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RESEARCH ARTICLE

CENTRAL BANK INDEPENDENCE AND THE ISSUES OF UNCERTAINTY IN THE IMPLEMENTATION OF MONETARY POLICY: STRENGTHS AND LIMITATIONS, REMEDIES AND PARADOXES

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Abstract

Within the framework of this article, we deal with the primordial role of central bank independence, which constitutes a fundamental institutional element and a sine qua-non condition for the conduct of monetary policy in a framework that tends towards stability and that endangers the framework of uncertainty. The independent central bank theory remedies the framework of temporal inconsistency that integrates central banking and the conduct of monetary policy into the disruptive influence of political power, and emphasizes a stability framework at the central bank that contributes to the credibility of the central bank and allows it to influence the behaviour of economic actors through an efficient expectations channel. Despite the crucial advantages and contributions of the independent central bank theory, however, it has several limitations and drawbacks. In this respect, the theory of central bank governance is presented through its two facets, namely internal and external governance theory, as two institutional instruments that make it possible, on the one hand, to remedy the limitations of the theory of the independent central bank and, on the other hand, to strengthen its contributions and its inescapable assets.

Introduction:-

Since the inception of Brainard's (1967) fundamental principle, there has been a plurality of research confirming that uncertainty affects the development of monetary policy decisions.

As such, the implementation of monetary policy within the framework of the literature is the subject of several controversies which imply that the gradual behaviour of central banks and the reasons may justify this state of affairs. In this case, the work of Drumetz and Pfister (2010) generates a great contribution at this level.

The central bank is at the heart of economic activity, because of the ubiquity of money, and it is important to question whether or not it is able to achieve the official objectives assigned to it.

According to MINSKY (1992), central banks are institutions that are able to contain and neutralize the effects of financial instability, and therefore have a responsibility to prevent it and to ensure the proper functioning of financial markets.

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According to Bagehot, the need for a central bank has arisen to ensure the convertibility of means of payment, currency stability and banking security.

Blinder states in 2010, that the usual responsibilities of central banks are of the order of four. The first mission is to conduct monetary policy by being authorised, and to exercise the function of Lender of Last Resort (LOLR) in certain exceptional cases.

The second mission is to ensure financial stability, while exercising the (LOLR) function in a less restrictive manner compared to the previous mission .

The third mission is to supervise and regulate the activities of banks. A mission that is less and less carried out within the central bank, but via the intermediary of the agencies.

The fourth mission is to ensure the smooth operation of the payment and settlement systems, as well as the possibility of carrying out the function of (LOLR) .

The central bank is an institution that is supposed to act for purposes other than crucial macroeconomic issues, namely the fight against inflation and the maintenance of internal and external monetary stability. Based on this observation, the action of the central bank requires neutrality in action on currency and credit. The ultimate objective is to avoid personal interests, the interests of individuals and the influence of lobbies in the context of its decisions.

The model of the independent central bank originates from the model of the Bundesbank, defended in the name of neutrality. It should be noted that the term "neutrality" is a semantic term close to "independence" or "autonomy". It is as independence is ensured legally and effectively over a fixed period of time, that neutrality is increasingly strong. The interest of neutrality is to protect the institution of the independent central bank from the disruptive influence of power and its fluctuating objectives.

The management of crucial macroeconomic issues by the institution of the central bank requires a relatively constant behaviour ensured by the “independent central banker”, who wants to maximize his “credit” in the long term, as confirmed by the author C.Aubin (1995). The independence of the central bank is opposed to political decisions, manipulated by the interests of individuals and short-term. The interest of the independence of such an institution is the search for impartiality and universalism.

The Objective of this independence is not limited to the protection of this institution with the intentions of the political alternations, but also aims to delimit in a very precise way the stability of the prices which illustrates an inter temporal task. The ultimate goal of central bank independence is indeed the search for credibility. The independence of the central bank is the institutional counterpart of the credibility of this institution

Initially, the theoretical framework that characterizes monetary analysis is set out in a context of uncertainty. At this level, the main factors of uncertainty that affect the design of monetary policy are presented in general theory. In a second phase, we analyze in depth the temporal inconsistency and we compare the contributions and the limits of the independence of the central bank.

The main issue on which our article is focused is as follows:
In what way does the independence of the central bank address the challenges of uncertainty for the optimum implementation of monetary policy?

