Disinflation in the Czech Republic: Looking Both Backward and Forward

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I am delighted to be invited to this symposium where so many of you have found the time in your busy schedules to gather and discuss the never-ending story for every central banker, which is price stability. Despite the worldwide dimension of this issue, I hope that taking some lessons from the Czech case may still be rewarding. The Czech Republic (and former Czechoslovakia) is an example of a country which opted for a rapid transition from a command to a market-oriented economy. During the transition we gathered some empirical evidence that there are consequences, on both the plus and minus side, of the radical approach for monetary affairs in the economy and for disinflation efforts of monetary authorities.

Let me emphasize two general features of a country undergoing a rapid transition. First, such an economy should be seen as a unique mix of market-oriented reforms on the one hand and built-in non-market inertia on the other. This peculiar coexistence of market and nonmarket structures gives rise, on both macro- and microeconomic levels, to some nonstandard or even strange economic phenomena that are easier to explain ex post than to anticipate ex ante. But more importantly, the composition of the mix is exposed to constant change in which the transition features wither away and economic agents become more experienced with the basics of free market behavior. Under such circumstances, the key issue for policymakers is to appropriately track this systemic shift from transition frictions
to the regularities of an internationally integrated market economy and this entails reconciling previously autonomous decisionmaking with the loss of a degree of freedom.

Second, just as a supersonic aircraft may produce annoying sound waves, similar waves from a fast movement ahead are sure to be expected in a rapidly transforming economy. As a consequence of this background phenomenon, the transition from a command to a market-type economy can be, to the discomfort of a central banker, pretty bumpy and challenging in terms of looking for various shock absorbers.

**Early transition policy mix**

Reforming programs elaborated for transition economies attach a great importance to preventing an accelerated inflation that could be otherwise easily triggered by the price and foreign trade liberalization. The debate how to achieve this goal was frequently structured as finding an anchor, that is, a variable whose stability should be the most conducive to containing inflationary pressures. Several arguments were put forward showing that the nominal exchange rate is well-suited to perform this role.

First, during the transition, the degree of monetization of the Czech economy grew sizably, and as a consequence, the velocity of money declined. But in advance, the speed and extent of these changes were difficult to predict. This notorious instability of money demand in transition economies made it difficult to rely exclusively on monetary aggregates’ targeting.

Second, the Czech economy has been traditionally open, with the share of imports and exports in GDP both around 40 percent. In view of this large openness, the stability of the exchange rate was of great importance to economic agents, as it reduced exchange rate uncertainty and allowed them to make sufficient long-term decisions.

Finally, an argument about the low credibility of the central bank at the inception of economic reform implies the need to base the stabilization program on a nominal variable that could be easily
observable to the general public who can thus quickly judge about the commitment of monetary authorities to financial stability.

The paradigm of the exchange rate anchor thus became the backbone of the stabilization program as it was designed and applied in the Czechoslovak economy. There was, however, the other side of the coin, in the sense that the more devalued the initial level of the exchange rate, the higher the chances for a longer-term survival of the anchor. On the other hand, too large a devaluation could lead to a sharp increase in import prices, which, in turn, should spread into the whole economy. These considerations were further complicated by the uncertainty about the size of the initial price jumps. A certain degree of assistance was also perceived necessary in order to shield the domestic business sector, which was exposed to a deep process of restructuring, privatization, and exodus from collapsing CMEA markets. So-called “protection through the exchange rate” thus gained official support, partly enforced as well by a relatively low tariff protection.

The credibility of the fixed exchange rate regime also requires a certain minimum level of foreign reserves that would allow the central bank to intervene, if need be, to support the chosen level. In fact, foreign reserves in the former Czechoslovakia shortly before the introduction of a fixed exchange rate regime were dangerously low, covering less than one month imports (partly due to a mistaken view to allow the policy decision on the right depth of devaluation to become a nationwide dispute). With this respect, financial assistance provided by the International Monetary Fund (IMF) under the stand-by program played a crucial role.

