ICEG European Center

INFLATION AND DISINFLATION IN CENTRAL AND EASTERN EUROPE

TRENDS IN THE REGION NR. 1

EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

1. The study **on Inflation and Disinflation in Central Eastern Europe** discusses the patterns of inflation and disinflation in Eastern Europe based on the experiences of 13 countries: 5 Central European (Czech Republic, Hungary, Poland, Slovakia, Slovenia), 3 Baltic (Estonia, Latvia, Lithuania), 3 Southeastern-European (Bulgaria, Croatia, Romania) and 2 former CIS (Russia and the Ukraine). The study describes in details the major stages of evolution of inflation in these countries, the differences between the three major groups of countries in terms of their inflation performance, the factors that affect ion the short term the inflation rate and changes in price structures and levels in these economies as well as the policy challenges that stem from these expected developments.

STAGES OF INFLATION IN CENTRAL AND EASTERN EUROPE

2. While there are sizeable differences between the individual economies and the evolution of inflation has strong country specific features, inflation during the last decade can be divided to four periods, which differed according to sources and dynamics of price changes.

3. In the first period lasting from 1989/1990 until 1992 all Central and Eastern European economies experienced significant jump in inflation, caused by price and trade liberalization, unification of official and black market exchange rates and the significant devaluation of the former. In economies with either better macroeconomic fundamentals (Czechoslovakia) or earlier progress with market reforms (Hungary) inflation remained moderate, but in economies with significant macroeconomic imbalances and/or distortions reached high, sometimes hyperinflation levels (Poland, former Yugoslavia, Russia).

4. In the second period lasting between 1992 and 1998 the successful stabilizers reduced their inflation rates to moderate levels, while in the other group initial price stabilization was unsuccessful and inflation remained volatile, reverting back to levels experienced following the liberalization. Among the successful stabilizers in one group inflation was reduced from either moderate (Czech Republic, Slovakia) or high (Estonia, Latvia, Lithuania and Slovenia) to upper low levels driven by the choice of pegged exchange rate regimes, strong anti-inflation preference of central banks and related tight monetary policies. In the other group (Hungary, Poland, Slovenia) price increases declined from lower levels more gradually and inflation remained in middle moderate levels: current account

imbalances and weak net foreign asset positions required the adoption of crawling pegs/bands, fiscal imbalances and sometimes inconsistent incomes policies have been an endemic problem, while these economies have been more ambitious in price liberalization.

Unsuccessful stabilizers included the economies in Southeastern-Europe and the former CIS where inflation didn't exhibit a hump-shape, and inflation remained at high levels or eventually exploded following typical first generation currency crises. These economies were not successful in finding the appropriate and credible monetary arrangement and anchor for disinflation, fiscal balances were unsustainable and central bank independence was limited.

5. In the third period between 1998 and 2000 inflation was influenced mainly by the variety of exogenous shocks following the Asian and Russian crises. The positive supply- and negative demand-side effects of these currency crashes together with the more restrictive macroeconomic policies following the Russian crisis contributed to significant decline in price increases in 1998 and 1999. Excluding Bulgaria, the average unweighted CPI in 1997 was 22,8% for the 12 economies in the sample: this declined in 1999 to 16,8% and further to 12,8% in 2000. The effect of exogenous shocks changed from early 2000, when the collapse of stock exchanges and the increase in oil prices produced a positive supply and a negative demand shock, which partially reversed the inflation gains of the previous two years.

6. The last stage of price developments have been characterizing the region since early 2001, when the effect of external conditions on price changes changed again, this time supporting disinflation via improving terms of trade, declining oil prices and less volatility in US $/ Euro exchange rates. Wile average CPI declined further decreasing for the first time below 10% for dozen economies, there are two different groups of economies in terms of inflation persistence and speed of disinflation. One of them has experienced downward price rigidity, either with upper low (Slovenia) or medium moderate inflation rates (Russia and Romania), while the other one could achieve significant disinflation (including Poland, Slovakia, Hungary, the Ukraine and to smaller extent Croatia and Bulgaria).