Adopted plan on article basis :

1. Factors of uncertainty and their influences on the implementation of monetary policy
2. Uncertainty about the state of the economy
3. Uncertainty about the structure of the economy
4. Strategic uncertainty
5. In-depth analysis of the temporal incoherence and comparison of the contributions and limits independence of the central bank

6. Detailed analysis of temporal incoherence
7. Confronting the contributions and limits of central bank independence

Conclusion:-

1/ Uncertainty factors and their influence on the conduct of monetary policy

The financial crisis is an economic fact that has shown the uncertainty in which the implementation of monetary policy operates. The framework of uncertainty arises when future realisations and disruptions are ambiguous for economic actors. In fact, the financial crisis is affecting the transmission channels of monetary policy.

Sénégas (2002) considers that uncertainty is a cost to the monetary authority, and therefore optimal monetary policy is linked on the one hand to the nature of the rule used and on the other hand to the type of uncertainty considered. The activity of the central bank is unquestionably the competence to manage uncertainty. The Brainard study (1967) is cited as one of the first to address the emphasis of uncertainty by the policy-maker in the empirical literature.

The economic literature identifies several forms of uncertainty, namely those relating to the measurement of inflation, the mechanisms and time frames for transmitting monetary policy to inflation, and the shocks likely to influence economies. Based on studies from the ECB's monthly bulletin (2001), Jenkins and Longworth (2002), Issing (2002,2003), Sahuc (2004) and de Noyer (2008), three types of uncertainty are identified that affect the implementation of the monetary policy strategy.

Uncertainty related to the state of the economy or additive uncertainty, strategic uncertainty and finally uncertainty about the structure of the economy called multiplicative uncertainty. Usually, the central bank watches for the development of macroeconomic aggregates that operate in an environment affected by very significant structural changes.

These structural changes stem from the uncertain economic dynamics that take many forms. The framework of economic uncertainty can be seen from ambiguity and ignorance about shocks, with the ability to disrupt the normal conduct of the economy.

Uncertainty related to the state of the economy :

An instant evaluation of the real situation of the economy is a major concern for the institution of the central bank. This implies difficulties based on the uncertain nature of the macroeconomic dynamics. In the first instance, shocks are likely to lead to a disruption of the macroeconomic environment. In addition, measurement errors distort the macroeconomic aggregates and their assessment of the real economy.

In order to interpret the state of the economy and its effects and consequences for future price stability, the monetary authorities assess the persistence of macroeconomic shocks that guide economic developments and trends. The assessment of the economy differs according to supply and demand shocks, and also according to the temporary or lasting nature of shocks. This assessment is essential because it involves determining the nature of the shocks taken into account in the monetary authority's strategy. The difficulties in assessing some of the technological shocks, which make uncertainties wider, should be highlighted. On the other hand, compromise the achievement of the monetary policy strategy.

The financial turbulence illustrates the impact of the uncertainty associated with the shocks, and impacts the anticipation of economic actors and thus economic activity. Uncertainty related to economic shocks contributes to a slowdown in industrial production. As such, the behaviour of the economic agent depends on its assessment of the future situation of the economic environment. In case of anticipation of an increase in prices and dynamic outlets, economic agents try to increase their consumption or to commit investments. The uncertainty related to the shocks generates gloom for the economic actor, and consists in slowing down the evolution of economic activity. It is important to note the uncertainty regarding data and measurement errors, which contribute to imperfect information.

Macroeconomic models are informed by data that generally originate from surveys, which are regularly subject to significant audits and revisions. The institution of the central bank must take into account the fact that the data on which it relies contain many errors and noises. For example, the output gap known as the output gap, which illustrates the difference between potential output and that actually observed, is linked to potential output, which plays a major role in measuring inflation. However, it should be noted that potential GDP is an unobserved variable such as the the equilibrium interest rate and the natural unemployment rate.

The definition of potential GDP and its estimate are the subject of many debates and controversies (Clerc (2002). A number of research studies have been carried out that highlight the impact of output gap measurement errors and their effects on monetary policy decisions and ultimately inflation (Rudebusch (2000) and Ehrmann and SMets (2000)). Cateau and Murchison (2010) rely on an inflation-targeting rule and note the decrease in efficiency leading to increased inflation volatility, the output gap and the interest rate at the time when errors in measuring the output gap are not taken into account.

