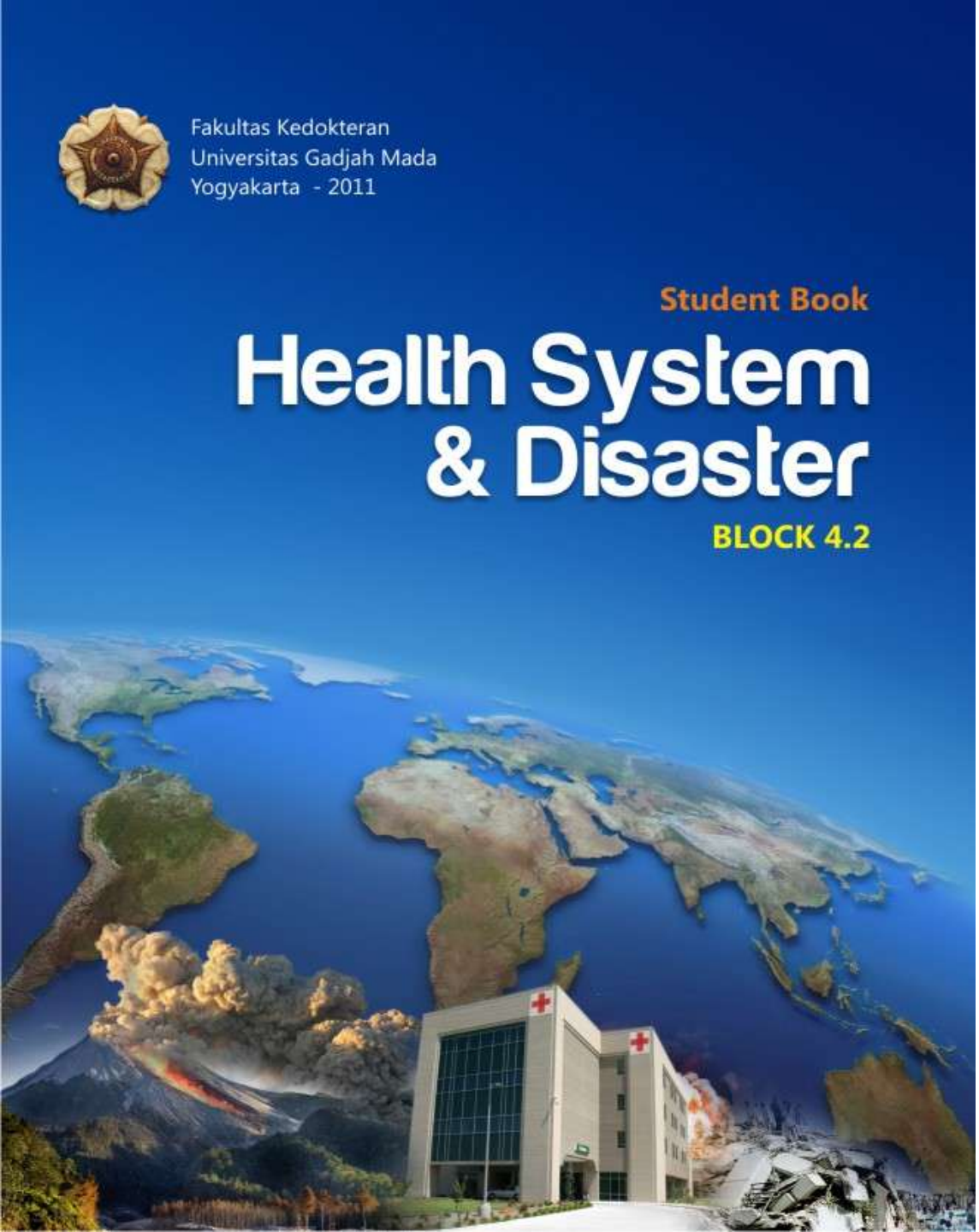


Lecture note Week 1:

Health system and Its Outcomes

Laksono Trisnantoro
Department of Public Health

Content

- **Description**
- **Key-terms**
- **Main Content**
- **References**
- **Pertanyaan (essay)**

Description (1)

This lecture describes health system by using WHO vast knowledge on how health sector should be analyzed as a system.

