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2. Inflation targeting worldwide and in Hungary – A miracle or a disaster?

Ádám Kerényi

Inflation Targeting (IT) is one of the operational frameworks for monetary policy aimed at attaining price stability. Goodhart's (2009) law states that any observed statistical regularity will tend to collapse once pressure is placed upon it for control purposes. Central banks behave accordingly to their monetary regime, which all have policy goals. In recent decades, there has been widespread interest in shifting from a discretion-based to a rules-based monetary policy frameworks. The inflation targeting regime has a wide pro and critical professional literature. We all know, that inflation is a serious disease, but the role of the anti-inflatory policy is questioned by several economists, who advise that the monetary policies might focus on unemployment rate or the increase of GDP. The questions raised in my paper that: Is IT an exclusive monetary regime? Is IT the most successful equipment to reach price stability? Are the central banks the one and only responsible actors regarding the inflation rate? I am focusing in the second part of my paper to the Hungarian monetary policy regimes. Does price stability should be the ultimate goal for a monetary framework in Hungary? I think this paper is actual, because in Hungary there has been inflation targeting monetary framework since 2001 due to what I suppose the international financial crisis hit the country more severe than it should.

Keywords: inflation, monetary policy, central banking

1. Introduction

In recent decades, there has been widespread interest in shifting from a discretion-based to a rules-based monetary policy frameworks worldwide (see Benati-Goodhart 2008).

The inflation targeting (IT) regime was introduced to eliminate the inflation bias, very soon many countries have adopted that regime, meanwhile in Hungary János Kornai (1983) listed seven different main diseases[1] which attacks the wealth

[1]Inflation, unemployment, shortage, high level of external indebtedness, growth problems, inequality, bureaucratism.

of national economies. Among these diseases there are many trade-offs. In order to reduce the symptoms and complications of one disease, or even be successful in treating it, we are responsible for increase one other disease. There is no panacea. That is almost impossible to be full healthy, the non-healthy condition remains. Almost everyone agrees on that the inflation can be harmful[2] to the society[3], let me refer to that expressions: inflation is the tax of the poor's. The main reasons for the inflation are the imbalances between the actual supply and demand. "Inflation harms the economy via two interrelated channels. The level of inflation, on the one hand, and inflation uncertainty, i.e. erratic changes in prices, on the other, may induce costs, thereby reducing social welfare (Kiss–Krekó 2004, p. 7.)". If we analyze the global inflation between 1990 and 2013 (Table 1) we might think that the golden era of decreasing and reaching a constant low inflation has been arrived. In the economic history that is a unique process when the inflation went down so fast. Nevertheless this is only a precondition of sustainable price stability, because long-term price stability depends less and less on domestic monetary policy.

Table 1. Inflation, average consumer prices

Geo – time	**1980**	**1985**	**1990**	**1995**	**2000**	**2005**	**2010**	**2013**
World	17,9%	15,3%	27,7%	14,4%	4,6%	3,8%	3,6%	3,8%
Advanced economies	13,7%	5,4%	5,1%	2,6%	2,3%	2,3%	1,5%	1,4%
Euro area	n/a	n/a	n/a	2,4%	2,2%	2,2%	1,6%	1,5%
Major advanced economies (G7)	12,4%	3,8%	4,7%	2,2%	2,2%	2,4%	1,4%	1,3%
European Union	12,6%	6,1%	27,5%	5,0%	3,1%	2,3%	2,0%	1,7%
Emerging market and developing economies	n/a	n/a	98,7%	39,0%	8,6%	5,9%	5,9%	6,2%
Central and eastern Europe	27,5%	17,7%	140,4%	49,2%	29,3%	5,9%	5,3%	4,1%

Source: International Monetary Fund, World Economic Outlook Database, October 2013 downloaded: 2014-03-09

One of the Maastricht criteria states that the inflation rate is an annual reference period shall not exceed the greater of 1.5% of the average of the three Member States with the lowest inflation rate index. In comparison, if we look at how different inflation rates over the last eleven years from within the European Monetary Union (Table 2), we can see that the difference between the countries with the lowest

[2]But there are evidence only for its harm to the economy when the inflation is unexpected, double digit or higher.
[3]Every inflation is basically antisocial (Inotai 2011, p. 361.).

and the highest inflation rate is always higher than the 2,2%, resulting in a dramatic divergences in a decade.