The analysis of the macroeconomic situation requires a range of information which illustrates imperfections. There is an imperfect and unreliable nature of monetary, financial and economic data. And this contains a greater or lesser uncertainty, as to the level of reliability of the results generated. In addition, there is some lag in the availability of most economic and financial data.

The practice of revising data related to economic, financial and monetary indicators suggests that the uncertainty that characterises them is significantly greater. Earlier studies by Orphanides and Van Norden (2001) involved comparative studies of alternative methods of estimating the real-time output gap. The result of these studies is that a relatively large measurement error, derived from real-time estimates, leads to a significant deterioration in the expected results of a policy.

According to Orphanides (2003), when measurement errors generated by differences between real-time and modified data are adequately accounted for, optimal policy measures are more tempered than they would have been. It is recalled at this level that Smets (1998) showed that the greater the error in the measurement of the output gap, the closer the value of the parameter corresponding to this deviation in the Taylor rule is to zero.

In the formulation of the monetary policy strategy, the monetary authority does not have the necessary variables for decision-making. At this level, the monetary authority often refers to estimated values with a concern for their reliability. The author Smets (1998) has clearly demonstrated the concern generated by uncertainty about monetary aggregates, with the output gap or with unnoticed variables such as the natural interest rate. Improving availability is a major challenge that can be achieved through the use of monthly or annual aggregates, or even approximations (proxies) generated by robust calculation methods. According to Smets (1998), research that has dealt with the effect of uncertainty in measuring the output gap implies that the measurement of indicators such as the output gap (Estrella and Mischkin (1999)) is carried out with a considerable margin of uncertainty.

Uncertainty about the structure of the economy :

Limited knowledge of the structure and functioning of the economy complicates the design of central bank policy. This relative uncertainty is related to two reasons that we will clarify later. Complexity comes first in the development of a model that accurately describes and analyses the dynamics of the economy

In 2005, Levin et al considered that the monetary authority was still confronted with the problem of choosing a coherent model, with the mapping of the economy taking into account the existing economic situation. Sahuc considered in 2002 that, despite the plurality of models that can be mobilized to study a single phenomenon, one can obtain quite distinct results. The identification of the most effective theoretical model choice in the description of structural relationships between economic variables is very difficult. Bordes (2007) highlights the classification of a range of macroeconomic models at three levels.

Firstly, general equilibrium models of the stochastic dynamic type. Secondly, traditional econometric models. And thirdly, vector autoregressive models (VAR).

It bears mentioning that no model illustrates the complete and unanimous reality of the transmission of monetary policy, despite the plurality of models that have contributed to the understanding of economic dynamics and despite the inclination of central banks towards general equilibrium models. This is due to the complexity of the transmission mechanisms to the economy on the one hand, and the lack of unanimity among economists on the other. Uncertainty is linked to the specification of the econometric model, because the synthesis generated by the model does not highlight the real economic situation.

Uncertainty promotes the econometric dimension and focuses on the coefficients of the model. This is because it has no precision about the real model. Uncertainty is linked to the way the model tends towards reality. Consistently, the central bank institution is supposed to use a model taking economic circumstances into account. The central bank cannot rely on a single economic model, and must have more tools of modeling at the level of its levers

In Blinder's (1995) view, the inevitable response is to use a multitude of models without placing too much reliance on any one of them. On the other hand, basing central bank policy on several models and highlighting an average of the best models in order to generate estimates that are close to real economic dynamics. The parameters underlying central bank policy differ according to the basic assumptions, which vary from the role of monetary developments as a determinant of future inflation to the role of the interaction of supply and demand in the goods and labour markets in influencing price and wage changes.

Central banks face uncertainty about parameters, In this case, the ECB is based on historical data that preceded the creation of economic and monetary union, thus generating a lack of harmonisation when setting up the appropriate aggregation. (Issing, 2003). Faced with the uncertainty of the plurality of models advocated by its authors, the institution of the central bank tries to base itself on procedures or rules consistent with the definition of robustness. For example, the strategy of the European Central Bank, which is divided into two pillars, is based mainly on a concern for robustness. Robustness involves defining a rule that generates enough good stabilization results, when associated with various possible models.

