

II Inflation Developments

By the end of 1992, major results in stabilizing inflation had been achieved only in the Central and Eastern European countries: inflation had dropped below 60 percent in the Czech Republic, Poland, and Slovak Republic (Table 1).² Hungary

²The term "inflation stabilization" is used here to indicate a stable decline of inflation below the 60 percent threshold (see footnote 1 in Table 2 for a more precise definition). While this threshold is arbitrary, few countries that managed to break it experienced

had always remained well below this threshold.³ Inflation in the ruble zone was high and rising at this time. It surged dramatically in many countries that

major inflation reversals. Moreover, the results discussed in this review are quite robust to the choice of the threshold. The term "disinflation" is instead used to indicate the overall process of reduction in inflation, including in the poststabilization period.

³This partly reflects its gradual price liberalization during the 1980s and, in comparison to some transition countries, its generally cautious monetary policy in that period and thereafter.

Table 1. Twelve-Month Inflation Rates in Transition Economies
(End of period)

	1992	1993	1994	1995	1996	1997
Albania	236.6	30.9	15.8	6.0	17.4	42.1
Bulgaria	79.4	63.8	121.9	32.9	310.8	578.6
Croatia	937.3	1,149.7	-3.0	3.7	3.5	3.9
Czech Republic	12.6	18.8	9.7	7.9	8.6	10.1
Hungary	24.7	21.1	21.2	28.3	19.8	18.4
Macedonia, FYR	1,935.0	241.9	55.0	9.0	-0.6	2.7
Poland	44.5	37.7	29.5	21.6	18.5	13.2
Romania	199.2	295.5	61.7	27.8	56.9	151.6
Slovak Republic	9.1	25.0	11.7	7.2	5.4	6.4
Slovenia	...	22.9	18.3	8.6	8.8	9.4
CEE median	79.4	34.3	19.8	8.8	13.1	11.7
Armenia	1,241.2	10,896.1	1,884.6	32.1	5.7	21.8
Azerbaijan	...	1,291.6	1,788.1	84.5	6.7	0.4
Belarus	1,561.5	1,995.0	1,957.3	244.2	39.1	63.4
Estonia	942.2	35.7	41.6	28.8	15.0	12.3
Georgia	1,335.1	7,543.8	6,471.6	57.4	13.7	7.3
Kazakhstan	2,960.7	2,172.6	1,157.6	60.5	28.6	11.3
Kyrgyz Republic	1,257.0	766.9	95.7	32.3	34.9	14.7
Latvia	958.2	34.9	26.5	23.6	13.5	7.1
Lithuania	1,162.5	188.8	45.0	35.5	13.1	8.5
Moldova	2,198.4	836.8	115.9	23.8	15.1	11.1
Russia	2,321.6	841.6	202.7	131.4	21.9	11.0
Tajikistan	...	7,346.3	1.1	2,135.2	40.6	163.6
Turkmenistan	1,328.6	1,261.5	445.9	21.5
Ukraine	2,005.0	10,153.6	401.1	181.4	39.7	10.1
Uzbekistan	910.0	885.0	1,281.4	116.9	64.4	50.2
BRO median	1,296.1	1,088.3	401.1	60.5	21.9	11.3

Source: IMF staff estimates.

