

## CONCEPTUAL APPROACHES CONCERNING THE NEW PARADIGM OF THE MONETARY ECONOMY

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### Abstract:

*The currency played in generally an important part within the popular conception as concerns the economy and life. The currency users have placed the currency within the economic activity, but in contradictory with the classical theory, they have proved that currency has not a real effect, opinion that has been checked within the real cycle theory of the business (according to authors F.E.Kydland and E. Prescott).*

*While during a long duration of time, the monetary theory has been governed by the idea, according to which the currency has no significance, the FED has eliminated such an opinion – by its frequent decisions of modifying the interest rates, fact that confirmed that currency does matter, at least on short term. Within this context, the most important aspect of the economical theory is of explaining why and how it carries out, in order to propose the best references to the political deciding representatives, when these were trying to use the monetary politics in order of reaching an economical expansion, until that point where the rate of inflation hasn't increasing.*

*The new paradigm of the monetary economy consists in the fact that it proves the inconsistency of the monetary theory, according to which the transactions have generated the currency demand. The part of the currency has been in adjusting between currency demand and available funds. This aspect assumes knowing the importance of the information imperfections and of banks behavior.*

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## INTRODUCTION

For the theorists, the monetary theories has been representing for long time a special challenge, respectively the founding of hypothesis that can allow or not the validation of theories. This challenge was difficult, since though the construction of the models where the currency plays a central part was easy, although the number of those leading to quantitative effects was significantly reduced, which might have offered the reality.

The macro-economical approaches have been based in generally on the effect that real equilibrium, respectively on the situation, when prices are reduced and the value of the currency is increased, thus allowing a greater satisfaction to the individuals. Actually, the importance of the real effect is especially reduced, more towards the situation of an economical restarting.

The monetary doctrine, according to which the prices grow proportionally to the increase of the monetary offer, no matter the monetary regime, it proves that there are no effects over the real transactions.

A current opinion assumes that monetary theories are based upon the principles of the micro-economy. Other economists emphasize the fact that monetary templates and theories are not adapted, and that they have to be established upon the maximization principles, therefore introducing the currency within the production and utility functions.

Research carried out after the 1990 year has tried to reaffirm that the currency has no significance. For this fact, it has been proved that the public financial politics has no effects considering the monetary point of view.

Of the government reduces the taxes and increases the public due, the demand of treasury certificates will grow by an amount rigorously equal to the increasing of currency offer. A modification within the structure of due's dates of payment will not carry out any effect,

On supporting this theory, certain hypotheses have been carried out, meaning:

- ✓ the absence of distortions produced by the rate installments;
- ✓ the absence of effects for redistributing between generations;
- ✓ the existence of the markets on capital perfect.

One of the most approached problems within the last 20 years was the investment of consequences for expensive and imperfect information of the capital market activities carrying out. It was proved that, therefore the models that assume imperfect capital markets are the most adequate for the reality rather than those that are competitive, which might be characterized by rationalization (limitation) of the credit and own funds. The models established towards the imperfect and expensive information have supplied certain explanations over the secondary and institutional character of the capital market, character that proves to be in contradiction to the model of perfect market.

The model of imperfect market proposes a basis for the explanation of numerous aspects of monetary aggregates functioning, which are not in harmony with the neoclassical competitive model.

# THE CRITICS OF CURRENCY DEMAND THEORY BASED UPON TRANSACTIONAL REQUIREMENTS

There are many susceptibility reasons over the traditional explanations; J.M.Keynes could not be comprehensible as concerns the currency definition, comprehension absence that authorized different behavior and interpretations. Within this context, the attention was towards paid t owards the deposits demand, since they represent a part of the currency directly controlled by the monetary authority and represents a larger component comparing to M1, which regroupes all payment means under the form of effective currency (bank tickets and divisionary currency) and of deposits into current accounts, not carrying the interests and that represent the most active part of the monetary mass or primary liquidity.

J.M. Keynes enumerated three reasons of currency preservation; precaution, speculation and transitioning. J. Stiglitz considers pertinent only the third reason, the first two reasons being related to using the currency as value reserve.

