



# MEXICO

## 2011 ARTICLE IV CONSULTATION

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2011 Article IV consultation with Mexico, the following documents have been released and are included in this package:

- **Staff Report** for the 2011 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on June 16, 2011, with the officials of Mexico on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on July 11, 2011. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.
- **Debt Sustainability Analysis** prepared by the IMF.
- **Informational Annex** prepared by the IMF.
- **Public Information Notice (PIN)** summarizing the views of the Executive Board as expressed during its July 27, 2011 discussion of the staff report that concluded the Article IV consultation.

The document listed below has been or will be separately released.

Selected Issues Paper

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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**International Monetary Fund**  
**Washington, D.C.**



# MEXICO

## STAFF REPORT FOR THE 2011 ARTICLE IV CONSULTATION

July 11, 2011

### KEY ISSUES

**Context.** Following a sharp decline in 2009, output growth has rebounded strongly, attesting to Mexico's strong fundamentals and skillful policy making. Strong exports are leading the recovery, with a rebound in domestic demand sustaining the momentum. Strong growth is envisaged to continue this year and into 2012, bringing output in line with potential, amid benign domestic inflationary conditions. Presidential elections will take place in July 2012, with the new government in office in December.

**Risks.** Important downside risks persist, linked to the global outlook. A more protracted slowdown in the U.S. would be a material drag to Mexico's growth, given its close integration with the U.S. economy. Although the direct impact from unsettled market conditions in Europe would remain contained (with the bank channel considered to be well ring-fenced), a surge in global risk aversion and generalized flight to quality could affect even strong sovereign credits, like Mexico's.

### Policy Challenges

With Mexico's economy expected to continue on a firm recovery, the challenge ahead is how to gradually adjust the overall policy stance and rebuild policy buffers, weighing domestic cyclical conditions against the potential impact of increased global downside risks. As fiscal consolidation is judiciously underway, the central bank will need to continue assessing the evolution of domestic and external circumstances in the coming months in deciding the course of monetary policy going forward.

Over the medium term, the task remains how to unleash Mexico's growth potential and employment generation, while tackling its long-term fiscal challenges. Advancing structural reforms would be key to increasing Mexico's growth, particularly in an environment of sluggish external demand. Addressing longer term fiscal challenges from oil revenues and age-related spending to ensure fiscal sustainability will require a combination of revenue mobilization efforts and expenditure rationalization.

Approved By  
**Gilbert Terrier and  
 Aasim Husain**

Discussions took place in Mexico, D.F., during June 6-16, 2011. The team comprised: Martin Kaufman (head), Enrique Flores, M.K. Tang (all WHD); Patrick Imam (MCM); Pablo Lopez Murphy (FAD); and Kai Guo (SPR). Messrs. Nicolás Eyzaguirre and Gilbert Terrier participated in the concluding meetings.

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## RECENT ECONOMIC DEVELOPMENTS

### 1. Mexico's rapid rebound from the fallout of the global crisis attests to its strong fundamentals and to the authorities' skillful management of the economy.

The V-shaped recovery in output and domestic demand has been underpinned by sound public, private, and financial balance sheets, as well as by the presence of a credible policy space to deploy an effective countercyclical response (Box 1). The authorities' adroit management of the economy has been instrumental, within the context of the global recovery, to Mexico's strong economic rebound. In particular, fiscal and monetary policies have been sound, and Mexico's flexible exchange rate regime has provided a useful shock absorber, helping support the recovery. The three successive FCL arrangements have backed the authorities' macroeconomic strategy by providing a significant buffer against potential tail risks.<sup>1</sup>

### 2. Robust growth has brought output back to pre-crisis levels.

Manufacturing exports have led the recovery, with a rebound in domestic demand helping sustain the momentum. Strong links with the U.S.,

particularly in manufacturing, have helped jump-start growth. The recovery in consumption has also been pronounced, linked to a recovery in employment, while the upswing in investment, which has been more subdued, now appears to be gaining momentum as excess capacity is being absorbed. Output has returned to pre-crisis levels, while a broad set of economic indicators suggests that demand pressures remain subdued. While employment has been improving, unemployment and underemployment remain above pre-crisis average levels. Credit to the private sector is recovering firmly, with growth still below pre-crisis rates. In this context, inflation dynamics have remained benign, with headline and core inflation declining to close to the 3 percent target.

### 3. Mexico's cyclical recovery and easy foreign financing conditions have rekindled capital inflows and currency appreciation.

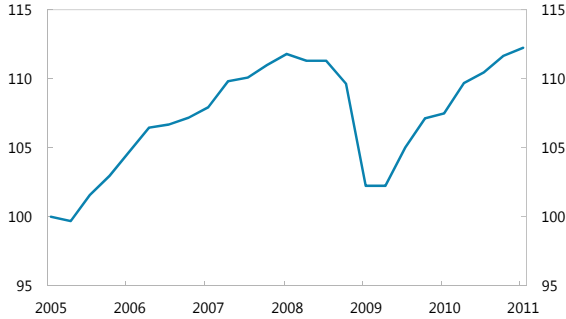
Portfolio inflows reached US\$37 billion in 2010, a historical high, with most of these flows (US\$23 billion) into government bonds. This responded in part to the inclusion of Mexico in the global bond index WGBI, which has attracted long-term institutional investors to Mexico's strong sovereign credit. Inflows

<sup>1</sup> The annual review of qualifications for Mexico's FCL is scheduled for December 2011.

**Figure 1. Mexico: Evolution of the Real Sector, 2005–11**

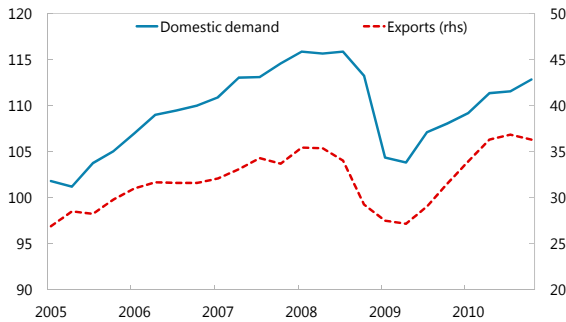
The recovery has been V-shaped, with output above pre-crisis levels...

**Real GDP**  
(in percent of 2005 GDP)



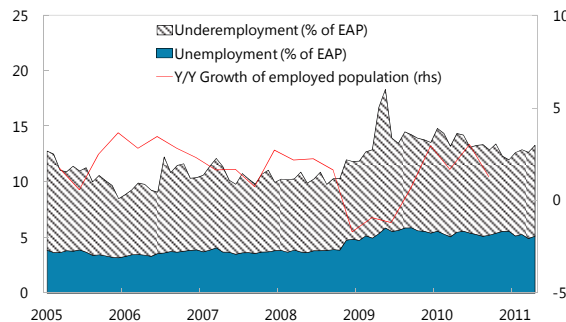
...but increasingly supported by the recovery in domestic demand.

**Domestic demand and Exports**  
(in percent of 2005 GDP)



...supported by gradually improving labor market conditions.

**Unemployment and Underemployment**



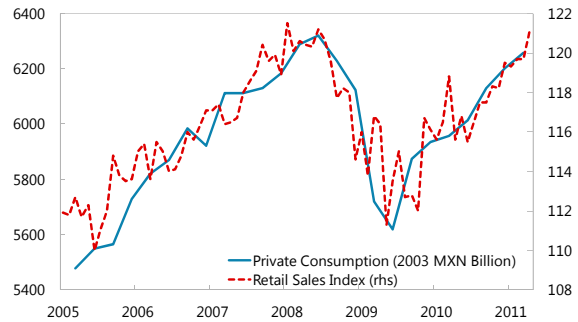
...led by manufacturing exports to the U. S. ...

**Mexico: Industrial production and Non-oil exports**  
**US: Industrial production**



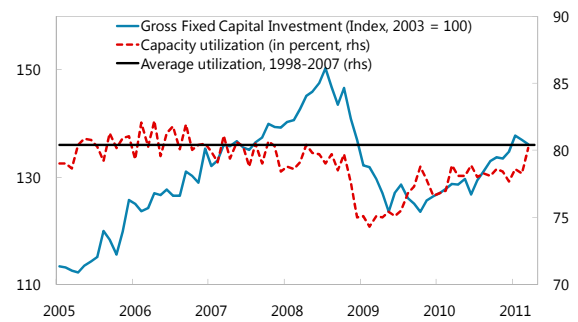
Consumption has also experienced a V-shaped recovery, and is nearing pre-crisis levels...

**Consumption (National Accounts) & Retail Sales Index**



The recovery in investment has been U-shaped, and reduced slack bodes well for future growth.

**Gross Fixed Capital Investment and Capacity Utilization**



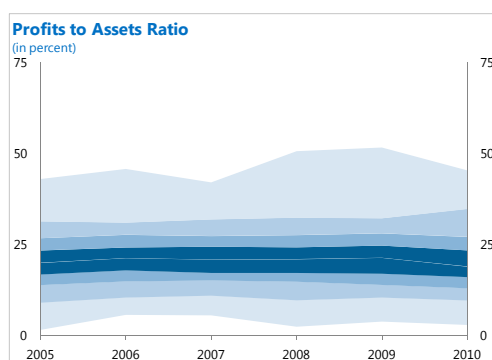
### Box 1: Corporates and Households Balance Sheets

**Leverage levels in Mexico are moderate.** The government debt level is quite manageable, while corporate and households leverage is modest. Mexico's V-shaped recovery has been supported by the lack of significant balance sheet repair needs.

**Corporates remain profitable and with moderate leverage.** A sample of 159 large corporates suggests that profits were resilient to the crisis, and that leverage levels remain modest. While the average

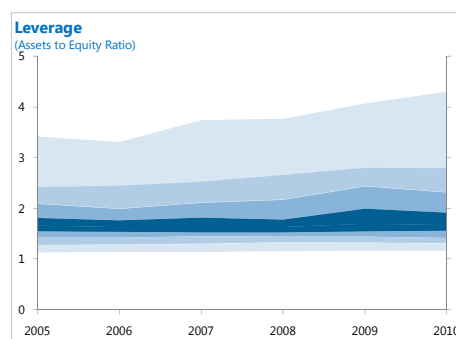
share of foreign debt has declined to about 30 percent of the total, short-term debt still accounts for about two-thirds of total debt.

**Household debt remains relatively low, at about 20 percent of disposable income.** Consumer credit amounts to less than 7 percent of disposable income and has not returned to pre-crisis levels. Mortgage lending has been more dynamic, but remains below 15 percent of disposable income.



Source: Ecomatrica

Note: Distribution according to deciles. The darker tones correspond to the middle deciles, and paler tones to the top and bottom ones.



#### Households debt, 2005-10

	2005	2006	2007	2008	2009	Est. 2010
Credit to the private sector, share of households disposable income						
<b>Total</b>	15.6	17.4	18.7	20.1	20.7	19.4
Consumption	4.8	6.2	7.0	7.0	6.4	5.8
Housing	10.8	11.2	11.7	13.1	14.3	13.6
(in million pesos, unless otherwise noted)						
<b>Memorandum</b>						
Households disposable income	6,531,891	7,126,603	7,725,432	8,410,831	8,260,772	9,164,566
as share of GDP	70.8	68.9	68.4	69.1	69.5	70.1

Source: Banxico, INEGI, and Staff estimates.

into treasury bills accelerated early this year, linked in part with carry trade operations.

**4. While the policy stance has supported the recovery, the policy mix has helped contain the effects of abundant global liquidity.** Following the fiscal and

monetary stimuli introduced in the wake of the global financial crisis, fiscal consolidation is underway to withdraw the stimulus while monetary policy remains appropriately supportive. The prudent policy mix, together with long-standing judicious banking regulations, has helped limit the effects of

capital inflows in the context of ample global liquidity. Ongoing efforts to improve the structure of the public debt, including with a noticeable lengthening in average maturities, have also helped improve resilience.<sup>2</sup>

- **Fiscal consolidation** is underway to withdraw the 2009 fiscal stimulus (3 percent of GDP). The 2010 tax package (1 percent of GDP) and spending restraint this year and last will help unwind the stimulus (in part by saving oil revenue windfall). In this context, gross public debt has stabilized at about 43 percent of GDP.
- **Monetary conditions** remain relatively accommodative. The policy rate has been kept at its lowest level of 4.5 percent since mid-2009, equivalent to a rate of around 1 percent (ex-ante) in real terms. The appreciation of the peso (nearly 10 percent against the U.S. dollar over the past year) has partially offset the monetary stimulus. Inflationary pressures remain subdued and medium-term inflation expectations are firmly anchored, albeit still somewhat above target.
- The tightening of the fiscal stance, in the context of a somewhat accommodative

monetary policy and longstanding prudent banking regulation on FX liquidity, has helped **ease capital inflows** associated with carry trade operations (Box 2).

- The **real effective exchange rate** has appreciated considerably since the global financial crisis, but remains somewhat below the average level before the crisis. CGER estimates indicate that the peso is broadly in line with fundamentals, with the external current account deficit expected to remain moderate over the medium term (Box 3).

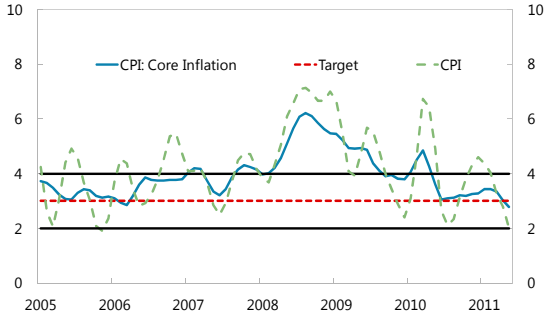
<sup>2</sup> The average maturity of government debt has increased substantially, from 6.4 years to 7.3 years over the last twelve months.



**Figure 2. Mexico: Monetary Policy, 2005–11**

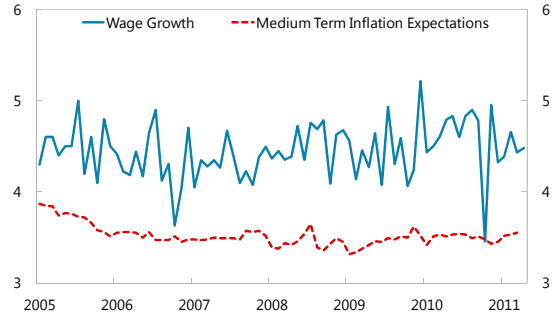
*Inflation pressures are subdued...*

**Changes in Consumer Price Index**  
(quarter on quarter percent annualized change)



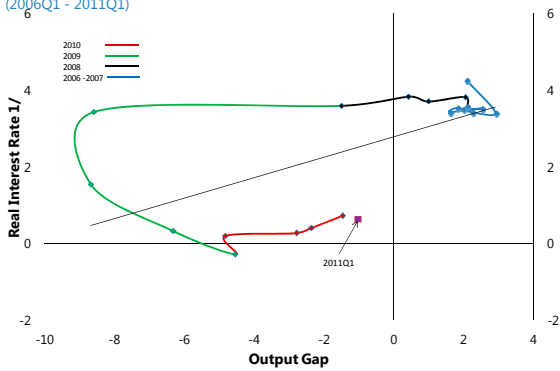
*...and inflation expectations remain firmly anchored, albeit somewhat above target.*

**Wage Growth and Medium-Term Inflation Expectations**  
(In percent)



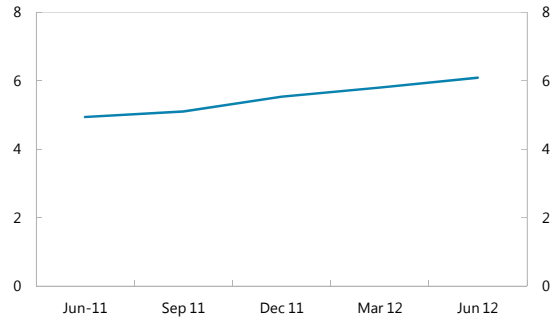
*Monetary policy has been supportive, and...*

**Real Interest Rate and Output Gap**  
(2006Q1 - 2011Q1)



*...the market expects a very gradual move toward neutral rates.*

**1M TIE Futures as of April 11, 2011**  
(in percent)



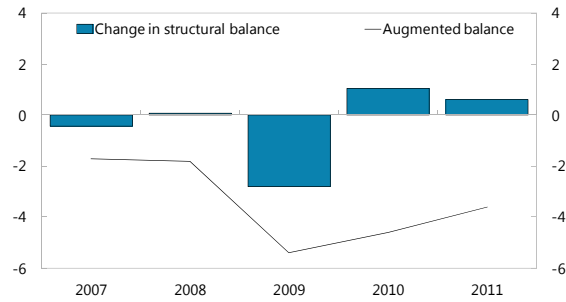
Sources: Banxico, EMED, Haver Analytics, Bloomberg LLP, WEO, and IMF staff calculations.

1/ Defined as overnight interest rate minus 12 months ahead inflation expectations.

