

# Electronic Finance: Reshaping the Financial Landscape Around the World



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# Structure of Presentation

- The New World of Financial Services:  
A (R)evolution?
- Public Policy Implications
- Impact on Emerging Markets



# The New World of Financial Services

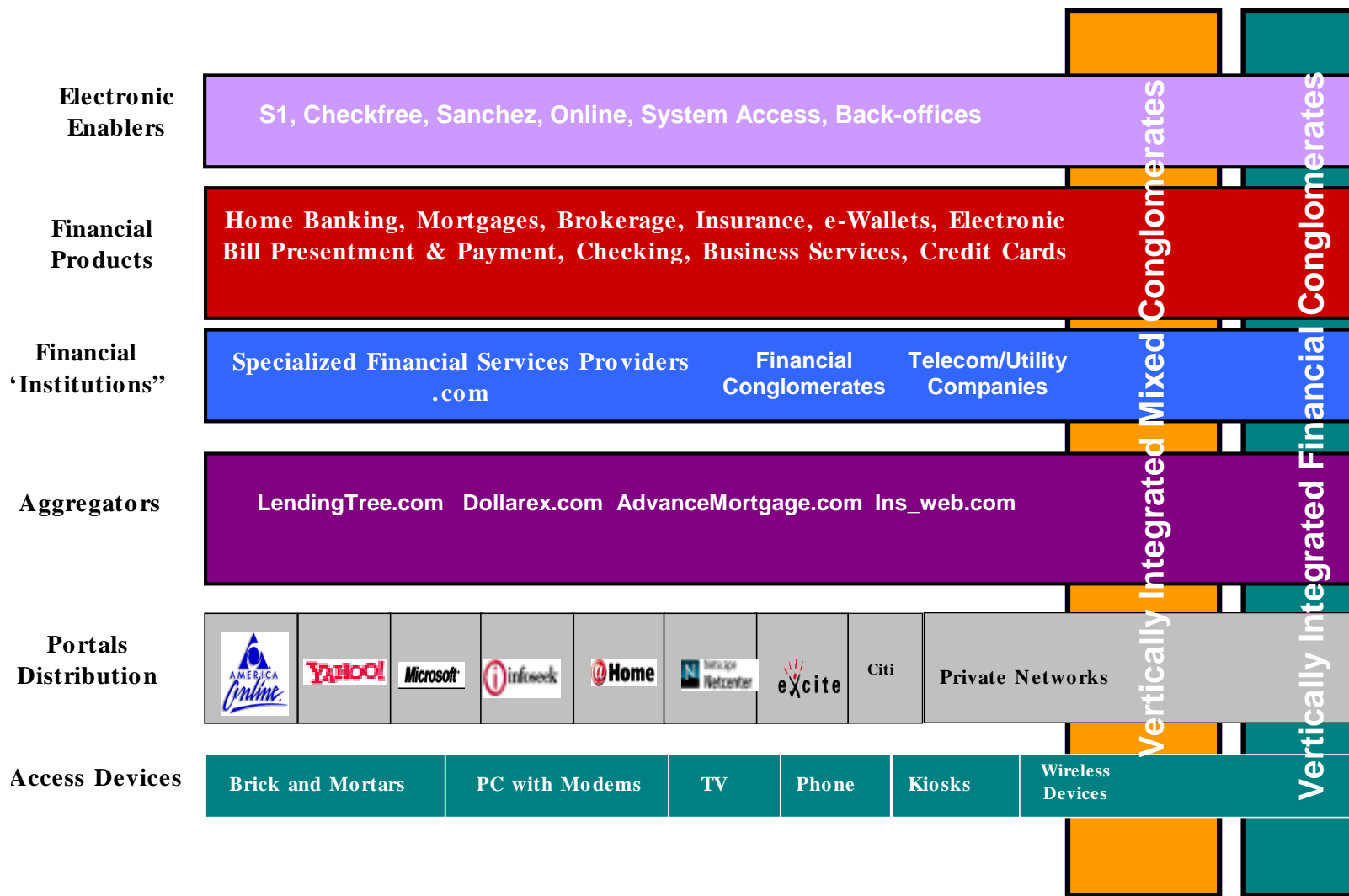
- Three major factors impacting financial services:
  - Globalization
  - Deregulation (geographic and product)
  - Advances in information technology



# Technology is Revamping Industrial Structure for Financial Services

- Entry of new specialized financial service providers
  - direct product providers
  - aggregators
- Entry of non-bank entities (telecoms/utilities)
- Consolidation around recognized brand names
- Emergence of mixed financial and non-financial conglomerates
- Globalization of markets and trading systems

