

Chapter 4

The Czech Republic's inflation targeting experience

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This chapter discusses the experience of the Czech Republic with inflation targeting (IT). The Czech Republic was the first transition economy to adopt IT. The author argues that IT was adopted only after other monetary policy regimes had failed. An important feature of the Czech regime is the need to build an exit strategy into the policy framework, given the country's expected entry into the euro zone, although no date has yet been announced. The problem of exiting from a monetary policy regime has so far been faced by countries with fixed exchange-rate regimes (including currency boards), rather than IT.

* The views expressed in this chapter are those of the author and do not necessarily represent those of the Czech National Bank.

Introduction

The Czech National Bank (CNB) introduced inflation targeting (IT) in December 1997. This change in the Czech monetary policy strategy came six months after an episode of exchange-rate turbulence, which put an end to a fixed exchange-rate regime in May 1997. In this regard, the CNB acted similarly to other central banks in adopting IT only after other monetary policy strategies had failed. The main difference is that the CNB was the first central bank to introduce IT in a transition economy.

This pioneering step was regarded by the outside world as risky and led to a debate on whether or not central banks in transition economies, or developing economies more broadly, could operate IT with the same success as central banks in developed economies. International institutions pointed out that transition economies did not meet some of the key conditions for successful IT. There were also doubts about whether or not a central bank in a transition economy could adopt a monetary regime that, unlike a fixed exchange-rate system, is not based on imported credibility, but on the central bank's ability to build its own credibility.

Looking back, one can say that the Czech experience with IT during in 1997-07 shows that this strategy can indeed be followed successfully by transition/developing economies. The first evidence in favour of this conclusion is the stable macroeconomic environment in which the Czech economy has been able to develop in recent years. Before the introduction of IT (1993-97), average inflation was 11.5%, against 2.9% for the IT period (1998-2007¹). Average GDP growth was 2.6% before IT and is slightly higher, at 3.6%, over the IT period. The second piece of evidence comes from the growing number of central banks in transition economies to have introduced IT over the last decade (Jeffery and Gerlach, 2002), coupled with a change in the view of international institutions regarding the appropriateness of IT in these economies (IMF, 2006; Masson *et al.*, 1997).

This article sets out to describe the Czech IT experience during 1997-2007 and to pass on that experience to central banks in developing countries that have implemented IT later than the CNB and might thus gain useful information from the CNB's experience.

The six phases of IT in the Czech Republic

The history of the Czech IT regime can be broken down into six phases: *i*) the preparation and introduction of the strategy (1997); *ii*) the embryonic phase, which is associated with the beginning of disinflation and the

establishment of the individual components of the policy regime (1998-2001); *iii*) the advanced phase, which is associated with the end of disinflation and fine-tuning of the main elements of IT (2002-05); *iv*) implementation of IT with a horizontal inflation target (2006-09); *v*) implementation of IT and preparations for adopting the euro (2010-“Year T”); and *vi*) exit from IT upon adoption of the euro (“Year T”²). Table 4.1 and Figure 4.1 provide key information on the inflation targets and inflation performance in each phase. Figure 4.2 depicts the basic data on the monetary policy setting and other economic policies that have strongly affected inflation outturns.

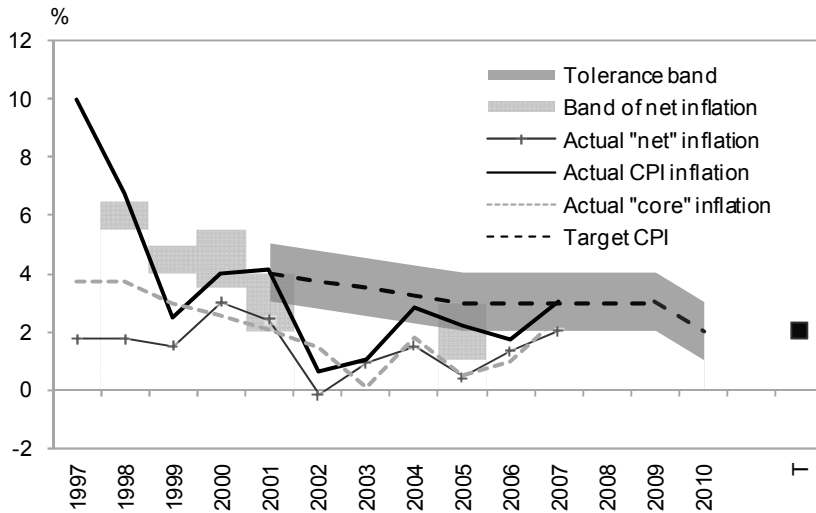
Table 4.1. Czech Republic: Specification of inflation targets

