

# [Analysis of the inflation situation in brazil economics essay](https://assignbuster.com/analysis-of-the-inflation-situation-in-brazil-economics-essay/)

## CHAPTER 1

For a better understanding of the topic, a quick look at the Brazilian economic history has to be made. This will take all readers to the same page since the economy of that country has changed dramatically in the last two decades, events such as currency crisis, hyperinflation, economic reforms, financial development, among others has taken place.

As a result of the two oil shocks in the 1970`s (1973 and 1979) the size of the foreign debt in Brazil during this period increased, alongside with sharp increase on interest rates. Soon, debt and inflation became the main problems in the Brazilian economy. During the 1980`s, unrestrained inflation, stagnation and enlarged external debt could sum up the decade, know in Brazil as the “ lost decade”.

The highest levels of inflation reached its peak in the economy of Brazil in early 1990`s, where in just under 30 years (June 1965 to June 1994) an inflation of 1. 142. 332. 741. 811. 851% was registered, according to the General Price Index of the period. Add to it the fact that in September 1992 the President Fernando Collor de Mello was impeached under accusations of corruption. New political and economic plans to the country as a whole were needed. The economy could not take those levels of inflation any longer. Control of inflation was the main target, in order to re-establish the public sector`s capacity to invest.

In 1994 (July first), economic reforms were implemented in Brazil by the then Ministry of Finance Fernando Henrique Cardoso. Many programs failed in tackling inflation in the past (from 1964 to 1994), this program tough – The Real Plan – was the most successful stabilization plan in Brazil`s history. Preceding the Real Plan, inflation was picking shocking high levels per year (over 2000%).

By sinking the devaluation of the new currency “ Real” in relation to the USD, stability was rising on the horizon again. Economic policies throughout the Brazilian Central Bank (BACEN) aimed to control the exchange rate. The BACEN had to keep the exchange rate inside an interval formerly determined. And, based on the inflation rate, that interval would be periodically devaluated.

Some critiques upon the Real Plan rose shortly after, accusing that plan of “ dollarization of the economy”. In fact, the main targets were successfully achieved by the plan, macroeconomic uncertainty and hyperinflation ended after over three decades. In less than two years inflation in the country had an annual rate below 20 per cent. In the same period, official statistics (IBGE – procurar site) showed that millions of families became consumers, automatically helping to boost the country`s economy.

This process of stabilization included also other economic reforms such as decrease the public sector size, with privatizations of state industries. Sectors like mining, banking, telecommunications, railroads, amongst others. Also, reduction of import tariffs helped on developing trade liberalization, and the financial system updated on its regulations and unsafe institutions liquidated or merged.

However the Brazilian exchange rate strategy mentioned above had to change after the financial crisis that stroke Asia and Russia. Foreign capital was no longer available. The stabilization policy based on the dollar peg inevitably caused overvaluations of real exchange rate, which forced the BACEN to let the exchange rate to fluctuate, with its roots on money and supply. In addition to that economic moment, where the American currency was demanded in a much bigger scale than the market was able to supply, the Brazilian currency had huge devaluations. Many economists expected a deep depression and rising on the inflation rates, but in spite of that, the government showed ability to tackle it. To avoid an economic meltdown, interest rates were increased to attract foreign investments, a new president to the BACEN was announced, multifarious measures to trim down public deficit, among others manoeuvres proved efficient.

Under the new exchange rate regime, in June 1999 Brazil adopted a formal inflation-targeting regime as a new anchor for inflation, six months after the change in the exchange rate regime into a floating system. Brazilian Central Bank has taken full responsibility to achieve this goal. The main feature of the new policy is that future inflation (expected) will be analysed and then a decision will be made about the current interest rate. Since the forward looking behaviour is appropriate to the lag that interest rate affects inflation through aggregate demand (King 1997, Ball 1999).

In the next chapter (Literature Review), after this brief on the economic scenario in Brazil, the subject will be revisited in details and the case for inflation targeting in Brazil can be better analysed.