Table 2. Inflation in the Euro area from 2002 to 2013

Geo - time	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Belgium	1,6	1,5	1,9	2,5	2,3	1,8	4,5	0,0	2,3	3,4	2,6	1,2
Germany	1,4	1,0	1,8	1,9	1,8	2,3	2,8	0,2	1,2	2,5	2,1	1,6
Estonia										5,1	4,2	3,2
Ireland	4,7	4,0	2,3	2,2	2,7	2,9	3,1	-1,7	-1,6	1,2	1,9	0,5
Greece	3,9	3,4	3,0	3,5	3,3	3,0	4,2	1,3	4,7	3,1	1,0	-0,9
Spain	3,6	3,1	3,1	3,4	3,6	2,8	4,1	-0,2	2,0	3,1	2,4	1,5
France	1,9	2,2	2,3	1,9	1,9	1,6	3,2	0,1	1,7	2,3	2,2	1,0
Italy	2,6	2,8	2,3	2,2	2,2	2,0	3,5	0,8	1,6	2,9	3,3	1,3
Cyprus							4,4	0,2	2,6	3,5	3,1	0,4
Luxembourg	2,1	2,5	3,2	3,8	3,0	2,7	4,1	0,0	2,8	3,7	2,9	1,7
Malta							4,7	1,8	2,0	2,5	3,2	1,0
Netherlands	3,9	2,2	1,4	1,5	1,7	1,6	2,2	1,0	0,9	2,5	2,8	2,6
Austria	1,7	1,3	2,0	2,1	1,7	2,2	3,2	0,4	1,7	3,6	2,6	2,1
Portugal	3,7	3,3	2,5	2,1	3,0	2,4	2,7	-0,9	1,4	3,6	2,8	0,4
Slovenia						3,8	5,5	0,9	2,1	2,1	2,8	1,9
Slovakia								0,9	0,7	4,1	3,7	1,5
United King	1,3	1,4	1,3	2,1	2,3	2,3	3,6	2,2	3,3	4,5	2,8	2,6
Iceland	5,3	1,4	2,3	1,4	4,6	3,6	12,8	16,3	7,5	4,2	6,0	4,1
Min	1,3	1,0	1,3	1,4	1,7	1,6	2,2	-1,7	-16	1,2	1,0	-0,9
Max	5,3	4,0	3,2	3,8	4,6	3,8	12,8	16,3	7,5	5,1	6,0	4,1
Difference	4,0	3,0	1,9	2,4	2,9	2,2	10,6	18,0	9,1	3,9	5,0	5,0

Source: Eurostat

2. Different goals, methods, frameworks

Over much of the 20th century macroeconomic stabilization was pursued through active discretionary monetary with a fixed exchange rate regime.

Disappointed with the excessive focus of economists in controlling business cycles, while neglecting the efficiency and growth, Milton Friedman (1948) was the

first to articulate a coherent framework of monetary and fiscal rules. Stated in its simplest form, his proposal called for a stable money supply calibrated only to accommodate actual government budget deficits or surpluses generated by a cyclically-balanced budget, which would of course allow for the operation of automatic stabilizers. Inspired by this proposal, rules-based macroeconomic policy frameworks have evolved in multiple ways to capture real-world needs and complexities of differing economic environments. In essence, a rules-based framework is commitment technology. Under such a framework, the fiscal or monetary authority is bound to pursue a predictable policy course, within certain numerical and qualitative constraints on a well-defined performance target, such as inflation, public debt, or budget balance. As commitment technology, the framework encompasses policy rules and procedures that link decision-making to the specified target. The linkages include institutional requirements and technical requirements. For instance, in the monetary area, inflation targeting is predicated on an effective transmission mechanism between the base interest rate and the inflation rate, possibly specified within a coherent macroeconomic model, which underlies inflation forecasts. In the fiscal area, policy rules must be supported by an orderly and transparent budget process. The latter provide the basis for reliable and unbiased short- to medium-term fiscal forecasts, as well as for long-term scenarios to ascertain public debt sustainability. A key element of the framework is a well-defined policy reaction function. The precise specification of the interest rate function (simply stated, as a function of the deviation of expected inflation from the target rate and of the output gap) used for inflation targeting is country-specific, yet within a broad pattern across countries (Kopits 2014).

When voters have three or more distinct alternatives Kenneth Arrow's paradox[4] states that no rank order voting system can convert the ranked preferences of individuals into a community-wide ranking while also meeting a specific set of criteria. Political decisions, if they are principled, rest on value judgments. Politicians and citizens participating in the political process must choose a position in the conflict between such ultimate values. Inflation is a monetary syndrome so that is logic we can hope for its curing from a monetary regime.