	Phase of IT	Type of target	Date of announcement	Index
1997	I. Preparation and introduction			
1998	II. Embryonic phase – beginning of disinflation	Interval, target only for December 1999	December 1997	Net inflation
1999			November 1998	Net inflation
2000			December 1997	Net inflation
2001			April 2000	Net inflation
2002			III. Advanced phase – end of disinflation	Descending corridor for 2002-05
2003	April 2001	CPI inflation		
2004	April 2001	CPI inflation		
2005	April 1999 (net)/ April 2001 (CPI)	CPI inflation		
2006	IV. Stabilisation of inflation – horizontal target	Point target with uncertainty interval, horizontal target		
2007			April I2004	CPI inflation
2008			April I2004	CPI inflation
2009			April I2004	CPI inflation
2010 -T			V. Preparation for euro – ECB-like target	Point target with uncertainty interval, horizontal target
Year T	VI. Adoption of euro – exit phase	ECB price stability target		

1. Two targets were subsequently announced for 2005. In 1999 target was announced for net inflation. In 2001, new target was announced for CPI inflation. Hence, the 1999 target was never used.

Source: Czech National Bank.

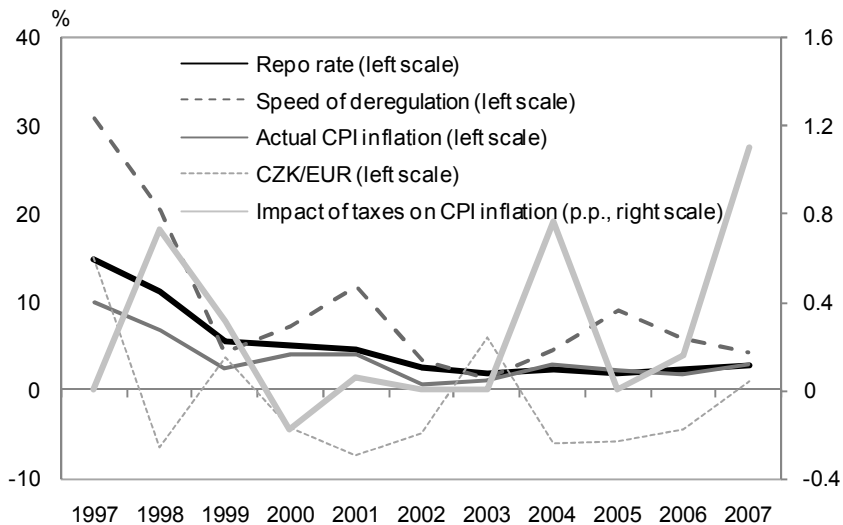
Figure 4.1. Czech Republic: Inflation targets and inflation, 1997-T¹



1. The date of euro adoption is not yet known; it is therefore expressed as T. From T onwards, the inflation target will be replaced by the ECB's definition of price stability (inflation below but close to 2%).

Source: Czech National Bank.

Figure 4.2. **Czech Republic: Monetary policy settings and other economic policies, 1997-2007**



Source: Czech National Bank.

