Balance between Equity and Efficiency: China's Healthcare Reform and Economic Development

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Outline

- Theoretical thinking and China's health policy
- Health resource allocation and economic development
- Policy considerations

Theories in Social Equity

Individual Right

- Individual Right (Norzick 1974) — Equity in personal right on resource allocation
- Contract theory (Rawls, 1971) – Equity in opportunity and support the vulnerable people
- Needs-based (Daniels,1988) – Equity in needs for medical service
- Utility (Dougherty,1988) – Maximizing social utility and welfare

Social Responsibility

- Public Health(Beauchamp,1988) – Social equity in public health, not medical care

Direction of China's Health Policy

- Equity through social programs
  - Priority:
    1. Public health
    2. Preventive and primary care
    3. Medical care in tertiary hospitals

The Reform Plan: Four Main Systems

- Community Health System
- Social Medical Security System (three social insurance plus medical assistance)
- Pharmacy system
- Medical care (Hospital) system

Social Insurance Programs

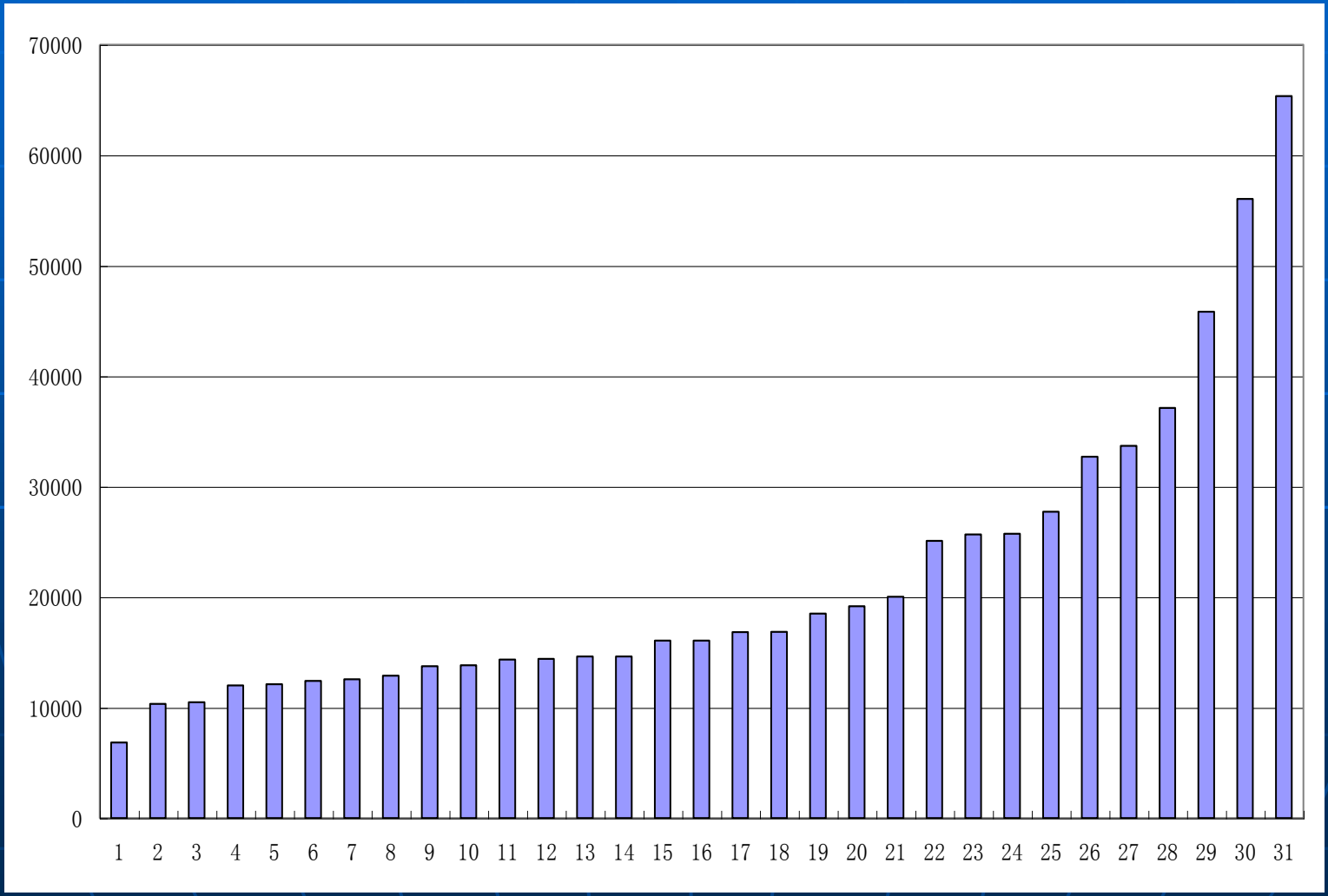
Insurance	Covered People	% of Population	Funding Source
Urban Employment	200,000	15%	Employer, Government
Urban Resident	120,000	9%	Government
Rural Resident	833,000	62%	Government

Note: Data are estimated according to the 2009 tasks

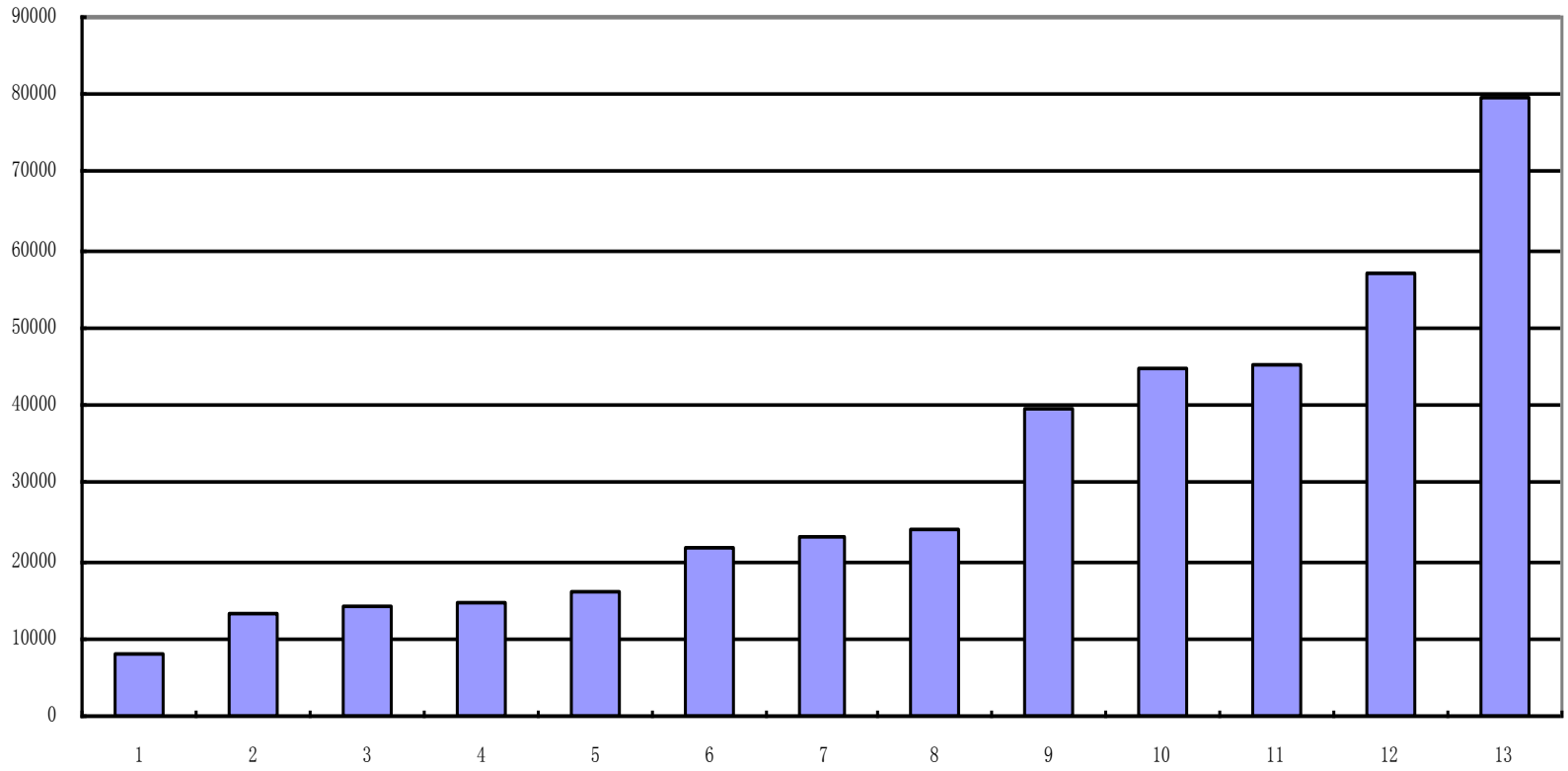
What is the funding capability of local government?