In the view of Landais (2008), the ECB justifies the use of a range of indicators and a little more reasoning because of the uncertainty and the plurality of models defended by economists. The strategy of the European Central Bank is based around two pillars. The first of which is a set of models and analytical frameworks that assigns a leading role to money in determining inflation. And the second, which encompasses a panoply of models of the price-setting process, basically those that highlight the interaction between supply and demand in the markets for labour goods. The interest of these two pillars contributes to the advantage of ensuring that the monetary policy decision-making process is examined on the basis of an in-depth analysis of a wide range of variables.

In short, the combination of a range of possible models and modelling approaches saves the central bank from making serious policy errors. The case of the ECB demonstrates that it makes more sense for a central bank that wants to remove model choice uncertainty to implement robust strategies.

It is worth stating, by way of synthesis, that the apprehension of the uncertainty linked to the choice of the model and the uncertainties generated by it is more complicated at the level of the optimality framework of the monetary rule, which means that recourse to the problem of optimisation does indeed presuppose a structural model of the economy defined under constraint. The effectiveness of the monetary rule in terms of the homogeneous results it produces, and the emphasis on robust policy, is the subject of much debate at the level of the Rule or Discretion dilemma.

In an attempt to address the strategic uncertainty, an attempt is made at this level to address the multiplicative uncertainty, i.e. the uncertainty linked to the parameters. The uncertainty linked to the parameters, specifically concerns the uncertainty on the strength and links at the level of a model. The example of Brainard (1967) about the conservatism principle appears to be indispensable, in order to grasp and apprehend this type of uncertainty.

According to Brainard (1967), the higher the degree of uncertainty concerning the parameters, the more the optimality of the reaction coefficient decreases in the rule by insisting on the difference between the optimal rule consistent with the certainty of the parameter which links the instrument to its target on the one hand, and on the other hand to the optimal rule which takes the uncertainty intoaccount.

Despite the unanimity of economists on the design of a single model to represent a given economy, uncertainty about linkages within the economic model persists. Since imperfect data and econometric estimation techniques influence the estimates, uncertainty concerns the parameters of the estimated relationships. According to Brainard (1967) and Soderstrom (2002), this type of uncertainty is illustrated in the context of parameter estimation.

The estimation of the parameters is generally carried out by generating a margin of error that is linked either to the use of various econometric methods or to imperfect data. As a consequence of structural economic changes, the parameters vary over time in addition to the imprecision of parameter estimation over a given period of time. Thus, the study of the relationships between economic variables becomes more complex, because of the uncertainty about the parameters and as a result, the economic analysis is disrupted. According to Le Bihan and Sahuc (2002), there is complexity in the day-to-day management of the model despite the improved sophistication of the estimation methods.

Strategic uncertainty :
In the view of Isssing (2002), strategic uncertainty is connected to the interaction between private agents and those responsible for monetary policy, and highlights the role of expectations and their impact at the level of the transmission channels of monetary policy and at the level of the evaluation of economic conditions at a given moment.

We shall begin with the role of expectations regarding the transmission channels of monetary policy. In analysing this role, we highlight the possible interaction between sectors of the economy and the central bank. The expectations of the central bank and of private agents impact the transmission channels of monetary policy. The forward-looking behaviour of economic agents illustrates an uncertainty that obviously contains the reaction of agents and markets to the central bank's statements, decisions and intentions. In addition to this element of forward- looking behaviour, a major source of uncertainty is the lags in the expectations of agents' consequent responses to central bank policy actions and decisions..

The central bank must potentially assess the emergence of reactions from economic agents in order to avoid them. Indeed, data and information undergo in depth institutional changes that contribute to a discontinuity in their content. Central banks are confronted with the problem of obtaining information, which becomes more complex during institutional changes. Expectations evolve irregularly and are not focused on a central element, as was the case for the European Central Bank during the far-reaching change in 1999 with the transition it implied for the money market, payment systems and capital markets. As a result of this transition of the macroeconomic context, there was an immediate integration of the new rules of the game into market expectations on the one hand. And on the other hand, a further rapid adaptation to the new monetary policy environment.

In order to reduce uncertainty in the implementation of monetary policy, the central bank must behave in a stable manner in advance, on the one hand, and in a manner that is satisfactory in terms of credibility for public opinion, on the other. This is the sine qua-non condition for an appropriate reaction by the markets to the central bank's decisions. At this level, the elements related to the stability of the behaviour of agents and the credibility of the policy are initiated. Compatibility and adequacy between economic agents and central banks in terms of stability, reliability and predictability of behaviour will contribute to the reduction of strategic uncertainty and thus facilitate the implementation of monetarypolicy.

