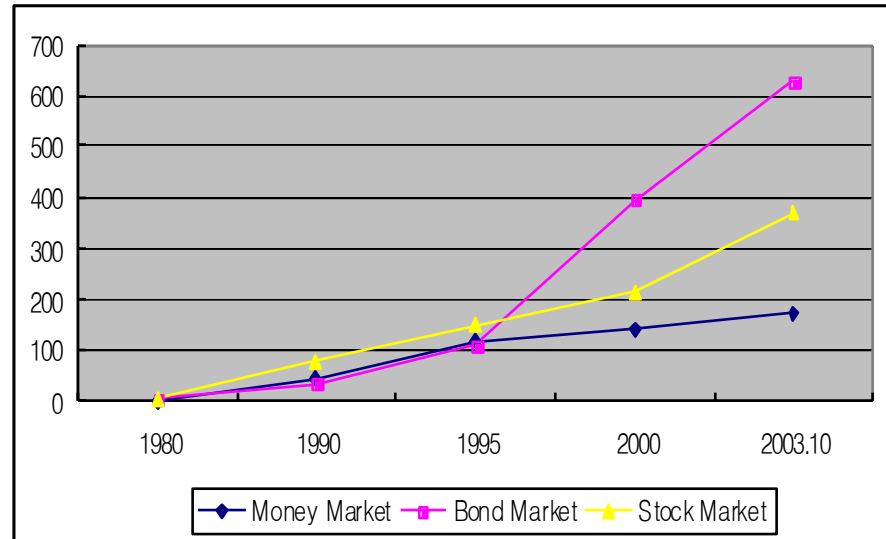


Bond Market Development: The Case of South Korea

DYNAMIC
KOREA



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Chung Ang University

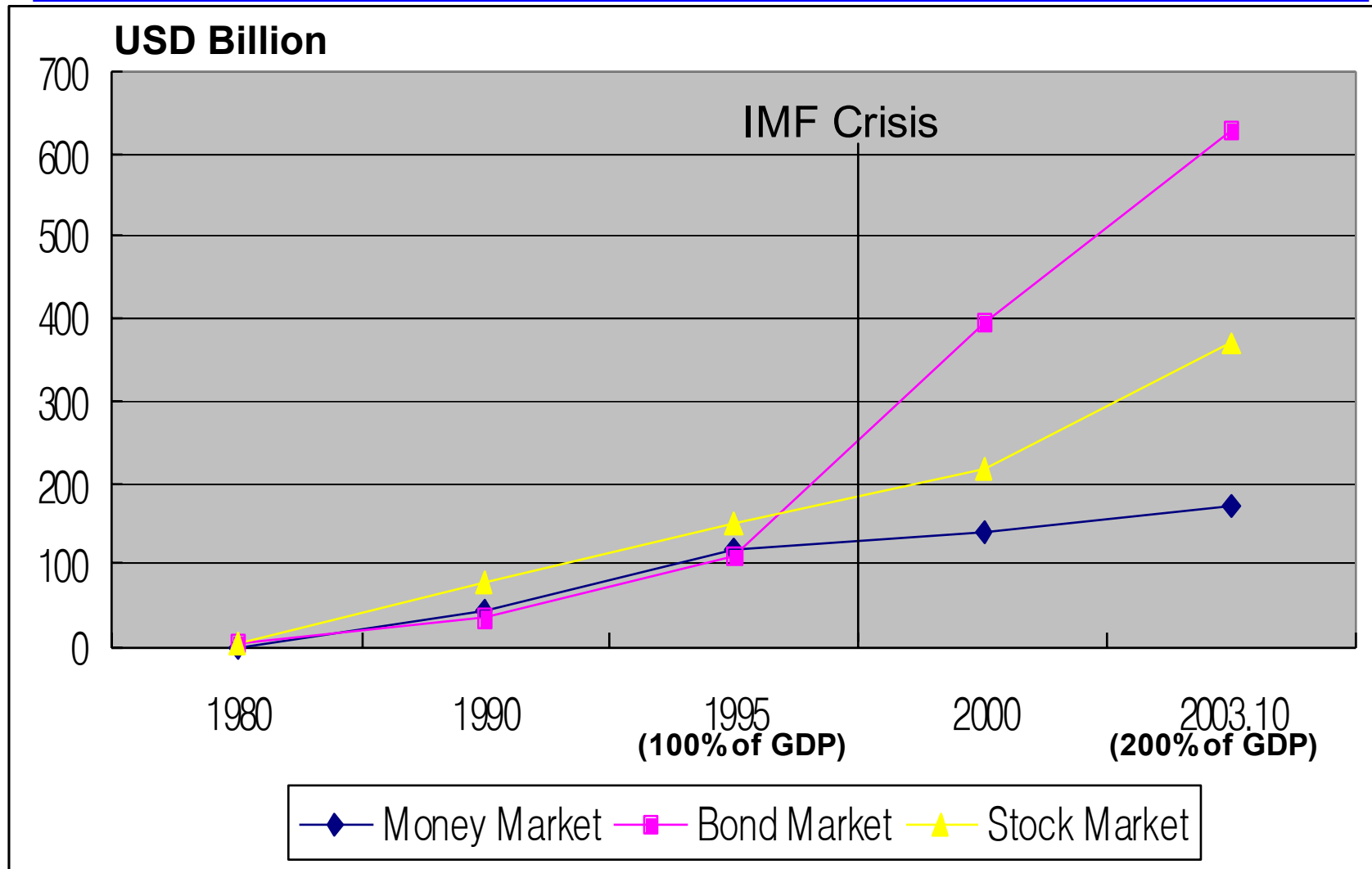
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Overview

- I. Development of Korean Bond Market:
history**
- II. Development of Korean Government
Bond Market**
- III. Development of Korean Corporate Bond
Market**
- IV. Challenges for Korean Bond Markets**

