Mexico: The challenges of capital inflows
Manuel Sánchez, Deputy Governor
Contents

1  Taxonomy of capital inflows

2  Risks and the prevention of problems

3  Economic outlook
Like other emerging markets, Mexico recently experienced a surge in net private capital inflows.

Mexico: Net Inflows from Private Nonresidents\(^1\)

**Billions of dollars**

- Nonbank lending
- Bank Lending
- Portfolio equity investment
- Direct equity investment
- Total

1/ After subtracting capital withdrawals by nonresidents

Source: Own calculations with the Institute of International Finance (IIF) and Banco de México data
What has been unusual is the increase in the share of nonbank lending, especially for Mexico

Net Inflows from Private Nonresidents¹
%
of total

Average 1996-2008

Average 2010-2012

1/ After subtracting capital withdrawals by nonresidents
*/ EE refers to emerging economies
Source: Own calculations with IIF and Banco de México data
A large fraction of capital inflows has been directed to peso-denominated government securities

**Peso-denominated Government Securities Held by Foreigners**

Billions of constant pesos, December 2010 = 100

*Up to May
Source: Own calculations with Banco de México data
The rising proportion of foreign holdings of local-currency government securities is not the highest among countries

Emerging Economies: Foreign Holdings of Local Government Bonds¹
Percentage of total government securities in circulation

1/ Federal government debt issued on the domestic market, in local currency
Source: Selected countries’ central banks and finance ministries
Synchronized capital inflows to emerging economies seem to have stemmed from expansionary monetary policy in advanced nations.\(^1\)

\(^1\) For a discussion of the monetary transmission channel to capital inflows, See Bruno, V. and H.S. Shin (2012), “Capital flows and the risk-taking channel of monetary policy,” BIS Working Papers
... as well as lower global risk aversion, where fluctuations may not be independent from the previous factor
Also, some domestic factors may contribute to explaining highly dynamic capital inflows to Mexico

### Emerging Economies: Idiosyncratic Factors

<table>
<thead>
<tr>
<th></th>
<th>Mexico</th>
<th>Emerging economies¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in output growth differentials vs. advanced economies from 1981-2009 to 2010-2012² (percentage points)</td>
<td>2.7</td>
<td>1.9</td>
</tr>
<tr>
<td>Capital account openness³ (highest degree=100, lowest degree=0)</td>
<td>69.4</td>
<td>50.9</td>
</tr>
<tr>
<td>Free-Floating Currency⁴</td>
<td>Yes</td>
<td>4 out of 30</td>
</tr>
<tr>
<td>EMBI Global⁵ (basis points)</td>
<td>140</td>
<td>282</td>
</tr>
</tbody>
</table>

... including recent progress on structural reforms

- **Labor**
  - Permits test training, temporary contracts, and wages per hour; reduces wage compensation after disputes; and eliminates the exclusion clause

- **General Government Accounting Law**
  - Requires all levels of government to publish financial data and evaluate the performance of public programs and policies on the Web

- **Education**
  - Calls for obligatory assessment of teachers; provides autonomy to the educational evaluation institute; and extends the school day

- **Competition and Telecommunications**
  - Provides autonomy to the competition and regulatory bodies; permits more FDI in telecommunications and broadcast radio; puts new licenses for TV frequencies up for auction; allows telecommunications operators to use the local network to provide fixed telephony, private TV and internet services
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Although in principle, capital inflows should be viewed as positive, their abundance could trigger unintended consequences

- Financial imbalances in households, firms and governments, in the form of excessive and unsustainable borrowing

- Bubbles in financial asset prices, in the sense of prolonged price deviations above values consistent with fundamentals
No clear indicators have surfaced of possible widespread financial imbalances

### Selected Indicators of Imbalances

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Mexico</th>
<th>Emerging economies¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current account balance (± of GDP)</td>
<td>-0.8 2007</td>
<td>3.6 2007</td>
</tr>
<tr>
<td>Public-sector borrowing requirements (± of GDP)</td>
<td>0.0 2007</td>
<td>2.6 2007</td>
</tr>
<tr>
<td>Total external debt (± of GDP)</td>
<td>19.3 2007</td>
<td>39.2 2007</td>
</tr>
<tr>
<td>Domestic credit to the private sector (± of GDP)</td>
<td>21.8 2007</td>
<td>54.5 2007</td>
</tr>
<tr>
<td>Bank nonperforming loans (± total gross loans)</td>
<td>2.4 2007</td>
<td>2.2 2007</td>
</tr>
</tbody>
</table>

