The Recent Stabilization Experience in Mexico

Manuel Sánchez

Since the late 1990s, Mexico has undertaken a stabilization program that reduced inflation to rates not seen in more than 30 years. The benefits of this progress have been substantial, including the improvement of living standards and the creation of an environment suitable for economic growth. Nevertheless, monetary policy still faces considerable challenges, among which the most important is reaching price stability, defined by the Bank of Mexico as a permanent annual inflation target of 3 percent.

The purpose of this article is to evaluate the achievements of Mexico's current stabilization program and identify its shortcomings in order to recommend measures for improvement. Emphasis is on the crucial role of monetary institutions in the progress attained, in particular, the inflation targeting approach under floating exchange rates and other complementary economic policies. Notwithstanding these achievements, the stagnation of disinflation since 2002 and the subsequent inability of the central bank to meet its inflation targets are identified as a major setback, which has damaged the credibility of monetary policy.

Behind the recent lack of development, serious limitations of the monetary strategy emerge, including a protracted tolerance of deviations from targets, particularly a propensity to be more reactive than preemptive in the fight against inflation. I warn of the risk of complacency and propose several basic steps to improve communication and operation of monetary policy to control inflation. Finally, Mexico's failures and successes provide some lessons for China, particularly the need to strengthen its banking system as a prerequisite of any monetary modernization.

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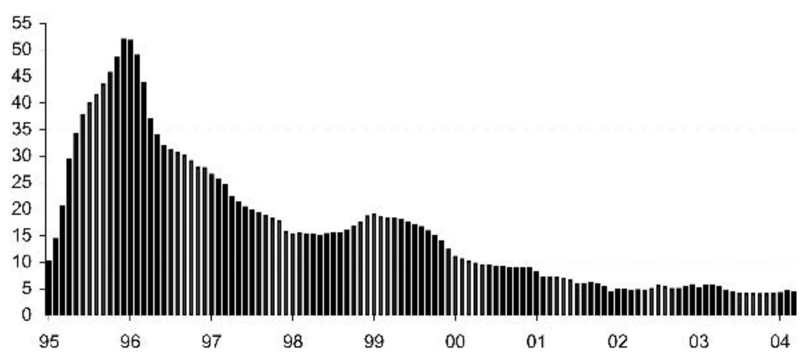
Stabilization and Its Benefits

Since the mid-1990s, Mexico has experienced a substantial drop in inflation. As shown in Figure 1, this trend has been clearer since 1999, because beginning in that year average price growth has systematically fallen to levels not seen for a long time. At the end of 2003, annual price growth was 4 percent, the lowest rate in the last 31 years, which amounts to a decline of almost 15 percentage points compared with the end of 1998. This reduction contrasts with the country's economic past, characterized by high and volatile inflation. For example, in 1995 annual price growth was 52 percent and, despite various stabilization programs, from 1973 to 1999 it reached an average rate of 38.4 percent.

FIGURE 1

PROGRESS TOWARD PRICE STABILIZATION
(NCPI, ANNUAL % CHANGE)



SOURCE: Banco de México.

These results have yielded important benefits for the population and the economy, some of which are summarized in Table 1. Although at a decreasing pace due to the recent economic slowdown, lower inflation has allowed the recovery of real wages, which had been depressed in the past because of higher than expected price instability. For example, average annual growth of real contractual wages was 3.8 percent during 1999–2003, versus -8.9 percent in the previous four years; in those same periods, average annual inflation was 8.7 percent and 26.7 percent, respectively.

TABLE 1

BENEFITS OF LOWER INFLATION (PERCENT)

	Contractual Wages (Real Av. Growth)	28-Day Cetes		Stock Market Certificates (Real Av. Growth)	Commerical Banks Performing Loans to the Private Sector Real Growth, End of Period			
		Nominal Average	Real Average		Total	Consumer	Housing	Companies
1995	–21.0	48.4	6.5	–	–39.1	–46.8	–36.0	–39.1
1996	–16.8	31.4	7.3	–	–40.6	–42.0	–56.7	–35.5
1997	–0.5	19.8	5.5	–	–25.1	–12.4	–20.8	–25.3
1998	2.9	24.8	8.1	–	–7.7	–5.3	–10.3	–8.1
1999	1.0	21.4	10.4	–	–16.3	–1.8	–13.4	–21.3
2000	6.7	15.2	7.1	–	2.6	23.4	–9.2	1.7
2001	5.8	11.3	7.3	–	0.8	32.5	–5.5	–4.8
2002	4.1	7.1	1.6	337.4	7.9	34.8	–2.8	7.1
2003	1.4	6.2	2.4	109.9	8.1	43.6	7.1	–0.8
2004[a]	0.7	6.2	2.6	75.1	14.1	46.8	18.8	0.4

[a]Data through July for contractual wages and stock market certificates; through August for Cetes and loans.

SOURCES: Banco de México and Bolsa Mexicana de Valores.

Nominal and real interest rates dropped, and during 2003, the former reached consecutive historic lows in all terms. The lower yields and the expectation that inflation will continue to be moderate have spurred financing, especially long-term. Thus, for the first time in Mexico's economic history, debt instruments in the securities markets have been developed in long-term contracts denominated in pesos at fixed interest rates. In 2001 and 2003, the federal government began to place 10- and 20-year bonds, respectively, with fixed interest rates in pesos. In addition, in 2001 a significant expansion began of stock certificates with maturities of up to 10 years, which are widely used by companies and various government levels.

