

Total Health Care Expenditure and Medical Technological Advances

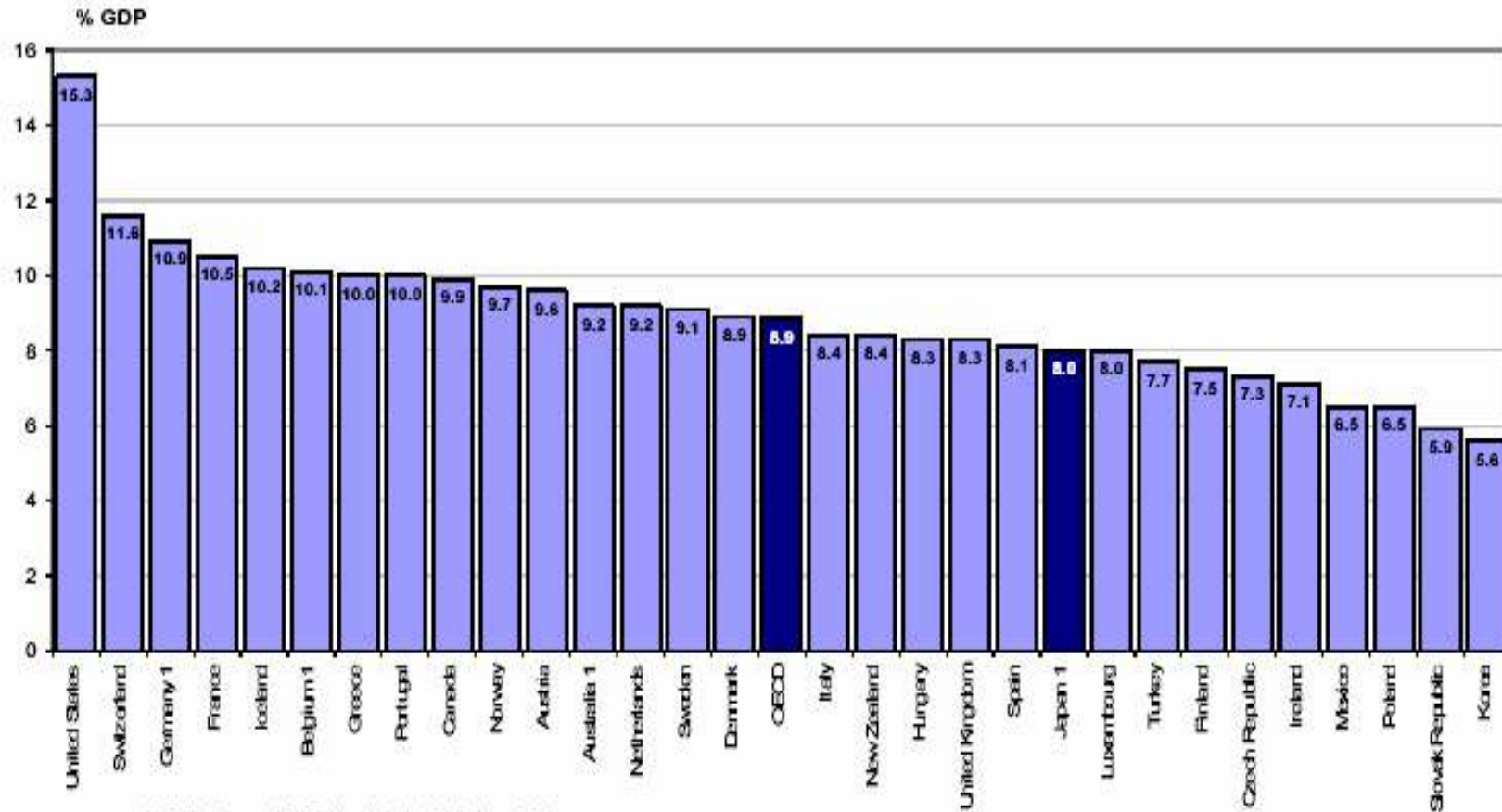
**Boston Scientific Japan
VP, Government Affairs
Makoto Tamura**

Allocation vs Total Expenditure

Though we have spent long hours to discussing allocation issues, we should spend more time discussing total health care expenditures

Health Care Spending in Japan

Health expenditure as a share of GDP, OECD countries, 2004



1. 2003. Source: OECD Health Data 2006, June 2006.

Health expenditure per capita, public and private expenditure,
OECD countries, 2004

<Unimportant Factors>

- Aging population
- Health Insurance
- Increase in National Income
- Increase in Health care providers
- Low efficiency of health care sector

<Important Factors>

- Technological Advances

Though this knowledge is usually used to manage health expenditure growth, it may help us to consider how we could increase health care expenditure

Technological advances can DECREASE or INCREASE health care expenditure. It depends on the situation.

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- Some technologies, such as less invasive technologies, have been proven to reduce health care cost.
- On the other hand, some new technologies may increase health care expenditure, though it may increase the efficiency as well.
- Typical example of a technology directly linked to increase health care expenditure;
 - ★Hemodialysis = 1.2 trillion yen (4% of total health expenditure)

Note: 230 thousand patients, 5.5 mil yen / patient•year

- Device cost does not make up a major part of the cost for hemodialysis
 - Dialyzer costs 130 billion yen

Why technological advances could increase health care expenditure in specific settings?

