Critical Analysis of Inflation and Price Stability in Monetary Policy

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Abstract. Nowadays the primary tool for controlling inflation is monetary policy. The Bank’s monetary policy objective is to ensure price stability, means- low inflation and to support the Government’s economic objectives including those for growth and employment. Therefore this paper provides a critical analysis of inflation expectations, price stability and inflation targeting. Inflation's effects on an economy are various and can be simultaneously positive and negative. When we first think of inflation we assume that it will affect all people equally. The fact of course is that everyone isn't affected equally, so we provide a classification of the losers and winners of inflation, and discuss them. This analysis will acknowledge the fact that price stability would encourage greater institutionalization of savings, because interest rates, paid by financial institutions to their depositors, would effectively compete with the returns that savers can get on the unorganized market of borrowings. We will also point out that increase of institutionalization of savings would provide more room for a much better distribution of funds. By using transparent inflation targeting as a preventive measure, enhancement of transparency and reduction of price variability are given, and in an economy where prices are relatively stable, money retains its value and this helps to create an environment where economic growth may occur more easily.

Keywords: Forced Savings, Inflation, Monetary Policy, Price Stability

1. Introduction

Inflation targeting can be theoretically defined as a framework for the conduct of monetary policy, in which the central bank uses its instruments in order to drive inflation near a preannounced target. While understanding this framework is genuine, its practical implementation may be far more demanding. Inflation expectations are a key determinant of actual inflation and are thus a crucial part of the analysis used by many central banks to generate inflation forecasts. In the real world, inflation expectations play a critical role in the conduct of monetary policy, providing timely and useful information. This information and knowledge of the monetary policy transmission mechanism is imperfect. However, central banks must make decisions based on this imperfect set of information and then convincingly explain the rationale for those measures to the financial markets and the public at large. A large number of economists agree in the point of view that economic growth is eased by monetary policy, which to some extent has an expansive character. Theoretically, this view relies on the doctrine of forced savings. As a result of the widely shared consensus that price stability is the ultimate objective of monetary policy, over the past fifteen years there has been a growing tendency among central banks to explicitly announce numerical targets for their objective of price stability. This trend is part of a wider process of transformation of the overall monetary policy framework, and we tend to make it more transparent by using the announcement of quantitative definitions of price stability and explicit numerical targets for inflation.

Inflation is a persistent rise over time in the average level of prices in the economy. Prices tend to go up when demand for goods and services exceeds the economy's capacity to supply those goods and services. Conversely, an excess supply of goods and services tends to put downward pressure on prices. In that sense inflation reduces the purchasing power of money over time. High and unstable inflation can be costly. It undermines the economy's ability to generate long-lasting gains in output, incomes, and employment. It creates uncertainty for consumers, businesses, and investors, and erodes the value of incomes and savings.
High inflation has an adverse effect on growth due to a number of factors: distortion of relative prices which lowers economic efficiency; redistribution of wealth between debtors and creditors; aversion to long term contracts and excessive resources are devoted to hedging inflation risks. 1 People on fixed incomes, including many elderly and less well-off people, are particularly vulnerable to high inflation, since it erodes the value of their investment income or social benefits (pension, allowance, etc.). High inflation and expectations of high inflation also encourage speculative activities rather than investments that increase production capacity and enable firms to stay competitive at home and abroad. 2 In developing economies, in particular, an additional cost of high inflation emanates from its adverse effects on the poor population. 3 Maintenance of low and stable inflation has thus emerged as a key objective of monetary policy and a noteworthy development during the 1980s and the 1990s was the reduction in inflation across a number of countries, irrespective of their stages of development. In advanced economies, inflation rates in the recent decade have averaged around 2-3 per cent per annum - consistent with the establishment of reasonable price stability. In developing and emerging economies too, inflation rates have declined significantly.

