

# **A Balance Sheet Approach to Reforming Social Security Pensions in Japan**

**by**

**Noriyuki Takayama**

**Professor of Economics, Hitotsubashi University**

**[takayama@ier.hit-u.ac.jp](mailto:takayama@ier.hit-u.ac.jp)**

**<http://www.ier.hit-u.ac.jp/~takayama/>**

**Joint PBC-IMF Seminar on China's Monetary Policy Transmission Mechanism**

**Beijing, April 12-13, 2004**

# Organization

**Brief Outline of Current Provisions**

**Demography**

**Basic Facts:**

**Identifying Main JPN Problems**

**Future Policy Options**

**The 2004 Reform Bill**

**Concluding Remarks**

# Brief Outline of Current Provisions

**2-tier Benefits**

**Contributions**

**The Biggest Business**

# Two-tier Benefits (DB)

## Basic Flat-rate Benefits (PM, PP)

66,200 yen = USD 630

## Earnings-related Benefits (40Yrs)

28.5% of Career Average Monthly Real Earnings

## Replacement Rate (One-earner Couple)

Around 60% Net (230,000 yen = USD 2,200)

## CPI Indexation

The NRA: 65

# Contributions/Transfer from GR

## Contributions

13.58% of **Annual Wages**

13,300 yen = USD 125 (PM, PP)

## Subsidy from General Revenue

1/3 of Flat-rate Basic Benefits

Mainly PAYG, but

with Partial Prefunding

# The Biggest Business in Japan

## Aggregate SS Pension Benefits

44 tr. Yen = USD 415 billion in 2003  
(9% of Japanese GDP)

cf. The Automobile Industry

40 tr. Yen (Domestic Output in 2000)

