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Outline
• The case for financial sector deepening in Asia
• Financial development for growth
• Financial access for inclusion
• Financial stability to safeguard inclusive growth
• Financing Asia’s future growth: key overall messages
Case for financial development

• Real-financial dichotomy in developing Asia
  – Dynamic real economy versus backward financial system
  – This is an old issue, so why re-visit it now?

• The global financial crisis (GFC) gave finance a bad name
  – Sophisticated financial innovations triggered GFC
  – Too much finance?
Case for financial development

• But Asia is well inside the global finance frontier
  – Asia is not New York or London
  – In Asia, financial development refers to much more basic task of building up a sound and efficient financial system

• More fundamentally, finance can give Asia a growth dividend
  – Asia’s growth has slowed down since GFC
  – In the past, Asia grew rapidly despite a backward financial system, not because of it
  – Therefore, the case for financial development is stronger now than ever before
Asia’s growth decelerated since GFC
Case for financial development

• In addition, financial development can contribute to equity and stability
  – Government must take action to foster inclusive finance
  – Safeguarding financial stability promotes both growth and equity

• Convergence of 3 strategic challenges adds sense of urgency to financial development
  – Re-igniting growth
  – Tackling rising inequality
  – Maintaining financial stability
Asia’s finance has improved since AFC......
.....but still lag OECD economies in size

% of GDP

Developing Asia
Latin America & Caribbean
OECD

Banking system deposits
Bonds
.....and in efficiency

Interest Rate Spread, 2011

%  

Developing Asia | Latin America & Caribbean | OECD

0 3 6 9 12 15 18  

OECD  

Latin America & Caribbean

Developing Asia
And, while Asia performs well relative to other developing regions.....

Liquid liabilities to GDP, 2011

0 50 100 150 200 250 300 350  

%
....the favorable aggregate picture masks enormous heterogeneity

Private credit to GDP, 2012
Evidence confirms growth benefits of finance

- Many cross-countries support a positive impact of financial depth on growth
  - Arcand at al (2012), Cecchetti et al (2012), and others find a non-linear relationship

- Two big problems with the literature
  - Measures of financial development or financial depth are highly imperfect
  - Two-way causality → growth may promote finance too
Evidence confirms growth benefits of finance
Measurement problems, but a roughly suggestive correlation.....
Evidence confirms growth benefits of finance

• Estrada, Park, and Ramayandi (2015) perform additional empirical analysis
  – Updates data to 2011, and expands sample to 108 countries [20 from Asia]
  – Incorporates country characteristics → e.g. developed vs developing
  – Incorporates financial openness
  – Incorporates foreign exchange rate regime
  – Use GMM to address endogeneity
Evidence confirms growth benefits of finance

- Key results from Estrada, Park, and Ramayandi (2015)
  - Re-confirm positive effect of financial depth on economic growth
  - Positive effect is especially evident in developing countries, especially Asia
  - Both banks and capital markets have a positive impact
  - Financial openness has a positive effect
  - Foreign exchange regime is insignificant
Measurement problems, but another roughly suggestive correlation.....
Evidence confirms growth benefits of finance

• Key results from Estrada, Park, and Ramayandi (2015)
  —For example, boosting developing Asia’s average ratio to GDP of liquid liabilities—currency plus checking and interest-bearing accounts in financial institutions—from about 65% to 75% adds almost 0.4 percentage points to average annual growth of GDP per capita.
Finance-equity link is conceptually ambiguous

- Conceptually, finance can either reduce inequality or worsen inequality
  - Financial development can reduce inequality if it leads to more and better financial services to the poor
    - The poor can borrow to finance their education
  - On the other hand, financial development can worsen inequality if it mainly raises returns to capital or the pay of financial professionals
    - The US before the global financial crisis
Empirical evidence is mixed too

Log Gini in market income

Log private credit to GDP

\[ y = 0.008x^2 - 0.045x + 0.063 \]

(0.002)*** (0.013)*** (0.021)***

Park and Shin (forthcoming)
Empirical evidence is mixed too

• More precisely, we find evidence of a U-shaped relationship
  – Financial development reduces inequality, but only up to a point

• Financial development does not necessarily promote equity

• Therefore, it must be accompanied by concerted government efforts to boost financial inclusion
Finance-inequality nexus

Negative correlation between income inequality and financial inclusion

\[ y = -0.3635x + 39.264 \]

(0.1696) (1.8424)

Gini index of inequality in equivalized household disposable income

Loan from a financial institution in the past year, income, bottom 40% (% age 15+), 2011
Financial instability harms growth, and exacerbates poverty and inequality