Table 2. Disinflation Thresholds¹

	Peak Inflation (1990–97)	Peak Inflation Date	Stabilization Program Date ²	Months To	Inflation<60	Months To	Inflation<30	Months To	Inflation<15	Months To	Inflation<7.5
<i>(Countries that stabilized before 1993)</i>											
Czech Republic	67.6	1991, June	1991, Jan.	3	1991, Apr.	1	1991, July	2	1991, Oct.	N/A	N/A
Hungary	31.0	1995, June	1990, Mar.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Poland	1,173.0	1990, Feb.	1990, Jan.	18	1991, June	33	1994, Dec.	21	1996, Oct.	N/A	N/A
Slovak Republic	73.7	1991, June	1991, Jan.	3	1991, May	1	1991, June	2	1991, Oct.	46	1995, Sep.
Slovenia	88.2	1992, Dec.	1992, Feb.	N/A	N/A	3	1992, Oct.	27	1995, Feb.	N/A	N/A
<i>(The 1993–97 stabilizations)</i>											
Albania	336.8	1992, Oct.	1992, Aug.	5	1993, Feb.	3	1993, May	23	1995, Apr.	2	1995, July
Armenia	29,600.9	1994, May	1994, Dec.	6	1995, June	10	1996, May	N/A	N/A	N/A	N/A
Azerbaijan	1,899.0	1994, Nov.	1995, Jan.	5	1995, June	1	1995, Aug.	7	1996, May	7	1996, Dec.
Belarus	2,809.6	1994, Aug.	1994, Nov.	9	1995, Oct.	11	N/A	N/A	N/A	N/A	N/A
Bulgaria (1st stabilization)	304.5	1992, Jan.	1994, Dec.	3	1995, Mar.	N/A	N/A	N/A	N/A	N/A	N/A
Bulgaria (2nd stabilization)	2,040.4	1997, Mar.	1997, Apr.	6	1997, Oct.	N/A	N/A	N/A	N/A	N/A	N/A
Croatia	1,944.9	1993, June	1993, Oct.	4	1994, Feb.	1	1994, Mar.	2	1994, May	0	1994, May
Estonia	1,241.9	1992, Sep.	1992, June	18	1993, Dec.	8	1994, Aug.	23	1996, July	N/A	N/A
Georgia	50,654.0	1994, Sep.	1994, Sep.	3	1994, Dec.	17	1996, May	1	1996, July	N/A	N/A
Kazakhstan	3,033.3	1994, June	1994, Jan.	17	1995, May	13	1996, June	11	1997, May	N/A	N/A
Kyrgyz Republic	1,257.0	1992, Dec.	1993, May	23	1995, Apr.	24	1997, May	N/A	N/A	N/A	N/A
Latvia	1,444.6	1992, Nov.	1992, June	9	1993, Mar.	27	1995, June	12	1997, June	N/A	N/A
Lithuania	1,412.6	1992, Nov.	1992, June	21	1994, Mar.	26	1996, May	2	1996, July	11	1997, June
Macedonia, FYR	2,100.3	1992, Oct.	1994, Jan.	6	1994, June	8	1995, Feb.	5	1995, July	5	1995, Dec.
Moldova	2,198.4	1992, Dec.	1993, Sep.	9	1994, June	9	1995, Mar.	14	1996, June	N/A	N/A
Romania	317.0	1993, Nov.	1993, Oct.	9	1994, July	N/A	N/A	N/A	N/A	N/A	N/A
Russia	2,321.6	1992, Dec.	1995, Apr.	9	1995, Dec.	5	1996, June	N/A	N/A	N/A	N/A
Turkmenistan	2,669.1	1996, Oct.	N/A	N/A	1997, Mar.	3	1997, June	N/A	N/A	N/A	N/A
Ukraine	10,155.0	1993, Dec.	1994, Nov.	18	1996, May	1	1996, June	11	1997, Apr.	N/A	N/A
Uzbekistan	1,936.0	1994, Sep.	1994, Nov.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>(Countries that did not stabilize)</i>											
Tajikistan	7,343.7	1993, Dec.	1995, Feb.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Sources: National authorities; IMF, *International Financial Statistics*; and IMF staff calculations.

¹Periods between thresholds were defined using the annualized three-month inflation rates. When these first fell below a threshold, and remained there for a year, and if the 12-month inflation rate fell below that level during the following year without rising above it again in that year (except for countries in which inflation fell below the threshold during 1997), the country was deemed to have crossed the threshold.

²From Fischer, Sahay, and Végh (1996), except for Turkmenistan and Bulgaria.

exited the ruble zone and established independent currencies and new central banks thereafter.