A major argument for establishing a rules-based framework is to anchor expectations of economic agents and financial markets as regards policy goals and policymaking. Regarding monetary policy the expectations are to be anchored to price stability. Anchoring inflation expectations tends to reduce uncertainty and to encourage investment, saving and work effort decisions to be taken from a longer term

[4] http://en.wikipedia.org/wiki/Arrow%27s_impossibility_theorem.

rather than a short-term perspective, so the reduction of uncertainty tends to lower the discount rate. The ensuing decisions contribute to higher economic growth. Introduction of a rules-based framework can be particularly useful for signaling a paradigm shift in a country where macroeconomic policy management has experienced erosion in credibility. If accompanied by much-needed structural reforms (rationalizing government employment, targeting subsidies and pensions, eliminating tax distortions, etc.), such policy signaling can initiate a virtuous economic cycle by inducing a decline in the sovereign risk premium, followed by a boost in economic activity, and culminating in an increased growth path (Kopits 2014).

The following monetary regimes exist (Table 3):

- Monetary targeting;
- Exchange rate targeting;
- Real exchange rate targeting;
- Inflation targeting;
- Hybrid;
- No strategy-strategy.

Table 3. Taxonomy of monetary policy regimes

	Monetary Targeting	**Exchange Rate Targeting**	**Real Exchange Rate Targeting**	**Inflation Targeting**
Final policy Goal	Inflation	Inflation	Competitiveness/ growth (inflation secondary)	Inflation
Intermediate Target	Money supply	Nominal exchange rate/ short-term interest rate	Real exchange rate	Forecasted inflation
Operational Target	Money base/bank deposit at central bank	Nominal exchange rate/short-term interest rate	Rate of crawl	Short-term interest rate
Primary shock absorber	Nominal exchange rate	International reserves	International reserves	Nominal exchange rate
Secondary shock absorber	Interest rate	Money supply	Interest rate	International reserves

Source: Habermeier et al. (2009, p. 57.)

In some respects, the European Union represents a special case of a monetary union with a highly decentralized system of subnational governments.

Although good practices have evolved in shaping rules-based frameworks, there is no universal standard applicable worldwide. In fact, it is hard to find two countries that have the same framework, even in terms of design, but especially in

practice. Whereas there is some convergence toward a standard template in the design and implementation of an inflation targeting regime (Kopits 2014).

3. Inflation Targeting worldwide

It is now widely accepted that the primary role of monetary policy is to maintain price stability. An operating definition of price stability that is now broadly accepted has been offered by Alan Greenspan "*Price stability obtains when economic agents no longer take account of the prospective change in the general price level in their economic decision making*" (2009). This is often thought to correspond to an annual rate of inflation in the low single digits. Inflation targeting is one of the operational frameworks for monetary policy aimed at attaining price stability. In contrast to alternative strategies, notably money or exchange rate targeting, which seek to achieve low and stable inflation through targeting intermediate variables – for example, the growth rate of money aggregates or the level of the exchange rate of an "anchor" currency – Inflation Targeting involves targeting inflation directly. The literature offers several different definitions of inflation targeting. In practice, however, inflation targeting has two main characteristics that distinguish it from other monetary policy strategies:

1. The central bank is mandated, and commits to, a unique numerical target in the form of a level or a range for annual inflation. A single target for inflation emphasizes the fact that price stabilization is the primary focus of the strategy, and the numeric specification provides a guide to what the authorities intend as price stability.
2. The inflation forecast over some horizon is the de facto intermediate target of policy. For this reason inflation targeting is sometimes referred to as "*inflation forecast targeting*". Since inflation is partially predetermined in the short term because of existing price and wage contracts and/or indexation to past inflation, monetary policy can only influence expected future inflation. By altering monetary conditions in response to new information, central banks influence expected inflation and bring it in line over time with the inflation target, which eventually leads actual inflation to the target (IMF 2005, pp. 161-162.).

Table 4. Inflation target worldwide

Country	Inflation targeting adoption date
New Zealand	1990
Canada	1991
United Kingdom	1992
Australia	1993
Sweden	1993
Czech Republic	1997
Israel	1997
Poland	1998
Brazil	1999
Chile	1999
Colombia	1999
South Africa	2000
Thailand	2000
Hungary	2001
Mexico	2001
Iceland	2001
Korea, Republic of	2001
Norway	2001
Peru	2002
Philippines	2002
Guatemala	2005
Indonesia	2005
Romania	2005
Serbia	2006
Turkey	2006
Armenia	2006
Ghana	2007
Albania	2009

Source: Sarwat (2012), http://www.imf.org/external/pubs/ft/fandd/basics/target.htm