## CHAPTER 2

## 2. INFLATION TARGETING: HISTORY AND THEORY

With the end of a close relationship between currency and income, particularly because of the speed that money was circulating, the Brettom Woods system fell, bringing alongside a new wave of research and development aiming to build up new anchors for nominal prices. After that spectacular fell of the gold standard, most of the countries took new ways towards a new monetary theory.

Stiglitz (2004, p. 46 -checar no texto 19) well said that in the late 1970s an apparent failure between inflation and unemployment (trade-off) had required a re-examination of some aspects in the traditional Keynesian theory, in the same way that the failure of currency and income relationship should hearten a re-evaluation of some aspects in the monetary theory.

For that reason, from the 70s new classics and new Keynesian theories started being developed. This development, (after the fall of the monetarist theory and the Keynesian theory finding dilemmas in clarify the relationship between inflation and unemployment) came involved with its foundations on microeconomics. Thus, the idea that inflexible prices and wages additionally to the recognition that monetary policy had no effects in the long term, brought a new look at the Philips Curve where the trade-off between inflation and unemployment would be limited to the short term.

Therefore, inflation targeting regime is the product of years of development in the theory since late 1970s, and still is subject of discussion and new ideas are constantly being developed. Since 1990 many countries are adopting the regime of inflation target, amongst them developed and developing economies. In the next chapter these economies and their experience with the regime will be discussed.

This chapter thought, aim to analyze the theory of the inflation target regime. The chapter will be organized as follows: enumerar os titulos…….

Significant to say that some of the issues that will be explained ahead are interconnected at some point. As a result, theoretical discussions are taken by the literature about the regime of inflation targeting, therefore only the main characteristics will be seen here.

## 2. 1 THEORY APPROACH ON INFLATION TARGET REGIME

As said above, throughout the last decades macroeconomics development aimed to find new nominal anchors for prices. Where, new-classical and new-Keynesian theories were developed, since Brettom Woods and monetary theory had difficulties to keep succeeding and meeting its goals.

According to Lopes (2003, p. 9, checar texto 19) new-keynesian`s way of thinking provided the macroeconomics with the microeconomics` fundamentals. This is the opposite of the new-classical theory that aimed to adapt the macroeconomics to the Walsarian microeconomics. Thus the inflation target regime is the result of new Keynesian theory, trying to grant traditional Keynesian basis and fundamentals. And this could buy back its credibility.

As Tobin said (1993, p. 43, checar texto 19): “ Keynesian macroeconomics does not require that prices and wages are rigid”. But they hold the position that involuntary unemployment would not be tackled if there were perfect price and wages flexibility. (checar com Professor)

New Keynesians deny that exist a long term trade-off between inflation and output for high inflation rates. So assume that monetary policy should not be conducted to determine the product and employment in the long term, rather than high inflation.

Yet, some new Keynesian authors, such as Akerlof, Dickens and Perry (1996 – checar 19) show that there is no single or unique natural rate of unemployment constant with steady inflation and a moderate rate of inflation is favorable for the regulation of prices and real wages in the economy. So, in the long term, a moderate rate of inflation would allow higher levels of product and employment and thus to low inflation would continue to be a trade-off between inflation and long-term unemployment. (citar a diss. – texto 19)

Under this argument the currency is neutral for high rates of inflation, this means that the Philips Curve in a long term would be vertical. On the other hand, a high and growing rate of inflation has negative impacts in the long term growth, so currency is not regarded as super neutral. (Barbosa, 1996, p. 2, checar 19 – mudar o autor)

In the literature is easy to find studies about high inflation and its impact on growth. Fischer (1993), Judson and Orphanides (1999), are examples of it. They show empirical evidences that inflation reduces growth by reducing investment and productivity, and when the inflation exceeds two digits it becomes negatively correlated with economic growth. Additionally, in a long term the job of maintenance of high levels of inflation is not helpful and consistent with continuous growth. It is agreed then that high rates of inflation produce costs, therefore monetary policy as a meaning to achieve price stability is justified.

Nevertheless, there is a disagreement in the literature about when the inflation rate achieves a level where economic growth begins to be inhibited. Many works on this subject can be found and the numbers vary widely from each other. Even inflation rates of 3% (per cent) are argued to affect growth, as said by Sarel (1996) – checar texto 19. However, most papers have the same opinion that this estimations may differ from one countries` economy to another. And they also agree that inflation rates of two digits should be tackled as soon as possible since it affects growth.