Introduction of IT

The CNB adopted IT at the end of 1997 after the May 1997 exchange-rate crisis. This move was preceded by a six-month preparation period during which alternative monetary policy strategies were evaluated. As indicated by studies from that time (Hrnčíř and Šmídková, 1998), there were four options: *i*) to re-introduce the fixed exchange-rate regime on which monetary policy had been based in the first half of the 1990s; *ii*) to adopt money targeting, which had also been used in the Czech Republic in the 1990s, *iii*) to pursue a flexible strategy with no explicit target along the lines of the U.S. Federal Reserve’s policy framework on the basis of a constitutional mandate (“just do it”); and *iv*) to adopt IT.

The CNB chose the fourth option. One of the primary reasons for this decision, as in the case of numerous other central banks (Vickers, 1998), was the well-known drawbacks of fixed exchange-rate regimes and money targeting. Moreover, it was apparent that the credibility of Czech monetary policy was not yet comparable to that of the United States’, so it was inappropriate to pursue a flexible strategy. IT seemed to be the most appropriate of the four possible regimes, even taking into account the risks arising from the differences between

transition and developed economies. These risks were emphasised in particular by international institutions (IMF, 1998). Some authors also argued that Czech monetary policy might not be sufficiently credible for successful implementation of a strategy which, unlike the fixed exchange-rate system, is not based on imported credibility, and that currency-board arrangements were coming back into fashion (Enoch and Gulde, 1998).

The CNB introduced IT by announcing two inflation targets, both specified in terms of “net inflation” (CNB, 1997).³ The one-year target was intended to help anchor inflation expectations in the short term, while the three-year target, which was lower than the one-year one, was meant to kick off a disinflation process. Net inflation was chosen in order to prevent monetary policy decision-making from being influenced by deregulation and the tax changes that were part of the transition process. Deregulation, measured by changes in regulated prices, was large in scale (Figure 4.2). The introduction of IT also required the CNB to announce that it would enhance the transparency of monetary policy decision-making and start publishing inflation reports. This announcement was accompanied by a communication campaign to explain the new strategy. A comparison of actual inflation with the inflation targets in place when IT was introduced reveals that the disinflation strategy was pretty ambitious, but disinflation was spread out over time with the aid of the two targets (Figure 4.1).

The embryonic phase of IT

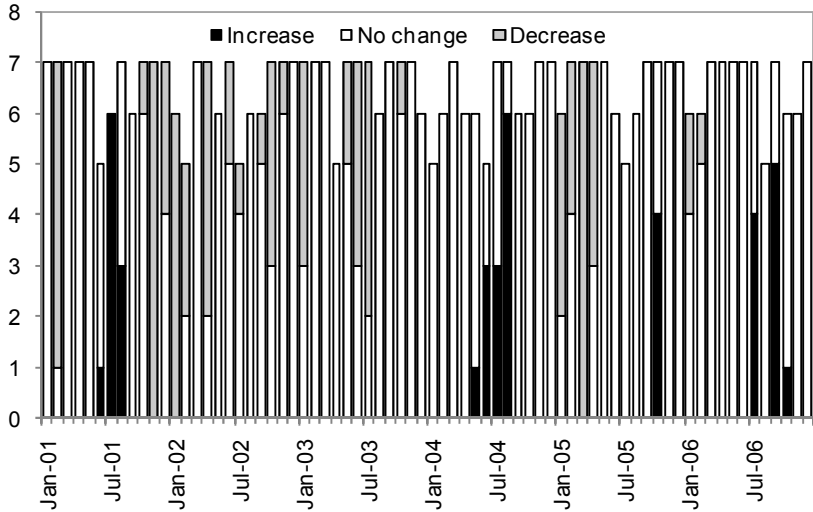
The embryonic phase of IT, which took place essentially during 1998-2001, was aimed at establishing the credibility of the new policy regime and all its essential components, and at getting disinflation under way. Credibility was achieved relatively quickly owing to highly visible disinflation, which proceeded faster than signalled by the first two targets for net inflation. The inflation targets were undershot in the early phase. In 1998, the CNB announced another short-term target for net inflation for 1999. In 1999, it announced a medium-term target for 2005, which was later recast as a target for CPI inflation. In 2000, it again announced a short-term target for 2001. In 2001, the CNB announced a change to CPI inflation targeting (as of 2002) in order to anchor expectations for the entire CPI. CPI inflation was crucial for numerous decisions, most notably wage bargaining. At the same time, the CNB replaced a combination of short- and medium-term inflation targets by a descending-band target.