Pre- and post-Asian financial crisis growth rates

Pre- and post-global financial crisis unemployment rates

INO=Indonesia; KOR=Korea, Rep. of; MAL=Malaysia; PHI=Philippines; THA=Thailand

GRE=Greece; IRE=Ireland; POR=Portugal; SPA=Spain
Outline

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Financial development for growth

• Ample and efficient finance boosts investment, productivity, and growth
• Banks underlie sound and efficient financial systems in Asia
• Capital built by long-term finance is vital for productivity growth and innovation
• Bond market development deepens pool of long-term financing
• The approach to developing the financial sector must fit each country’s circumstances
Financial sector efficiency raises credit availability and lowers credit cost

Private credit and lending-deposit spread, developing Asia

Real lending rate and lending-deposit spread, developing Asia
Tighter link between finance and investment in Asia than elsewhere
Banking sector development contributes to investment, which feeds into growth
Long-term finance and investment enhance productive capacity

**Providers of Funds**

<table>
<thead>
<tr>
<th>Sources of funds</th>
<th>Financial intermediaries</th>
<th>Users of Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>Banks</td>
<td>Infrastructure</td>
</tr>
<tr>
<td></td>
<td>Insurance companies</td>
<td>Commercial real estate</td>
</tr>
<tr>
<td></td>
<td>Pension funds</td>
<td>Property, plant, and equipment</td>
</tr>
<tr>
<td>Foreign</td>
<td>Other asset managers</td>
<td>Equipment and software</td>
</tr>
<tr>
<td></td>
<td>Sovereign wealth funds</td>
<td>Education</td>
</tr>
<tr>
<td></td>
<td>Alternative investment vehicles</td>
<td>Research and development</td>
</tr>
<tr>
<td>Self-financing instruments</td>
<td>Capital markets</td>
<td>Maintenance of physical capital</td>
</tr>
<tr>
<td>Corporate retained earnings</td>
<td>Equity</td>
<td>New stock of residential real estate, for emerging economies</td>
</tr>
<tr>
<td>Government tax receipts</td>
<td>Bonds</td>
<td></td>
</tr>
<tr>
<td>Household income/wealth</td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

In the diagram, the flow of funds is illustrated from providers to intermediaries, and then to users of funds. This flow is crucial for enhancing productive capacity through long-term investment.
But the range of long-term finance instruments in Asia remains narrow.....

Debt financing of nonfinancial corporations by region, year-end 2011

<table>
<thead>
<tr>
<th>Region</th>
<th>Corporate loans</th>
<th>Bonds</th>
<th>Securitized loans (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>11.6</td>
<td>68%</td>
<td></td>
</tr>
<tr>
<td>Other developed</td>
<td>3.3</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Western Europe</td>
<td>13.2</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Other developing Asia</td>
<td>0.8</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Latin America</td>
<td>0.8</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>5.6</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>People’s Republic of China</td>
<td>8.6</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Middle East &amp; Africa</td>
<td>1.2</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>0.8</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Central &amp; Eastern Europe &amp; Commonwealth of Independent States</td>
<td>1.5</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>
….pointing to a need for a broader and more diversified long-term investor base

Ratio of pension assets to GDP in selected economies, 2013
Asia’s bond markets are bigger than those of other developing regions.....

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Local currency denominated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ billion</td>
<td>$ billion</td>
</tr>
<tr>
<td><strong>Advanced economies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>74,371</td>
<td>67,912</td>
</tr>
<tr>
<td>Euro area</td>
<td>22,106</td>
<td>20,147</td>
</tr>
<tr>
<td>Other</td>
<td>22,857</td>
<td>19,134</td>
</tr>
<tr>
<td>US</td>
<td>29,409</td>
<td>28,630</td>
</tr>
<tr>
<td><strong>Emerging market economies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8,119</td>
<td>7,070</td>
</tr>
<tr>
<td>Europe</td>
<td>699</td>
<td>500</td>
</tr>
<tr>
<td>Lat Amer.</td>
<td>1,406</td>
<td>1,053</td>
</tr>
<tr>
<td>Asia</td>
<td>5,667</td>
<td>5,260</td>
</tr>
<tr>
<td>Other</td>
<td>347</td>
<td>255</td>
</tr>
</tbody>
</table>
.....but masks a great deal of heterogeneity