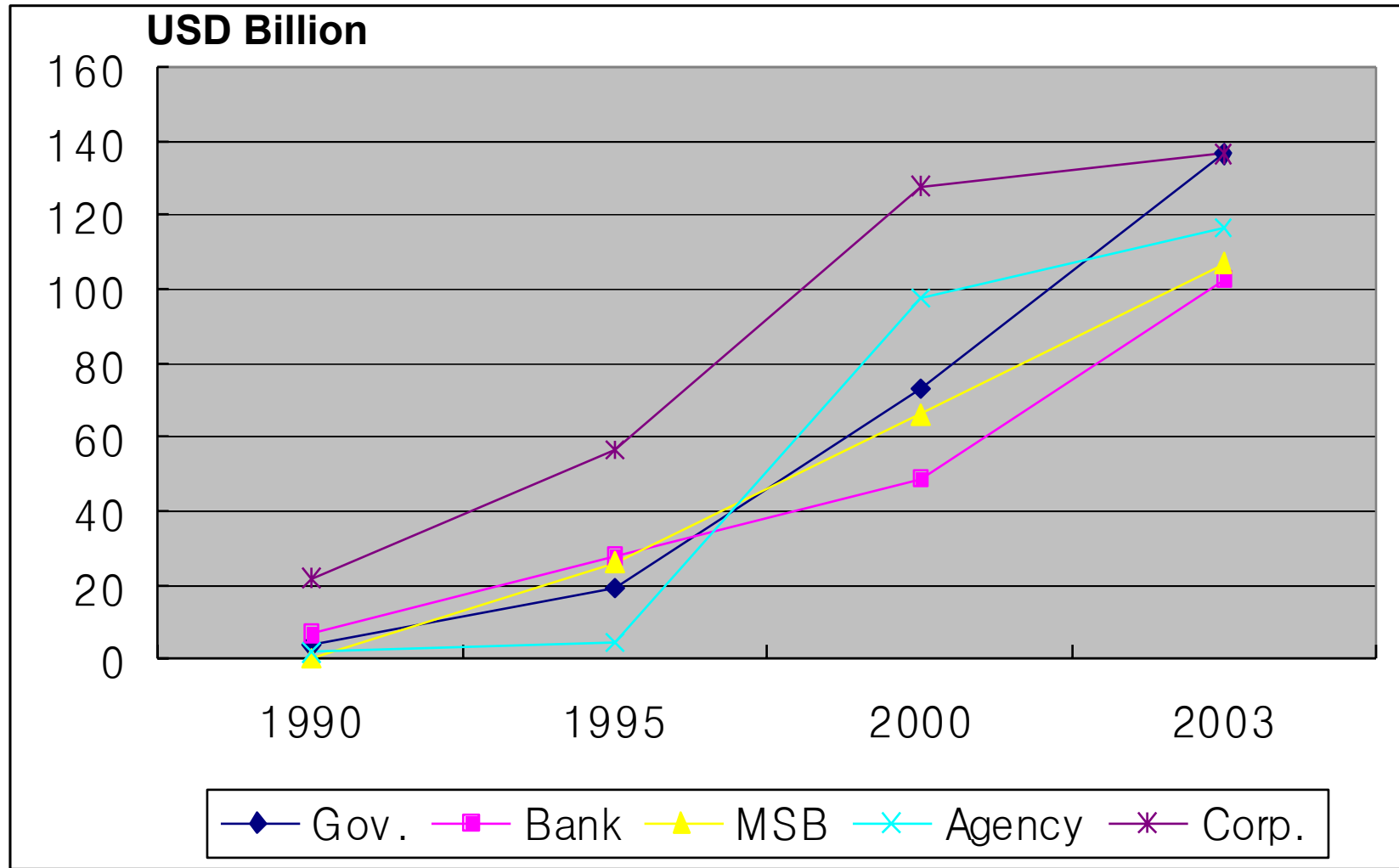
I. Development of Korean Bond Market: History

Development of Korean Bond Market: History



Source: Bank of Korea

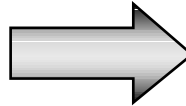
Development of Korean Bond Market: History



Source: Bank of Korea

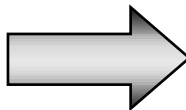
Development of Korean Bond Market: History

Portfolio (Inventory)
Management Facilities



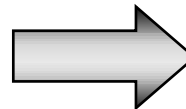
- Repo Market (need to develop)
- Diversified Products (STRIPS –2006)
- Bond Futures Market (99.9)

Issue Size



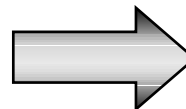
- Fungible Issues (reopening system) (00.5)

Trading Facilities



- Primary Dealer System (99.3)
- IDB (00.2)
- Mandatory Exchange Trading (02.10)

Infra & Pricing Facilities



- Gov. Bond Market Stimulus Plan (98.8)
- Credit Rating Agency (strengthening regulation in 98)
- Pricing Agencies (98 & 00)
- DVP system (99.11)

II. Development of Government Bond Market

Before & After the Crisis

- **Before the currency crisis: small and under-developed**
 - Markets for government bonds and government-guaranteed bonds were not well-developed (conservative fiscal policy)
 - As a result, the 3-yr corporate bond emerged as the benchmark bond
- **After the currency crisis: Dazzling Development**
 - Government bond Market: To finance public fund for financial restructuring and boost depressed economy by fiscal pump priming (**Government-led Development**)
 - The government dramatically increased the size of KTB issuance from around W7 trillion (\$billion) in 1997 to W56 trillion (\$billion) in 2004.
 - In terms of outstanding balance, the total amount of KTBs has increased from W25 trillions as of the end of 1996 to more than W123 trillion as of end 2004.

Institution Building Reforms

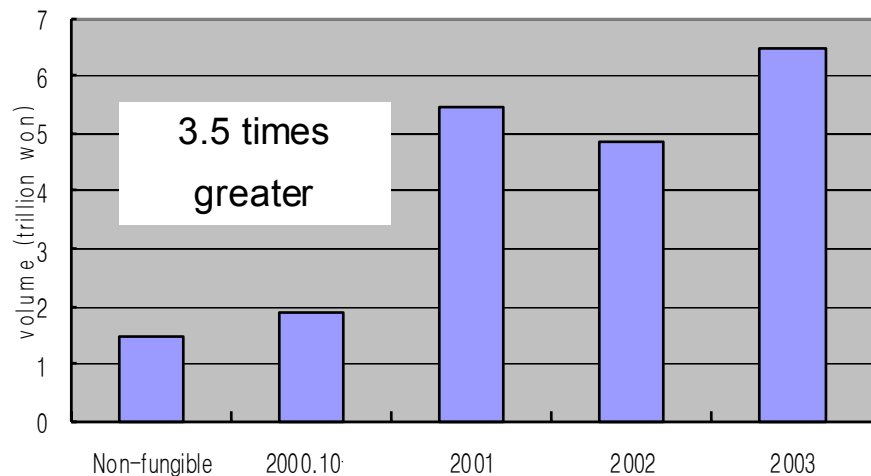
1998.8	Announcement of 'Government Bond Market Stimulus Plan'
1999.3	Establishment of Inter-Dealer market (IDM)
1999.3~1999.6	Test period of Primary Dealer system
1999.7	Enactment of Primary Dealer system
1999.9	Introduction of government bond futures
1999.11	Introduction of DVP system
2000.2	Introduction of Inter-Dealer Brokers (IDB)
2000.3	Securities financing facilities for primary dealers
2000.5	Introduction of reopening system
2000.8	Switch from multiple price auction to Dutch auction
2002.10	Mandatory Exchange trading requirement for benchmark issues
2003.1	Strengthening obligations of primary dealers
2003.6	Unifying interest payment dates in preparation for introducing STRIPS