Per capita GDP in2007

31 Provinces and Municipalities



Per Capita GDP by City in Jiangsu Province 2006



The Main Challenge of China's Health System: Large Funding Difference of Local Government

- Health insurance
- Delivery system
- Healthcare utilization
- Health

Variation in Health Insurance

Urban Employment-Based Program

- Premiums are based on wage
  - Employer: 6% of the total wage
  - Employee: 2% of own average wage in the last 3 years
- The level of revenue collection depends on the level of local income

New Rural Medical Collaborative System

	Government	Individual
2005	10	10
2006	20	10
2007	40	10
2008	80	20
2009	100	20

Urban Resident Program

- Government minimum contribution = ￥40
- Local governments can adjust their contributions above the minimum level, e.g., Nanjing's funding level is at ￥450 per person.
- Again, local government is the main funding source

Minimum Social Contribution 2008

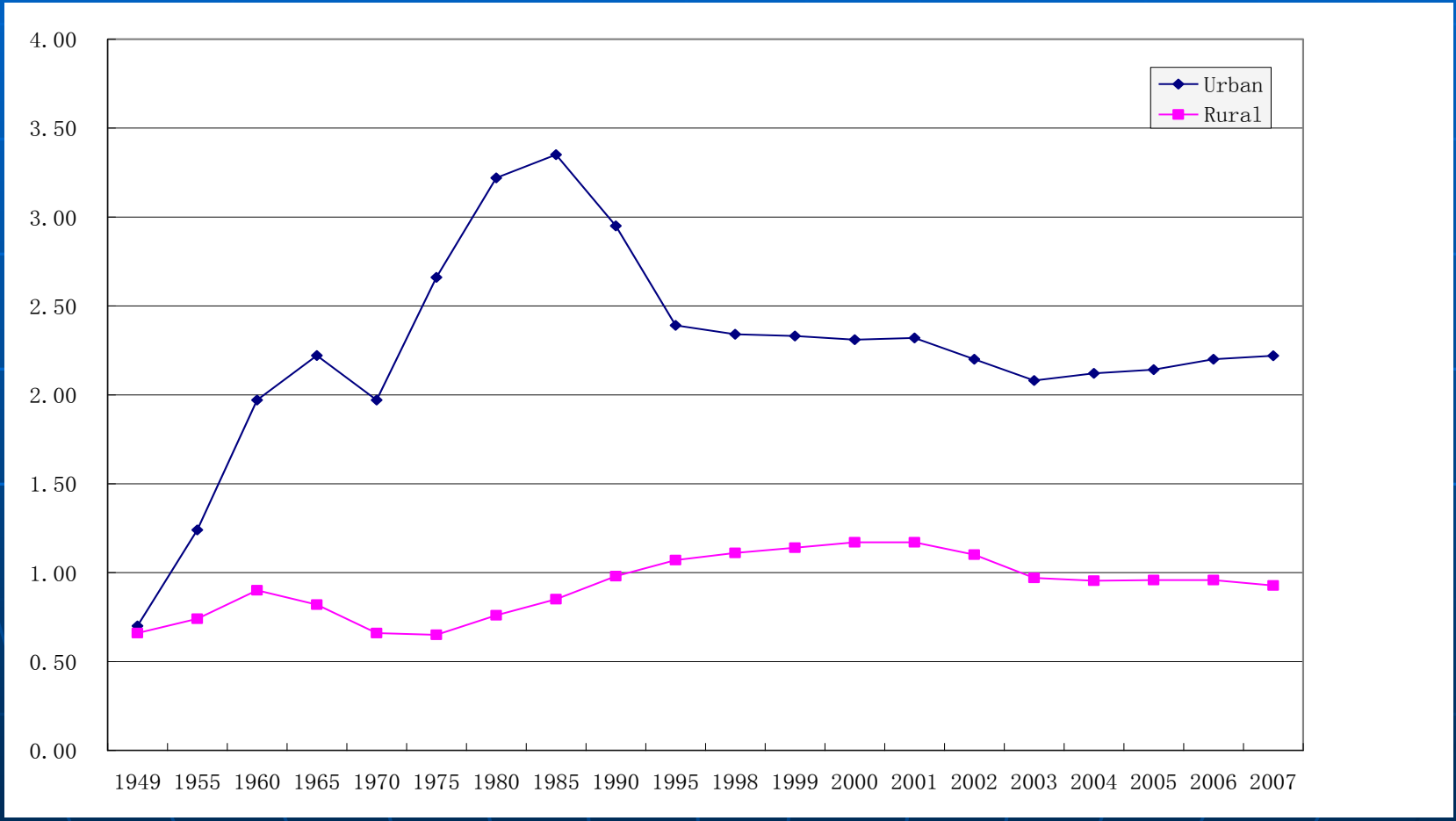
Program	Contribution	Source
Urban employee	>￥759	Employer/government
Urban resident	￥40	Local government
Rural	￥80	Local government

Summary for Social Insurance

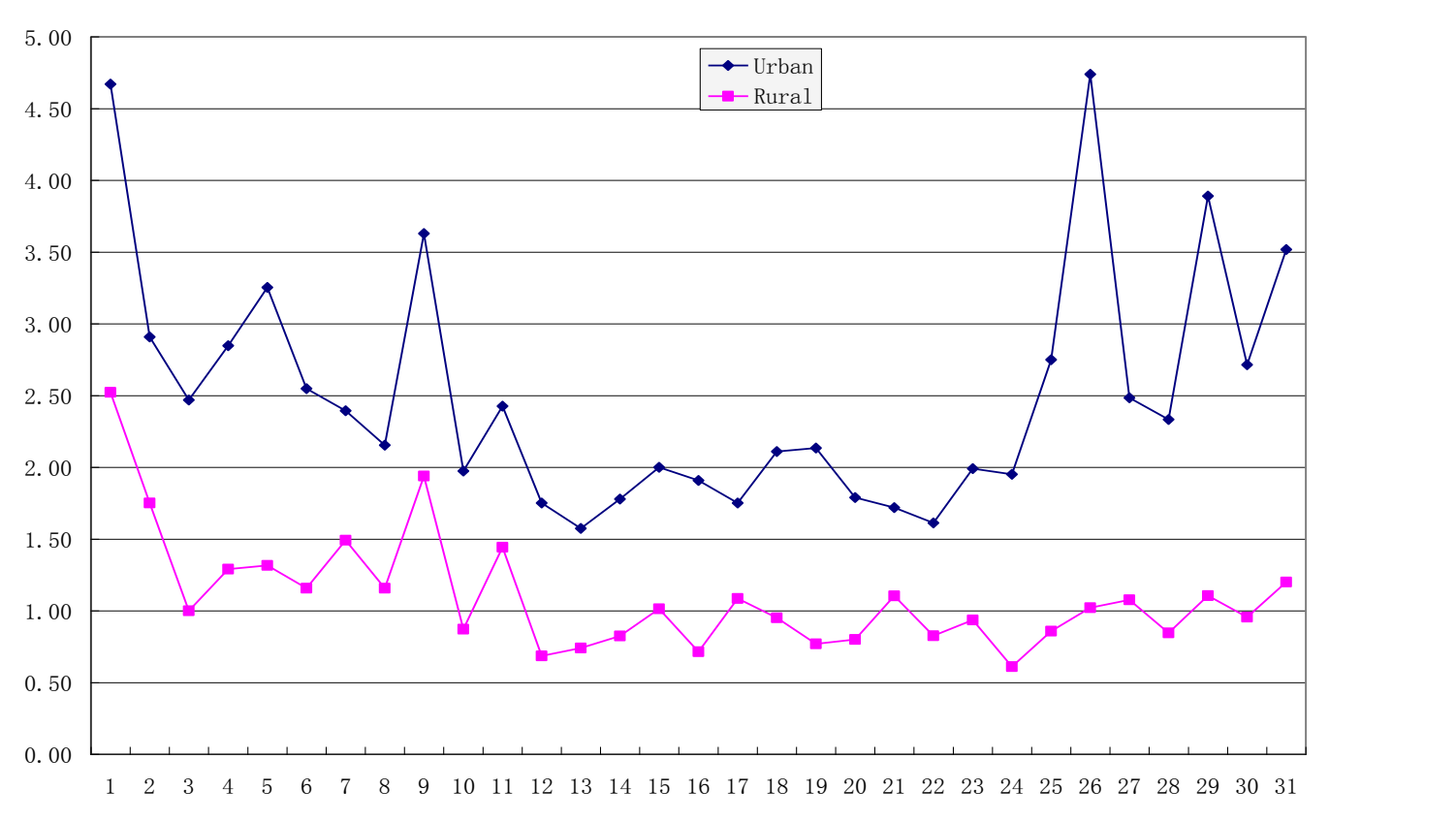
- Social contribution is substantially different between urban employees and others
- The level of social contribution among urban employees depends on the level of local income
- To reduce disparity in financial contribution, the fiscal capability of local government is a critical condition.