Discussion:

- **At the macro social level, why is a health "system" important?**
  - **Connection to social, economic and human capital development.**
- **What are the three principal functions that health systems serve?**
  - **Service provision**
    - **Producing human and material (structures, equipment, medicines, and supplies) inputs**
    - **Process of combining inputs into systems**
    - **Services as health promotion, preventive care, public health, and curative care**
  - **Resource generation and use/maintenance**
    - **Financial resources**
    - **Human resources**
  - **Governance/stewardship**
    - **Including production and use of information**

Description (2)

This description will lead to the fact that physicians should understand that they live and work in a comprehensive healthsystem.

Discussion:

- **Why is it important for a doctor to understand the health system and their place in it?**

Description (3)

it is important to understand the current trend of health system that:

- becomes more decentralized,
- having more managed care feature funded by insurance or social security system,
- competitive and remote areas health service, and
- has many values such as equity and efficiency.

Discussion:

- **Ideological drivers or health systems**
  - **What is the role of government and how large should it be?**
  - **Health as a basic human right. Is health care also a right?**
  - **Free markets vs. government role in addressing market failures and promoting social equity. (Equity in access to products and services; equity in outcomes.)**
  - **What is a "public" vs. a "private" health service?**
- **Performance indicators for health systems**
- **Decentralization environment**

Key-terms

- System
- Systemic thinking
- Health System
- Health system elements
- Health system functions
- Health system objectives
- Access
- Socioeconomic inequity
- Geographic inequity

This lecture will present:

1. **System understanding and systemic thinking**
2. **The function and components in a health system;**
3. **the roles of government;**
4. **cross-country comparison;**
5. **The Impact of Health System**
6. **Decentralized and centralized system**

Part 1

- **System understanding and systemic thinking**

System definition

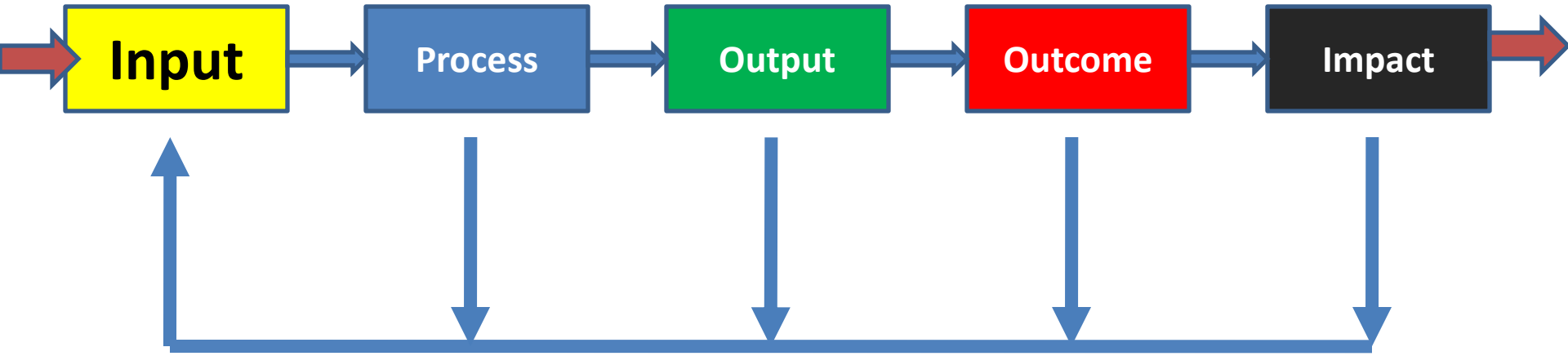
- a set of things that affect one another within an environment and form a larger pattern that is different from any of the parts.
- The fundamental systems-interactive paradigm of organizational analysis features the continual stages of input, throughput (processing), and output, which demonstrate the concept of openness/closedness

System components

1. objects – the parts, elements, or variables within the system. These may be physical or abstract or both, depending on the nature of the system.
2. attributes – the qualities or properties of the system and its objects.
3. internal relationships among its objects.
4. exist in an environment.

A simple system model

Environment



Feedback

Feedback

Environment

Discussion:

Part 2

The function and components in a health system

What is health sector?

