KOREA: MEDIUM AND LONG-TERM ECONOMIC PROSPECTS

Joseph E. Stiglitz
Columbia University, New York
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Economic Performance Since 1997

- Impressive and fast recovery. GDP grew at an average of 7% per year during 1998-2003

- Recovery and growth performance of other crisis countries have been much slower

- Similarities (among the crisis countries) in shape and trend shows the level of regional and global integration – differences are due to differences in underlying macroeconomic and institutional structures

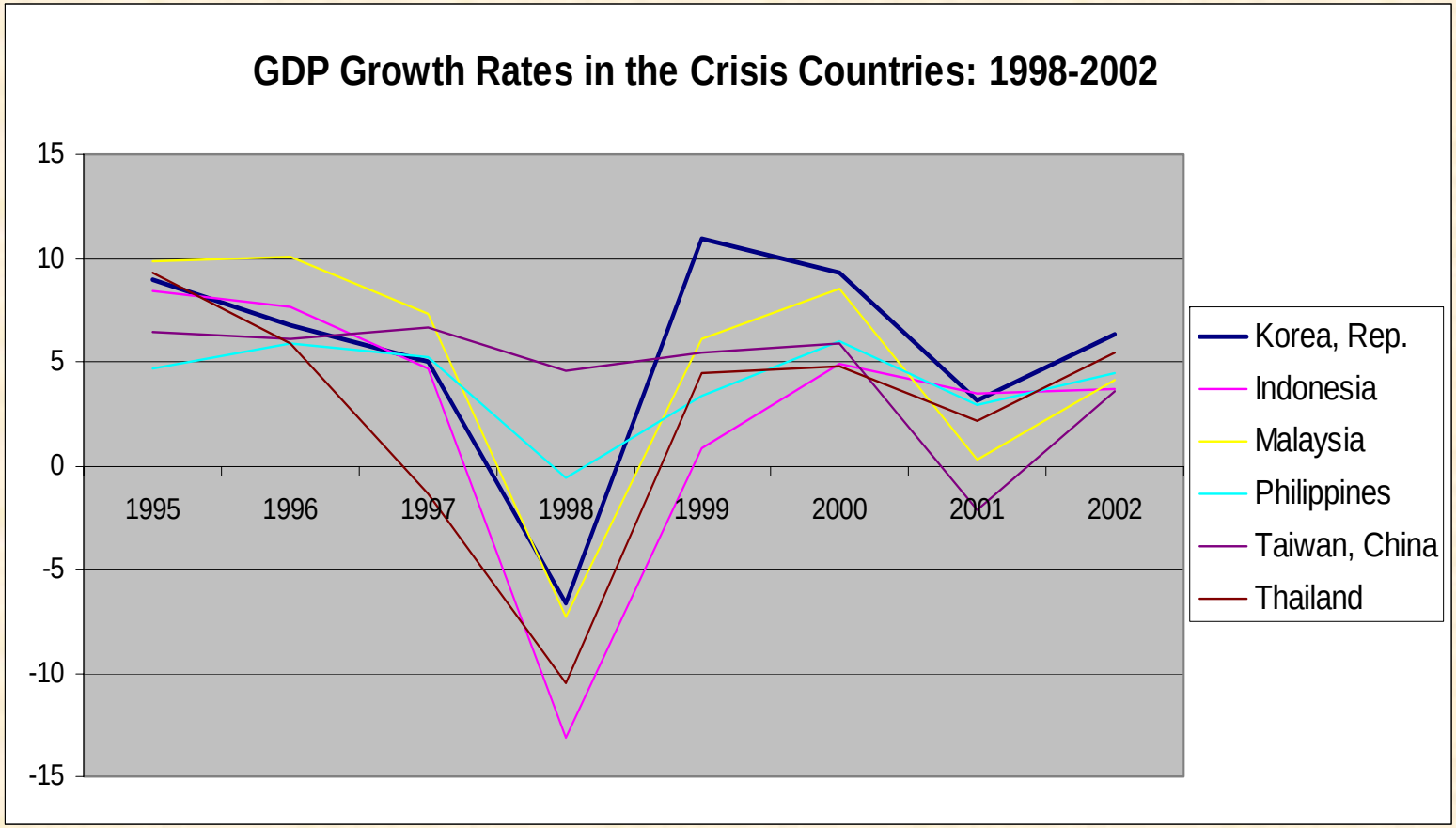
- Human capital – more educated workforce and improved labor productivity

- Gross government debt is about 22% of GDP – far less than the OECD average of 74%

- Gradually reducing reliance on manufacturing – becoming a knowledge-based service economy. Share of the service sector increased substantially

