



Seminar on Financial Markets & Market Development

Functions & Structure of Financial Markets

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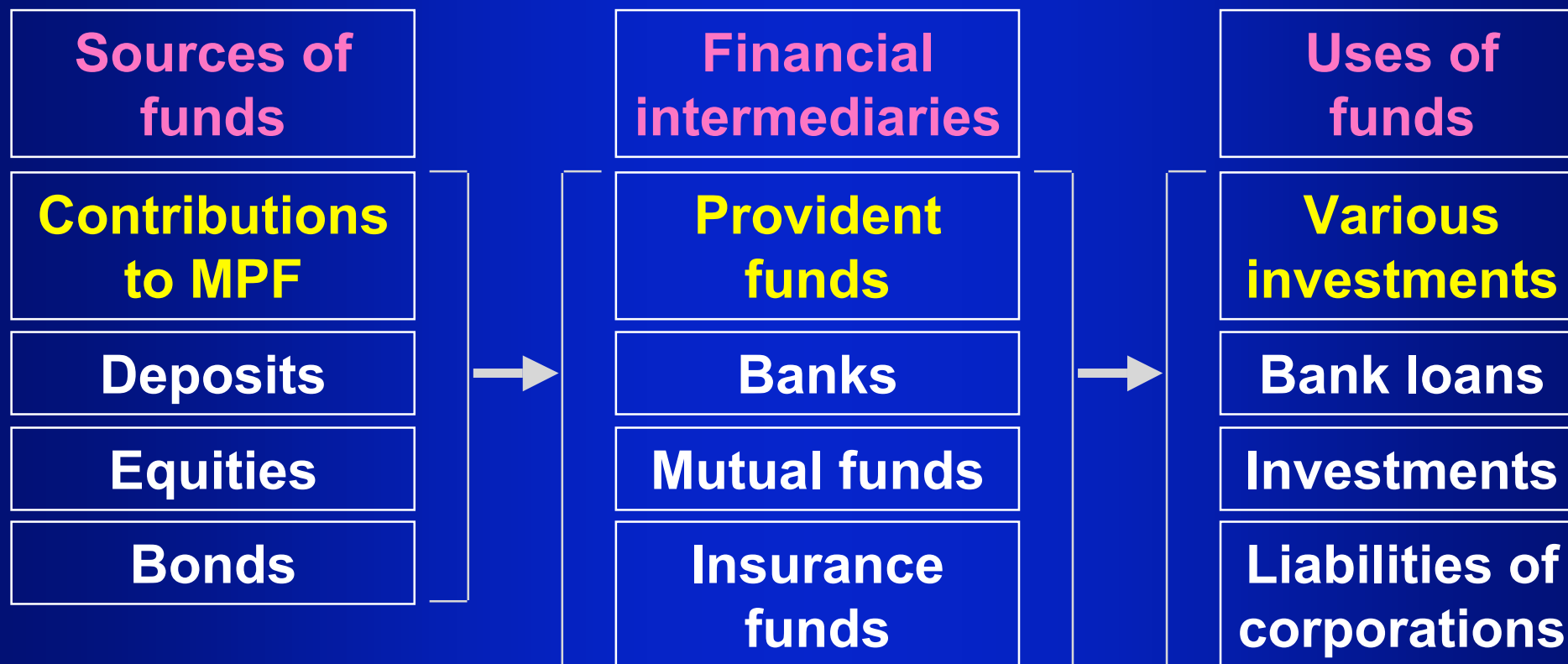
Functions of Capital Markets

- ◆ **Price discovery** - pricing of risks and valuation of property rights
- ◆ **Resource allocation** - exchange of property rights
- ◆ **Investor choice** - timing of consumption vs savings
- ◆ **Risk Management** - enable diversification of risks
- ◆ **Role in corporate governance**



Efficient intermediaries needed

- ◆ Delayed consumption = savings = investment
- ◆ ∴ efficient intermediaries needed
- ◆ otherwise, fall in the vicious circle : bad loans → lost savings → lost consumption → suppressed economic growth → bad loans





Information & Markets

- ◆ Markets need real time, reliable information to make correct decisions, especially for risk management in highly volatile environment
- ◆ High quality information needs :
 - ✦ Good accounting standards,
 - ✦ Reliable, timely statistical & reporting processes
 - ✦ Capacity to process, analyze and decide on information critical to competitive success
- ◆ Bad accounting = bad information = poor decision making = bad risk management → financial crisis