2. Inflation expectations

Inflation tends to be closely and positively correlated with the trend growth rate of money in circulation, and it is no longer a controversial issue in contemporary monetary theories. However, apart from academic economists a vast majority of central bankers accepts the view that in the conditions of modern market economies tactless monetary growth has a considerable specific weight as a factor that encourages other (non-monetary) causes of inflation, allowing their spreading and reinforcement. According to some authors (e.g. Rich, 1987), central banks in developed market economies would hardly have succeeded in the fight against inflation, if they kept totally cold towards monetary doctrine, which as one of its fundamental proposition includes the assertion that inflation is mainly a monetary phenomenon. 4 How much restrictive pressure should be imposed by monetary policy to the economy, in order to reduce or slow down inflation? How much can we protect the economy from price shocks, following a flexible monetary policy? Monetary authorities can always limit the rate of inflation. Also, sufficiently tight monetary policy can certainly lead to a decline in economic activity and even an economic collapse. Too little money is just as dangerous as a too large volume of liquidity in the economy. Of course, the skill is to find the "right measure" and know how to achieve it. But sometimes inflation gets very high or "out of control", then we talk about hyperinflation.

2.1. One of the Worst Episodes of Hyperinflation in History: Yugoslavia 1993-94

The hyperinflation in Yugoslavia was one of the most extreme in economic history. The Yugoslavian hyperinflation was driven by excessive money supply that monetized various deficits that emerged upon the disintegration of Yugoslavia and its common markets. The identified co-integrating relations showed that money growth was weakly exogenous and affected inflation via currency depreciation (Petrović, 1999). This led to rates of inflation of 15 to 25 percent per year. These irrational policies and the breakup of Yugoslavia led to heavier reliance upon printing or otherwise creating money to finance the operation of the government and the socialist economy. More than 80% of Yugoslavia's budget was earmarked for the military and police forces, and by December 1993 almost 95% of all government expenditures were being financed with freshly printed dinars. 5 The government tried to counter the inflation by imposing price controls, but this made the

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2 Available online: http://www.oocities.org/kstability/student/monetary-policy/mod-one-intro.html
3 Available online: http://rbidocs.rbi.org.in/rdocs/Publications/PDFs/59592.pdf ; page 116
price producers getting ridiculously low so they stopped producing. In October of 1993 they created a new currency unit. One new dinar was worth one million of the old dinars. In effect, the government simply removed six zeroes from the paper money. This of course did not stop the inflation and between October 1, 1993 and January 24, 1995 prices increased by 5 quadrillion percent. This number is a 5 with 15 zeroes after it. During the 24-month hyperinflation period, per capita income plunged by more than 50%. Ordinary people were forced to deplete their hard-currency savings. On January 24, 1994 the government introduced the super-dinar equal to 10 million of the new dinars, but less than two years after its introduction, the official devaluations of the super-dinar began. Even though physical constraints on printing notes stopped hyperinflation, it is not a real solution. The best way to stop inflation is to abandon a domestic currency and permanently replace it with a foreign currency, or better yet to provide enhancement of transparency and reduction of price variability with inflation targeting as a preventive measure.

2.2. Inflation targeting

Inflation targeting is an economic policy in which a central bank estimates and makes public a projected or "target" inflation rate and then attempts to steer actual inflation towards the target through the use of interest rate changes and other monetary tools. Because interest rates and the inflation rate tend to be inversely related, the likely moves of the central bank to raise or lower interest rates become more transparent under the policy of inflation targeting. If inflation appears to be above the target, the bank is likely to raise interest rates. This usually (but not always) has the effect over time of cooling the economy and bringing down inflation. On the other hand, if inflation appears to be below the target, the bank is likely to lower interest rates, which effects with accelerating the economy and raising inflation. In order for inflation targeting to be successful, a high level of central bank independence is a sine qua non. In most cases, countries that have accepted inflation targeting have the liberty to choose the instruments for achieving the targeted inflation rate, but not the choice of the target. The selection of a target in this regime is usually made by a government. Econometric studies have shown that in countries which accepted inflation targeting policy the inflation rate fell, as well as inflationary expectations, and this lead to increased economic and price stability.

2.3. Price stability

Price stability is a situation where inflation is low enough that it no longer has a material effect on people's economic decisions. A credible commitment by the monetary authorities to keeping inflation low and stable provides a climate conducive to sound economic decisions. It also leads to lower interest rates, supporting productive investments that allow the economy to grow at a sustainable, non-inflationary pace over time and to generate higher incomes and new jobs. In that sense we see price stability as a measure of economical stability. In an economy where prices are considered stable, factors such as inflation and deflation have a minimal effect, and prices on goods and services change little from year to year. Generally, price stability is considered to be a good, though not necessarily totally achievable goal for an economy.