The main intentions of monetary policy are to reduce strategic uncertainty and to improve the credibility of the central bank. This credibility refers to the level of confidence granted by private sector economic agents in the determination of the central bank to achieve its objectives while remaining faithful to the announced objectives. The concern to preserve the capacities and commitments to achieve the objectives of the central bank, stems indeed from the stake of credibility on the part of the said institution.

According to Issing (2002), credibility creates a virtuous circle, since by relying on the central bank to achieve the overriding objective of price stability, economic agents are expected to implement behavioural stability for the long term. It is indispensable for the central bank, in the context of economic uncertainty, that it does not constitute an additional source of uncertainty in this regard.

Within the framework of an exceptional economic situation, the central bank implements a monetary policy that is not indicated in advance. The effect of this policy is the inconsistency that generates the credibility problem for the opinion of agents, at a time when the central bank has the intention of correcting structural inefficiencies with the objective of stabilising output above its potential level. (Barro and Gordon, 1983).

Extensive analysis of the temporal inconsistency and confrontation of the contributions and limitations of central bank independence :

In-depth analysis of the temporal inconsistency :
Attention is given to deepening the analysis concerning the temporal inconsistency that central bank independence tries to remedy in order to achieve credibility of the said institution, and consequently a sufficient reputation at the public level to make monetary strategies succeed. The temporal inconsistency is a description of the likely deviations by decision-makers from the initially announced policy. This means that decision-makers have an incentive to announce low inflation policies and then deviate from this promise in order to achieve real short-term goals.

This raises the question "what does it mean to have a coherent policy and an incoherent policy? "Indeed, a policy is said to be coherent, if an action planned in t, for t+i remains optimal when t+i occurs. A policy will be temporally incoherent if in t+i it is not the optimal response as initially planned. The policy is consistent if at any point in time the policy chosen is the best policy given the current situation. Thus, the decision-maker is responsible for implementing a policy over several periods in the future starting at time t. To do this, the decision-maker maximises an "objective" function to the private sector's need for economic balance.

Building on a similar example presented in DRAZEN (2000; P 101-102), we consider the choice of the decision-maker for inflation in t+i. P t+i (t+j), the inflation rate chosen at the period t+j for t+i. A forward-looking decision-maker can wait until t+i to choose the inflation rate for that date, or choose the inflation rate of t+i at period t. If there is no change in preferences or technologies or the occurrence of unexpected shocks between the two periods, one would expect the level of inflation rates retained in these periods to be the same. The time incoherence arises when nothing changes, no shocks occur, and the choice between the two periods diverges. Temporal inconsistency becomes an important analytical phenomenon if we imagine that inconsistent temporal policies are implemented to maximize the welfare of those who are misled. (DRAZEN. (2000, P 102).

The theory of temporal inconsistency underlines that monetary authorities are often tempted to promise low inflation today, and try to surprise the public with unanticipated inflation later. This theory is based on the logic implying that expected and actual inflation will often be higher, especially since the monetary authorities had made a binding promise. This consequence is called "inflation bias" (Chang (1998)), because the monetary policy maker faces more ex post than ex ante constraints, which leads him to prefer other policies than those initially chosen, which are said to be inconsistent according to Persson (1994)). This situation occurs when the monetary policy framework may allow the central bank to make a binding commitment in period t, in order to pursue a particular policy in period t+i.

Time inconsistency can be explained on the basis of the prisoner's dilemma about three main relationships. (CUKIERMAN (1992). It leads to inflation that damages confidence in the monetary authority. (Silber 2012) The literature on temporal inconsistency suggests that the effectiveness of monetary policy should not be assessed on the basis of static criteria but rather on the basis of dynamic criteria.

The control of inflation, according to BERNANKE (2013), requires a credible and disciplined monetary policy that tends to create a virtuous circle. In the presence of transitory price shocks, if inflation expectations remain anchored at levels consistent with the monetary objective, central bank policy will be more effective and the size of rate changes necessary to maintain price stability should be reduced. (Avouyi-Dovis (2009)) The decision-maker must acquire a reputation for behavioural, and more specifically strategic, behaviour. The effect of reputation is linked to the fulfilment of past announcements concerning monetary policy, i.e., to the fact that the monetary authority has respected its word and its previous commitments.