Changing Structure of Financial Markets

- ◆ Improvements in Finance Theory
 - ⇒ evolution of derivatives, options & futures
- ◆ Technology & Telecommunications
 - ⇒ **Global 24 hours markets**
 - ⇒ **From market place to market space**
- ✦ Deregulation
 - ⇒ Lines of traditional businesses blurring



Market power shifting to fund management

US\$ trn - 1999

US Banks - \$6.6

US Stocks - \$15.3

US Bonds - \$14.6

Global central bank reserves - \$1.8

OTC daily turnover - \$1.26 (+66%)

Exchange traded turnover - \$1.37 (+12%)

Total daily FX turnover - \$1.5 (April 98)



Rise of Derivative Markets

US\$ trn - June 1998

Global Notional Outstanding OTC contracts - \$72

Gross Outstanding Exchange Contracts - \$13.2

Gross market value of OTC contracts - \$2.4

Net market value of OTC contracts - \$1.2

Gross World GDP - \$29.2 trn

**Gross stock market cap in EU/NA/JP = \$46.6 trn vs
GDP of \$21.4**



Technology driving competition & consolidation

- ◆ Electronic trading replacing trading floors (DTB vs LIFFE)
- ◆ Strategic alliances formed (Pan-European Exchange)
- ◆ US market polarising (NYSE vs NASDAQ/Amex/Phil)
- ◆ Internet trading volume accelerating (Globex, Reuters etc)
- ◆ Asian alliances?



Exchanges of the Future

- ◆ Highly automated (needs high capital investments)
- ◆ Highly liquid (with global institutional players, not just domestic retail driven)
- ◆ Globally competitive (strategic linkages)
- ◆ Responsive to market changes (not constrained by member interests)
- ◆ Adaptable to technology change
- ◆ Low cost (economies of scale)



Globalization and Consolidation

- ❖ **Competition and Technology resulting in consolidation > NASD/Amex**
- ◆ **Merger of Equity, Bond & Derivative markets > Eurex + Cedel + Euroclear (?) to improve clearing platforms and increase efficiency**
- ◆ **Global Partnerships > CME + SIMEX + MATIF + Montreal + Brazil;**
- ◆ **Demutualization: ASX, SSE**
- ◆ **ECNs account for 40% of trading in NASDAQ**