The CNB began the embryonic phase with a forecasting system based primarily on expert knowledge and partial econometric estimates. It was not until IT was up and running that work started on building a fully-fledged

forecasting system centred on a calibrated model. All decision-making reference materials prepared by CNB experts were submitted to the CNB Board in internal monthly documents called situation reports.

From the outset of IT the CNB has been a very transparent central bank. Right from the beginning in April 1998 it started publishing quarterly inflation reports based on the internal situation reports. Minutes of board meetings on monetary policy issues started to be published in January 1998. These meetings usually took place once a month, the minutes being issued 12 days after each meeting. From the start, both of these primary communication documents were published in two languages, Czech and English, so that the domestic and foreign public and participants in international financial markets could follow the discussions. In 2001, the CNB announced that full internal transcripts of monetary policy meetings would be disclosed along with the relevant situation reports six years after each meeting (CNB, 2001a). In 2001, the CNB also started disclosing the ratios of board members' votes (before then, it had only reported whether decisions had been approved unanimously or by a majority vote). This move allowed analysts and market participants to better estimate future interest-rate movements, as it revealed the level of agreement on the current interest-rate settings (Figure 4.3).

Figure 4.3. Czech Republic: Voting ratios on monetary policy rates, 2001-06



1. In some cases, not all board members were present, hence the number of votes fluctuates between 7 (full participation) and 4 (minimum required participation).

Source: Czech National Bank.

During the embryonic phase, the policy interest rate fell from 12 to 5% per year, the koruna appreciated modestly against the euro at 4% per year on average, and deregulation proceeded at a high, albeit slowing, pace, with regulated prices rising by 10% on average. CPI inflation fell from 7 to 4%, net inflation fluctuated between 1.5 and 3%, and core inflation, which was viewed as the relevant indicator of demand-pull inflation, decreased from 4 to 2%. The pace of disinflation was frequently discussed during this phase, but according to several studies inflation fell to close to the optimum rate at the time (Mahadeva and Šmídková, 2000).

The advanced phase of IT

The advanced phase of IT (which took place primarily during 2002-05) was meant to complete the disinflation process, anchor inflation expectations at a low level and fine-tune all the essential institutional underpinnings of the monetary regime. A new inflation target, taking the form of a descending band, was implemented in January 2002. It was specified in terms of CPI inflation. As the disinflation process continued at a relatively fast pace, the target was undershot throughout the period, except for the final year, when inflation was affected by a tax increase in the previous year and by faster deregulation (Figure 4.2).

The implementation of a fully-fledged forecasting system took several years. The system was not launched until IT had been in place for four years (Coats *et al.*, 2003). The CNB started working with the fully-fledged forecasting system in 2002. At its core was a quarterly projection model (QPM) covering the key macroeconomic linkages between monetary policy, the output gap, the exchange rate and inflation. Alongside the QPM, the CNB started using a complementary expert-empirical system for short-term forecasts and also modified the structure of its internal situation reports to incorporate model forecasts. The limited number of macroeconomic linkages covered by the QPM meant that the monetary policy debate, which often covered a wide range of economic variables, could not be based entirely on model forecasts. This was one of the reasons why the CNB started to work on a new, more sophisticated forecasting model in 2003 (Beneš *et al.*, 2005). The CNB also further enhanced its transparency. Since 2002 the inflation reports have featured a numerical unconditional forecast of macroeconomic developments. The publication gap of the minutes of board meetings on monetary policy issues was shortened in 2005 from 12 to 8 days after each meeting.