Formal Health services

Helath service by medical professional

Traditional Healers

Alternatives Medicines

Pharmaceutical use: by prescription or not (OTC)

Includes:

Health Promotion

Disease Prevention

+

Road safety

Environmental issues

Health education

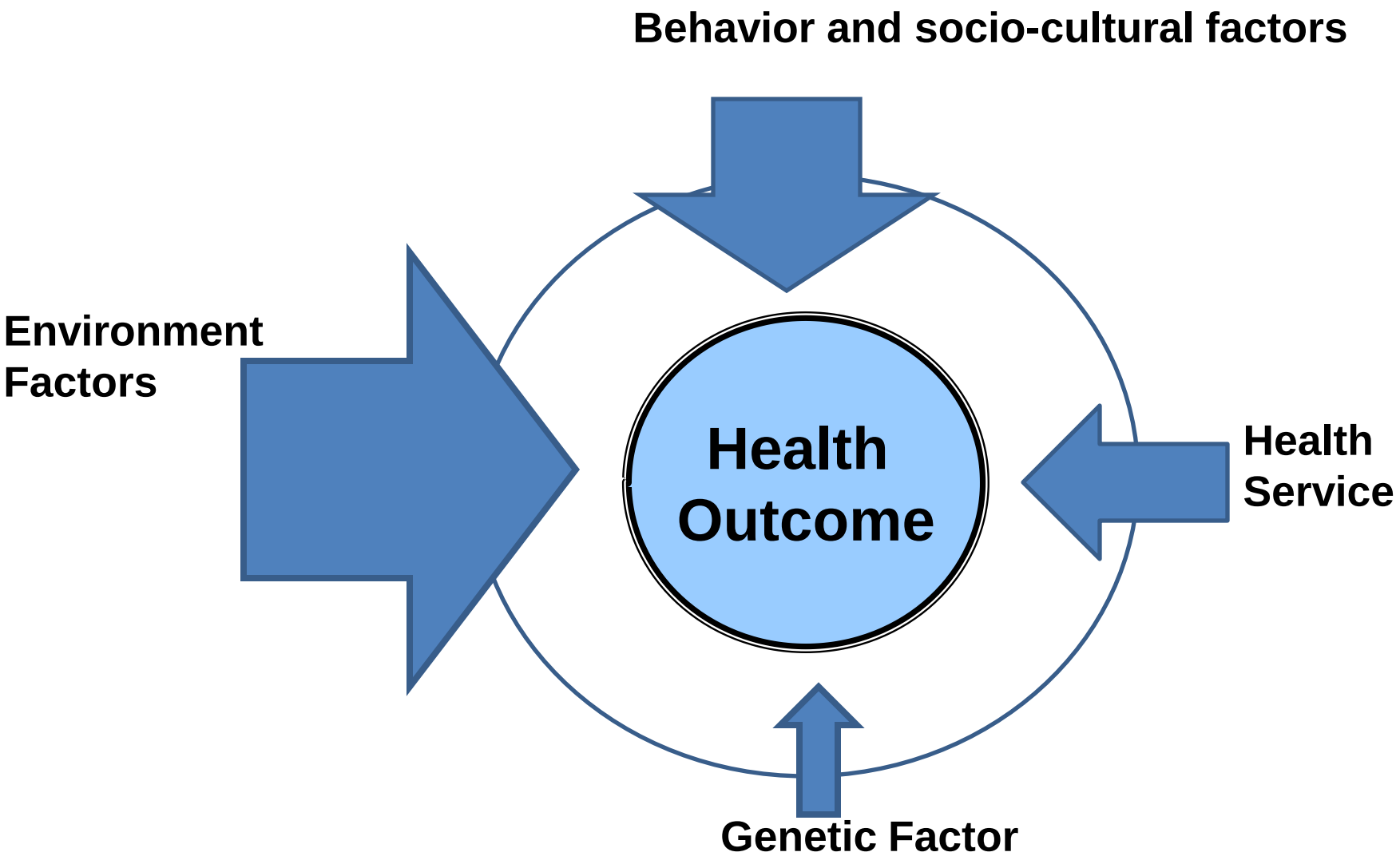
Sin tax

Sanitation

Some approaches in describing health sector

A. Blum Concept
B. Social Determinants of Health
C. Health Status factors

H.L. Blum (1974):


Behavior and socio-cultural factors
Environment Factors
Health Outcome
Health Service
Genetic Factor