A thorny issue of selecting a more balanced exchange rate level was resolved in practice by the series of opening devaluations which totaled 96 percent against the U.S. dollar. A substantial part of this, however, was simply a pre-reform move toward a more reasonable exchange rate rather than devaluations in the true sense, bearing in mind that the exchange rate was one of the most distorted prices in the previous planning system. This shock-type change created an important cushion which provided a competitive edge to exporters.
and discouraged imports (in conjunction with a temporarily levied and later gradually phased out 20 percent import surcharge), at the cost of a one-off price jump of 56.6 percent in 1991. Of course, a substantial part of the price increase (we estimate 50 to 70 percent) must be attributed to other price shocks: sweeping price liberalization, eliminating subsidies, and switching to world prices for payment of Russian oil imports and other raw materials.

The unexpectedly high initial price jump created another cushion in the form of a radical decline of real wages by 26 percent during the first year of economic reform. To some extent, the drop of real wages was seen as an unavoidable belt-tightening policy during the transition and negotiated with trade unions. But such a pronounced drop of real wages, however, came as a surprise, which, for the benefit of price stability, was only gradually undone by subsequent wage demands. It helped that the general public seemed to suffer from a money illusion. The outspoken criticism regarding the price rise was soothed by payrolls which were, in nominal terms, growing, although in real terms declining. Incomes policy was also put in place penalizing the wage increase above legally approved regulatory limits.

The two cushions which came into existence at the very start of economic reform raised the implicit question about minimizing the speed of their flattening. In other words, a reasonably low real exchange rate appreciation was required on the part of the first cushion and temperate wage increases on the part of the second. At this point, prudent monetary management proved to be a key precondition for keeping inflation on a leash. Initially, we orchestrated a restrictive monetary policy. Later, we projected a neutral stance of monetary policy, but even then, we might have effectively, although unintentionally, practiced some restriction due to an underestimated decline of money velocity.

Proper credit should be given to administrative controls. Credit ceilings, interest rate ceilings, and even moral suasion contributed to the outcome that, in an environment crowded with discontinuities and institutional reforms, credit extension and the growth of the
money supply did not get out of the hands of the monetary authorities. Their widespread usage makes sense when the role of interest rates in the transmission mechanism of monetary policy is unpredictable due to badly functioning financial markets. Moreover, there was little help in insisting that interest rates be strictly positive in real terms because high interest rates would only provoke the moral hazard phenomenon instead of encouraging efficient allocation of credit. At the same time, negative real interest rates did little harm to savings as countervailing precautionary motives encouraged the propensity to save. This, however, was only temporary. To sum up, in the above corset which allowed no escape from a tight control of the money supply, one can find one of the secrets of successful disinflation in the Czech transition economy.

Last but not least, fiscal policies were tight or neutral but never expansionary. The coordinated anti-inflationary actions of the central bank and government stemmed from a shared philosophy that high inflation would not be conducive to progress with reforms and that it would increase the costs of transition while simultaneously delaying its benefits.

It is true that the application of tight monetary and fiscal policies was followed by a steep decline in output (by around one-fourth between 1990 and 1993). Many commentators even drew parallels with the Great Depression of the 1930s. But that view was misleading as it mixed up the cyclical reasons for the latter with the structural and institutional factors of the former. It also neglected the severe external shocks that hit the bloc of Central European countries at the time. Let me recall, for example, the collapse of trade between the former CMEA countries, German reunification, the wars in Yugoslavia and the Persian Gulf, and the specific disintegration disturbances from the dissolution of Czechoslovakia. After all this, the economy did a marvelous job in absorbing the shocks without undermining the general consensus on the objectives of a radical reform.

With the benefit of hindsight, we can say that the Czech heterodox approach—I would call it the strategy of a padded exchange rate
anchor inserted in the money supply corset—has been reasonably successful. Within a half year following sweeping price liberalization, monthly inflation settled down to average levels not far above single-digit yearly figures and kept staying on these levels, disregarding temporary blips caused by the adjustment of administratively regulated prices and the introduction of the VAT tax reform.