# Technology is Revamping Industrial Structure for Financial Services





# Technology: Changing Financial Service Provision

- Massive cost reductions in technology and communications cost
- In particular, the internet
  - reduces processing and labor costs
  - allows for new distribution channel
  - allows for better and more cost effective customer stratification and personalized pricing
  - permits unbundling of financial products and commoditization
  - lowers barriers to entry



# Benefits to Consumers of Financial Services

- **Benefits to retail consumers**
  - Reduction in price and search costs
  - Improvement in quality of services
  - speed and timeliness of information (information-asymmetries reduced)
- **Benefits to corporates**
  - Reduction in transaction, search and monitoring costs
  - Widening of access to financial services including for SMEs



# Implications for Public Policy in the Areas of:

- Safety and soundness regulations
- Competition policy
- Consumer protection and education
- Global public policies





# Safety and Soundness

- The need to review the extent of safety net
  - Special nature of banks eroding
  - Safety net and associated prudential regulation and supervision
  - Guarantees of payment finality a last resort
- Over short term, given technology advances important to
  - Prevent extension of safety net in EM countries
  - Decline of franchise value of incumbent institutions and financial stability



# Competition Policy

- A more active competition policy will be needed
- Market and product definition more difficult
- Barriers to entry can arise from
  - Sunk costs and/or high fixed costs and switching costs
  - Network externalities
  - Links between banking and commerce or vertical integration/horizontal integration
- Competition policy in financial services needs to be harmonized.



# Consumer and Investor Protection

- Consumer and investor education and protection more important
- What role for ISP providers?
- What role for Portal Companies and Investment Advice?
- What role(s) for financial service providers?



# Global public policy dimensions

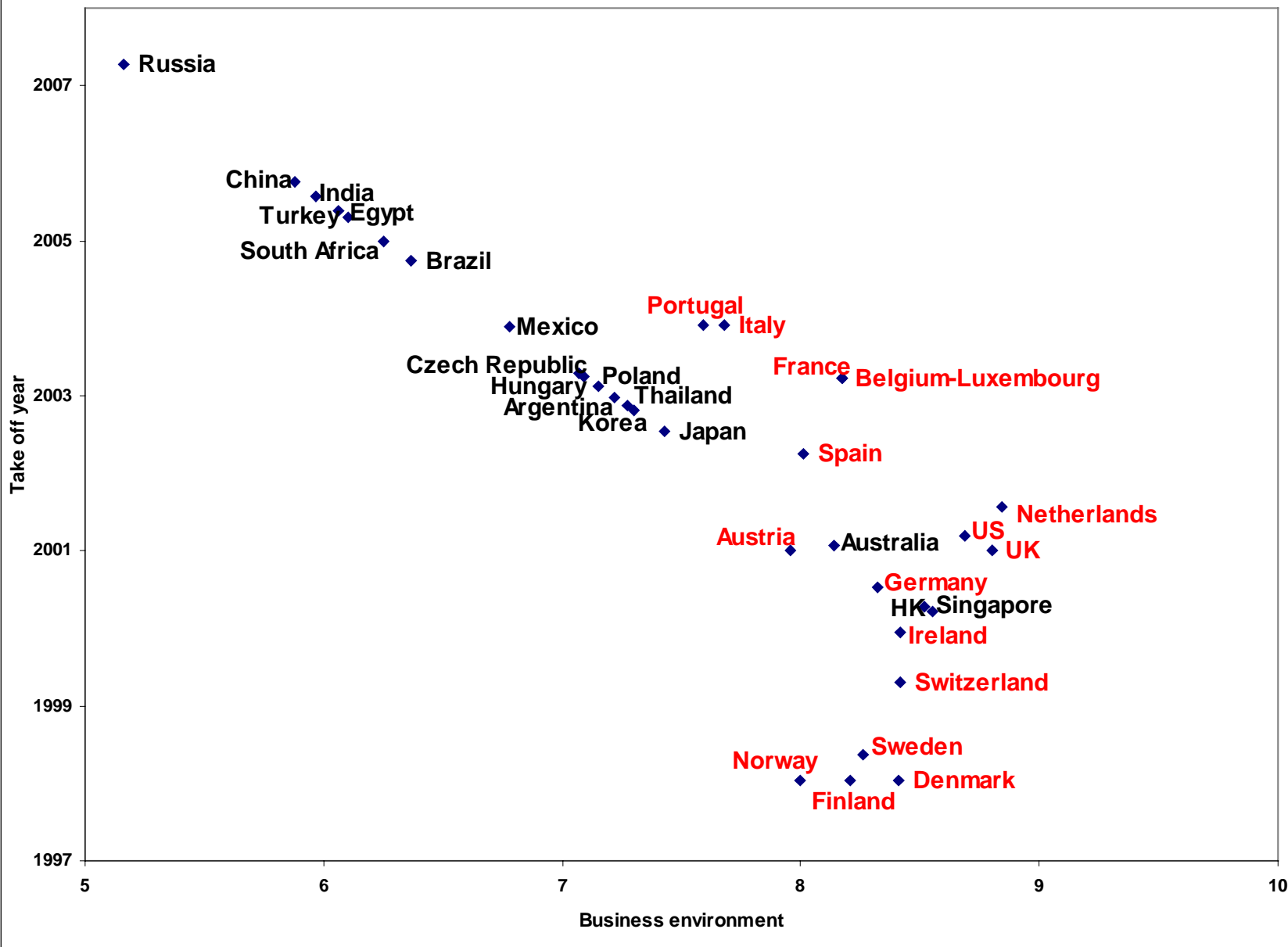
- Access to cross-border financial services raises the following issues
  - Move to single license (passport) with home rule regulation?
  - Which country standards and jurisdictions apply?
- Market disturbances could increase
  - Easier spread of misinformation, commoditization, less risk sharing by institutions could increase asset price volatility
  - Herding, contagion, and susceptibility to spurious currency attacks may increase
  - Capital account restrictions more difficult to enforce
  - Coordination of creditors in a crisis more difficult