Rapidly Growing

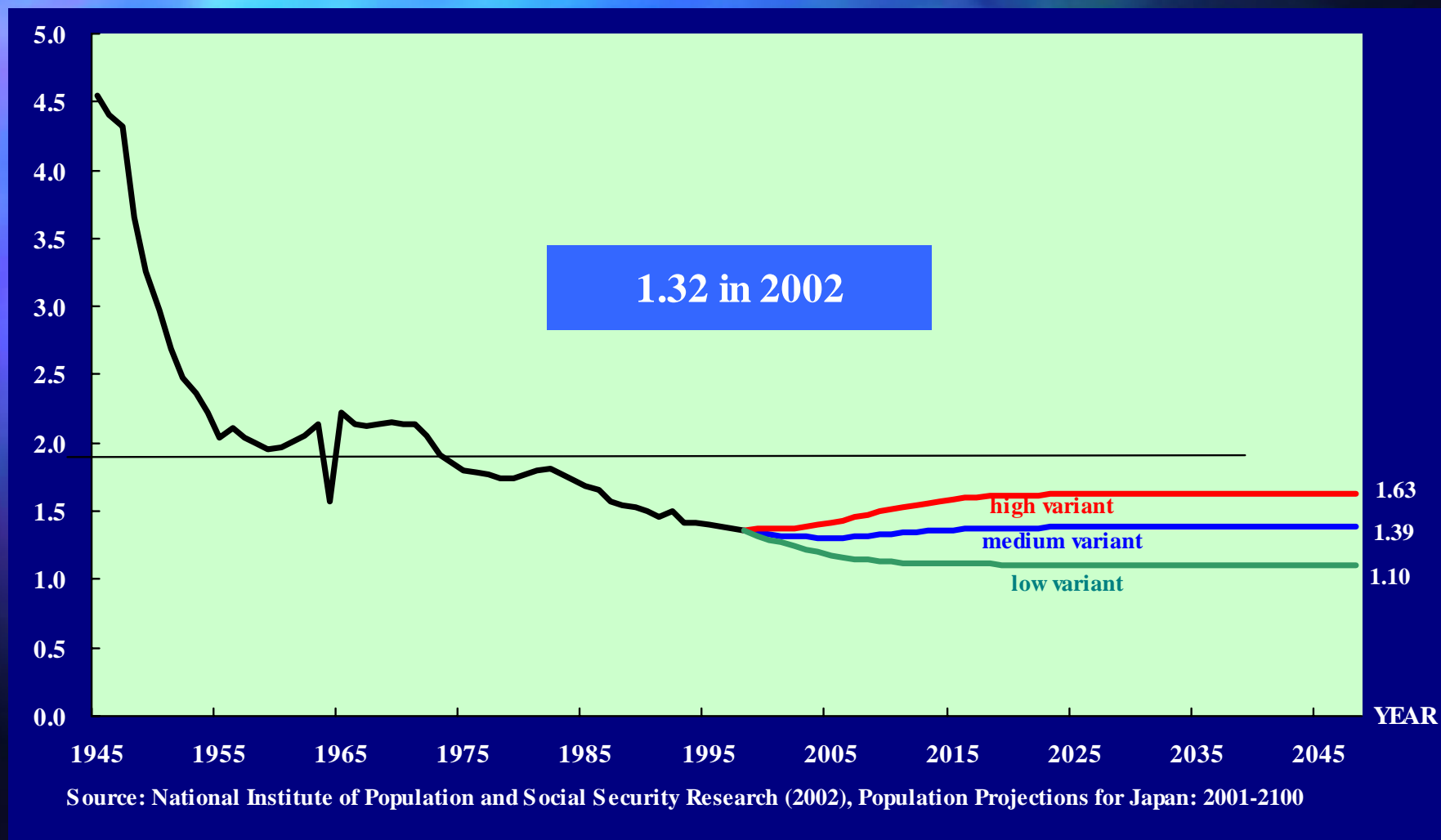
# Demography

**TFR**

**Total No. of Populations**

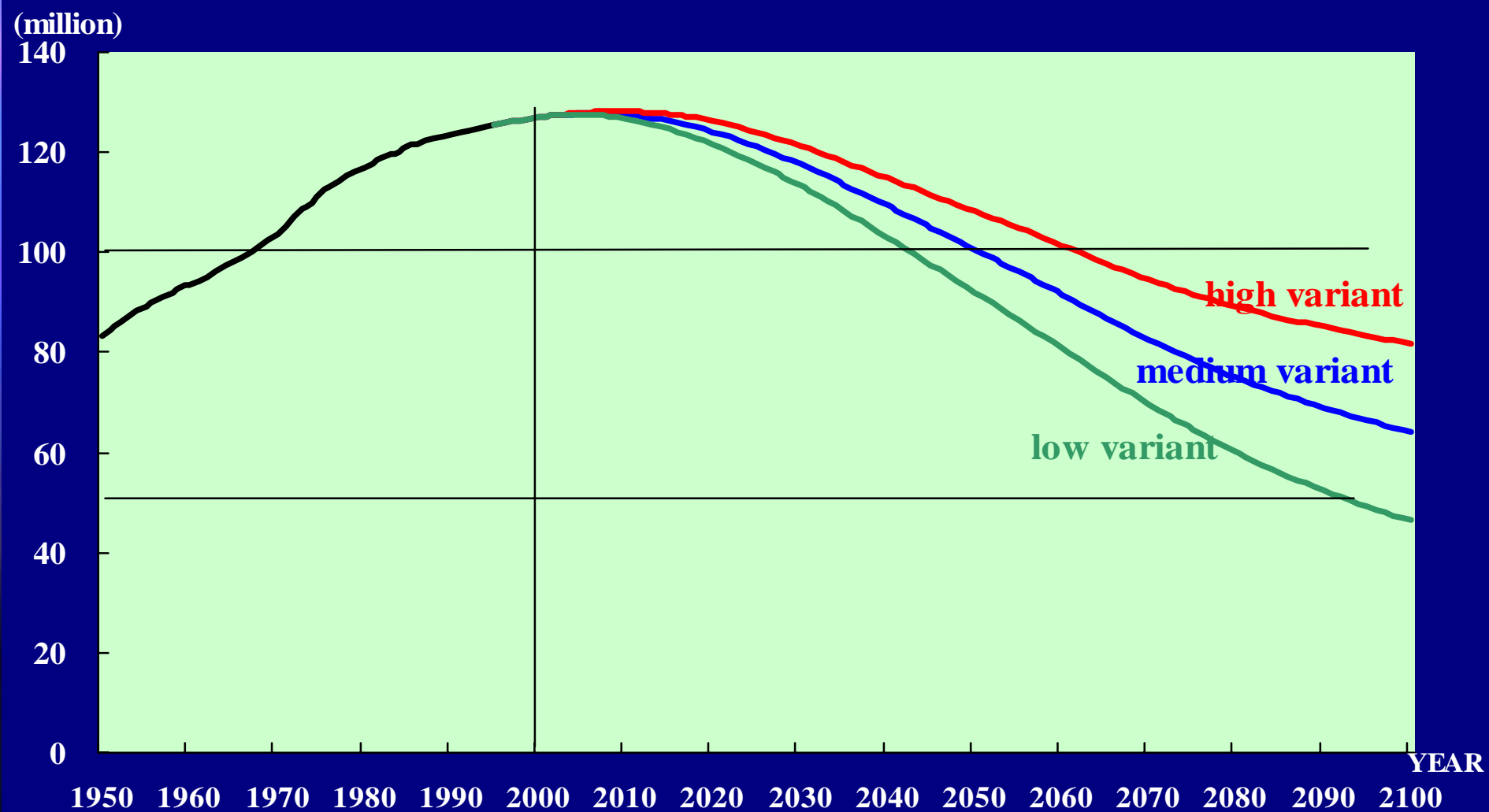
**Proportion of 65+**

# Trends in the Total Fertility Rate of Japan



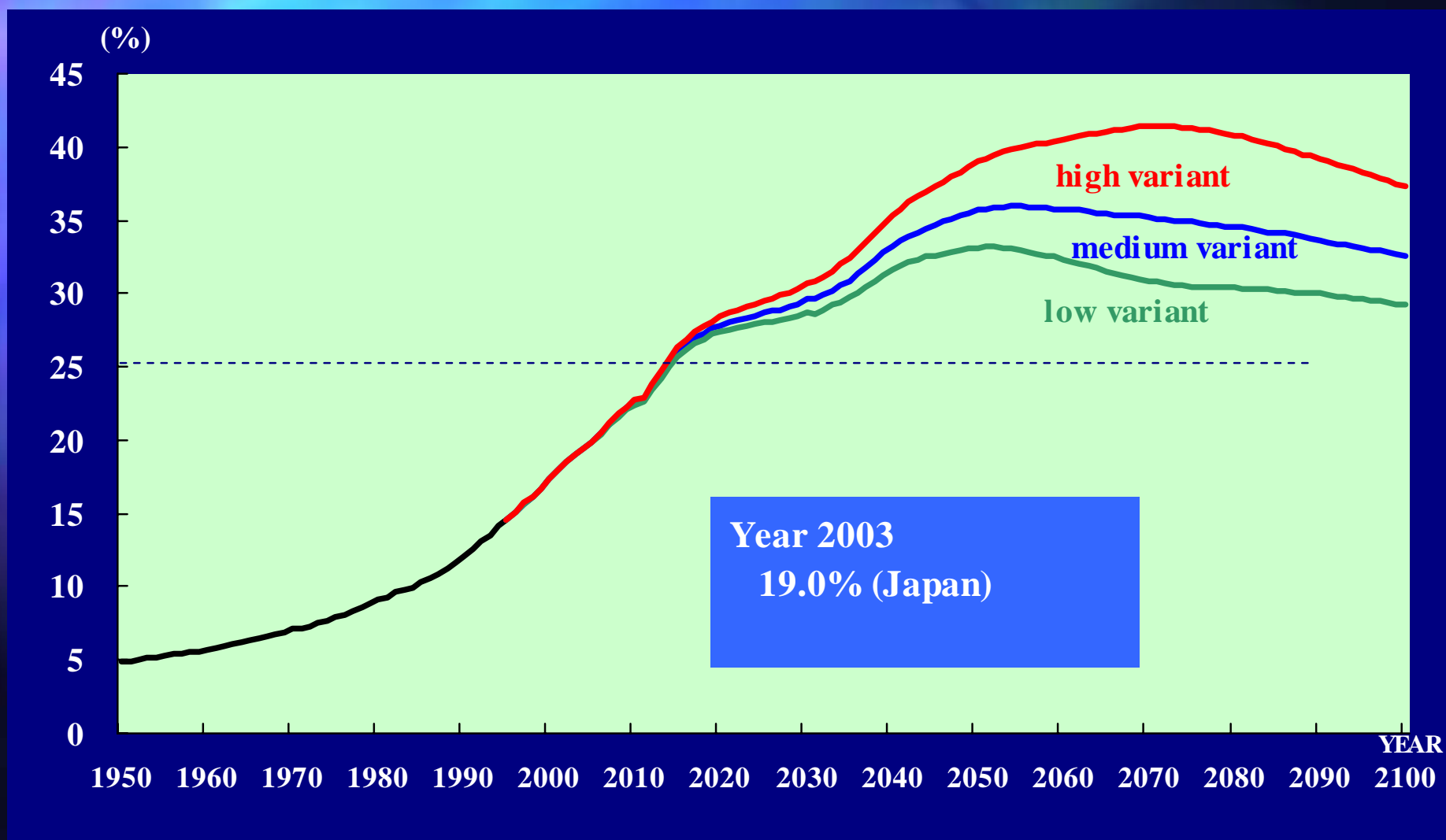


# Actual and Projected Population of Japan



Source: National Institute of Population and Social Security Research (2002), *Population Projections for Japan: 2001-2100*

# Proportion of the Elderly (+65) in Japan



Source: National Institute of Population and Social Security Research (2002), Population Projections for Japan: 2001-2100