Delivery

Number of Doctors Per 1000 Persons, 1949-2007 (Rural vs Urban)

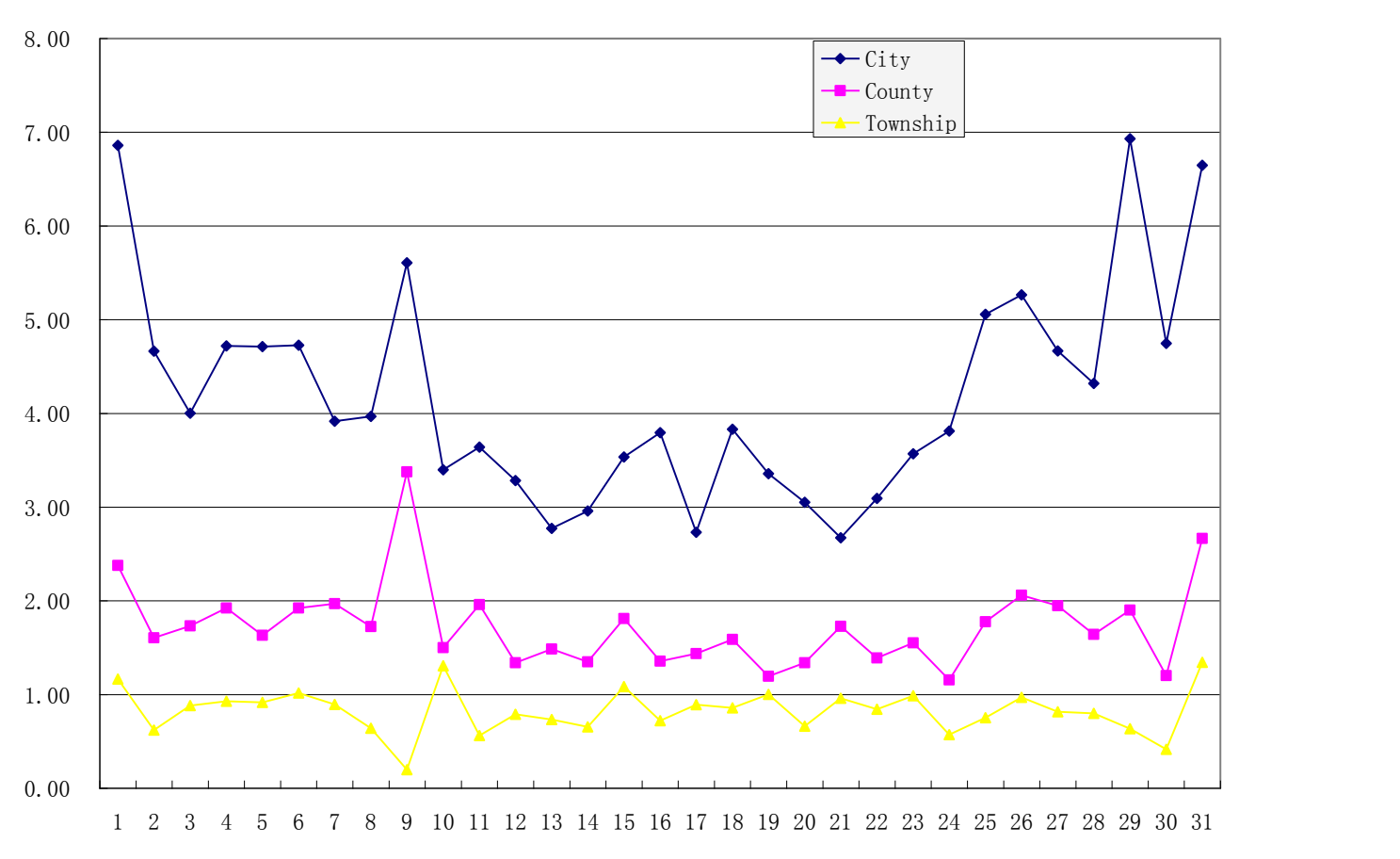


Number of Doctors Per 1000 Persons by Province, 2007



Number of Hospital Beds Per 1000 Persons 1980-2007 (Rural vs Urban)