Effortless to say, that price stability is not a simple conception. To simplify the idea Greenspan (1996) – checar texto 19 said that when economic agents no longer take into account the forthcoming change in the general price level then price stability was achieved.

Truman (2003- checar texto 19) talked about the intellectual origin of the inflation target regime and argued that it would involve some features such as: the costs of inflation, the negative correlation between inflation and growth, high inflation in a long run would have a vertical Philips curve as a consequence, and the necessity to develop a new anchor for monetary policies since others proved malfunctioning.

Under the inflation target regime the core objective of the monetary authorities is to maintain the price stability as argued above. This sometimes appears to be a simple and mechanical action of the Central Bank. However, it is not a mechanical action. These actions require discretion from the monetary authorities, and any relevant information will be judged and used to help them to find their goals.(Bernanke et al., 1999 – checar texto 19).

In other words, the inflation target regime allows the authorities to fuse the obedience of the regulations and rules with the flexibility of a discretionary regime, not forgetting the price stability as a long term goal as will be seen in the next chapter about the international experience on inflation targeting.

The whole idea of discretion is vindicated below the notion that monetary policy is performed based on a strict rule and mechanism. So, the level of rigidity that monetary authorities should act will be defined by the degree of credibility obtained during the conduction of the regime. Corbo (2005, p. 4, checar 19) well said:

“ Of all monetary schemes, the one based on inflation targeting is the most sensitive to private expectations regarding future inflation, because this is the main anchor of inflation and, together with output gaps, is also the main determinant of medium-term inflation.”

Thus, one of the main upsides of the regime is the fact that the authorities can conduct their actions to tackle shocks in the economy in a short run. Bernanke and Mishkin (1997, p. 76, Checar texto 19) “ central bankers have in practice left themselves considerable scope to respond to current unemployment conditions, exchange rates, and other short run developments.” They still define it as policy discretion.

Recent developments on the subject of inflation target defend the idea that expectations about inflation will work as a heavy anchor for price stability, and the monetary authorities will know how flexible in their actions they will be taking into consideration the level of uncertainty in the economy as a whole. “ An emphasis on transparency and the far reaching communication strategy has been long regarded the central features of the inflation targeting approach “(PLESSIS, 2006 p. 7 – checar).

In this framework, a good communication strategy and transparency by the Central Bank would allow them, under possible shocks in the economy, to have a better response with lower costs, increasing their credibility. Therefore, the main features of the inflation target regime would be credibility and transparency. Thus, to achieve these features some procedures have to be adopted amongst them the announcement of a goal number for the inflation rate.

The literature discussed in many works and pointed out (Mishkin, 1997, citar alguns caras aqui- textos q tenho) some of the issues that inflation target regime should cover in order to succeed, such as: the time for convergence of the inflation rate to the target; the price index that should be chosen; setting a single value or a range for the inflation target; the value for the inflation rate of long run; a permission of deviations in the inflation in relation to the target and, the utilization of the core index used or their total value.

These issues will be discussed ahead. Nevertheless, with the arguments showed up to now can conclude that monetary policy for the inflation targeting regime should be conducted to ensure the price stability, but using a degree of flexibility to accommodate unexpected shocks on the economy. (citar o texto 19. 21)

## 2. 2 INSTITUTIONAL ARRANGEMENTS TO THE INFLATION TARGETING REGIME

In this section a brief analysis will be made onto the different institutional arrangements and how they influence the credibility and mainly the flexibility of the monetary policy adopted to drive the inflation target regime.

It is important to make this analysis since different economies will demand from the regime an adaptation to their own characteristics. A developing country with recent memories of high inflation and external vulnerability, and a developed country with no such tribulations cannot be evaluated on the same table of discussions. Differences for instance the rigidity of the regime or the interval of convergence to achieve the target will be taken differently.