PATTERNS OF INFLATION AND DISINFLATION

7. The 13 economies analyzed in the review could be divided to three broad groups in terms of inflation and disinflation patterns. The first group includes economies (Baltic states, Croatia, the Czech Republic and Bulgaria after 1997) where low inflation was reached rapidly and has been maintained since amidst strong exogenous shocks and changes in relative price structure. In the second

group (Hungary, Poland, Slovakia and Slovenia) initial price stabilization was followed by persistent moderate inflation and strong price inertia, while recently inflation aversion of monetary authorities increased and a steep disinflation began, reducing inflation close to the level in the first group. The third group (Romania, Russia and the Ukraine) still faces higher and volatile inflation and significant efforts are needed to reduce it from current moderate to low level.

8. In the first group of countries the choice of hard pegs was crucial in disinflation, as it provided a stable anchor, reflected inflation aversion of policy makers and preference for rapid disinflation, resulted in high levels of central bank independence. Nominal exchange rate behavior was another key element due to its remarkable stability against key currencies and in nominal effective terms. The pegged or stable exchange rate was a strong disinflation factor due to high real and financial openness, high exchange rate passthrough , and discipline effect on fiscal policies (even with balance problems in Bulgaria and Croatia). The major factor of inflation is the adjustment of administrative prices and the changes in relative price structures, driven by shift in the relative level of tradable versus non-tradable prices. Three factors pose challenge for further disinflation: strong exposure to unfavorable exogenous shocks, in some cases (Czech Republic and Croatia) increasingly unsustainable fiscal position, and structural changes, including ongoing liberalization of prices, alignment of tax regimes to European structures, fast productivity increases driven by foreign capital inflows.

9. While the sources of inflation were similar, the second group exhibited different pattern of disinflation. After absorbing the initial liberalization and devaluation related acceleration in price changes, inflation declined to moderate levels and but remained persistent for long period: further disinflation was gradual and costly in terms of foregone output. Several factors contributed to the persistence of moderate inflation: monetary authorities gave equal weight to inflation and external competitiveness, thus either crawling pegs (Hungary and Poland), or tightly managed flexible regimes were chosen to avoid nominal appreciation and loss of price and cost competitiveness. Very strong inflation inertia and the dominance of backward-looking expectations, and inconsistencies between fiscal and monetary policies added to the persistence of moderate inflation. But the costs of moderate inflation were high led recently to increased emphasis on disinflation: monetary regimes shifted to inflation targeting, exchange rate regimes to floating, and in the greater willingness of authorities to tolerate temporary output losses of disinflation. As a result with mixed external conditions for disinflation the new emphasis led to sizeable decline of inflation in Poland, Hungary and Slovakia

10. Inflation in the third group has two special features. First, the initial liberalization and

devaluation led to open inflation, which was not stabilized and remained persistently high. Second, it is very difficult to determine a clear trend in inflation, as it was always very volatile, had a "boom and bust cycle" pattern, increasing after exogenous or policy related shocks, with gradual stabilization followed by new shocks. The key factor that explains the slow progress with disinflation is exchange rate instability, serious fiscal imbalances caused by structural and institutional distortions and persistent and sometimes uncontrolled increase of wages in corporate sector, driven by its weak discipline. Recently inflation has somewhat declined, but this progress remains fragile as it has been achieved at the expense of sometimes artificial exchange rate stability, Moreover, these economies still lag behind in price liberalization and adjustment of their tax regimes while nominal wage increase in the last two years were very significant and contributed to sizeable cost pressures.

SHORT-TERM FACTORS AFFECTING INFLATION

11. Five factors will strongly affect inflation rates and the pace of disinflation in Eastern Europe, especially in more advanced economies: further changes in price structures, real and nominal convergence, vulnerability to various exogenous real and financial shocks, and inflationary pressures from fiscal imbalances and excessive wage growth.

12. While adjustments in price structures and changes in relative prices are ongoing processes in open economies, which should not have direct inflation effects, in Central and Eastern Europe several factors affect changes in price structures and give them additional inflationary effect. First, changes in price structures are still partly driven by liberalization and adjustment of administrative prices as the share of goods and services with administratively regulated prices is still above the advanced economies. In pre-accession economies the EU-membership requirements will demand further liberalization and adjustment of prices (public transport, rents e.g.) to cover costs. Second, the share of regulated goods and services in the consumption baskets in transition economies is above advanced one, and thus their liberalization may have additional inflationary effects.