**Figure 3. Mexico: Fiscal Sector, 2006–11**

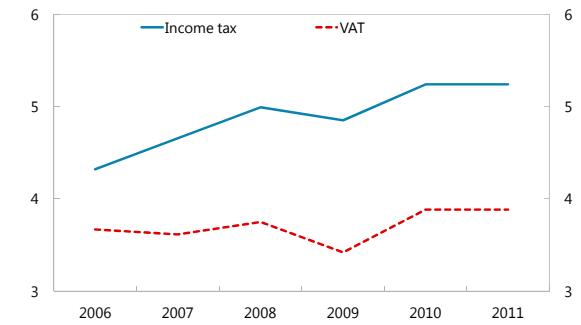
*The 2009 fiscal stimulus is being withdrawn....*

**Fiscal balances**  
(In percent of GDP)



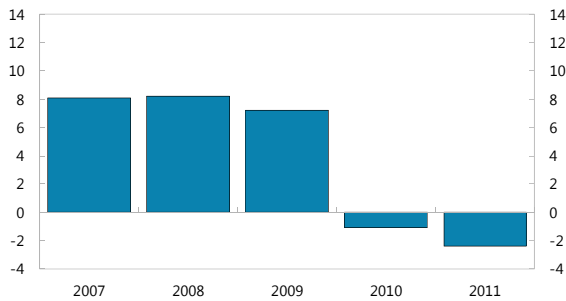
*...through the 2010 tax package...*

**Tax Revenue**  
(In percent of GDP)



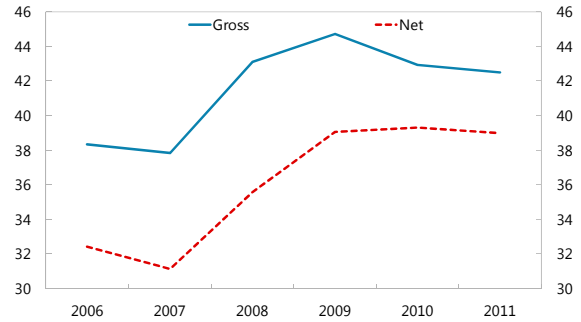
*...and lower real spending...*

**Real Primary Spending Growth**  
(In percent)



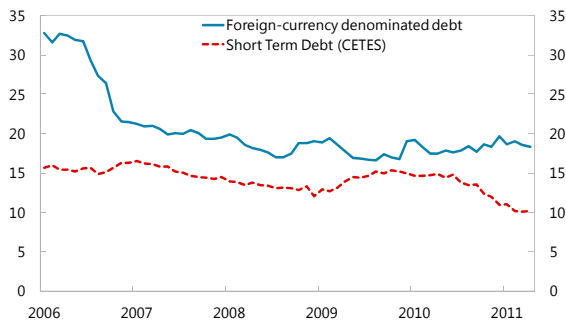
*...stabilizing public debt...*

**Public Debt**  
(In percent of GDP)



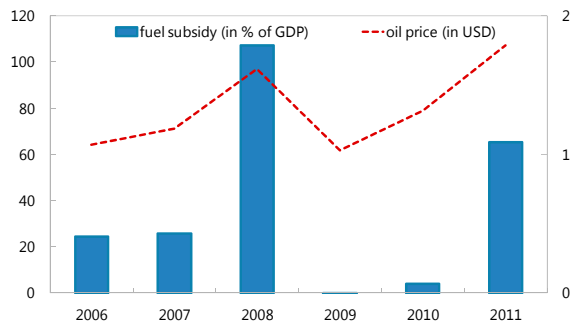
*...while reducing roll-over and foreign exchange risks.*

**External and Short Term Debt**  
(As percent of Gross Debt)



*Fuel subsidies remain a challenge.*

**Oil**



Sources: SHCP, Haver Analytics, and IMF staff calculations.

### Box 2. Foreign Exchange Liquidity Coefficient

International experience has shown that maturity and currency mismatches in the banking sector can amplify an exchange rate shock and create banking and balance of payments disruptions. In addition, Mexico's past crises revealed that FX risk exposures can be higher than suggested by net open positions, because banks can be actively engaged in a variety of operations, including speculative structured notes in domestic currency linked to the exchange rate.

Learning from past crises, Mexico's central bank has had long-standing regulations on foreign exchange exposures, including through a liquidity coefficient in foreign currency. These regulations encourage banks to have limited twin currency/maturity mismatches, maintaining adequate liquidity in foreign currency,

thereby requiring them to internalize the risk of operating in a currency for which the central bank has limited lender of last resort capacities.

The FX liquidity coefficient makes it very expensive for banks to borrow in foreign currency and lend in pesos, limiting capital inflow intermediated by the banking system and its ability to be counterparty in carry trade operations. To prevent regulatory avoidance, the central bank has included in the definition of foreign exchange positions the peso-denominated notes that are linked to the exchange rate. In the event, the FX liquidity coefficient proved useful to limit the impact of volatile capital flows on Mexican banks during the 1998 Russian crisis and the recent global financial crisis.

#### 5. Mexico's foreign reserves buffers have been reinforced through oil revenue windfalls and an increased FCL insurance.

The authorities have enhanced foreign reserve buffers predominantly through higher sales from the state oil company (Pemex), while the FCL remains a significant insurance against tail risks. Gross international reserves stand now at US\$131 billion, up US\$27 billion over the last 12 months, with intervention through rule-based options amounting to less than US\$6 billion. Moreover, the authorities have complemented their own international reserves buffers with a new FCL arrangement in January 2011 (with an increased access from 1000 to 1500 percent of quota, or about US\$73 billion) to insure against the tail risk of renewed major global dislocations.

#### 6. The financial sector in Mexico proved resilient during the global financial crisis, with credit growth supporting the recovery.

Financial soundness indicators did not deteriorate significantly during the crisis, with the absence of major strains in the banking system owing, in part, to a large deposit base, the absence of large complex off-balance sheet activities, and limited cross-border linkages. Capital adequacy ratios and liquidity indicators are now above pre-crisis levels. Non-performing loans, which rose only moderately, have fallen back and are well provisioned. The recent stress testing by Mexico's Financial Stability Council confirmed the resilience of the banking system to potential adverse shocks. In addition, related party lending regulations have been tightened further. Credit growth to the private sector has recovered, and is now expanding in line with the cyclical recovery in financing needs.

### Box 3. Mexico: Exchange Rate Assessment

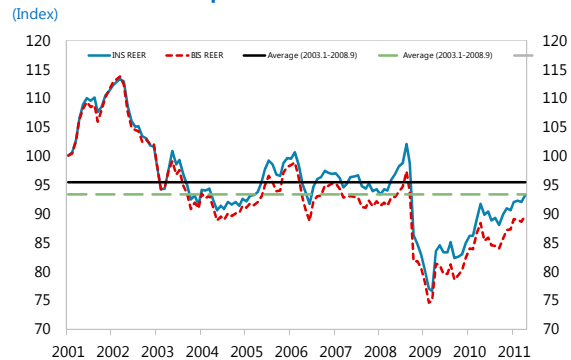
**Mexico’s real effective exchange rate (REER) has increased considerably since the trough of the peso during the global crisis.** Although this increase amounted to 18 percent through April 2011, the REER is still about 4 percent below the average pre-crisis level. In this context, Mexico’s export performance has improved and its market share in the U.S. has recovered from pre-crisis lows, moving above the early-2000 levels.

**The current account deficit, which narrowed during the global crisis, is expected to widen gradually over the medium term.** Mexico’s oil balance is expected to deteriorate gradually under the production and consumption trajectories currently envisaged. The declining oil balance is expected to be partially compensated by the improvement in the non-oil balance. As a result, the current account deficit will widen gradually to about 1½ percent of GDP by 2016, a moderate and sustainable level.

**CGER estimates indicate that the peso is broadly in line with fundamentals.** The macroeconomic balance approach suggests that the real effective exchange rate is only marginally (6 percent) above its medium-term value, although the result is sensitive to the envisaged trajectory of the oil balance. The equilibrium real exchange rate and external sustainability approaches show the real exchange rate to be modestly below its medium-term value.<sup>3</sup> On average, there is no strong indication that the peso is significantly apart from its equilibrium level.

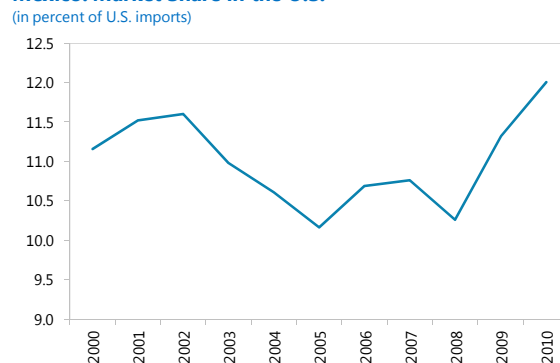
<sup>3</sup> The macroeconomic balance, equilibrium real exchange rate, and external sustainability approaches show the peso to be broadly in line with its estimated medium-term value at, respectively, 6 percent above and -11 percent and -1 percent below the estimated norms.

#### Mexico: REER developments



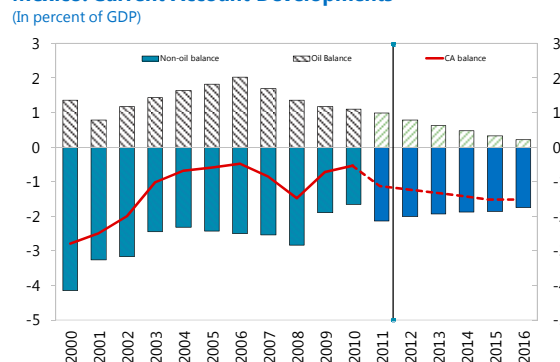
Sources: BIS, and INS

#### Mexico: Market Share in the U.S.



Source: DOTS

#### Mexico: Current Account Developments

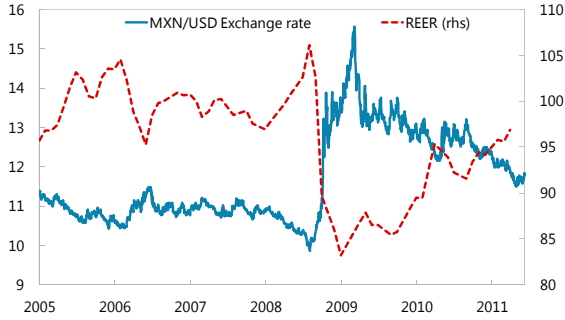


Sources: Banxico, and staff calculations

**Figure 4. Mexico: Evolution of the External Sector, 2005–11**

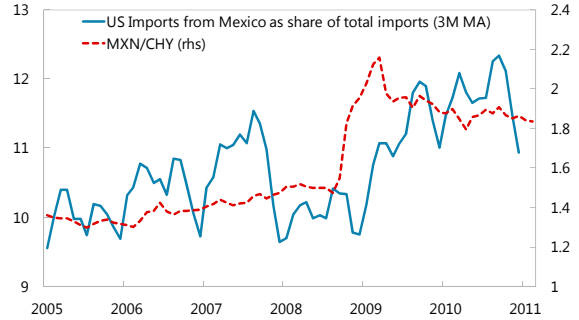
The peso has appreciated but remains below pre-crisis levels...

**Peso Foreign Exchange Rate**



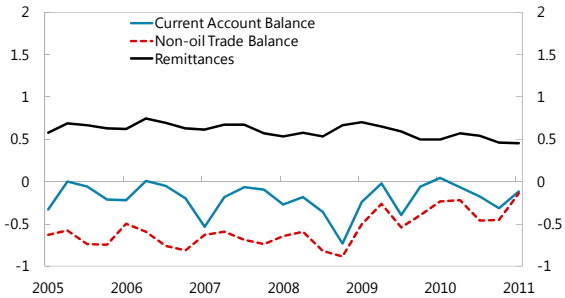
...supporting Mexico's exports.

**US Imports from Mexico and exchange rate MXN/CHY**



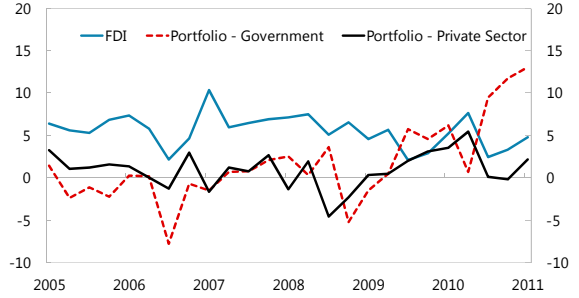
The current account and non-oil deficits remain moderate

**Current Account**  
(in percent of GDP)



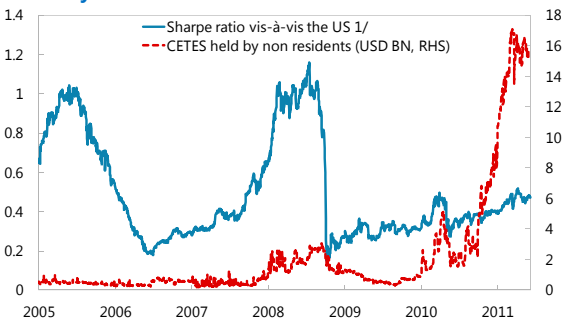
Inflows have been strong, largely reflecting foreign investment in government securities.

**Financial account**  
(in billions of U.S. Dollars)



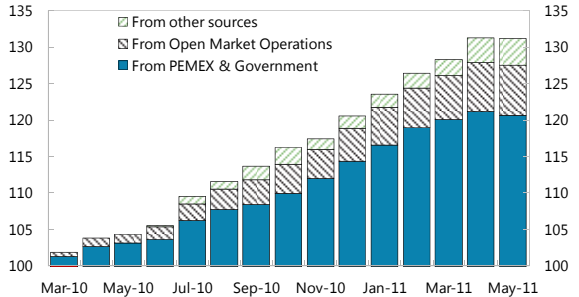
Short-term inflows have also increased...

**Mexico's 3-month interest rate sharpe ratio & tenure of CETES by non-residents**



...while reserve has been strengthened alongside with moderate intervention.

**Level of reserves**  
(in billions of U.S. Dollars)



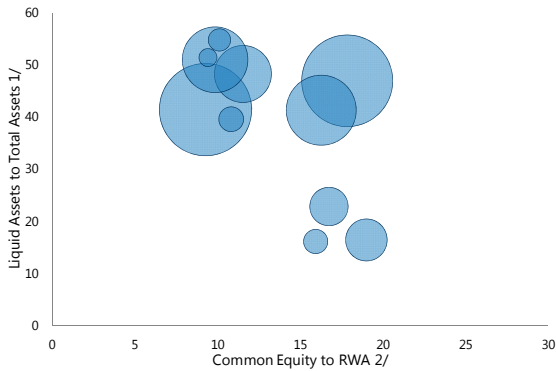
Sources: Banxico, IFS, Haver Analytics, and IMF staff calculations.

1/ Defined as the difference in the 3-Month risk free interest rate swap of Mexico and the United States divided by the volatility of a 3-Month at-the-money USD/MXN option.

**Figure 5. Mexico: Financial Sector, 2005–11**

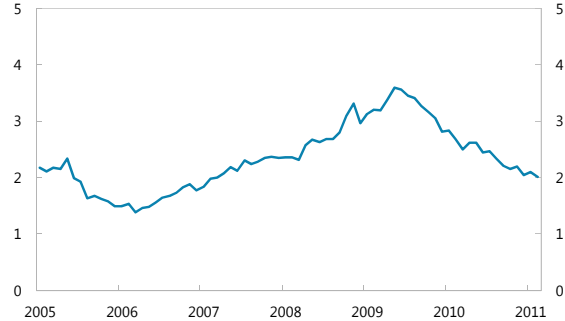
*Banks have strong capital and liquidity positions...*

**Banking Sector Ratios**



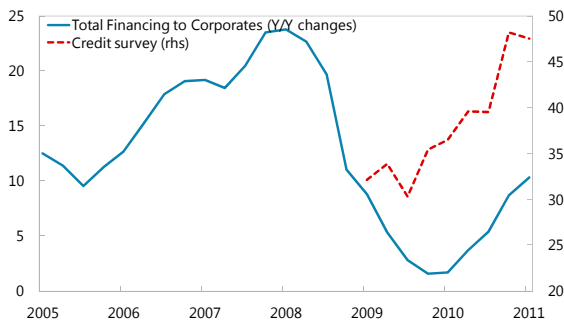
*...and asset quality has been resilient to the global crisis...*

**Non-Performing Loans to Total Gross Loans, Deposit Takers**  
(In percent)



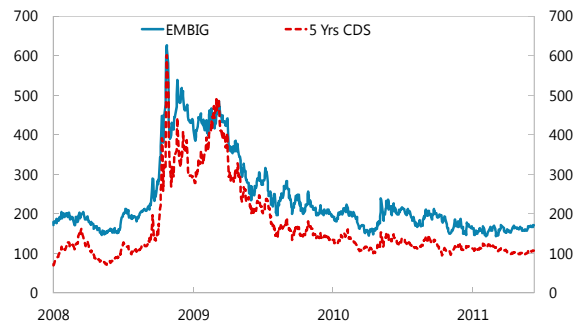
*...allowing a recovery in bank credit amid improving lending conditions.*

**Lending and Credit Conditions**



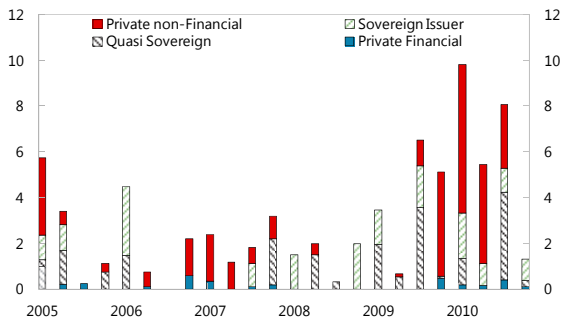
*Sovereign spreads at historically low levels...*

**Sovereign Risk: EMBIG and CDS**  
(Basis points)



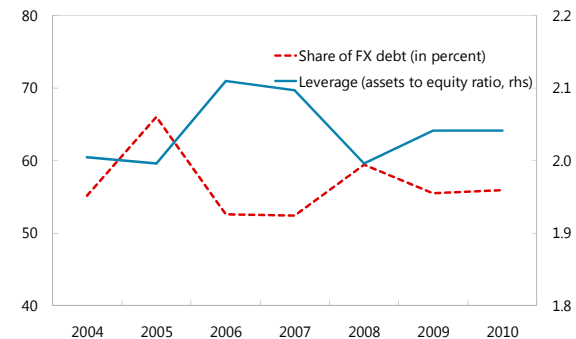
*...have facilitated corporations' access to foreign funding...*

**Proceeds of Bonds Issued Abroad by Mexican Corporations**  
(In billions of U.S. Dollars)



*...but corporate leverage and foreign currency debt remains moderate.*

**Corporates' Ratios**



Sources: Banxico, Bloomberg LLP, Dealogic, Economatica, CNBV, WEO, Haver, Financial Soundness Indicators Database, and IMF staff calculations.