Number of Hospital Beds Per 1000 Persons by Province, 2007



Summary in Delivery

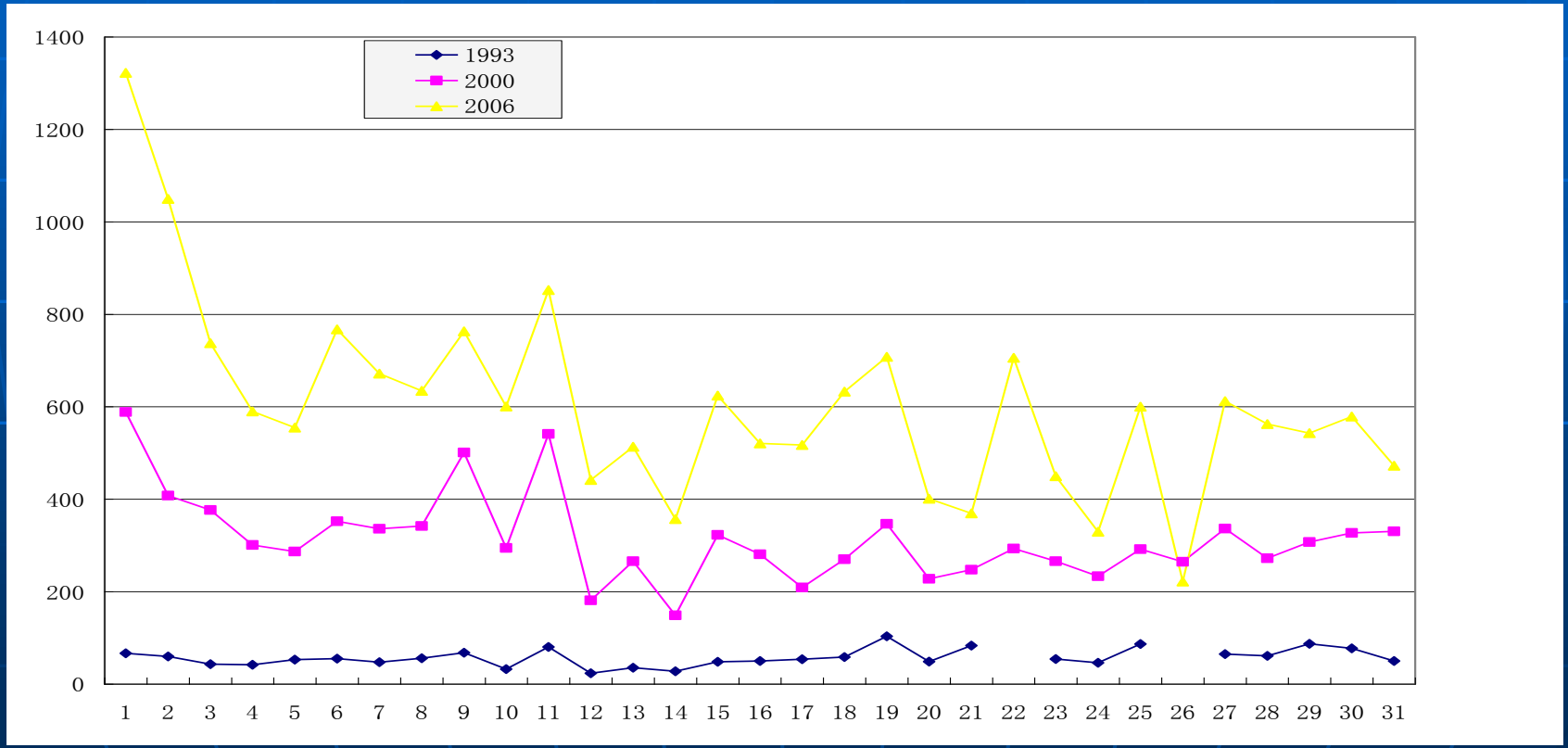
- The rural-urban differences in number of doctors and hospital beds is large and persistent.
- The capacity of healthcare delivery system across provinces also vary substantially, but not associated with local economy, which reflect government manaement in resource allocation.

Healthcare Utilization

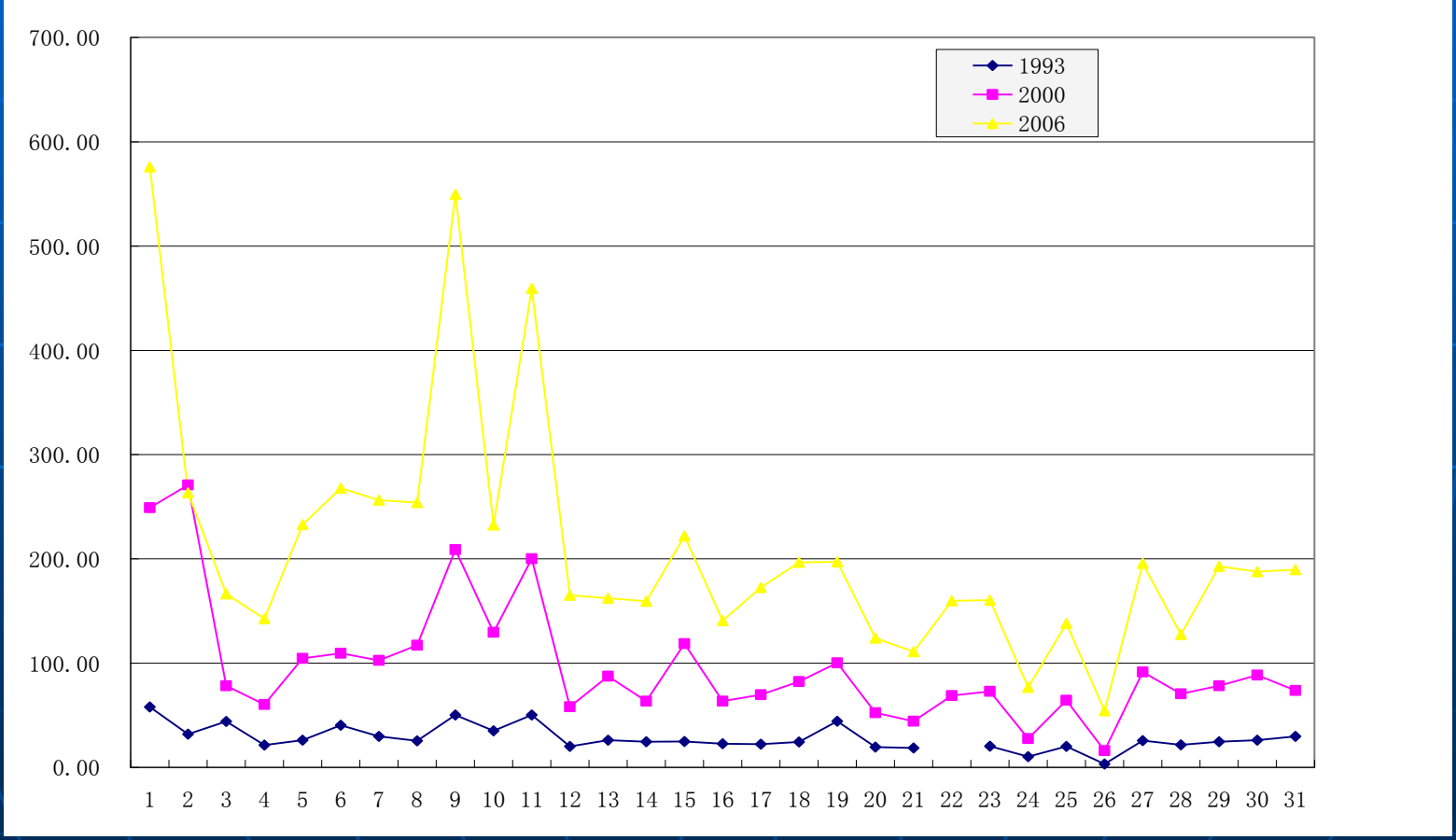
Healthcare Expenditure

- Data reported are the expenditure of individuals' payment for health care, not just medical care.
- Data were from national survey of families in rural and urban areas by the National Statistical Bureau.
- Expenditure for medical care were reported for six provinces.