Effect of Reopening System

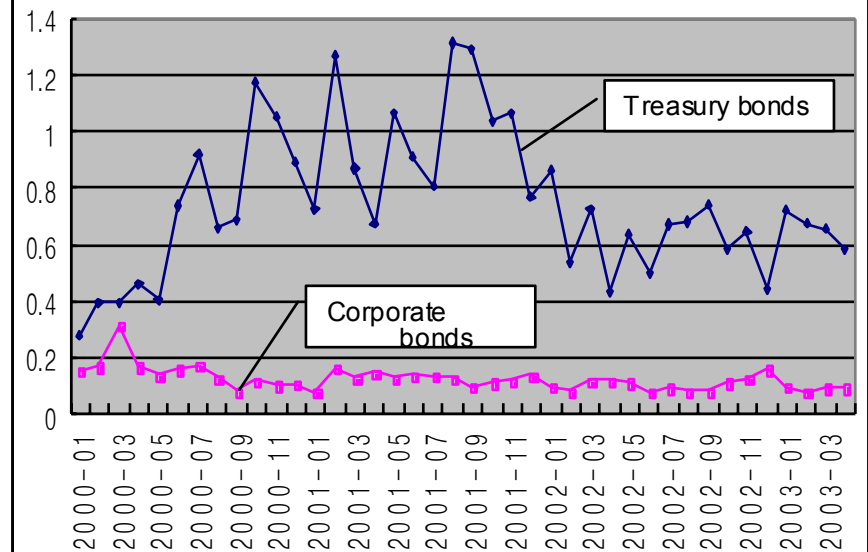
The Fungible Issue System (Reopening System)

- Bonds have identical maturities and coupon rates.
- It expands the size of bond issuances of the same maturities.
- The turnover rates of GB is 6 times larger than that of CB.

Volume of Benchmark Issues



Turnover Rates



History of PD System

- 1999.3 Establishment of Inter-Dealer market (IDM)
- 1999.7 Introduction of Primary Dealer system
 - 24 institutions designated as primary dealers
 - 2% Minimum requirement: Acquisition & Trading
- 2000.2 Introduction of Inter-dealer brokers (IDB)
- 2000.3 Providing financing facilities for primary dealers
 - Line of credit provided (at cheaper rate)

Privileges	Obligations
<ul style="list-style-type: none"> - Exclusive participation in government bond auctions - Access to securities financing facilities for secondary market trading - Regular consulting partners for the treasury department at the Ministry of Finance and Economy 	<ul style="list-style-type: none"> - 5% minimum underwriting & trading (every 6 months) - Provide bid/ask quotes (min vol and max spread constraint) - 40% Mandatory exchange trading - Reporting requirement of position and trading information of the government bonds (To Treasury)

Mandatory Exchange Trading Requirement

- Korea Stock Exchange (KSE) & OTC Market



VS.



- New Policy measures for activating KSE market

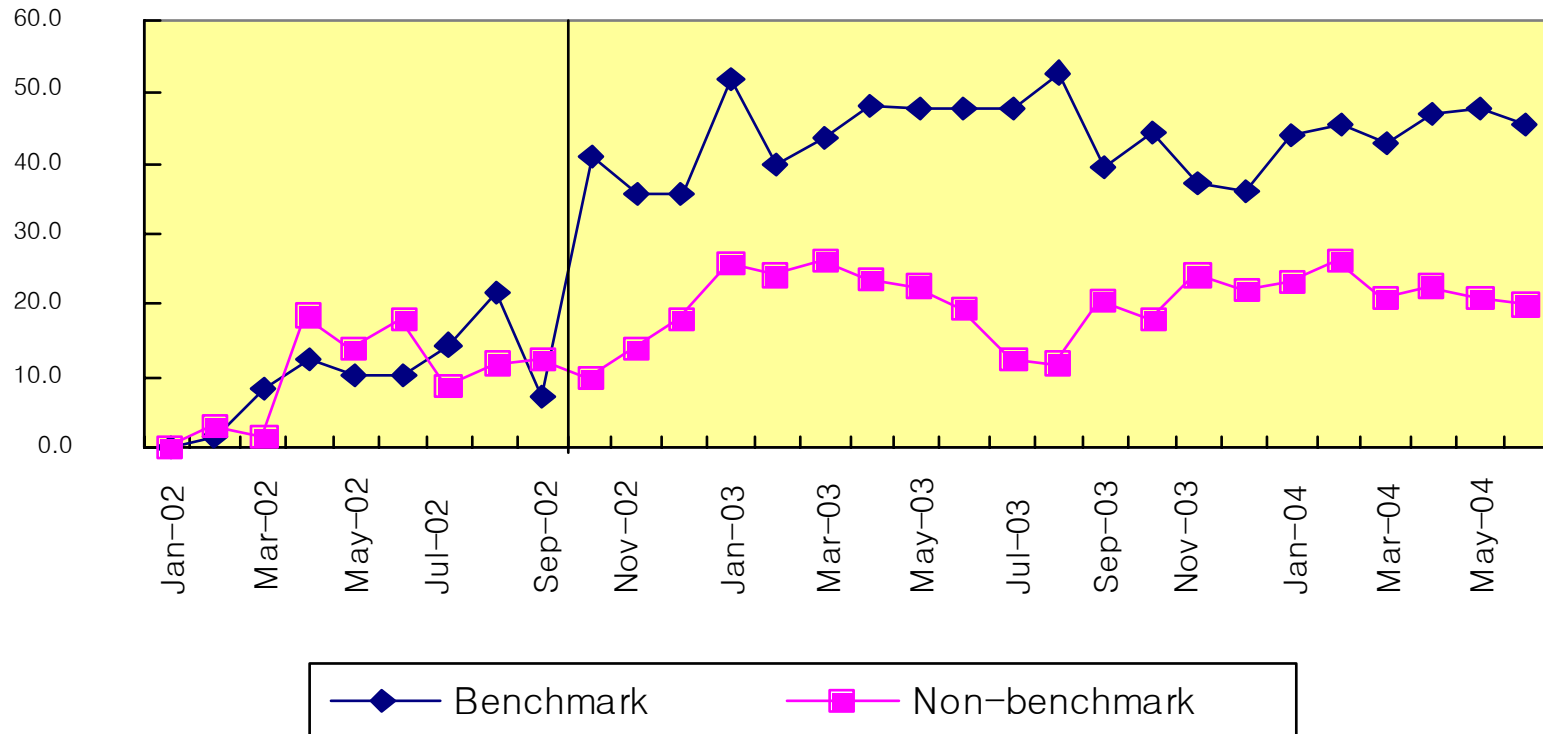
2002.10 Mandatory exchange (KSE) trading requirement
- 20% of Benchmark Issues

2003.1 Obligations of primary dealers strengthened
- Exchange trading requirement increased from 20% to 40%
- Minimum trading amount increased from 2% to 5%