Generally speaking, reputation refers to preconceived ideas about the characters or characteristics of individuals or a group. Hence, it can be thought of in terms of an agent's actions for which he or she is known; for example, a decision-maker may have a reputation for having an aversion to inflation. It can be thought of in terms of predictability, in the sense that one always follows the same course of action, especially for the monetary authority in a static environment. It refers to the ability of central banks to preserve their autonomy. It is associated with a stock of variables moving up or down in response to changes in monetary policy strategies.

Moreover, due to the evolving nature of the central bank-government-private agent relationship, political factors and the personalities of the agents responsible for implementing monetary policy, it may increase over time, or deteriorate (Bordo and Siklos (2015)). Reputation is the probability that agents assign to the coherence and consistency of the pursuit of monetary policy. It is related to the public's belief in the decision-maker's preferences, and to the public's expectations of the actions that the monetary authorities will take (Weber (1991)). Credibility is measured by Average credibility and Marginal credibility.

The central bank's independence is the institutional counterpart of the credibility of this institution. It is important at this level to clarify the theory of the independent central bank. The economic theory of the independent central bank is based on the split between political and monetary power. We explain the intellectual path that has made the independent central bank a solution to the problem of temporal inconsistency. According to this theory, the central bank would guarantee price stability, without influencing other macroeconomic variables such as growth or unemployment if it is cut off from political power. This does not emanate from a vacuum, but from a theoretical corpus developed during the 1970s around the problem of temporal inconsistency.

The fact of investigating the pros and cons of the problem of temporal incoherence will enable us to understand the factors behind the emergence of debates and controversies in economics in the early 1980s centred on the "independent central bank guaranteeing price stability". In 1977, the two American economists KYDLAND and PRESCOTT presented the problem of temporal incoherence for the first time in an article. The main question of these authors was whether or not the government can optimise welfare or not, through the discretionary use of economic policy instruments.

It was the underlying idea that the government can mislead economic agents and improve its economic performance. However, this attempt remains futile because the agents anticipate it rationally and therefore thwart the government's action. The thinking of KYDLAND and PRESCOTT is summarized in this maxim entitled "The rule versus discretion" and in an axiom, the rule may allow the government to optimize social welfare, but not discretionary use.

In 1983, BARRO and GORDON were inspired by the intuitions inherited from the work of KYDLAND and PRESCOTT. The monetarists of the school of CHICAGO, based on the Phillips curve increased by rational expectations à la Lucas, confirm that non-compliance with the rule and the discretionary use of monetary policy will be thwarted by economic agents. Worse still, this use will have the opposite expected effect, i.e. an increase in inflation. BARRO and GORDON's model identifies two authors, the government and private actors.

An explanation of the model's approach is given as follows. The government sets the inflation target for the coming year as a first step. Once the signal is given, private actors engage in collective bargaining to adjust wages. In the discretionary regime, once collective bargaining has taken place, it is in the government's interest to use the monetary policy despite the rule having been set beforehand.

From a situation where wages are already fixed, the government has an objective of initiating an expansionary monetary policy aimed at fostering aggregate demand without raising inflation. In anticipating this government intention, referred to as "temptation to cheat" by BARRO and GORDON, collective bargaining incorporates the increase in nominal annual income due to the anticipated overshooting of the inflation target. Therefore, there is a temporal incoherence between the objectives originally set by the government and the results achieved, since inflation increases significantly in relation to the change in employment.

The monetary theorists are intrigued by the factors behind government discretionary behaviour. Indeed, the discretionary behaviour of government is impacted by the bias generated by the electoral cycle. The government conducts an expansionary monetary policy before the elections in order to improve its economic employment performance.

There is a political incentive for the government to implement good economic performance, which will be the reason to vote for it. The background literature for this reasoning has its origins in Nordhaus' contribution on the political business cycle in 1975.ALESINA adds to the work of BARRE and GORDON, this contribution by NORDHAUS in 1989.

Nevertheless, during 1994, ALESINA and ROUBINI added a refinement to this historical contribution by introducing the non-cooperative game between the "Left" and "Right" parties. The cynical political approach of the government adopted with a view to a new re-election led to the discretionary use of the monetary weapon with harmful effects on price stability. This is how the political economy model of temporal inconsistency comes full circle. The time inconsistency can jeopardise the credibility of the central bank institution, which has a negative impact on its monetary strategies.