- Reforms are slow but in the right direction

Korea: Better Post-Crisis Growth Performance



Source: WDI Database, 2003

Investment in Building Human Capital

- Education is the largest line-item in the central government budget – 24.4% of the total in 2003

- Korea is only behind Canada, Ireland and Japan in terms of the percentage of population with tertiary education – 40% of all Koreans have a university degree

- Among the OECD countries, Korea ranks number one in terms of students enrolled in higher education – 53% of 20-year old Koreans are in college compared to 34% for the US and 15% for Germany

- Korea also ranks at the top in terms of college graduates with degrees in engineering and applied science. 27.2% of all college graduates in Korea obtain degrees in engineering

College Enrollment (%) by Age

	Age 18	Age 19	Age 20
Australia	29	34	32
Canada	15	30	33
Germany	3	8	15
Ireland	32	36	35
Japan	n.a	n.a	n.a
Korea	**44**	**59**	**53**
Netherlands	16	26	31
New Zealand	23	32	33
Sweden	n.a	23	22
United Kingdom	24	33	34
United States	35	41	34

Source: OECD Report, 2003

Investment in Research and Development

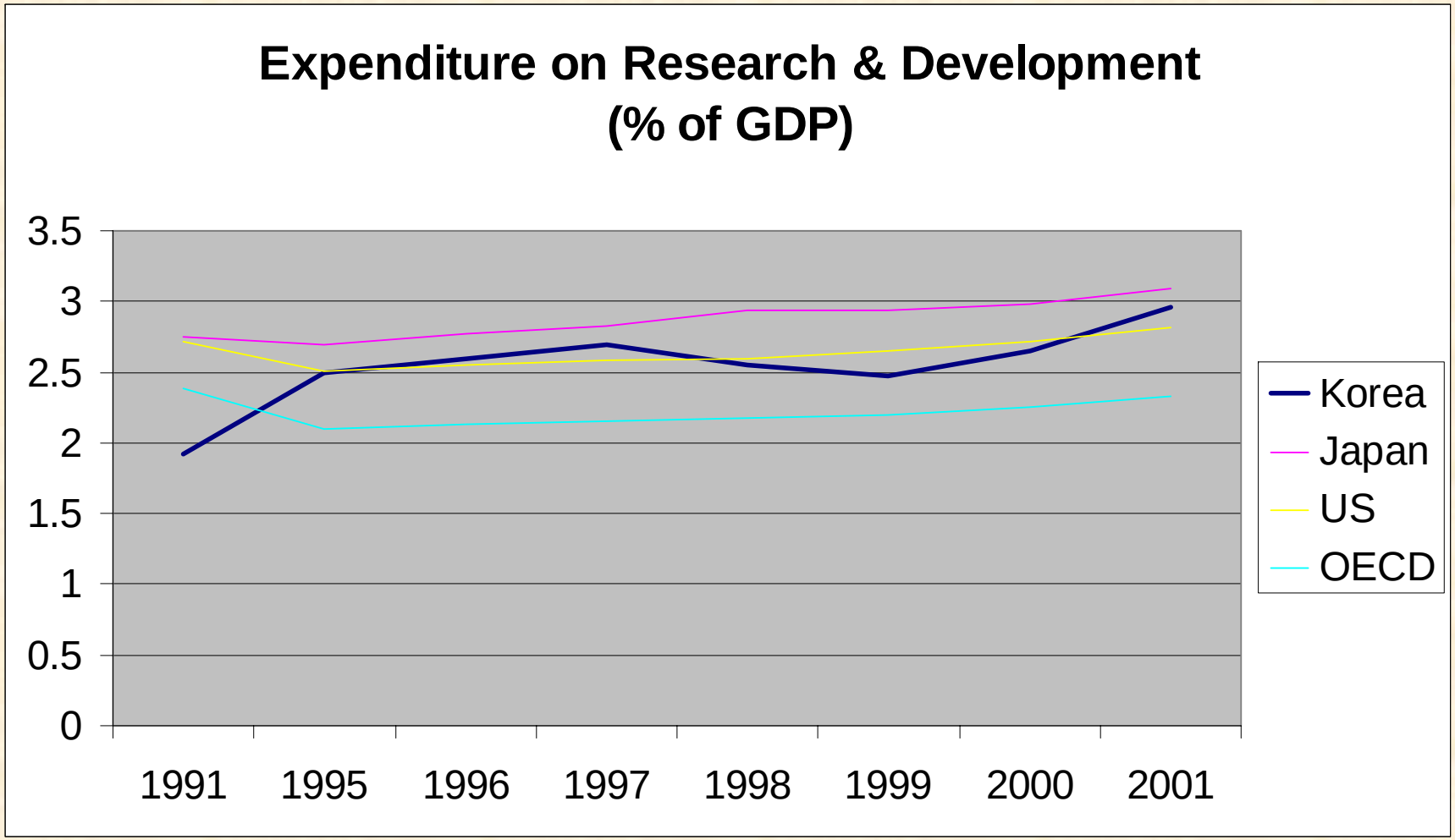
- Between 1991 and 2001, Korea's R&D expenditure (as % of GDP) grew by 4.83% per year

