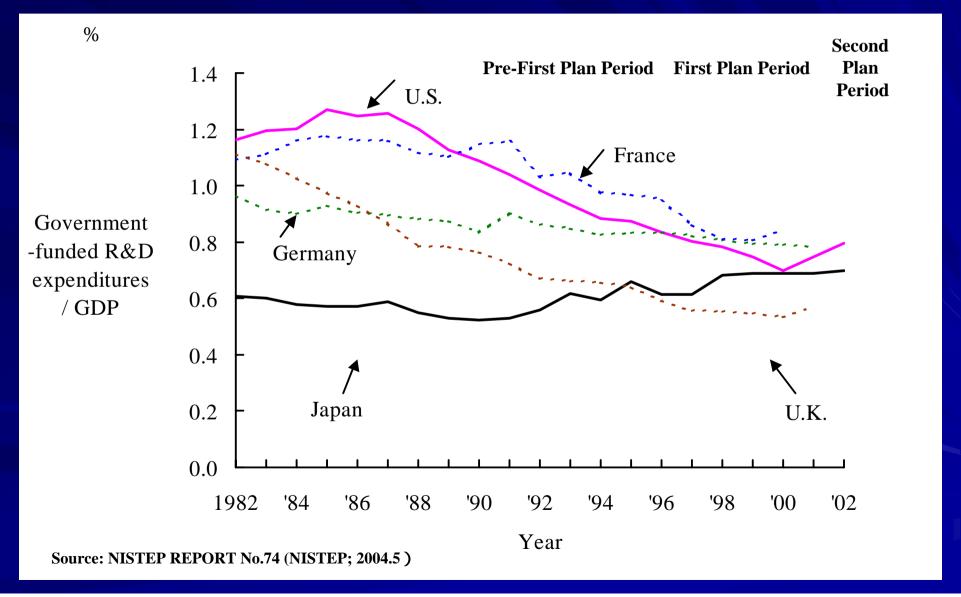
INTRODUCTION AND ESTABLISHMENT OF PO AND PD SYSTEM IN JAPAN

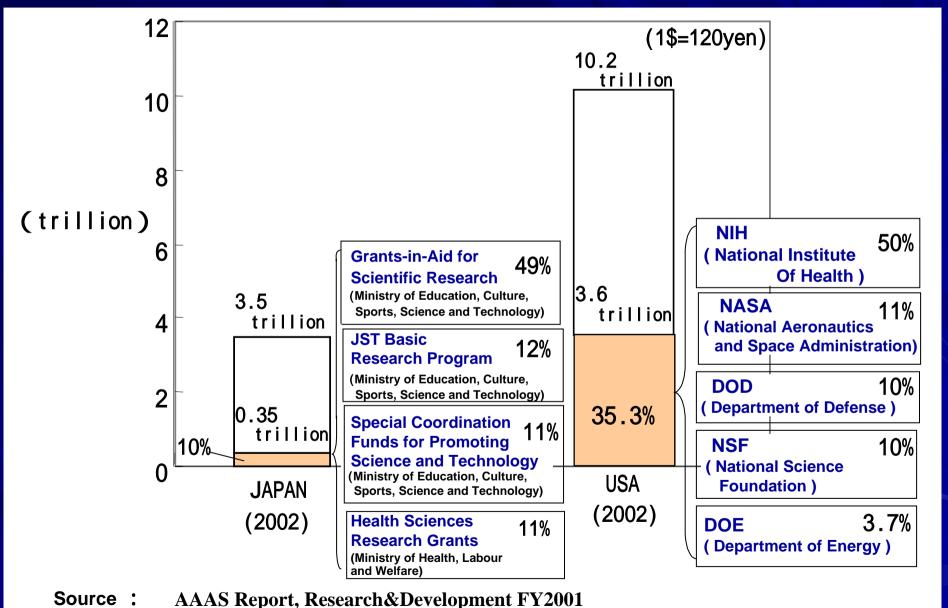
Hiroo Imura

Former Member of Council of Science and Technology Policy Program Director for the Special Coordination Funds Promoting Science and Technology