# Basic Facts

**Deficit in Current Account**

**Balance Sheet:**

**Huge Excess Liabilities**

**SS Pension Contributions:**

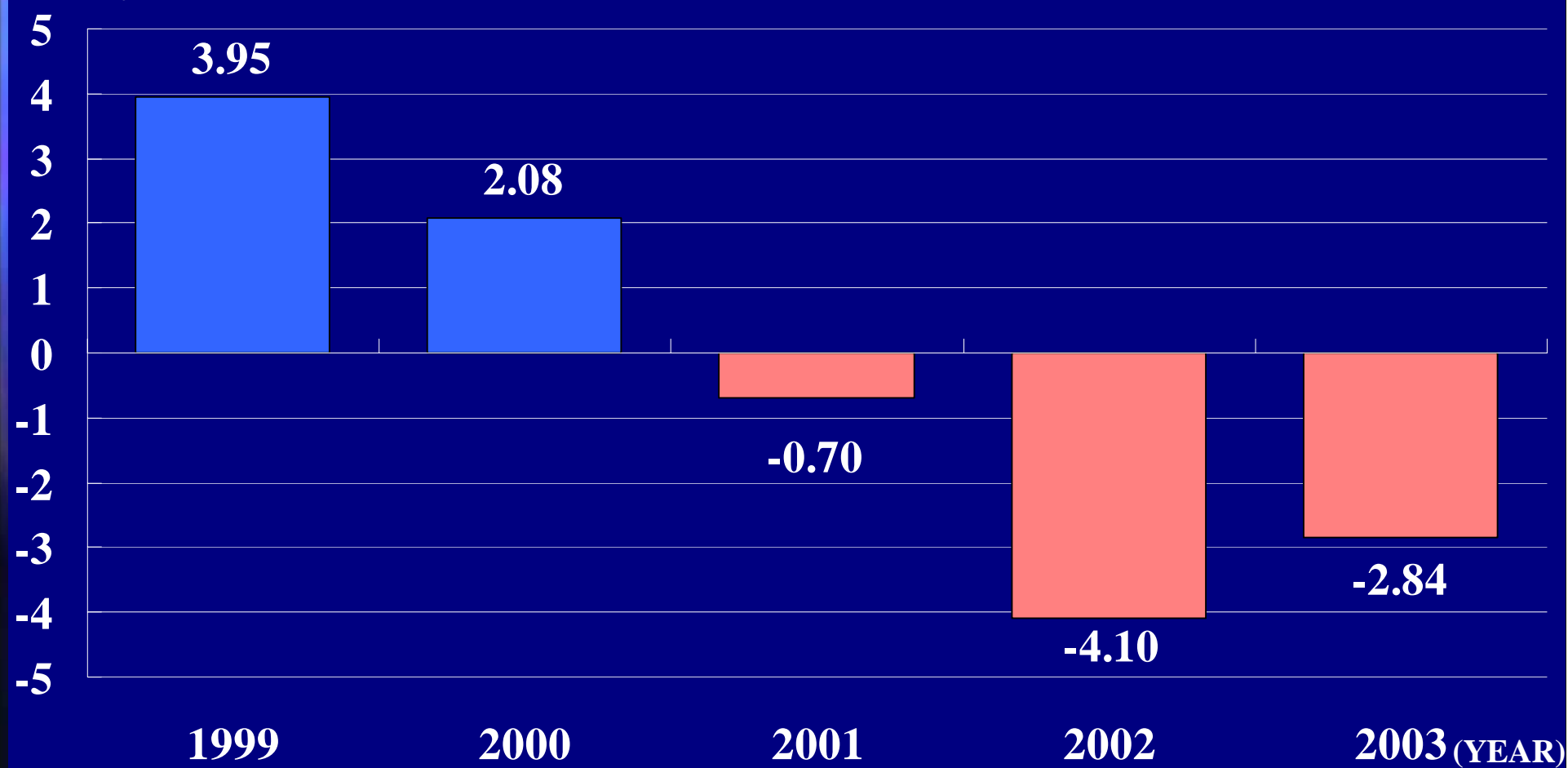
**Heavy Burdens Outstanding**

**Too Much Income Transfers between  
Generations**

**Increasing Drop-out**

# Current Account of the KNH

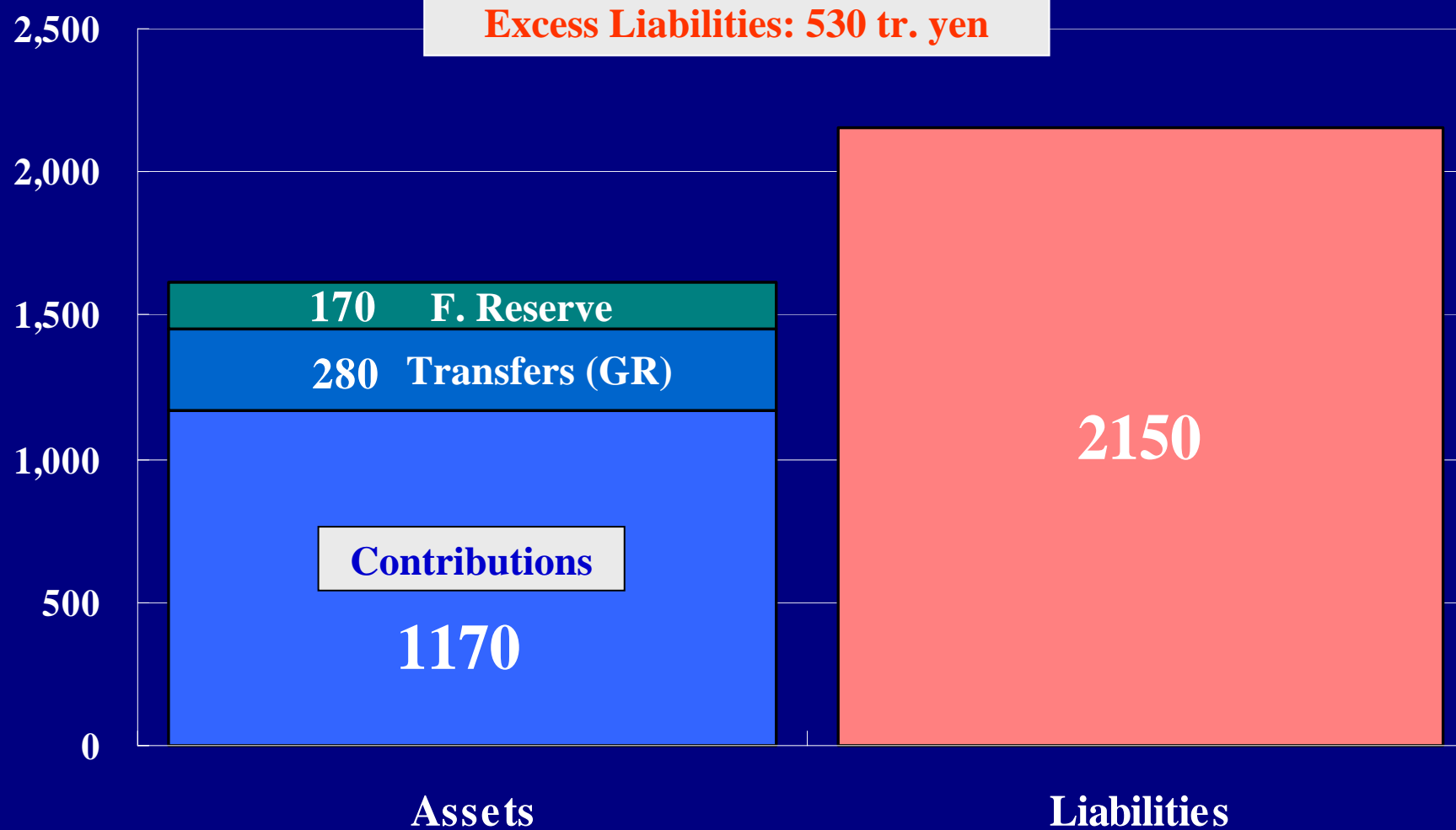
(trillion yen)