¹/ According to IIF classification. Not all countries provide full data; 2/ Or most recent available data; 3/ IIF; 4/ The World Bank; 5/ Includes domestic-currency-denominated government securities held by foreigners
... or financial bubbles. However, evidence could appear

<table>
<thead>
<tr>
<th>Asset Price Indicators</th>
<th>Mexico</th>
<th>Emerging economies&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007</td>
<td>2013&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>10-year interest rate or nearest equivalent&lt;sup&gt;3&lt;/sup&gt; (%)</td>
<td>7.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Real effective exchange rate&lt;sup&gt;4, 5&lt;/sup&gt; (2007=100)</td>
<td>100.0</td>
<td>99.0</td>
</tr>
<tr>
<td>National stock market indices, LCU&lt;sup&gt;4, 6&lt;/sup&gt; (2007=100)</td>
<td>100.0</td>
<td>147.9</td>
</tr>
<tr>
<td>Real estate prices&lt;sup&gt;7&lt;/sup&gt; (2007=100; in constant currency units)</td>
<td>100.0</td>
<td>99.4</td>
</tr>
</tbody>
</table>

1/ According to IIF classification. Not all countries provide full data; 2/ Until April except for the real estate price index, which is up to Q1 2013; 3/ IFS; 4/ Haver Analytics; 5/ A figure higher than 100 represents an appreciation; 6/ LCU: Local currency units; 7/ Based on BIS Property Price Statistics, FRED Economic Data and Haver Analytics
More importantly, experience confirms that booms in capital inflows have often ended in sudden stops

- Sudden stops can occur even if capital inflows do not generate internal financial imbalances or bubbles
- Factors behind capital inflows, above all portfolio funds, can change for reasons not necessarily related to the recipient country; e.g.:
  - Anticipation of tighter monetary conditions in advanced countries
  - An increase in global risk aversion
- Effects can be amplified by contagion
- Debtors and savers with exposure to interest-rate and foreign-exchange risks should remain wary
During recent weeks, global market sentiment has changed, reflecting expectations on tapering of U.S. monetary accommodation.

10-year Swap Interest Rates

<table>
<thead>
<tr>
<th>Country</th>
<th>Jan-13</th>
<th>Feb-13</th>
<th>Mar-13</th>
<th>Apr-13</th>
<th>May-13</th>
<th>Jun-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico</td>
<td>6.5</td>
<td>6.7</td>
<td>6.8</td>
<td>6.9</td>
<td>7.0</td>
<td>7.5</td>
</tr>
<tr>
<td>Poland</td>
<td>4.5</td>
<td>4.6</td>
<td>4.7</td>
<td>4.8</td>
<td>4.9</td>
<td>5.0</td>
</tr>
<tr>
<td>South Africa</td>
<td>5.5</td>
<td>5.6</td>
<td>5.7</td>
<td>5.8</td>
<td>5.9</td>
<td>6.0</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3.5</td>
<td>3.6</td>
<td>3.7</td>
<td>3.8</td>
<td>3.9</td>
<td>4.0</td>
</tr>
</tbody>
</table>

1/ An interest rate swap is the exchange of a set of cash flows with a fixed interest rate for another set with a floating interest rate.

Source: Bloomberg

Exchange Rates

Local currency per U.S. dollar, April 2013=100

<table>
<thead>
<tr>
<th>Country</th>
<th>Jan-13</th>
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<td>2.7</td>
<td>2.8</td>
<td>2.9</td>
<td>3.0</td>
</tr>
<tr>
<td>Singapore</td>
<td>1.5</td>
<td>1.6</td>
<td>1.7</td>
<td>1.8</td>
<td>1.9</td>
<td>2.0</td>
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Source: Banco de México and Bloomberg

Mexico: The challenges of capital inflows
Recent volatility in Mexican financial markets has occurred in tandem with that of the United States.