**Coping with external sector deregulation**

Determining the point of time beyond which an economy ceases to be a transition one seems a matter of convention. Critical observers would expect to cross the point rather later; incumbents might be biased toward seeing it earlier. Whatever set of criteria we use, the fact is that around the middle of 1993 the Czech economy entered a new economic landscape. While in the previous stage, liberalization and deregulation measures were to a large extent superimposed by the rigidities of institutional reforms, in the subsequent phase, these frictions waned and the wheels of a market-based economy started to turn round more and more smoothly. The national economy climbed out of the transformation recession and showed the first signs of a robust recovery, interrupted by the breakup of Czechoslovakia.

A major systemic change can be seen in the rapid capital account liberalization and the firm heading toward full convertibility of the Czech currency. Both of these processes had already been entrenched in the initial package of the so-called internal convertibility that guaranteed domestic businesses free access to hard currencies needed to meet demands associated with trade-related transactions. The arrangement was also designed to create a friendly environment for foreign investment.

In the second half of 1995, the opening of the Czech economy was, to a large extent, completed. On October 1, 1995, the Czech Republic accepted the obligations of Article VIII of the IMF, meaning that the Czech currency became free of any restrictions for current account transactions. The new Foreign Exchange Act went even further by lifting some capital restrictions. Thus, in the space of five
years, the Czech Republic succeeded in opening up its economy to a degree of capital mobility that took most industrial countries several decades to realize. This rapid opening reflected, however, not only the rapid pace of economic reforms in the country, but also the radically different conditions in today’s world financial markets that make capital controls far more difficult and costly to maintain.

Increased openness of the economy created the possibility of large capital inflows, while progress with privatization, structural reform, and improving macroeconomic indicators (reflected in the upgrades of ratings by major rating agencies) supplied necessary incentives for foreign investors. As a result, the Czech economy became one of the favorite targets of capital inflows.

A more liberal environment also made more visible the conflict with the so-called uncovered interest rate parity condition. The point was that prevailing interest rate differentials, having their origin predominantly in the inflation differential, became fundamentally inconsistent with the regime hitherto of a fixed exchange rate. Economic agents, spared from taking account of exchange rate risk, tried to exploit lower interest rates abroad. This incentive was particularly strong for domestic firms, thus making foreign borrowing the largest item in the structure of capital inflows, and true as well for the short-term speculative capital. It took some time for the inconsistency among fixed exchange rate, interest rate differentials, and capital mobility to develop openly, but once it developed, the Czech Republic received a massive capital inflow which peaked in 1995. In that year the share of net capital inflow in GDP reached a world record level of 18.4 percent. During this period of inflow, the official external reserves witnessed an unprecedented increase from almost zero at the beginning of 1993 to $14 billion (U.S.) at the end of 1995. The share of the change in net foreign assets as a part of the change in the money supply doubled from 45 percent in 1993 to 80 percent in the last quarter of 1995.

Describing the disinflation efforts of the time boils down to a description of the techniques we used to sterilize capital inflows. The first reaction was to close the window for central bank refinanc-
ing facilities and switch government-owned deposits from banks to the central bank. A substantial role was then given to open market operations in order to mop up excess liquidity from the commercial banking sector. We also increased reserve requirements and experimented with a sort of “throwing sand into the wheels” measure by limiting the nonresident short-term open positions of commercial banks.

Sterilized interventions to support a fixed exchange rate pose policy dilemmas, and this was no different in the Czech Republic. The massive sterilization prevented interest rate differentials from diminishing and so enticed even larger amounts of foreign borrowing and speculative capital. At the same time, it did not eliminate, but only postponed, the upward pressure on prices since the stock of short-term securities held by banks in their portfolios acted as standby liquidity for credit formation which was drawn once banks started to dispose of the papers by selling them back to the central bank. Last but not least, there were considerable costs to the central bank’s profit and loss statement.