Social Determinants of Health Rainbow

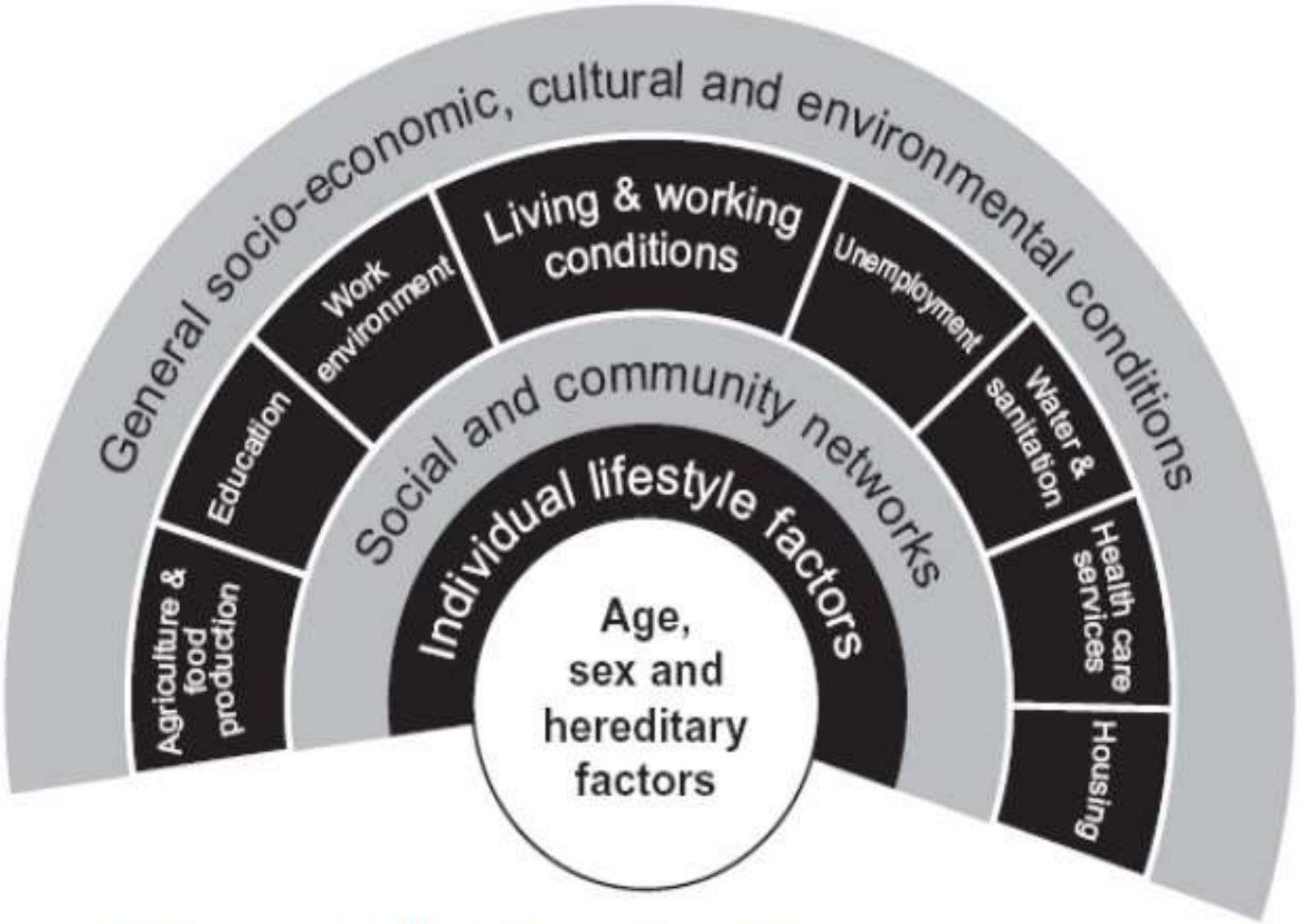