Mishkin says that there are 5 major characteristics of this monetary regime, which are the follows: "Inflation targeting is a recent monetary policy strategy that encompasses five main elements: 1) the public announcement of medium-term numerical targets for inflation; 2) an institutional commitment to price stability as the primary goal of monetary policy, to which other goals are subordinated; 3) an information inclusive strategy in which many variables, and not just monetary aggregates or the exchange rate, are used for deciding the setting of policy instruments; 4) increased transparency of the monetary policy strategy through communication with the public and the markets about the plans, objectives, and decisions of the monetary authorities; and 5) increased accountability of the central bank for attaining its inflation objectives. Inflation targeting requires that a decision be made on what price

stability means in practice. Alan Greenspan has provided a widely-cited definition of price stability as a rate of inflation that is sufficiently low that households and businesses do not have to take it into account in making everyday decisions. This definition of price stability is a reasonable one and operationally, any inflation number between zero and 3% seems to meet this criterion (Mishkin 2001, p. 2.)".

Inflation Targeting has become an increasingly popular monetary policy strategy, with many countries now inflation targeters. After New Zealand had introduced Inflation Targeting were 27 other countries that adopted it, fixing the consumer price index as their monetary policy goal (Table 4). The government outsources the decision-making to an independent central bank which in turn is accountable to the government, the legislature, and the public. Performance under the inflation target is continuously monitored and communicated by the central bank (including through quarterly inflation reports); also, deviations from the inflation target must be explained (Kopits 2014).

3.1. What to do with IT in good times?

It is well documented that, by and large, performance under rules-based monetary frameworks has been favorable. Inflation targeting, whether explicit or implicit, conducted by independent central banks, has contributed significantly to an almost uninterrupted record of low inflation in more than three dozen countries around the world. Arguably, this record was helped significantly by tailwinds during the Great Moderation. Integration of the Asian workforce into the world labor market and IT-based productivity gains in industrial countries have been major drivers, which allowed a rather loose monetary stance (and complacency) in some countries. The experience has been particularly beneficial in emerging market economies, where inflation targeting has served as a useful disinflation device from double-digit rates

Most of the inflation targeters had poor initial conditions prior to the adaptation of Inflation Targeting regime (see Table 5). Table 5 represents a cross-country – in Emerging and Industrial countries – analysis (data source International Monetary Fund 2005, p. 178.).

However, in recent years, inflation targeting regimes in many of these countries have been under pressure from strong capital inflows associated with extraordinary liquidity expansion in the advanced economies (Kopits 2014).

Table 5. Initial conditions prior to adopting Inflation Targeting (0%=poor, 100%=ideal)

	Technical Infrastructure	**Financial system health**	**Institutional independence**	**Economic structure**
Emerging Countries				
Philippines	25%	29%	50%	13%
Israel	42%	22%	29%	48%
Czech Republic	33%	23%	60%	26%
Peru	8%	25%	83%	27%
Hungary	25%	50%	15%	53%
Korea	42%	44%	32%	29%
Brazil	25%	54%	56%	26%
Chile	25%	43%	67%	28%
Thailand	8%	57%	57%	44%
Poland	25%	42%	65%	35%
Colombia	25%	41%	63%	39%
South Africa	33%	64%	64%	53%
Mexico	58%	41%	68%	48%
Industrial Countries				
New-Zeeland	67%	43%	14%	28%
Iceland	58%	43%	33%	39%
Australia	67%	56%	57%	52%
Norway	58%	56%	64%	55%
Canada	100%	41%	48%	53%
United Kingdom	92%	62%	44%	53%
Sweden	92%	55%	66%	41%
Switzerland	58%	68%	77%	56%

Source: International Monetary Fund (2005, p. 178.)

3.2. What to do with IT in the times of financial crises?

„Today inflation targeting is been put to the test – and it will almost certainly fail" (Stiglitz 2008). The governors of different central banks of major advanced economies decided to reach certain overarching goals, which are the follows: (1) lower unemployment to a 6.5 % rate in the United States, (2) to save the euro in the European Union, and (3) to end deflation in Japan. Faced with zero-bound interest rates, central banks adopted "forward guidance," as a form of rule, in the implementation of quantitative easing programs (Woodford 2012).

In the European Union, the one-size-fits-all monetary policy in the euro area has been less than successful and the Stability and Growth Pact has failed upon implementation (Kopits 2014).

The other critics of IT Inflation targeting in transition economies has been a more challenging task than in developed economies (Daianu–Lungu 2005, Freedman–Ötker-Robe 2009, Rose 2007, Walsh 2009a, 2009b). As experience with IT in transition economies shows, the central banks in these countries often missed inflation targets by a sensible amount.[5] „The country experiences support the earlier arguments that countries do not have to satisfy a long list of preconditions at the outset to implement the IT framework successfully. Among the sample countries, only one (Canada) was well-positioned to move to a full-fledged IT regime at the time that it adopted the policy framework. In others, while some of the so-called preconditions were met, a number of them were missing and were established gradually over time after the adoption of IT (Freedman–Ötker-Robe 2009, p. 6.)", see also on Table 6.