# Balance Sheet of the KNH

(as at the 31<sup>st</sup> MAR 2000)

(trillion yen)



# Balance Sheet of the KNH (Part 1)

(as at the 31st MAR 2000)

Pension Liabilities Accrued from **FUTURE** Contributions

(trillion yen)

1,600

1,400

1,200

1,000

800

600

400

200

0

**Excess Liabilities: 80 tr. yen**

**180** Transfers (GR)

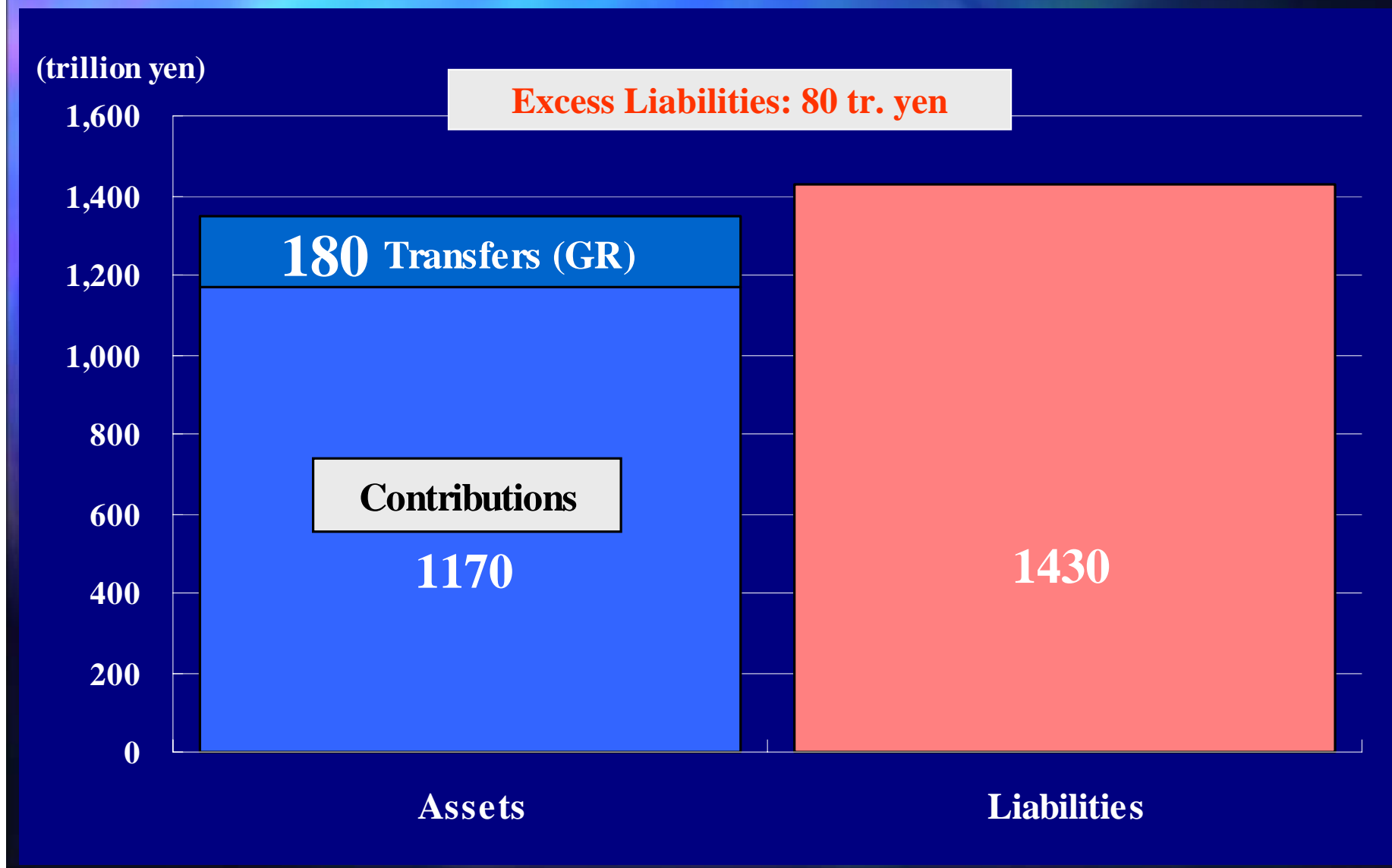
**Contributions**

**1170**

**1430**

**Assets**

**Liabilities**



# Balance Sheet of the KNH (Part 2)

(as at the 31<sup>st</sup> MAR 2000)

Pension Liabilities Accrued from **PAST** Contributions

(trillion yen)

800

700

600

500

400

300

200

100

0

**Excess Liabilities: 450 tr. yen**

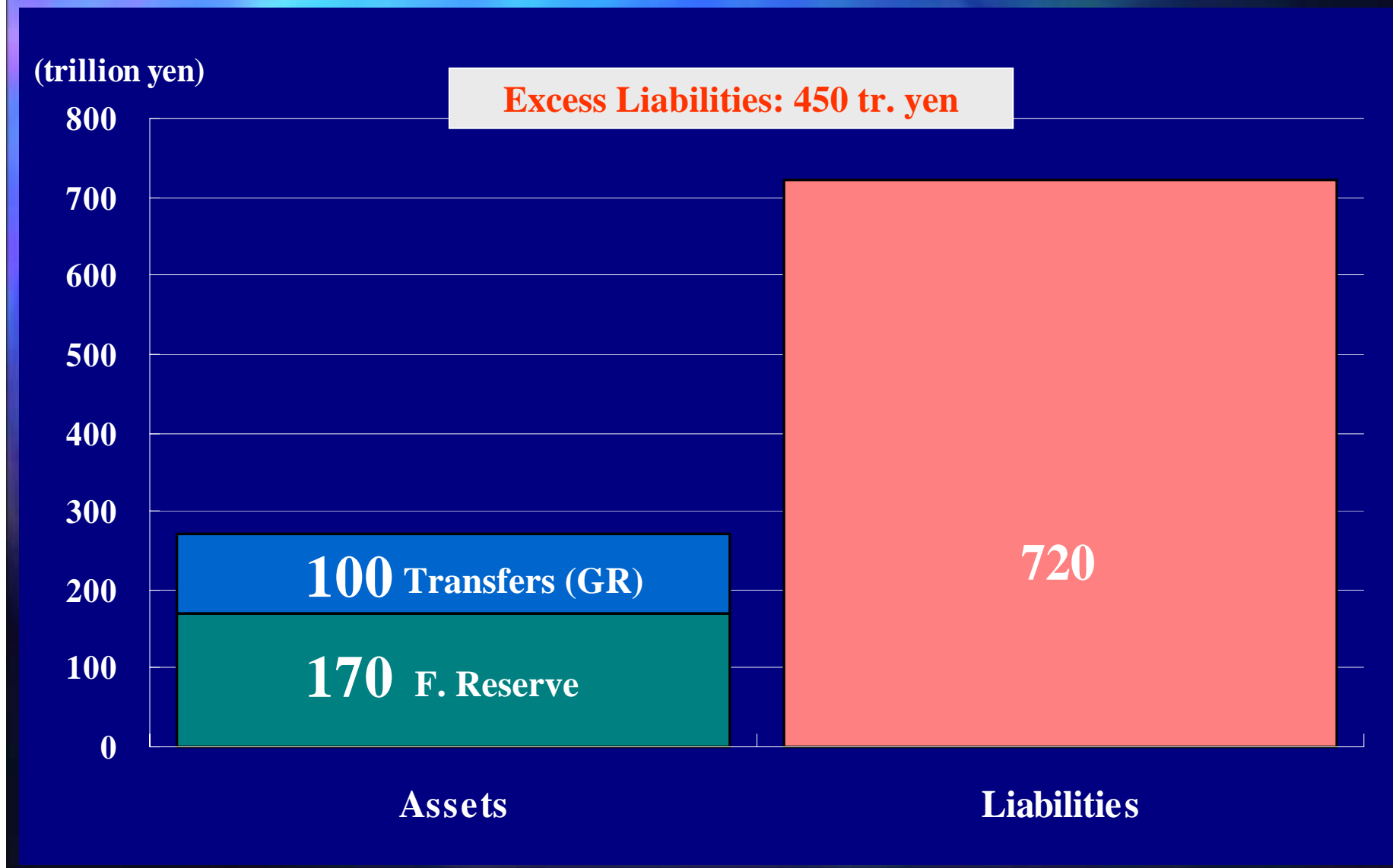
**100** Transfers (GR)