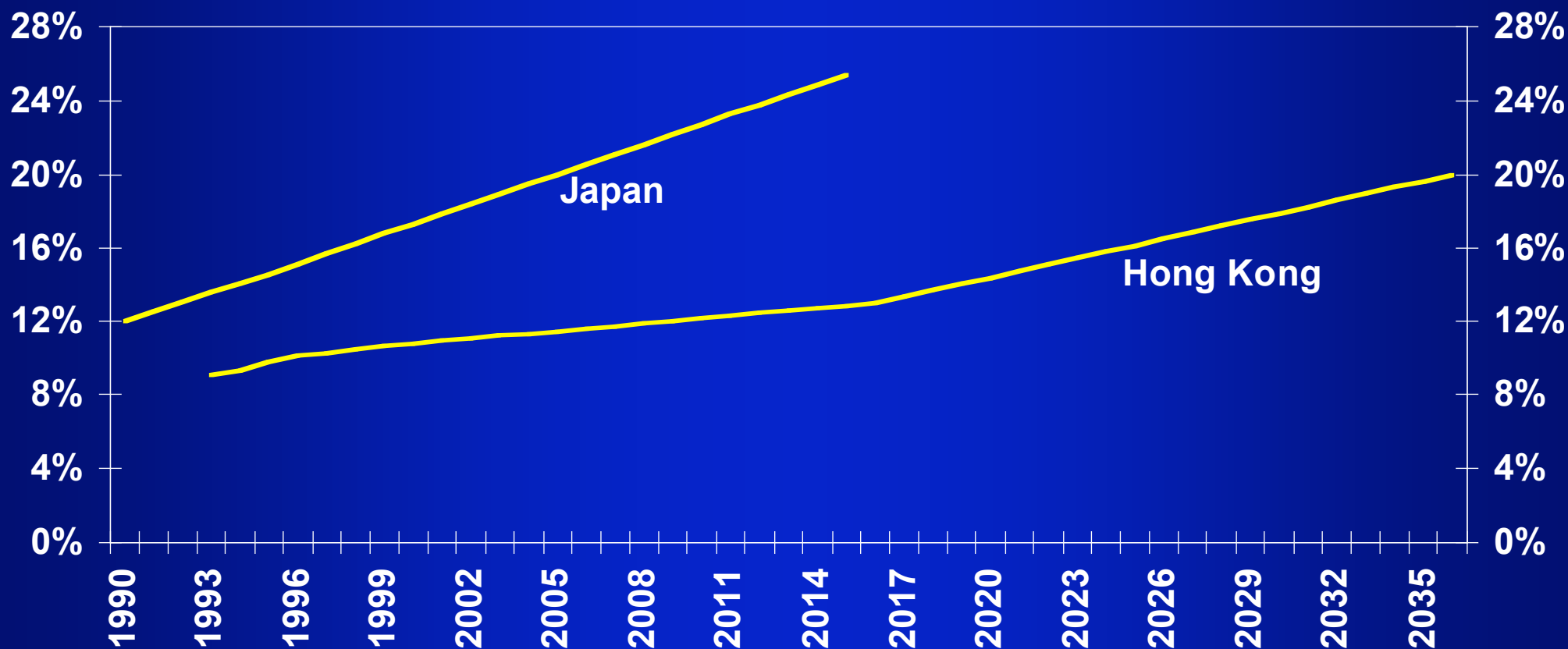
The future of E-trade

- ◆ E-Schwab opened 1.4 million new accounts in 1998. Charles Schwab market cap now US\$41.5 bn - size of the Thai market and bigger than Boeing or Merrill
- ◆ Amazon.com market cap just under the Jakarta market cap
- ◆ 8 traditional SEC registered stock exchanges, vs more than 20 electronic trading systems
- ◆ Eventually, retail order flows may go direct to Exchanges



Aging drives savings in funds

- ◆ In HK, population aged 65+ : 9.8% in 1995, 10.5% in 1998, 13% in 2016 and 20% in 2036
- ◆ In Japan, population aged 65+ : 14.5% in 1995, 16.2% in 1998 and 25.4% in 2015



Sources: MPFA, Statistics Bureau of Japan and World Bank



Impacts of the MPF Scheme on Capital Markets

- ◆ Initial MPF contributions > US\$1 bn, growing to US\$4 bn as the system matures (60-70% of GDP)
- ◆ Impacts on capital markets :
 - ✦ demand for HK\$ debt instruments
 - ✦ development of bond and stock markets by providing a stable source of long term savings
 - ✦ greater stability in the stock market
 - ✦ corporate governance and innovation
 - ✦ development of hedging instruments
 - ✦ institutionalisation of savings
 - ✦ listings of overseas multinationals



Market Capitalization of the Stock Market of Hong Kong (US\$ billion)

	As of end-Oct 1999	Proposed Listings	
Proposed Listings Completed			
TOTAL	461.7	53.0	514.7
<i>Red-Chips + China Telecom (a)</i>	<i>59.5</i>	<i>15.6</i>	<i>75.1</i>
<i>H-shares (b)</i>	<i>5.5</i>	<i>21.0</i>	<i>26.5</i>
China-related shares (a) + (b)	65.0	36.6	101.6
Non-China-related companies proposed to be listed (HKEXC)			



Asian Online Broking

	Internet Users (million)	Internet Penetration (%)	Internet Brokers	Commission rates
Hong Kong	2.0	29.1	8	Deregulated
Singapore	1.1	28.4	6	Fixed
Taiwan	4.1	18.3	42	Deregulated
S. Korea	6.7	14.3	21	Deregulated
Thailand	0.8	1.2	NA	Fixed
Malaysia	0.8	3.7	NA	Fixed
Philippines	0.6	0.8	NA	Deregulated
Japan	14.0	11.0	33	Deregulated
US	58.0	21.0	100	Deregulated



