



Financial Innovation and the Mexican Experience

Manuel Sánchez

Capital Market Summit 2014, Shenzhen City, China, November 16, 2014



BANCO DE MÉXICO

Contents

1 Global Trends

2 The Mexican Experience

3 Mexico's Challenges

Innovation is both a response and a contribution to a continuously evolving economic environment

- Financial innovation is anything that reduces transaction costs, offsets financial risks or improves products or channels, among other impacts
- It provides a way to exploit business opportunities, compete and make profits
- As in other industries, financial innovation is an engine of productivity and progress¹

1/ For a review of the literature on financial innovation, see Tufano, P. (2003), "Financial Innovation." In Constantinides, G., et al. (eds.), *Handbook of Economics of Finance*, volume 1, Part A, chapter 6, pp. 307-335. Amsterdam: Elsevier North Holland

Higher efficiency and better financial products and services improve welfare and facilitate economic activity

- The road for improvement is not smooth
 - ✓ Not every innovation can be successful
 - ✓ Some innovations can introduce complexity and exacerbate asymmetric information problems, as witnessed by the big financial crisis
- But financial debacles have occurred with and without innovation
- Furthermore, the assessment of innovation should be disentangled from public policies that may have provided inadequate incentives leading to past bouts of financial disarray

New technologies, financial instability and regulation may be among the triggers for innovation

- Financial innovations have a long history
- The first known financial innovation, in the form of a medium of exchange, dates back to 9000 B.C.
- Some notable changes in recent decades
 - ✓ Automatic Teller Machines
 - ✓ Debit and credit cards
 - ✓ Venture capital and leveraged buyouts
 - ✓ On-line payment systems
 - ✓ Virtual currencies¹

1/ For a summary of major financial innovations throughout history, see World Economic Forum and O. Wyman (2012), *Rethinking Financial Innovation: Reducing Negative Outcomes while Retaining the Benefits*. Geneva: World Economic Forum

Adoption of innovations in developing countries has reflected their individual needs

- They tend to be followers in mainstream financial innovations
 - ✓ Their limited development of sophisticated products shielded them in the big financial crisis
- However, large segments of low-income populations push for specific channels and products
 - ✓ Rotating savings and loan associations
 - ✓ Group-based credit products
 - ✓ Retail banking correspondents
 - ✓ Mobile banking

Contents

1 Global Trends

2 The Mexican Experience

3 Mexico's Challenges

In Mexico, stronger macroeconomic fundamentals in recent years have facilitated financial innovation

- Price stability
- Healthy public finances
- Pension system privatization
- Flexible exchange rate regime
 - ✓ Buffer in turbulent times
 - ✓ Discipline for authorities and market participants
 - ✓ Less pass-through to inflation
- Improved framework for financial regulation and supervision

In a better environment, deep markets and new products have emerged

- Largest FX market traded volume among emerging economies¹
- Government yield curve in pesos up to 30 years
- Foreign issuer participation in Mexican bond market
- FX and credit derivatives
- Securitization
- REITs and private equity certificates
- Mortgage products, including at fixed nominal interest rates
- Payroll lending

1/Bank for International Settlements (2013), *Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in 2013*. April