**170** F. Reserve

**720**

Assets

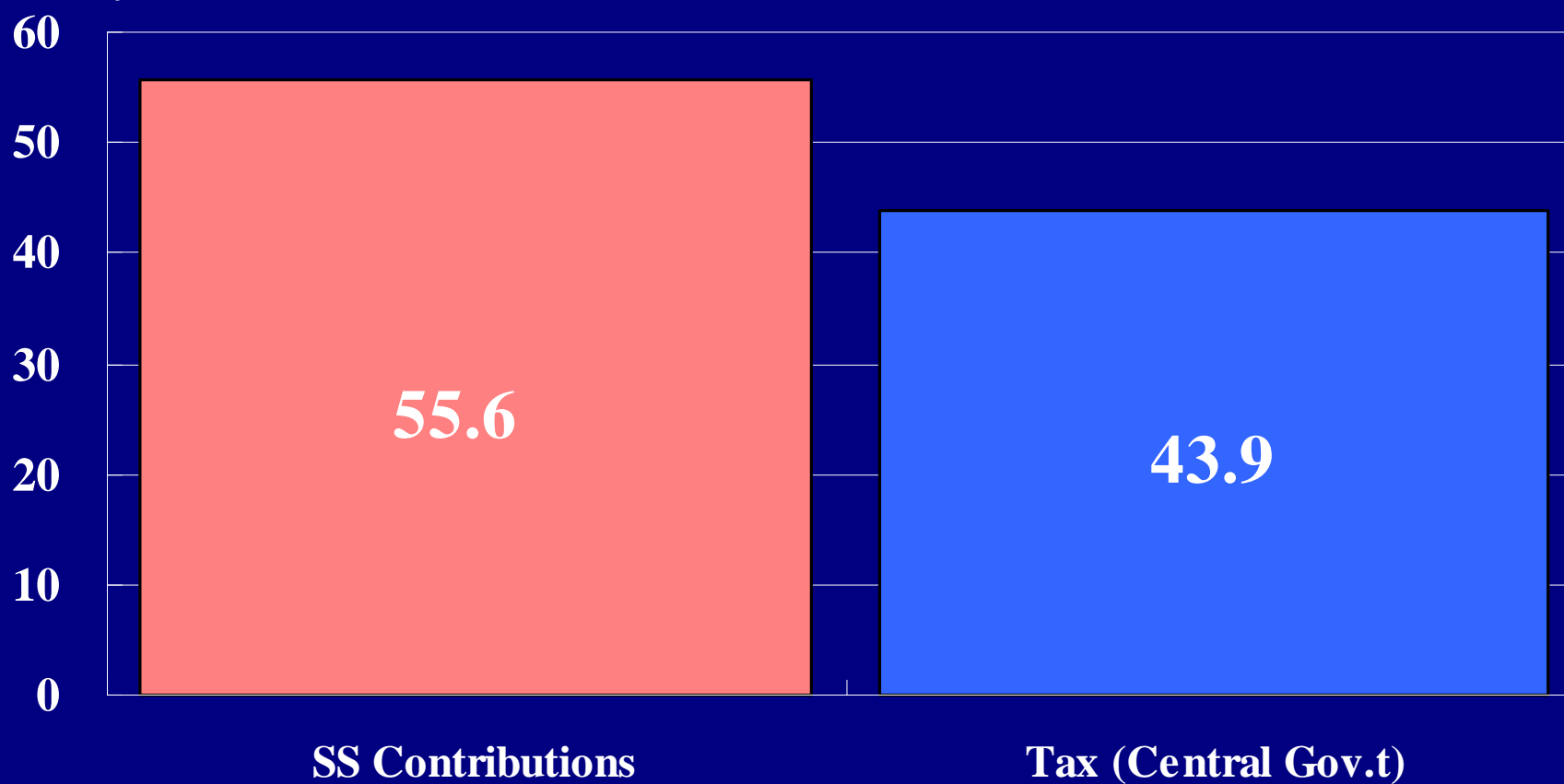
Liabilities



# Which Is More, SS Contributions or Tax Revenues?

FY 2003 National Budget, Japan

(trillion yen)