The advanced phase of IT coincided with a further decline in the policy interest rate, albeit at a far more moderate pace than in the embryonic phase (from 3 to 2%), a continuing modest appreciation of the koruna against the euro

(3% on average), and a volatile, often pro-cyclical, speed of deregulation (at 5% on average). CPI inflation fell further from 4 to 2%, and core inflation fluctuated between 0-1.5%. The disinflation process was more or less complete, as reflected in the CNB's 2004 announcement of a new horizontal target for 2006 (CNB, 2004).

IT with a horizontal inflation target

The current phase, which for the purposes of this chapter will cover the 2006-09 period, is one of inflation stabilisation and gradual refinement of the individual components of the monetary regime to reflect new information from economic theory and practice. The new inflation target was set for an indefinite period, with a tolerance band of ± 1 percentage point. So far, CPI inflation outturns have fluctuating just below the target, but mostly above the lower bound (Figure 4.1).

In this phase, work is under way on a new version of the forecast model, which is expected to become the core of the forecasting system. The process of enhancing transparency is also ongoing. In 2007, the CNB announced that it would start disclosing the individual board member votes in 2008 in addition to the voting ratios (CNB, 2007). At the same time, it announced that it would lower the horizontal target to 2% in 2010, in preparation for adopting the euro. This IT phase has so far been characterised by a moderate rise in the policy rate from 2 to 3%, a continuing modest appreciation of the koruna against the euro at 2% on average, and a modest speed of deregulation of around 5%. CPI inflation has been fluctuating between 2-3%, and core inflation has edged up to 1-2%.

IT towards adopting the Euro

An important specific feature of the Czech IT regime compared to other countries, such as Canada, New Zealand and Israel, is the need to eventually gear the policy framework for preparing to adopt the euro. The Czech Republic has been a member of the European Union since 2004; therefore, at some point it is expected to adopt the single currency. Although the exact date is not yet known, it can be assumed that preparations will begin after 2010. According to the Czech government and the CNB, preparations should last two to three years (Czech Ministry of Finance, 2006). The CNB has already announced a lowering of the inflation target for 2010. The new target should be in line with the current interpretation of the Maastricht criteria, which must be satisfied before the euro can be adopted. Among other things, the criteria require low inflation and exchange-rate stability.

Exit phase

Another specific feature of the Czech IT regime compared to other countries is its clearly defined exit route. On adopting the euro, the Czech economy will cease to be stabilised by means of IT as currently implemented by the CNB, and its macroeconomic framework will be shaped by the monetary and exchange-rate policy of the euro area as a whole. The problem of exiting from a monetary policy regime has so far been faced mostly by countries with fixed exchange-rate regimes (including currency boards), rather than IT countries (Portugal, 2007). That notwithstanding, we mention the issue here, because it is among the (often implicit) considerations during the introduction of a new monetary policy regime.

Components of the IT regime

The Czech IT regime has three key components: the specification of the inflation target, the internal framework for monetary policymaking and the communication strategy (which determines the degree of transparency of monetary policy).

Specification of the inflation targets

When specifying an inflation target, several decisions need to be made, including on the target level and horizon and on how to deal with uncertainties associated with monetary policy decisions. In general, one can choose between a descending target and a horizontal one, with closed- or open-ended horizons, between a point inflation target with a system of escape clauses or a target range, and between targeting all or only a sub-set of the consumer price index (Haldane, 1995). Each specification has its pros and cons, so it is natural for a central bank to change the definition of the target when the economic circumstances change, therefore altering the balance of advantages and disadvantages of alternative specifications.

To begin with, as described above, the CNB used descending targets, which indicated its intended disinflation speed, and time-limited targets, which signalled the estimated timeframe for disinflation. Subsequently, it switched to a horizontal target with an open-ended horizon, which better suited the central bank's goal of stabilising inflation. The uncertainty associated with monetary policy decisions was initially dealt with by means of target ranges, which emphasised the considerable uncertainty surrounding the volatility of inflation in the disinflation process, and also by targeting net inflation (rather than the entire CPI), which reflected the uncertainty associated with the end of transition and with the impact of economic policies on inflation. A list of *ex ante* escape

clauses was added subsequently (CNB, 2001b). As some of the uncertainties gradually diminished, the CNB switched to point targets accompanied by a signal interval only, and to targeting the entire CPI.