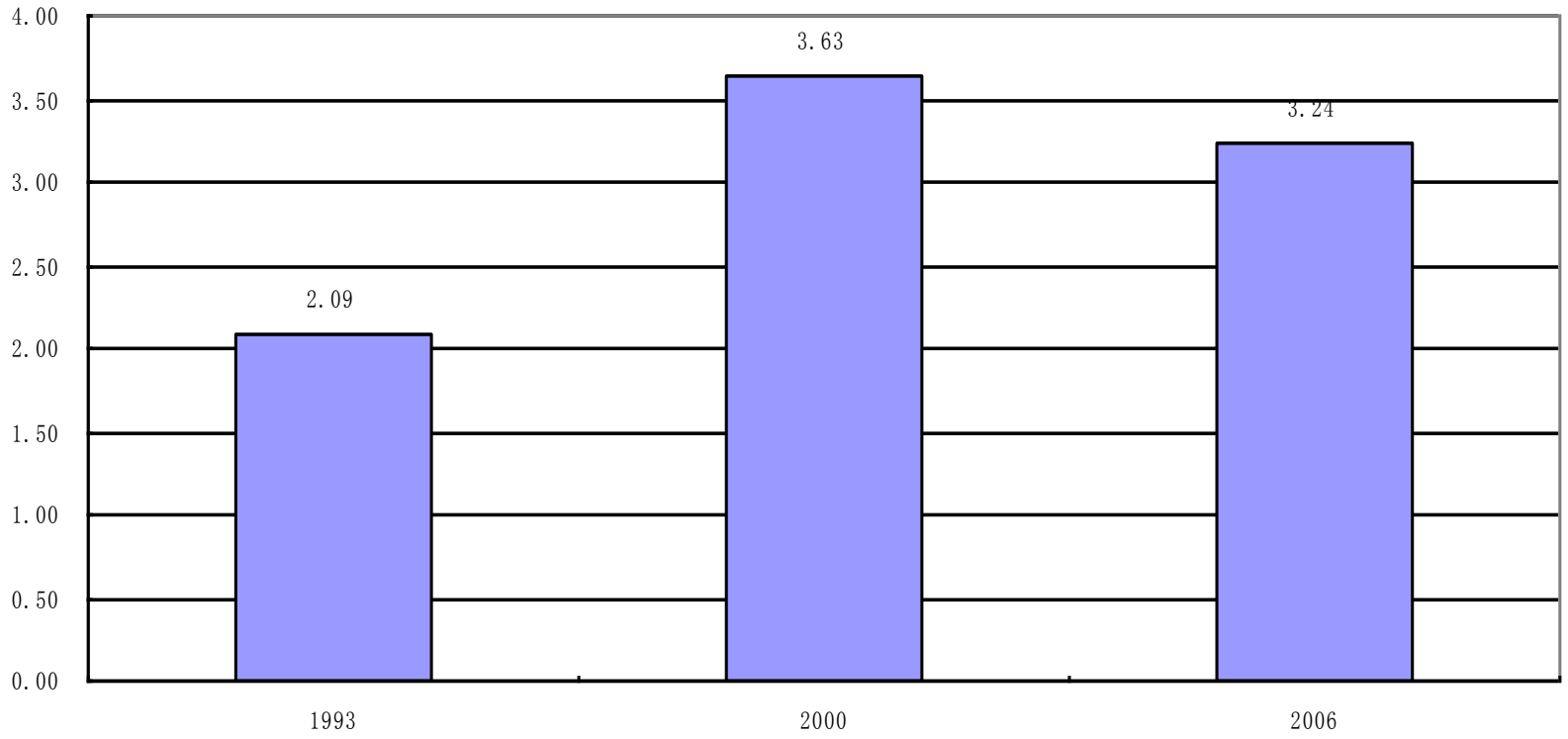
Urban Individuals' Healthcare Expenditure Per Person by Province



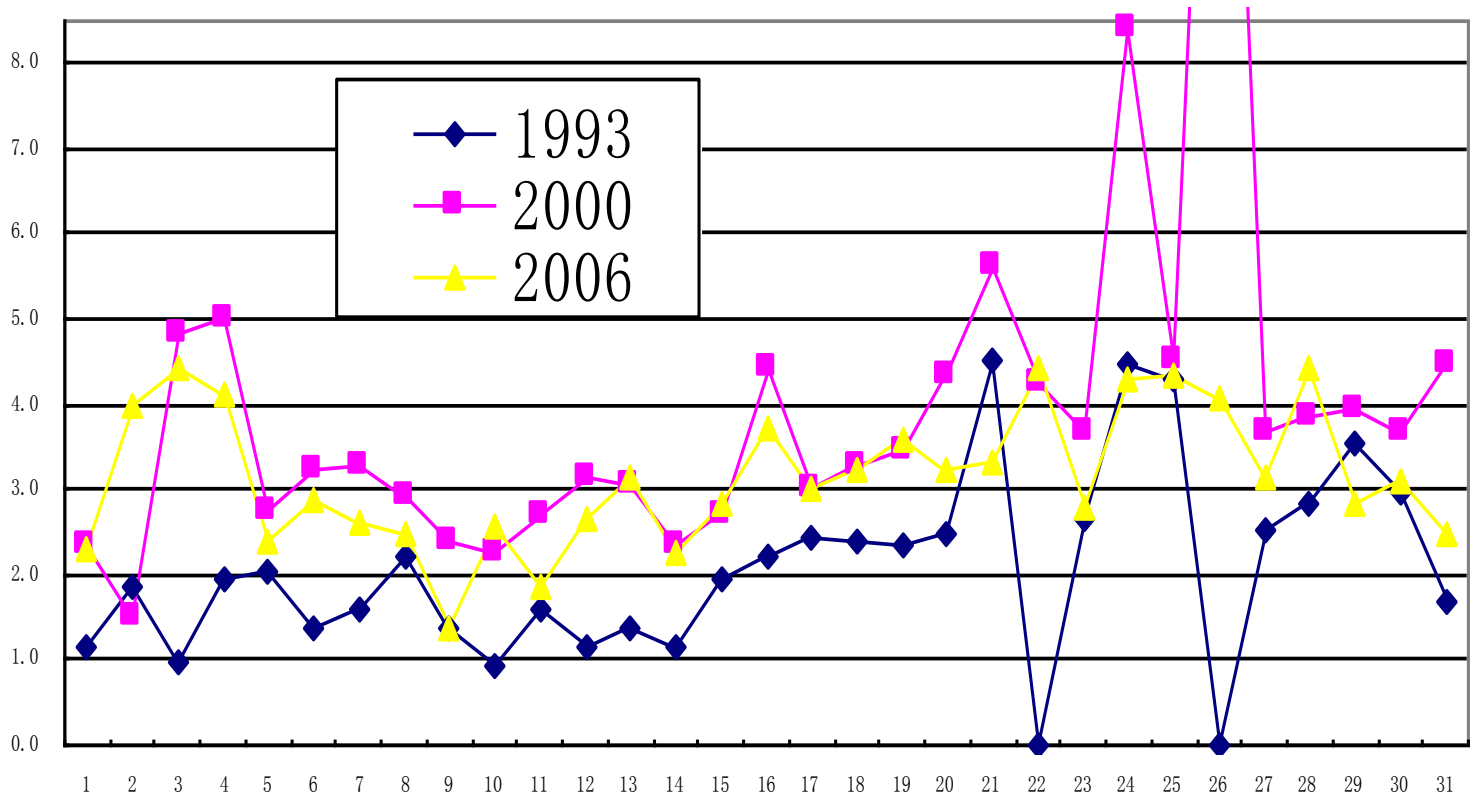
Rural Individuals' Healthcare Expenditure Per Person by Province