Therefore, the analysis of requirement has to be focused upon the *currency requirement* for transactions. The last 15-20 years led to remarkable modification within transactions technology, by the fact that a fast circulation of currency is possible. The relationship between the conventional measured currencies mass and the level of incomes was not established in these years. This fact, to which the unpredictable character of the currency speed is added, will prove that the theory of *currency demand* has no practical utility and that this theory was exceeded.

**THE CURRENCY CARRIES THE INTEREST AND HAS AN OPPORTUNITY COST**

A central topic and very controversial is the following: presently, within the advanced and industrialized economies, the currency is carrying the interest, and the interest difference between a monetary cost and a thesaurus certificate is determined, not by the monetary politics, but by the transactional costs. In present, considering the modern technologies, the treasury certificates can be used for transactions also, so that there is no opportunity cost in order to own the currency.

The monetary theories developed within last 30 years have developed an equation of demand requirement, where the opportunity cost for owning it can also be taken into consideration. The standard monetary theories explain the fact that monetary politics can carry out in order to modify the currency offer, fact that induces a variation of interest rate. This modification is

rebounded over the real economic compartments. Reducing the currency offer leads towards the increasing of the currency price, the interest rate, this on its turn leads towards reducing the demand. Within an opened economy there is a channel, by which the monetary politics can exercise the influence. Increasing the interest rate makes more attractive the investments for the foreigners; capital movements induced by the countries that increase the rate of interest leading therefore to reducing the exporters' demands and towards the increasing of importers' demands. This model is very useful for the currency politics representatives, since at least few relationships remains stable. The conclusion would be that while the investment function is unstable, the currency demand is stable also.

Recent models assume that currency demand is a function of national income value. The biggest part of the transactions does not generate incomes, but are connected to sales or buying assets. Although, these intertrade of assets do not involve obvious and stable connections with the national income (the annual incomes of these transactions might be huge).

## IS THE CURRENCY NECESSARY TO TRANSACTIONS?

Most of transactions do not need this type of currency that might be accomplished by credit. The reason, for which the credit cannot be used in order to facilitate the intertrade, is related to information insufficiency, which have to guarantee the approval of a credit, to an economical agent or an individual. The decentralized character of the information within market economy makes expensive the achievement of this information. But, the modern technology that allowed so many progresses on monetary level, including the use of treasury certificates as currency, might allow the use of the credit as basis of intertrade.

As concerns the variations of circulation speeds, the currency users have displayed a certain skepticism on mechanism for interest rate point of view, respectively for the real installment that results from the real variables.

The business cycle theoreticians have developed the idea according to which the currency has no importance for the real intertrade, it interferes over the prices level.

The explanations of the currency users are based upon the constant circulation speed, which as compared to the classics that assume circulation speed as depending upon the opportunity cost of the currency owning, the calculus proved that annual rate of the interest does not explain but partially the variations of the circulation speed.

In order that relationship between currency and income to be explained, another definition of the currency was in great demand. The error manifested into relationship between currency and income needs a reexamination of the monetary theory basis, as more the apparent error of the report between inflation and unemployment towards the end of 70 was produced due to certain postulates of the traditional Keynes's theory.

The monetary theory that is based upon using the currencies in order to perform transactions carries out other problems, also:

- What do the investments determine?
- The rate of interest on short or long term?
- The rate of interest or the price of stockholding?
- The real or nominal rate of the interest?

The demand for investments is related to the rate of interest, on real terms, on long term or by the price of stocks. Many empirical studies take into consideration the standard approach by which the monetary politics exercises its effects.

The most important variable that influences the investments is the nominal rate of the interest. The price of stocks is also the most pertinent measurement instrument of the capital cost, since it reflects the market perception of the risk associated to the investments.

## THE THEORY OF JAMES TOBIN'S PORTFOLIO

J. Tobin explains, by theory of portfolio, which effects of the monetary politics result by the modifications of relative currency offer into thesaurus certificates or by fiduciary currency, or, yet by thesaurus certificates on long or short term (as the Twist operation, the Treasury takes the bonds on long term and issues bonds on short term, in order to ameliorate the negative balance of payments, and in order to maintain the economical growth). Such an action is based upon the theory according to whom the rate of interest on short term is adapted by international capital movements, while the rate on long term is related to the internal market, especially by the mortgage market.