13. Besides the liberalization of regulated prices the evolution of energy and agricultural prices may have inflationary effects. In most transition economies energy price liberalization was segmented as administrative constraints were lifted in the corporate, while not in household sector and prices. Thus the remaining liberalization of energy prices will have a direct effect on consumer prices and producer prices will be affected less. Agricultural price liberalization may have inflationary effects as their level in Eastern Europe is around 50-75% of the EU average. Besides the reduction of this gap,

inflationary effect will come from the high share of agricultural products in consumption basket: while they represent 15% of the basket in the EU, their weight is around 30% in most Eastern European economies. Both the general price level and agricultural prices will be affected by the growth of land prices, which are currently land only 10-15% of the average of prices in the EU, and will converge rapidly.

14. Finally, relative price structures are affected by the adjustment of tax regimes, mainly in case of indirect, especially value added taxes: (introduction of VAT, increase in its rates). While changes in tax regime should have a one-off effect on inflation, there may be second round effects depending on the impact of tax changes on inflation expectations and relative price structures.

15. The next two factors that affect inflation and disinflation is the real and nominal convergence of pre-accession economies to advanced ones. Real convergence means the narrowing of the existing gaps in income, wage and price levels, and the reduction of differences in price structures, price dispersion ratios between transition and advanced economies. Nominal convergence represents the adjustment of major nominal variables to threshold levels set by Maastricht criteria. While the channels of the effect of and nominal convergence on inflation are different, they strongly influence price developments in pre-accession and lesser extent in less advanced transition economies.

16. Among real convergence the catch-up of price levels will be an important factor of inflation, as currently they are low in Eastern Europe compared to the average of EU: comparative price levels of 10 pre-accession economies in German prices in 2000 varied between 28,7% and 59.9%. However, the comparative price level for the first round accession economies (Czech Republic, Estonia, Hungary, Poland, Slovakia and Slovenia) increased between 1992 and 2000 from 28,5% to 44,3%. When the price index is divided to tradable and non-tradable ones, than it becomes clear, that most of price level convergence occurred due to tradable prices, and the gap between them in transition – and especially in pre-accession – and advanced ones narrowed to levels observable between advanced economies. However, two factors may maintain in the short-run price increases in tradable sector in transition economies above the EU levels: wage pressures coming from wage rigidities and convergence of wage levels and quality improvements in tradable sector, which allows more room for price increases.

17. But price level convergence is expected to come from the increase in non-tradable prices, which are much below the levels of advanced ones notwithstanding the recent catch-up. This catch up is driven by Balassa-Samuelson effect and the underlying it gap in productivity increases in tradable and non-tradable sectors, and by the shift in demand towards services and non-tradable goods.

Moreover, the liberalization of administrative prices put non-tradable price increases above tradable ones. Another factor affecting inflation through price convergence is related to the expected decline of price dispersion ratios, which will come due to competition enhancing effect of integration, shifts in production structures and adjustment in tax regimes.

18.Inflationary effects from other aspect of convergence, income one, may also be expected, as it will be driven by productivity differences between advanced and transition economies, caused on the supply-side by the Balassa-Samuelson effect, which has recently been hotly disputed. Its supporters emphasize its long-term presence in the convergence and catch-up of several middle-income economies. As most of transition economies are small and very open, growth and catch up comes mainly from exports and expansion of tradable sector and this will maintain the already existing productivity differences between tradable and non-tradable sectors. Another argument is that inflation in the non-tradable sector is above the tradable one due to delayed and gradual price liberalization and constantly shifting demand towards non-tradable sector.

19. Opponents' counter-argument is that as the catch up comes simultaneously with transition to market economy, the positive effects of liberalization and opening, increasing capital inflows, changes in ownership and management structures effect the supply side equally both in tradable and non-tradable sectors. Moreover, since supply in the non-tradable sector was limited and demand shifted rapidly, profitability is high, attractive to stimulate new investments. The increase in aggregate supply of non-tradable may thus lead to productivity growth similar to tradable at least in the recent stage of transition.

20. While the assessment of pros and cons of the Balassa-Samuelson effect is beyond the topic of this study, some tentative conclusions on its contribution to short-term inflation developments in transition economies may be derived. First, neither the strength nor the causes of past trends in Balassa-Samuelson effect can be extrapolated in pre-accession economies: these effects were partly caused by one time, transition related factors and they will be a misleading guide due to the structural and institutional changes that occurred in the meantime. Second, it is very important to distinguish between the Balassa-Samuelson related and other factors of price increases, including the liberalization of prices, changes in demand and supply conditions. Finally, while countries differ and there are several estimates, the mostly likely level of the Balassa-Samuelson-effect in longer-term is between 1,5% and 2,5% annually.