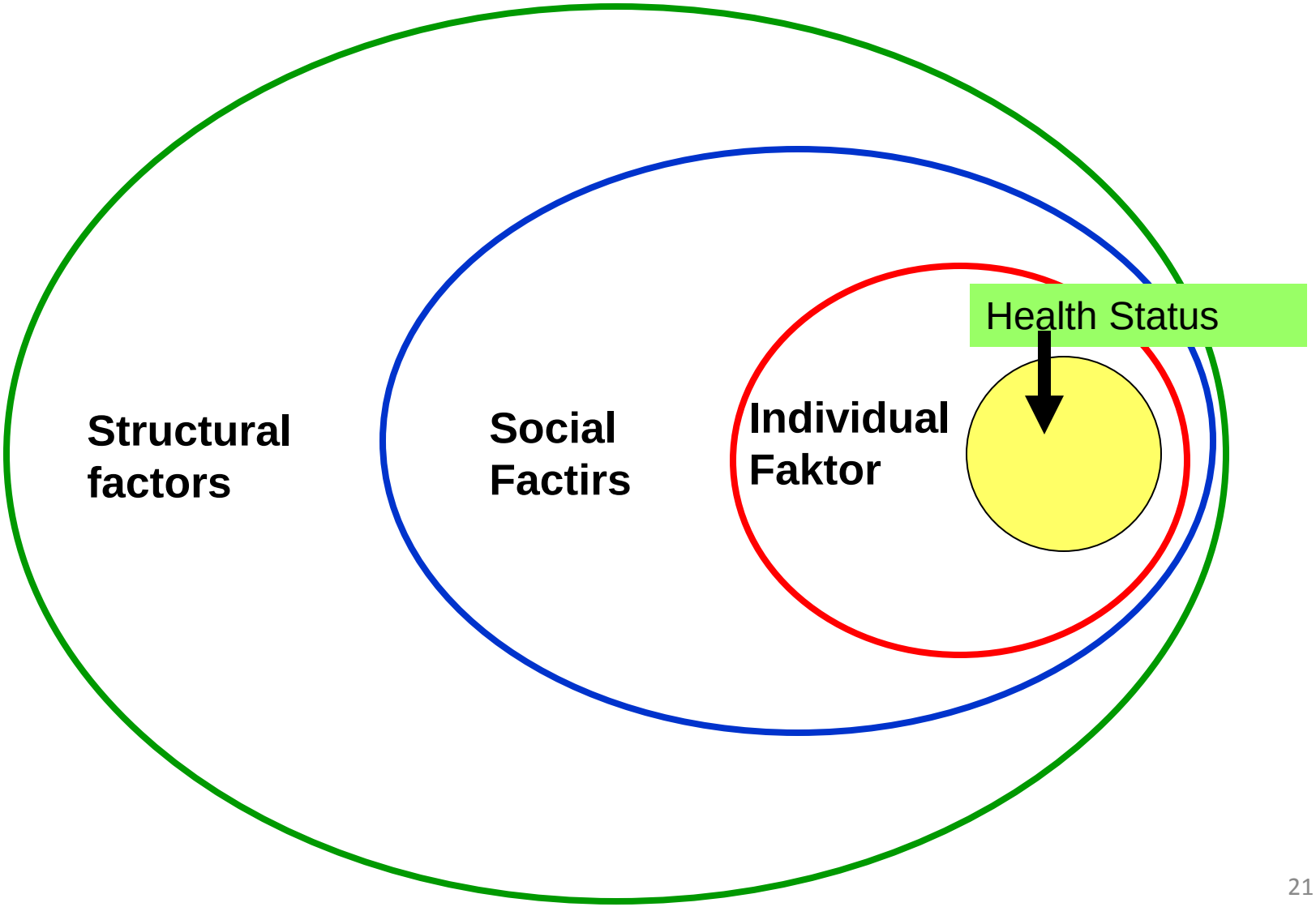