1/ Size of bubbles represents total assets

2/ The horizontal axis is cut at 30 in order to present the largest 11 banks, which account for 90% of the banking system.

## OUTLOOK AND RISKS

**7. Strong growth is envisaged to continue this year and into 2012, bringing output in line with potential, but important downside risks persist linked to the global outlook.** The near term outlook is supported by the expected continued recovery in the U.S. and solid domestic demand growth in Mexico, notwithstanding some softening in growth in the first half of this year. Over the medium term, growth is envisaged to converge to Mexico's potential growth rate, estimated at 3¼ percent in the absence of comprehensive structural reforms (Selected Issues Paper).

- The near-term balance of risks appears tilted to the downside, associated with the global outlook. A more protracted slowdown in the U.S., particularly if it involved manufacturing, would represent a material drag to Mexico's growth given its close integration with the U.S. economy. Renewed global financial turmoil from unsettled conditions in Europe could adversely affect Mexico, given its close

integration with international capital markets, especially if contagion were to spill over to countries beyond the epicenter and rekindle counterparty uncertainty and generalized risk aversion. Downside risks to global growth could also arise from a persistent increase in oil prices, which could have a limited positive direct effect on Mexico but a strong indirect negative effect associated with a slowdown in the U.S. economy.

- Longer-term risks stem primarily from domestic structural sources. Main downside risks for Mexico are linked to a rise in fiscal pressures, notably a decline in oil revenues as a share of GDP and an increase in age-related spending. On the other hand, the staff and authorities agreed that the effective implementation of productivity-enhancing reforms could provide considerable upside to the growth outlook.

## KEY POLICY ISSUES

### A. Near-Term Macroeconomic Policies

**8. With growth in Mexico expected to continue on a firm footing, discussions focused on how to gradually adjust the policy stance and rebuild policy buffers, taking into account heightened global uncertainties.** Mexico implemented an effective countercyclical policy response to the global crisis, which has supported a V-shaped output recovery. In this context, discussion centered on how to balance domestic cyclical conditions and increased global downside risks in adjusting macroeconomic policies going forward.

**9. The authorities' intend to continue with fiscal consolidation in 2012 to unwind the past stimulus.** They considered that a gradual fiscal consolidation this year and next was warranted to withdraw the fiscal stimulus introduced in 2009, at the time of the global crisis.<sup>3</sup> They noted that the 2010 fiscal package already envisaged reducing the fiscal deficit during the 2010–12 period, through a combination of higher tax rates and contained expenditure growth. They indicated that their plan was to return in next year's budget to the

balanced-budget rule and lift again the ceiling on the accumulation of resources in the oil stabilization fund, as they did in 2010 and 2011. Thereafter, Mexico's balance-budget rule would help maintain the public debt broadly stable as a share of GDP. Staff supported the authorities' approach, noting that, with growth on a firm footing, plans for fiscal consolidation were not expected to jeopardize the recovery. The augmented primary balance is envisaged to improve by about 1 percentage points of GDP in 2011 (to -0.5 percent of GDP) and by ½ percentage point in 2012 (to balance). Staff also noted that continuing with the gradual adjustment of domestic fuel prices to align them with international prices, as planned by the authorities, would reduce the current fiscal cost (about 1 percent of GDP in 2011) and remove the untargeted subsidy.

**10. With fiscal consolidation underway, the challenge of balancing domestic cyclical conditions and the potential impact of increased global downside risks would befall on monetary policy.** Staff concurred that, at present, demand pressures appear muted and that the task going forward will be to assess the speed of the economic recovery in Mexico and the level of remaining slack in

<sup>3</sup> The negative fiscal impulse envisaged for 2011 and 2012 is about ¾ percent of GDP in each year.



resource utilization.<sup>4</sup> While the potential for supply shocks having second-round effects and possibly affecting inflation expectations warrants Banxico's close monitoring, the external outlook has become more clouded, introducing an element of uncertainty with respect to the appropriate timing for future monetary policy tightening. Moreover, as pointed out by the authorities, the recent appreciation of the peso has in effect contributed to some tightening in Mexico's monetary conditions. On balance, given the still-benign inflation landscape and firmly-anchored inflation expectations, the authorities and staff concurred that there is room for Banxico to continue assessing the evolution of domestic and external circumstances in the coming months in deciding the course of monetary policy. Moreover, Banxico's officials underscored that the important efforts undertaken recently to enhance communications will strengthen the public's understanding of the delicate balancing act behind the monetary policy decisions and help further anchor inflation expectations (Box 4).

<sup>4</sup> The task is further complicated because the degree of remaining slack in the economy remains uncertain, with post-crisis standard output gap estimates subject to larger margins of error than usual, putting a premium on considering a broad set of economic indicators to assess domestic cyclical conditions (Selected Issues Paper).

**11. Mexico's floating exchange rate has proven an important buffer against external shocks.** Major progress in reducing external vulnerabilities over the last decade and the established inflation-targeting framework have allowed for the unencumbered working of the floating exchange rate regime. The depreciation of the peso during the global financial crisis helped cushion the adverse external shock to external demand, public finances, and financing conditions. The appreciation of the peso since then has mainly responded to Mexico's improved cyclical position and its increased recognition among foreign investors as a strong sovereign credit. The authorities indicated that the appropriate response to increased capital inflows remained an adequate macro policy mix (fiscal, monetary and financial) and the full working of the flexible exchange rate regime. Mexico's existing sound prudential framework, particularly the long-standing FX liquidity coefficient, would mitigate the potential risks associated with a surge in inflows.

**12. International reserves remain comfortable for normal times.** The recent build-up of reserves, mostly through higher revenues from Pemex with rule-based intervention playing a limited role, is consistent with the authorities' objective of increasing its level of external insurance, reflecting the lower coverage of balance sheet

exposures relative to peers, which had been a concern for investors during the global crisis. The level of reserves appears adequate for normal times. Given that the global

environment remains highly uncertain, the authorities and staff agreed that the FCL is a useful complement to self-insurance and an important buffer against potential tail risks.

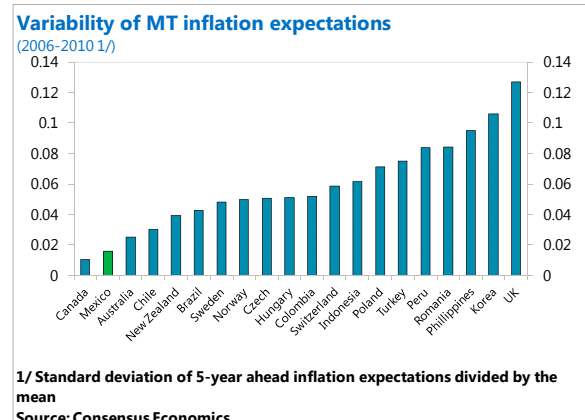
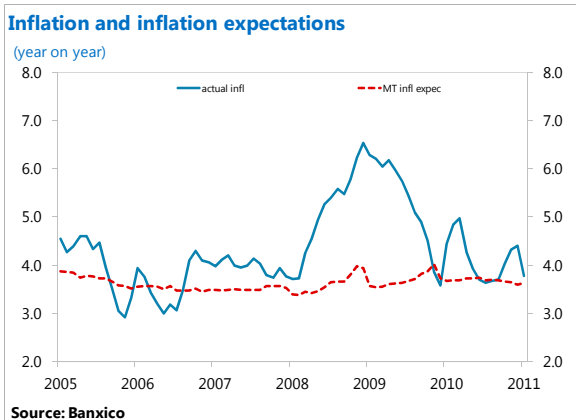
**Box 4. Central Bank Communication and Inflation Dynamics**

**The adoption of an inflation targeting (IT) framework in the early 2000s represented a key milestone in the evolution of Mexico’s monetary policy regime.** Together with the implementation of prudent fiscal policies, the IT framework succeeded in controlling inflation, bringing it down from nearly 20 percent in 1999 to an average level of about 4 percent since 2003, or close to the authorities’ 3 percent target. Reflecting gains in Banxico’s credibility, the price formation process in Mexico has also become much less persistent under the IT regime (e.g., Chiquiar et al., 2010), and medium-term inflation expectations have been very firmly anchored—albeit somewhat above the target—despite fluctuations in headline inflation.

**In an effort to further strengthen the IT framework, Banxico has taken important measures to enhance its communication, bringing it in line with the international best practice.** In particular: (i) in 2011 Banxico started publishing the minutes of its policy meetings, which include detailed analyses of the global and domestic economies, and covering extensively discussions

amongst board members, presenting the nuances behind each policy decision and helping the private sector better understand the importance of various factors shaping the views of the board; (ii) its quantitative assessment has increased in granularity, using for instance fan charts showing baseline projections and the balance of risks; and (iii) there has been an increase in the number of public speeches and presentations by Banxico authorities, expanding communication beyond formal channels.

**Staff research underscores the benefits of enhanced central bank communications.** Tang and Yu (forthcoming) illustrate how clear central bank communication about the bases for its policy decisions can help better anchor market perceptions of the monetary policy response function. Based on parameters similar to those estimated for Mexico, the paper’s simulates stylized scenarios involving uncertainty about the size, nature, and persistence of macroeconomic shocks to illustrate quantitatively how improved communications can bring about more stable inflation and smoother interest rate adjustment.



**13. Mexico's prudential framework is ahead of new international standards, with banks well positioned to implement them.**

The authorities noted that Mexico will be implementing most Basel III prudential regulations ahead of the international schedule.

- Capital requirements today are broadly compliant with future Basel III guidelines (Box 5). In addition, subordinated debt, which counted toward Tier-2 capital, will be phased out. Most banks are already compliant with the short-term liquidity requirement of Basel III.<sup>5</sup>
- Staff commended the authorities for the early adoption of a Financial Stability Council to monitor systemic risks and coordinate efforts to address potential financial vulnerabilities (Box 6).
- While Mexico's regulatory perimeter is already broad, plans to gather information and allow non-bank financial intermediaries (Sofoles/Sofomes) to come into the regulatory perimeter are judicious, given their difficulties experienced during the global crisis. These non-bank intermediaries are being brought into the regulatory perimeter by allowing them to

apply for banking licenses subject to certain conditions or to voluntarily adhere to certain regulatory standards. The authorities are also taking steps to eliminate the possibility of regulatory arbitrage by foreign non-subsidiary banks.

- In addition, steps are being taken to monitor vulnerabilities that surfaced in the corporate sector during the crisis. With respect to derivative positions, progress has been made on data requirements for listed corporates, although some data gaps remain for non-listed firms that may have operations with off-shore counterparts. Regarding derivatives regulation, Mexico is planning to create a trade registry for OTC operations, in coordination with pending U.S. regulations, given that most transactions are with U.S. counterparties.
- An FSAP Update will be take place in the fall of 2011. Mexico's financial reforms and capacity building efforts over the past decade have solidified the stability of the financial sector, which showed its payoff during the recent global financial crisis.

**14. However, international financial regulatory reforms, while beneficial for global financial stability, could have unintended consequences on Mexico's banking system.** In particular, the authorities expressed concern that the introduction of new capital surcharges for systemic and

<sup>5</sup> Other global reforms, such as the adoption of FSB standards on financial sector compensation, are not expected to have a significant impact in Mexico.

trading risks, as well as a recalibration of capital charges for sovereign risks could negatively affect Mexico. A more thorough consideration of the side effects of

international regulatory reforms on countries that are host to subsidiaries (or branches) of global banks would be needed.

### Box 5. Basel III

**Mexico is well positioned to adopt the regulatory changes envisaged under Basel III.** Banks already fulfill the new capital requirements and, with the exception of some smaller banks, the liquidity requirements. The authorities are therefore considering an accelerated pace of implementation of Basel III, ahead of the international schedule.

**Capital requirements.** The authorities plan to introduce new capital requirements in 2012.

- **Common equity.** Banks will need common equity of 4.5 percent of assets plus a capital conservation buffer of 2.5 percent, and a counter-cyclical buffer (ranging from 0-2.5 percent). The conservation buffer imposes constraints on earning distributions when the situation of a bank deteriorates. At end-2010, all banks complied with the minimum requirements set for 2019, with common equity at 13.8 percent, significantly exceeding requirements. While the authorities are working on the practicality of instituting counter-cyclical provisioning, the introduction of expected loan-loss provisioning has brought about an element of counter-cyclicality. Pending a decision on counter-cyclical buffers, common equity is to be increased by 2.5 percentage points in the meantime.
- **Tier 1 capital of 6 percent.** At end-2010, Mexican banks had an average Tier one capital ratio of 14.7 percent.
- **Leverage ratio of 3 times Tier 1 capital.** The

leverage requirement is expected to become effective by 2018, but it is not currently binding for any bank in Mexico.

**Liquidity requirements.** The Liquid Coverage Ratio and the Net Stable Funding ratio will be subject to an observation period, with a review to assess unintended consequences.

- **Liquidity Coverage Ratio (LCR).** It requires banks to maintain a stock of "high-quality liquid assets" that is sufficient to cover net cash outflows for a 30-day period under a stress scenario. In Mexico, banks' liquid assets are large in relation to short-term liabilities. A mid-2010 assessment suggests that only some of the smaller banks may not yet comply with this ratio.
- **Net Stable Funding Ratio (NSFR).** This standard requires a minimum amount of funding that is expected to be stable over a one-year horizon, based on liquidity risk factors assigned to assets and off-balance sheet liquidity exposures. Mexico has a significant deposit base which places it well with respect to this requirement.

### Box 6. Financial Stability Council

In 2010, Mexico established a **Financial Stability Council (FSC)** to identify and address systemic risk, facilitating coordination and information exchange among policy makers and financial regulators.

The Council is chaired by the Minister of Finance, and includes representatives from the central bank, the bank and exchange supervisor (CNBV), the insurance supervisor (CNSF), the pension funds regulator (CONSAR), and the deposit insurance institute (IPAB). Although it is formally established to work under a majority voting rule, it is in practice envisaged to operate by consensus, with each institution responsible for the implementation of policies within its legal mandate.

The Council has set up **four working groups** to strengthen its assessment of risks seeking to:

- (i) standardize and collect information relevant to

- monitoring financial stability; (ii) develop a framework to analyze financial system vulnerabilities, identify relevant variables, and assess specific risks in a timely manner; (iii) design metrics and methodologies for the measurement of systemic risk, complementing the analysis of vulnerabilities; and (iv) ensure that financial market participants have sufficient and timely information for making decisions.

The FSC has recently published its **first annual report**, in which it assessed the resilience of Mexico's financial sector, based on its stress testing analysis. It highlighted a set of systemic risks, including a potential reversion of capital flows, the impact of the European crisis on the Mexican financial system, and a more protracted slowdown in global economic activity.

- Capital surcharge for systemic institutions could have a disproportionate effect on Mexico because of the large share of systemic banks in its financial sector, leading to lower credit growth and higher intermediation margins. The authorities also highlighted the asymmetry in information sharing between home and host countries for global institutions.
- There is also a concern about Basel III's capital surcharges for risks on banks' trading books. Banks in Mexico are important financial intermediaries, with their trading activities being an important source of liquidity for domestic sovereign debt and derivative markets. There is a concern that the new regulations could reduce market liquidity and increase spreads.
- A recalibration of sovereign risks in the balance sheet of global financial institutions, an issue already identified under Basel II, could also affect domestic debt markets. Under Basel guidelines, global banks could treat the holdings of domestic debt by subsidiaries as foreign debt, requiring higher capital and potentially creating incentives for divesting from domestic debt holdings and an increase in required interest.

## B. Global Spillovers

### 15. Spillovers from fiscal and monetary stimuli in advanced economies in the aftermath of the global crisis, particularly in the U.S., have been largely positive for Mexico.

The authorities concurred that efforts to sustain domestic demand in advanced economies during the global crisis were beneficial for Mexico through real/trade channels, as well as improved access to external financing.

- Mexico is strongly integrated with the United States. About 80 percent of Mexican non-oil exports go to the U.S. market, and Mexico's industrial production closely tracks that of the U.S.<sup>6</sup> This reflects, in part, the high degree of integration of Mexican manufacturing into the U.S. industrial production chain.
- Stabilized financial markets and low interest rates also helped improve Mexico's external financing conditions. Capital inflows into Mexico have become increasingly more important, mitigated by an appropriate policy mix and the flexible exchange rate. If U.S. monetary conditions

<sup>6</sup> The contemporaneous correlation of industrial production between the U.S. and Mexico is high at nearly 0.9 in the period 2006–10. Moreover, Swiston and Bayoumi (2008) "Spillovers Across NAFTA," IMF Working Paper WP/08/03 estimate that a 1 percent change in U.S. GDP would result in a 1½ percent change in Mexico's GDP.

remain loose for a protracted period, the pace of capital inflows to Mexico could intensify. In this context, Mexico's flexible exchange rate would serve well to contain excesses, while it would be a good opportunity to advance the pace of fiscal consolidation and rebuild policy buffers. Mexico is well prepared to absorb increased capital flows, with moderate household and corporate leverage and a sound prudential framework. The authorities stressed that the use of capital controls in other emerging market economies to deal with easy foreign financing conditions may have negative spillovers for financially open economies, by diverting capital flows and limiting exchange rate adjustments.