**Primary dealers (PDs) should trade benchmark issues
of the Government Bonds in KSE.**

Mandatory Exchange Trading Requirement

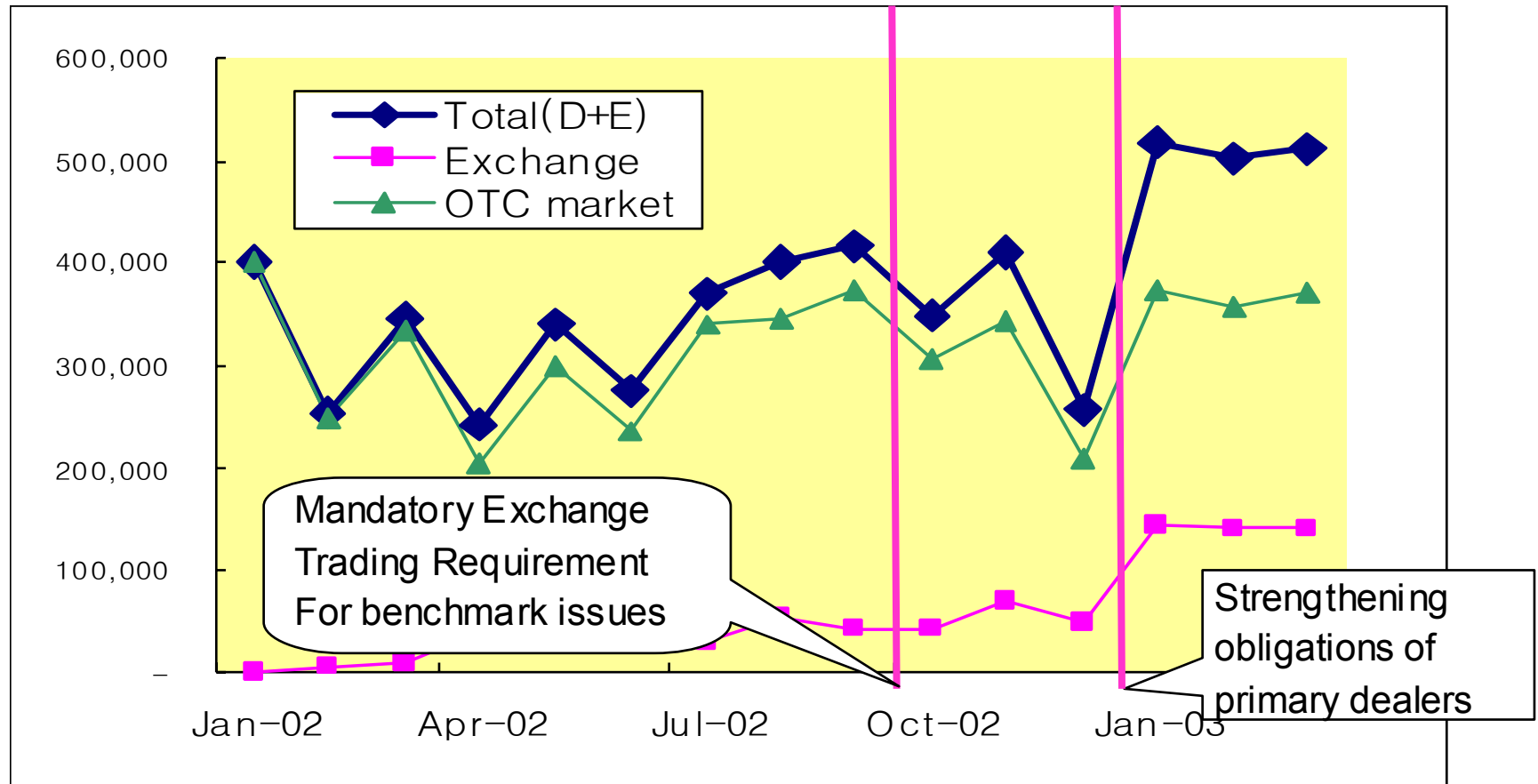
Exchange Trading Proportions (%)
(Benchmark vs. Non-Benchmark)



- The proportion of benchmark issue trading within the exchange has significantly increased since Oct. 2002.

Mandatory Exchange Trading Requirement

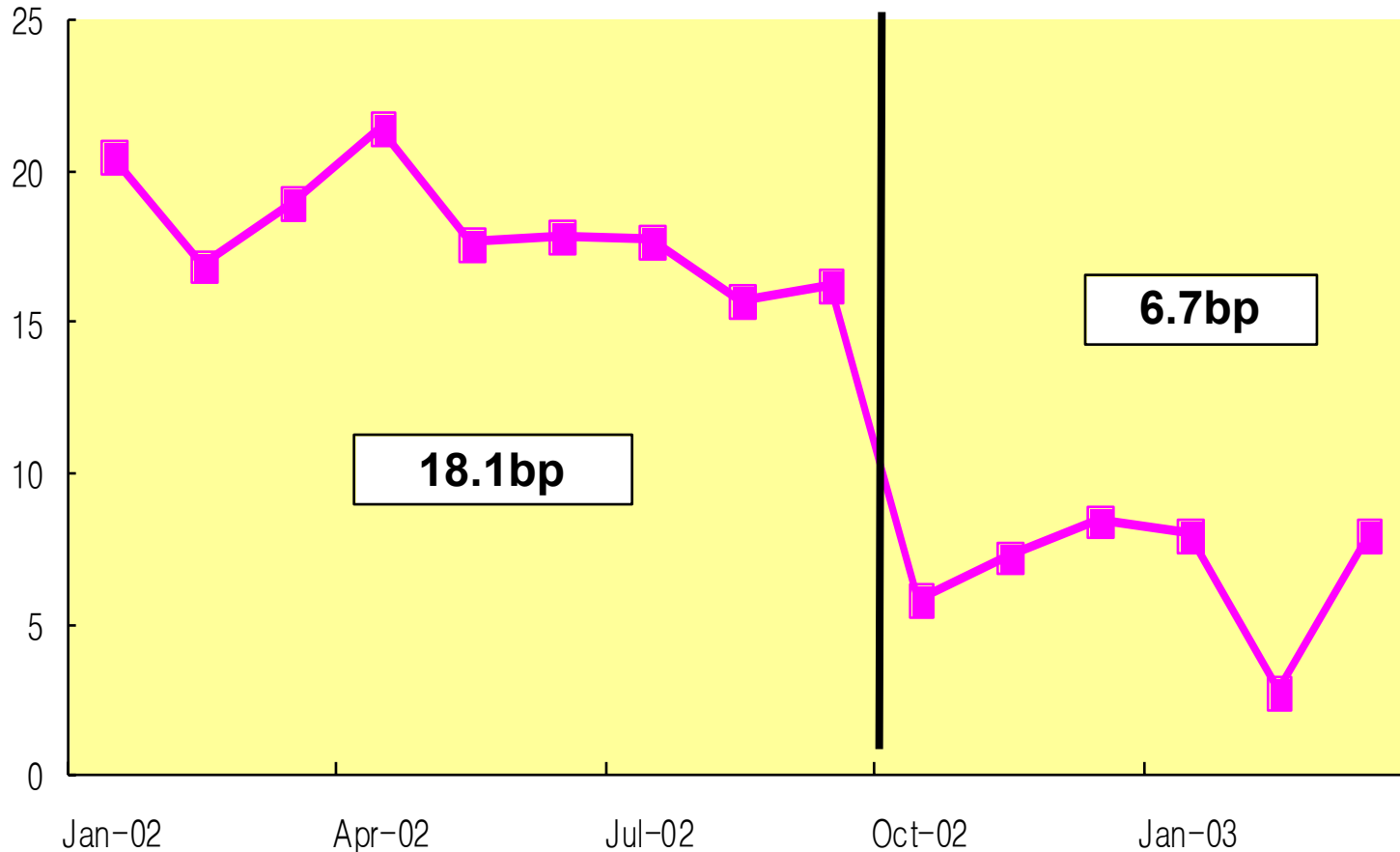
Gov Bond Trading Volume (KSE vs. OTC)



- The Trading volume in the OTC market has not been decreased.