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1. Government cannot ignore effective technology

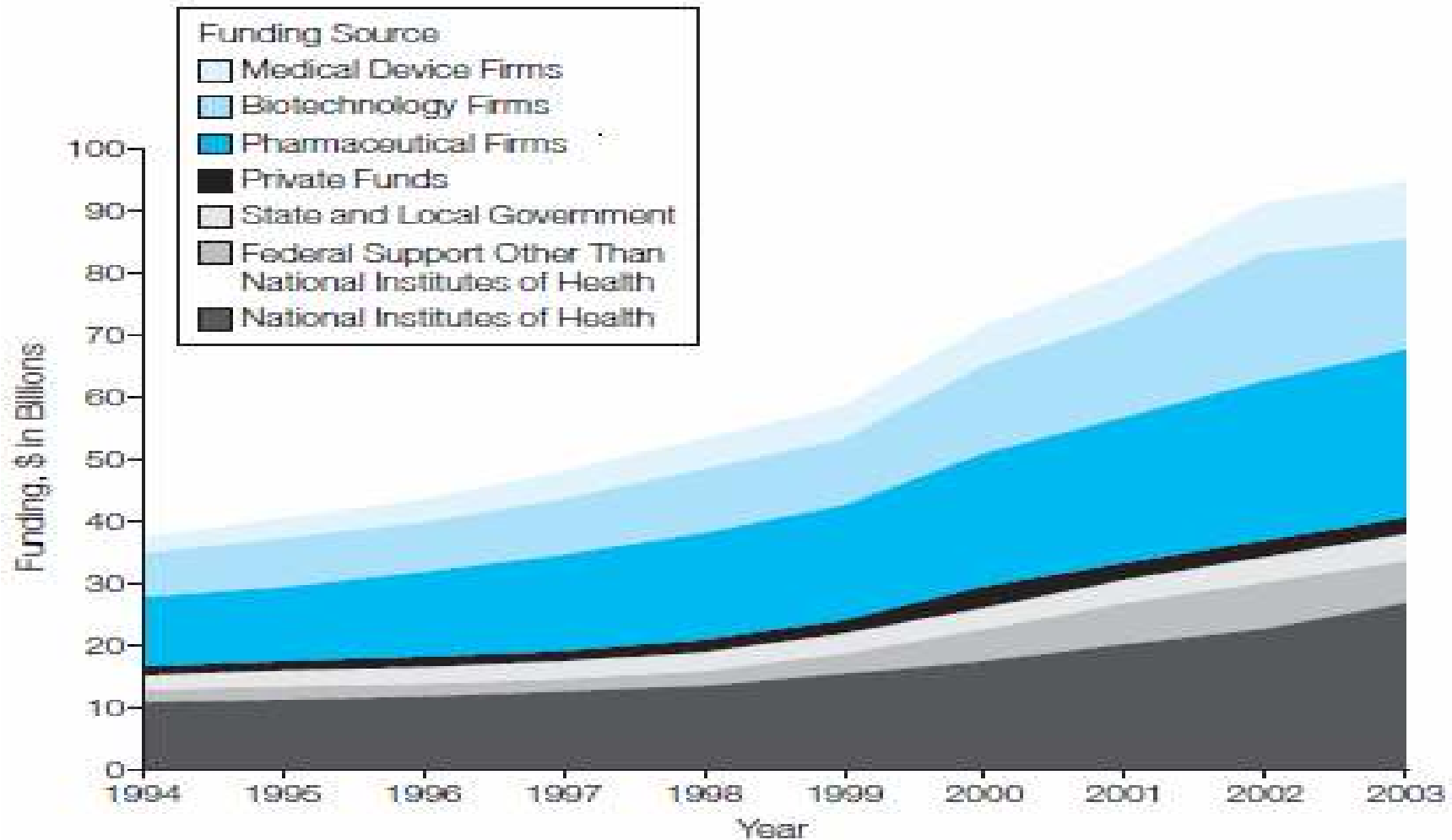
- Government is forced to pay when very effective technology, like hemodialysis, appears even if the cost is quite high.
- Currently, dollar amount per QALY (quality adjusted life year) threshold is around \$50,000 in many countries, but if highly effective technology (but less cost-effectiveness) appears, the threshold might be increased.

2. Capital market is willing to invest in proven technology

- Capital market seems to believe health care is going to be highly prioritized in many countries.
- Capital market has a power to change the society in many ways.

How medical technology could be advanced?

Funding for Biomedical Research by Source, 1994-2003



<Source: Moses (2005)>

Key is “Evidence”

- If effective technology is NOT proven to be EFFECTIVE, it would NOT be diffused.
- However, the cost to create evidence is huge.
- Private manufacturers spend significant amount of money to show the evidence. Based on the Moses's data (2005), Pharma companies spend about half of their R&D is to show the effectiveness of their products.

- If we want to increase health care expenditure, we should promote further technological advances.
- To do so, we might take advantage of stock market (private manufacturers) as much as possible, which has a huge potential to change the society.
- However, we should be careful that private companies (stock market) play a major role in resource allocation, such as hospital, insurer, etc.
 - Issues have been observed in some countries.