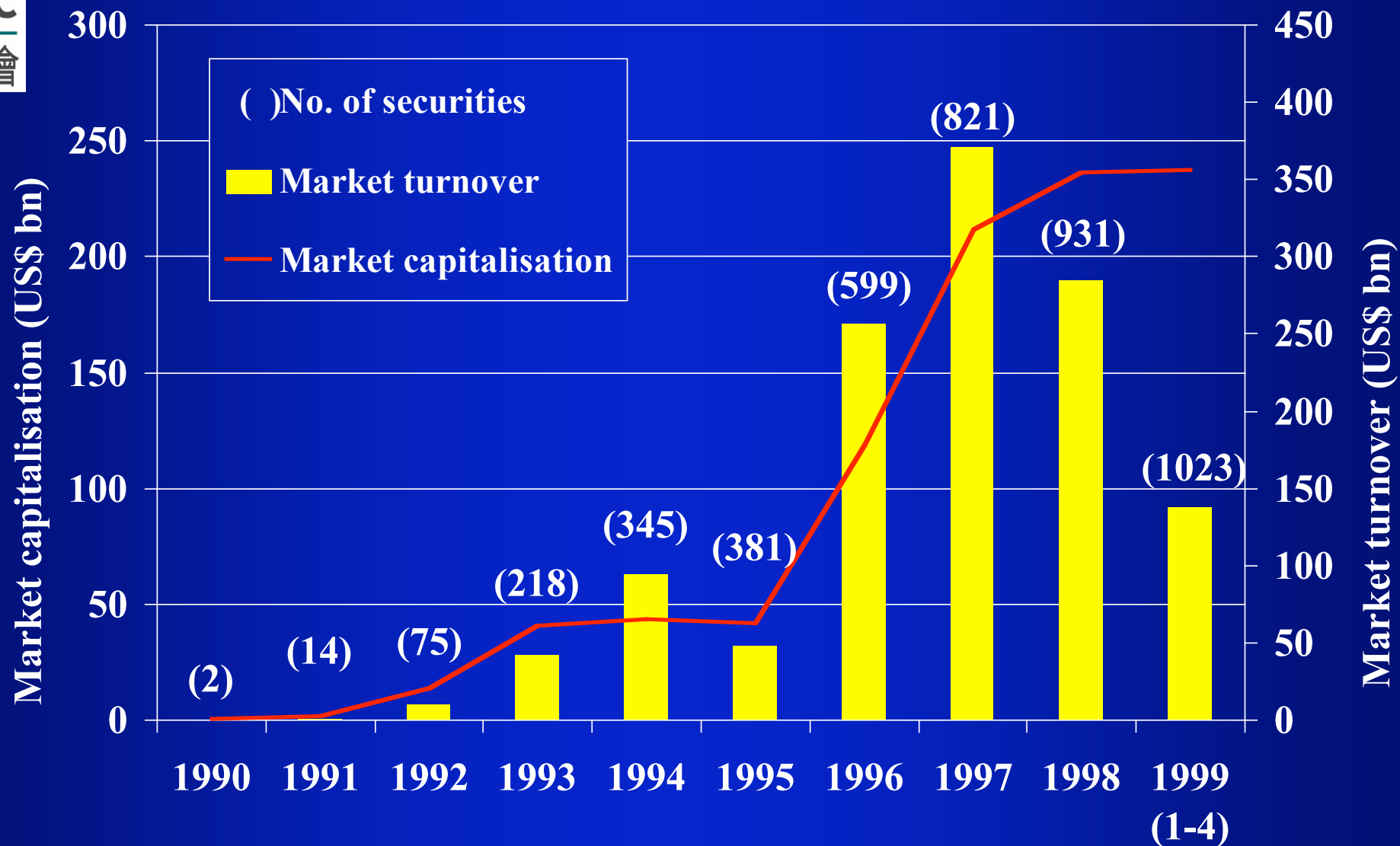
China Teledensity

- ◆ Internet user base will exceed 33 million, growing at an annual rate of nearly 60% over the next five years
- ◆ Mobile phone usage grew by 2.34 million subscribers in the first months of 1999. At end-June 1999, the number reached 33.1 million
- ◆ Fixed line phone subscribers jumped to 145 million at end-June 1999, nearly triple the number three years ago
- ◆ IT market, worth US\$9.24 bn in 1998, is expected to grow by 24.3% in 1999 and 31.3% in 2000



Mainland Stock Markets

- tremendous growth



Source : Shanghai Stock Exchange & Shenzhen Stock Exchange



Internet Penetration (%)

	Internet penetration 1998	Internet hosts Jan 1999	Personal computers 1997	Mobile phones 1997	Telephone lines 1997
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Hong Kong

23.1 34.3

United States

40.7 20.6

France

17.4 9.9

Germany

25.6 9.9

Japan

20.2 30.4

Singapore

40.0 27.9

South Korea

29.1

56.5

21.0

64.4

5.8

57.5

9.1

55.0

11.0

47.9

28.4

54.3

14.3

1.2

11.3

0.8

1.6

1.3

2.1

0.4

Source: World Bank, *World Development Report 1999/2000*, August 1999.