After a brief period following the transition, all Visegrád countries (V4) opted for an inflation targeting regime, later Romania also introduced IT. In Table 7 we can state that out of 32 trials only 14 times (with green color) were reached the target in Czech Republic and in Poland between 1998 and 2013.

[5] Also criticize IT the following economists: Barry Eichengreen, University of California, Berkeley Mohamed El-Erian, PIMCO Arminio Fraga, Gavea Investimentos, Takatoshi Ito, University of Tokyo, Jean Pisani-Ferry, Bruegel, Eswar Prasad, Cornell University and Brookings Institution, Raghuram Rajan, University of Chicago, Maria Ramos, Absa Group Ltd., Carmen Reinhart, Peterson Institute for International Economics, Hélène Rey, London Business School, Dani Rodrik, Harvard University, Kenneth Rogoff, Harvard University, Hyun Song Shin, Princeton University, Andrés Velasco, Columbia University, Beatrice Weder di Mauro, University of Mainz, Yongding Yu, Chinese Academy of Social Sciences

Table 6. Main Elements of Successful Inflation Targeting Implementation

Conditions	**Countries satisfying**
Price stability as the primary goal of monetary policy	Romania and Turkey
Price stability main objective with other goals	Canada, Chile, Czech Republic; Hungary, Israel and Poland (with exchange rate bands)
Goal independence or agreement with the government on inflation target path	Israel (government set the target); Canada, Czech Republic, Hungary, and Turkey (joint between government and CB); Chile, and Poland (CB)
Absence of fiscal dominance (gov. access to CB credit limited/ prohibited)	Canada, Chile, Czech Republic, Hungary, Israel, Poland, Romania, and Turkey
Central bank instrument independence	Canada (de facto) Chile, Czech Republic, Hungary, Israel, Poland, Romania, and Turkey
Well-understood transmission mechanism	Relatively good in Canada (though with gaps); Basic at outset, with continuing efforts in: Chile, Czech Republic, Hungary, Israel, Poland, Romania, and Turkey
Reasonable degree of control over short-term interest rates	Canada, Chile, Czech Republic, and Turkey. Hungary, Israel, and Poland (though reasonable, it was complicated somewhat by simultaneous pursuit of the ER target)
Reasonably well-developed financial markets	Canada and Chile (well-developed) Czech Republic, Hungary, Israel (relatively well-developed), Turkey, Poland, and Romania (less well-developed)
Reasonably stable financial system	Canada, Chile, Hungary, Israel, Poland, Romania, and Turkey
Modeling/forecasting capacity	Canada (well-developed). In the remaining countries--little at the start, developed and improved over time.
Mechanisms of accountability	Canada (no formal accountability mechanism at the outset, but need to explain monetary policy to public; formal mechanisms established over time); Turkey (through requirement to inform the public about CB operations and monetary policy and when targets were not met at the designated time).

Source: Freedman–Ötker-Robe (2009, p. 6.)

Table 7. Inflation Targeting Systems in Czech Republic and in Poland between 1998 and 2013

	Czech Republic		Poland	
	Target	**Actual**	**Target**	**Actual**
1998	5,5-6,5%	10,70%	N/A	11,80%
1999	4-5%	2,10%	6,4-7,8%	7,30%
2000	3,5-5,5%	3,80%	5,4-6,8%	10,10%
2001	2-4%	4,68%	6-8%	5,50%
2002	2,75-4,75%	1,88%	4-6%	1,90%
2003	2,5-4,5%	0,11%	2-4%	0,80%
2004	2-4%	2,78%	1,5-3,5%	3,49%
2005	2-4%	1,84%	1,5-3,5%	2,13%
2006	2-4%	2,54%	1,5-3,5%	1,03%
2007	2-4%	2,86%	1,5-3,5%	2,49%
2008	2-4%	6,34%	1,5-3,5%	4,22%
2009	2-4%	1,03%	1,5-3,5%	3,45%
2010	2-4%	1,46%	1,5-3,5%	2,58%
2011	2-4%	1,93%	1,5-3,5%	4,27%
2012	2-4%	3,29%	1,5-3,5%	3,70%
2013	2-4%	1,42%	1,5-3,5%	0,90%