The policy of sterilized interventions may thus reach a point beyond which benefits from maintaining an exchange rate anchor are completely undone by mounting inflationary pressures through excessive capital inflows. The Czech Republic thus can add one more piece to the already extensive evidence that a fixed exchange rate is not, in itself, sufficient to reduce inflation to levels achieved in the industrial countries. The underlying logic of this assertion should, however, be properly understood. The main reason is the coincidence of two events: first, the growing openness of a transition economy which gradually destroys the previous corset of autonomous monetary policy, and second, the occurrence of this opening at a time when the economy has not yet succeeded in realigning its fundamentals with those of industrial countries, inflation rate differentials being one of the most pervasive disturbances. The higher inflation then creates problems both for the current and capital accounts of balance of payments. In the former case, it leads to an excessive real exchange rate appreciation, while in the latter, to an excessive increase in liquidity through capital inflows. Both reasons
make the fixed exchange rate arrangement vulnerable to a potential confidence crisis.

In the second half of 1995, the time was ripe for rethinking the exchange rate regime. The change came in February 1996 when the five-year-old arrangement was modified by adopting a horizontal wider band: 7.5 percent in both directions from the unchanged central parity. Whether, and how long, it will be possible to maintain this more flexible exchange rate regime depends on many factors. Among the most prominent is the speed with which it would be possible to use the newly regained—though only partial—freedom of monetary policy to reduce excess liquidity in the economy, and how fast continued restructuring will result in productivity growth, justifying exchange rate appreciation.

The episode of skyrocketing capital inflow served as a final exam testing our capability to manage monetary affairs primarily by market instruments, considering that administrative controls—credit and interest rate ceilings—were already phased out. We learned that linkages between money stock, exchange rate, and interest rates became more established once financial markets grew out of their infancy and started to communicate with the external environment. The Czech National Bank policies seemed to pass the test because inflation kept declining, although, at the present time, the further reduction of inflation is becoming increasingly more difficult. These policies also had to cope with a less cooperative mood of fiscal policies, which were partly infected by the contagion of the political cycle.

**Challenges of further disinflation**

Where are we now and where are we heading? A succinct answer could be that we successfully accomplished the rougher part of disinflation by getting the annual price increase slightly under 10 percent. Compared with other post-communist countries this result looks satisfactory. On the other hand, the result is less impressive from the point of view of new benchmarks flashing in the form of inflation levels achieved in European Union countries. From this
perspective, further disinflation in the Czech Republic still remains an overriding concern. We feel, however, that the difficulty of our job resembles a vacuum pump: while it is relatively easy for this device to exhaust the first 90 percent of the air, most of the effort is spent exhausting the remainder.

A major problem common to all post-transition economies lies in the compatibility of pushing inflation down with a robust economic growth. Facing this tradeoff, our comparative advantage within the group of formerly command economies consists in a tradition to value price stability. The tradition stretches back as far as to the 1920s when Czechoslovakia avoided hyperinflation that plagued all other neighboring countries and even central planners more or less followed suit. Despite this favorable setup, however, disinflation remains a sensitive issue. I would not claim that our problems are unknown to other central bankers in other times. But the still nonstandard economic environment with surviving rigidities does not offer straightforward hints and solutions. Let me go through a short list of issues we are debating and pondering the right policy responses.

First of all, two structural features are going to make disinflation difficult or even painful. The first is connected to the fact that a major part of the CPI (up to 60 percent) is composed of administered prices subject to a long-term deregulatory timetable and agricultural prices dependent on weather and other external factors. (It should be noted that the CPI is a narrow sample of consumer prices, so the share of regulated prices included in it considerably underestimates the true extent of price liberalization reaching, itself, about 95 percent.) This means that we are faced primarily with a supply-shock driven inflation which the general wisdom usually recommends accommodating in a piecemeal fashion. The alternative is to instigate a sort of Big Bang to get rid of the inflation frozen in regulated prices through a one-off price jump probably accompanied by a social compensation scheme.

Secondly, our research confirms different propensities to inflate in the tradable and nontradable sectors (7 percent against 14 percent...
in 1995). This gap is quite understandable as it reflects softer market conditions for firms oriented toward domestic outlets as opposed to firms that must compete internationally. The consequence, however, is that tightening of monetary policy tends to hit firms in the two sectors differently, because the same nominal borrowing interest rates represent a lower real burden for those firms whose output prices are growing at a faster rate.