- During the same period, Japan and the US increased R&D expenditure by 1.19% and .41% annually

- Korea's share (as % of GDP) of R&D expenditure is one of the highest among the OECD countries (only after Sweden, Finland, Iceland and Japan)

- 76.01% of Korean R&D expenditure is borne by business enterprises. Comparable figure for other countries are lower

Investment in Research and Development



Source: OECD Science and Technology Report, 2003

Investment in R&D and Human Capital Improvement: Is It Paying Off?

- ***Yes!***

- Labor productivity grew by 5.1% per year during 1990-95 (highest among the OECD countries) and by 4.0% during 1995-2002 (second after Ireland)

- Labor productivity in Japan and the United States grew by 2% during 1995-2002

- In 2002, Korea registered a GDP per hour worked as $132 (1995=100) – Ranked only after Ireland

- Number of patent applications increased at an annual rate of 24.6% during 1991-2001 – the highest rate for any country of the world

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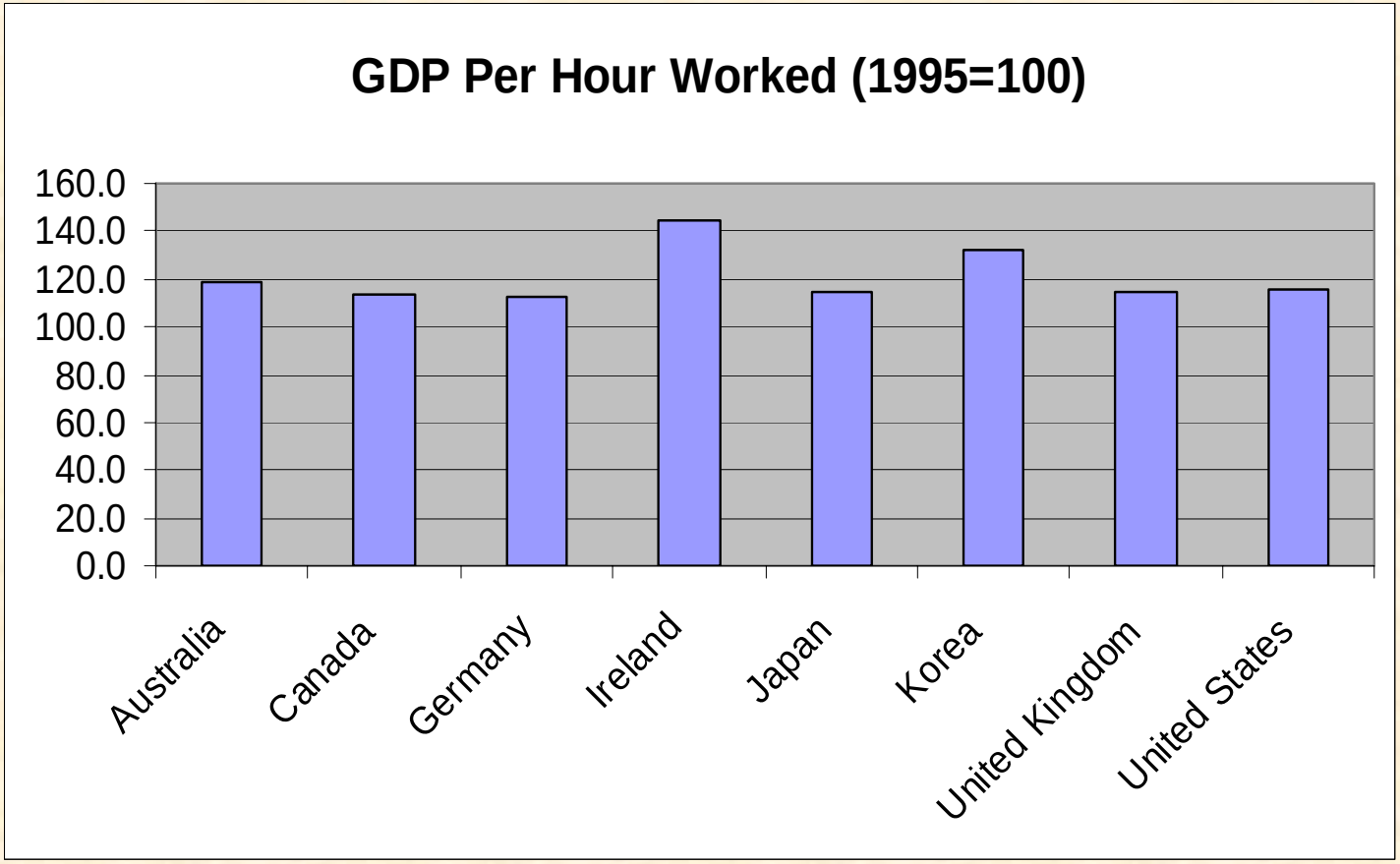
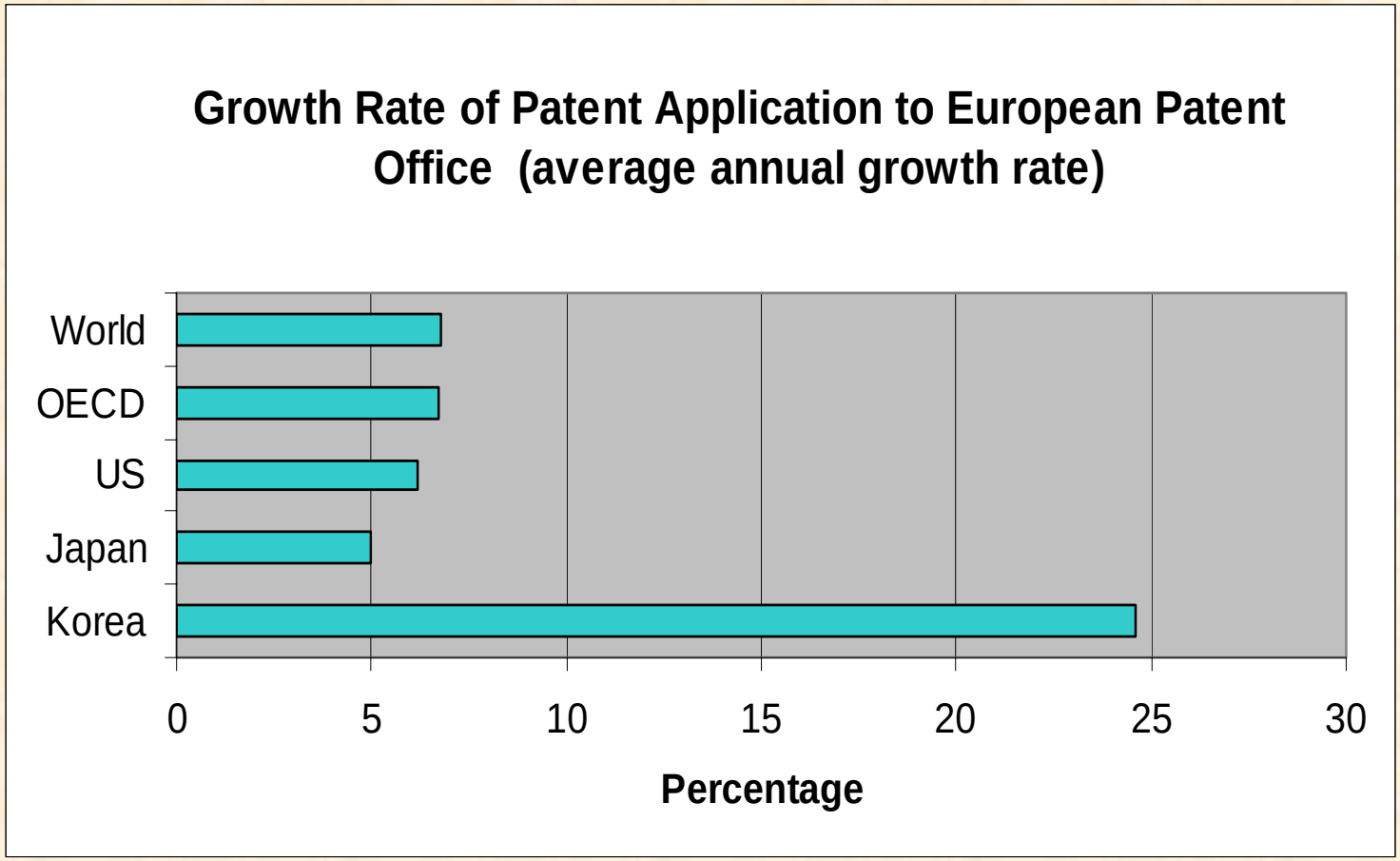


Source: OECD Labor Productivity Database

Investment in R&D and Human Capital Improvement: Is It Paying Off?