In some studies, the institutional arrangements for setting the inflation target are regarded as part of the specification process. This specification can be carried out by the central bank, the government or the two acting together. There are cases around the world (Heenan *et al.*, 2006) where the central bank (*e.g.* Chile) and the executive branch of government each specify an inflation target (*e.g.* United Kingdom). In the case of the CNB, the targets were set by the central bank alone on some occasions, as in 1998, or together with the government, as in 1999. However, informal consultations have taken place when setting the targets, which have been used for economic analyses by both the central bank and the government. The formal features of this institutional set-up have therefore not played a major role in monetary policymaking.

The monetary policy decision-making framework

While the specification of the inflation target attracts the attention of the financial community, decisions on the main characteristics of the monetary policymaking framework tend to be important primarily for the internal running of the central bank. The only part of this framework that usually attracts the attention of market participants and analysts is the forecasting model, which can be compared with the models of other central banks or with academic models (Robertson, 2000). However, the framework is made up of several components. In addition to the model that generates the central forecasts, there is the method for dealing with uncertainty, the format of reference materials, the organisation of the discussion, and, finally, the adoption of actual decisions to change rates (Šmídková, 2005).

As in the case of the models used by other inflation-targeting central banks, the CNB's forecasting system has gone through several phases. As described earlier, the aggregated model has been refined and expanded and the latest academic research findings have been taken on board. The first generation of the forecasting system lasted four years, and the estimate for the second generation is six years. The uncertainty associated with monetary policymaking has been reflected since the outset in several elements of the framework. Internally, a verbal account of particular risks has always been provided in the situation reports. The individual votes on policy rate changes have also played an important role, because board members have not always reached consensus on their assessments of the economic situation (Figure 4.3) and have thus in fact estimated the risks associated with the forecast through the method of averaging

alternative views by voting. This method is often used by managers when faced with uncertainty (Šmídková, 2005).

The methods for dealing with uncertainty have gradually been expanded to include, for example, the use of alternative scenarios and interval forecasts. Externally, uncertainty has been communicated through the specification of the target (see above). Monthly situation reports and updates of those reports in the case of the extraordinary board meetings held in the embryonic phase of IT have served as reference documents. These reports contain information that is similar to that provided in the inflation reports, while delving into some issues in greater detail. An increasing emphasis has been placed over time in the situation and inflation reports on the inflation forecast and risk estimates. The monetary policy meetings have a fixed format. Following a presentation of the situation report by CNB experts, the CNB Board, which has seven members, each one with an independent vote, meets in a closed session and, after holding a discussion that is later made public in the minutes, votes on rates. In the event of a tied vote, the governor casts the deciding vote. The outcome of the meeting is disclosed in a press release and at a news conference.

Communication strategy

The communication strategies of IT central banks tend to be based on a combination of several tools: press releases/news conferences, and inflation reports and minutes of meetings, usually accompanied by interviews with individual board/committee members (Šmídková, 2005). These tools involve direct communication with both the general public and the financial community. To meet the needs of the academic community, some central banks also later release their internal reference documents, forecasting model equations and detailed transcripts of monetary policy meetings. The central bank's institutional partners are another key target group. This group typically includes the institution that conferred the status of independence to the central bank, be it the government or the legislature (Šmídková and Tůma, 1999).

The CNB employs all the above communication tools, making it one of the most transparent central banks in the world (Fracasso *et al.*, 2003). The degree of transparency has been high from the beginning of IT, and the range of tools used has gradually been expanded, as described above. Interest-rate decisions are now announced in a press release and explained at a news conference, and further details are provided eight days after the meeting in the form of minutes and quarterly through the inflation reports (Šmídková and Bulíř, 2007). Reference documents and a detailed transcript of the meeting are published subsequently. The inflation report is also presented by CNB representatives

twice a year in the Czech parliament, which is a partner institution of the central bank.