That is when the international experience with inflation targeting regime should be out looked taking into considerations the peculiarities of each economy. The method of implementation of targets should not be viewed as a single rigid framework to be adopted by any economy that follows the regime. An awareness of the importance of the influence of different institutional arrangements on more flexible monetary policies is needed. Therefore, the analysis of issues such as choice for the horizon of convergence to the long-term target; the choice between a band or a single numerical value; the amplitude of the band; the value of long-term target and the use of a core price index or its full value is of great importance.

## 2. 2. 1 The interval of convergence to achieve the target

To determine how flexible the monetary policy will be in the inflation target regime is essential to know the lags or intervals chosen to meet the target rate. And to make a decision about the time frame in which the inflation rate should converge to achieve the target is essential to verify, later on, the efficiency of the monetary policy. (Svensson, 1998, checar na internet)

Another problem to be tackled is the fact that monetary actions demand an interval to show its effects, this interval has to be taken into consideration before deciding the lags of which inflation rate should converge to its target. (MISHKIN; Hebbel, 2001, p. 14, checar)

One year is a fairly brief interval to be elected, and it would require a tougher action from the monetary authorities, under potential shocks in the economy, than a longer interval. Given that, with a longer interval, an economic shock would have output and employment losses softened. Additionally, longer intervals are more likely to meet the target established with no need to the frequent action from the authorities with fluctuations of the product. (achar uma citacao no texto 19, blibiografia) In other words, a short interval selected could end up having loss of credibility to the inflation targeting regime, because of the implications that can happen along the way as commented above.

However, in the literature is easy to find papers supporting the idea that there is a limit to choose the intervals, and it cannot be too short either too long. Bernanke et al. (1999, p. 31, checar texto 19) defend the period between 1 and 4 years: “ Within 1 to 4 year range, the central bank`s choice of target influences the trade-off between transparency and flexibility.”

Loss of credibility to the monetary authorities can occur under the choice of a very long interval of convergence, for the reason that investments over shorter periods than those established under the regime may be unable to find the anchor symbolized by the inflation target regime, and may guide economic agents to lose their assurance that monetary authorities are really aiming price stability. One additional information has to be pointed out at this stage, it is about exchange rate flexibility. With a short horizon of convergence, exchange rate variability can bring economic costs, a more gradual pace would ideally better. (Svensson, 1998, achar outro nos textos q tenho) Once more, the characteristics of each economy will be the main factor to be considered before any decision about the pace of convergence to the target. Inflation targeting regime represents an anchor to the price stability, this attribute cannot be lost and yet, the interval has to be elongated enough to preserve a flexible monetary policy.

## 2. 2. 2 The price index to be chosen

In the majority of the literature there are a few steps taken towards the price index chosen for monitoring the rate of inflation. One of them is the fact that for a better transparency and flexibility of the regime the price index should be based on the core of the inflation as a way of avoiding any primary shock on the level of prices. Another step would be towards a fine price index based on a time series not only on the latest data. And, least but not last, make sure that the economic agents are aware of the index and how it was calculated. It will make easier to them to monitor the inflation and positive expectations about future inflation rates will come as a result. (Bernanke et al. (1999, p. 27, checar texto 19, e trocar se preciso)

Thus, transparency and credibility are achieved with a suitable choice of the price index since this will make monitoring the inflation rate easier. Not only that, but yet promote an efficient conducting of the regime. Even amongst the writers on the subject there is virtually a harmonic consensus about the importance and criteria recommended for the selection of the price index. In the same way that is agreed that some variation of the consumer price index would seems to be a good option in countries that adopted the inflation targeting regime.

## 2. 2. 3 Determining the band of the inflation rate

To determine the correct band of the inflation rate, yet again, the level of flexibility of the inflation targeting regime will be taken into consideration. And, not only flexibility but credibility as well are narrowly related to the band chosen to the regime. Since, as it is known, narrow bands can be tricky to manage in those countries with recent history of inflation and just in recent times secured their price stabilization.

Thus, narrow bands can end up taking away the monetary authorities` flexibility, and making the target rate harder to achieve and in many cases not achieved. Penalizing, however, the inflation targeting regime itself with loss of credibility.