Source: OECD, Science and Technology Score Card, 2003

Is it Paying Off? Korea on Its Way to Become a High-tech Service Sector Economy…

- Service sector value-added, as percentage of GDP, increased from 50.60% in 1995 to 55.10% in 2002 – a large sectoral transformation in a relatively short period of time

- Service sector export grew at an annual rate of 5.8% during 1990-2001 and at 6.7% during 1995-2001. During these two periods, US service sector export grew by .5% and -.1% respectively

- Labor force participation in service sector grew even faster – between 1995 and 2002, number of people employed in the service sector increased by 14.94%

Is It All Good News Then?

- ***Not really!!***

- Falling gross savings rate – diminishing investment

- Falling share of export and deteriorating terms of trade

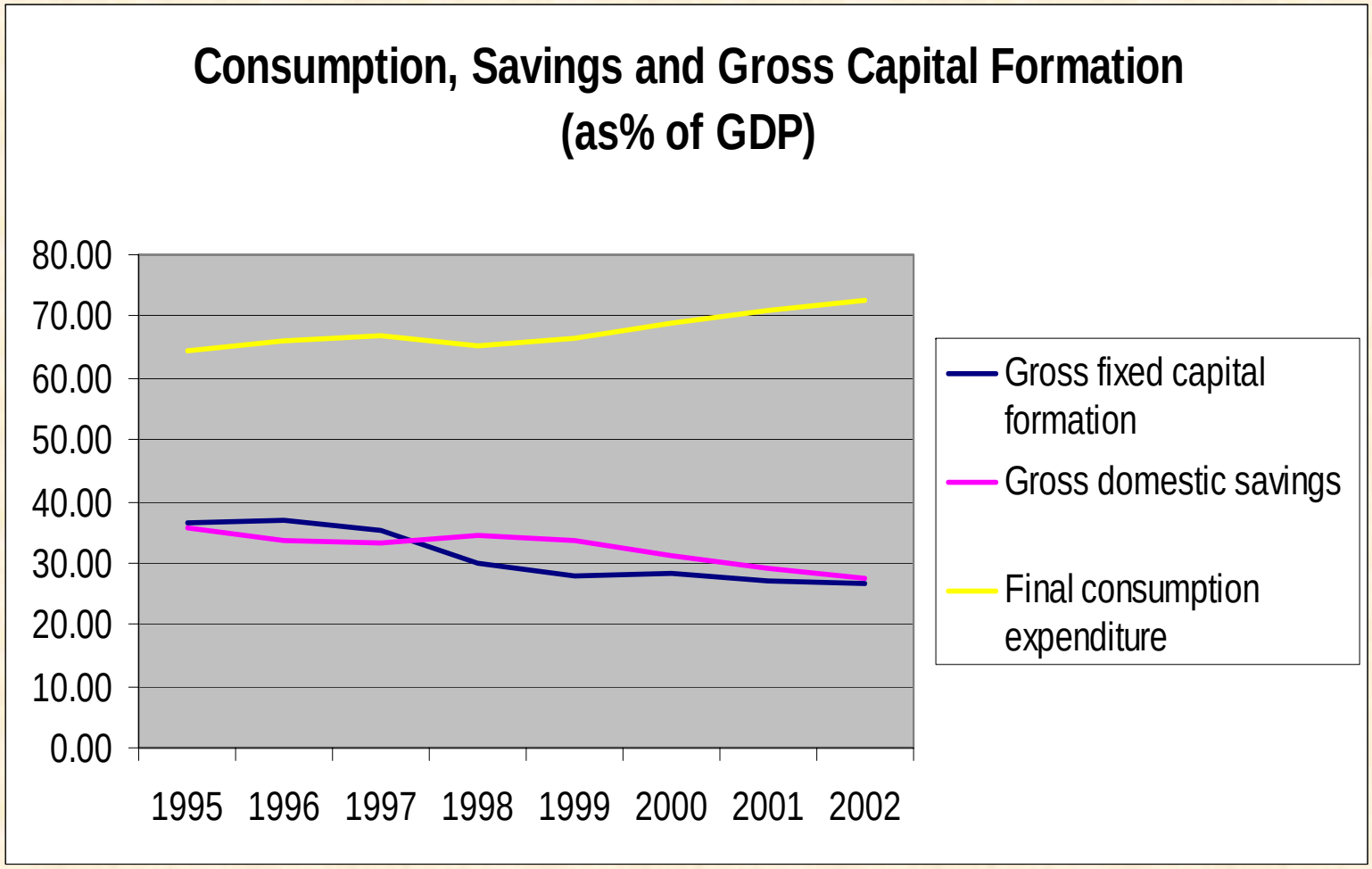
- Not enough FDI or bond market participation to compensate for falling savings rate – lack of institutional investors and lack of confidence in market process