Therefore, the theory of J.Tobin is advanced as comparing to the theory based upon transactions, but excepts the part of institutions, since what matter the most in economy is the demand and the offer for all the assets portfolio. The adjustments of the assets carry modifications of the rate of interest and of the shares' efficiency, fact that influences the real economic activity.

According to theory, the monetary politics carries out its effects, as result of the real rate of the interest. The graphics prove that during times, the real rate is constant and there is no cyclical variability.

The monetary politics balances other modifications of the economy but cannot make this sufficiently, and didn't succeed on avoiding the reducing of real rates of interest (according to graphics, on long periods, except years '70, of mineral oil shocks). Therefore, it becomes difficult on relating the stability of real rate of interest, with enouncing the monetary theory that offer a central part to the real rate.

The *standard monetary theory* focuses the rate of interest of the treasury certificates, but the economical activity depends upon the rate that has to be paid by investors.

The hypothesis of standard theory is that these two rates of interest are separated depending on risk; the interval between those two rates often varies. In 1191 in USA, the rate of thesaurus certificates has decreased to 3-4%, while the rate of interest to credit cards was between 16-19%. But, it becomes not justifying that risk adjusting has followed the same evolution with rates of interest.

Other drawbacks of the monetary theory established on transactional needments:

1. The premises of theory are not enough convincing, where lots of problems remained unsolved; do not explain the modifications in efficacy of the monetary politics.
2. The theory proposed by Stiglitz advances as alternative the fact that monetary politics is unable to save economy from recession; it is unable on restarting the growth by its credit offer or by ameliorating the conditions where credit is offered.

The standard approach of the monetary economy places the currency on a central place, but the studies indicate the necessity of credit part's emphasizing and also of its determinant factors.

Within recent approaches, the own funds concept is taken into consideration, on the part of information on credits' offer and on that of institutions, banks or economical agents, which achieve information and assume risks associated to credits' offer. Also, within monetary politics plan, the recent approaches have proved the following aspects:

1. – Over the economical activity, influence is carried out by the conditions where credit is proposed to the private sector; and the volume of credit and not the currency amount, on general point of view.
2. – The relationship between conditions where credit is proposed (as the rate of interest) and the rate of thesaurus certificates, which might considerably vary in time.
3. – The credit offer cannot necessarily vary in parallel with the currency offer, modifying the relation between currency and credit being more obvious within crisis period.
4. – The banks determine, on general point of view, the conditions of credit and its volume. The aptitude and their attention towards loan is influenced by the rate of interest to thesaurus certificates, but on a manner that depends upon the economical conditions.

5. – The variations of rate of interest affect the real value of the companies of banks and of their preferences for loans.
6. – The monetary politics affect the economical activity, but not only by its effects over the credit demanding (for the investments), but also by currency offer (especially when there is the limitation of credit). Therefore, the monetary politics influences the offer and demand required, which are interacting.
7. – On particular situations, the effects of currency demand over the offer mutual influence (generating a distortion of the economical activity), but the effects over the offer might be more powerful than those related to demand, in situation of a more restrictive politics, even that inflationist.
8. – the monetary politics influences the behavior of banks and of companies, not only by an effect of substitution generated by modifying the rate of interest, but only by an effect of richness and cash-flow.
9. – The repercussions over the general equilibrium are propagated by crossing more channels, other than those traditional. The high rates of interest influence the net value and influence the risks and incertitude associated to value of assets and bankruptcies. The increased rates of interest affect the preference for loans or for state bonds on long term. Such effects can be increased, when regulations as concerns making proper the capital impose also an inadequate risk adjustment, for certain categories of assets.
10. – The monetary politics has effects on long term. An actual increase of the rate of interest, previously pronounced, can have very long term consequences, after the initial impact.
11. – The monetary politics carries important economical distortions and these have to be taken into consideration in order to emphasize the advantages comparing to other methods of stabilization. The distortions can be corrected, but this solution reaches towards decreasing the efficiency of monetary politics.
12. – When monetary politics takes action first over the bank system, the full effects are rebounded over the economy assembly, due to credit installments.
13. – The competition growth within the bank system by eliminating or significantly reducing the profits resulted from the spread of interest rate, will lead towards reducing the efficiency of currency politics.
14. – Other modifications within the financial structure, as well as the growth of commercial effects weight or of the market titles with dates of payment, and also for the global integration of these, will lead towards alteration and even elimination of monetary politics efficiency.