Findings of numerous studies (all done mainly for medium and highly developed market economy countries) show that macroeconomic performances are associated with the popularity of the government in specific countries, and the electoral success of parties who hold the political power. The popularity is being threatened with a decline in real income of economic entities, which may arise as a result of inflation or a recession caused by politics of inflation suppression. Finally, an insignificant number of economists (of various philosophical and theoretical beliefs) agree to the view that economic growth is eased by the monetary policy, which to some extent has an expansive character. Theoretically, this view relies on the doctrine of forced savings. Learning about the forced savings had a long history in monetary theory and

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showed up again (implicitly and explicitly) in modern recipes for the conduct of monetary policy. If a country wants to achieve a higher rate of domestic capital accumulation (as a condition for faster economic growth), then it should follow the appropriate inflationary monetary policy, because it is assumed that the redistribution of income and assets caused by inflation will produce forced savings, and subsequently the increase of the overall rate of accumulated capital.

3. The true nature of forced savings - Inflation losers and winners

The doctrine of forced savings through inflation rests on two assumptions:
1. Inflation leads to a redistribution of real income and assets in society, and
2. Marginal propensity to saving is higher for inflation winners than for inflation losers.

While the first assumption is relatively well established, the other is seen as a highly simplified argument. Before we carefully analyze the behaviour of the inflation losers in terms of consumption and savings (so we can formulate some conclusions) we will emphasize several elements that explain the true nature of forced savings.

First, it is worth paying attention that from a social point of view among the inflation winners and losers the real savers are the losers, not the winners. The winners are only apparent savers. An important influence factor of this concept is included in the phase before making the decision of voluntary savings by the inflation winners and it is expressed in the forced transfer of real income and assets under force majeure (inflation force), against which the inflation losers have no protection and they’re pushing ahead by reducing their real consumption (as consequences of the previous process). Accelerated reduction of the real consumption of inflation losers make forced savings represent an important aspect of the nature of forced savings (normally completely shaded by traditional teachings). In a society as a whole the only way to achieve additional domestic accumulation is through the sacrifice of real consumption of some or all members of the community. There is no other way.

Secondly, reducing real consumption of the inflation losers represents the determined total savings. However, the overall reduction in real consumption of the mentioned groups of economic entities is not available as savings for the economic system. A large part of the saving is spent through additional spending of inflation winners, which is prompted by the available real income and property acquired in the inflationary environment. Only the excess reduction in real consumption of inflation losers is what constitutes net forced savings. The conclusion that could be done is the following: inflation is much more efficient in transferring income from the inflation losers to the inflation winners, than in collecting savings. Inflation reduces much more the real consumption of inflation losers, than it increases the net savings of the national economy (which can also be negative); because a substantial part is spend by the inflation winners. Therefore, inflation is not only extremely unfair but also very ineffective as a mechanism for encouraging savings.

Third, the forced savings are not in possession of the right savers (in the social sense), i.e., the inflation losers. Ownership of these savings actually belongs to the inflation winners, which are not forced to sacrifice their consumption in order to create additional savings. Now, focus our attention on short-term reactions of inflation losers induced by appropriate changes in the current real income. The term ”short term” does not necessarily have to refer to a period of several months. It is possible that its significance extends to a period of several years. All the inflation losers can be divided into two subgroups:
1. Those that have no possibility to reach voluntary savings,
2. Those with the safe option of voluntary savings.8

In the aggregate analysis the state of economic entities (households) who are below the poverty line is neglected. How will the real consumption of economic entities with higher income (who have the possibility

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8 Economic entities that live on or near the minimum level of existence, and spend as much as they are able to earn. They do not have any accumulated savings that they could trigger at the time of scarcity. Since they are most often been in dept, they can provide very little chance in terms of new borrowings. Therefore, any reduction in real income of these economic entities automatically means minimizing their real consumption, thus generating of forced savings. They are forced to save, and that means spending less, because there is no way they could maintain their level of real consumption in the new (adverse) conditions.
to save) be affected when they lose their real income through inflation? The traditional response (included in the hypothesis of forced savings) is that their real consumption will fall, and that this fall will be measured by the fall in their real income, multiplied by their marginal propensity to consumption. It is assumed that the norms of consumption are completely reversible - they adapt up or down with equal ease. In other words, the traditional theory assumes that consumption responds symmetrically to possible changes in current income. Starting from a given level of consumption, marginal propensity to consume of a household will be the same whether the household is faced with an equal volume of growth or fall in real income. However, in most cases this is not true. Traditional theory assumes too great flexibility (reversibility) of norms of consumption which can not be found in real life.