Indeed, central bank credibility depends on the determination and capacity of the monetary authority to convince economic agents to subscribe to the announced strategies and to act accordingly (Gilles (1992); Pollin (2008)), which refers to the problems of temporal inconsistency of low inflationary monetary policies (Calvo (1978) and Barro and Gordon (1983)).

Confronting the contributions and limits of central bank independence :

Arguments in favour of central bank independence need to be confronted with arguments against central bank independence.

Throughout the 1990s, there has been much debate about central bank independence. Indeed, proponents of central bank independence consider that it strengthens the credibility of monetary policy and price stability by anchoring agents' expectations.

C.BORDES noted: "With independent central banks, Switzerland and Germany experienced an average price increase of around 3% from the mid-1950s to the mid-1980s, while it was close to 8% in New Zealand and Spain, where the central banks were under supervision".

F.MISHKIN points out that "there is a large number of empirical studies on the relationship between the status of the central bank and a country's economic performance in terms of inflation and growth.

From these, two main conclusions may be drawn:
The thesis of the positive influence of central bank independence on inflation outcomes is supported.

On average, the better performance of independent central banks is not paid for by lower growth or a higher exchange rate... In sum, independence would be a good way for a society to achieve the objective of price stability at no real cost (lower growth, increased rate of unemployment)".

F.Mishkin puts things into perspective by stating that "one should undoubtedly be cautious and not draw definitive conclusions from these studies. They are based on the use of indicators of the degree of independence of central banks which, by construction, are always very frustrating. There is often a clear difference between the independence given to the central bank by the statutes and the reality. Indeed, in addition to formal independence, several factors, notably the personality of the governor, contribute or not to ensuring the effective independence of the central bank.

Another argument in favour of central bank independence relates to seigniorage. Seigniorage is the use of coinage by the political power. It is a kind of implicit and painless tax, which often results in the monetary financing of the budget deficit or in deliberate devaluations of the currency. In this respect, the independence of the central bank puts at risk the political monetary cycles generated by seigniorage.

At the heart of the underlying argument lies the inflationary bias, which incorporates economic policy in a democracy. The central bank's autonomy in the field of financial independence is a guarantee against the misuse of seigniorage.

Clearly, the central bank's independence is reflected in the separation of political and monetary power. This results in the removal of two major causes of inflation, which are the temporal inconsistency explained above and seigniorage. In contrast, there are arguments against central bank independence linked to the economic, technical and political dimensions.

Effectively, independence is not a prerequisite for ensuring the credibility of monetary policy and price stability. According to Patrick Minford, author of New Classical Economics, "the question of temporal coherence and credibility of announcements has given rise to a huge literature. I think a lot of hogwash has been written about credibility. Ultimately, the credibility of programmes of all kinds regarding future inflation is a matter for the people themselves; for instance, it is clear that it is the Germans themselves who have endowed the Bundesbank with considerable credibility. In Germany, if an inflationary policy is made, you come up against the people...The announcement of an anti-inflationary policy is useless if it is not credible. Bottom line is that the only way to solve this credibility problem is for people to actually punish the politicians for inflation. I think the European electorate has come very close to the Germans on this issue".

Three technical arguments against central bank independence are put forward by Milton Friedman. Firstly, the risk of dilution of responsibilities between the central bank that does not assume full monetary power and other institutions such as the Ministry of Finance. Secondly, there is the uncertainty and instability generated by the loading of central bank officials, given the great importance of the personality of central bankers. Thirdly, central bank independence tends to overstate the bankers' view, which gives more importance to market effects and neglects other effects..

One of the most important arguments in politics is the danger of positioning a new power for democracy. The economics theory of bureaucracy highlights the danger of the potential for central bank independence to contribute to the pursuit of its own objectives, which may not be compatible with those of the government or the public. Central bank autonomy is an attack on representative democracy, in so far as the officials of the independent central bank are not elected and to the extent that it is free from any real political control.

S.Guillaumot Jeanneney's quotation recapitulates the elements cited: "to give the independent central bank the priority mission of defending the value of the currency is obviously to deprive the government of an instrument of economic policy. It will no longer be possible for it to resort to "seigniorage", i.e. the creation of money to finance public expenditure. It is not always certain that, in a situation of public deficit and unsustainable levels of public debt, reducing public expenditure or increasing taxes is a better situation than money creation, that is to say, than resorting to inflation tax. "On the other hand, central bank independence may lead to excessive economic policy rigidity in the face of external shocks to which all economies, especially small economies, are subject.