Furthermore, since June 2002, the performing loan portfolio of the commercial banks to the private sector has grown continuously, compared with the previous year, and in 2004 this lending expansion included each main component: business, consumer, and mortgage loans. Commercial banks and specialized nonbank institutions currently offer mortgages at fixed interest rates for up to 30-year terms, after the banks had been out of this market for several years since the crisis of 1995.

The gradual fall in inflation has occurred without any apparent adjustment cost. The descent of price rise totaled almost 10 percentage points during 1999–2000, a period in which annual average economic growth was 5.2 percent; in contrast, during 2002–03, with an inflation reduction of only 0.4 points, annual average GDP growth was 1 percent resulting mainly from a contraction in U.S. manufacturing, a basic link of economic integration between Mexico and the United States.

Monetary Policy

The progress described above stemmed from a better monetary management, which benefited from previous failed stabilization programs. Since 1995, the Mexican economy has been under a floating exchange rate policy. This decision, adopted initially as an emergency measure to face the macroeconomic crisis in that year, has been maintained after proving its usefulness. For many years, the country played with different fixed or semifixed exchange rate systems, which always ended in crisis because the central bank geared its monetary policy toward different ends, such as promoting economic growth. With the macroeconomic collapse of 1995, the Mexican authorities learned that it is preferable to adopt a flexible exchange rate regime, rather than to pursue the inconsistency of a pegged parity and an independent monetary policy, if the country is not willing to give up the latter policy.

Although the floating exchange rate system has not been entirely clean, the intervention of the central bank has followed preannounced rules and has gradually diminished. The most significant action has to do with the exchange control that the federal government and its companies have been subject to for many years. Accordingly, they must turn over their foreign currency revenue, derived mainly from oil exports, to the Bank of Mexico to be exchanged for local currency without passing through the market. A second form of intervention was instituted in 1996 when the Exchange Commission, the authority in matters of foreign exchange policy presided over by the Finance Secretary, introduced a mechanism for the official accumulation of international reserves through monthly auctions of dollar put options by the Bank of Mexico for the commercial banks. In symmetrical fashion, the following year this Commission established a contingent sales mechanism through auctions of US$200 million by the central bank to the financial intermediaries each time the peso depreciated, at least, 2 percent in one trading session. However, in view of a considerable accumulation of international reserves, in mid-2001, the Exchange Commission decided to suspend both the put options and the contingent dollar sales. In addition, starting in 2003 it introduced a mechanism to slow down the accumulation of international reserves associated with government revenue.[1]

Despite these interventions, the floating exchange rate system has proven useful because it has discouraged speculative movements against the peso and prevented the accumulation of unsustainable current account deficits that in the past were financed mainly through portfolio investment and were a leading indicator of the recurrent peso crises. An additional benefit of the flexible exchange rates has been the lower pass-through from the peso to inflation, which in the early years of the floating exchange rate system was substantial and practically immediate. Apparently, to the extent that the public has learned that, with this regime, the peso movements could go in any direction and might not necessarily be long-lived, the pass-through has diminished, which facilitates conducting monetary

[1]Since May 2003, the Bank of Mexico holds daily dollar auctions in accordance with a preannounced rule. Initially, the amount auctioned was half of the positive change of foreign currency of the previous quarter if it exceeded US$250 million, divided by the working days of the current quarter. In March 2004 the rule was modified, making the quarterly amount of the auctions equal to the average of the amounts that would have been auctioned in the four previous quarters under the previous rule.

policy and the fight against inflation in the event of a currency depreciation.

Under this system, the central bank has sought to exercise its constitutional autonomy, granted in 1994, by which its only mandate is "to maintain the stability of the purchasing power of the currency" and no authority can oblige it to grant financing. To reduce inflation, in 1995–97 the Bank of Mexico applied quantitative objectives based on aggregates such as the monetary base, and in 1998–2000 made the transition toward a strategy anchored on explicit inflation targets. In particular, the 1999 monetary program set an annual inflation goal of no more than 13 percent for the National Consumer Price Index and proposed, as a commitment for the next five-year period, a gradual approximation to "the inflation rate of the country's main trading partners."

Later, the annual inflation objectives were defined. In the 2001 Monetary Program, a 3 percent inflation target was formally announced for 2003 and henceforth, and in mid-2002 the central bank specified that this commitment would have a variability range of plus or minus 1 percentage point. This band is not a goal, but seeks to allow for transitory deviations due to disturbances that might affect the price formation process; for example, extraordinary hikes in certain key price indexes considered volatile would justify, as an exception, the upper band limit. In 2003, the central bank announced that the 3 percent inflation target, with a plus or minus 1 percent variability range, would be applied in a continuous manner from December of that year onward.

The 3 percent target exceeds the goals of most central banks that follow an inflation targeting approach and can hardly be justified in terms of an overestimation of true inflation.[2] Nevertheless, the Mexican objective represents a considerable challenge as it implies a permanent obligation, which contrasts with a past of severe price instability. Based on the GDP deflator, whose information is available for long-term horizons, since 1950 annual inflation has been less than or equal to 3 percent in only six years.