4. Consumption behaviour of economic entities

In the short term we can find two important features of the behaviour of economic entities in terms of their consumption:

1) Their levels of consumption are slowly changing, and
2) These levels are much slower changing in the direction downwards than upwards.

In the literature we have offered different explanations for the observed slowness to adapt the level of consumption to changes in income (under the assumption 1). Some are based on purely intuitive conclusions and ordinary perception. The rest are derived from the micro level from theory of rational consumer choice oriented towards the maximization of utility, the simplistic (and unrealistic) assumptions of perfect knowledge about future economic developments, the perfect functioning of capital markets and the independent functions of utility. Crucial for the review of the hypothesis of forced savings is the other mentioned feature of short-term behaviour of households in terms of their spending, and that is that their standards of consumption are changing much slowly downwards, but in a direction which is facing upwards (assumption 2). Assumption (2) is not derived from a utility theory or a rational choice theory in conditions of certainty or uncertainty, it relies on ordinary experience. When faced with a decline in current income, the economic entities try in short time to protect own standards of current consumption by reducing their voluntary saving, depositing some of the planned purchases of durable goods, or even by de-accumulation (by spending of earlier savings). Despite the existence of habits, unwillingness to reduce consumption and awareness of present social position, the next reason for this type of delayed adjustment may be hope of households-inflation losers that the reduction in their real incomes is "temporary" - that they will soon realize increased cash flow and that increase of their real incomes will follow, as a result of the actual overall economic growth. Only when economic entities clearly realize that their real incomes are "permanently" reduced, they begin to adapt their real consumption downwards. Adjustment of consumption in the direction upwards, even in the short term, is relatively easy to perform and much faster to implement compared to the previous case. Such adjustments are, moreover, always welcome. Therefore, in the consumption behaviour of economic entities can be seen a stopping effect: when their income drops for a given amount, consumption is reduced less, compared with its growth in circumstances where the income is increased by the same determined amount. Consumption behaviour is asymmetrical: the downward marginal propensity to consume (determined by the consumption fall due to a small decline in real income) is much smaller than upward marginal propensity to consume (determined by the increase in consumption due to an equally small increase in real income). This hypothesis is contrary to traditional theory, which assumes a symmetrical behaviour of consumption.

4.1. Asymmetric consumption behaviour

If we accept the "asymmetric hypothesis," the quite possible outcome, instead of net forced savings from inflation is net forced de-accumulation. This will happen if the additional spending induced by the inflation winners exceeds the total forced savings (or spending cuts) of inflation losers. By traditional theory, this possibility is completely ruled out by the assumption of differences in marginal propensity to consume of different layers of economic entities (depending on the amount of their income), increased with the indirect

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9 Assumption (2) is embedded in the Hypothesis of Relative Income by Duesenberry. Thus every empirical support for this hypothesis is also support for assumption (2).
assumption of the symmetrical behaviour of consumption. Asymmetric consumption behaviour can break the
traditional doctrine of forced savings. This conclusion does not need to be changed if we take into account
the effect of property (wealth effect) on consumption. Inflation causes not only transfers of real income but
also the transfer of real property. Property losers are the net cash creditors (creditors). Property winners are
net cash debtors (debit). Net monetary debtors are economic entities whose financial debts surpass their
monetary claims. Inflation favours the last by reducing the real value of their debts. Economic entities who
gain profit are generally net cash debtors. Because of that they are not only inflation winners when it comes
to real income, but also when it comes to real property. On the other hand, the wealthy stockholders and
employees are becoming net monetary creditors, which appear to be inflation losers in terms of real
property. They are also losers, when viewed through the visor of real income. What effect on aggregate
consumption/savings will have the transfer of real property which is generated by inflation? Even according
to the traditional theory, the gain in real economic assets of economic entities who earn profit (if other things
stay the same) will stimulate greater consumption (and lower savings) proceeding from the same level of real
income. By analogy we conclude, that this theory predicts a reduced consumption of losers of real
asset. However, the assumption of downward rigidity of spending norms gets in the way of forming a final
conclusion. If the latter assumption is correct, then the de-accumulation phenomenon that occurs on the basis
of inflation caused transfers of assets is quite possible.