The risk then arises of having a wrong combination of monetary policy and fiscal policy in the Policy-mix. As such, HAVRILESKY (1990), KANE (1980) and WEINTRAUB (1978) show that the presence of political influences was not excluded even when there is independence. Thus, independence alone is not a sure guarantee of credibility. Blinder (1997), Good hart (2000) and Bean (2003) have questioned the hypothesis of inflationary bias, explained the uncertainties about the "real good" model of the economy, and pointed to the need for a relationship between the central bank and the political authorities as part of governance. one of the major criticisms of the delegation is that this approach assumes that maintaining low inflation necessarily contributes to faster growth and development. This ignores the economic costs of inflation targeting, and does not integrate it into the analysis.

Conclusion:-

To conclude, it is important to clarify the insights generated by the theory of central bank governance in order to address the limitations of the independent central bank theory. What these elements lead to is the creation of key success factors for the monetary authority in the face of the challenges of uncertainty and its requirements.

Against this background, the two facets of governance theory, namely internal and external governance, are discussed in depth. In undertaking internal governance, CPMs operate in a climate of uncertainty fuelled by a number of factors, including the complexity and diversity of the economy and its data, the lack of a single natural model of the economy, the difficulty of gathering data on the economy and the complexity of the overall analysis of the economy. It is crucial to have experts who implement the best possible decisions, given that monetary policy operates in a situation of permanent uncertainty. In spite of the fact that these experts are not directly elected by the people, political legitimacy is acquired by being appointed by men who have obtained it directly from the electorate. Therefore, it is worth affirming the quote from Blinder (1996) that 'expertise and political appointment are symbiotic, not contradictory, elements'. In practice, three arrangements of expertise and political appointment are cited within CPMs composed of experts appointed by the political authorities.

The legitimacy of experts comes firstly from the fact that they follow the "True Good" model of the economy and that they have diversified information enabling them to reduce imperfect knowledge. Within this context, the combination of legitimacy and expertise aims to reduce imperfect knowledge so that the gap between the interest rate set by the CPM and the optimal interest rate is as small as possible. Second, monetary policy faces uncertainty about the model of the economy, reduced through deliberation that contributes to confront the diversity of models of the economy. Variety involves legitimacy, which requires nomination by those who hold their legitimacy from the people. In order to arbitrate between the different models of the economy, experts are able not only to be uninfluenced in their judgement but also to be open-minded enough to change the model when the situation requires it. Finally, the experts are representative of the different sectors of the economy or regions and have legitimacy because they are appointed by the political authorities. In keeping the balance between the heterogeneous preferences of members of society, the expert advocate must be faithful to the ideas of the group he or she represents. Furthermore, he does not change his judgement since he does not adopt the point of view of other partisan experts such as the expert on the uncertainty context.

On the one hand, external governance contributes to a delegation of monetary policy to the CPM, and on the other hand to a delegation to the political authorities to define the objectives. The ultimate objective of external governance is to create the instrumental independence that allows for effective accountability of the CPM. The logic underlying external governance holds that the existence of a "real good" model of the economy is unrealistic, while the uncertainty surrounding the monetary policy environment illustrates an inescapably accepted element. This external governance structure therefore implies that communication is indispensable in fostering an environment of consensus with other stakeholders in society on its decisive monetary policy choices.

We recall that communication is unavoidable for the central bank, insofar as its ability to influence the economy depends on its capacity to act on expectations. Communication by the central bank in the framework of governance theory is based on the cornerstone of common understanding, which implies unanimity of interpretation and

understanding by the central bank and the public, regarding the monetary policy strategy. Consequently, central bank communication should not be equated with full transparency. At this level, it is made clear that communication does not aim to reveal all information, but only to convey relevant, clear and forward-looking information in a common language understood by all stakeholders in society. The concern underlying the central bank's communication process is certainly to convince the public, via a democratic and economic point of view, of the soundness of its decisions. This indeed stems from the democratic challenge of the central bank to be a communicative monetary authority aiming to contribute to the emanation of a consensus with the public, a common understanding and a relationship of trust between monetary authorities and the private sector. Along with the benefits mentioned above, external governance jeopardises the unproductive nature of the preponderance of monetary policy over fiscal policy, and fosters a climate of coordination leading to effective macroeconomic policy outcomes and financial system stability.

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