To confirm its commitment to the inflation targets, the central bank has made progress in transparency and accountability. In addition to the annual monetary programs and semiannual monetary

[2]Several studies for the United States place the overestimation of true inflation at between 0.5 percent and 2 percent as a result of technological changes, substitution for cheaper goods, and quality improvements. There is no public study on this subject for Mexico, but it is unlikely that the factors mentioned are more important in this country. For a discussion of these measurements, see Bernanke et al. (1999).

policy reviews required by law, since 2000 the Bank of Mexico has published quarterly reports to evaluate the evolution of inflation against its goals. Moreover, since 2003 monetary policy decisions have been announced twice a month, following a preannounced calendar, with the exception of December when this is done only once, and a monthly communiqué is issued that coincides with one of these dates.

Complementary Policies

The more effective monetary management has also been possible thanks to two complementary economic policies. On the one hand, in recent years the government has strengthened its finances, thereby reducing the "country risk" and, hence, Mexico's vulnerability to external shocks. In the past, the crisis episodes uncovered, without exception, significant disorders in public finances. In the 1970s this meant severe fiscal disequilibria stemming from growing expenditures and in the 1990s it implied the mounting of short-term public debt linked to the U.S. dollar, which proved difficult to pay.

Because a weak fiscal position complicates achieving price stability, the government has gradually reduced its deficit and announced an economic surplus objective for 2006. Furthermore, as shown in Table 2, the structure of public debt has improved, reducing the importance of foreign liabilities and extending the terms of maturity and the repricing of domestic obligations. Even on an accrued basis, the accumulated public sector financial requirements have been relatively stable since 1996, slightly above 40 percent of GDP. Nevertheless, public finances exhibit weaknesses, especially because of their high dependence on oil revenue which introduces cyclical volatility in public expenditures in the absence of a significant oil stabilization fund. Frequently, this has caused public prices to rise above the inflation target of the central bank, jeopardizing the credibility of monetary policy.

On the other hand, the banking system has been capitalized under a more satisfactory regulatory framework, which has facilitated conducting monetary policy. In any economy, banking activity conditions the performance of the central bank and vice versa. In particular, the strength of financial intermediaries helps achieve price stability, which, in turn, is essential for these to operate appropriately.

Seldom was the relationship between the banking system and monetary policy in Mexico more adverse than in 1994. In spite of speculative attacks against the peso, the central bank chose to raise interest

TABLE 2
PUBLIC FINANCES

	Total Net Debt (% of GDP)	External Net Debt (% of GDP)	Domestic Net Debt (% of GDP)	Revision Term of Domestic Debt Rate[a] (Days)	Average Term[a] (Days)	PSFR Net Balance (% of GDP)	PSFR Historic Balance (% of GDP)
1995	38.5	32.4	6.1	–	292	48.4	42.9
1996	30.5	24.3	6.2	–	297	39.7	36.2
1997	25.4	18.1	7.3	269	383	40.0	37.1
1998	27.5	19.3	8.2	206	421	43.0	41.2
1999	24.9	15.8	9.1	187	561	45.8	42.8
2000	23.1	12.6	10.5	269	538	41.5	40.0
2001	23.3	11.7	11.6	400	748	41.8	40.5
2002	24.0	11.7	12.3	486	816	43.1	41.0
2003	25.2	12.2	13.0	601	908	44.6	43.1
Jun-04	24.8	12.4	12.4	663	979	–	41.4

[a]Last figure corresponds to 2nd quarter 2004.
SOURCE: SHCP.

rates moderately.[3] To some extent, this reflected the fear of damaging the banking system, which for some time had been showing signs of fragility. Between 1988 and 1994 financing by the commercial banks to the private sector increased at an annual average rate of more than 30 percent in real terms, with this indicator reaching 43 percent of GDP at the end of this period. The lending explosion occurred without an adequate supervisory and regulatory framework, including poor accounting standards, insufficient recognition of past-due loans, and low capital requirements. Especially since the end of 1992, past-due loans showed a rising trend (even despite their deficient classification), the profitability of the banking system fell, and its reserve coverage remained very low. An extreme symptom of these problems was the government intervention in two commercial banks in 1994.

Unfortunately, the postponement of strict banking regulation and the inconsistency of the monetary and exchange rate policies precipitated, at the end of that year, a more serious crisis than the one the government was trying to avoid. The peso was abruptly devalued, inflation was rampant, and interbank interest rates spiraled from 17 percent in the third week of August 1994 to 110 percent in the third week of March 1995. The recession and unemployment in 1995 were the worst since the Great Depression, which together with a poor respect for the rule of law, caused, during this and the following years, a generalized default on loans and the virtual bankruptcy of the banking system. The mistakes in economic policy had a significant cost in terms of living standards, including the bailout of the banking system that guaranteed deposits and the operation of the payment system.

The macroeconomic crisis forced an improvement in banking regulation and supervision as well as in the legal framework. The most important changes included accounting modifications, more rigorous rating standards for loans and capital requirements, the creation of credit bureaus, the gradual reduction of deposit insurance, and the total elimination of restrictions to foreign equity in banks. As a complementary measure, the legal framework was modified to protect creditors' and debtors' property rights, through a Guarantees Bill that allows reducing the time for repossessing assets and facilitates the awarding of guarantees without the need of a court proceeding. Also, replacing the previous and ineffective Bankruptcy Law, a Mercantile Bankruptcy Law was passed, by which creditors may initiate the restructuring or bankruptcy of troubled companies and conclude the process within a maximum time frame of one year.

[3]The extent of this moderation has been a debated issue (see, e.g., Gil-Díaz and Carstens 1997).