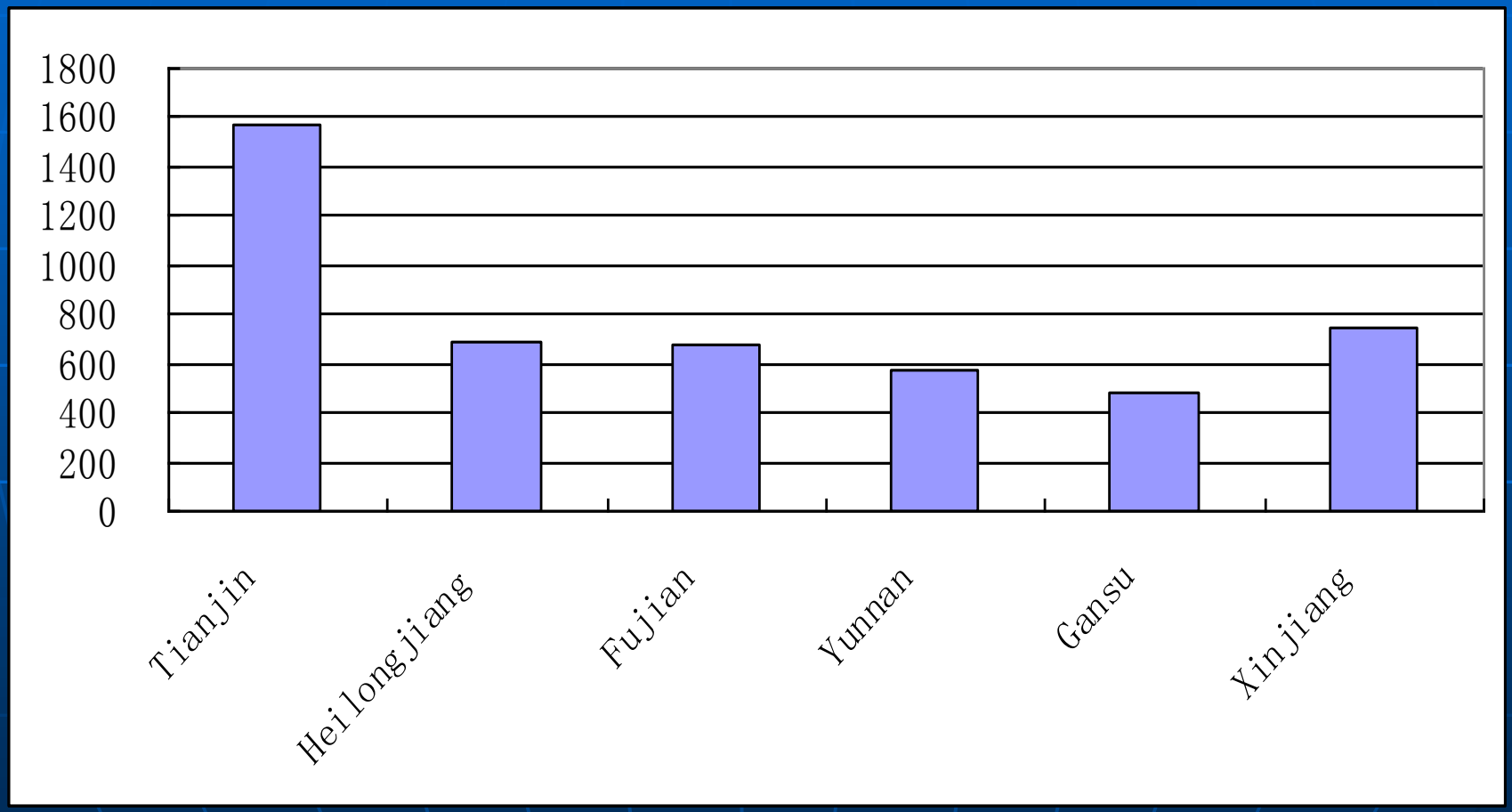
Urban to Rural Ratio Individual's Healthcare Expenditure