On the other hand, a wide band selected could also end up losing credibility to the regime itself, as well as discretion problems and also lack of commitment under the economic agents` eyes.

Given that, it is easy to affirm the importance of a correct band selected. And, moreover, the period of implementation of the regime will dictate the choice of the band. This means that the economic situation of a country putting into operation the regime will be the basis of the choice. A country with high inflation rate and just implementing the regime will choose a wider band, and throughout the years narrow it down. This is observed in most countries under the inflation targeting regime.(citacao, achar no texto 19)

Therefore, credibility, the level of maturity that is the regime and flexibility will be measured to set a correct band of the inflation rate, additionally the importance given to the relationship between output and inflation in the short run. (Dezordi, 2004, p. 28, checar)

## 2. 2. 4 The choice between a numerical value or a band

Once more, flexibility and credibility will play an important role when choosing a band or a numerical value for the inflation rate. However, this time the literature does not agree harmonic as before.

Some experts say that a numerical value could bring credibility to the monetary policy authorities, proving their positive expectations and confidence in their future economic actions towards eventual shocks in the economy. But, in contrast, a numerical value could also increase the chances of not meeting the inflation target selected, or drastic changes on interest rates for instance, in order to achieve the target.

In relation to the use of bands, some advocate their use for the reason that it will increase monetary authorities` flexibility. And this could be more appropriate to countries just executing the inflation targeting regime and with high rates of inflation. This way, avoiding loss of credibility.

Thus, economic situation of a country and the stage of maturity that the regime finds itself will help to find the appropriate number or band. (achar uma citacao no texto2 ou 3)

## 2. 2. 5 Target for the long-term (esse topico nao e tao necessario, podendo ser retirado)

The great majority of the theorists support that price stability is a broader conception than the rate of inflation for the long term. Ever since, setting a target of zero inflation could, for instance, lead to a deflation process with bigger and worst consequences (i. e. deflationary spiral). So, setting a target of zero inflation is not health to the economy as a whole.

According to Debelle (1997, p. 12, checar texto19), amongst most of the countries that adopted the inflation targeting regime, the target has been set between 1 and 3 per cent. He adds that at such low levels there is little evidence of benefits from having 1 per cent or 2 per cent inflation.

The data seems to prove that, apart from of who embraces the concept of inflation target regime and therefore price stability, a low and stable inflation is beneficial to maintaining the long-term economic growth.

## 2. 2. 6 Headline inflation (Overall inflation) or Core inflation (Underlying inflation)

Little opposition is made towards the use of core inflation, even though some advocate that the applicability of headline inflation would bring more credibility to the monetary authority.

On the other hand, most works in the literature showed that there are many other factors supporting the use of core inflation. The main aspect would be the flexibility gained by the monetary agents with the implementation of core inflation, since it can avoid for instance sudden economic shocks ending up with permanent rise on the inflation rate. So, those unwelcome primary effects of the economic shock would be tackled by monetary authorities. (achar uma citacao em papers no brasil, texto 19)

Countries with high debt will also find better results with the use of core inflation. In an eventual economic shock for example, the changeability of interest rates would be diminished, avoiding negative effects on payment of interest.

Developing countries are more likely to adopt core inflation because they are more vulnerable to exchange rate shocks, it does not mean developed countries are not vulnerable because it could also bring sudden inflationary spikes to their economies too. Where prices depend at certain degree on external factors, exchange rate could greatly influence. So, the use of core inflation can not only avoid that but also help to build up expectations “ forward looking” (Oliveira, 2006, checar texto 19).

But, it is understood that central banks need to be transparent when using core inflation. Their actions and how they are estimating the core inflation must be clear to the public as a whole, as well as the nature of shock that took place and what will be done to avoid it of spreading. All this will help in achieving more credibility, with lower costs in terms of output and without being extremely discretionary. (Bernanke at al., 1999, checar texto 19)

In brief, the adoption of core inflation over headline inflation will be more adequate in order to achieve inflation rate in the long term with less side effects such as decrease of output and employment, or primary effects from economic shocks. Transparency from the central banks is needed though.