As shown in Table 3, these regulatory changes have encouraged a stronger banking system. Even using stricter criteria than those prevailing in 1994, the 2004 figures reflect a noteworthy improvement compared to the precrisis situation. In particular, the capitalization ratio has more than tripled the previous ratio, the delinquency ratio is less than half, and banks have 1.75 pesos in reserves for each peso in past-due loans. Undoubtedly, there are tasks still pending for the government and the banking system, especially the expedient enforcement of laws and the efficiency in financial intermediation. Nevertheless, these transformations have set the basis for a sound financial system that allows greater freedom in monetary policy.

TABLE 3
COMMERCIAL BANK INDICATORS

	Dec-94[a]	Dec-97	Jun-04
Capitalization Ratio, %	9.6	17.2	33.4
Tier 1 (basic capital)	–	–	30.1
Tier 2 (complementary capital)	–	–	3.3
Past-Due Loan Ratio, %	7.3	11.1	3.0
Loan Loss Provisions/ Past-Due Loans, %	47.9	61.2	174.5

[a]With previous rules.
SOURCE: CNBV, Boletín Estadistico de Banca Múltiple.

Pending Tasks

Notwithstanding these advances, stabilization is still far from complete. The Bank of Mexico faces considerable challenges since the fight against inflation seems to have come to a standstill. As shown in Table 4, although annual average inflation has been decreasing since 1999, the gains have been increasingly lower, 1.4 and 0.4 percentage points in 2002 and 2003, respectively, and 0.1 percentage points in the first nine months of 2004.

Moreover, based on data for the end of the period, according to which the commitments through 2003 were defined, it is clear that disinflation concluded in 2001, the year in which there were significant drops in agricultural prices, which drove headline inflation downward. Since then, inflation has varied without a clear trend, to a great extent, due to adverse idiosyncratic shocks. This stagnation is serious because, without exception, since 2002 annual inflation has remained above the target established by the monetary programs. In

TABLE 4

INFLATION REDUCTION

	Target	End of Period	Annual Average
1995	42.0	52.0	34.8
1996	20.5	27.7	35.3
1997	15.0	15.7	20.8
1998	12.0	18.6	15.9
1999	13.0	12.3	16.7
2000	10.0	9.0	9.5
2001	6.5	4.4	6.4
2002	4.5	5.7	5.0
2003	3.0	4.0	4.6
2004[a]	3.0	5.0	4.5

[a]September.

SOURCE: Banco de México.

particular, during 2004, it consistently surpassed the upper limit of the variability range set by the central bank to account for transitory shocks.

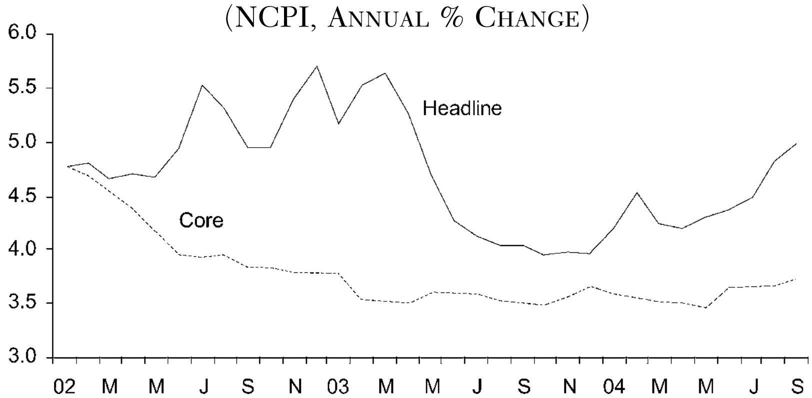
The lack of improvement is also seen in annual core inflation, which excludes changes in the more volatile price components (government-managed and regulated prices, agriculture, and education), on which monetary policy presumably acts more effectively. As shown in Figure 2, since early 2003, annual core inflation has exhibited downward rigidity, with an average at around 3.6 percent. Moreover, this variable has been rising since June 2004, reflecting the pressures observed in the merchandise price index, which recently surpassed the drops of the other core component, services.

A factor that has contributed toward explaining the recent lack of progress in reducing inflation has been the behavior of the exchange rate. Although, as noted previously, the pass-through has weakened, it has not disappeared completely. As shown in Figure 3, the sharpest decline in inflation during 1999–2001 was helped by the effect of the appreciation of the peso on merchandise core inflation, and since mid-2002 the currency depreciation has had the opposite effect. The Bank of Mexico has not been able to offset this effect.

As a result, since 2003 annual inflation has remained at an average level of 4.6 percent, surpassing the upper limit of the variability range around the 3 percent long-term inflation target. In addition, not even annual core inflation has temporarily touched the target, and its downward rigidity places it at closer to 4 percent. This has occurred despite an environment favorable to reducing inflation. For example, price growth in the United States in 2003 was the lowest of the last 40

FIGURE 2

Headline and Core Inflation
(NCPI, Annual % Change)

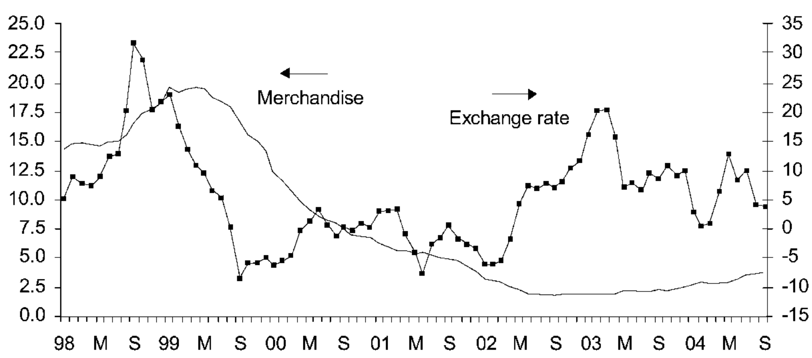


Source: Banco de México.