Also, innovative delivery channels have been leading bank infrastructure growth

Mexico: Bank infrastructure

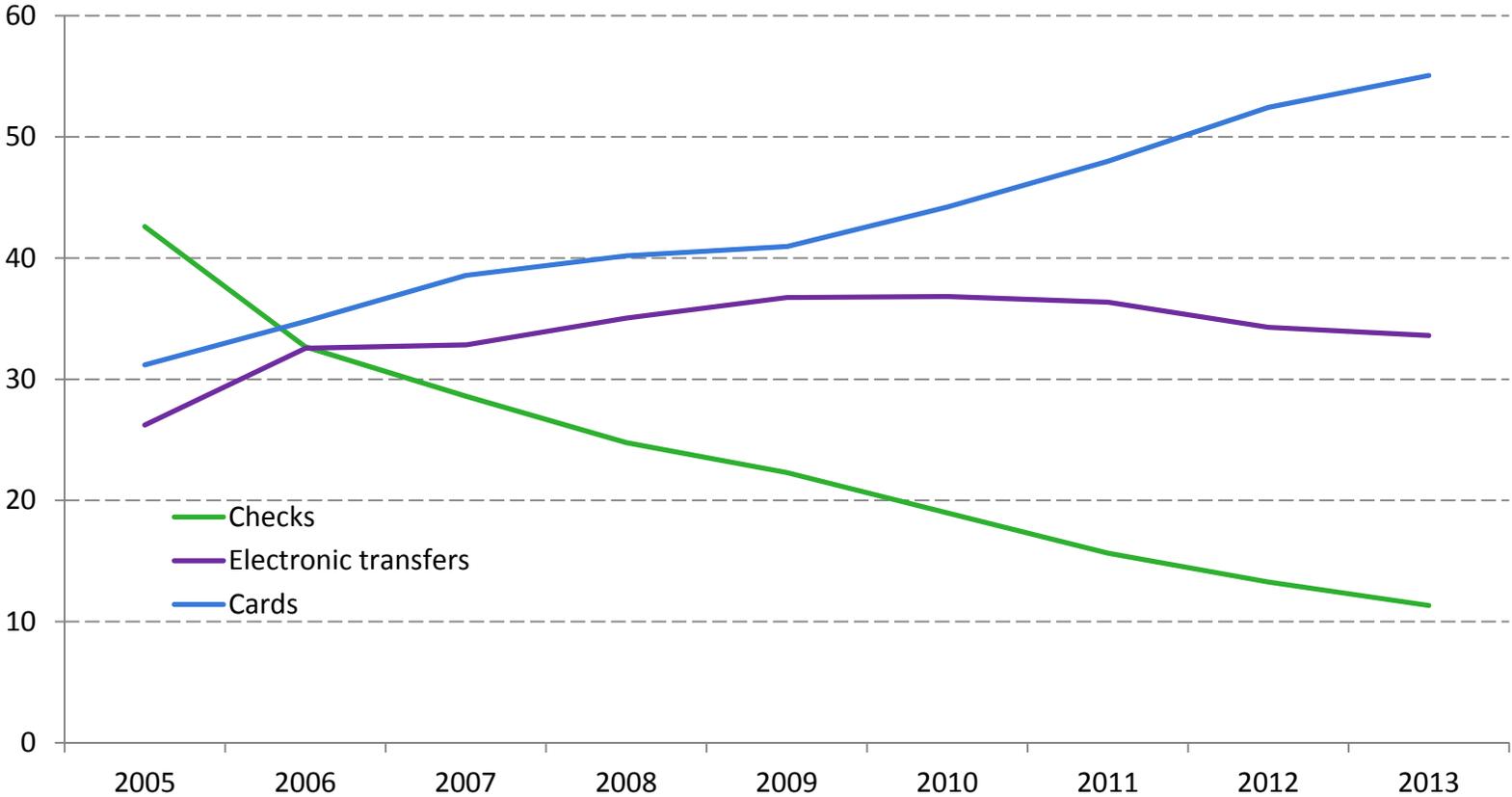
% average annual growth

| | 2003-2010 | 2011-2013 |
|-------------------------------|-----------|-----------|
| Traditional branches | 6.2 | 3.7 |
| Retail banking correspondents | -- | 41.0 |
| Automatic Teller Machines | 9.8 | 3.8 |
| Point of Sale terminals | 17.8 | 12.2 |

Source: Banco de México and the Comisión Nacional Bancaria y de Valores (CNBV)

... and electronic payment methods have been gradually displacing less efficient means