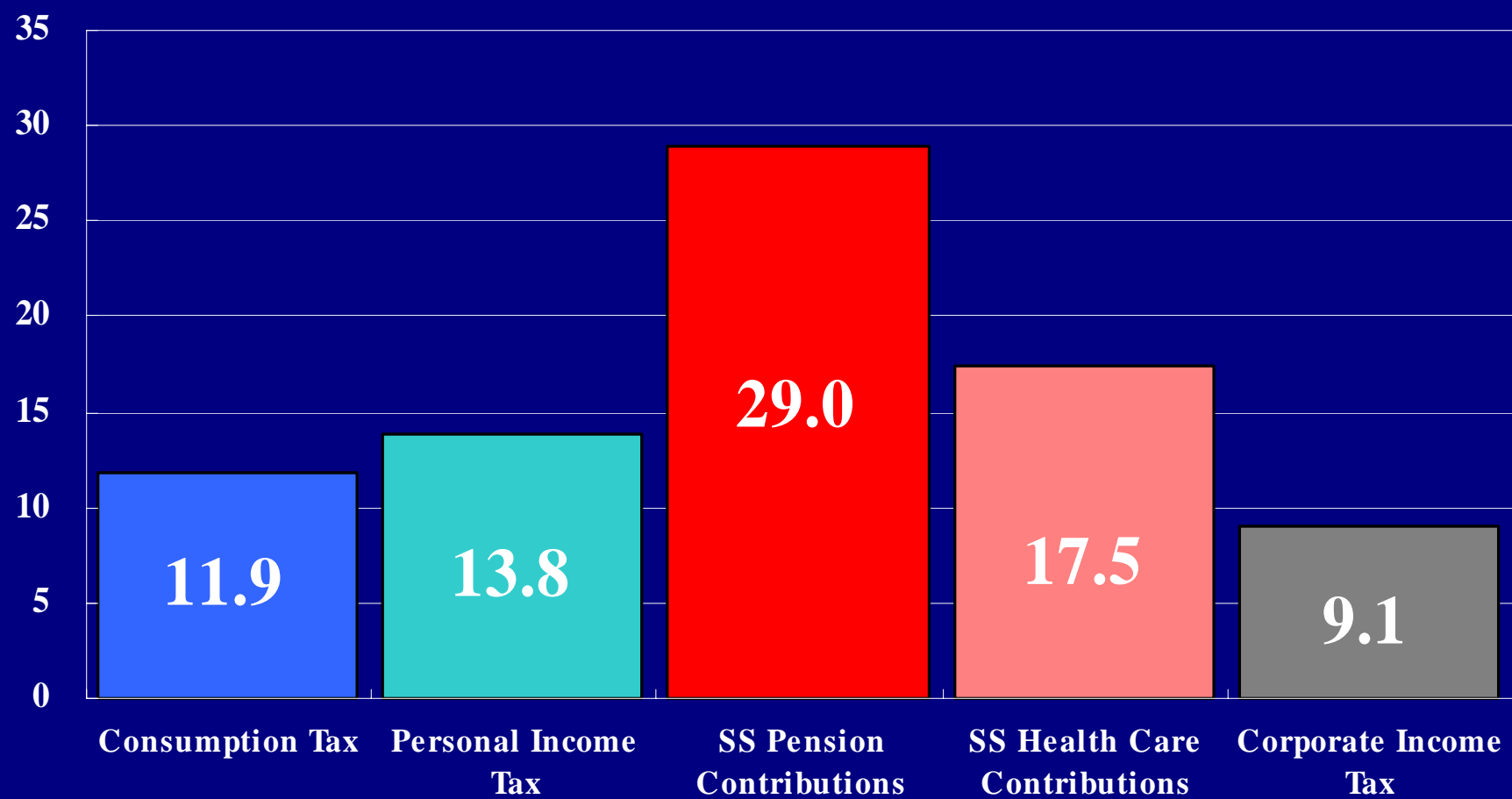




# Main Income Sources of Japan's Central Government

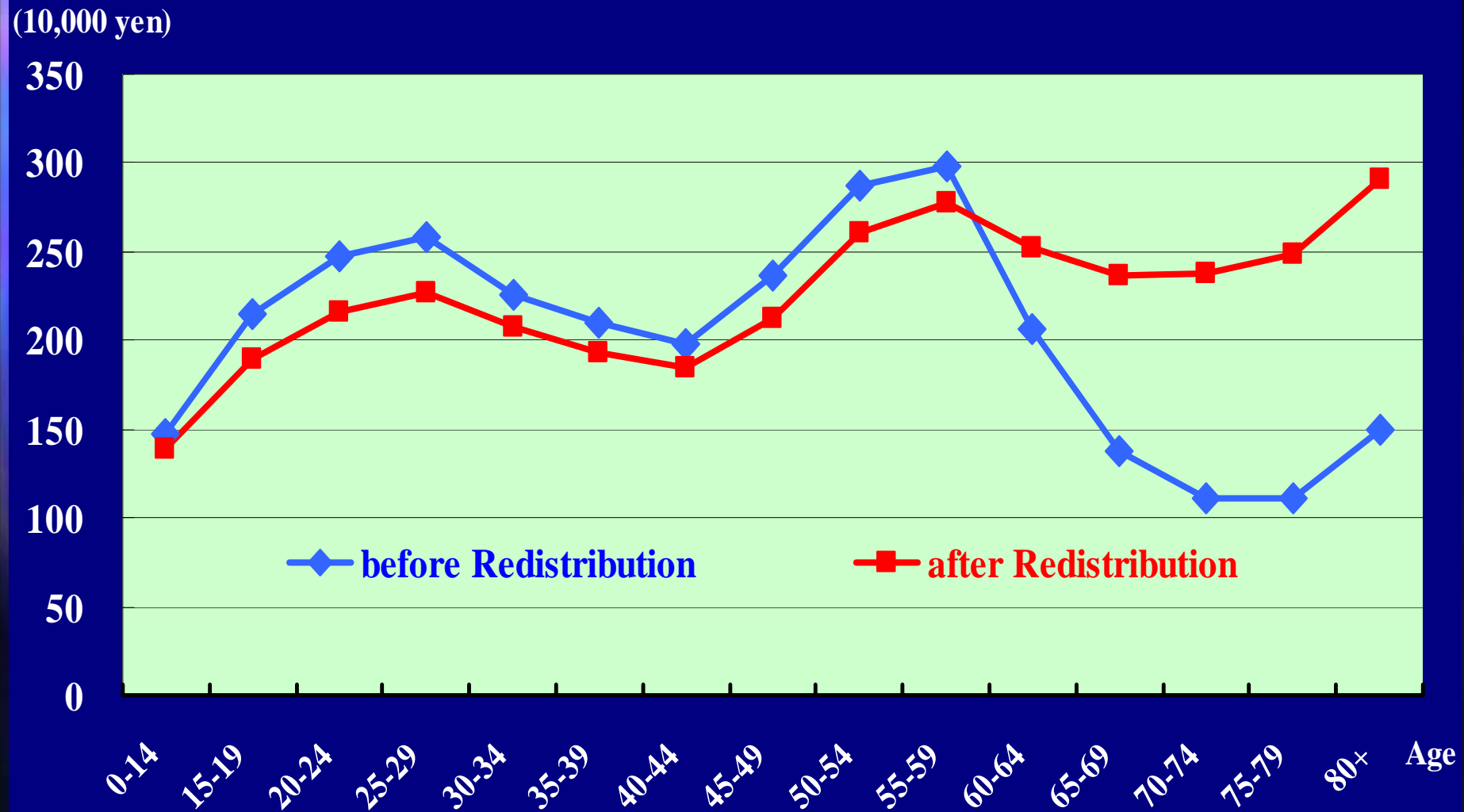
FY 2003 National Budget, Japan

(trillion yen)



