ratio of market value to office" is the most important variables. Then calculated prioritize options, so that the "inflation" was in the first place.

- Therefore, Monetary targets (such as inflation, exchange rates, interest rates) affecting on stock returns. It was approved by experts. According to experts' macro indicators that affecting stock returns, respectively are

inflation, interest. Exchange the income. So the effect of inflation on stock returns is more than other monetary targets (exchange rates, interest rates). It was approved.

Table 1: shows the final weight and relative variables affecting the stock exchange by F.AHP.

Variable ranking	Indexes' relative weight and its ranking	Indexes its ranking
liquidity (2)	Owners income to debt ratio	(3)
	Instant ratio	(2)
	Current ratio	(9)
Operational performance (6)	receptive account flow	(20)
	Good deliverance flow	(10)
	Invest flow	(4)
growth (5)	Stock growth ratio	(15)
	Stable growth ratio	(14)
	Impure profit growth ratio	(11)
	Income growth ratio	(12)
purpose (1)	Market per book value ratio	(1)
	Price per income ratio	(7)
Profitability (3)	Impure profit border	(13)
	invest output	(17)
	Stockholders salary output	(19)
	Stock profit	(18)
	Investment output	(16)
risk (4)	Business risk	(5)
	Financial risk	(6)
	Systematic risk	(8)

The highest weight in indicator is "the ratio of market value to office" (0.1235), which is related to the "vision".

rate	item	ranking
1	inflation	0.40
2	Interest rate	0.33
3	Currency rate	0.27

According to research results:
- profitability factor impact on stock returns
- operational efficiency factor impact on the return of the stock exchange
- cash factor impact on stock returns stock
- vision factor impact on stock returns stock
- growth factor impact on stock returns stock
- risk factor impact on stock returns stock

Regarding the effect of stock returns in exchange for changes in monetary targets variables (inflation, interest rates, exchange rates, oils revenues), the country's economic policy makers during the application of fiscal and monetary policy, Should studied all aspects of the influence policies and Positive and negative effects of these policies are intended to apply policies to the country's improve capital market. With respect to the priority of monetary targets variables on stock returns is recommended that Government control "inflation" as the top priority, followed by interest rate policy to consider support for stock returns and then consider the interest rate policy to support stock returns. By rising interest rates due to expensive capital cost and cause a negative relationship between these variables and indicators is return on equity. In calculating the profitability and efficiency of investment projects is one of the determinants of the exchange rate. In fact, exchange rate lead to stability and confidence in the domestic economy, so investors easily make decisions to investment in the present and the future. Investor tries to looking for a cheaper exchange rate to produce cheaper and earn more profits.

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