Mandatory Exchange Trading Requirement

Bid-Ask Spreads of Benchmark Issues



- Bid-ask spreads of the benchmark issues decreased sharply after the new policy in 2002.

Liquid Gov. Bond Futures Market

3-Year KTB Futures – Global Status <Top 10 Gov Bond Futures Contracts>

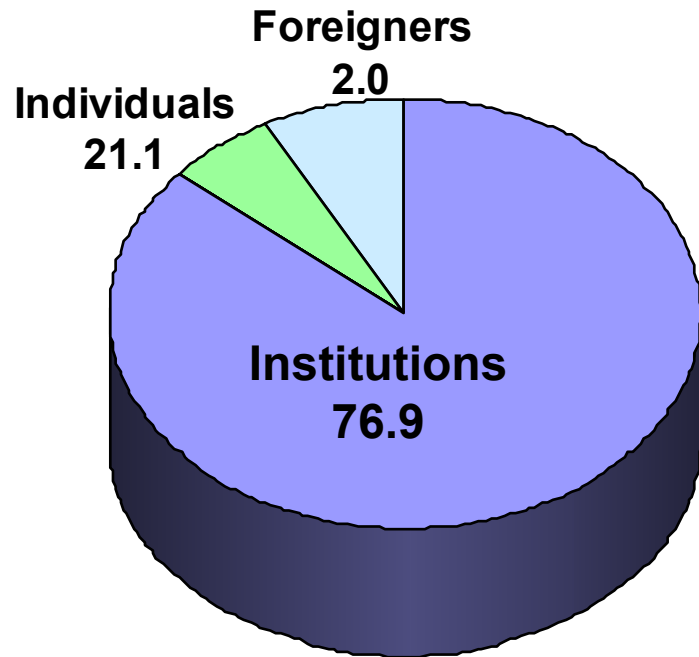
(in 1,000 contract)

Rank	Contract(Maturity)	Volume	Exchange
1	Euro Bund(10)	129,320	Eurex
2	Euro Bobl(5)	78,297	Eurex
3	T-Note(10)	66,531	CBOT
4	Euro Schatz(2)	59,605	Eurex
5	T-Note(5)	33,204	CBOT
6	T-Bond(30)	30,452	CBOT
7	T-Bonds(3)	9,190	SFE
8	KTB(3)	5,452	KOFEX
9	Long Gilt(10)	4,883	Euronext-Liffe
10	JGB(10)	4,501	TSE

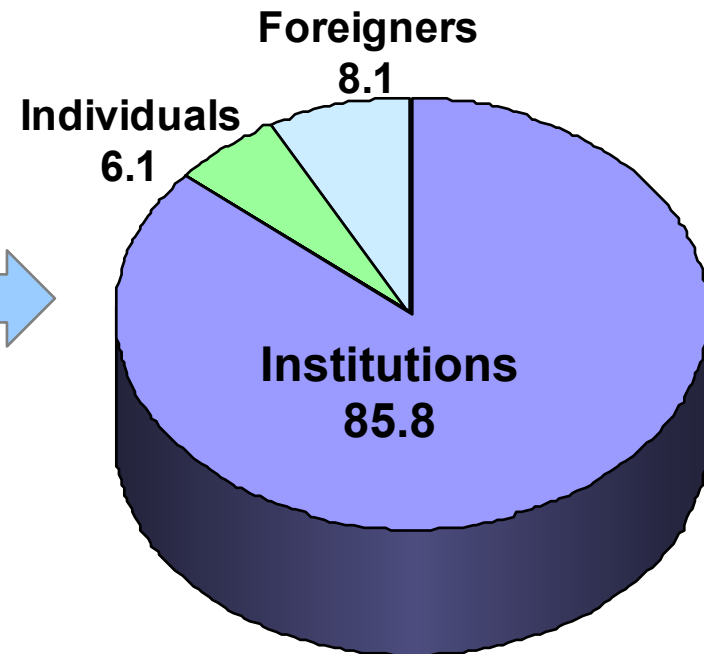
3-Year KTB Futures – Users

(in %)

<2000>



<Jan~Oct 2003>



III. Development of Corporate Bond Market

Development of Corporate Bond Market

Currency Crisis
(97.11)

Daewoo Crisis
(99.8)

SKG & Credit Card
Crisis (03.3)

Credit shock

Credit shock

Credit shock

Market Impact

- Massive Corp. Bond Issuance to Refi Bank Debts (From Banks to ITCs)
- ABS development to handle NPLs

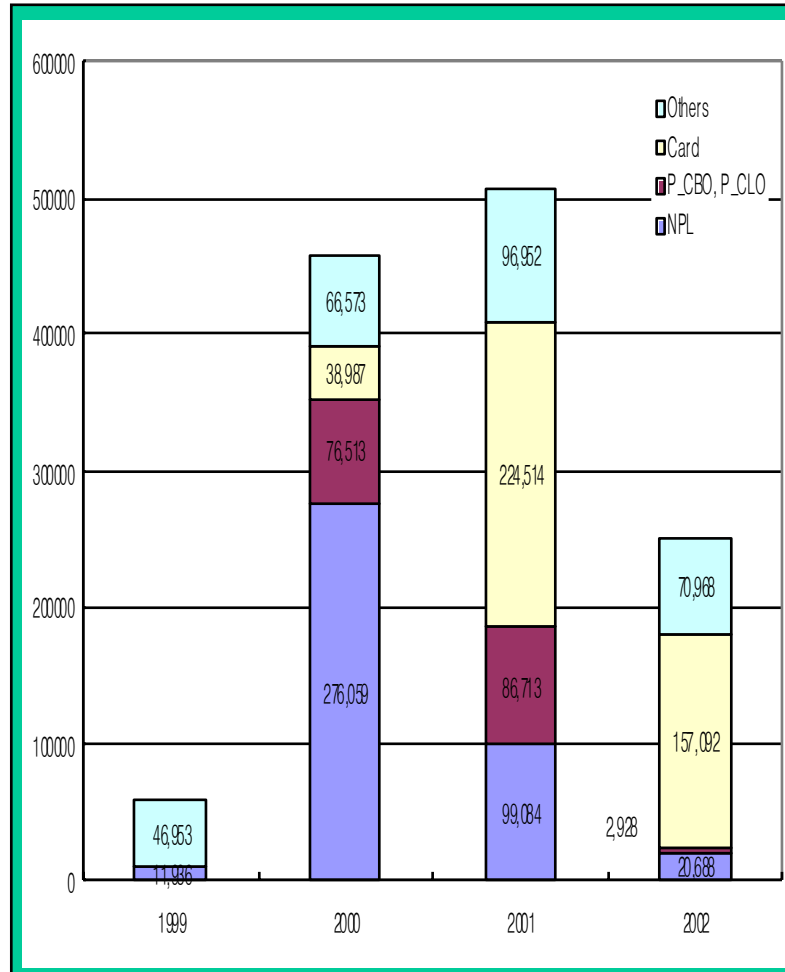
Market Impact

- MTM accounting for ITCs
- Realization of Credit Risks
- Issuance of P-CBOs to Refi Corp Bond Debt
- Rapid Pick-Up of ABS Markets