JP Morgan, *Internet Broking: Unstoppable*, 3 August 1999.

Lehman Brothers, *Asian Online Broking*, 25 October 1999.



Upgrading for the e-Economy

- ◆ Intermediaries need to re-evaluate their own roles in a **CYBER world**
- ◆ Global investors in a hi-tech world view different financial markets as one single market
- ◆ Provision of an one-stop high value added financial supermarket (i.e. the **linking up of different financial markets**)
- ◆ Provision of an efficient and low risk settlement platform (i.e. the **linking up of trading and settlement systems**)
- ◆ Provision of a 24-hour trading environment (i.e. the **linking up of different financial centres**)

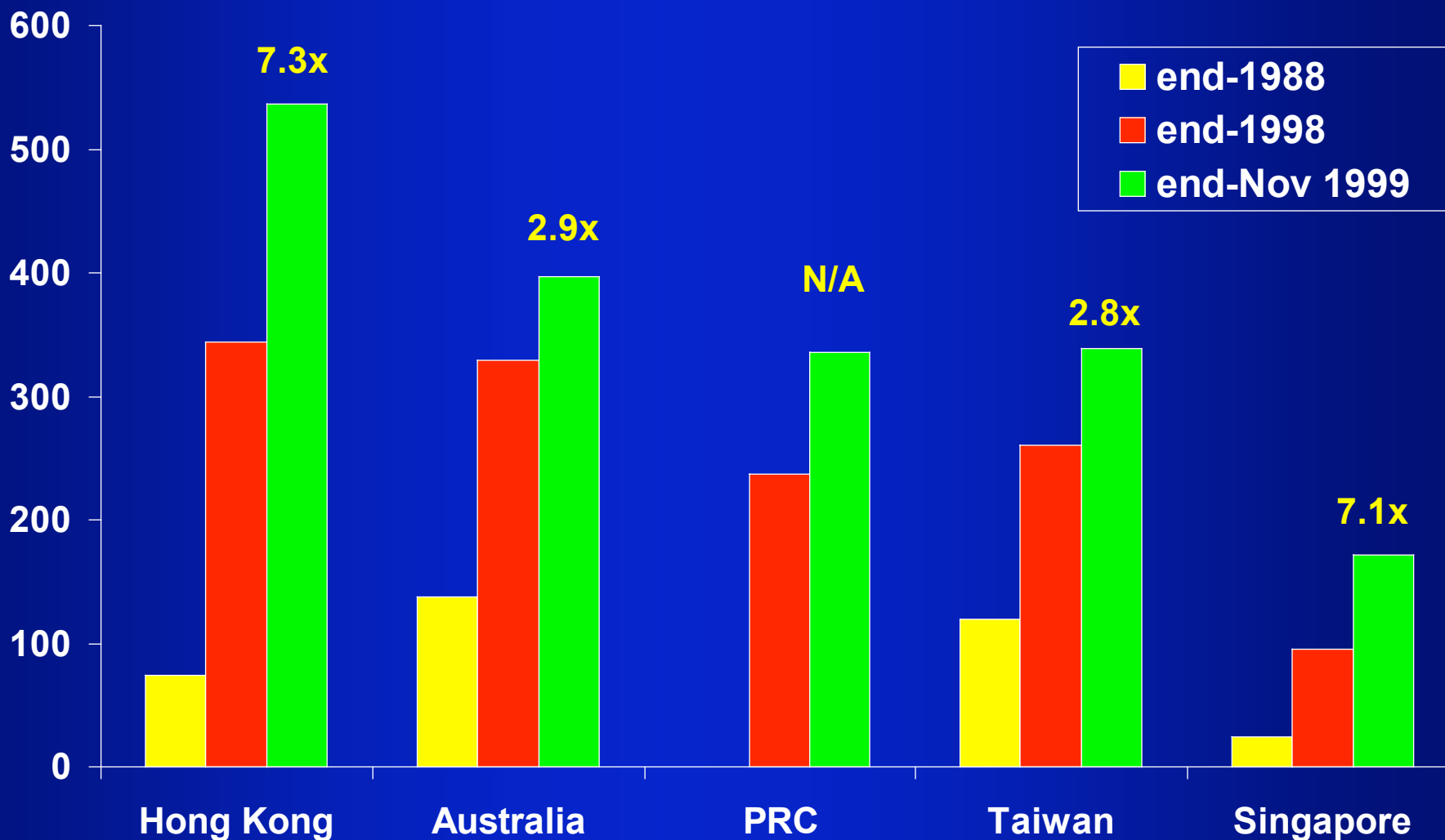


2nd Largest Securities Market in Asia

- ◆ Market capitalization at US\$608 bn at end-1999 - 2nd largest stock market in Asia and 10th largest stock market in the world