GOVERNMENT EXPENDITURE ON R&D AS A PERCENTAGE OF GDP

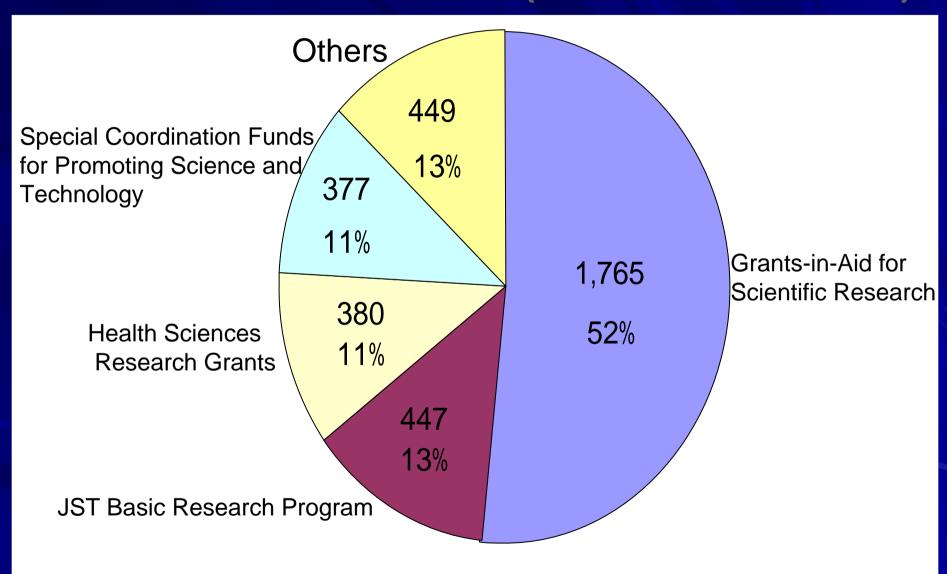


PROPORTION OF COMPETITIVE RESEARCH GRANTS IN TOTAL SCIENCE BUDGET IN JAPAN AND USA

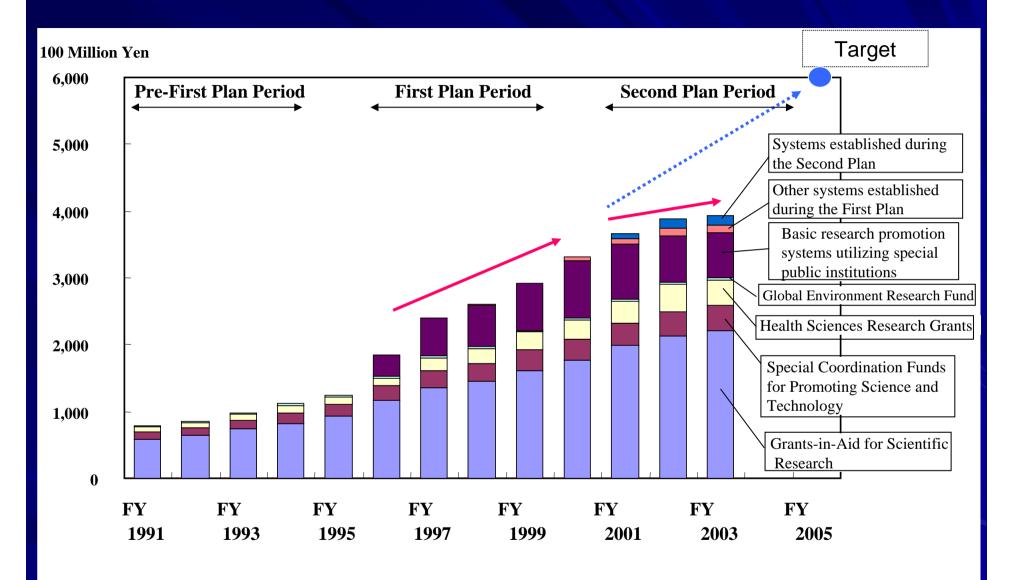


Budget of the United States Government FY2003, Analytical Perspective

COMPETITIVE RESEARCH GRANT IN 2002 FISCAL YEAR (0.1 BILLION YEN)



TRENDS IN COMPETITIVE RESEARCH FUNDS



Source: MEXT S&T Policy Bureau, "Budget for S&T in FY 2003," May 2003 and its annual

issues, and budget for S&T data

Source: NISTEP REPORT No.74 (NISTEP; 2004.5)

PROBLEMS IN JAPANESE RESEARCH GRANTS

- Absence of Established Funding Agencies
 Freer Discretion for JST and JSPS
- Lack of Proper Management Data Base, PD or PO, Follow-up System Amount of Each Grants, etc.
- Problems of Research Grants Themselves
 Amount and Duration
 Consideration to Young Investigators
 Many Group Studies
- Lack of Flexibility
 Carryover to Next Fiscal Year
 Earmarking

PROPOSALS TO REFORM RESEARCH GRANT SYSTEMS

- 1. Creating More Competitive Environment Incentive, Effort Management, Indirect Cost, etc.
- 2. Supporting Young Investigators
 Help Independence
- **3. Management of Grants by PD and PO**Defining Roles of PD and PO
- 4. Effective and Flexible Use of Grants
 Carryover of Grants
 Fair and Transparent Screening System
 Use of Electronic System
- 5. Establishing Independent Funding Agencies
- 6. Reform of Universities