Source: IMF

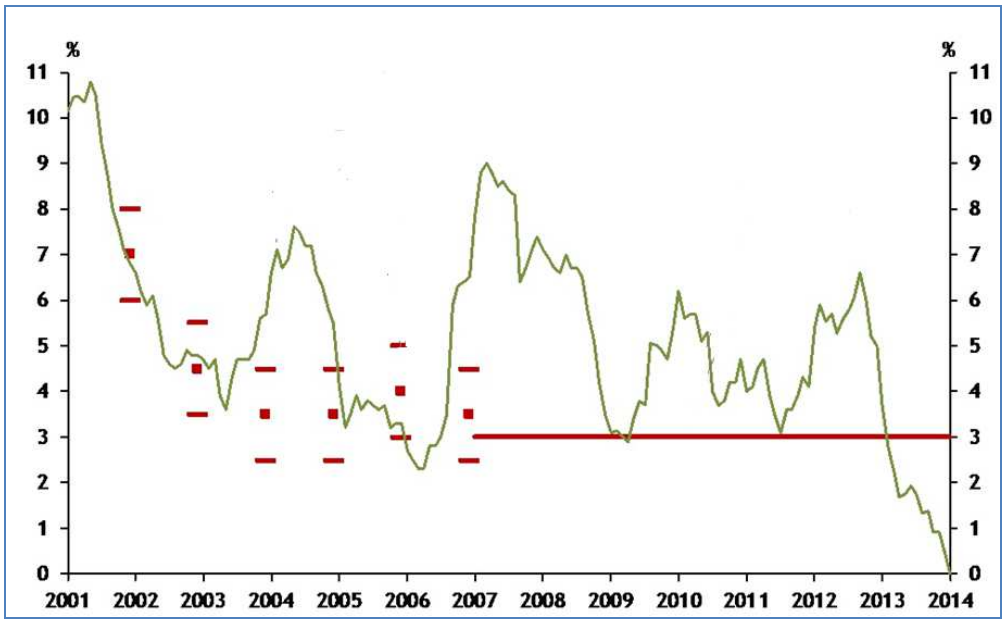
Contrary to the criticism that rules-based frameworks are too rigid, well-designed frameworks are sufficiently flexible to compensate for economic shocks. Indeed, inflation targeting can be constructed to allow explicitly or implicitly, in some cases automatically, for compensatory offsets to output shocks. For example, inflation targets can be formulated in implicit terms or within a band or (under the Taylor rule) with a dual mandate by including the output gap as an additional determinant (Kopits 2014).

4. IT in Hungary

Table 3 showed that Hungary is using an IT monetary regime. The central bank law states that the main goal of the Hungarian National Bank is to reach and sustain the

price stability. For this purpose there has been introduced the inflation targeting monetary framework (IT) since 2001.[6] The Hungarian National Bank with the government has a middle-term inflation rate goal, which is equal 3% of the official-, Central Statistic Office measured average consumer price index. The MNB said that this measure is consistent with the price stability, although many leader economists suggest that price stability may be 4% or above (see Blanchard et al. 2010, p. 11.). Figure 1 and Table 8. show the Hungarian IT's results.

Figure 1. CPI and Inflation Targeting in Hungary



Source: Hungarian National Bank

We can see that the IT has not been successful in Hungary. "The practical implications of long-term optimal inflation in Hungary are, to a certain extent, limited by the fact that the medium/long-term inflation target should meet the criteria of adopting the euro. In order to join the euro area, Hungary must reduce inflation to a level consistent with the relevant convergence criterion (Kiss–Krekó 2004, p. 4.)."

[6] Before 2001 there used to be the preannounced crawling exchange rate peg framework.

Table 8. Inflation and targets in Hungary

Year	Inflation	Target
2001	6,8%	5,8%
2002	4,8%	3,5%-5,5%
2003	5,7%	2,5%-4,5%
2004	6,1%	2,5%-4,5%
2005	3,3%	3%-5%
2006	6,5%	2,5%-4,5%
2007	8,0%	3,0%
2008	6,0%	3,0%
2009	4,2%	3,0%
2010	4,9%	3,0%
2011	3,9%	3,0%
2012	5,7%	3,0%
2013	1,7%	3,0%