The new paradigm proposes that State has to be highly based upon *the monetary politics*, in order to stabilize the economy, knowing the limits and costs of this action.

*The monetary politics*, in contradistinction to the politics of public expenses, needs a reduced volume of information, since it is based upon market's mechanisms, in order to guide the low capacity functioning of the economy.

*The monetary politics* carries important a predictable multiplications; a growth of the monetary basis leads to a multiplied expansion of the credit.

*The monetary politics* deform the economic environment and the incidences are not always predictable. The market deformations are amplified once with the financial market development.

*The monetary politics* has a direct and powerful influence over the small and middle enterprises activity (of the building field), which do not call commercial effects or titles on average or long term, that can call only the bank credits. In contradistinction to the small enterprises, the international companies can take their financing to one country to another. As these circulations are more powerful, as much the impact of limitation to credit over the small enterprises will be reduced, and the global impact of the reduced offer on internal credit will be smaller.

The monetary politics carries high costs correlated to the volatility and weakness of the bounds market. Considering the absence of a performance bounds market, the companies prefer the

self-financing or contracting credits. Therefore, the economies that depend upon, more and more of the monetary politics, in order to be stabilized, can be marked by a reduced efficacy on global allocation of capitals and also of the high disparities between marginal efficiencies of the investments.

The *distortion effects* of the monetary politics are emphasized when aiming towards the maintenance of *rate of exchange*. Such utilization leads towards the increasing of rates of interest to extreme levels, if the economy is within the liquidity crisis.

Not involving within the stabilization of the rate of exchange carries similar effects, fact that involves the question if there is no problem without solution? The answer is “no”. Reducing the rate of exchange can have minimal effects over the economical activities if the companies exercise a politics of careful indebttness and covering the rate of exchange.

The exporting companies carry out automatically the partial covering, since the incomes are increased when the rate of exchange decreases. It becomes remarkable the fact that when the state assumes such risk, it actually reduces the prices for companies that do not exercise an adequate covering.

Over a long period of time, the FMI (Monetary International Fund) has supported the necessity of offering the subventions, in order to avoid the devaluation, since the companies haven't practiced an enough covering over the currency risk. FMI was thinking that if companies do not protect by specific techniques, it becomes necessary the intervention of public funds, in order to maintain the rate of exchange or in order to reduce the devaluation diminution. Therefore, a system by which companies that do not protect against the currency risk has been maintained.

The effects of monetary politics are found specifically on certain sectors of activity. The agriculture and small enterprises cannot take the effects, being those that support most the involvements of rates increased by the rates of interest. Majoring the rates of interests, towards the years '70 and beginning of years '80 in USA, has reduced considerably the activities of economies houses, some of them having negative values. Numerous risk investments were made in order to solve those respective situations. The employers have paid increased costs, and resources were not adequately shared. These effects could have been reduced by two solutions: more rigorous regulation and subventions, solutions that carried a considerable cost of the monetary politics.

As conclusion, the affirmation according to what the monetary politics is relatively inefficient is based upon distortions and not adequate sharing of the effects. Also, not in the advantage of monetary politics, the absence of foreseeing the effects and their irreversibility also exists.

The monetary theory affirms that effects are predictable and easily reversible , due to the simple relation existing between the monetary offer and the level of nominal incomes

On recent approach, where the main part is carried out by credit, the things are changing, since a credit line for the individual cannot be substituted with a credit line from another. In this way, the currency is considered to be anonymous, comparing to the credit. If a bank owns supplementary reserves, and another one no, the reserves in surplus cannot be transferred to the other banks.

Also, within the time of economical recession and financial crisis, it becomes difficult to force the banks in order to loan more, respectively the amount carried out on increasing the monetary basis. The incertitude that manifests as concerns this aspect comes from the fact that banks have different expectations and that modifying the value of banks can become different. Much more, the banks can have a better appreciation of the expected loss, in comparison to the central bank, and each of them can hide the information that it owns.

Due to the high time interval between modification of monetary politics and the impact over the economy, the authorities paid attention over the currency offer and more recently, on the rate of interest to thesaurus certificates. These parameters progress normally, in tandem.