Figure 3: Dahlgren and Whitehead's Social Determinants of Health Rainbow

Source: Dahlgren and Whitehead (1991) cited in Leeds NHS Primary Care Trust, Date Unknown)

Health Status factors



Health System Definition

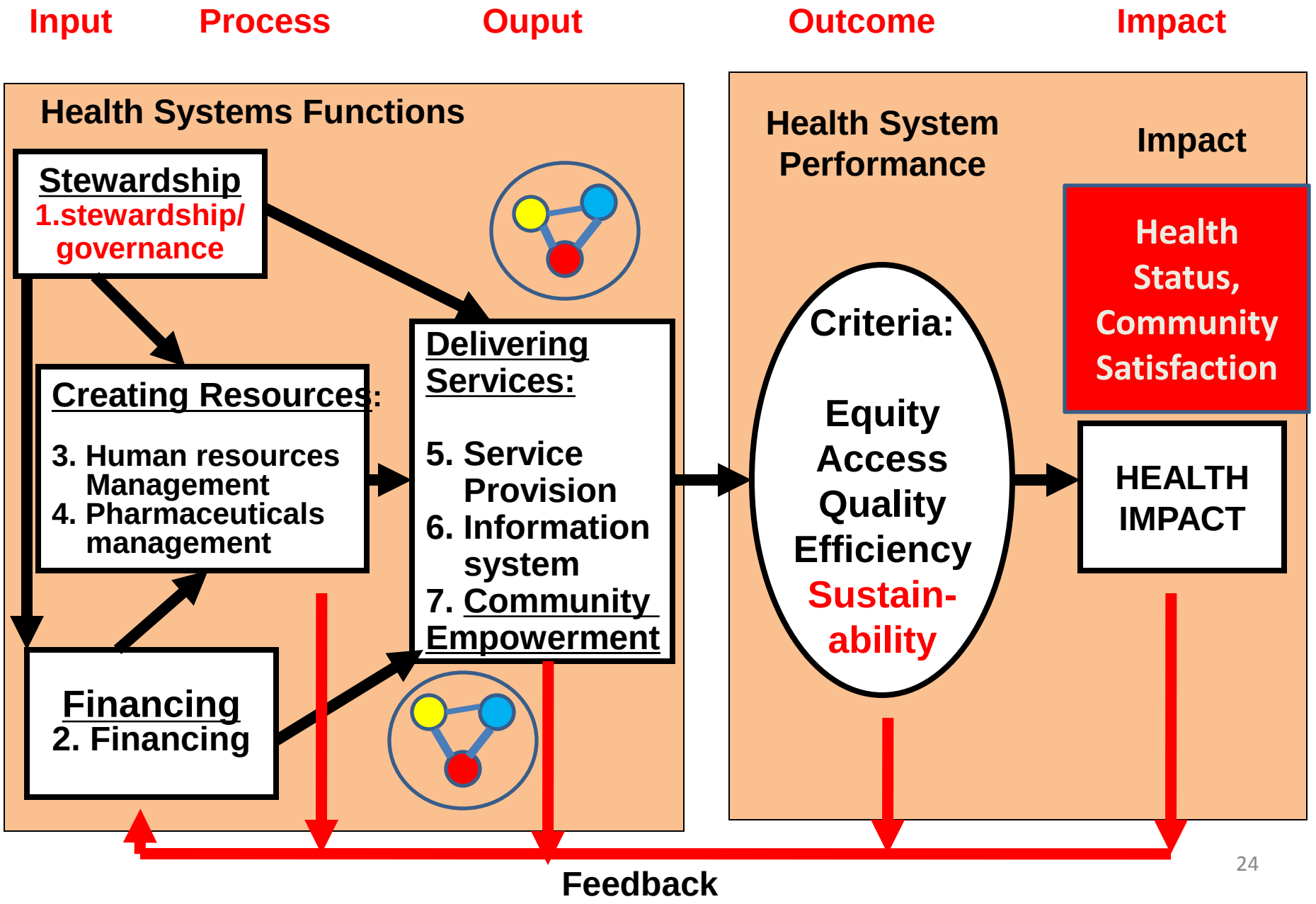
- **health systems is defined as all activities whose primary purpose is to promote, restore or maintain health, WHO.**

semua kegiatan yang tujuan utamanya untuk meningkatkan, mengembalikan dan memelihara kesehatan.