<table>
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<tr>
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<td>$ billion</td>
</tr>
<tr>
<td>Asia</td>
<td>5,667</td>
<td>5,260</td>
</tr>
<tr>
<td>China, People's Rep. of</td>
<td>2,956</td>
<td>2,938</td>
</tr>
<tr>
<td>Hong Kong, China</td>
<td>116</td>
<td>45</td>
</tr>
<tr>
<td>India</td>
<td>515</td>
<td>489</td>
</tr>
<tr>
<td>Indonesia</td>
<td>113</td>
<td>84</td>
</tr>
<tr>
<td>Korea, Rep. of</td>
<td>1,265</td>
<td>1,117</td>
</tr>
<tr>
<td>Malaysia</td>
<td>260</td>
<td>233</td>
</tr>
<tr>
<td>Pakistan</td>
<td>34</td>
<td>32</td>
</tr>
<tr>
<td>Philippines</td>
<td>101</td>
<td>63</td>
</tr>
<tr>
<td>Singapore</td>
<td>130</td>
<td>90</td>
</tr>
<tr>
<td>Thailand</td>
<td>175</td>
<td>170</td>
</tr>
</tbody>
</table>
Lots of progress in bond market development in Asia, but scope for further growth

• Asian EMEs experienced rapid improvement in the currency structure of bond markets
  – The proportion of foreign-currency bonds falling from 10% around 2000 to just 4% in 2013
    • In the PRC, India, Malaysia, Pakistan, and Thailand, more than 90% of bonds are now denominated in local currency

• Big differences exist across Asia, and bond markets in many financially underdeveloped countries are still embryonic or nonexistent

• Furthermore, in the region as a whole, the market for corporate bonds remains less developed than the market for sovereign bonds
Thailand’s local-currency bonds outstanding

% of GDP

Government
Corporate
Total

1995 1997 1999 2001 2003 2005 2007 2009 2011 2013
Financial development must fit country circumstances

• Low-income countries that rely heavily on banks can benefit from reform that mobilizes domestic savings, lowers credit costs, improves access, and promotes credit allocation to most productive sectors

• Middle-income countries can reap productivity gains from developing equity and bond markets that can lower long-term capital costs to facilitate investment and innovation
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Financial inclusion is a vital ingredient of inclusive growth

- Although financial development promotes growth, it does not necessarily promote equity.
- What matters more for inclusive growth is financial inclusion – i.e. broadening financial access to poor households and smaller firms.
- Financial services can raise the well-being of the poor and increase their income potential.
- They facilitate the entry of new and smaller firms, and thus promote competition and dynamism.
- Yet the region fares relatively poorly in financial inclusion.
Low degree of financial inclusion

Formal account penetration across the world

% of adults with account at a formal financial institution

- High income
- Europe
- Latin America & Caribbean
- Developing Asia
- Middle East and North Africa
- Sub-Saharan Africa

Global median
Limited access to banks

ATMs per 100,000 adults  Commercial bank branches per 100,000 adults

High Income | Europe | LAC | MENA | Developing Asia | SSA

LAC=Latin America & Caribbean; MENA=Middle East and North Africa; SSA=Sub-Saharan Africa
Low financial usage and access for firms

- % of enterprises with checking/savings account
- % of enterprises with credit line/loan

Europe: 95%
Latin America & Caribbean: 85%
Developing Asia: 75%
Africa: 60%
Middle East & North Africa: 50%
Financial access is low in poorer Asian countries

Adults with an account at a formal financial institution, bottom 40 percentile by income, 2011

- Singapore
- Republic of Korea
- Hong Kong, China
- Mongolia
- Thailand
- Sri Lanka
- Malaysia
- PRC
- Kazakhstan
- Bangladesh
- India
- Georgia
- Uzbekistan
- Lao PDR
- Nepal
- Armenia
- Azerbaijan
- Viet Nam
- Philippines
- Indonesia
- Pakistan
- Tajikistan
- Cambodia
- Kyrgyz Republic
- Afghanistan
- Turkmenistan
A range of barriers impede Asian household and corporate access to finance

• More than simply a lack of money holds Asian households back from opening bank accounts.

• Household surveys find that account fees, difficult geographic access, and stiff documentation requirements get in the way.

• For Asian firms, the major deterrents to borrowing are unfavorable interest rates, complex application procedures, and high collateral requirements.
Innovations and policies to improve financial inclusion in Asia must address cost and risk

- The fixed costs of extending traditional financial services, such as establishing a branch in a rural area, often make it prohibitively expensive to reach the poor.
- More cost-effective delivery channels, such as mobile phones and banking agents, can reduce costs by as much as 19%.
Innovations and policies to improve financial inclusion in Asia must address cost and risk

- Further, serving clients with no steady income flow, formal property title, or even personal identification entails high risk.
- However, biometric identification initiatives such as India’s Aadhaar program, for example, can address the lack of proper identification and facilitate access for the poor to financial services.
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Financial stability for growth and equity

• Financial sector development can sometimes lead to instability and volatility in financial institutions and financial markets
  — Especially, if financial development is accompanied by financial liberalization and opening up

• Yet, as we saw earlier, financial instability can harm both growth and equity

• Therefore, a major strategic challenge for many Asian countries is to further develop their financial sectors in a stable way
  — For example, this is a huge priority for the PRC
External and domestic risks to stability