A new wave of stabilization efforts followed during 1993–94 and enjoyed considerable success: during 1993–97, 19 other transition economies managed to break the 60 percent inflation threshold (Table 2)—in most cases without reversals—and by the end of 1997, 16 countries had brought inflation below 15 percent (Table 1). Georgia is a particularly dramatic case, reducing 12-month inflation from 50,000 percent during 1994 to single digits in 1997.

While many countries delayed inflation stabilization for several years—with a relative cluster of stabilizations in late 1994–early 1995—inflation stabilization, once undertaken, was usually rapid. In many cases, less than six months elapsed between the initiation of a major stabilization effort and quarterly annualized inflation falling below 60 percent on a sustained basis (Table 2).⁴ Only five countries (Estonia, Kazakhstan, the Kyrgyz Republic, Lithuania, and Ukraine) took about 18–24 months from the beginning of the stabilization to get below 60 percent.⁵

But after the initial inflation stabilization phase, further disinflation was often slow. After breaking the 60 percent disinflation threshold, inflation persisted at moderately high levels (the 15–60 percent range) for more than two years in a number of countries. This slower disinflation group includes the same countries that reached 60 percent slowly (except Ukraine), though Latvia and Albania, which had quickly reduced inflation to 60 percent, joined the group thereafter. However, the most often-quoted cases of persis-

tently moderate inflation (see Cottarelli and Szapáry, 1998) are given by a number of advanced transition economies where inflation had dropped below the 60 percent threshold before the end of 1992. These include Poland (where it took more than four years to bring inflation down from 60 percent to below 15 percent), Hungary (where inflation was still over 18 percent at the end of 1997), and Slovenia (where inflation remained in the 15–30 percent range for over two years after the initial stabilization). Inflation in the Czech Republic and Slovakia has remained stuck to close to 10 percent for a number of years. The median inflation rate of those Central and Eastern European countries that began stabilization before 1993 fell from 27½ percent in 1993 to 15½ percent in 1997; the median inflation rate in the Baltics, Russia, and other countries of the former Soviet Union meeting the same criteria declined somewhat more rapidly, from 35½ percent to 12 percent over this period. Only Croatia and the former Yugoslav Republic of Macedonia have maintained inflation in low single digits for a number of years.⁶

Despite this persistent moderate inflation, the relapses into high inflation were relatively rare (Table 1). During 1993–97, there were three major reversals of inflation after initially successful stabilizations: Bulgaria and Romania in 1996, and Albania in 1997 (Table 1). And Albania and Bulgaria have since renewed their stabilization efforts. While outside the period covered by this paper, the resurgence of inflation in Russia during the summer of 1998 is also notable: the 12-month inflation rate jumped from less than 6 percent in July to 59 percent in October (following a monthly inflation rate of almost 40 percent in September), reflecting the depreciation of the ruble during August 1998. As discussed below, this resurgence of inflation shares many of the features characterizing the relapses into inflation observed during 1993–97.

⁴The stabilization initiation dates adopted by Fischer, Sahay, and Végh (1996) have been used to construct Table 2. Most stabilization dates coincide with the starting date of an arrangement with the IMF. When multiple attempts were made (as occurred in six of these countries), “the most serious attempt” was taken. Fischer, Sahay, and Végh stress that the judgment about the seriousness of the stabilization program was not based on eventual inflation performance, but rather on an evaluation of the policy package associated with the stabilization effort.

⁵The marked volatility of inflation throughout the transition area is reflected in findings that lagged inflation has been relatively unimportant in explaining inflation in transition economies (Cottarelli, Griffiths, and Moghadam, 1998; and Coorey, Mecagni, and Offerdal, 1998).

⁶The upward biases in inflation measurement identified by the Boskin report for the United States may be larger in transition economies, given the faster rate of introduction of new products and the proliferation of new retail outlets (Škreb, 1998). On the other hand, lagged adjustments of the weights for goods subject to administered pricing tend to cause inflation to be understated when administered prices rise relative to market prices.