- Industry 'concentration ratios' (in terms of market share) – are still high - Poorly performing corporate sector and still difficult 'bankruptcy' process

- Under-performing banking sector – banks are yet to learn to live in a world without 'Government Guarantees'

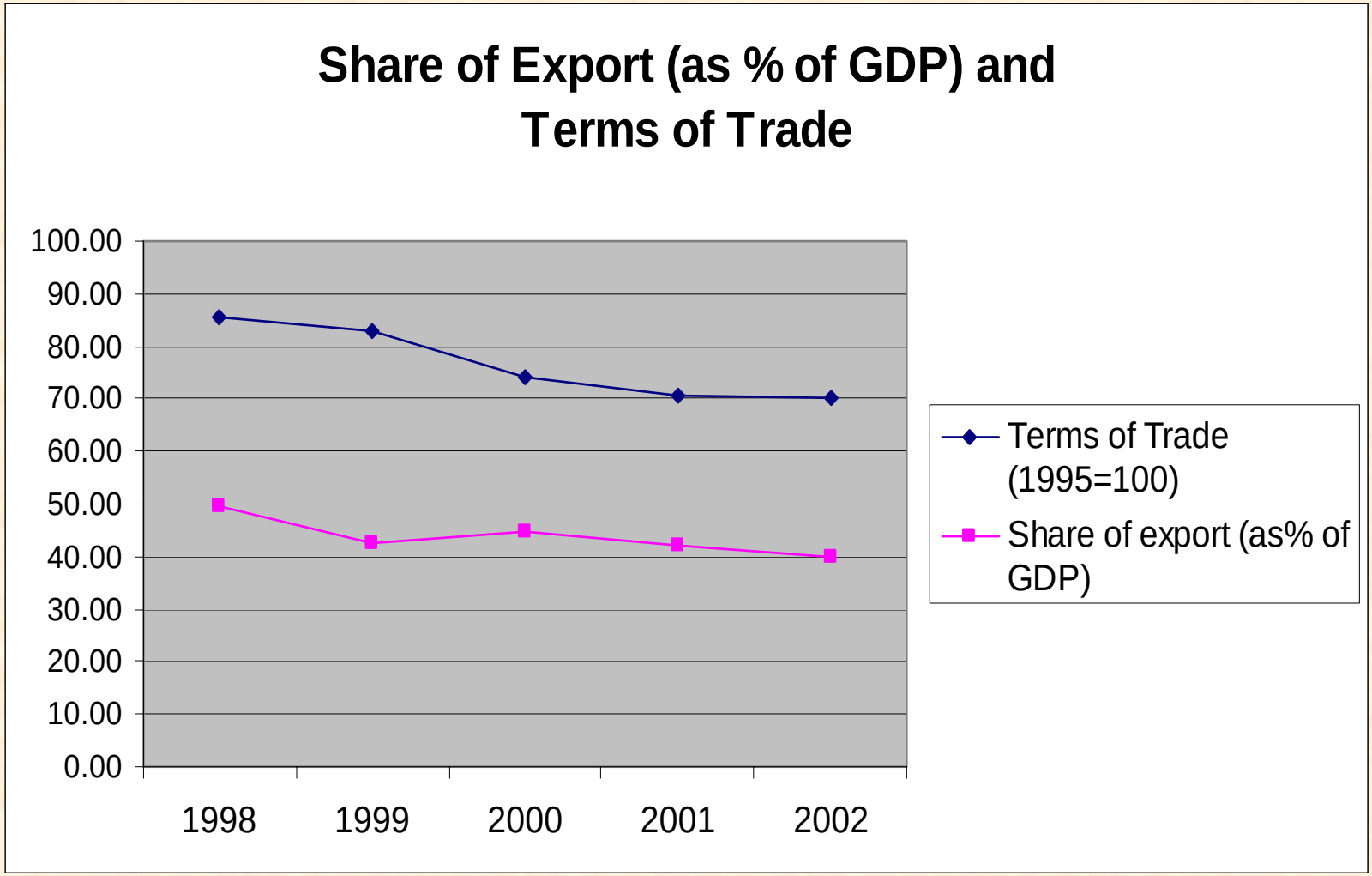
- Weak regulatory environment – lack of adequate monitoring, supervision and inadequate 'competition' policy