**Volatility in 10-year Swap Interest Rates in Mexico and the United States**

*Basis points*

1/ An interest rate swap is the exchange of a set of cash flows with a fixed interest rate for another set with a floating interest rate. Volatility is here defined as the standard deviation of a 20-day moving average of the swap interest rates.

Source: Banco de México with Bloomberg data
The reaction of financial markets in Mexico has been orderly

Government Securities Held by Foreigners

Billions of pesos

Duration of Government Bond Portfolios Held by Foreigners

Years

1/ Only includes fixed-rate bonds
Source: Banco de México

2/ Only includes fixed-rate bonds
Source: Banco de México
FX market volumes have continued to be high and bid-ask spreads have remained slim

Average Peso-per-Dollar Bid-Ask Spread
Pesos, 5-day moving average

Source: Reuters
Policy measures in Mexico have been mainly directed toward mitigating the possible adverse effects of capital inflows

- International reserves and IMF flexible credit line
- Financial System Stability Council
- Financial regulation on banks
  - Capitalization and provisioning requirements
  - Limits on related-party lending
  - Foreign banks can operate only through subsidiaries
  - Authorization required for significant transfers of assets and liabilities between Mexican subsidiaries and foreign parent banks
  - Restrictions on FX transactions: deposits, net liabilities, net open position and liquidity ratio
- Such policies can hardly be sufficient; hence authorities should remain vigilant
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The Mexican economy has recently shown signs of deceleration reflecting stagnation in industry, especially manufacturing.

Global Economic Activity Indicator\(^1\)

2003=100; s.a.

- Total
- Agriculture
- Industrial
- Services

Manufacturing Output\(^2\)

2007=100; s.a.

- Mexico
- U.S.

1/ Data up to March except for industrial data, which is up to April s.a. Seasonally adjusted.
Source: Mexican National Accounts System (SCNM), INEGI

2/ Data up to May for the U.S. and up to April for Mexico s.a. Seasonally adjusted.
Source: Banco de México and the Federal Reserve.
The slowdown in manufacturing results from lower export growth in that sector

Manufacturing Exports
2007=100; s.a.

By Industry
- Total
- Automobile
- Nonautomobile

By Destination
- Total
- U.S.
- Rest of the world

s.a./ Seasonally adjusted
Source: Banco de México
Less dynamic external demand has likely had negative repercussions for domestic retail sales and gross fixed investment.

**Retail Sales in Commercial Establishments**

2003 = 100; s.a.

Source: Survey of Commercial Establishments, INEGI

**Investment and its Components**

2003 = 100; s.a.

Source: INEGI
Most forward-looking indicators still suggest that economic performance may improve in the near future.

**Purchasing Managers Index**

- **50 reference points; s.a.**
- **Leading Indicator**
  - **2003=100, s.a.**

1/ Data adjusted for business size
s.a./ Seasonally adjusted
Source: IMEF

s.a./ Seasonally adjusted
Source: INEGI
Analysts forecast that Mexican GDP growth will be higher in 2014 than this year.

GDP
Annual growth, %

* Excluding 2009
F/ Forecast
Source: INEGI. Forecasts, Blue Chip and Latin America Consensus Forecasts, June
Finally, a rise in headline inflation has been the result of supply shocks in noncore components of the CPI

Annual Inflation

Source: INEGI
Medium- and long-term inflation expectations have remained stable, albeit above the 3 percent target.

**Analysts’ Inflation Expectations**

- **Next 12 months**
- **End of 2013**
- **End of 2014**
- **End of 2015**
- **Next 4 years**
- **Next 5 to 8 years**

**Break-even Inflation**

1/ Based on 10-year bond nominal and real interest rates in the secondary market.

Source: Own calculations with Valmer data.
The Bank of Mexico expects inflation to be very close to the permanent target by 2014

Concluding remarks

- The recent surge of capital inflows to Mexico has been characterized by a significant increase in the share of portfolio funds.
- The reaction of Mexican financial players to recent changes in global market sentiment has been orderly.
- Macroprudential measures can hardly be sufficient; hence, authorities should remain vigilant.
- Softer economic activity and rising inflation are expected to be transitory, but they pose policy challenges.
- There is ample room for raising long-term potential economic growth through structural reforms.
Mejoran las perspectivas económicas mundiales