Source: MNB and KSH

5. Hungarian monetary policy and the financial crisis

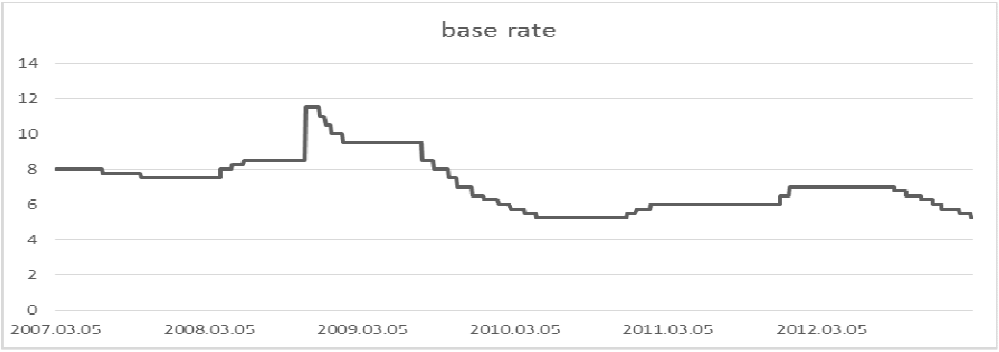
Just like the other economies in the region, in autumn 2008 the Hungarian economy was hit by several extremely severe shocks at the same time. Firstly, the immediate impact to the real economy caused by the collapse of demand in the export markets. Secondly, the liquidity shock as the entire economy was shaken by the sudden shortage of foreign-currency and forint liquidity. Since monetary policy could only respond to this upheaval tardily, and inefficiently due to reasons of principle and technical factors, all scope for budgetary-policy intervention was lost. It is an undisptable fact that Hungary had already lost the means of applying an anti-cyclical budgetary policy – by actively increasing the deficit during the crisis – in the years preceding the crisis. As a consequence of the grossly irresponsible economic (primarily budgetary) policies of previous years, unlike in neighboring countries, fiscal policy was unable or barely able to mitigate the terrible impacts of the crisis.

The financing of the budget – except in countries with reserve currencies – has temporarily run into difficulties in many other countries, due to the general drying up of local money and capital markets. But in these countries assertive and confident action by central banks, which often had no qualms about deploying unorthodox methods, succeeded in perceptibly dampening down the market tension related

to the financing of the government securities market. A necessary prerequisite for this, but not the only one, was that the central banks possess sufficient foreign exchange reserves to provide temporarily, over the short term, an adequate buffer to absorb the increased domestic demand for foreign currency, and to partly make up for the drop in foreign currency inflow, to meet payment obligations and fulfil conversion requests; in other words, making it possible to avoid the currency exchange rate going into freefall and benchmark interest rates from rising sharply and suddenly. For this reason, these countries were only forced to seek outside assistance considerably later.

The Hungarian economy was in a terrible shape when the international financial turmoil reached the country due to its relatively high level of external indebtedness, the high public debt, the overly extensive and badly-structured fiscal redistribution of funds, the extremely rapid and unfavourably-structured growth in forint and foreign-currency lending and the significantly overvalued forint, the high positive real interest rates. Figure 2 shows the base rate of that era.

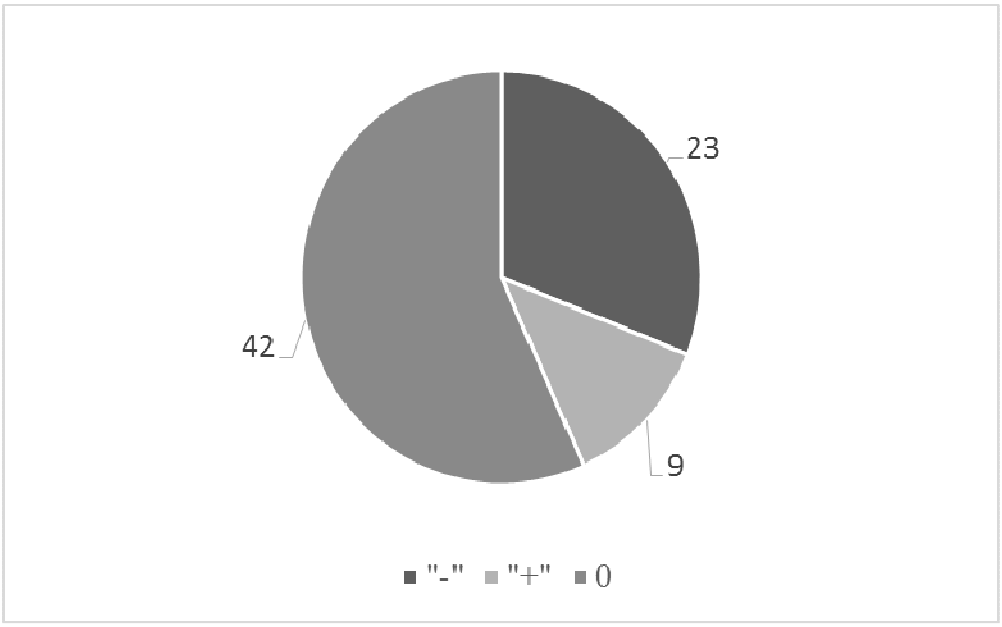
Figure 2. The base rate under Governor Simor



Source: MNB data with my own figuring

If we analyze the rate decisions of the Monetary Council we can state that under the era of Governor Simor's there were altogether 74 rate decision (see Figure 4). 42 times out of it there were neither base rate rising, nor base rate decreasing. 23 times were base rate decreasing and only 9 times decided the Monetary Council to raise the base rate. For a few drama-filled days in autumn 2008 the central bank raised the reference rate by 300 basis points (see in Figure 3), the only central bank in the region to do so with good reason.