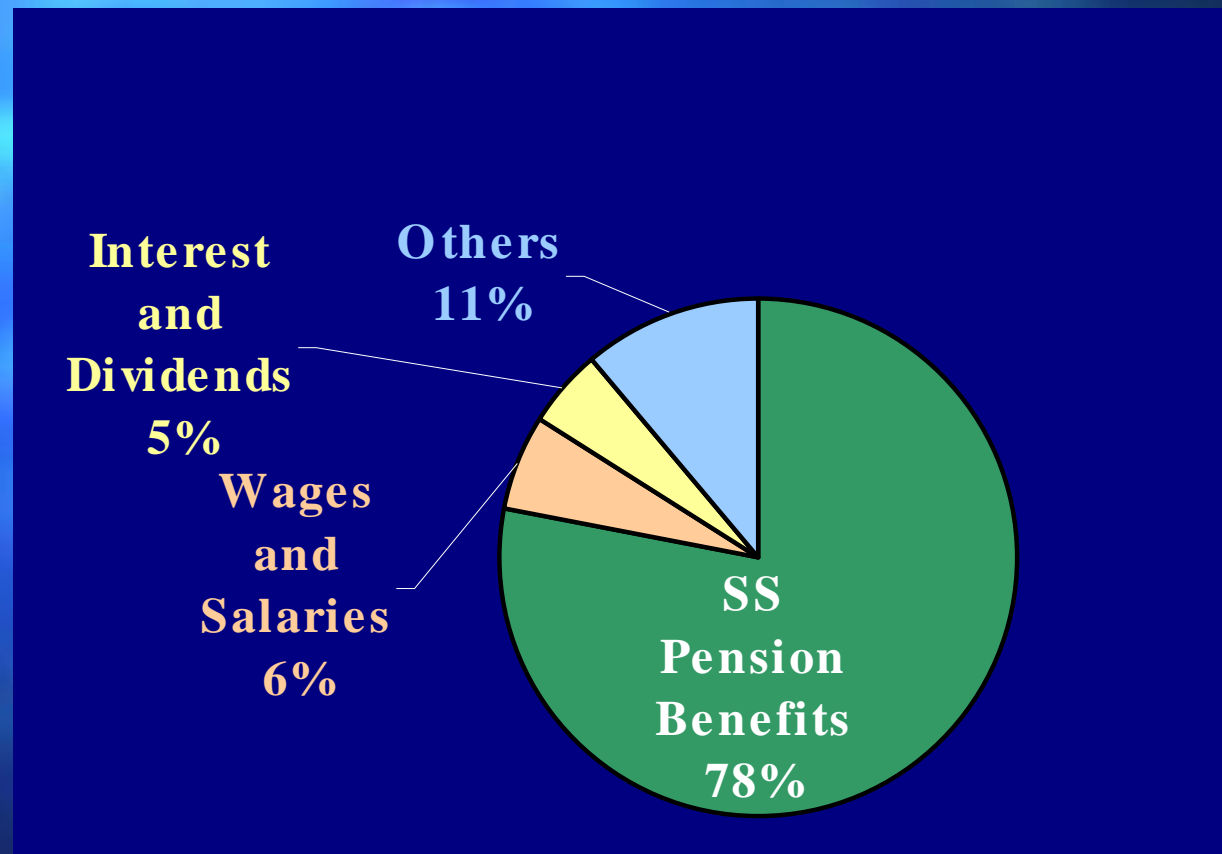
# Per-capita Income by Age in Japan

18



Source: Ministry of Health and Welfare, *The 1996 Income Redistribution Survey*

# SS pension benefits are the major source of retirement income

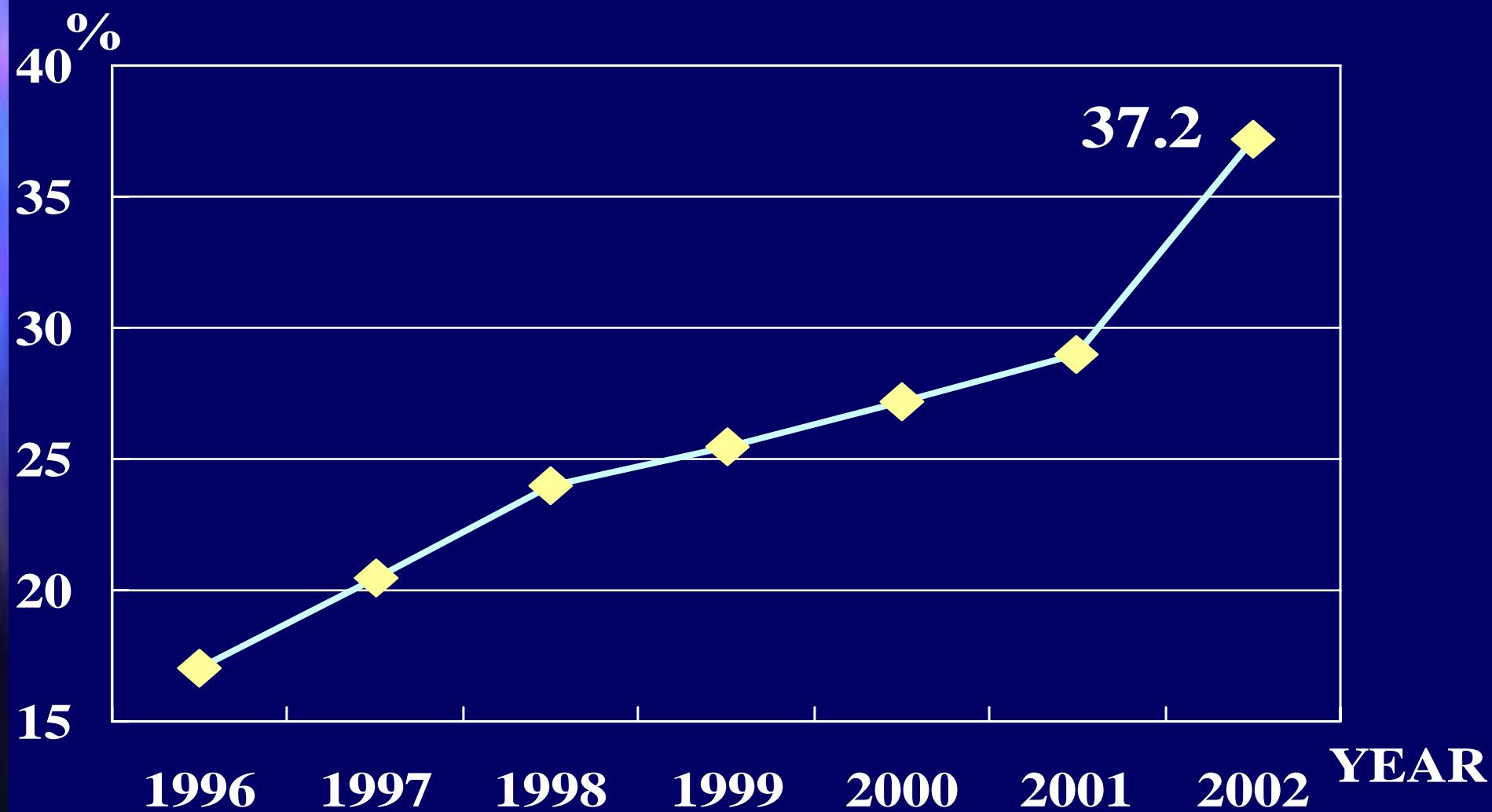


median income: 3.38 million yen

Source: *The 1989 NSFIE* (elderly couples: median income group)