In the absence of empirical results of testing "asymmetry hypothesis" for Yugoslavia, it is not advisable
for this hypothesis to claim anything more than its admissibility. However, what is still accomplished with
this conclusion is not unimportant. It creates serious doubts regarding empirical persuasiveness of the old
doctrine that is considered almost axiomatic correct. It is obvious that the doctrine of forced savings through
inflation should be updated (as theoretically and empirically) for various countries that have had experience
of inflation for long periods. Except the real economic costs (such as leading to inefficient allocation of
limited financial resources of society), inflation as we (probably) showed does not increase the rate of total
domestic capital accumulation. Three pretty compelling reasons can be given to emphasize price stability as
the main objective of monetary policy. First, inflation imposes a loss to society (huge one) that will never be
charged. Second, in the long run, the central bank can regulate the level of prices of goods and services.
Third, the climate of price stability will encourage further development of the financial system of the country,
greater capital accumulation and increased institutionalization of savings. Among economists supporting the
first reason is almost universal. There is also a widespread agreement about the other mentioned reasons. The
last of the claim can be briefly explained. Various forms of financial assets and their markets play an
important role in encouraging and mobilizing savings of business subjects. Forms of financial assets (as
custodians of values) have several advantages over the material forms of assets (forms of real assets), such as
increased divisibility, greater liquidity, lower risk, better ability to keep financial assets, etc. The forms of
financial assets do not require any direct managerial work of the kind of forms requisite by real assets to
produce income (i.e. service). Therefore un-entrepreneurial layers of society realize that is extremely
practical to hold their assets in various forms of financial assets. Companies also keep money and other
forms of financial assets. Price stability would encourage greater institutionalization of savings, because
interest rates paid by financial institutions to their depositors, would effectively compete with the returns that
savers can get on the unorganized market of borrowings. It is known that in deflationary conditions, interest
rates on deposits in financial institutions resist changes (decrease in level of interest rates is not going up so
fast, not even in the extent that would be expected). In the coming inflation, interest rates approved by these
institutions are not adapted quickly in a direction upwards and in the extent that is sufficient to compensate
depositors for their current rate of inflation. On the other hand, on the unorganized (gray) market, interest
rates are much more elastic. Interest rates on this market promptly adapt to changes in the market. Thus, in
periods of inflation the funds begin to move from financial institutions to the disorganized (gray) market. In
a regime of price stability this should be stopped. And not only that, gradually a visible increase in demand
for all types of financial assets would follow. From an economic point of view, increase of
institutionalization of savings would provide more room for a much better distribution of funds.

5. Conclusion
A well-designed monetary policy can contribute towards a sound economy by ensuring price stability, and reducing fluctuation in the real value of aggregates. On the example of Yugoslavia we showed that high and variable rates of inflation can cause long lasting damage to the economy, and that a failure to regulate the supply of money leads to hyperinflation that destroys the value of money. Hence we recognised that inflation’s negative impact on investment is one of the reasons why price stability should be the main goal of monetary policy, since it is a necessary precondition for a healthy economy. Price stability would encourage greater institutionalization of savings, and this would provide more room for a much better distribution of funds, in that sense the goal of price stability has become widely accepted as the appropriate objective of monetary policy, and is now one of the primary considerations of central banks around the world. By using transparent inflation targeting as a preventive measure we can provide enhancement of transparency and reduction of price variability, and more likely avoid a liquidity trap, but also contribute to escaping from one if already trapped. Emphasizing the differences between inflation losers and winners we concluded that inflation is much more efficient in transferring income from the inflation losers to the inflation winners, than in collecting savings. It is also shown that expectations do play a certain role in influencing household savings behaviour, and that is that their standards of consumption are changing much slowly downwards, but in a direction which is facing upwards. This asymmetric consumption behaviour can break the traditional doctrine of forced savings. In an economy where prices are relatively stable, money retains its value and this helps to create an environment where economic growth may occur more easily. Therefore, all developed economies try to maintain price stability by regulating and monitoring inflation needs and avoiding deflation.

6. References