- Asia’s financial systems have become much healthier since reform following the Asian financial crisis of 1997–1998.
- Even so, external shocks have the power to unsettle local markets, as they did in May 2013, when news of a possible change in US monetary policy decimated Asian stock prices and currency values in the so-called taper tantrum.
- Lurking in the background, meanwhile, are such homegrown risks as large shadow banking systems in some economies and unrestrained household debt expansion in others.
Asia is vulnerable to global financial shocks

Nominal rate changes against the US dollar during the taper tantrum, 23 May–30 June 2013
Bank regulation is first line of defense

• International experience during the global financial crisis provides valuable lessons for Asian bank regulators

• Above all, the crisis underlined that sound and effective bank regulation is vitally important to financial stability

• The crisis reflected the failure of the regulatory authorities to keep pace with financial innovation

• The sobering lesson for Asia is that even financially advanced economies are susceptible to risks from lax regulation and reckless lending.
Advent of Basel 3 further complicates the task of Asian bank regulators

Comparison of Basel II and Basel III capital requirements

<table>
<thead>
<tr>
<th>% of risk weighted assets</th>
<th>Capital requirements</th>
<th>Additional macro prudential overlay</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Common equity</td>
<td>Tier 1 capital</td>
</tr>
<tr>
<td></td>
<td>Minimum</td>
<td>Required</td>
</tr>
<tr>
<td>Conservation buffer</td>
<td>Minimum</td>
<td>Required</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memo:</td>
<td>Equivalent to about 1% of an average international bank under the new definition</td>
<td>Equivalent to about 2% of an average international bank</td>
</tr>
<tr>
<td>Basel III New definition &amp; calibration</td>
<td>4.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>
Macroprudential policies can also help.....

- Macroprudential policies seek to mitigate risks that could undermine the entire financial system by imposing, for example, capital requirements and limits on foreign currency borrowing that apply to all banks.
- They are designed to complement microprudential regulation, which monitors risks specific to individual institutions.
- Evidence indicates that macroprudential policies can indeed manage and mitigate macroeconomic risk in Asian economies.
Credit growth response to credit-related macroprudential tightening in India

Credit growth response
Upper bound
Lower bound

Impulse response
4
2
0
-2
-4
0
2
4
6
8
10
Leverage growth response to liquidity-related macroprudential tightening in Indonesia
Housing growth response to credit-related macroprudential tightening in the Republic of Korea

Impulse response

Housing growth response
Upper bound
Lower bound

Impulse response

0
2
4
6
8
10
...as can FDI and diversified foreign funding

• The literature offers ample evidence that a higher share of foreign direct investment in foreign liabilities stabilizes financial markets

• Empirical analysis across economies further shows that those with more diversified foreign funding when the taper tantrum struck suffered less exchange rate depreciation

• When borrowing foreign currency, it is prudent to minimize currency mismatch
Diversification of external liability in short-term debt and currency depreciation during QE taper tantrums

- Developing Asia
- Other economies

Percentage change in nominal exchange rate
20 –
15 –
10 –
5 –
0 –
-5 –

Diversification of short-term liabilities in short term debt, 2012
Share of foreign direct investment in the foreign liabilities of selected economies, 2012

- India
- Malaysia
- Philippines
- Thailand
- Indonesia
- Hong Kong, China
- People's Republic of China
- Mexico
- United States
- Brazil

Developing Asia

Other economies
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Key overall messages

• Financial sector development can foster inclusive growth in Asia.
  – Finance has a generally positive effect on growth.
  – The benefits of growth will be even larger if finance promotes a more market-based allocation of resources.
    • Experience in the PRC shows, for example, that the entry of private foreign banks can enhance the efficiency of state-owned banks.
  – But the impact of finance on equity is uncertain.
    • To safeguard inclusive growth, further sector development must be accompanied by steps to ensure broad access to finance for households and firms.
Key overall messages

• Regulators will be challenged, however, to find the right balance
  – The region’s financial institutions are well placed to meet the more stringent regulatory standards being adopted globally, as many already surpass requirements under Basel III.
  – Yet regulators must act to strengthen financial institution governance and clamp down on inefficient and inequitable practices like crony lending and insider trading.
Key overall messages

• Regulators will be challenged, however, to find the right balance
  – They must appreciate how strong regulation protects stability by preventing the accumulation of systemic risks, but weigh it against the potential benefits of flexible regulation that promotes investment, productivity, innovation, and economic growth

• Reforms in other areas will magnify the benefits of financial sector development
  – A benign investment climate strengthens the link between finance, entrepreneurship, and investment
  – Education reform that improves school equality will increase the gain from borrowing for education