But, if circumstances are not normal anymore (as for instance: crisis states or inflation), then for their economic activity it becomes important the *credit offer*, and also the conditions of offering.

The responsible people of the monetary politics have reached to conclusion that average rate of the credits' rates of interest do not provide a fine measure over the capital's cost. If the installments rates are increasing due to risk increasing, and of the information is symmetrical, and the debtors and creditors are neutral as concerns the risk, then the increased level of the interest rates do not lead towards restricting certain activities' sizes.

A new conclusion can be formulated; meaning any type of monetary politics behaves a certain level of uncertainty. The best instruments of monetary politics are these that allow the fast detecting of an error and fast and facile. If the time interval necessary for detecting and amendment is high or if consequences are irreversible, then this type of instrument has to be carefully used.

When FMI imposed installments of the huge rate of interest in East Asia (60% the nominal rate of interest in Indonesia, real rates of 25% in Korea), affirmed : *if they are too high, it will come back over the monetary politics*. But, these rates of interest have brought thousands of enterprises in bankruptcy state. Decreasing the rates if installments could not reestablish the situation, immediately, and the malnutrition and interruption the schooling have been represented the effects on social level.

Considering the traditional way, the monetary politics and that of financial regulation are considered separate topics. One is the branch of macro-economy, and the other appears as a branch applied to micro-economy. One is based upon currency offer, and the other on the stability and security of banks.

The aim of the new paradigm is that of proving that separation of the two systems is an erroneous approach and of proving that financial bank regulation attenuates the effects over the general state of the equilibrium.

## THE RATIONALITY OF BANK REGULATIONS AND DEREGULATIONS

Why does the public power regulate the activity of financial institutions within the entire world? The answer consists in the increased number of bankruptcies, which carried considerable crisis into all economies, as well as public expenses dedicated to these directions. Upon basis of these bankruptcies, the inadequate practices as concerns the credit exist; they come either by an apparent behavior or by assuming certain increased risks.

Why do the banks perform such risky loans? The answer is the following: the private costs had by banks are less important than the social costs. The argument to such intervention of the public power can be analyzed on two points of view: if there are externalities associated to real practices, then the state can play its part by the alignment of private costs to the social costs. On the other hand, the state manifests its part by having the quality of underwriter. The state actually assures the bank deposits, fact that involves an ethical problem of the risk: the insured persons cannot fully support the costs of assumed risks. As result, the insurance companies try to regulate the behavior of the insured persons, respectively of the banks. Therefore, the problem of the financial regulations hasn't been limited only to the rules of making proper the capital.

The real reason that justifies the excessive trust within the norms of making proper the capital result from the fact that it represents a solution less bad than free exercise of bank profession. The pertinence of the capital represents a stabilizer: as more a bank owns more own funds, as much the state will support lower costs in situation of bankruptcy. On the other hand, the pertinence of the capital leads towards a system of stimulations: as more the owners risk more the capitals, more these cannot accept the risks of bank activity.

The impact of the capital pertinence has been analyzed by Hellman, Murdoch and Stiglitz authors. These have proved that trusting within pertinence normative of the capital is not efficient, in the Pareto way, no matter if there is or not an insurance of the deposits. The pertinence normative of the capital might lead towards a less careful behavior, and the bank's ability of operating can be negatively influenced.

The fail of the regulations put in a concrete form on capital pertinence is recognized in present as having an important part towards financial stability that characterized the greatest part of

the countries developed and in course of development. On the above mentioned authors' opinion, a significant cause consists in the absence of the theory related to banks behavior, upon basis which a theory of the bank regulations has to be built. The process of transaction into outgoing direction has also been representing another major reason of the financial crisis, therefore manifesting by a vital lack of the qualified staff.

As concerns the Asiatic crisis, this has been argued that the absence of a powerful financial institution. Instead, as concerns the Scandinavian crisis, the institutions apparently powerful could not prevent a crisis of proportions. On the other hand, as concerns Thailand, the Central Bank, considered one of the most solid banks of the world in '80, this knew a diminution of its part, as result of the process of financial freedom, fact that emphasizes that before liberalization there were institutions in better and powerful situations.

Although the regulation authorities are aware of these problems and propose a gradual liberalization, this objective is difficult to be reached, since the preference for such risks has been increasing once the programs of liberalization were announced.