Concluding remarks

The CNB's experience with IT may be of interest to other central banks in emerging-market economies that are considering the introduction of this monetary regime or have introduced it more recently than the CNB. The key facts relate primarily to the conditions for successful implementation of IT, the essential characteristics of the policy regime and its flexibility.

Not all the conditions need to be met before introducing IT

A whole range of conditions have been identified in various studies as essential for the successful implementation of IT in a developing economy. In the CNB's case, many of these conditions were satisfied; for instance, a lack of fiscal dominance and a relatively well developed financial market. But there were conditions that were not met, such as the availability of an adequate forecasting model and technical know-how at the central bank. Nevertheless, IT has proved to be a success in terms of disinflation and later as an inflation-stabilising strategy. The CNB's experience proves that not all the conditions need to be met before IT is introduced. Some of them may in fact be difficult to meet, because there is insufficient motivation to satisfy them in the absence of IT. This is the case, for example, of a central bank which, like the CNB in 1997, is switching from a fixed exchange-rate regime to IT. In a fixed exchange-rate system, the central bank does not have a strong incentive to set up an extensive, inflation-centred forecasting system, as monetary policymaking focuses on interest-rate changes and interventions in the foreign-exchange market needed to maintain the exchange-rate peg.

Key features to be addressed when introducing and refining IT

The introduction of IT is always combined with the announcement of an inflation target. Implementation of the strategy is often referred to as inflation-forecast targeting, because by changing the policy interest rate the central bank tries to keep the inflation forecast in line with the inflation target. Another key feature of IT is transparency. It is therefore the inflation target, the forecasting model and the inflation report that frequently take centre stage during the introduction and refinement of the IT regime. However, IT has numerous characteristics that need to be considered. The CNB experience demonstrates that it is important to fully appreciate from the outset the role of *ex ante* escape clauses as a mechanism enabling the central bank to communicate to the public why it may intentionally not meet the inflation target

in the event of large shocks. It is also crucial from the outset to introduce into the decision-making process elements that reflect the uncertainty associated with the central forecast. References to alternative scenarios, for instance, can be very useful in this regard. Moreover, it is good to bear in mind from the start that the academic community will be interested in studying internal reference documents and detailed minutes of meetings at some subsequent point in time. Consequently, it is useful to set from the outset an appropriate format for these internal documents and a mechanism for approving their final versions.

Changes need to be made as and when necessary

IT can give the impression of being quite a rigid policy framework. The inflation target is usually presented in the academic literature as a horizontal point target that does not change over time. Likewise, the issues of changing the forecasting model or gradually enhancing the transparency of the monetary policy decision-making process over time are rarely discussed in the academic literature. The CNB's experience clearly demonstrates that IT is in practice a framework in progress, allowing changes to be made to its individual components as and when necessary. The three most prominent examples in the Czech experience are the changes to the inflation target, the forecasting model and the communication strategy. The specification of the inflation target has changed fairly often over time – once every three years on average. These changes have had no bearing on the credibility of IT, because they have always reflected changes in the conditions in which the CNB implements monetary policy; therefore, they have not been viewed as opportunistic. Such changes in conditions occurred, for example, after the effects of the first wave of deregulation had worn off and after accession to the European Union, which entailed an obligation to adopt the Euro at some point in the future. The forecasting system has changed as the CNB's know-how has expanded, and also as new ideas have emerged from the academic world, such as the use of DSGE models. The CNB's communication strategy has put emphasis on gradually enhancing transparency. Expansions of the set of information available to the public and earlier publication of certain documents have been announced relatively frequently, on average once every eighteen months.