- ◆ 15th largest futures & options market with 8.5 mn contracts in 1998
- ◆ Overseas institutions accounted for 31% of turnover in 1998
- ◆ 701 companies listed on SEHK at end-1999
- ◆ Major fund raising centre for Mainland China
- ◆ Securities market supported by highest concentration of international legal and accounting firms in Asia



Regional Market Capitalisation (US\$ billion)



Remark: x = increase from end-1988 to end-Nov 1999

Source : FIBV and IFC



Great development potential for bond market (% of GDP 1998)

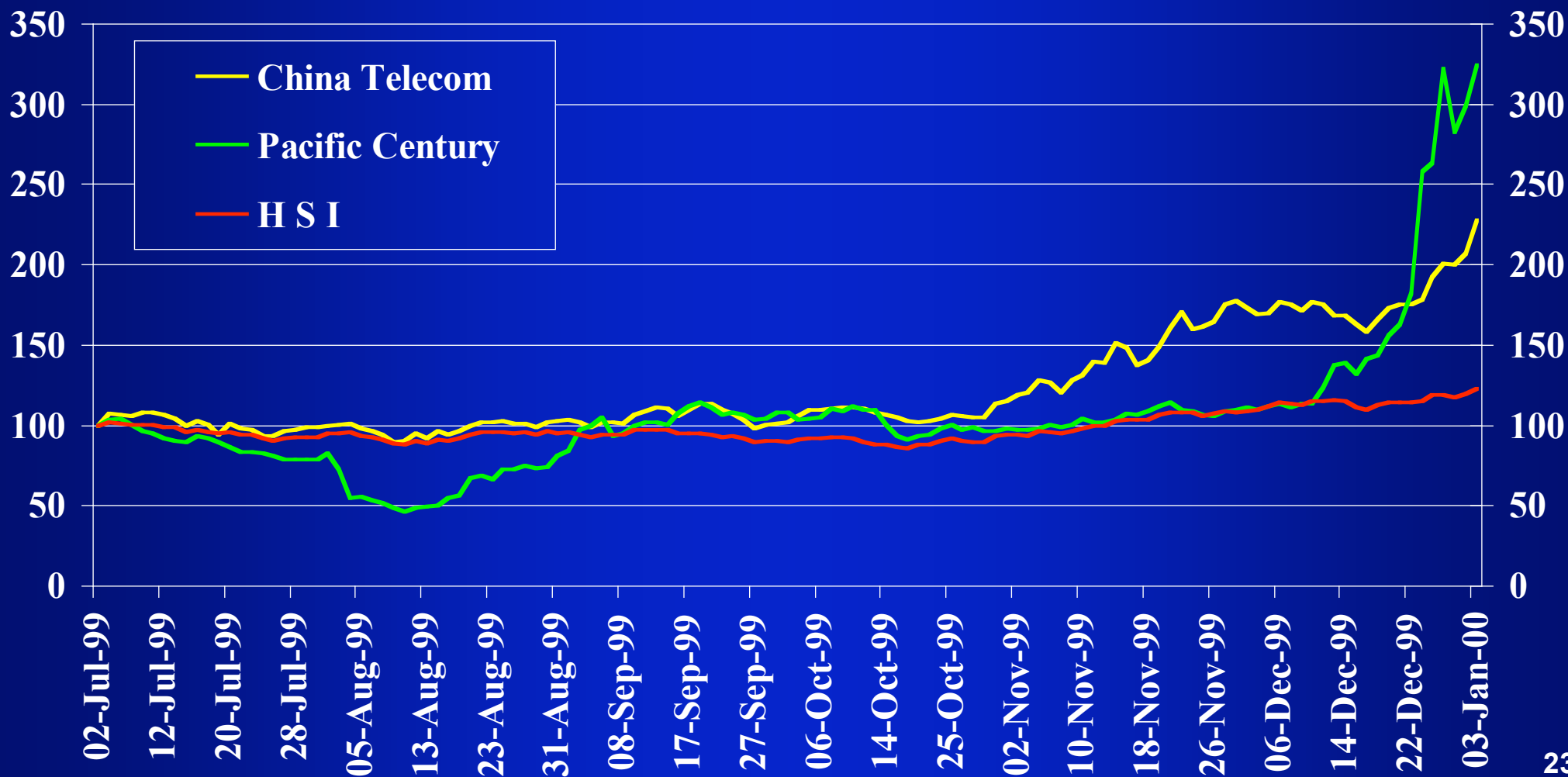
	Bank Assets	Equity Market	Bond Market
Hong Kong	214	206	32
China	139	25	12
Singapore	220	112	20*
US	65	158	141
Japan	145	64	101
Germany	273	51	97
S. Korea	233	35	53
Thailand	176	30	21#