- Going forward, the eventual withdrawal of stimuli in advanced economies could entail new challenges, including the risk of a rapid reversal of capital flows.

### 16. A potential surge in global risk aversion from unsettled market conditions in Europe remains a concern.

Mexico's main direct link with Europe is through the large presence of Spanish banks (Santander and BBVA) in its domestic financial system. The authorities have tightened regulations and supervision of subsidiaries of foreign banks,

including with limits on dividend distribution (to avoid an erosion of capital) and related-party lending. They see the bank channel as well ring-fenced, an assessment shared by market participants and local analysts.<sup>7</sup> Although the direct impact from unsettled conditions in Europe is seen as limited, an increase in global risk aversion and generalized flight to quality could affect even strong sovereign credits like Mexico. Mexico's debt structure and reinforced reserve buffers would help limit the effect of an increase in global risk aversion, but the increased liquidity and participation of foreign investors in Mexican securities markets in recent years could make this a potential channel in a tail scenario.<sup>8</sup>

**17. Competition with China in the U.S. market.** Although direct trade and FDI linkages between China and Mexico are limited, China is a key competitor in manufacturing with Mexico. The authorities have viewed China's undervalued currency as a contributing factor to Mexico's loss of export market share in the U.S. in the 2000s and the relocation of manufacturing activities from North America to China and Asia more

general. More recently, however, the appreciation of the renminbi against the peso, together with higher relative wage inflation in China, appears to have helped reverse part of the competitiveness disadvantage and regain some of the lost market share in the U.S. Going forward, unleashing Mexico's productivity growth would also be important to recovering its export potential and market share (Selected Issues Paper).

<sup>7</sup> The strong subsidiary model of these banks, together with the funding of their local operations primarily with domestic deposits, would be expected to lessen potential direct spillover risks.

<sup>8</sup> Foreigners' holdings of peso-denominated government securities have increased by about US\$40 billion since end-2009 to around US\$70 billion.

## C. Longer-Term Challenges

**18. Mexico's strong macroeconomic policies and frameworks are expected to continue to ensure stability over the medium-term.** Sound fundamentals, including an established inflation-targeting regime with a flexible exchange rate, a fiscal framework ensuring debt sustainability, a comfortable level of international reserves, and a sound prudential framework, have helped secure macroeconomic stability in Mexico and enhanced resilience to external shocks.

**19. However, Mexico will face fiscal challenges over the longer term arising from diminishing oil revenues and increasing age-related spending.** Addressing these issues to ensure fiscal sustainability will require a combination of revenue mobilization efforts with expenditure rationalization, and foresight over an extended horizon, in part to incorporate the long implementation lags of some of the reforms (Selected Issues Paper). The authorities concurred with staff's broad assessment of longer-term challenges. In the area of pensions, they emphasized that the reforms already implemented had helped address the imbalances of the previous regime and that the remaining issues were largely associated with the transition cost of these reforms.

- **Oil revenues** are expected to decline relative to GDP, in the context of broadly stable oil production and prices.<sup>9</sup> While risks associated with oil production seem to have declined, linked to a more balanced distribution of production and higher investment, reliance on oil revenues represent a significant challenge to the longer term fiscal outlook in the absence of a significant increase in volumes. At present, oil revenues account for a third of government revenues, and there is a risk that they could fall by about 4 percentage points of GDP by 2030, as the economy grows. Staff noted that the non-oil revenue mobilization efforts that will be needed to compensate for such a loss would need to focus, inter alia, on broadening the tax base of the value added and personal income taxes and revamping tax mobilization by subnational governments. The authorities agreed and underscored that subnational governments' revenues, in particular, should play a key role, in part to help align spending incentives at the local level (Box 7).

<sup>9</sup> At present, oil revenues accounts for about 8 percent of GDP.



### Box 7. Tax Mobilization in Mexico

**With oil revenues as a share of GDP envisaged to diminish in the future, a tax mobilization effort would be needed to replace lost revenues and address age-related spending pressures.** The level of non-oil tax revenue in Mexico is one of the lowest in the region and the lowest amongst OECD countries. Recent revenue trends show non-oil tax revenue in Mexico to be around 10 percent of GDP, with income taxes accounting for 50 percent of non-oil tax revenues and VAT for 40 percent. Key elements of Mexico's tax system and potential areas for reform include:

**Personal income tax (PIT).** The PIT in Mexico has a narrow base because of uncapped deductions, preferential regimes, and exemptions. Revenue productivity is low, despite a 30 percent top rate, as collections amounted 2.3 percent of GDP in 2010—one of the lowest in the OECD. The PIT would need to be simplified, its base broadened, and its progressivity enhanced. A reform of the PIT would bring exempt incomes (e.g., bonuses, overtime pay) into the tax base and replace existing deductions (e.g., mortgage interest) with higher basic exemption allowances for all taxpayers.

**Corporate income tax (CIT).** Mexico's CIT is generally sound and competitive. The base of the CIT could be broadened by bringing in

medium and large businesses in agriculture, forestry, and transportation from the simplified regime.

**VAT.** While VAT collections have been increasing slowly over the past decade, widespread zero rates and exemptions continue to seriously reduce their yield. These weaknesses, together with a reduced VAT rate in the border areas, complicate administration and make the VAT in Mexico the least revenue productive in the OECD. The VAT should be broadened by minimizing exemptions, unifying the rate across the country, and limiting zero rates to exports.

**Fuel taxation.** Domestic fuel prices in Mexico are administered. Given the spike in oil prices at the end of 2010, Mexico's policy of gradual gasoline price increases led to a "negative" excise tax in 2011. Gasoline pricing should continue to be increased and aligned with international process to regain a positive gasoline taxation in Mexico.

**Subnational taxation.** Subnational government revenue mobilization in Mexico is very low and should be enhanced. At around 1.3 percent of GDP, local tax collection is well below most OECD countries. For instance, municipal taxation of real estate yields  $\frac{1}{4}$  percent of GDP compared to about 1 percent of GDP on average in OECD countries and  $\frac{3}{4}$  percent of GDP in other Latin American countries.

- **Population aging** and the transitional costs from the reform of the old pension system are expected to put significant pressure on health and pension spending. The number of pension beneficiaries will increase rapidly as the population ages, while public spending in healthcare will rise because of aging and medical costs. Staff noted that both effects could increase public spending by about 3 percent of GDP by 2030, pointing to the need to revisit the main parameters of the pension system, including the retirement age.

**20. Further enhancing Mexico’s fiscal framework could help reduce procyclicality.**

The strong fiscal framework in Mexico has been critical to ensuring public debt sustainability. In the near-term, staff suggested that permanently removing the ceilings on the accumulation of resources in the oil stabilization fund would help save oil revenue windfalls and mitigate the potential procyclicality during upturns embedded in the fiscal rule. Over the medium term, Mexico’s strong fiscal framework could be enhanced by focusing on a structural balance measure. The authorities acknowledged the asymmetries of the current framework (potentially procyclical during upturns and broadly acyclical during downturns) and considered that, in the future, a structural fiscal rule could be contemplated to mitigate upturn procyclicality.

**21. Enhancing the coverage of subnational government finances and strengthening local revenue mobilization would help align spending incentives at the subnational level.**

Over 90 percent of subnational government revenues currently come from central government transfers, reducing incentives for prudent fiscal management at the subnational level. Staff also noted that, although subnational government debt remains moderate, at about 2½ percent of GDP, implicit pension liabilities are estimated to be considerable higher. In

addition, short-term borrowing by some local governments has increased, warranting close monitoring. In this context, staff stressed that broadening the reporting and coverage of subnational governments’ accounts, including their implicit pension liabilities, would help assess fiscal policy and public sector liabilities in a more comprehensive manner.

**22. Decisively pressing ahead with an ambitious program of structural reforms would be key to boosting Mexico’s growth, particularly in an environment of sluggish external demand.**

Despite the strong macroeconomic framework underpinning stability, the integration into NAFTA, and favorable demographics, Mexico’s growth only averaged about 3¼ percent a year over the two decades preceding the global crisis. This growth outcome has underperformed that of comparable peers. Going forward, staff and the authorities shared the view that, with the global environment likely to remain challenging and prospects for external demand subdued, stepping up structural reform efforts—some of which could yield rapid payoffs—would be essential. These reforms would also help to improve employment opportunities in the formal sector of the economy, which are limited in Mexico. There is broad consensus that reforms should focus on the following areas:

- **Boosting competition.** Concentration remains very high in key sectors of the economy (e.g., telecommunications, transportation, energy). The recent anti-trust reform is a welcome step to increase competition by enhancing the powers of the regulatory body. Moreover, ongoing efforts to distribute radio spectra through open auctions would contribute to more competitive markets. At the same time, there is scope to further build on recent reforms of state-owned energy companies to strengthen their productivity (e.g., further promoting limited-scope PPPs) and governance.
- **Broadening access to credit, including SMEs and households.** While Mexico's financial system is sophisticated, access to credit by some segments of the economy remain limited. Advancing initiatives to facilitate credit availability for SMEs, such as improving information flows on borrowers and strengthening the legal framework for the use of collateral, could help support investment and growth of these firms, increase their productivity, and bolster employment creation. Measures to promote private financing of infrastructure projects, including through PPPs, would also strengthen investment and contribute to unleashing higher growth. With household debt at a moderate 20 percent of disposable income, further efforts to reduce frictions in the financial system and enhance households' access to financial services could support more efficient saving and investment decisions.
- **Improving education and labor flexibility.** While enrolment has increased over the years, the quality of education seems to remain below that of peers. Measures to improve the quality of education, including through teachers' incentives, could significantly increase investment in human capital in Mexico. Also, long-standing contractual rigidities have weighed on employment in the formal sector of the economy, constraining an effective allocation of labor. Expediting reforms to enhance labor flexibility would be an important step toward creating a more dynamic labor market, including among the young.
- **Reinforcing domestic security.** Ongoing efforts to fight organized crime, including through the strengthening of the AML framework, are important to foster investment and growth.

## STAFF APPRAISAL

**23. Mexico's very strong fundamentals and policy track record proved crucial to withstand the fallout from the global crisis and to the V-shaped recovery.** The strong rule-based policy framework introduced in Mexico over the past decade includes the inflation targeting and flexible exchange rate regimes, the balanced-budget fiscal rule, and a sound prudential system. This framework has helped secure macroeconomic stability, enhance resilience to external shocks, and enable the authorities to implement a credible counter-cyclical policy response during the global crisis.

**24. With Mexico's economy expected to continue on a firm recovery, the policy challenges ahead include:**

- **Over the course of this year and next, how to gradually adjust the overall policy stance, taking due account of significant global uncertainty.** Following the effective countercyclical response to the global crisis, the gradual withdrawal of policy stimuli requires delicately balancing domestic cyclical conditions with global risks, with different fiscal and monetary timings.
- **Over the medium term, how to unleash Mexico's growth potential and**

**employment generation, while tackling its long-term fiscal challenges.** Decisively addressing Mexico's longer term issues will require anticipating well the fiscal challenges and pressing ahead with ambitious growth-enhancing reforms.

**25. After the stimulus provided during the global crisis, ongoing fiscal consolidation plans are judicious, on cyclical and structural grounds.** The planned return in next year's budget to the balanced-budget rule and the lifting of the ceiling on the accumulation of resources in the oil stabilization fund will help further unwind the fiscal stimulus. They will also bring the structural balance closer to pre-crisis levels, and help regain some fiscal space for potential downside risks to the global economy. Thereafter, the balanced-budget rule would help keep Mexico's public debt-to-GDP ratios broadly stable. The gradual adjustment in gasoline prices should continue, to bring them in line with international prices by next year. The elimination of the fuel subsidy could be complemented by enhancements in the safety net to protect the most vulnerable segments of the population from large increases in fuel prices.

**26. Mexico would benefit from gradually rebuilding fiscal policy buffers over the medium term.** Fiscal buffers before the crisis proved critical to pursuing a countercyclical policy response in the midst of extraordinary global circumstances. Gradually rebuilding these buffers would help provide additional insurance against potential downside risks. In that respect, permanently removing the ceiling on the accumulation of resources in the oil stabilization fund would help save revenue windfalls and reduce procyclicality. Further, consideration could be given to enhancing Mexico's strong fiscal framework by focusing on a structural balance measure. Also, broadening the reporting of subnational governments' accounts, including their implicit pension liabilities, would help assess fiscal policy and public sector liabilities more comprehensively.

**27. Monetary policy has successfully supported the recovery, and the challenge ahead will be to balance the domestic cyclical conditions with global uncertainties.** Key to the balancing task will be the speed of the economic recovery and weighing the level of remaining slack in resource utilization, the potential for supply shocks contaminating inflation expectations, and the potential for negative effects from the global environment. The benign inflation dynamics of recent months and firmly-anchored inflation

expectations provide the monetary authorities with room to decide on the best timing for the policy response to domestic and international developments. Recent efforts to enhance Banxico's communications will help to better convey the balancing of domestic and global conditions in policy decisions.

**28. The flexible exchange rate regime has served Mexico well, playing an important role in adjusting to domestic and external conditions.** In real effective terms, the Mexican peso has appreciated since the global financial crisis, responding to Mexico's improved cyclical position and its increased recognition as a strong sovereign credit. CGER estimates suggest the peso is broadly in line with fundamentals. The increase in international reserve buffers has stemmed mostly from high Pemex oil sales, with rule-based intervention playing only a limited role. As noted, the FCL remains a significant additional insurance against global tail risks.

**29. The financial sector proved to be resilient during the global crisis, and the prudential framework is generally ahead in the implementation of new international standards.** Mexico's financial sector indicators remain sound, back to pre-crisis levels, with credit growing at a sustainable pace, in line with the cyclical recovery. Most Basel III prudential regulations will be applied ahead of

the internationally-agreed schedule, with banks well positioned to implement them. Mexico has also been a leader in the setting up of a Financial Stability Council (FSC) to monitor systemic risks and help coordinate efforts to address potential financial vulnerabilities. The FSCs' broad data collection effort underway is welcomed, helping to identify systemic risks. In addition, Mexico could play a critical role in international fora to close remaining gaps, including for non-listed firms that have operations with off-shore counterparts. Monitoring the external debt of corporates, including positions in the derivatives market, will continue to be critical to assess vulnerabilities. With lending to subnational governments increasingly concentrated on a few smaller banks, close monitoring of those institutions is also warranted.

**30. Mexico faces longer term fiscal challenges arising from a projected decline in oil revenues relative to GDP and population aging.** Addressing these issues to ensure fiscal sustainability will require a combination of non-oil revenue mobilization efforts and expenditure rationalization. Given the long implementation lags of the reforms that are needed, it will be important to initiate the reform effort in the near future. The 2011 budget documents highlighted several long-term risks, and further progress toward a comprehensive statement of fiscal risks would

be important. Non-oil revenue mobilization efforts that will be needed to compensate in part for the oil revenue loss would need to focus, inter alia, on broadening the tax base for the value added and personal income taxes and revamping tax mobilization by subnational governments. The latter will also help align spending incentives at the subnational level. To deal with the expected increase in transitional pension spending, consideration could be given to revisiting the main parameters of the old pension system, including the retirement age.

**31. Unleashing Mexico's growth potential would require advancing structural reforms to increase productivity and promote investment, building on recent reform efforts.** Mexico's growth over the last two decades has lagged comparable peers, in part due to negative external shocks. Given lackluster external demand prospects for Mexico, it would be important to undertake additional reform efforts to increase productivity and competitiveness and encourage domestic sources of growth. Some of these reforms may prove to have rapid payoffs, including those associated with improving infrastructure and enhancing efficiency in the service sectors. Recent reform progress to improve anti-trust regulations is welcome, with the task ahead being to establish the credibility of the improved

regulatory power. A comprehensive reform strategy to foster growth would help assess the more pressing constraints and prioritize reform efforts going forward. These efforts would help improve limited employment opportunities, especially among young adults. Further reforms would be needed to strengthen the quality of education, increase labor flexibility (with the recent legislative proposal a welcome step), improve performance of state energy companies (building on recent efforts to promote limited-scope PPPs and improve governance), and advance initiatives to facilitate access to credit for SMEs and financing for infrastructure.

**32. Potential global spillovers warrant close monitoring.** The authorities are carefully assessing possible implications of changes in the global environment for Mexico. Moreover, these potential spillovers have actively

informed their assessments and policy analysis, which have been reflected, for instance, in the report of the FSC and Central Bank publications. Economic prospects and policies in the U.S. remain critical for Mexico, with a relapse in U.S. growth having direct implications for growth in Mexico. The large presence in Mexico of subsidiaries of systemic foreign banks has emphasized the need to contain spillover risks through prudential regulation and active supervision, which the authorities have been proactively pursuing. The direct impact from unsettled global market conditions is therefore expected to remain contained, but a surge in risk aversion could affect even strong sovereign credits, like Mexico's.