Market Impact

- Plunge of ABS markets
- Realizing the need for systemic risk monitoring system
- Weakened Market Discipline
- Realizing the Importance of CRA and Trustees

Evolution of ABS market



(Unit : 0.1 billion)

Phase 1 : Financial Restructuring & Securitization of NPLs (1999-2000)

Phase 2 : Credit crunch & Financing tools for companies using Primary CBOs (2000-2001)

Phase 3 : Consumer Financing (2001-2002)

Phase 4 : Deepening of ABS market : Future Cash Flow Securitization & others(2002-present)

Bond Pricing Agencies



KIS PRICING

**Paid-in Capital
KRW 3 billion**



Korea Bond Pricing

**Paid-In Capital
KRW 5 billion**

NICE Pricing Services, Inc



**Paid-In Capital
KRW 4.75 billion**

- The KSDA monitors these companies

Credit rating Agencies

**National Information &
Credit Evaluation, Inc**



Paid-in Capital: 33.5 billion won



**KOREA
INFORMATION
SERVICE**

**Paid-in Capital: 23.8 billion won
163 Employees**

**Paid-in Capital:
24.3 billion won
183 Employees**



**Seoul Credit Rating
& Information**

**Paid- in Capital: 13.7 billion won
227 Employees**

IV. Future Challenges

Challenges for Korean Bond Market

Challenges	Background	Direction of Possible Solutions
Maintaining the Liquidity of BM	Return to Balanced Fiscal Policy B & H Strategies	Further standardization and simplification Develop alternative securities such as MBS and MSB Proactive debt management (I.e. buy-back)
Developing Repo Markets	Existence of well-established Call Market	Limit the participants of the Call market
Diversifying Products	Insufficient volume of new issuance	STRIPS expected to be introduced in 2006 Plan to issue Inflation linked bonds MBS market started to emerge (KHFC)
Mitigating the possibility of credit shock	Cyclically haunting credit shock	Developing systemic risk monitoring system Developing credit derivative markets Developing credit bureaus

Transparency to Corporate Bond Secondary Markets

- * NASD begins full dissemination of transaction and price data on the entire universe of corporate bonds to retail investors using TRACE (Trade Reporting and Compliance Engine). Dealers must report corporate bond transactions to TRACE within 30 minutes, and that window will be reduced to 15 minutes in July 2005**
- * KSDA requires dealers to report corporate bond transactions to KOSCOM CHECK Terminal within 15 minutes in 2004**
- * KSDA consider strengthening enforcement and dissemination to retail investors**

Asia Bond Market Initiatives (ABMI)

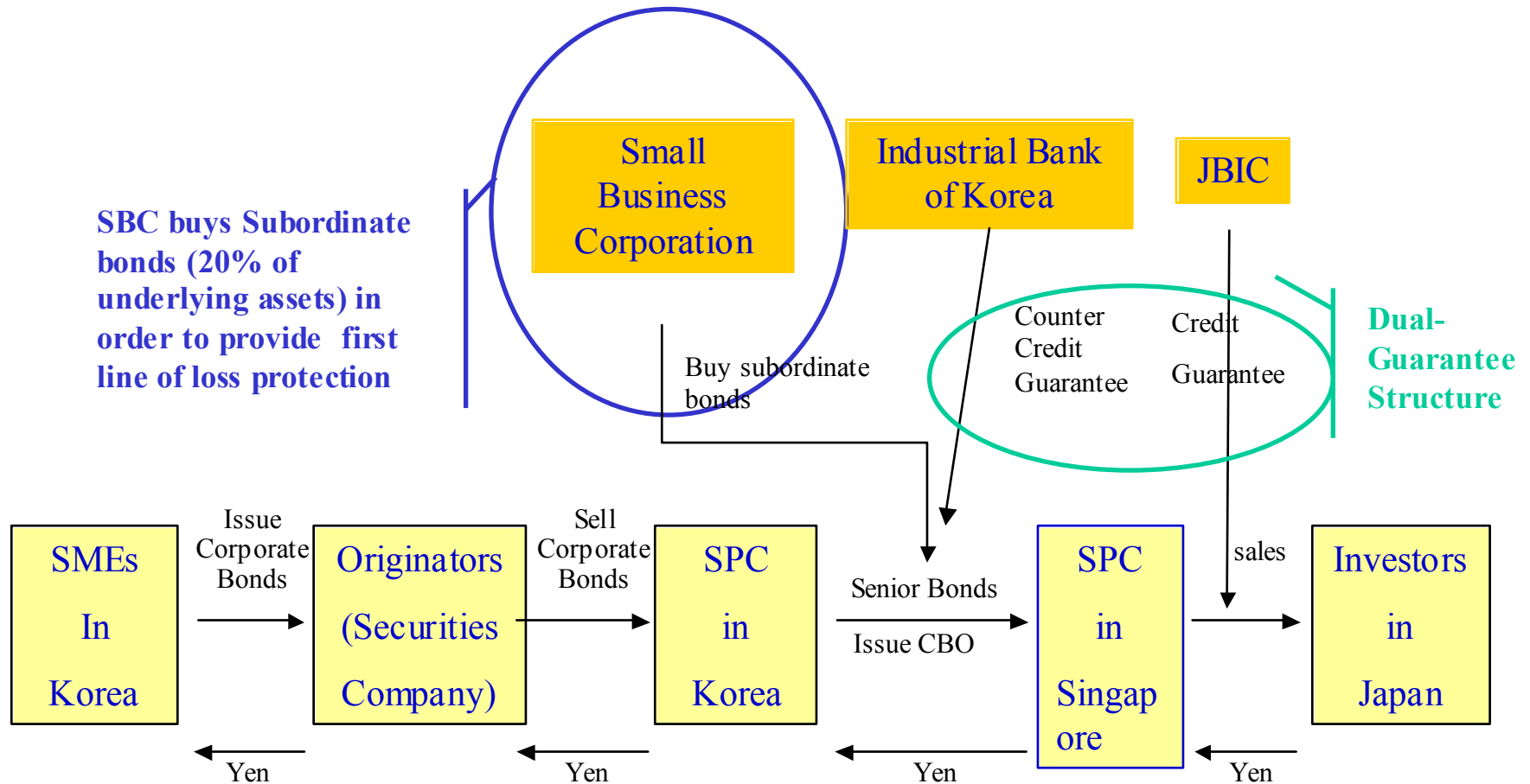
Multilateral Approach: ASEAN+3 Working Group