# Impact on Emerging Markets

- E-finance and related e-commerce and overall penetration is growing very rapidly
- E-finance has the potential to
  - Improve quality and scope of financial services
  - Venues for trading risks
  - Offer more cost-effective delivery of services
  - Widen the access of retail and commercial clients
- Survey Results Suggest Uneven Development of Preconditions to obtain the benefits.

Take off Point for Online Banking: Conditioned on Business Environment



# EXISTING REGULATION OF E-FINANCE PROVIDERS AND INFORMATION INFRASTRUCTURE

Country by Geographic Region	Does “electronic signature” or online-verification of a person exist?	Do statutes, regulations or guidelines address the issues of outsourcing for financial institutions?	Can financial service providers obtain positive (A) or negative (B) information on borrowers?
<b><i>Europe</i></b>			
<b>European Union</b>	<b>Yes</b>	<b>Yes</b>	N/A
<b>UK</b>	<b>Yes</b>	N/A	<b>Yes (A &amp; B)</b>
<b>Germany</b>	<b>Yes</b>	<i>Pending</i>	N/A
<b>Czech Republic</b>	<i>Pending</i>	No	No
<b>Finland</b>	<b>Yes</b>	N/A	<b>Yes (A &amp; B)</b>
<b>France</b>	<b>Yes</b>	N/A	<b>Yes (A &amp; B)</b>
<b>Hungary</b>	<i>Pending</i>	N/A	<b>Yes (A &amp; B)</b>
<b>Poland</b>	<i>Pending</i>	<b>Yes</b>	<i>Pending</i>
<b>Russia</b>	<i>Pending</i>	N/A	N/A
<b>Sweden</b>	<b>Yes</b>	N/A	<b>Yes (A &amp; B)</b>
<b>Turkey</b>	No	No	<b>Yes to B</b>
<b><i>The Americas</i></b>			
<b>Argentina</b>	<i>Pending</i>	N/A	<b>Yes (A &amp; B)</b>
<b>Brazil</b>	<i>Pending</i>	<b>Yes</b>	<b>Yes to B</b>
<b>México</b>	<b>Yes</b>	No	<b>Yes (A &amp; B)</b>
<b>USA</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes (A &amp; B)</b>
<b><i>Asia</i></b>			
<b>Australia</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes (A &amp; B)</b>
<b>China</b>	<i>Pending</i>	No	<b>Yes (A &amp; B)</b>
<b>Hong Kong</b>	Yes	<b>Yes</b>	<b>Yes to B. No to A</b>
<b>India</b>	<b>Yes</b>	N/A	<i>Pending</i>
<b>Japan</b>	<b>Yes</b>	Yes	<b>Yes (A &amp; B)</b>
<b>Korea</b>	Yes	Yes	Yes (A & B)
<b>Singapore</b>	Yes	Yes	<i>Pending</i>
<b>Thailand</b>	No	N/A	Yes (A & B)
<b><i>Africa</i></b>			
<b>Egypt</b>	N/A	N/A	N/A
<b>South Africa</b>	<i>Pending</i>	N/A	Yes (A & B)
<b>Morocco</b>	No	No	No
<b>Tunisia</b>	N/A	N/A	N/A