21. Another important aspect of convergence is the reduction of the wage gap, where the scope for

catch-up exceeds the income levels as gross monthly wages on nominal exchange rates vary between 14,3% and 28,3% of the EU average. However, the real purchasing power of wages is higher than indicated by the pure relationship between dollar wages due to the lower non-tradable prices and price level. The slow past convergence of wage levels is due to the natural time lag between the recovery and catch up of output and wage levels, and it was delayed in recent years by macroeconomic imbalances resulting in stabilization programs, which involved sizeable real wage adjustments. In the medium-term accelerated convergence of wage levels can be expected, driven mainly by productivity differences and catch up of wages in tradable sector exceeding price increases justified by productivity differences in tradable and non-tradable sectors.

22. The final aspect of real convergence is the reduction of the gap between actual and equilibrium exchange rates, represented by the decline of the exchange rate gap or exchange rate deviation index. The exchange rate deviation index for the six pre-accession economies varied in 2000 between 1,5 (for Slovenia) and 2,68 (for Slovakia), and generally declined in recent years, though modestly. This decline is a sign of real exchange rate appreciation. If productivity growth remains at current levels and wage increases are moderate, than differences in labor productivity between transition and advanced economies can produce annually a 2-3-percentage point equilibrium real exchange rate appreciation. The effect of trend appreciation on inflation depends whether it comes from nominal appreciation or from inflation differences.

23. The nominal side of convergence will also affect inflation and the speed of disinflation in pre-accession economies, especially its interest rate and fiscal side. Fiscal convergence has mainly positive effects on price convergence and inflation. Lower fiscal deficits and public debt weaken the need for seigniorage, will reduce risk premia and accelerate interest convergence, which may weaken speculative capital flows and the exposure to boom-and-bust cycles. Two remarks may weaken these benefits: fiscal is one of the most difficult areas of convergence and it may imply policy measures that have direct inflationary effects(tax harmonization, subsidy reduction, etc.). There are differences between pre-accession economies in their fiscal performance and the effect of fiscal convergence on inflation: the Baltic countries are in the best position, Hungary and Poland have sizeable fiscal imbalances and need to account their balances according to EU rules, while Slovakia, the Czech Republic and in some respect Slovenia have more serious problems. Recent fiscal developments highlight the potential dangers of fiscal imbalances on inflation convergence. In the last two years brought a significant worsening of fiscal balances in most of transition economies, driven both by

cyclical (slow-down of growth rates) and structural factors (banking sector clean-up and strengthening corporate discipline).

24. The convergence of short- and long-term interest rates is the final convergence factor that effects inflation: in last 2-3 years the gap in long-term interest rates declined remarkably, while the convergence is much slower on the short end of the yield curve. Currency and especially country risk premia, lack of full credibility of monetary policies, problems with monetary transmission channels are the factors that hinder interest rate convergence, which has several implications for inflation. First, it makes them conducive to short-term speculative capital inflows and to the shift in structure of inflows from stable to more volatile elements. Second, in the medium-term the presence of interest rate gap will lead to convergence play, with its potential adverse effects on exchange rate stability and inflation. Finally, there may be due to slow short-term interest rate convergence an increasing likelihood of currency mismatch and its negative side-effects.

25. The next factor that affects inflation is the choice of monetary arrangements, where two trends can be determined. While accession economies follow the hollowing out hypothesis, the choice of monetary and exchange rate arrangement in economies with upper moderate levels of inflation is determined by their financial vulnerability and exogenous shocks. In accession economies, currency boards and increasingly flexible exchange rate regimes with direct inflation targeting remain in place until their accession to the EMU. Currency boards are transparent and credible, keep fiscal policies under tight control and help to avoid the build-up of currency mismatches and balance sheet problems. The problem for inflation with currency boards is the management of Balassa-Samuelson-effect, and the existence of interest rate differentials, which are not completely eliminated stimulating speculative, boom-and-bust cycle type capital inflows, which may have inflationary effects.