Falling Savings Rate…



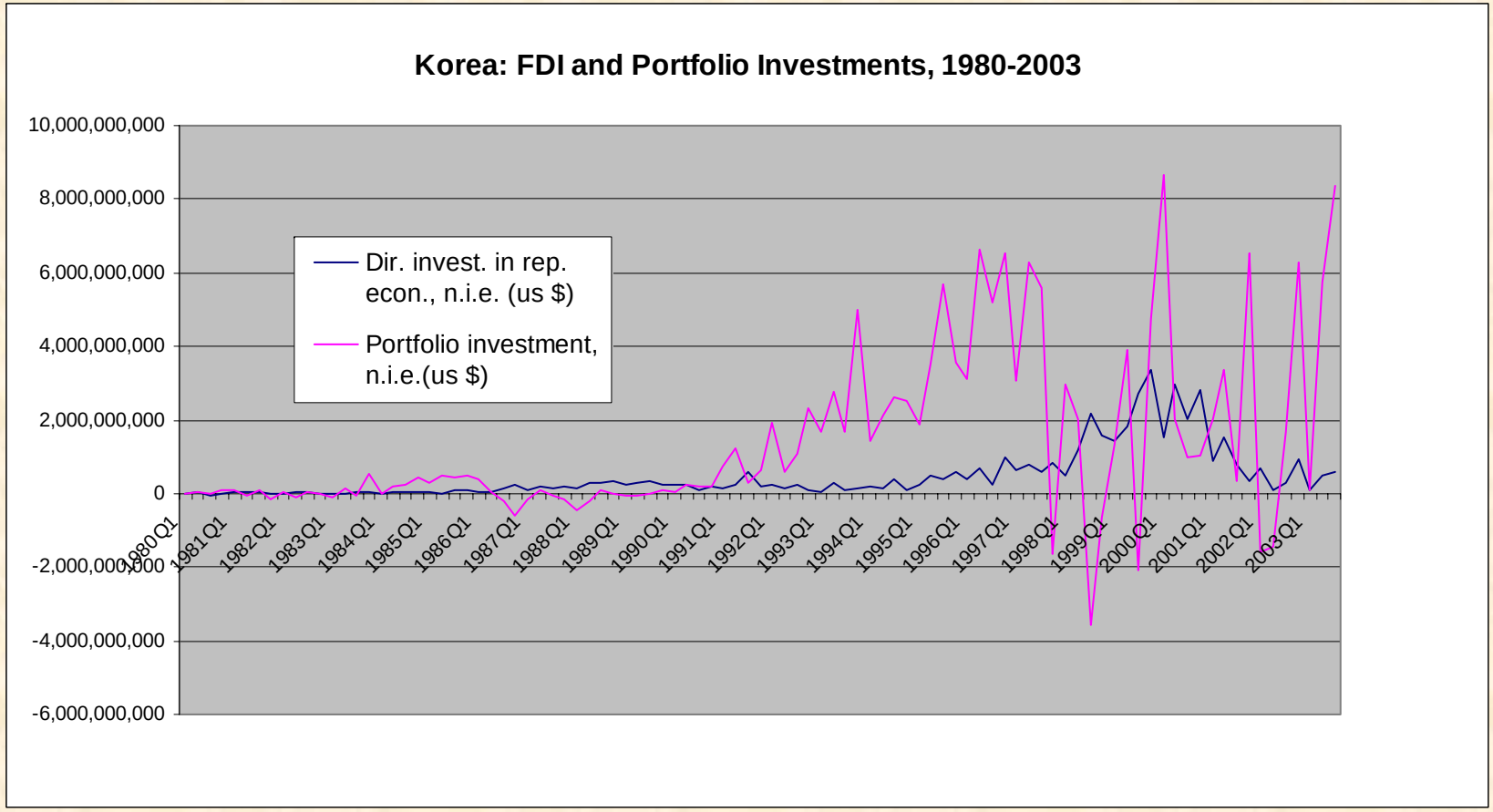
Source: WDI Database, 2003

Falling Export and Deteriorating Terms of Trade



Source: WDI Database, 2003

FDI and Portfolio Investments Have Been Volatile and Inadequate



Source: International Financial Statistics, 2003

Lack of Institutional Investors and Outside Monitoring

- Non-bank institutional investors hold a relatively small share of the financial assets

- In 2001, Korean Pension Funds held only 4.15% of the total financial assets. Comparable figures for the U.S. and Japan are 32.98% and 19.50% respectively