# EXISTING REGULATION OF E-FINANCE PROVIDERS AND INFORMATION INFRASTRUCTURE

Country by Geographic Region	Do separate authorization requirements for virtual electronic finance providers exist?	Does regulation of stored value cards or electronic payments (e.g. deposit substitutes) exist?	Are issuers of deposit substitutes required to inform their customers that the cards are not guaranteed in case the issuer fails?	Type of institutions with access to the real time gross settlement system	Are there disclosure requirements for portals?
<b><i>Europe</i></b>					
<b>European Union</b>	Same framework as “brick and mortar”	<b>Yes</b>	No	Only credit institutions or ELMI	No
<b>UK</b>	No (refer to EU)	No	No	Banks	No
<b>Germany</b>	No (refer to EU)	<b>Yes</b>	No	Credit Institutions	No
<b>Czech Republic</b>	No	Pending. new “Banking Act”	<i>Pending</i>	Domestic banks and Stock Exchange Inst.	No
<b>Finland</b>	No (refer to EU)	<b>Yes</b>	<i>Pending</i>	Central Bank	No
<b>France</b>	No (refer to EU)	<b>Yes</b>	N/A	N/A	No
<b>Hungary</b>	No	<b>Yes</b>	<b>Yes</b>	Financial Institutions	No
<b>Poland</b>	No	Pending	No	Banks and Clearing Houses	No
<b>Russia</b>	No	<b>Yes</b>	N/A	Bank of Russia-clients	No
<b>Sweden</b>	No (refer to EU)	<b>Yes</b>	No	Credit Institutions	<b>Yes</b>
<b>Turkey</b>	No	No	N/A	Banks	No
<b><i>The Americas</i></b>					
<b>Argentina</b>	No	No	N/A	Banks/Clearing House	<b>Yes</b>
<b>Brazil</b>	No	No	N/A	N/A	<i>Pending</i>
<b>México</b>	No	No	No	Banks and Brokers	No
<b>USA</b>	<i>Pending</i>	No	<b>Yes</b>	Depository Institutions	<b>Yes</b>
<b><i>Asia</i></b>					
<b>Australia</b>	No	<b>Yes</b>	N/A	Depository Institutions	No
<b>China</b>	No	<b>Yes</b>	<b>Yes</b>	Banking Institutions	<b>Yes</b>
<b>Hong Kong</b>	No	<b>Yes</b>	No	Depository Institutions	<b>Yes</b>
<b>India</b>	No	<b>Yes</b>	N/A	Banking Institutions	No
<b>Japan</b>	<b>Yes</b>	<b>Yes</b>	N/A	Financial Institutions	No
<b>Korea</b>	<i>Pending</i>	No	No	Commercial Banks	No
<b>Singapore</b>	Yes	Yes	No	Banks	Yes
<b>Thailand</b>	No	No	No	Banks	No
<b><i>Africa</i></b>					
<b>Egypt</b>	N/A	N/A	N/A	N/A	N/A
<b>South Africa</b>	No	Yes	Yes	Banks	No
<b>Morocco</b>	No	No	No	Banks	No
<b>Tunisia</b>	N/A	N/A	N/A	N/A	N/A





# Impact on Emerging Markets

- Financial Sector Development: A New Paradigm?
  - A more **functional** versus institutional approach
  - Focus on the enabling environment: basic legal, information, and communications infrastructure
  - Reassess approach to financial regulation and supervision
  - Reassess whether very small and/or underdeveloped countries should have domestic equity, bond, and even banking systems



# Some Preconditions

- Communications Infrastructure
- Security Arrangements
- Privacy and Information
- Contract Enforcement



# Communications Infrastructure

- Privatize Post Telegraph and Post Administrations
- Improve licensing of competitive operators
- Reduce international trade barriers
- Impose mandatory interconnections
- Introduce an independent/ accountable regulatory authority
- Develop price cap regulations



# Security Arrangements

- Security breaches becoming more common
- Should the Certification Authority be public or private?
- How stiff are penalties for security infractions?
- How can private keys be made much more secure to permit authentication?
- Biometrics



# Privacy and Information

- Is Privacy consistent with Security?
- Screen scraping
- Sharing positive and negative credit information
- Technology and its role in data mining and scoring—the case of ICICI and Global Trust Bank



# Contract Enforcement

- Weak Contract Enforcement implies less liquidity
- Cross Border Issues and Dispute resolution
- Can technology improve collateral and foreclosure processes?
- Can technology improve contract enforcement?



# Applications: E-Finance in Emerging Markets

- Smart Cards a way to Leapfrog
- Insurance: E-financeable
- E-Finance for Small and Medium Enterprises
- Micro finance: E-financeable?
- Housing Finance: A new approach
- ECNs in emerging markets?