years. In a strict sense, with such a benign price environment, the appropriate reference for Mexico's headline inflation in 2003 should have been the lower limit of the variability range, 2 percent. On the other hand, it is likely that some of these external factors will not be as favorable in the future, including higher inflation abroad and a stronger pass-through from the depreciation of the peso as the domestic economic recovery continues.

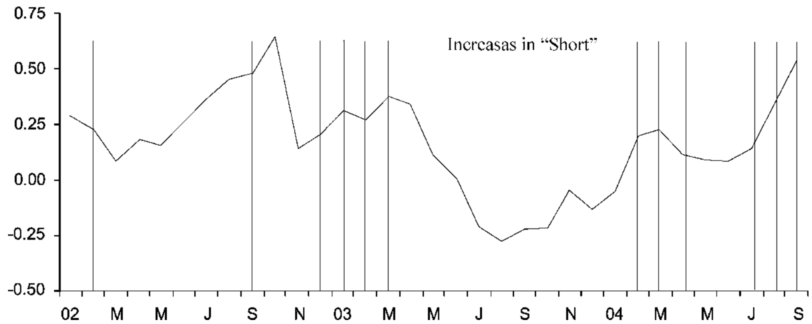
FIGURE 3

Merchandise Price Subindex and Pesos per Dollar
Fixed Exchange Rate (Annual % Change)



Source: Banco de México.

FIGURE 4
REACTION TO "SHORT"[a]



[a]Inflation expectations, percentage points of deviation against target inflation (4.5% in 2002) or upper variability limit (4% in 2003 and 2004).
SOURCE: Banco de México.

Hence, as the previous progress was partly due to nonrecurrent favorable conditions, there is the risk that Mexico will lose further ground against inflation. This perception seems to be reflected in the deterioration of inflationary expectations, gathered in the Bank of Mexico's monthly survey of private sector analysts. As shown in Table 5, with information through September 2004, expected inflation was 4.6 percent for the whole of 2004 and an annual average of 3.9 percent for the next four years—0.9 and 0.4 percentage points higher than the corresponding forecasts a year earlier.

It is not just the worsening of the inflation estimates that is cause for concern, but the absence, in any survey conducted until now, of expected inflation of 3 percent for any foreseeable horizon. In plain and simple terms, this reflects an absolute lack of credibility of the long-term inflation target. Apparently, a goal of around 4 percent is considered more feasible, which could be reflecting confusion

TABLE 5
INFLATION EXPECTATIONS

	Sep-03	Dec-03	Oct-04
2004 Inflation (eop)	3.7	3.9	4.6
Next 12 Months	4.0	–	4.0
2005–2008 (annual)	3.5	3.6	3.9

SOURCE: Banco de México's monthly survey.

between the upper limit of the variability range and the 3 percent target, since this band was announced one year after the official target and was possibly interpreted as a more lenient goal.

The problem is that the risks are hardly static. The central bank endorsed the annual inflation references set by the government before the adoption of the inflation targeting approach. From 1995 to 1998, these references were systematically not achieved. What gave credibility to the new monetary strategy was the compliance with the inflation targets during 1999–2001. However, the subsequent failure in three consecutive years to meet the inflation goals has caused a loss of credibility, which could increase if there is no clear improvement in the future.

Measures for Improvement

To overcome these problems and achieve its long-term objective of permanent price stability, the Bank of Mexico needs to reinforce its monetary strategy. In this endeavor, three basic interrelated recommendations are crucial. The first is the improvement of communication with market participants in order to convince them that the 3 percent inflation target is, in effect, attainable, and that the longer time it is taking to achieve it does not mean that it will be reached only at great social cost. It should be clear that this target represents the central bank's main concern, stemming from its constitutional mandate, which does not include other objectives such as economic activity, and that its actions will be consistent with this obligation.

Likewise, it is essential to eliminate the common confusion among many analysts that the variability range is the goal, by emphatically reiterating that reaching the upper limit of this band is not equivalent to meeting the target. One simple way of achieving this objective would be to eliminate this band altogether.[4] In addition, the central bank must reinforce that since 2004 the 3 percent inflation target is applicable in a continuous manner, avoiding misunderstandings derived from occasionally expressing this objective in terms of the end of the year, as has been the case in some communiqués by the central bank.[5] It is also necessary that the improvement in communication includes a clear commitment that prolonged deviations from the

[4]Obviously, another way would be to equalize the target to the band. This option, however, appears less attractive as it may send an unintended massage of leniency.

[5]For example, in the communiqués that accompanied the increases of the "short" on August 27 and September 24, 2004, the Bank of Mexico recognized the existence of a "perception that it will be difficult to achieve the inflation target," giving the impression that the target

target and inflation rates beyond the established variability range are inadmissible.