	Informal Working Group	Chaired by
I	New Securitized Debt Instruments	Thailand
II	Credit Guarantee and Investment Mechanism	Korea and China
III	Foreign Exchange Transactions and Settlement Issues	Malaysia
IV	Issuance of Bonds Denominated in Local Currency Bonds by MDBs, Foreign Government Agencies and Asian Multinational Corporations	China
V	Rating Systems and Dissemination of Information on Asian Bond Market	Singapore and Japan
VI	Bilateral Technical Assistance and Capacity Building Needs of ASEAN+3 Countries on Bond Market Development	Indonesia, the Philippines and Malaysia

Asia Bond Market Initiatives (ABMI)

Bilateral Approach: Yen-denominated CBO (two-tier securitization)

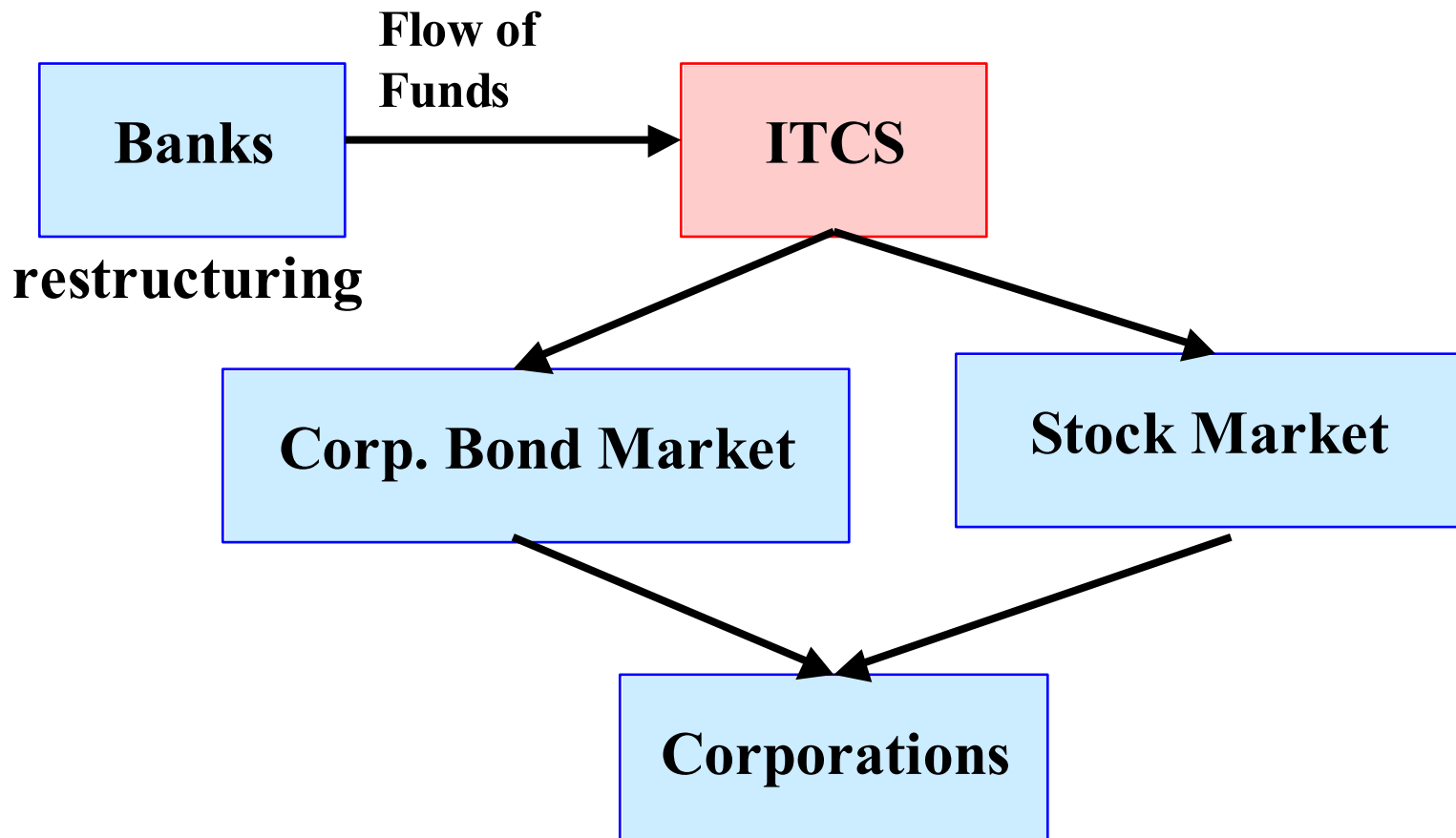
(2004.12.13 / 10 billion yen / 46 Korean SMEs / 3month Y-LIBOR+20bp)



APPENDIX. Crisis in Corporate Bond Market
-Some Details

1998 & 1999: Flow of Funds from Banks to ITCs

Strict restructuring of Banks & loose regulation on ITCs



Corporate Bonds in Bank Restructuring

(1) Contribution: “Spare-Tire theory”

* Corporations mitigated credit crunch problems by issuing massive amount of corp. bonds.

- Capital market as a parallel circuit to bank financing

* Market interest rates were stabilized since corp. credit crunch problems were mitigated & thereby it contributed to high growth in 1999.