The increased liberalization and integrating the capital markets, as well as creating the UME have reached the problem of using possibility related to monetary politics in order to prevent an economical crisis or in order to limit an overrunning of the economy. It becomes improbable, for instance, for the Central European Bank, to decrease the level of unique interest rate in order to restart the economy of Portugal. In this way, the governments are obliged to abandon such representative instrument, for their power; the governments have also a freedom to action in this field, where any difference of rate of interest between internal and exterior parts would generate huge movements of capitals.

The analysis of this topic, within the context a new monetary paradigm, would allow understanding of why regional fluctuations remain so important, even in situation of certain integrated economies (as USA) and why the national governments have such possibilities of using the monetary politics, and respectively of affecting the credit flows. This analysis explains why there is yet an important part of the central banks in certain countries where using dollars were carried out (the situation of Ecuador, the currency is related to the dollar).

The credit is funded by information, and particular, on information provided by small and middle enterprises. From this, it results that information is local. The credit does not circulate on its own, from one region to another and the part of local banks is very important on credits' offering. In situation where to these banks level, modifications as concerns the net value are produced, the casualties cannot be compensated immediately by establishing new banks in those regions. Although the theory admits that perfect information leads to capitals mobility, it was proved that adjustments as concerns the credit situation are made due to migration of work force.

The connections between the level of regional development and state of recession can be emphasized within integrated economies (as USA and UME). The main problems of this argue is that of manner when the increase of the labor force is related to the local economic conditions (regional) in comparison to those of world level. For instance, the weak local economic conditions can carry a deterioration of the banks situation (by increasing the number of debtors with problems) and a decline of the activity. Also, if local services are not developed, the labor force will be directed towards industry.

In order to develop the correlation between recessions, the regional development and monetary politics have been developed by two ways:

- One based upon the information and regional regulation of the capital market;
- Another model, based upon traditional approach of the competition.

The model based upon the information has proved that an amelioration of the local conditions, as result of the economical growth can have very good effects over the financial market. Also, of the financial markets are integrated, the funds will freely circulate. Remaking the local banks can lead towards the increasing of the credit activity, directed on the most profitable projects. If the information proves to be much localized, at least one part of the supplementary credit capacities will remain at the local level.





- since the monetary politics affects not equally the different sectors of activity, an increased trust of the monetary politics might involve powerful distortions and can carry institutional adjustments, fact that on long term, reduces the efficiency of the monetary politics.
- the transformations that manifest within the transactional technologies and information can carry into the future significant effects over the efficiency of monetary politics.

## BIBLIOGRAPHY:

1. Basno C., Dardac, N.,(2000) *Opera iuni bancare*, Editura Didactic i Pedagogic , Bucure ti;
2. Cibotariu, Irina- tefana, (2008) *Finan ele întreprinderii*, Editura Didactic i Pedagogic , Bucure ti;
3. Clarida, R., Gali, J., Gertler, M., (1999) *The science of monetary policy: a new Keynesian perspective*, *Journal of Economic Literature*, Vol. XXXVII;
4. Costic , Ionela, L z rescu, S., (2004) *Politici i tehnici bancare*, Editura ASE, Bucure ti
5. Hlaciuc, E., Mihalciuc, C.,(2006) *The monetary policy- the main responsibility of the Central Bank: Romanian case towards EU integration*, the International economic conference, The preconference for the International economic history congress (Helsinki, Finland, 21-25 August 2006), Session 44: „Identity, Globalization and Universality in the Eastern and Central European Economic Area and Involutions in the Modern and Contemporary Period: Experiences, Meanings, Lessons”, Section 3: Monetary and financial structures in East and Central Europe: Evaluations in the context of European integration, Volume III, Lucian Blaga University Publishing House , Sibiu;
6. Hlaciuc, E. Mihalciuc,C. (2006), *Diagnosticul financiar - instrument al analizei performan ei financiare i al managementului întreprinderii*, *Analele tiin ifice ale Universit ii de Stat din Moldova, seria socio umanistice*”, sec inea Finan e, Chi in u;
7. Obstfeld, M., Rogoff, K., (2005) *Foudations of International Macroeconomics*, The MIT Press;