Remark: * figure for Singapore includes government bonds only; # 1997 figure

Sources: FIBV, IFC, World Bank and various central banks



Tech Stocks Outperform HSI (2 Jul 1999 = 100)





Challenges for Hong Kong markets

- ◆ Risk management centre for Asia
 - ❖ Key risks - RMB assets & \$/¥
- ◆ Asian time-zone portal for \$/EU securities
- ◆ Strategic Alliances
 - ❖ Global & Regional
- ◆ Centre for financial technology
- ◆ eCommerce & eTrading centre in Asia
- ◆ Challenge is people skills
- ◆ Need for investor & intermediary education
- ◆ 21st century competition is knowledge competition



End of Presentation



Compendium of Sound Practices

- ◆ **APEC Collaborative Initiative on Development of Domestic Bond Markets' guidelines to develop domestic bond markets involve :**
 - ✦ **government policies**
 - ✦ **regulatory framework**
 - ✦ **market infrastructure**
 - ✦ **liquidity**
 - ✦ **risk management**



Government policies

- ◆ **The government should :**
 - ✱ **strike a balance between its sovereign debt management policy and a strategy for domestic bond market development**
 - ✱ **play a catalytic role in the development of a nascent domestic bond market**
 - ✱ **develop a sound legal framework for its bond programme**
 - ✱ **promote a level playing field**
 - ✱ **ensure that the strategy for bond market development be consistent with fiscal and monetary policies**



Regulatory framework

◆ There should be :

- ✦ **full, timely and accurate disclosure of information to investment decisions**
- ✦ **good governance principles**
- ✦ **clarity in the roles, responsibilities, and objectives of the regulatory authorities**
- ✦ **transparency in trading and price reporting to deter manipulation and unfair trading practices**
- ✦ **uniform regulatory, compliance and enforcement standards for intermediaries**
- ✦ **sound criteria for external credit assessments**



Market infrastructure

◆ There should be :

- ✱ **clear rules and procedures that govern the operations of a market infrastructure system**
- ✱ **an effective regulatory regime to ensure efficient operations of the systems**
- ✱ **clear risk management procedures to address the various categories of risks**
- ✱ **settlement lags of no more than T+3 days**
- ✱ **provision of relevant information to participants on a timely basis**
- ✱ **contingency arrangements to handle system problems**



Liquidity

◆ There should be :

- ✱ **accurate and reliable benchmark yield curves**
- ✱ **regular issuance of bonds in large volume and long maturity**
- ✱ **transparency in the primary and secondary markets to promote market participation**
- ✱ **low transaction costs achieved through maintaining a competitive dealer structure and standardising trading conventions and settlement processes,**
- ✱ **wide and open market access available to diverse participants**



Risk Management

◆ There should be :

- ✦ a risk audit to identify the exposure of its bond programme to various risk categories
- ✦ a debt profile that provides protection against temporary market disruption
- ✦ risk-sharing through financial contracting to hedge against the potential costs arising from adverse market conditions
- ✦ sound investment and risk management policies
- ✦ credibility and reputation on the part of credit rating agencies to avoid conflict of interests



End of Presentation