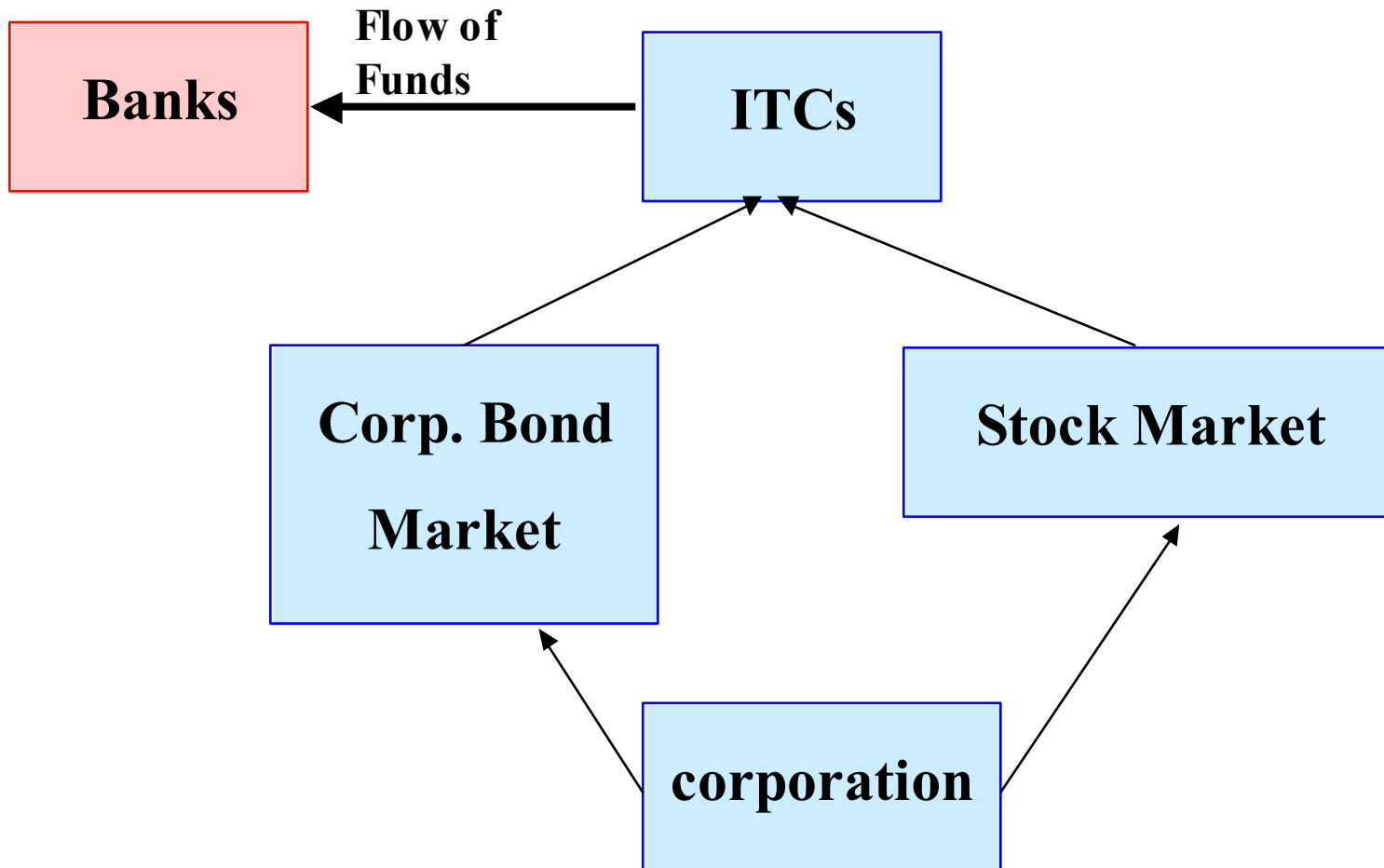
Corporate Bond in Bank Restructuring

(2) No Free Lunch

- * **Maturity Concentration & credit crunch in 2001!**
 - * **ITCs assumed credit risk with little discipline.**
 - * **Unviable firms could extend their lives.**
 - * **Easy financing reduced Chaebol's incentive to restructure their businesses.**
- **massive default and recurrent credit crunch**
 - **increased ultimate costs of restructuring!**

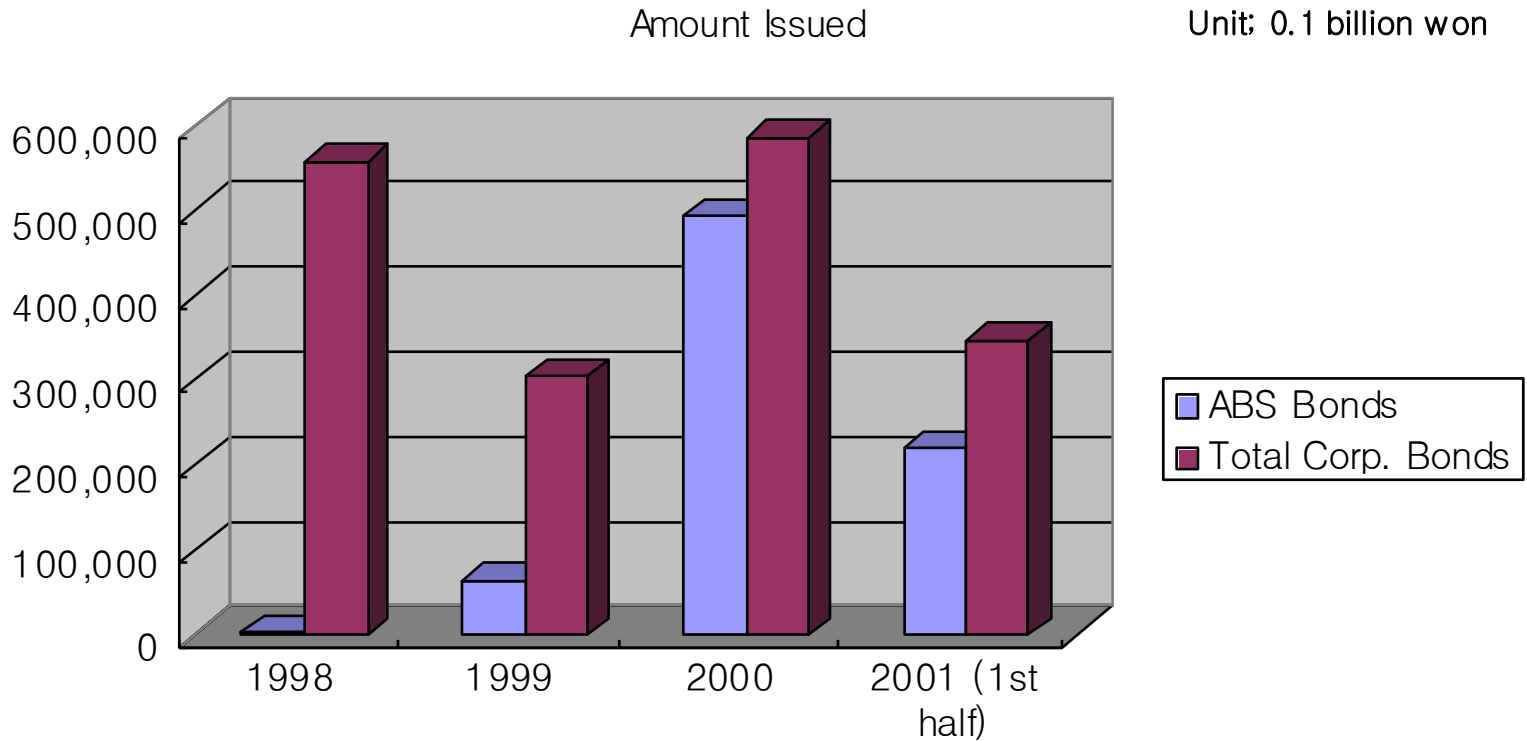
After August 1999: Daewoo Crisis

From ITCs to Banks



Growth of ABS Market

- **The proportion of ABS is currently above 70%!**
 - CBO, CLO, MBS



Amount of bond Issuance (Net)

unit: 10 billion won