Urban to Rural Ratio by Province Individual's Healthcare Expenditure



Total Per Capita Health Expenditure for 6 Available Provinces

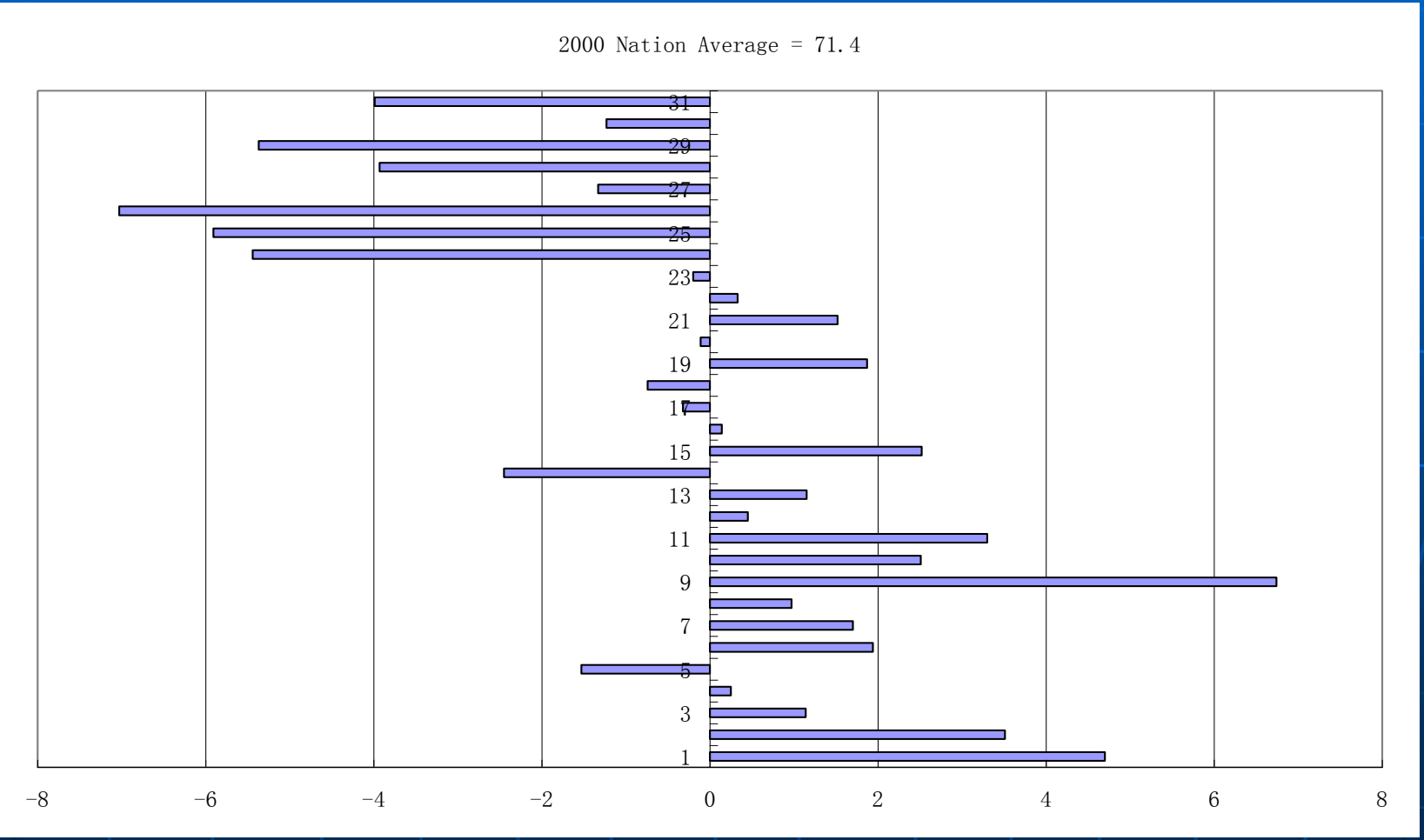


Summary in Healthcare Utilization

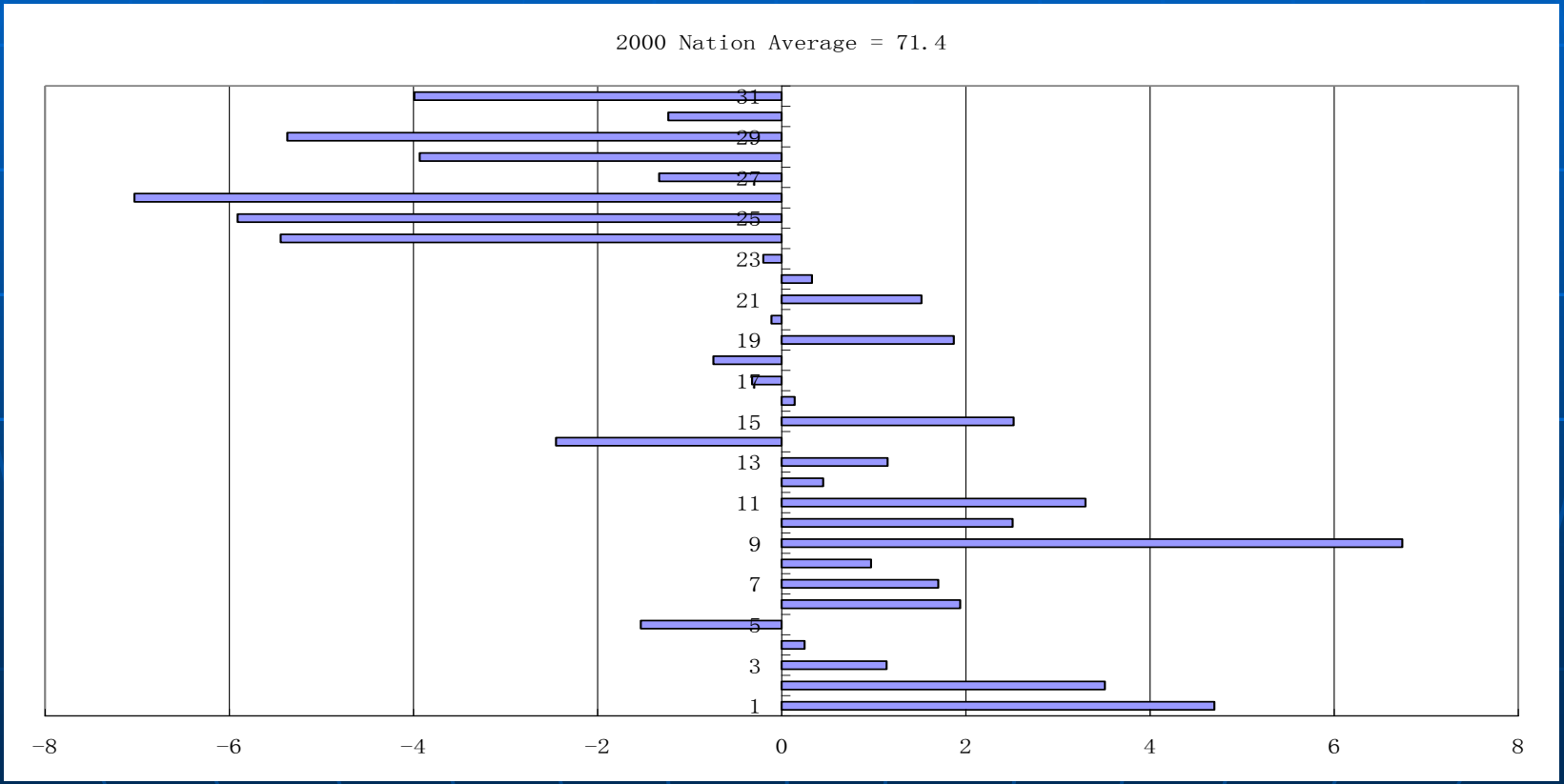
- Individual's healthcare expenditure varied significantly
  - the largest difference is
    - 10.6 times among rural residents
    - 6 times among urban residents
  - between rural and urban areas, the difference
    - was almost doubled between 1993 and 2000, but went down a little bit since 2000.

Health

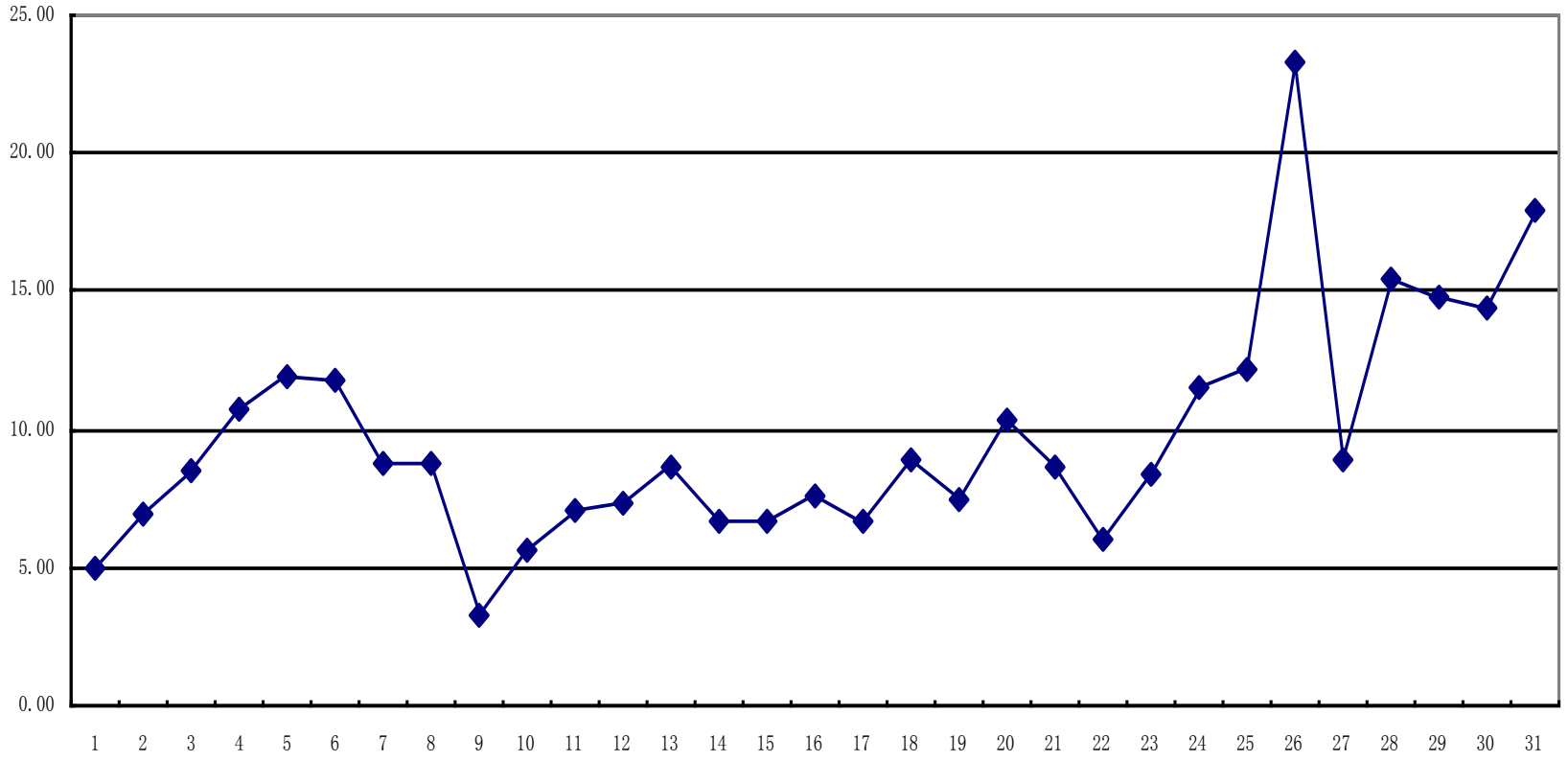
Deviation of Life Expectancy by Province, 1990



Deviation of Life Expectancy by Province, 2000



Infant Mortality 2006
(Number of death per 1000)