To make this pledge more credible, the central bank should define in advance the cases that might justify failure to meet the target, and the practical consequences of not reaching it otherwise over a prolonged time frame. Up to now, the only cost of the three years of nonachievement has been a loss of credibility. The dissemination of cases of successful stabilization from moderate inflations, such as those of Canada, New Zealand, and Australia in the early 1990s could help in the work of persuasion. To a great extent, these programs were based on the credibility of the monetary institutions and the clear decisions of their governors, something that is transmitted with good rhetoric and actions.[6]

Hence, a second task should include more decisive monetary policy measures than in the past. This implies eliminating any signs of complacency, such as those that occurred in the two reductions of the monetary restriction in 2001, in light of favorable fortuitous events—the agricultural deflations—that implied a comfortable compliance with the 6.5 percent target set for the end of that year. Instead of taking advantage of the recession that originated outside the country to reach the 3 percent target without great political pressure, a strategy that the three above-mentioned economies made full use of in 1990–91 with the recession in the United States, the Bank of Mexico was satisfied with less. Furthermore, after meeting the target in 2001, the next year the central bank sent out contradictory signals to the market by increasing the "short" in February and reducing it in the same amount two months later. This lack of direction in its actions seems to reflect short-term concerns that subordinate the long-term stabilization commitments.

The most decisive actions should also include a more preemptive and less reactive attitude. Up to now, monetary policy decisions have been generally implemented after the inflationary expectations deteriorate beyond a certain level. In common jargon, Mexico's central bank tends to remain "behind the curve," acting after inflation expectations have been revised upward, instead of making provisions before this occurs. As suggested in Figure 4, the Bank of Mexico increased the restriction after the fact, when private sector analysts' expected inflation surpassed the target for 2002 and the upper limit

is not applied in a continuous manner, despite the fact that it has not been reached throughout 2004.

[6]For an excellent recounting of these experiences, see Debelle (1996).

of the variability range since 2003, thereby adding to the confusion between the variability range and the 3 percent inflation target. Moreover, the weakening of expectations did not lead to a greater restriction as long as they remained below the upper variability limit.

On the other hand, in 2004 the Bank of Mexico has waited for the Federal Reserve to do the "dirty work" of raising interest rates, expecting that these increases will be transmitted to domestic interest rates. This patience appears to presume that the inflation rates of the two countries are sufficiently similar so as to take time in acting more severely. Besides, the Bank of Mexico has frequently not shown a sufficient aversion to price growth nor an apparent urgency to comply with its targets. In the report on inflation for the second quarter of 2004, the central bank spoke of an "inertial" scenario, according to which the decline of inflation to rates below 4 percent would not occur before 2005. Accordingly, no specific strategy was indicated to comply with the target in 2004.

A third, no less important task is to improve the tools of monetary policy. Since 1998, the Bank of Mexico has used the "short" as its most important operating guide. This is a daily intervention in the money market to make an overdraft, for a certain announced amount, on the current accounts of the commercial banks with the central bank and meet this liquidity demanded at two times the market interest rate, in order to generate an increase in market interest rates.[7] Understanding this mechanism is complicated for several reasons.

From an operating standpoint, it works as a book entry that does not affect the money supply. Yet, even after more than six years of sustained application, the "short" continues to sow confusion, including the mistaken idea that it withdraws money from circulation. The misunderstanding becomes larger as the effects of this tool are not always those intended. Since it works as a signal mechanism and is often applied with a lag, the increase sought in interest rates does not

[7]The "short" is one of the three possibilities of monetary stance, resulting from the policy of balances in the current accounts of the commercial banks. This was defined in terms of accumulated monthly balances in March 1995, used actively since March 1998, and based on daily balances since April 2003. The commercial banks have the incentive of maintaining zero balances in these accounts because their opportunity cost (the market interest rate) equals the net penalty of the overdraft (two times this rate minus one time this rate). Consequently, the monetary policy is expansive if in its daily intervention the central bank provides more liquidity than demanded, neutral if it meets demanded liquidity exactly, and restrictive if it generates shortages. In any case, at the end of the evening session, the central bank matches the supply and demand of the monetary base. For more information see Banco de México (2003).

always occur and is often short-lived. As illustrated in Table 6, of the 28 changes in the amount of the “short” from March 1998 to August 2004, interest rates did not change in the expected direction (including increases for the reductions of the “short”) in 12 of these, and when the expected change occurred, it disappeared in 4 cases, at the latest after 4 weeks.

The transitory and uncertain effect on interest rates is explained, in part, because frequently the market moves ahead of the “short” in view of higher expected inflation, which tends to occur each time monthly inflation increases beyond previous estimates. As is customary, the transmission mechanism of the monetary policy tends to define itself following an increase in interest rates and the reduction of expected inflation. On the other hand, contrary to claims by some critics of stabilization, the “short” has not always strengthened the peso against the dollar.

Another source of confusion is the difficulty in interpreting the monetary stance, since, as was shown in Figure 5, higher amounts of the “short” have coincided with all-time lows for interest rates. Based on these prices, the monetary stance in 2003 was extremely lax, but based on the amount of the “short” it was the most restrictive up to then. It is not clear which interpretation should prevail. Certainly, the first should be favored considering most indexes of monetary conditions.[8] Independent of the interpretation adopted, confusion remains regarding the monetary stance, which in principle should affect the credibility of the instrument and its effectiveness in controlling inflation. If the monetary stance is confusing, understanding its effects on inflation can be even more complex.