**33. It is proposed that the next Article IV consultation with Mexico take place on the standard 12-month cycle.**

Table 1. Mexico: Selected Economic, Financial, and Social Indicators, 2007–2012

I. Social and Demographic Indicators						
GDP per capita (U.S. dollars, 2009)	8,143	Poverty headcount ratio (% of population, 2008)	47.4			
Population (millions, 2009)	107.4	Income share of highest 20 percent / lowest 20 percent	14.5			
Life expectancy at birth (years, 2009)	75.3	Adult illiteracy rate (2009)	6.6			
Under-5 mortality rate (per thousand, 2009)	16.8	Gross primary education enrollment rate (2008)	114.3			
II. Economic Indicators						
	2007	2008	2009	2010	Proj. 2011	Proj. 2012
(Annual percentage change, unless otherwise indicated)						
<b>National accounts in constant prices</b>						
Real GDP	3.2	1.2	-6.2	5.4	4.4	4.1
Net exports (contribution)	-0.6	-0.9	2.2	0.2	-0.3	-0.2
Total domestic demand	3.7	1.9	-8.0	5.1	4.6	4.3
Total consumption	3.9	1.6	-5.8	4.7	4.7	3.4
Gross fixed investment	6.9	5.9	-11.9	2.4	5.1	5.6
Change in business inventories (contribution)	-0.7	-0.6	-0.9	0.9	-0.1	0.4
<b>External sector</b>						
Exports, f.o.b.	8.8	7.2	-21.2	29.9	21.5	8.1
Export volume	3.5	-2.4	-7.7	15.8	9.4	7.2
Imports, f.o.b.	10.1	9.5	-24.0	28.6	22.3	7.8
Import volume	4.4	1.0	-21.0	23.3	12.7	7.0
Petroleum exports (percent of total exports)	14.9	16.4	12.6	13.3	14.2	13.1
Terms of trade (deterioration -)	-0.3	1.3	-11.2	7.6	-1.5	-5.8
<b>Exchange rates</b>						
Nominal exchange rate (US\$/Mex\$)						
(average, depreciation -)	-0.3	-1.8	-17.6	6.9	...	...
Real effective exchange rate (CPI based)						
(average, depreciation -)	-1.1	-1.6	-12.4	8.6	...	...
<b>Employment and inflation</b>						
Consumer prices (end of year)	3.8	6.5	3.6	4.4	3.4	3.0
Formal sector employment (annual average)	4.2	2.1	-3.1	3.8	...	...
Formal sector unemployment rate (annual average)	3.7	4.0	5.5	5.4	4.5	3.9
Real manufacturing wages (annual average)	-0.7	0.2	1.2	-6.4	...	...
<b>Money and credit</b>						
Broad money (M4a)	11.2	16.8	5.9	12.1	...	...
Treasury bill rate (28-day cetes, in percent, annual average)	7.2	7.7	5.4	4.4	...	...
(In percent of GDP)						
<b>Nonfinancial public sector</b>						
Government Revenue	21.2	22.8	22.2	22.2	21.5	21.9
Government Expenditure	22.8	24.2	27.0	26.3	24.7	24.4
Augmented balance 1/	-1.6	-1.4	-4.8	-4.1	-3.2	-2.5
Augmented primary balance	1.0	0.7	-2.6	-2.2	-0.5	0.0
Traditional balance 2/	0.0	-0.1	-2.3	-2.8	-2.5	-2.0
Gross public sector debt	37.8	43.1	44.7	42.9	42.8	42.8
Net public sector debt	31.1	35.6	39.1	39.3	39.2	39.2
<b>Savings and investment</b>						
Gross domestic investment	26.5	26.8	23.5	25.0	25.7	25.9
Public investment	4.6	5.5	6.1	5.9	5.8	5.4
Private investment	16.6	16.5	15.3	14.3	15.3	15.8
Change in inventories	5.4	4.8	2.1	4.9	4.6	4.7
Gross national saving	25.7	25.7	22.8	24.4	24.7	24.8
Public saving 3/	3.2	3.9	0.8	1.3	2.2	2.4
Private saving	22.4	21.8	22.0	23.1	22.5	22.3
External current account balance	-0.9	-1.5	-0.7	-0.5	-1.2	-1.0
Non-oil external current account balance	-2.5	-2.8	-1.9	-1.7	-2.2	-1.8
Net foreign direct investment	2.1	2.3	0.9	0.4	1.9	1.9
In percent of exports of goods, nontactor services, and transfers)						
Public external debt service 4/	7.5	6.8	6.7	4.8	5.8	5.1
(In billions of U.S. dollars, unless otherwise indicated)						
Net international reserves	78.0	85.4	90.8	113.6	133.6	143.6
Gross official reserves in percent of short-term debt 5/	152.7	172.0	191.3	188.6	201.2	199.8
Gross external debt (in percent of GDP, end of period)	18.7	18.2	21.8	23.1	22.2	21.9
Crude oil export price, Mexican mix (US\$/bbl)	61.8	79.0	52.5	67.7	91.1	90.2

Sources: National Institute of Statistics and Geography; Bank of Mexico; Secretariat of Finance and Public Credit; and IMF staff estimates.

1/ Federal Government plus Social Security and State-owned Companies, excl. nonrecurrent revenue and net lending of development banks.

2/ Authorities definition. The break in the series in 2009 is due to definitional and accounting changes of HUIE-GAS.

3/ Estimated as the difference between the augmented fiscal balance, as reported by SHCP, and public investment, as reported in the national accounts.

4/ Debt service on gross external debt of the federal government, development banks and nonfinancial public enterprises (adjusted for Pfdiregas).

5/ In percent of short-term debt by residual maturity. Historical data include all prepayments.



Table 2. Mexico: Financial Operations of the Public Sector, 2006–2016

(In percent of GDP)												
	2006	2007	2008	2009	2010	2011		2012	2013	2014	2015	2016
					Prel.	Budget	Proj.	Proj.	Proj.	Proj.	Proj.	Proj.
<b>Budgetary revenue, by type</b>	<b>21.8</b>	<b>22.0</b>	<b>23.5</b>	<b>23.7</b>	<b>22.7</b>	<b>21.4</b>	<b>21.9</b>	<b>22.3</b>	<b>21.8</b>	<b>21.2</b>	<b>20.9</b>	<b>20.6</b>
Oil revenue	8.3	7.8	8.7	7.9	7.4	7.0	7.7	7.9	7.5	7.1	6.8	6.5
Non-oil tax revenue 1/	9.0	9.3	9.9	9.5	10.1	10.3	10.1	10.4	10.2	10.1	10.0	10.0
Non-oil non-tax revenue	4.5	4.9	4.9	6.3	5.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0
<b>Budgetary revenue, by entity</b>	<b>21.8</b>	<b>22.0</b>	<b>23.5</b>	<b>23.7</b>	<b>22.7</b>	<b>21.4</b>	<b>21.9</b>	<b>22.3</b>	<b>21.8</b>	<b>21.2</b>	<b>20.9</b>	<b>20.6</b>
Federal government revenue	15.0	15.1	16.8	16.8	15.9	15.3	15.8	16.2	16.3	15.8	15.4	15.1
Tax revenue, of which:	8.6	8.9	8.2	9.5	9.6	10.3	9.2	10.1	10.7	10.6	10.5	10.4
excises (including fuel)	-0.1	-0.1	-1.4	0.4	0.0	0.5	-0.4	0.2	0.9	1.0	0.9	0.9
Nontax revenue	6.4	6.3	8.7	7.3	6.3	5.0	6.6	6.1	5.6	5.2	4.9	4.6
Public enterprises	6.8	6.8	6.7	6.9	6.7	6.1	6.0	6.1	5.4	5.5	5.5	5.6
PEMEX	3.1	3.3	3.0	3.2	2.9	2.7	2.6	2.7	2.0	2.0	2.1	2.1
Other	3.7	3.5	3.7	3.7	3.8	3.4	3.4	3.4	3.4	3.4	3.4	3.4
<b>Budgetary expenditure</b>	<b>21.7</b>	<b>21.9</b>	<b>23.6</b>	<b>26.0</b>	<b>25.5</b>	<b>23.9</b>	<b>24.4</b>	<b>24.3</b>	<b>23.7</b>	<b>23.0</b>	<b>22.6</b>	<b>22.2</b>
Primary	19.3	19.8	21.7	23.8	23.5	21.7	22.2	22.1	21.4	20.7	20.2	19.8
Programmable	16.0	16.7	18.2	20.5	20.0	18.1	18.6	18.4	17.7	17.1	16.7	16.4
Current	12.9	13.2	13.8	15.4	15.1	13.5	13.9	13.7	13.7	13.6	13.5	13.5
Wages	5.9	5.8	5.8	6.4	6.1	5.9	5.9	5.8	5.7	5.6	5.5	5.4
Pensions	1.9	2.1	2.1	2.4	2.6	2.3	2.7	2.8	2.9	3.0	3.2	3.3
Subsidies and transfers	2.3	2.3	2.7	3.1	3.2	2.6	2.6	2.6	2.6	2.6	2.6	2.6
Other	2.8	3.0	3.2	3.4	3.2	2.6	2.6	2.5	2.4	2.3	2.3	2.2
Capital	3.1	3.6	4.4	5.1	4.9	4.6	4.7	4.7	4.0	3.5	3.2	2.8
Physical capital	2.5	2.8	3.1	4.6	4.7	4.5	4.5	4.3	3.8	3.3	3.0	2.6
Of which: non Pemex	2.3	2.5	2.5	2.5	2.6	2.5	2.5	2.3	1.9	1.5	1.3	1.0
Financial capital	0.6	0.8	1.3	0.5	0.3	0.1	0.2	0.4	0.3	0.2	0.2	0.2
Nonprogrammable	3.4	3.1	3.6	3.3	3.5	3.6	3.6	3.7	3.7	3.6	3.5	3.4
Of which: revenue sharing	3.2	2.9	3.5	3.2	3.3	3.4	3.4	3.5	3.5	3.4	3.3	3.3
Interest payments 2/	2.4	2.1	1.9	2.2	2.0	2.2	2.2	2.2	2.3	2.4	2.4	2.5
<b>Traditional balance 3/</b>	<b>0.1</b>	<b>0.0</b>	<b>-0.1</b>	<b>-2.3</b>	<b>-2.8</b>	<b>-2.5</b>	<b>-2.5</b>	<b>-2.0</b>	<b>-1.9</b>	<b>-1.8</b>	<b>-1.7</b>	<b>-1.6</b>
Traditional balance for balanced budget rule	...	0.4	0.5	-0.2	-0.8	-0.5	-0.5	0.0	0.0	0.0	0.0	0.0
<b>Adjustments to the traditional balance</b>	<b>1.4</b>	<b>1.6</b>	<b>1.3</b>	<b>2.5</b>	<b>1.3</b>	<b>0.9</b>	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>
PIDIREGAS	1.1	0.9	1.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
IPAB	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Budgetary adjustments	0.2	0.4	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2
PEMEX, oil stabilization fund, FARP (-: net inflows)	-0.2	-0.1	-0.9	0.7	0.5	0.0	-0.2	-0.4	-0.3	-0.2	-0.2	-0.2
FARAC/FONADIN	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Debtor support	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Development banks (changes in capital)	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nonrecurring revenue	0.3	0.6	0.7	1.5	0.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5
<b>Augmented balance (excl. net lending of dev. banks)</b>	<b>-1.3</b>	<b>-1.6</b>	<b>-1.4</b>	<b>-4.8</b>	<b>-4.1</b>	<b>-3.4</b>	<b>-3.1</b>	<b>-2.5</b>	<b>-2.4</b>	<b>-2.4</b>	<b>-2.3</b>	<b>-2.2</b>
Augmented interest expenditure	2.8	2.6	2.5	2.7	2.6	2.7	2.7	2.4	2.5	2.6	2.6	2.6
Augmented primary balance (excl. dev. Banks) 5/	1.5	1.1	1.1	-2.1	-1.5	-0.7	-0.5	0.0	0.1	0.2	0.3	0.5
<b>Memorandum items</b>												
Crude oil export price, Mexican mix (US\$/bbl)	52.4	61.8	79.0	52.5	67.7	65.4	91.1	90.2	87.2	85.3	84.6	84.4
Development banks	-0.5	0.0	0.4	0.5	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Augmented balance (incl. net lending of dev. banks) 4/	-0.8	-1.7	-1.8	-5.4	-4.6	-3.8	-3.6	-2.9	-2.9	-2.8	-2.7	-2.6
Augmented primary balance (incl. net lending of dev. banks)	1.9	1.0	0.7	-2.6	-2.0	-1.1	-0.9	-0.5	-0.4	-0.2	-0.1	0.0
Non-oil augmented balance 6/	-6.9	-7.5	-9.3	-9.7	-8.9	...	-8.7	-7.7	-6.6	-6.2	-5.9	-5.7
Oil augmented balance	6.1	5.8	7.4	4.3	4.3	...	5.2	4.8	3.7	3.4	3.2	3.1
Fiscal Impulse 7/	0.1	-0.4	0.1	-2.8	1.1	...	0.6	0.8	0.2	0.3	0.3	0.1
Gross public sector debt	38.4	37.8	43.1	44.7	42.9	...	42.5	42.5	42.7	42.7	42.5	42.4
Domestic (percentage of total debt)	85.0	85.9	70.3	75.2	74.9	...	77.1	78.3	79.4	80.5	81.4	82.3
External (percentage of total debt)	15.0	14.1	29.7	24.8	25.1	...	22.9	21.7	20.6	19.5	18.6	17.7
Net public sector debt	32.4	31.1	35.6	39.1	39.3	...	39.0	38.9	39.1	39.1	38.9	38.8
Nominal GDP (billions of Mexican pesos)	10,373	11,313	12,176	11,880	13,070	14,284	14,284	15,316	16,302	17,384	18,557	19,701

Sources: Mexican authorities; and IMF staff estimates. Data refer to non-financial public sector, including PEMEX and other public enterprises but excluding state and local governments (except as noted).

1/ Total tax revenue excluding excise tax on gasoline.

2/ Includes transfers to IPAB and the debtor support programs.

3/ The break in the series in 2009 is due to definitional and accounting changes.

4/ Public Sector Borrowing Requirements excl. nonrecurrent revenue.

5/ Treats transfers to IPAB as interest payments.

6/ Excludes oil revenue (oil extraction rights, PEMEX net income, oil excess return levies, excise tax on gasoline) and PEMEX operational expenditure, interest payments, and capital expenditure.

7/ Change in the structural balance measured using a domestic resource approach (adjusting tax revenue for the cycle, excluding PEMEX external trade balance, and oil hedges).

Table 3. Mexico: Summary Balance of Payments, 2006–2016

	2006	2007	2008	2009	2010	Projections					
						2011	2012	2013	2014	2015	2016
(In billions of U.S. dollars)											
<b>Current Account</b>	-4.5	-8.9	-16.3	-6.4	-5.6	-13.6	-12.7	-13.2	-15.1	-17.7	-19.0
Merchandise trade balance, f.o.b.	-6.1	-10.1	-17.3	-4.7	-3.0	-6.2	-5.7	-5.8	-6.0	-6.4	-6.7
Exports	249.9	271.9	291.3	229.7	298.5	362.6	391.8	420.6	453.7	493.9	537.7
Imports	-256.1	-281.9	-308.6	-234.4	-301.5	-368.8	-397.5	-426.4	-459.7	-500.3	-544.4
Factor income	-18.6	-18.9	-17.2	-14.8	-14.5	-18.8	-19.1	-20.0	-20.9	-21.8	-22.6
Net services	-5.7	-6.3	-7.4	-8.4	-9.6	-12.1	-13.0	-13.8	-16.3	-19.1	-20.1
Net transfers	25.9	26.4	25.5	21.5	21.5	23.5	25.0	26.5	28.1	29.5	30.3
Of which: Remittances	25.6	26.0	25.1	21.2	21.3	23.2	24.7	26.1	27.7	29.1	29.9
<b>Financial account</b>	-2.4	22.0	27.7	20.5	34.9	33.6	22.7	23.2	25.1	27.7	29.0
Public sector 1/	-12.4	13.7	13.7	11.9	33.4	15.5	4.5	5.4	4.7	3.9	4.2
Medium and long term borrowing	-19.5	-3.4	-2.4	7.9	10.2	-2.5	-1.9	-1.0	-1.0	-1.0	-1.0
Disbursements	9.8	6.6	10.0	18.9	27.1	12.8	12.1	13.1	14.0	14.2	11.1
Amortization 2/	29.3	10.0	12.4	11.0	16.9	15.3	14.0	14.1	15.0	15.2	12.1
Pidiregas 3/	7.0	13.2	12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other, including non-resident purchases of domestic bonds	0.1	3.9	3.2	4.0	23.2	18.0	6.4	6.4	5.7	4.9	5.2
Of which: oil hedging capital income	...	...	...	5.1	...	...	...	...	...	...	...
Private sector	10.0	8.3	14.0	8.6	1.5	18.0	18.2	17.7	20.4	23.8	24.8
Direct investment net	14.3	21.5	25.1	8.3	4.3	22.0	24.0	25.0	25.7	27.5	29.4
Bonds and loans	5.2	8.8	-0.9	-3.7	14.8	5.7	5.7	5.2	7.0	7.0	5.9
Equity investment and change in assets abroad	-9.5	-22.0	-10.2	4.0	-17.6	-9.7	-11.5	-12.4	-12.3	-10.7	-10.5
<b>Errors and omissions and valuation adjustments</b>	5.9	-2.7	-4.0	-8.7	-6.5	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net international reserves (increase -)</b>	1.0	-10.4	-7.4	-5.4	-22.8	-20.0	-10.0	-10.0	-10.0	-10.0	-10.0
(in percent of GDP, unless otherwise indicated)											
Current account balance	-0.5	-0.9	-1.5	-0.7	-0.5	-1.2	-1.0	-1.0	-1.1	-1.2	-1.3
Non oil current account balance 4/	-2.5	-2.5	-2.8	-1.9	-1.6	-2.2	-1.8	-1.6	-1.6	-1.6	-1.5
Non oil trade balance 4/	-2.7	-2.7	-2.9	-1.7	-1.4	-1.5	-1.3	-1.1	-0.9	-0.8	-0.7
Oil trade balance	2.0	1.7	1.4	1.2	1.1	1.0	0.8	0.6	0.5	0.3	0.2
Gross financing needs (billions of US dollars) 4/	70.2	71.0	80.7	63.8	71.2	89.2	80.3	82.8	88.1	93.4	92.8
Gross international reserves (change, billions of US\$) 5/	2.2	10.9	8.1	4.6	20.7	20.0	10.0	10.0	10.0	10.0	10.0
End year (billions of US\$)	76.3	87.2	95.3	99.9	120.6	140.6	150.6	160.6	170.6	180.6	190.6
Months of imports of goods and services	3.3	3.4	3.4	4.7	4.4	3.9	3.9	3.9	3.8	3.7	...
Months of imports plus interest payments	3.4	3.5	3.5	4.9	4.6	4.1	4.1	4.1	4.0	3.9	...
Percent of short term debt (by residual maturity) 6/	147.2	153.3	183.2	233.2	217.0	24.4	252.8	254.6	259.6	283.1	...
Gross total external debt	17.8	18.7	18.2	21.8	23.1	22.2	21.9	21.7	21.4	21.0	20.7
Of which: public external debt	9.8	9.9	10.2	10.9	10.7	9.2	8.6	8.1	7.6	7.1	6.7
Gross total external debt (billions of US\$)	169.0	193.2	201.2	192.4	239.0	260.3	270.5	281.1	292.7	303.6	313.8
Of which: public external debt 7/	93.1	102.6	112.2	96.4	110.4	107.9	106.0	105.0	104.0	103.0	102.0
Public external debt service (in percent of exports of goods, services and transfers) 8/	14.2	7.5	6.8	6.7	4.8	5.8	5.1	5.0	5.1	4.9	4.1

Sources: Bank of Mexico; Secretariat of Finance and Public Credit; and Fund staff calculations.