Notes

1. CNB inflation and GDP forecast used to approximate data for 2007.
2. No specific euro adoption date has been set as yet (Czech Ministry of Finance, 2006), so it is referred to as “T” in this chapter.
3. Net inflation is CPI inflation adjusted for deregulations and other administrative measures.

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List of acronyms

ADF	Augmented Dickey-Fuller Test
AR	Autoregressive Model
BCB	Central Bank of Brazil (<i>Banco Central do Brasil</i>)
BER	Bureau for Economic Research
BI	Bank Indonesia
BIS	Bank for International Settlements
BRSA	Banking Regulatory and Supervisory Agency
CBC	Central Bank of Chile
CBT	Central Bank of Turkey
CDT	Colombian Interest Rate (<i>Certificado de Depósito a Término</i>)
CETES	Mexican Interest Rate (<i>Certificados de la Tesorería de la Federación</i>)
CMN	Brazilian National Monetary Council (<i>Conselho Monetário Nacional</i>)
CNB	Czech National Bank
COPOM	Brazilian Monetary Policy Committee (<i>Comitê de Política Monetária</i>)
CPI	Consumer Price Index
CPIX	Consumer Price Index (excluding mortgage interest costs)
DSGE	Dynamic Stochastic General Equilibrium
EMBI	Emerging Market Bond Index
FAVAR	Factor-Augmented Vector Autoregressive Model
FDI	Foreign Direct Investment
FIML	Full Information Maximum Likelihood
FPAS	Forecasting and Policy Analysis System
FTO	Fine-Tuning Operations
GDP	Gross Domestic Product
GNP	Gross National Product
IGP-DI	Brazilian General Price Index (<i>Índice Geral de Preços - Disponibilidade Interna</i>)

IMACEC	Chilean Monthly Economic Activity Index (<i>Indicador Mensual de Actividad Económica</i>)
IMF	International Monetary Fund
IMT	Inflation Management Team
INPC	Mexican Consumer Price Index (<i>Índice Nacional de Precios al Consumidor</i>)
IPC	Chilean and Colombian Consumer Price Indices (<i>Índice de Precios al Consumidor</i>)
IPCA	Brazilian Consumer Price Index (<i>Índice Nacional de Preços ao Consumidor</i>)
IRF	Impulse Response Functions
IT	Inflation Targeting
M-GARCH	Multivariate Generalised Autoregressive Conditional Heteroskedasticity Model
MPC	Monetary Policy Committee
MPR	Monetary Policy Report
OMO	Open-Market Operations
PP	Phillips-Perron Test
QPM	Quarterly Projection Model
SADC	Southern African Development Community
SARB	South African Reserve Bank
SBI	Bank Indonesia Certificates (<i>Sertifikat Bank Indonesia</i>)
SDIF	Savings Deposit Insurance Fund
SEE	Survey of Economic Expectations
SELIC	Brazilian Policy Interest Rate
SIC	Schwarz Information Criterion
TJLP	Brazilian Long-Term Interest Rate (<i>Taxa de Juros de Longo Prazo</i>)
TPM	Chilean Policy Interest Rate (<i>Tasa de Política Monetaria</i>)
TR	Brazilian Reference Interest Rate (<i>Taxa Referencial de Juros</i>)
UF	Chilean <i>Unidad de Fomento</i>
VAR	Vector Autoregressive Model
VMA	Vector Moving Average

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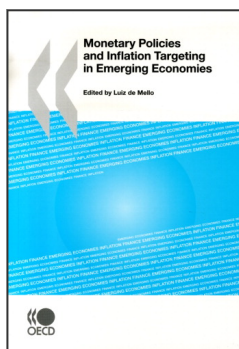
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From:
Monetary Policies and Inflation Targeting in Emerging Economies

Access the complete publication at:

<https://doi.org/10.1787/9789264044630-en>

Please cite this chapter as:

Šmídková, Kateřina (2008), "The Czech Republic's inflation targeting experience", in Luiz de Mello, *Monetary Policies and Inflation Targeting in Emerging Economies*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/9789264044630-5-en>

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