# Drop-out from SS Pensions (Non-employees)

## Delinquency in Paying Pension Contributions



# Future Policy Options

## Strengthening Incentive-Compatibility

Shift to NDC

## Handling Legacy Pensions

Diminishing Excess Liabilities

# Strengthening Incentive-Compatibility

## Shift to NDC

**Direct Link between Contributions  
and Pension Benefits**

**“Every Yen Counts”**

**Increased Credibility**

# Handling Legacy Pensions

## Three Options

**Reducing Benefits**

**Increasing Contributions**

**Increasing Subsidies**

# Option 1: Reducing Benefits

**Deflation-Indexing**

**A Clawback System**

**Benefits Indexation Reflecting  
Macroeconomic Conditions**

**Increasing the NRA to 67**

**Deducting Contributions for Health Care**

**More Taxes on Benefits**



# Option 2: Increasing Contributions

**Incentive-compatible?**

What Matters is **Taste of Pie**

**Penalties on Employment**

**Non-neutral & Regressive**

**Income Tax Revenues**

# Option 3: Increasing Subsidies

## Where to Go:

Flat-rate Basic Benefits ( $1/3$      $1/2$ ) or  
Guaranteed Pensions or  
Legacy Pensions?

## What Funding Source:

Consumption Tax or Income Tax or  
Cutting Other Public Expenditure?

# The 2004 Reform Bill (1)

## Increasing Contributions

by 0.354 point Every Year

18.30% from 2017 onwards

by 280 yen Every Year

16,900 yen from 2017 onwards

## Increasing Subsidies

Flat-rate Basic Benefits (1/3 1/2)

# Changes in Balance Sheet of KNH after the 2004 Reform<sup>28</sup> Bill

(as at 31<sup>st</sup> MAR 2000)

(Tr Yen)  
2,000

**Excess L : 390 Tr. Yen**

1,500

1,000

500

0

Transfers (GR)

120

F. R.

170

Assets

**(PAST)**

Pension  
Lia-  
bilities

680

Liabilities

(Tr Yen)  
2,000

1,500

1,000

500

0

**Excess A : 480 Tr. Yen**

Transfers

270

Contri-  
butions

1500

Assets

**(FUTURE)**

Pension  
Lia-  
bilities

1290

Liabilities

## The 2004 Reform Bill (2)

### Reducing Benefits by Considering “Demographic Factors” in Indexing Benefits between 2005 and 2023

#### Replacement Rate for a “Model” Couple

##### Benefits at Age 65:

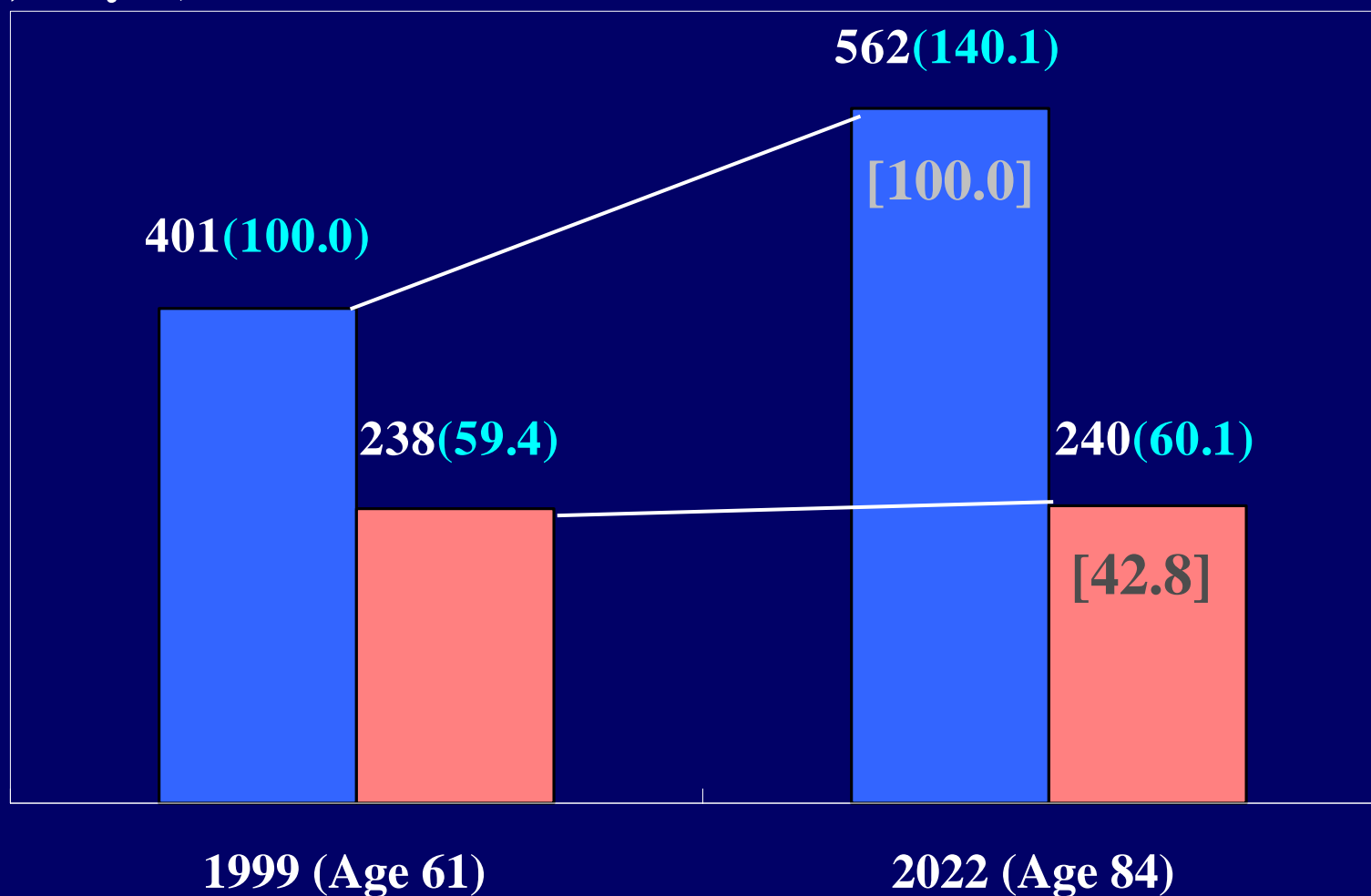
60% (2004)      50% (2023)

##### Current Pensioners:

60% (Age 65)      43% (Age 84)

# Benefits for Current Pensioners

(1,000 yen) ■ Take-home Pay ■ Pension Benefits



# The 2004 Reform Bill (3)

**Relaxing the Earnings-test**

**Earnings-split between Husband & Wife**

**Non-Employees:**

**Shift to Income-related Contributions**

**Strengthening Private Initiatives**

# Concluding Remarks

**Balance Sheet : So Informative Tools**

**Greater Significance on Incentives and Compliance**

**Burden-Sharing: How It Will Be**

**Separating Legacy Pensions from Newly Qualified Pensions **Recommended****

**Minimize Adverse Effects on the JPN Economy**

**Automatic Stabilizers Still Lacking**