Figure 3. Interest rate decisions of the MNB Monetary Council



Source: MNB data with my own figuring

Due to the shortage of sufficient foreign exchange reserves there wasn't any monetary action in the currency market in this severe times. The low international reserves prevented the central bank from performing one of its basic functions. Even over a short, 3-6-month horizon, the central bank was incapable of guaranteeing the liquidity of the Hungarian financial system without any major hitches; in other words it was only partially able to fulfil its role as the 'lender of last resort'. Over and above the technical restriction caused by the shortage of reserves, however, weighty matters of principle also led to the MNB being far less prepared for the crisis than its foreign counterparts. For many years prior to the crisis, the MNB believed in the self-regulating nature of the financial markets, and in their efficiency. It assigned itself the role of 'night watchman', and rejected out of hand any approaches that ran contrary to this. Before the crisis hit the central bank had not only passed over the opportunity to intervene in the currency market (as demonstrated by the strengthening of the forint exchange rate to HUF 228/EUR in the spring of 2008), but also declined to quote FX swaps (exchanges of foreign currency and forint deposits) and thus forewent the ability to influence liquidity, just as it had refused to take part in open-market transactions and actively shape market liquidity and market

expectations. After the agreement was concluded with the IMF, it was no longer so much the technical limitation that prevented the MNB from being active and courageous, innovative and prepared to make wide use of unconventional means and react with the appropriate degree of flexibility, but rather its inability to step out of its own shadow.

First and foremost, a fundamental change of principles and approach was needed, similar to the one that has taken place widely around the world as a result of the crisis. Despite an awareness of the substantial expansion in liquidity in the offing from the international financial institutions, there was no fundamental rethinking of the monetary-policy frameworks (Surányi 2010).

A significant relaxation of monetary policy would have undermined the forint exchange rage, thereby letting inflation and inflation expectations off the leash. In January 2009 the central bank gave off signals and made decisions that pointed in the direction of a dangerous, across-the-board monetary loosening. The unfortunate central bank communication regarding the exchange rate at the beginning of the year, and the further ill-advised interest-rate cuts, seemed to suggest that the central bank's policy was shifting from one extreme (the forcing of a strong forint) to the other (preference for a weak forint (Surányi 2010).

In an inflation targeting framework, the FX rate "in theory" floats freely. In the other group of countries, pegged or quasi-fix FX regimes are operated. The final goal of monetary policy is obviously to facilitate price stability. In text book cases, the most important tool of the central bank is setting the domestic interest rates in order to reach price stability and control inflation. This is true in theory and in big, closed economies. The effectiveness of the IT regimes is subject to heated debates even in big, closed, developed economies, while in the small, open economies of the CEE region the track record of the IT systems is very poor. A long series of empirical studies have already proved that the interest rate channel in these countries is much weaker than the FX-rate channel. One can believe in the IT systems or not, but it can not be disputed, that the only effective tool of the central bank is the FX rate – in a small, open economy. Hence, a central bank operating under an IT system, in practice should target the FX rate and adjust its interest rate level to the "implicit" FX target that is consistent with the inflation goal (Surányi 2009, 2010).

6. Conclusions

The fact that the inflation target has not been constantly achieved in Hungary, it does not in mean that the IT regime (which is much more than a public definition of

the inflation target) itself is unsuccessful. Many countries did not satisfy the preconditions, difficulties in establishing credibility.

A major argument for establishing a rules-based framework is to anchor expectations of economic agents and financial markets as regards policy goals and policymaking. Regarding monetary policy the expectations are to be anchored to price stability. Anchoring inflation expectations tends to reduce uncertainty and to encourage investment, saving and work effort decisions to be taken from a longer term rather than a short-term perspective, so the reduction of uncertainty tends to lower the discount rate. The ensuing decisions contribute to higher economic growth.

One can believe in the IT systems or not, but it can not be disputed, that the only effective tool of the central bank is the FX rate –in a small, open economy. Hence, a central bank operating under an IT system, in practice should target the FX rate and adjust its interest rate level to the "implicit" FX target that is consistent with the inflation goal. Hungary is a role model to show the need of a rethinking Inflation targeting framework.

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