26. Under floats with inflation targeting both elements of monetary arrangement can support disinflation. As nominal exchange rates are undervalued their trend appreciation is likely in the short- to medium-term, which will reduce tradable and overall inflation rates. Moreover, as currency mismatch is low in these economies in international comparison, the choice of managed floats will not have negative effects on inflation. Inflation targets will also help disinflation if the recent technical and institutional problems (missed targets, lack of transparency, incomplete tools, etc.). The long-term inflation commitment of central banks, the enhanced transparency of monetary policies and the fiscal discipline effects will help disinflation, while the mentioned difficulties with implementation will gradually diminish.

27. Since in less advanced transition economies macroeconomic fundamentals are weaker, exposure to global financial shocks and capital flows is greater, they can choose either dollarization or Euroisation, or shift to floats. Intermediate regimes are mainly unsustainable in these economies, similarly to other emerging economies. The only exception are the countries that maintain significant restrictions on their balance of payments operations, and are in the early stage of capital account liberalization (like Yugoslavia).

28. While Eastern and Central European economies have already experienced significant net capital inflows, they are expected to increase further due to growth differences with advanced countries, high productivity growth and declining risks. In less advanced transition economies these inflows can have strong inflationary effect due to the lack of appropriate instruments to sterilize them, high fiscal costs of sterilization. In accession economies the problem can be that both under floats or hard pegs the hands of monetary authorities are tied, and thus fiscal policy should be counter-cyclical, which may be difficult to accomplish. The stability of the banking sector and the boom-and-bust cycle effect of capital flows are another sources of concern for inflation as financial sector weaknesses, lack of prudential regulations may lead to rapid expansion of bank credits increasing both financial vulnerability and domestic aggregate demand. Finally, capital inflows may have inflationary effects if they lead to increasing current account deficits due to increased consumption smoothing, improved growth and spending prospects.

SHORT-TERM POLICY CHALLENGES FOR DISINFLATION

29. The short-term policy issues are determined by current macroeconomic conditions and recent price developments. While these economies made significant progress in price liberalization, adjustment of their exchange rates towards equilibrium levels, and making their fiscal and monetary policies consistent with exchange rate arrangements, the existing income gap and underdeveloped services sector forecasts further price increases, while EU-membership changes in price structures. The policy challenges are deepened by the almost complete real and financial liberalization, by their heavy exposure to global real and financial shocks, and fiscal problems.

30. While recently sacrifice ratios were high in many cases, there are arguments in favor of pursuing fast disinflation. While the relationship between sacrifice ratio and disinflation is non-linear, these economies can gain from rapid disinflation: better allocative efficiency and signaling effect of prices, the reduced rigidity of wages and pries, changes in formation of expectations. Additional gains

stem from membership in the Euro zone (positive growth effects, smaller transaction and independent currency related costs, protection from erratic capital flows) and thus disinflation to Euro inflation rates has additional benefits.

31. The choice of appropriate monetary arrangement and related exchange rate regime strongly affects the speed and costs of disinflation. Those accession economies that have hard pegs, will maintain this arrangement until their eventual membership in the Euro zone, as the costs of "double switch" exceed their benefits. Economies with inflation targeting should embark of improving their institutional framework: strengthen interest rate channel of monetary transmission, let the exchange rate to evolve towards its equilibrium levels and refrain from too frequent and direct intervention.

32. Fiscal policies play crucial role in disinflation, strengthened by the discussed shift to corner exchange rate and monetary arrangements. Under floats with inflation targeting fiscal authorities bear joint responsibility with the central banks for inflation targets and consistency of fiscal policy with this target, while under hard pegs fiscal policies should be flexible to adjust to shocks and changes in market sentiment. Fiscal policies will affect disinflation in transition economies through the changes in revenues, expenditures and fiscal balance. Authorities should avoid measures aimed at increasing indirect taxes and leading to a too rapid adjustment of regulated prices. On the expenditure side, they should pay a close attention to wage increases in the public sector, and growth of capital expenditures, as public investments may reduce supply side bottlenecks. Fiscal deficits should be kept low and reduced significantly as low deficits provide more scope for anti-cyclical fiscal policies and reaction to exogenous shocks, and reduce speculative capital inflows and their negative inflationary effects.

33. Monetary and fiscal policies are demand side instruments, but supply side, structural policies should also be considered. The majority of public utilities should be privatized, in more competitive sectors competition between suppliers should be increased by more liberal market entry and exit rules, and the flexibility of labor markets should be increased.