Mexico: Use of payment methods other than cash
Percentage of total¹



1/ Total includes checks, electronic transfers and cards

Source: Banco de México

Contents

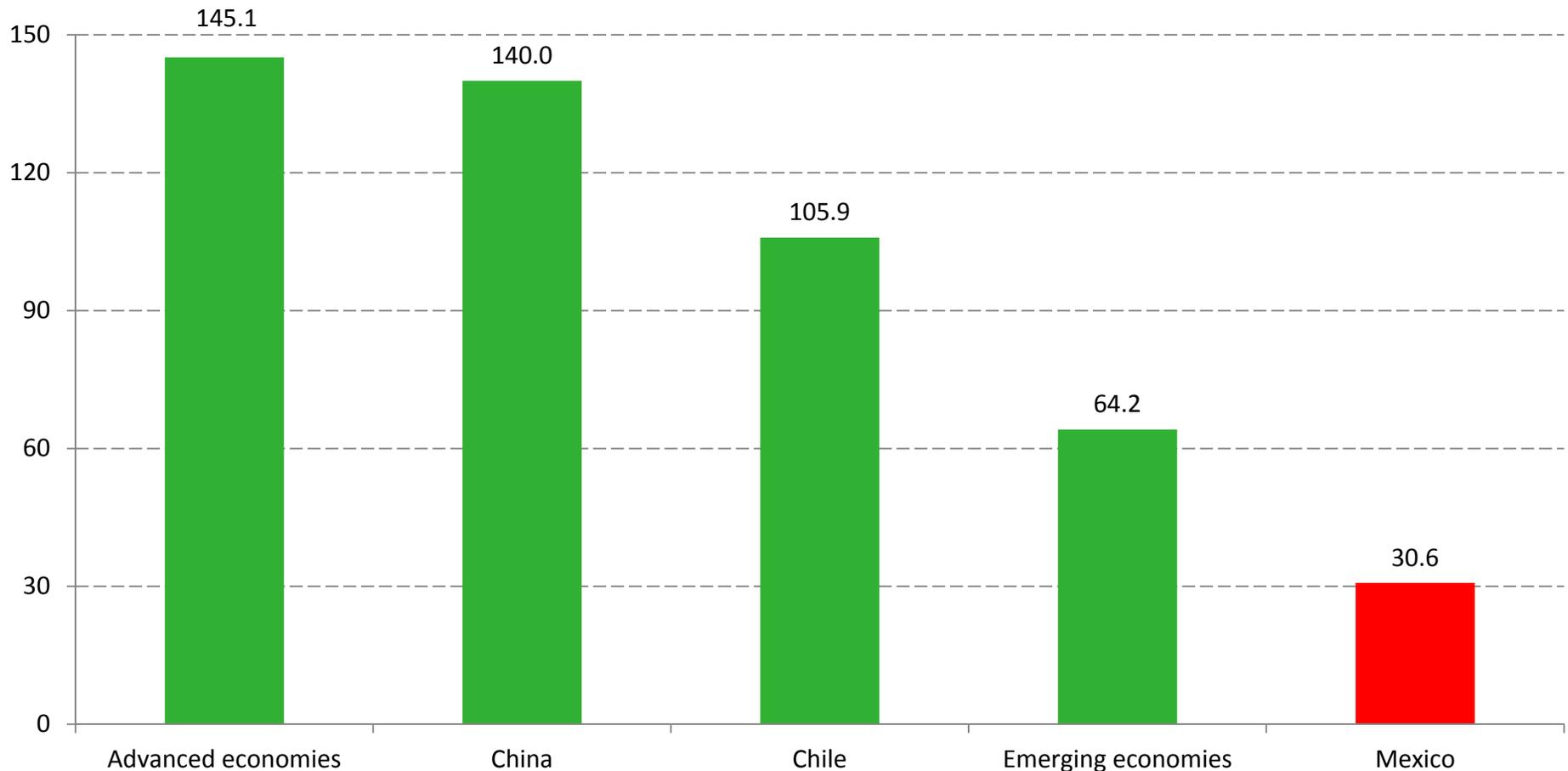
1 Global Trends

2 The Mexican Experience

3 Mexico's Challenges

Yet, opportunities still abound in Mexico, as reflected in low financial penetration by international standards

Total financing to the nonfinancial private sector in 2013¹
% of GDP



1/ Advanced economies include 27 countries, and emerging economies, 30

Source: Own calculations with World Development Indicators, World Bank

Resulting low financial inclusion has largely affected low-income families and SMEs

- Deposit accounts, transactions through the banking system, and loans per inhabitant and business remain low
- There is an inverse relationship between the lack of access to banking services and household income or company size

Mexico is in the process of tackling the root causes of low financial deepening and inclusion

- Underlying problems
 - ✓ A weak rule of law
 - ✓ Widespread informality
 - Small transaction size, deficient business information, and lack of credit history
 - ✓ High telecommunication costs and limited transport infrastructure
- Recent major policies
 - ✓ Financial reform
 - More effective property-rights protection
 - Promotion of competition
 - Improved regulation
 - ✓ Other structural reforms: labor, education, competition, telecommunications and energy

Macro foundations and reforms set the stage for further innovations to multiply in financial markets

- Debt trading through electronic platforms
- Attractive schemes for foreign investors to hold peso-denominated corporate bonds
- Term repos
- Extending the electronic payments system to a 24 x 7 basis

... and better align products and services for consumers and small businesses needs

- Use of alternative information to evaluate creditworthiness
 - ✓ Big data: bank activity, payments history and social networks
- Massive supply of standardized credit products
- Mobile banking
- Promotion of POS cell phone terminals by retail store suppliers
- Incipient peer-to-peer lending

Finally, the role of the financial authorities is essential for innovation to be sustainable

- Possible dangers from innovation
 - ✓ Excessive risk taking
 - ✓ Fraud
- Tasks for the financial authorities
 - ✓ Fortify economic fundamentals and regulation and supervision
 - Seek the right balance: excessive regulation could make innovation too costly
 - ✓ Promote competition among intermediaries
 - ✓ Enhance information availability and the interconnectivity of service providers

Concluding remarks

- Worldwide benefits from innovation have outweighed costs throughout history
- Significant advances in Mexico relate to the development of financial markets and new retail products and channels
- Mexico is in the process of tackling the root causes of low financial deepening and inclusion
- Macro foundations and reforms set the stage for further innovations to multiply
- Innovation requires the authorities to watch risks and strengthen the financial framework



BANCO DE MÉXICO

www.banxico.org.mx