In view of these limitations, it is time for Mexico to sacrifice originality in order to gain effectiveness by importing the “technology” used by successful central banks, which includes the use of a policy interest rate. In particular, the “short” should be replaced by a benchmark rate, which would lead to greater transparency and understanding of monetary policy actions. An official interest rate could be monitored in real time, its effects on the market could be more lasting, and the monetary stance would be clearer. The new operating guide could be the banking system fund rate, which as shown in Figure 6 has shown unusual stability as a result of the decision by the Bank of Mexico, since the end of April 2004, to induce setting this rate by consensus of the banks’ treasuries at levels reflecting “international

[8]For example, in Thorne (2004), the J. P. Morgan Monetary Conditions Index (MCI) for Mexico touched its lowest point in the second half of 2003.

TABLE 6

CHANGES IN INTEREST AND EXCHANGE RATE AFTER A CHANGE IN THE "SHORT"

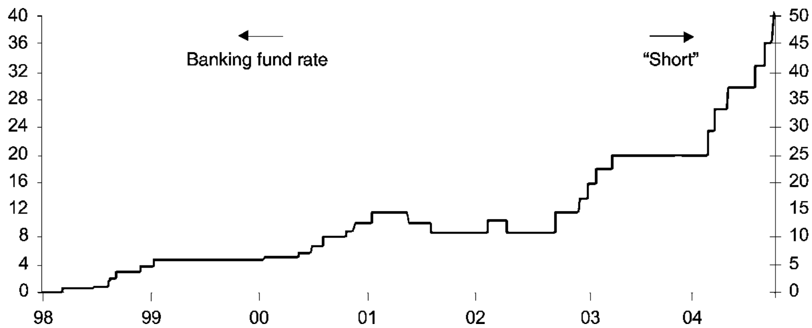
Date	Change in the "Short" (Millions of daily pesos)	Two Weeks: 28-day Cetes Secondary Market[a]	Two Weeks: Exchange Rate Fix[b]	Four Weeks: 28-day Cetes Secondary Market[a]	Four Weeks: Exchange Rate Fix[b]	Eight Weeks: 28-day Cetes Secondary Market[a]	Eight Weeks: Exchange Rate Fix[b]
11-Mar-98	0.7	–50	–1.6	–100	–1.8	–325	–2.2
25-Jun-98	0.4	25	–0.1	–50	–1.0	275	4.0
10-Aug-98	0.7	600	5.7	1,600	11.7	1,600	12.0
17-Aug-98	0.7	1,500	7.2	2,600	13.1	1,360	9.2
10-Sep-98	1.1	–1,450	–4.0	–1,400	–1.7	–1,950	–5.2
30-Nov-98	1.1	15	–0.5	–260	–1.6	–50	2.2
13-Jan-99	1.1	–430	–4.0	–670	–5.1	–1,300	–7.5
18-Jan-00	0.7	80	1.7	–85	–0.5	–285	–1.3
16-May-00	0.7	160	0.1	140	2.7	–60	–0.8
26-Jun-00	1.1	–280	–5.2	–280	–6.8	–80	–7.6
31-Jul-00	1.8	120	–1.2	100	–1.7	100	0.6
17-Oct-00	1.1	112	0.2	130	–0.5	60	–1.0
10-Nov-00	1.4	70	–2.2	–35	–2.1	–10	1.6
12-Jan-01	1.8	15	–1.9	15	–1.6	–180	–2.1
18-May-01	–1.8	–100	2.2	–300	0.8	–180	4.2
31-Jul-01	–1.8	–100	–0.2	–80	0.0	130	3.8

8-Feb-02	2.1	–50	–0.4	–135	–0.8	–205	–1.3
12-Apr-02	–2.1	0	2.7	125	4.8	210	7.3
23-Sep-02	3.6	–135	–1.7	–150	–3.6	–169	–1.1
6-Dec-02	2.7	–45	–0.9	0	1.1	95	6.2
10-Jan-03	2.7	43	3.4	70	4.1	108	6.1
7-Feb-03	2.7	0	0.8	80	1.9	–28	–2.0
28-Mar-03	2.7	–27	0.3	–151	–2.2	–360	–4.0
20-Feb-04	4.0	45	0.0	73	0.4	55	2.8
12-Mar-04	4.0	–32	0.9	–50	2.3	38	6.1
27-Apr-04	4.0	98	2.8	43	1.5	53	0.0
23-Jul-04	4.0	21	–0.2	28	–0.8	20	0.4
27-Aug-04	4.0	0	2.0	17	0.3		
24-Sep-04	6.0						
Change in Expected Way[c]		57%	46%	50%	61%	44%	56%

[a]Change since modification of the "Short," basis points.
[b]% change since modification of the "Short," pesos per dollar, appreciation (–), and depreciation (+).
[c]Increase (decrease) of interest rate and appreciation (depreciation) of the exchange rate with increases (reductions) in the "Short."
SOURCE: Banco de México.