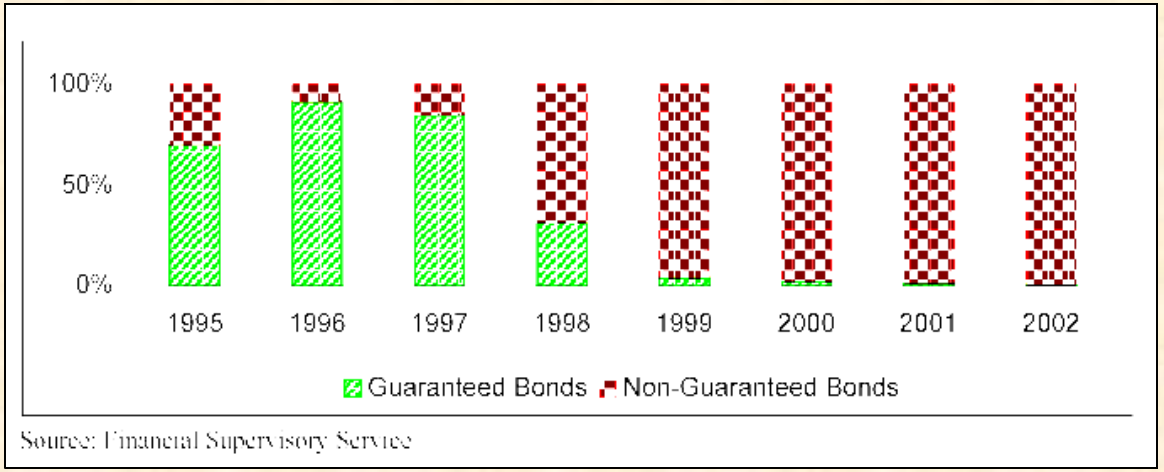
- Corporate bond's share in the total bond market declined from 38.4% in 1997 to 27.0% in 2002

- Foreigners hold only .11% of all outstanding Korean bonds – very low foreign participation by OECD standard

- However, Share of guaranteed bonds has been steadily falling since 1997

Rising Share of Non-Guaranteed Bonds

Share of Guaranteed and Non-guaranteed Bonds



Korean investors are learning to accept risk!

Concentration of Corporate Ownership

- In 2002, 34.3% of the manufacturing firms were unprofitable, up from 32.3% in 2001 – improving profitability is a must

- Internal (e.g. family) ownership ranged from 23.18% to 61.96% in ten largest *Chaebols* – has not changed significantly since 1997; in case of a few of these Chaebols ownership concentration actually increased

- The companies belonging to the five largest *Chaebol* listed on the stock exchange make up some 40% of the total asset of all the listed companies

<u>Chaebol issues</u>

- Progress in transparency and minority share-holder rights
- Cross-ownership and management still an issue
- Dominant position, competition and market access issues – problems of monopolization
- Daewoo put *'Too big to fail'* to rest

Other Sources of Risks…

- Increasing household debt, relative to their disposable income – unsustainable in the long-run. Default rate increased 27% between 2000 and 2002 (In the U.S., household debt delinquency was about 7% compared to about 15% in Korea)

- Delinquency rate on credit card loans are also on the rise (about 12% in Korea compared to 2.73% in the U.S.) – *99 million credit cards (up from 39 millions in 1999) or an average of four credit cards per working person*

- Problem of non-performing loans still persists

- Derivative market, set up in 1996 has grown to be one of the largest in the world – another source of risk

- Shrinking of the non-banking sector and high level of credit risk in corporate sector will continue to contribute to the 'credit crunch'

- Government guarantees increased from 2.9% of GDP in 1997 to 19.6% in 2001 – another potential risk

Contract Enforcement and Closing a Business

Enforcing a contract:

	Number of procedures	Duration (days)	Cost (% GNI per capita)
OECD: High income	18	213	7.1
Japan	16	60	6.4
Korea, Rep.	23	75	4.5
United States	17	365	0.4

Closing a business:

	Actual Time (in years)	Actual Cost (% of estate)
OECD: High income	1.8	7
Japan	0.6	4
Korea, Rep.	1.5	4
United States	3	4

Source: World Bank Doing Business Database

Concluding Remarks

- Korea has made significant progress in human capital development and is well positioned to become a 'knowledge-based' economy

- Scope for further improvement in corporate governance, transparency minority shareholder rights, market access and competition issues

- More effective bankruptcy laws and prudential regulations

- Learn to take risk without explicit and implicit government guarantees

- Fast growth of the derivative market exposes Korean investors to a new kind of risk – a more comprehensive regulatory framework is needed for the derivative market

Concluding Remarks

- By some estimates and by OECD standards, Korea's Total Factor Productivity is low (historically, Korea's annual TFP growth rate averaged .10, compared to .58 for Japan, .71 for Taiwan and .53 for the U.S.*)

- Further growth is unlikely to come from enhancing labor productivity or from capital accumulation. Future growth will be from increasing Total Factor Productivity (TFP) through improving corporate governance, minority shareholders' rights and competition

- By some estimates, improving institutional efficiency will increase TFP from 1.6% to 2.0% per year

- With higher TFP, Korea can expect to be the economic bridge between 'fast-growing' China and 'slowly-recovering' Japan

*Baier and Dwyer (2002) How Important Are Capital and Total Factor Productivity for Economic Growth?