1/ Including the Financing of PIDIREGAS.

2/ Includes pre-payment of external debt.

3/ Break in the series in 2009 due to accounting changes.

4/ Excluding oil exports and petroleum products imports.

5/ Excludes balances under bilateral payments accounts. For 2008, includes the allocation of SDR 2,337 billion in the general allocation implemented on August 28, 2009, and another SDR 0.224 billion in the special allocation on September 9.

6/ In percent of short-term debt by residual maturity. Historical data include all prepayments.

7/ Includes gross external debt of the federal government, development banks and non-financial public enterprises, and is adjusted for PIDIREGAS.

8/ Includes amortization on medium and long-term bonds and debt, and interest payments.

**Table 4. Mexico: Financial Soundness Indicators**

(in percent)

	2006	2007	2008	2009	2010	2011 1/
<b>Capital Adequacy</b>						
Regulatory capital to risk-weighted assets	16.1	15.9	15.3	16.5	16.9	16.9
Regulatory Tier 1 capital to risk-weighted assets	15.1	14.7	13.3	14.6	14.9	15.0
Capital to assets	13.6	13.8	9.2	10.1	10.4	10.4
Gross asset position in financial derivatives to capital	35.3	36.1	47.1	57.6	56.5	62.4
Gross liability position in financial derivatives to capital	33.8	35.0	47.7	59.5	55.6	60.6
<b>Asset Quality</b>						
Nonperforming loans to total gross loans	2.0	2.7	3.2	3.1	2.0	2.0
Provisions to Nonperforming loans	210.3	168.9	161.2	173.8	200.6	198.4
<b>Earnings and Profitability</b>						
Return on assets	3.5	2.7	1.1	1.5	1.8	1.7
Return on equity	25.9	19.9	8.9	15.2	16.8	16.2
<b>Liquidity</b>						
Liquid assets to short-term liabilities	51.1	50.4	40.4	42.7	58.2	56.7
Liquid assets to total assets	64.2	64.2	56.1	57.7	43.3	42.1
Customer deposits to total (noninterbank) loans	107.4	95.8	99.6	92.7	87.9	84.3

Sources: FSI &amp; CNBV.

1/ As of February 2011

Table 5. Mexico: Indicators of External Vulnerability, 2005 - 2011

	2006	2007	2008	2009	2010	2011
	Dec.	Dec.	Dec.	Dec.	Dec.	Apr.
<b>Financial market indicators</b>						
Exchange rate (per U.S. dollar, end-period)	10.9	10.9	13.5	13.1	12.4	11.6
(year-to-date percent change, + depreciation)	1.0	-0.1	24.6	-3.5	-5.4	-6.3
28-day treasury auction rate (percent; period average)	7.2	7.2	7.7	5.4	4.4	4.3
EMBIG Mexico (basis points; period average)	137	126	254	301	186	161
Stock exchange index in U.S. dollar terms (year on year percent change)	47.2	11.8	-39.2	48.8	26.8	20.7
<b>Financial system</b>						
Bank of Mexico net international reserves (US\$ billion)	67.7	78.0	85.4	90.8	113.6	125.8
Real credit to the non-financial private sector (12-month percent change)	31.3	26.9	13.5	-1.0	10.0	13.8
Commercial banks' nonperforming loans (percent of loans granted to non-financial private sector)	2.5	3.0	3.6	3.8	2.9	2.8
<b>Exports and imports</b>						
Trade balance (US\$ billion; year-to-date)	-6.1	-10.1	-17.3	-4.7	-3.0	0.8
Exports (year to date, annual percentage change) 1/	16.7	8.8	7.2	-21.2	29.9	12.6
<i>Of which</i>						
Non-oil	15.7	8.5	5.2	-17.4	29.1	9.0
Imports (year to date, annual percentage change) 1/	15.4	10.1	9.5	-24.0	28.6	9.8
<i>Of which</i>						
Consumer goods	17.1	16.7	11.3	-31.5	26.2	12.7
Capital goods	16.4	10.1	16.4	-21.6	-1.3	19.0
Terms of trade (12-month percent change)	2.9	-0.3	1.2	-11.0	7.6	9.7
Real effective exchange rate (CPI based; 12 month percent change) 2/	-2.8	-2.7	-12.1	2.6	6.6	1.7
<b>External Debt</b>						
Non-financial public sector external debt (percent of GDP)	9.4	8.2	9.2	11.5	9.6	...
Non-financial public sector short-term external debt (percent of GDP) 3/	0.1	0.1	0.1	0.2	0.2	...
Private sector external debt (percent of GDP)	8.0	8.7	9.9	10.6	12.2	...
Private sector short-term external debt (percent of GDP)	2.3	2.3	3.2	3.1	2.0	...
<b>Memorandum items:</b>						
Gross international reserves to short-term debt (by residual maturity, percent)	145.7	152.7	172.0	191.3	188.6	...
Monetary base to gross international reserves (percent)	54.2	52.2	44.8	48.5	46.5	42.4
Net international reserves to M2	15.7	16.4	19.1	18.3	19.4	19.4

Sources: Bank of Mexico; National Banking and Securities Commission; National Institute of Statistics and Geography; Secretary of Finance and Public Credit; and IMF staff estimates

1/ In US dollar terms.

2/ Increase represents appreciation.

3/ Short-term debt by residual maturity includes pre-payment of debt.

Table 6. Mexico: Baseline Medium-Term Projections, 2006–16

	2006	2007	2008	2009	2010	Staff projections					
						2011	2012	2013	2014	2015	2016
(Annual percentage change, unless otherwise indicated)											
<b>National income and prices</b>											
Real GDP	5.2	3.2	1.2	-6.2	5.4	4.4	4.1	3.3	3.3	3.3	3.2
Consumer prices (end of year)	4.1	3.8	6.5	3.6	4.4	3.4	3.0	3.0	3.0	3.0	3.0
Consumer prices (average)	3.6	4.0	5.1	5.3	4.2	3.6	3.1	3.0	3.0	3.0	3.0
<b>External sector</b>											
Non-oil current account balance (as a share of GDP) 1/	-2.4	-2.5	-2.5	-2.8	-1.9	-1.7	-2.1	-2.0	-1.9	-1.9	-1.9
Exports, f.o.b.	16.7	8.8	7.2	-21.2	29.9	21.5	8.1	7.3	7.9	8.9	8.9
Imports, f.o.b.	15.4	10.1	9.5	-24.0	28.6	22.2	8.5	7.6	7.7	8.6	8.6
Terms of trade (deterioration -)	2.9	-0.3	1.3	-11.2	7.6	2.4	0.1	0.0	0.0	0.2	0.3
Oil export price (US\$ / bbl)	52.4	61.8	79.0	52.5	67.7	91.1	90.2	87.2	85.3	84.6	84.4
(In percent of GDP)											
<b>Non-financial public sector</b>											
Augmented fiscal balance	-0.6	-0.9	-1.4	-0.7	-0.6	-1.2	-1.2	-1.4	-1.4	-1.6	-1.6
Augmented Primary Balance	-1.3	-1.6	-1.4	-4.8	-4.1	-3.1	-2.5	-2.4	-2.4	-2.3	-2.2
Augmented Primary Balance	1.5	1.1	1.1	-2.1	-1.5	-0.5	0.0	0.1	0.2	0.3	0.5
<b>Saving and investment</b>											
Gross domestic investment	26.3	26.5	26.8	23.5	25.0	26.2	26.2	26.1	26.1	26.1	26.0
Fixed Investment	21.0	21.2	22.0	21.4	20.1	21.0	21.0	20.9	20.9	20.9	20.8
Public	4.4	4.6	5.5	6.1	5.9	5.8	5.3	4.3	3.8	3.4	3.0
Private	16.6	16.6	16.5	15.3	14.3	15.2	15.7	16.6	17.2	17.4	17.8
Gross national saving	25.7	25.7	25.5	22.8	24.4	25.1	25.0	24.8	24.7	24.5	24.5
Public	3.7	3.2	3.9	0.8	1.3	2.2	2.4	1.4	1.0	0.7	0.4
Private	21.9	22.4	21.6	22.0	23.1	22.9	22.6	23.4	23.7	23.8	24.0
<b>Current account balance</b>	-0.5	-0.9	-1.5	-0.7	-0.5	-1.1	-1.2	-1.3	-1.4	-1.5	-1.5

Sources: Bank of Mexico; National Institute of Statistics and Geography; Secretary of Finance and Public Credit; and IMF staff projections.

1/ Excluding oil exports and petroleum products imports.



# MEXICO

## STAFF REPORT FOR THE 2011 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS

July 11, 2011

Approved By  
**Gilbert Terrier and  
Aasim Husain**

Prepared by the Staff of the International Monetary Fund

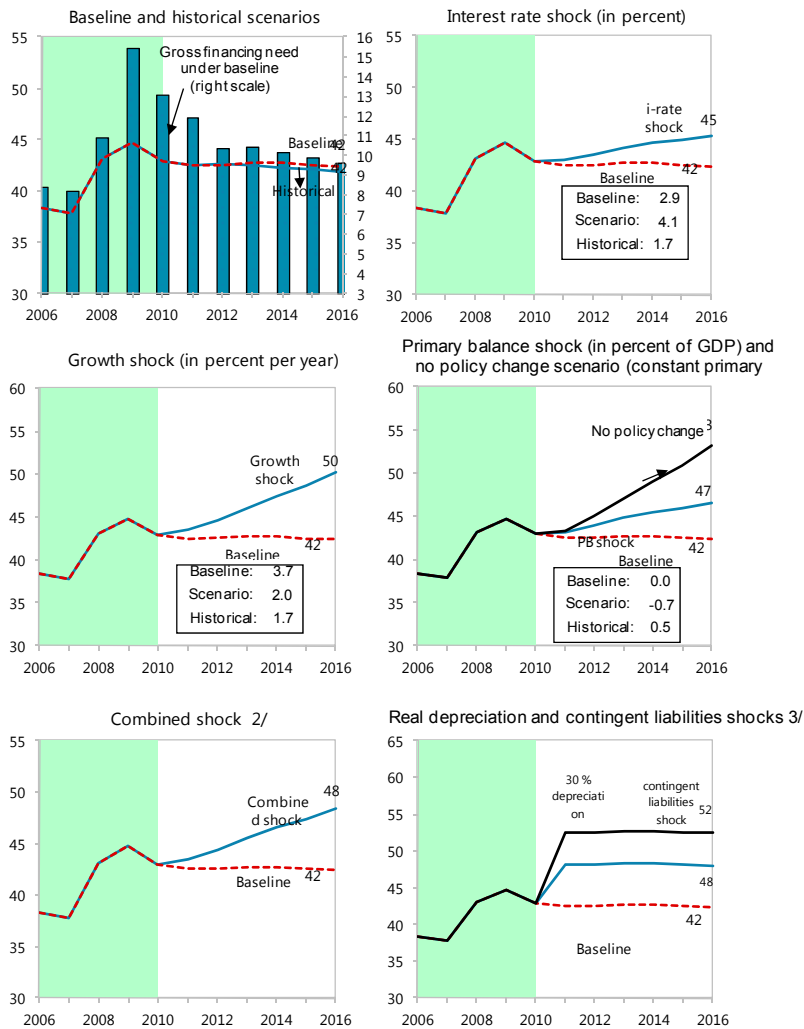
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# FISCAL DSA

Mexico’s public debt is moderate and will remain stable over the medium term under the baseline scenario, at around 43 percent of GDP. Standard DSA shocks would increase public debt by generally less than

10 percentage points of GDP over the medium term. But Mexico’s balanced-budget framework represents a strong fiscal anchor against the materialization of such scenarios.

Figure 1. Mexico: Gross Public Debt Sustainability: Bound Tests 1/ (Gross public debt in percent of GDP)



Sources: International Monetary Fund, country desk data, and staff estimates.  
 1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.  
 2/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and primary balance.  
 3/ One-time real depreciation of 30 percent and 10 percent of GDP shock to contingent liabilities occur in 2010, with real depreciation defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

Table 1. Mexico: Gross Public Sector Debt Sustainability Framework, 2002–2016

(In percent of GDP, unless otherwise indicated)

	Actual										Projections						Debt-stabilizing primary balance 9/
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
<b>Baseline: Gross public sector debt 1/</b>	45.7	45.6	41.4	39.8	38.4	37.8	43.1	44.7	42.9	<b>42.5</b>	<b>42.5</b>	<b>42.7</b>	<b>42.7</b>	<b>42.5</b>	<b>42.4</b>	<b>-0.5</b>	
o/w foreign-currency denominated 7/	15.5	16.0	14.6	12.8	10.2	10.2	12.8	12.1	10.0	9.2	8.5	8.0	7.6	7.1	6.7		
Change in gross public sector debt	3.7	-0.1	-4.2	-1.6	-1.5	-0.5	5.3	1.6	-1.8	-0.4	0.0	0.2	0.0	-0.2	-0.1		
Identified debt-creating flows (4+7+12)	3.6	-1.5	-5.4	-2.5	-3.2	-2.3	0.6	3.8	-0.1	-1.0	-0.9	-0.6	-0.8	-0.9	-0.8		
Primary deficit	0.1	-0.9	-1.6	-1.5	-1.5	-1.1	-1.3	2.2	1.8	0.6	0.0	-0.1	-0.2	-0.3	-0.5		
Revenue and grants	19.7	20.6	19.3	20.8	21.4	21.2	22.8	22.2	22.2	21.4	21.8	21.3	20.7	20.4	20.1		
Primary (noninterest) expenditure	19.8	19.7	17.7	19.3	19.9	20.1	21.5	24.4	24.0	22.0	21.8	21.2	20.5	20.0	19.6		
Automatic debt dynamics 2/	4.1	0.0	-2.4	-0.7	-1.4	-0.6	2.6	3.1	-1.7	-1.1	-0.4	-0.1	-0.1	-0.1	0.2		
Contribution from interest rate/growth differential 3/	2.3	-1.4	-2.5	-0.1	-1.5	-0.5	0.1	3.6	-1.7	-1.1	-0.4	-0.1	-0.1	-0.1	0.2		
Of which contribution from real interest rate	2.4	-0.8	-0.9	1.1	0.3	0.6	0.5	0.9	0.5	0.6	1.2	1.3	1.2	1.2	1.4		
Of which contribution from real GDP growth	0.0	-0.6	-1.6	-1.2	-1.8	-1.1	-0.4	2.7	-2.2	-1.7	-1.6	-1.3	-1.3	-1.3	-1.3		
Contribution from exchange rate depreciation 4/	1.8	1.3	0.0	-0.6	0.1	0.0	2.5	-0.5	...	...	...	...	...	...	...		
Other identified debt-creating flows	-0.6	-0.6	-1.3	-0.2	-0.3	-0.6	-0.7	-1.5	-0.2	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5		
Privatization receipts (negative)	-0.6	-0.6	-1.3	-0.2	-0.3	-0.6	-0.7	-1.5	-0.2	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5		
Recognition of implicit or contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual, including asset changes (2-3) 5/	0.1	1.4	1.2	0.9	1.8	1.8	4.7	-2.2	-1.7	0.6	1.0	0.8	0.8	0.7	0.7		
Gross public sector debt-to-revenue ratio 1/	231.7	221.7	214.6	191.3	179.1	178.4	189.3	201.6	193.1	199.0	195.0	200.9	206.0	208.5	210.8		
<b>Gross financing need 6/</b>	11.0	10.9	8.8	10.4	8.4	8.2	10.9	15.4	13.1	11.9	10.4	10.4	10.1	9.9	9.6		
in billions of U.S. dollars	77.4	76.4	67.1	88.1	79.7	84.7	119.4	135.5	135.2	140.2	128.8	135.6	139.3	143.1	146.6		
<b>Scenario with key variables at their historical averages 7/</b>										<b>42.6</b>	<b>42.6</b>	<b>42.4</b>	<b>42.3</b>	<b>42.1</b>	<b>41.9</b>	<b>-0.5</b>	
<b>Scenario with no policy change (constant primary balance) in 2010-2015</b>										<b>43.3</b>	<b>45.0</b>	<b>47.1</b>	<b>49.0</b>	<b>50.9</b>	<b>53.1</b> de	<b>-0.5</b>	
<b>Key Macroeconomic and Fiscal Assumptions Underlying Baseline</b>																stabilization	
Real GDP growth (in percent)	0.1	1.4	4.0	3.2	5.2	3.2	1.2	-6.2	5.4	4.4	4.1	3.3	3.3	3.3	3.2		
Average nominal interest rate on public debt (in percent) 8/	8.4	7.6	7.3	7.6	7.8	7.5	7.6	5.9	5.8	6.4	6.2	6.3	6.4	6.5	6.6		
Average real interest rate (nominal rate minus change in GDP deflator, in percent)	5.8	-1.8	-1.8	3.1	1.1	1.9	1.4	1.7	1.5	1.7	3.2	3.3	3.2	3.2	3.7		
Nominal appreciation (increase in US dollar value of local currency, in percent)	-11.3	-8.2	-0.3	4.5	-0.9	0.1	-19.7	3.7	...	...	...	...	...	...	...		
Inflation rate (GDP deflator, in percent)	2.6	9.4	9.1	4.6	6.7	5.6	6.2	4.1	4.4	4.7	3.0	3.0	3.2	3.3	2.9		
Growth of real primary spending (deflated by GDP deflator, in percent)	13.0	0.6	-6.4	12.3	8.6	4.4	8.2	6.3	3.7	-4.4	3.5	0.3	0.0	0.9	1.1		
Primary deficit	0.1	-0.9	-1.6	-1.5	-1.5	-1.1	-1.3	2.2	1.8	0.6	0.0	-0.1	-0.2	-0.3	-0.5		

1/ Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.