As far as operating procedures are concerned, some observers would argue that we gave up the old anchor in the form of the fixed exchange rate. So should we look for a new one? Needless to say, our exchange rate anchor has not been completely abandoned, only its chain has been loosened. In other words, we opted for a wider but horizontal band with the old central parity, unlike many countries in similar conditions which operate with a crawling peg or diagonal band. Putting aside the gyrations caused by short-term capital movements, the exchange rate may thus continue to perform its disciplinary role, which substantially increased after the cushion from the initial devaluations was eroded by the steadily appreciating real exchange rate.

A delicate issue arises whether we could even afford some nominal exchange rate appreciation to fight inflation. This idea has been constantly provoked by calculations of an exchange rate based on purchasing power parity (PPP), which suggests a still high undervaluation of the Czech currency. Some Czech economists even infer from the gap between the PPP and market exchange rates a kind of “hands-off approach” for monetary policy, arguing that fiddling with monetary tightening will not bring forth sustainable disinflation but only prolongs the time needed for domestic prices to catch up with the world level. On the other hand, should we believe in a substantial undervaluation on the background of prevailing current account deficits (4.1 percent of GDP in 1995 with a worsening outlook for 1996)? Are not the trade deficits rather a sign of currency overvaluation? In that case, triggering exchange rate appreciation for the sake of lower inflation may prove an overkill which is certain not to do any good.
A growing number of countries resort to inflation targeting as an alternative procedure for central bank disinflation policies. We are also carefully analyzing what could or could not be accomplished by this approach. Some observers maintain that we should cash in on our, so far, sound anti-inflationary track record and use inflation targets for breaking inflation inertia. The point, however, is whether the credibility we have accumulated up to now is strong enough to persuade the public that there will be a penalty paid for diverting inflation from its desired downward trajectory so that the public itself will opt deliberately for only tolerated price increases. I would claim that if the public is not educated in this respect through central bank rhetoric and, if that is not enough, through persuasive tightening measures, inflation targeting may become an easy way to lose credibility.

A key condition is the cooperative attitude of other economic policies. Up till now, there were no serious rifts in the concerted dialogue with the government. We hope that this feature will be preserved even if inflation proves more persistent and stubborn than we previously expected.
Endnote

1 Let me give some examples:

(a) A full-speed attack on distortions inherited from a planned economy, including sweeping price liberalization, elimination of enterprise subsidies, fear of mass layoffs, and so on, gives birth to many uncertainties which are matched by prudential savings of the household sector at the expense of consumption. This deflationary adjustment is conducive to nascent price stability. Later, however, depressed consumption will spur a consumption wave; the stronger position of higher income groups will tend to encourage demands, particularly for imported goods.

(b) A scheme of rapid privatization often induces short-sighted behavior on the part of incumbent managers who react by shrinking investment expenditures. Lower investment demand then contributes to the current price stability. Later, however, deferred investment plans join forces in an investment wave which pushes wages and prices up or fuels the current account deficit.

(c) A program for bold external sector deregulation quickly removes barriers to capital mobility that, in conjunction with higher profit opportunities in a transition economy, is followed by a wave of capital inflow.

(d) Privatization and demonopolization of state-owned companies, as well as a boom of small and medium enterprises, lead to the monetization of many formerly intrafirm transactions. This structural feature may result in an underestimation of the decline of money velocity. Later, when institutional changes slow down and the pace of financial innovation accelerates, the trend in velocity seems to pick up. The consequences of this so-called velocity wave for monetary management are far-reaching. While on the downward slope of the wave, the politically more palatable neutral character of monetary policy may actually mask the restrictiveness; being situated on the upward slope implies that an unpopular tightening of monetary policy may prove “too little, too late.”

(e) This list of “supersonic” waves can be completed with a fifth one: the expansion-consolidation pattern in the banking sector. I will not pursue this line of argument which is a topic for a separate symposium.