FIGURE 5

BANKING FUND RATE AND "SHORT"
(% AND "SHORT" DAILY AMOUNT, MILLIONS OF PESOS)

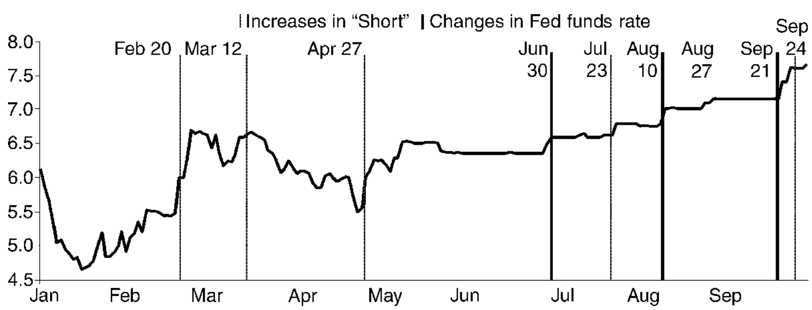


SOURCE: Banco de México.

monetary conditions" (i.e., changes in the U.S. Fed Funds rate) and the amount of the "short." However, it would be preferable for the central bank to explicitly dictate this reference rather than to continue promoting interest rate collusion. In addition, it should set its level and modify it aggressively in a preemptive fashion, over and above any increases in U.S. Fed Funds rate, as Mexico has not yet achieved price stability.

FIGURE 6

BANKING FUND RATE, %, 2004



SOURCES: Banco de México and U.S. Federal Reserve.

Lessons for China

Finally, Mexico's monetary experience could offer some lessons for China. It is often argued that this economy should liberalize its pegged exchange rate and let the renminbi float on the international markets. However, up to now the currency peg has led to stability in prices after high inflation in 1994. If China chooses to free its exchange rate, it should do so for reasons other than those frequently espoused by other countries. There would be no attempt to induce a "fair competition" to supposedly correct the advantage of the real depreciation of the currency in recent years. It would be preferable to base such a decision on the attributes of a broad liberalization process in which it might be inconvenient to maintain parity. The experience of Mexico reminds us that it is better to float its currency when a country is not willing to relinquish monetary management.

However, before taking this action other measures should be considered, among which the strengthening of the banking system stands out. In China, banks conduct most of the financial intermediation; they are predominantly state institutions and their loan expansion has been spectacular. This growth has occurred at the expense of the quality of the loan portfolio, which is difficult to quantify due to lack of transparency and lax accounting criteria. The source of this deterioration is the channeling of substantial loans to government companies and projects. The problems have worsened because of the consolidation and insolvency of government businesses, the lack of guarantees in many of the loans, and the legal deficiencies for their collection.

To stop the accumulation of damages, since the end of the 1990s the authorities have taken steps, including the capitalization of the four largest state banks and the creation of asset management companies that have bought loan portfolios from these institutions in exchange for government-backed securities. In addition, prudential regulation has improved with a new portfolio rating system and stricter reserve requirements. It is expected that by 2006 the banks will comply with capitalization criteria similar to those that up until recently were the international standards, known as Basle I. China's joining the WTO has implied a commitment to eventually eliminate all restrictions to the entry of foreign banks.

However, these changes are insufficient, among other reasons because the new regulations exclude the four largest state banks, maintain stringent limits to foreign capital (both overall and by investor), and retain government control of the major banks. Because of this, a reform is needed that could convert banks into viable businesses, impose uniform regulations, and eliminate limits to foreign investment.

A second field for reform is monetary and financial policy. The management of the central bank is based on direct controls, such as credit ceilings, bands on lending interest rates and ceilings on deposit interest rates, and goals for exchange rates and monetary growth. Far from allowing a sound monetary policy, these interventions lead to inefficient decisions of financial intermediaries.

The capital controls have accustomed the population to the possibility of a monetary policy in permanent inconsistency with the exchange rate policy. The lower inflation observed since 1995 has occurred with a lax monetary policy, to a great extent, because the fixed exchange rate has worked as a "nominal anchor." The capital controls have allowed the substantial entry of foreign direct investment to not be reflected in growing current account deficits, and the excess liquidity to not cause capital flights or a weaker currency.

This system of controls has its costs. Although during the Asian crisis of 1997–98 the capital restrictions isolated China from the financial turmoil of neighboring countries, the restrictions are incompatible with the greater economic modernization, since they limit the development of the financial markets and, therefore, the efficient allocation of resources. The authorities have favored the current situation because they have been able to promote the growth of credit and the economy without incurring inflation risks. In defense of the controls, it is argued that movements in capital control and the exchange rate could worsen the condition of the state-run companies and, consequently, the banking system. Nevertheless, in practice, the capital restrictions have served to postpone the establishment of an autonomous central bank, thereby subordinating monetary policy to fiscal objectives, as was clear in the use of a substantial amount of international reserves for the capitalization of two government banks in 2003.

Conclusion

This article has examined the reduction of inflation in Mexico since 1999, with an explicit inflation targeting approach under a floating exchange rate system. In 6 years, annual inflation fell by almost 15 percentage points, achieving, toward the end of 2003, the lowest rate in 31 years. This stabilization process has generated important benefits for the population and the economy, including the increase in real wages, the drop in interest rates, and the development of the long-term capital markets in pesos. In addition to the improved management of monetary policy, two complementary measures, the enhancement of public finances and the strengthening and capitalization of the banking system, made this possible.

However, the central bank faces considerable challenges because stabilization has not yet concluded. Recently, the annual growth in prices has exhibited a downward rigidity and the central bank has not met its inflation targets in three consecutive years. This failure has resulted in a loss of credibility for monetary policy, expressed in the long-term inflation expectations of private sector analysts, which surpass the official target. This article has analyzed some limitations of monetary strategy in order to recommend improvements in communication and operation that will make the conquest of inflation possible. Finally, some financial lessons have been drawn from Mexico that might be useful for China, particularly regarding the need to strengthen its banking system.

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