Summary in Health

- Both Life expectancy and infant mortality vary substantially among provinces

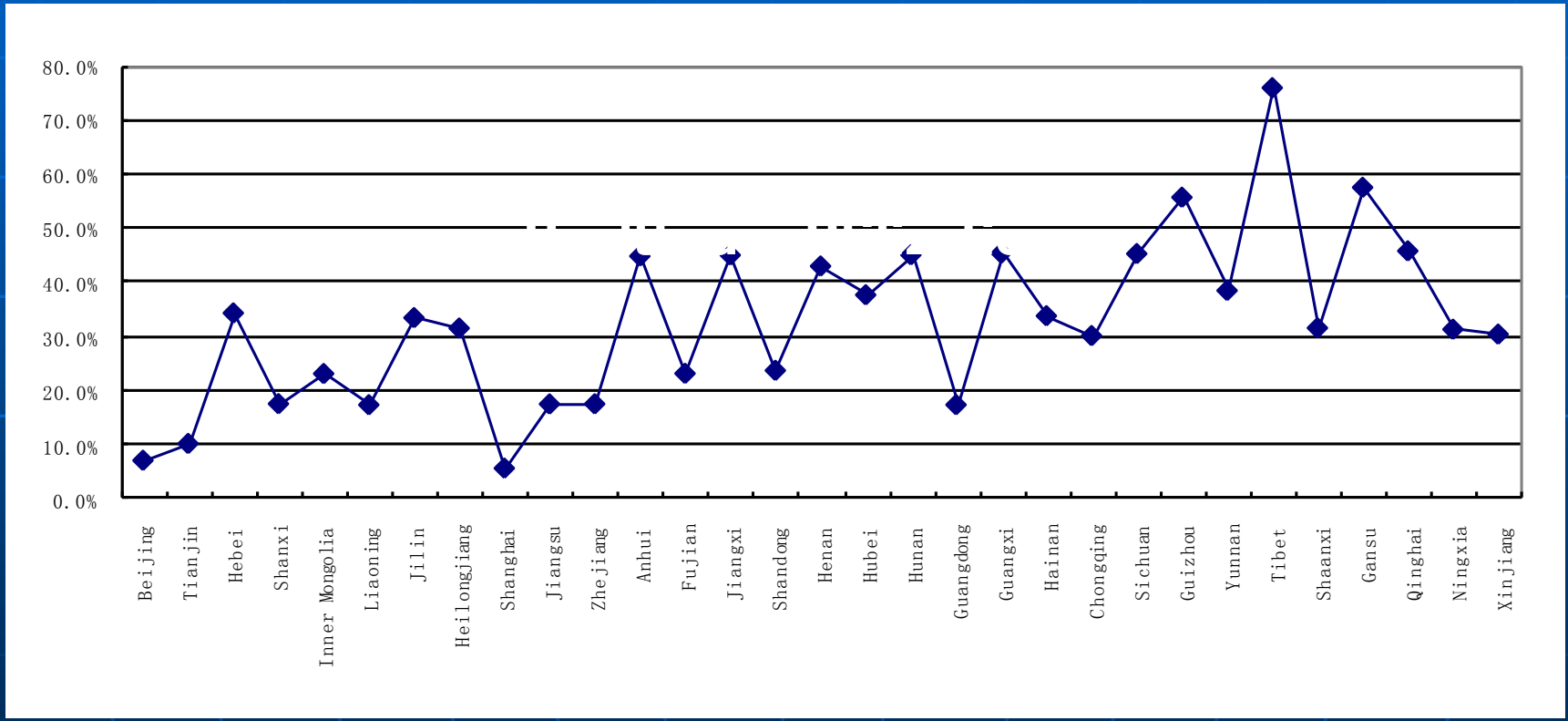
Challenges to the Reform Plan

- Major changes are funded by local government
  - Health insurance
    - Both rural and urban resident programs require funding from local government
  - Basic health care
    - Both rural and urban community health system require funding from local government

A basic Insurance Coverage

Total health expenditure per person	￥915
Expenditure for medical care (76.3% of the total)	￥699
A fair individual contribution (30% of the total)	￥210
Government contribution	￥489

Percent of Government Revenue for a basic universal health insurance



Burden of Local Government for a Universal Plan

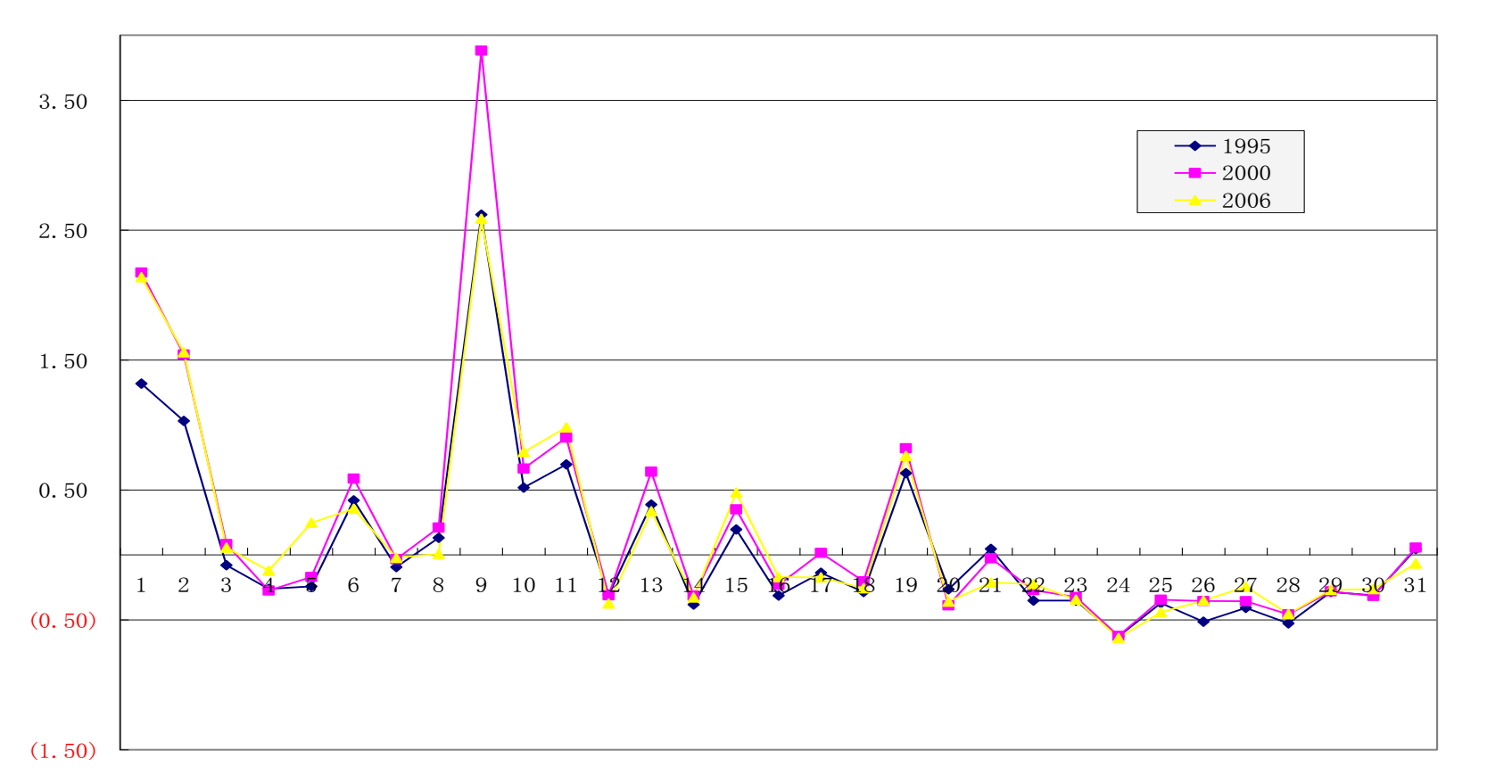
Contribution as percent of government revenue	Number of provinces
<10%	2
10%=< x <20%	6
20%=< x <30%	3
30%=< x <40%	10
40%=< x <50%	7
50%=< x <80%	3

Trend of Regional Economic Disparity

Can Time Eliminate the Problems?

- Assume GDP grow at 8% annually, no inflation, the shares of health expenditure and government revenue in GDP remain constant,
- The government contribution would be 1,246 Yuan by 2020
- The necessary condition to improve disparity is that under-developed regions grows faster than developed regions.

Deviation of Per Capita GDP by Province 1995, 2000, 2006



Summary in Economic Disparity

- Between 1995 and 2006：
  - 14 provinces' change is less than 10%
  - Changes between 10% and 15% occurred in 7 provinces
  - Most changed provinces
    - Beijing: 82%
    - Tianjin and Inner Mongolia：~50%
    - Zhejiang, Jiangsu, and Shandong：~28%
- At least during the last 12 years, there is no change in economic disparity.

Summary in Economic Disparity

- At least during the past 15 years, there is no reduction in regional economic disparity.
- In the coming 5 to 10 years, rural-urban difference will decline, but, regional difference is likely to remain.

Health Reform and Economic Development

Policy Implications

- Health system reform is not only a problem in the health sector, needs to balance with policy in economic development.
- A parallel improvement strategy may be better than the sequential policy to improve equity

A Parallel Strategy in Health Improvement

- Province government: providing universal coverage for preventive and primary care, reducing difference in social health insurance programs
- Central government: Nationwide universal coverage for specific medical conditions such as Children's heart disease and leukemia.

Thank You!