2/ Derived as  $(r - p(1+g) - g + ae(1+r))/(1+g+p+gp)$  times previous period debt ratio, with  $r$  = interest rate;  $p$  = growth rate of GDP deflator;  $g$  = real GDP growth rate;  $a$  = share of foreign-currency denominated debt; and  $e$  = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

3/ The real interest rate contribution is derived from the denominator in footnote 2/ as  $r - \pi(1+g)$  and the real growth contribution as  $-g$ .

4/ The exchange rate contribution is derived from the numerator in footnote 2/ as  $ae(1+r)$ .

5/ For projections, this line includes exchange rate changes.

6/ Defined as public sector deficit, plus amortization of medium and long-term public sector debt, plus short-term debt at end of previous period.

7/ The key variables include real GDP growth, real interest rate, and primary balance in percent of GDP.

8/ Derived as nominal interest expenditure divided by previous period debt stock.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

7/ External debt is converted in pesos using end of period exchange rates.



Table 2. Mexico: External Debt Sustainability Framework, 2006-16

(In percent of GDP, unless otherwise indicated)

	Actual					Projections						Debt-stabilizing non-interest current account 7/ -1.6
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
<b>Baseline: External debt</b>	17.8	18.7	18.4	21.8	23.1	<b>22.1</b>	<b>21.9</b>	<b>22.0</b>	<b>22.0</b>	<b>21.9</b>	<b>21.8</b>	
Change in external debt	-2.7	0.9	-0.3	3.4	1.3	-1.0	-0.2	0.1	0.1	-0.1	-0.1	
Identified external debt-creating flows (4+8+9)	-3.5	-2.8	-0.9	3.4	-3.7	-1.9	-1.8	-1.5	-1.4	-1.4	-1.4	
Current account deficit, excluding interest payments	-1.0	-0.6	0.2	-0.6	-0.7	0.0	0.1	0.0	0.0	-0.1	-0.2	
Deficit in balance of goods and services	1.3	1.6	2.2	1.5	1.3	1.5	1.7	1.8	1.9	2.0	1.9	
Exports	27.9	27.9	28.2	27.7	30.3	32.1	32.8	33.5	34.3	35.4	36.6	
Imports	29.2	29.5	30.4	29.2	31.6	33.7	34.5	35.3	36.2	37.3	38.5	
Net non-debt creating capital inflows (negative)	-1.8	-2.3	-1.3	-1.8	-1.1	-2.1	-2.1	-2.1	-2.1	-2.2	-2.2	
Automatic debt dynamics 1/	-0.7	0.0	0.3	5.8	-2.0	0.3	0.3	0.6	0.8	0.9	1.1	
Contribution from nominal interest rate	1.5	1.4	1.3	1.3	1.2	1.2	1.1	1.3	1.4	1.6	1.7	
Contribution from real GDP growth	-0.9	-0.5	-0.3	1.4	-0.9	-0.9	-0.9	-0.7	-0.7	-0.7	-0.7	
Contribution from price and exchange rate changes 2/	-1.3	-0.9	-0.8	3.1	-2.3	...	...	...	...	...	...	
Residual, incl. change in gross foreign assets (2-3) 3/	0.8	3.7	0.6	0.0	5.1	0.8	1.6	1.6	1.5	1.3	1.3	
External debt-to-exports ratio (in percent)	63.6	66.8	65.1	78.8	76.2	68.7	66.7	65.6	64.2	62.1	59.6	
<b>Gross external financing need (in billions of US dollars) 4/</b>	72.0	61.4	73.4	61.7	57.8	77.3	85.0	92.2	100.4	111.9	118.3	
in percent of GDP	7.6	5.9	6.7	7.0	5.6	6.6	6.8	7.1	7.3	7.7	7.8	
<b>Scenario with key variables at their historical averages 5/</b>						<b>22.1</b>	<b>22.2</b>	<b>22.2</b>	<b>22.3</b>	<b>22.3</b>	<b>22.1</b>	<b>-1.5</b>
<b>Key Macroeconomic Assumptions Underlying Baseline</b>												
Real GDP growth (in percent)	5.2	3.2	1.5	-6.1	5.0	4.4	4.1	3.3	3.3	3.3	3.2	
GDP deflator in US dollars (change in percent)	6.7	5.3	4.3	-14.3	11.6	9.1	1.5	1.6	1.9	2.1	1.8	
Nominal external interest rate (in percent)	8.1	8.8	7.5	5.9	6.6	5.7	5.5	6.3	6.9	7.6	8.2	
Growth of exports (US dollar terms, in percent) 6/	15.6	8.7	6.9	-20.9	28.3	20.7	7.9	7.2	7.7	8.7	8.7	
Growth of imports (US dollar terms, in percent) 6/	14.7	9.7	9.1	-22.7	26.9	21.4	8.3	7.4	7.9	8.7	8.4	
Current account balance, excluding interest payments	1.0	0.6	-0.2	0.6	0.7	0.0	-0.1	0.0	0.0	0.1	0.2	
Net non-debt creating capital inflows	1.8	2.3	1.3	1.8	1.1	2.1	2.1	2.1	2.1	2.2	2.2	

1/ Derived as  $[r - g - r(1+g) + ea(1+r)] / (1+g+r+gr)$  times previous period debt stock, with  $r$  = nominal effective interest rate on external debt;  $r$  = change in domestic GDP deflator in US dollar terms,  $g$  = nominal appreciation (increase in dollar value of domestic currency), and  $a$  = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as  $[-r(1+g) + ea(1+r)] / (1+g+r+gr)$  times previous period debt stock.  $r$  increases with an appreciating domestic currency ( $e > 0$ ) and

3/ For projection, line includes the impact of price and exchange rate changes.

4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

6/ Goods and nonfactor services.

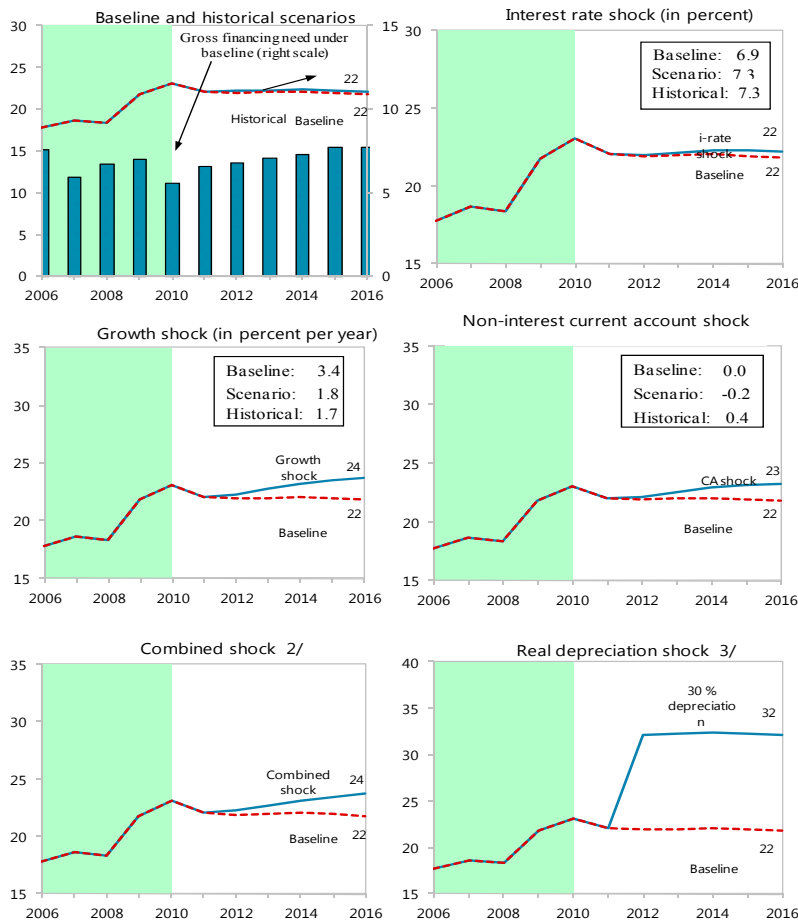
7/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain of the last projection year.

# EXTERNAL DSA

Mexico’s external debt is low relative to GDP and will remain low over the medium term. A 30% depreciation of the peso could bring external debt to 30 percent of GDP, a moderate level, mitigated by the fact that an increasing share of Mexico’s external debt is

now denominated in peso. Other shocks, including growth, current account, and interest rate, would have only marginal effects on Mexico’s external indebtedness in relation to GDP.

Figure 2. Mexico: External Debt Sustainability: Bound Tests 1/



Sources: International Monetary Fund, Country desk data, and staff estimates.  
 1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.  
 2/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.  
 3/ One-time real depreciation of 30 percent occurs in 2011.



# MEXICO

## STAFF REPORT FOR THE 2011 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

July 11, 2011

Prepared By

Western Hemisphere Department

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## ANNEX 1. MEXICO: FUND RELATIONS

(As of May 31, 2011)

The 2011 Article IV discussions were held in Mexico City during June 6–16, 2011. The staff team comprised M. Kaufman (Head), E. Flores and M.K. Tang (both WHD), K. Guo (SPR), P. Imam (MCM), and P. Lopez-Murphy (FAD). G. Terrier (WHD) joined for the second half of the mission and N. Eyzaguirre for the concluding meetings. The mission met with the Minister of Finance, the Governor of the Bank of Mexico, senior staff of several government ministries and agencies, representatives of regulatory agencies, and

private sector representatives. Mr. Jimenez (OED) attended most meetings.

Mexico has accepted the obligations of Article VIII, sections 2, 3, and 4, and does not have restrictions on payments for current international transactions.

Comprehensive economic data are available for Mexico on a timely basis. It subscribes to the SDDS, and economic data are adequate to conduct surveillance.

**I. Membership Status:** Joined December 31, 1945; Article VIII.

**II. General Resources Account:**

	SDR Million	Percent of Quota
Quota	3,625.70	100.00
Fund holdings of currency	2,622.16	72.32
Reserve position in Fund	1,003.58	27.68

**III. SDR Department:**

	SDR Million	Percent of Allocation
Net cumulative allocation	2,851.20	100.00
Holdings	2,646.88	92.83

**IV. Outstanding Purchases and Loans:** None

**V. Latest Financial Arrangements:**

Type	Arrangement Date	Expiration Date	Amount Approved (SDR Million)	Amount Drawn (SDR Million)
FCLC	Jan 10, 2011	Jan 09, 2013	47,292.00	0.00
FCLC	Mar 25, 2010	Jan 09, 2011	31,528.00	0.00
FCLC	Apr 17, 2009	Apr 16, 2010	31,528.00	0.00
Stand-By	Jul 07, 1999	Nov 30, 2000	3,103.00	1,939.50

**VI. Projected Payments to the Fund** (SDR million):

	2011	2012	Forthcoming 2013	2014	2015
Principal					
Charges / Interest	0.54	1.10	1.10	1.10	1.10
Total	0.54	1.10	1.10	1.10	1.10

**VII. Exchange Rate Arrangement:** Mexico has a floating exchange rate regime since December 22, 1994. Mexico maintains an exchange system that is free of restrictions on the making of payments and transfers for current international transactions.

**VIII. Article IV. Consultation:** The last Article IV consultation was concluded by the Executive Board on March 10, 2010. The relevant staff report was IMF Country Report No. 10/71.

**IX. Technical Assistance**

Year	Dept.	Purpose
2011	FAD	Custom administration
2011	FAD	Tax policy
2010	FAD	Fiscal Risks Management
2010	FAD	Treasury
2009	STA	National Accounts
2009	FAD	Fiscal Framework
2008	FAD	Customs Administration
2007	FAD	Intergovernmental Fiscal Relations
2007	FAD	Customs Administration
2007	FAD	Treasury
2007	MCM	Accounting and Budgeting Functions, BoM
2005	STA	National Accounts

**X. Resident Representative:** None

## ANNEX 2. MEXICO: RELATIONS WITH THE WORLD BANK AND BANK-FUND COLLABORATION UNDER THE JMAP

### A. Relations with the World Bank

Mexico has had a longstanding partnership with the World Bank Group encompassing the delivery of the full menu of financial, knowledge, and coordination and convening services. The flexibility of the FY08–13 Country Partnership Strategy (CPS) was instrumental in helping Mexico adjusting to the large adverse shocks experienced during 2008–2009. The global economic downturn and tightening in financial conditions combined with the outbreak of the A (H1N1) influenza in April 2009 led much of the World Bank's assistance to Mexico to focus on financial services while continue working on a broad knowledge agenda.

After a deep recession, Mexico is now experiencing a robust recovery. While Mexico has lowered IBRD lending to protect exposure from US\$6.4 billion in FY10 to US\$2.8 in FY11, the alignment of IBRD's lending and knowledge program to critical strategic and

global areas, like climate change and social safety nets, has continued to mature through innovative client-driven approaches. A critical challenge for the Bank now is to reach the poorer states in Mexico.

As of May 31, 2011, Mexico was the Bank's second largest borrower with US\$12.8 billion debt outstanding, representing 9.7 percent of the IBRD's total portfolio. As of this date, Mexico had the fifth largest portfolio under supervision in terms of net IBRD commitments with US\$7,552 million of which US\$3,549 million remained undisbursed. The active portfolio comprised 19 IBRD projects. During FY11, the Bank approved five projects for a total lending amount of approximately US\$2.8 billion. FY12 total new lending is envisaged at US\$1.5 billion. A new CPS will jointly be prepared with the Government of Mexico in FY12 and will cover the period FY13–FY18.

### B. Bank-Fund Collaboration under the JMAP

The Bank and Fund teams meet several times since the last Article IV consultation and agreed on the following priorities:

- Strengthening the fiscal framework. Support the authorities efforts to assess fiscal risks, improve tax administration, evaluate tax policy and enhance cash

management; with the Fund taking the lead in these areas.

- Strengthening safety nets. Support the authorities conditional cash transfer program (oportunidades) which serves about 5.6 million poor families and ameliorating the impact of the global financial crisis on the poor, and expand the popular health insurance's coverage of people without contributory social security; with the Bank taking the lead in these areas.
- Addressing climate change. Support the authorities' efforts to reduce Mexico's carbon footprint, including increasing sources of renewable energy, and improving efficiency of lighting and appliances; with the bank taking the lead.
- Financial sector surveillance. The Fund will continue with the surveillance of the financial sector. An FSAP update will take in the second half of 2011, a joint Bank-Fund effort.

## ANNEX 3. MEXICO: STATISTICAL ISSUES

The overall quality of Mexican statistics is good. A data ROSC for Mexico was completed on May 23, 2003 and was subsequently published as IMF Country Report No. 03/150. A data ROSC update was completed on October 8, 2010 and was published as IMF Country Report No. 10/330. There are various areas where improvements could be made. The authorities are aware of this situation and are continuing work in this regard. Mexico observes the Special Data Dissemination Standards (SDDS) and its metadata are posted on the Dissemination Standards Bulletin Board (DSBB). In a number of cases, the periodicity and timeliness of disseminated data exceed SDDS requirements.