## FINAL CONSIDERATIONS

To sum up this chapter, it was said that inflation targeting regime brought a new anchor for price stability, with the monetary authorities not acting under a simple and mechanical rule. Now though, being able to tackle economic shocks in the short term and yet keeping their monetary policy in place to achieve the main target that is price stability.

As described above, each economy under the inflation targeting regime will demand a different action and a different institutional arrangement from their economic authorities given that for each one its peculiarities such as exchange rate volatility, maturity and gradualism of the regime, inflation rate before the regime, degree of indexation, amongst others will influence the results of the regime. Under this look, the institutional arrangements should be of main relevance.

## CHAPTER 3

## 3. INTERNATIONAL EXPERIENCE: INFLATION TARGETING REGIME IN DEVELOPED AND DEVELOPING ECONOMIES

Multifarious countries adopted inflation targeting regime since 1990, when New Zealand put into practice the regime being the first country to do so. Amongst those countries are many developed and developing economies.

In this chapter, to achieve a better overview on the subject two developed and two developing economies will be under the loop for a brief analysis. The way of conducting the regime in those countries will be the main function of this part of the dissertation, not the results of the regime itself.

The countries analyzed will be New Zealand, United Kingdom, Chile and Mexico. New Zealand because it was the first to implement the regime as said above, and Chile was the first in South America and the first emerging economy. UK as a developed economy and because its economic importance in Europe and in the world. And Mexico, because of the similarities with the Brazilian economy.

A broad approach aiming to analyze all countries under the inflation targeting regime will not be possible neither necessary in this work, since this is not the main goal here and the countries selected here will well show different manners of implementing and managing the regime.

Therefore, economic peculiarities from the countries above mentioned, and different arrangements towards the credibility of the regime will supply the tools needed for analysis and discussions ahead about the Brazilian experience with the inflation targeting regime.

## 3. 1 CASE OF NEW ZEALAND

New Zealand implemented the regime in 1990. The Reserve Bank of New Zealand (RBNZ) set their goal of price stability in 1989, and under the same act it was included that the president of their Central Bank could be fired if the target to the inflation was not accomplished. The target for the inflation would be set down through the Policy Targets Agreement (PTA). And once the PTA is signed, monetary decisions would be freely taken towards that target without additional instructions from the government. This is why the person responsible for these acts (Central Bank`s president) could be fired for inadequate performance (Archer, 2000, p. 4, checar texto 19).

Additionally, the act of 1989 allowed variations of inflation in relation to the target, when motivated by supply shocks. Important to remind that before embracing the inflation target regime the country was already fruitfully fighting inflation.

The Minister of Finance and the Central Bank`s President have to agree on the target to be set down, with a numerical target and a horizon to accomplish that. This was documented in the PTA. Also included in the PTA was a list of escape clauses designed to tackle shocks, more precisely supply shocks since they are readily identified as exogenous. Thus, the Central Bank could take action using those escape clauses (Mishkin and Schmidt-Hebbel 2001, p. 13, checar texto 19).

Dezordi (2004, p. 38, checar) reminded that in spite of being considered conservative the inflation targeting regime in New Zealand (with institutional constraints established), many aspects pointed out its flexibility i. e. price stability to be achieved within 3 years and no concerns about the centre target.

Also important to communicate another examples of flexibility in the New Zealand regime, such as the subsistence of escape clauses that permit the correction of the target when unexpected events occur, ruling out movements in goods` prices when calculating the official price index, and the reality that the target can be adjusted in the face of trade shocks (Bernanke and Mishkin, 1997, p. 11, checar texto 19).

The inflation target was calculated by the New Zealand`s Central Bank until 1999, based on core (underlying) inflation instead of headline inflation. This as seen last chapter excludes factors that could bring sudden economic shocks on the price level, and that was their aim also avoiding mechanical alterations on interest rates. Only from 1999 the (full) Consumer Price Index became the official index.

Another sign of flexibility in the New Zealand`s regime was the time of convergence to the inflation target. The horizon was multi-year and from 1997 became indeterminate, allowing then their Central Bank to tackle undesirable shocks in the economy with steady responses. This would evade fluctuations and conserve credibilit