Although some items of the balance of payments statistics conform to the fifth edition of the Balance of Payments Manual, a full transition has not yet been completed.<sup>1</sup> Several measures to improve external debt statistics have been carried out, including the compilation of data on external liabilities of the private sector and publicly traded companies registered with the Mexican stock

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<sup>1</sup> Since the release of the balance of payments figures for the second quarter of 2010 (August, 25th, 2010), Banco de México has been publishing a new format that follows the guidelines of the fifth edition of the Balance of Payments Manual.

exchange (external debt outstanding, annual amortization schedule for the next four years broken down by maturity, and type of instrument). International reserves data are compiled according to the Operational Guidelines for the Data Template on International Reserves and Foreign Currency Liquidity of the IMF (2001).

The national accounts statistics generally follow the recommendations of the System of National Accounts, 1993 (1993 SNA). Source data and statistical techniques are sound and most statistical outputs sufficiently portray reality. A broad range of source data are available, with economic censuses every five years and a vast program of monthly and annual surveys. For most surveys, scientific sampling techniques are used. Nonetheless, most samples exclude a random sample of small enterprises. Changes in inventories are obtained as residuals, so there is no independent verification between the production and expenditure measures of GDP. Some statistical techniques need enhancement. For example taxes and subsidies on products at constant prices are estimated by applying the GDP growth rate; a deviation from best practice.

The concepts and definitions for both the CPI and PPI meet international standards. The PPI is only compiled by product and not by economic activity. Source data for the CPI and



PPI are comprehensive and meet the needs for both indices. Price and product specification data collected for the fortnightly price survey, as well as expenditure data collected for the ENIGH, are processed and audited according to procedures established as part of the total quality management system ISO 9001.

The authorities compile fiscal statistics following national concepts, definitions, and classifications that make international comparison difficult. The statistics are comprehensive and timely, except for states and municipalities. The new government accounting law mandates accounting standards that follow international standards for all levels of government, and that take into account the information needs of international organizations and national accounts.

The authorities are committed to reporting government financial statistics in GFSM 2001 format, as well as data for the GFS Yearbook.

The methodological foundations of monetary statistics are generally sound. However, the recording of financial derivative and, to a lesser extent, repurchase agreements transactions are overstating the aggregated other depository corporations (ODC) balance sheet and survey. The accuracy and reliability of the monetary statistics are supported by comprehensive source data. The coverage of nonbank ODC is complete. Availability of data on other financial intermediaries such as insurance companies and pension funds allow for the construction of a financial corporations survey with full coverage of the Mexican financial system, which is published on a monthly basis in *International Financial Statistics*.

## Mexico: Table of Common Indicators Required for Surveillance

As of June 23, 2011

	Date of latest observation	Date received	Frequency of Data <sup>7</sup>	Frequency of Reporting <sup>7</sup>	Frequency of Publication <sup>7</sup>	Memo Items:	
						Data Quality – Methodological soundness <sup>8</sup>	Data Quality Accuracy and reliability <sup>9</sup>
Exchange Rates	June 2011	June 2011	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities <sup>1</sup>	May 2011	June 2011	M	M	M		
Reserve/Base Money	May 2011	June 2011	M	D, M	W	LO, O, O, LO	LO, O, O, O, O
Broad Money	April 2011	June 2011	M	M	M		
Central Bank Balance Sheet	April 2011	June 2011	W	W	W		
Consolidated Balance Sheet of the Banking System	May 2011	June 2011	M	M	M		
Interest Rates <sup>2</sup>	June 2011	June 2011	D	D	D		
Consumer Price Index	May 2011	June 2011	Bi-W	Bi-W	Bi-W	O, O, LNO, O	LO, LNO, O, O, LNO
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – General Government <sup>4</sup>						LO, LNO, LNO, O	O, O, O, O, O
Revenue, Expenditure, Balance and Composition of Financing <sup>3</sup> – Central Government	April 2011	May 2011	M	M	M		
Stocks of Central Government and Central Government-Guaranteed Debt <sup>5</sup>	April 2011	May 2011	M	NA	M		
External Current Account Balance	Q1 2011	May 2011	Q	Q	Q	LO, LO, LNO, LO	LO, O, O, O, LO
Exports and Imports of Goods and Services	May 2011	June 2011	M	M	Bi-W		
GDP/GNP	Q1 2011	May 2011	Q	Q	Q	O, O, O, LO	LO, O, LO, LO, O
Gross External Debt	April 2011	June 2011	M	M	M		
International Investment Position <sup>6</sup>	2010	June 2011	A	A	A		

<sup>1</sup> Any reserve assets that are pledged of otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

<sup>2</sup> Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes, and bonds.

<sup>3</sup> Foreign, domestic bank, and domestic nonbank financing.

<sup>4</sup> The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

<sup>5</sup> Including currency and maturity composition.

<sup>6</sup> Includes external gross financial asset and liability positions vis-à-vis nonresidents.

<sup>7</sup> Daily (D); Weekly (W); Monthly (M); Quarterly (Q); Annually (A); Irregular (I); Not Available (NA).

<sup>8</sup> Reflects the assessment provided in the data ROSC completed on October 8, 2010, except consumer prices which is based on the ROSC completed on May 23, 2003. For the dataset corresponding to the variable in each row, the assessment indicates whether international standards concerning (respectively) concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O), largely observed (LO), largely not observed (LNO), or not observed (NO).

<sup>9</sup> Same as footnote 8, except referring to international standards concerning source data, assessment and validation of source data, statistical techniques, assessment and validation of intermediate data and statistical outputs, and revision studies.

## ANNEX 4: FOREIGN EXCHANGE LIQUIDITY COEFFICIENT

Adding to the standard net open position limits, Mexico's regulation on FX operations is based on three pillars:

- To minimize potential (balance sheet) losses from exchange rate changes, **the net open position in foreign currency** is limited to 15 percent of Tier-1 capital (including peso denominated products linked to the exchange rate).
- To reduce the risk of losses from asset fire sales and potential instability in FX markets the **Liquidity ratio on foreign currency** requires that banks hold enough liquid FX assets to meet their short term obligations, and
- The **structural FX requirement** mandates a balance in the medium term maturity structure of assets and liabilities.

**Liquidity ratio.** A foreign currency maturity ladder is constructed to compare a bank's future cash inflows and outflows over a series of specified time periods. Banks need to hold enough FX liquid assets to cover the largest gap or net cash outflows (outflows minus inflows, where inflows include the "netting assets" described below as well as other inflows) for buckets of 1 day, 1–7 days, 1–30 days and 1–60 days. In addition, institutions must hold additional liquid assets for a

percentage of all liabilities up to 60 days which are not covered by "netting assets" with the same or shorter maturity.

- To compute inflows for the maturity ladder, haircuts are applied to "netting assets" depending on their quality, while inflows are classified according to maturity.<sup>2</sup> Netting assets include term deposits, securities with secondary market that do not qualify as liquid assets, commercial paper due within 1 year, the amount of deposits and asset in investments and mutual funds which exceeds the limits to compute as liquid assets, but do not comprise inflows from the credit portfolio (the latter are only included as inflows when computing the gaps for the above mentioned buckets).
- Regarding securities traded in secondary markets, they are computed as if they were due in 5 days, whereas commercial paper

<sup>2</sup> Assets eligible as liquid assets without haircut include: cash, deposits in the central bank, sight deposits or deposits due within 7 days at highly rated institutions (with a minimum rating of A-2 or P-2 granted by S&P or Moody's), US T-bills, T-notes and T-bonds as well as securities issued by US agencies with an unconditional guarantee from the US Government, holdings in investment and mutual funds approved by the central bank, and irrevocable credit lines granted by foreign highly rated financial institutions. There is, however, a limit to the amount of deposits, holdings in investments and mutual funds and credit lines that can be used as liquid assets.

is computed as if it was due in 1 day. The amount of deposits and assets in investment and mutual funds which exceeds the limits to compute as liquid assets are classified according to their due date (deposits) or as if due in 7 days (investment and mutual funds). In addition, securities trading in secondary markets receive a haircut depending on their credit rating (see Table). With respect to outflows, sight deposits receive a special treatment and are classified according to their interest rate, which is an indicator of their stability or behavioral maturity.<sup>3</sup>

**Table 1. Haircuts on Traded Securities**

<b>Rating</b>		<b>Value after discount as a percentage of market value</b>
<b>S &amp; P</b>	<b>Moody's</b>	
<b>Investment grade</b>		
≥ AA-	≥ Aa3	100
A+	A1	90
A	A2	90
A-	A3	90
BBB+	Baa1	80
BBB	Baa2	80
BBB-	Baa3	80
<b>Speculative grade</b>		
BB+	Ba1	50
≤ BB	≤ Ba2	0

<sup>3</sup> Assets associated to derivatives operations are considered both for the calculation of the GAPs and to net assets. Derivatives are also included, either as an asset or a liability. If derivatives are cash settled by differences, then only the difference is included as an inflow or an outflow, whereas if the derivative is settled by delivery of underlying assets, the full amount is recorded as an inflow or an outflow.

**Structural FX requirement.** At the end of each day, banks need to have Net Foreign Currency Liabilities (NFCL) of less than 1.83 times its core capital. NFCL are defined as the difference between liabilities weighted by maturity (with an eight of 100 percent for maturities up to 1 year and decreasing weights for longer maturities) and assets weighted by maturity and degree of liquidity (with a 100 percent weight for liquid assets and a 50 percent weight for highly graded loans up to 1 year). Thus, a bank may increase the size of its balance sheet in foreign currency so long as it does not create a large imbalance between the maturities of its assets and liabilities. This regulation effectively precludes institutions from borrowing short term to fund long term credit in foreign currency (for instance, mortgages).

**Table 2. Weights for Structural FX Requirement**

<b>Liabilities</b>	
Maturity	Weight
Up to 1 year	1.00
1 to 2 years	0.20
2 to 3 years	0.10
More than 3 years	0.05
<b>Assets</b>	
Type of asset	Weight
Liquid Assets and other high quality assets with maturity up to a year, credit lines granted by foreign financial institutions, and FX and derivatives operations with highly rated counterparts.	1.00
Outstanding loans graded A, B or C, as well as other assets and rights with maturity up to 1 year.	0.50



INTERNATIONAL MONETARY FUND

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August 8, 2011

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## **IMF Executive Board Concludes 2011 Article IV Consultation with Mexico**

On July 27, 2011, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Mexico.<sup>1</sup>

### **Background**

Mexico has recovered rapidly from the fallout of the global crisis. After a sharp contraction in 2009, growth in Mexico picked up strongly in 2010, reaching 5.4 percent. Robust growth has brought output back to pre-crisis levels, with manufacturing exports leading the recovery and the rebound in domestic demand helping sustain the momentum. This rapid rebound in output has been underpinned by Mexico's sound public and private sector balance sheets, strong prudential framework, and the effective countercyclical policy response, with the floating exchange rate providing also an important buffer to the fallout from the global crisis and supporting the recovery. The three successive Flexible Credit Line arrangements (currently with an access equivalent to US\$73 billion) have backed the authorities' macroeconomic strategy by providing a significant buffer against potential tail risks.

Strong growth is envisaged to continue this year and next, at about 4.5 and 4.1 percent respectively. The near term outlook is supported by the expected continued recovery in the U.S. and solid domestic demand growth in Mexico. In this context, inflation has

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<sup>1</sup> Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: <http://www.imf.org/external/np/sec/misc/qualifiers.htm>.

remained benign, with headline and core inflation declining to the 3 percent target. With demand pressures still subdued and inflation expectations well-anchored, the central bank has maintained the policy rates at 4.5 percent (since mid-2009). The current account deficit is projected to widen moderately this year to 1 percent of Gross Domestic Product (GDP), and to 1.5 percent over the medium term.

Capital inflows have increased in 2010 and 2011, on the back of sizable flows to peso-denominated government securities. This has reflected Mexico's improved outlook and its inclusion in the global bond index WGBI in 2010, which has attracted long-term institutional investors. In this context, the peso has appreciated by some 25 percent in real effective terms since the depth of the crisis, but still is somewhat below the pre-crisis levels. International reserves have increased by US\$27 billion over the last 12 months, with gross reserves now at US\$131 billion, mostly through the sale of oil revenues, with rules-based interventions playing only a limited role. The banking system continues to be liquid and well-capitalized, with funding mainly from domestic deposits. Private sector credit growth has picked up in line with the economic recovery, with household and corporate leverage ratios broadly stable.

### **Executive Board Assessment**

Executive Directors commended the authorities for their strong rules-based policy framework, which has underpinned skillful macroeconomic stewardship and a rapid turnaround in activity. With the recovery expected to remain firm, a gradual withdrawal of the policy stimulus that takes due account of the significant global uncertainty is warranted in the near term. Directors noted that the main medium-term challenges for Mexico are to bolster its growth potential and address long-term fiscal challenges.

Directors supported the authorities' fiscal consolidation plans, including returning to the balanced budget rule next year and lifting the ceiling on the accumulation of resources in the oil stabilization fund to save oil revenue windfalls. They welcomed the planned adjustment of gasoline prices to bring them gradually in line with international prices, while strengthening the social safety net to protect the most vulnerable. Directors encouraged further efforts to rebuild fiscal buffers over the medium term, particularly in view of population aging and the projected decline in oil revenues relative to GDP. This requires a combination of expenditure restraint and non-oil revenue mobilization, including at the sub national government level. Consideration should be given to adopting a structural budget rule to reduce policy pro-cyclicality, and broadening the coverage of fiscal accounts to include sub-national governments.

Directors supported the accommodative monetary policy stance, given contained inflationary pressures and well-anchored expectations. However, they noted the challenge of calibrating the policy settings in a way that balances domestic cyclical considerations against global uncertainties as fiscal consolidation is underway. Directors

underscored the need for the authorities to remain vigilant and stand ready to take action as needed.

Directors agreed that Mexico's flexible exchange rate has played an important role in absorbing external shocks and managing capital inflows. They took note of the authorities' limited intervention through the transparent, rules-based mechanisms.

Directors welcomed the resilience of Mexico's financial sector—the result of the authorities' efforts to strengthen the regulatory and supervisory framework. They considered that financial supervision has been further bolstered by the establishment of the Financial Stability Council to monitor systemic risks and address potential vulnerabilities, and that Mexico is well placed to meet Basel III prudential standards ahead of schedule. Directors looked forward to a comprehensive review of progress in the forthcoming Financial Sector Assessment Program (FSAP) update.

Directors emphasized that ambitious structural reforms are crucial to increase productivity and promote investment. They welcomed steps to improve anti-trust regulations, and called for a comprehensive strategy to address the most pressing constraints and prioritize reform efforts. Key among them is to improve labor flexibility, access to credit for small- and medium-sized enterprises, and job opportunities in the formal sector. Enhancing the efficiency and governance of state energy companies is also a priority.

Directors underlined the importance of closely monitoring cross-border spillovers, noting that a surge in global risk aversion could affect Mexico despite its strong fundamentals. They continued to view the Flexible Credit Line arrangement as a useful insurance against potential global tail risks. In this context, some Directors saw a further build-up of international reserves as part of an exit strategy from the arrangement, while a few others considered Mexico's reserve coverage to be adequate.

Public Information Notices (PINs) form part of the IMF's efforts to promote transparency of the IMF's views and analysis of economic developments and policies. With the consent of the country (or countries) concerned, PINs are issued after Executive Board discussions of Article IV consultations with member countries, of its surveillance of developments at the regional level, of post-program monitoring, and of ex post assessments of member countries with longer-term program engagements. PINs are also issued after Executive Board discussions of general policy matters, unless otherwise decided by the Executive Board in a particular case. The [staff report](#) (use the free [Adobe Acrobat Reader](#) to view this pdf file) for the 2011 Article IV Consultation with Mexico is also available.

## Mexico: Selected Economic and Financial Indicators 1/

	2005	2006	2007	2008	2009	2010
(Annual percentage changes, unless otherwise indicated)						
<b>National accounts and prices</b>						
Real GDP	3.2	5.2	3.2	1.2	-6.2	5.4
Real GDP per capita 2/	2.2	4.2	2.3	0.3	-6.9	4.4
Gross domestic investment (in percent of GDP)	24.4	26.3	26.5	26.8	23.5	25.0
Gross national savings (in percent of GDP)	23.8	25.7	25.7	25.5	22.8	24.4
Consumer price index (end period)	3.3	4.1	3.8	6.5	3.6	4.4
<b>External sector</b>						
Exports, f.o.b.	14.0	16.7	8.8	7.2	-21.2	29.9
Imports, f.o.b.	12.7	15.4	10.1	9.5	-24.0	28.6
External current account balance (in percent of GDP)	-0.6	-0.5	-0.9	-1.5	-0.7	-0.5
Change in net international reserves (end of period, billions of U.S. dollars)	-7.2	1.0	-10.4	-7.4	-5.4	-22.8
Outstanding external debt (in percent of GDP)	20.4	17.8	18.7	18.2	21.8	23.1
Total debt service ratio 3/ (in percent of exports of goods, services, and transfers)	24.5	14.2	7.5	6.8	6.7	4.8
<b>Nonfinancial public sector (in percent of GDP)</b>						
Augmented overall balance	-1.4	-1.3	-1.6	-1.4	-4.8	-4.1
Traditional overall balance	-0.1	0.1	0.0	-0.1	-2.3	-2.8
Gross augmented public sector debt	39.8	38.4	37.8	43.1	44.7	42.9
Net augmented public sector debt	35.2	32.4	31.1	35.6	39.1	39.3
<b>Money and credit</b>						
Broad money (M4a)	14.8	13.0	11.2	16.8	5.9	12.1
Treasury bill rate (28-day CETES, in percent, annual average)	6.8	9.2	7.2	7.2	7.7	5.4

1/ Methodological differences mean that the figures in this table may differ from those published by the authorities.

2/ IMF staff estimates.

3/ Public and private sectors.