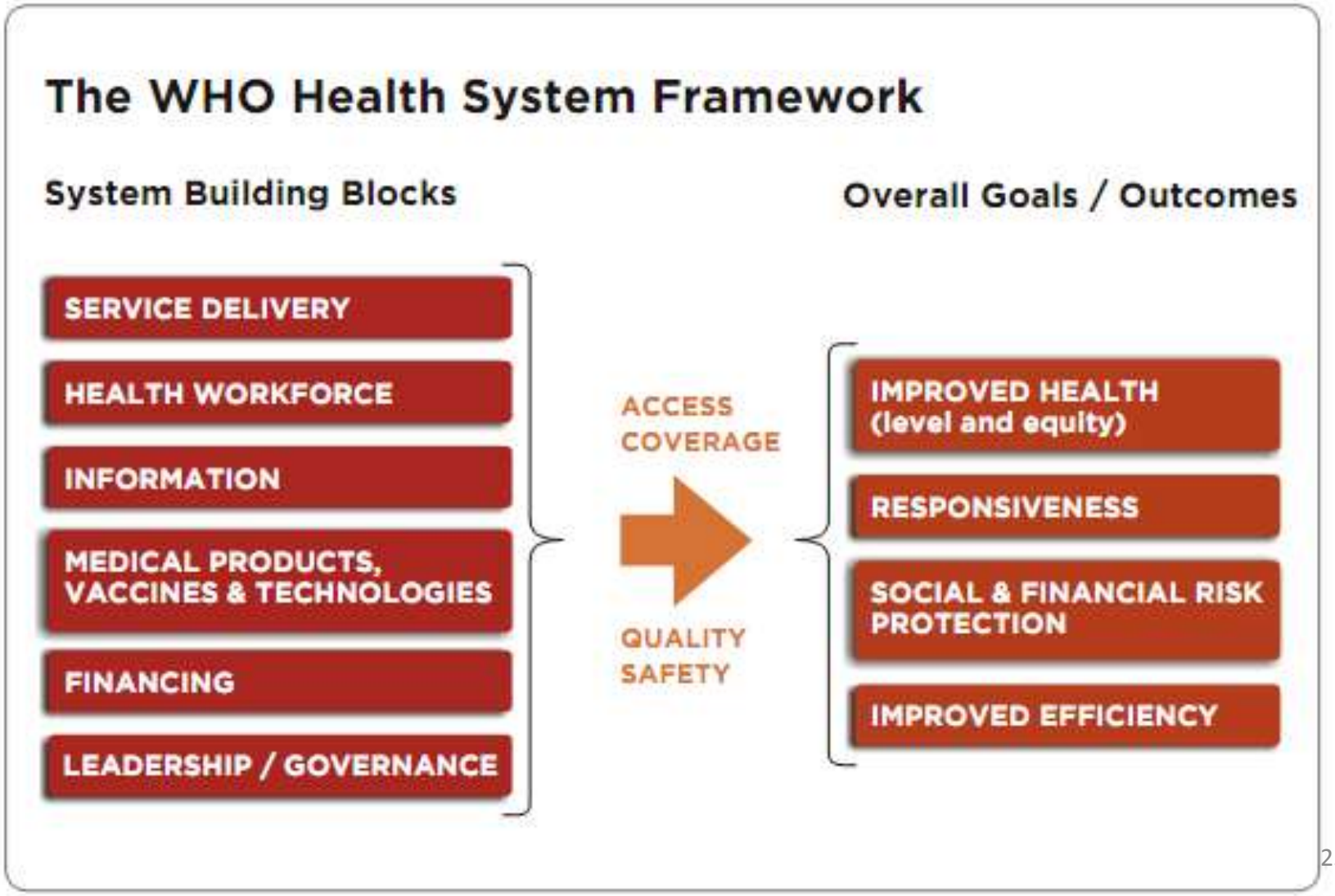
What is the meaning of health system features?

- Depends on the writer
- definition:
  - WHO: stewardship, provision, resources generation, etc
  - Kovner: the role of government in: regulation, provision of services, and financing the system
  - Harvard and WBI: use the “knobs” metaphora

Basic concept of Health System (WHO 2000)



The Building Blocks of the health System: Aims and Attributes (2009)



Some important health system functions

- Stewardship
- Health Financing
- Health Service Provision
- Health Workforce

- **What are the three principal functions that health systems serve?**
  - **Service provision**
    - **Producing human and material (structures, equipment, medicines, and supplies) inputs**
    - **Process of combining inputs into systems**
    - **Services as health promotion, preventive care, public health, and curative care**
  - **Resource generation and use/maintenance**
    - **Financial resources**
    - **Human resources**
  - **Governance/stewardship**
    - **Including production and use of information**

Discussion:

Part 3. The Role of Government

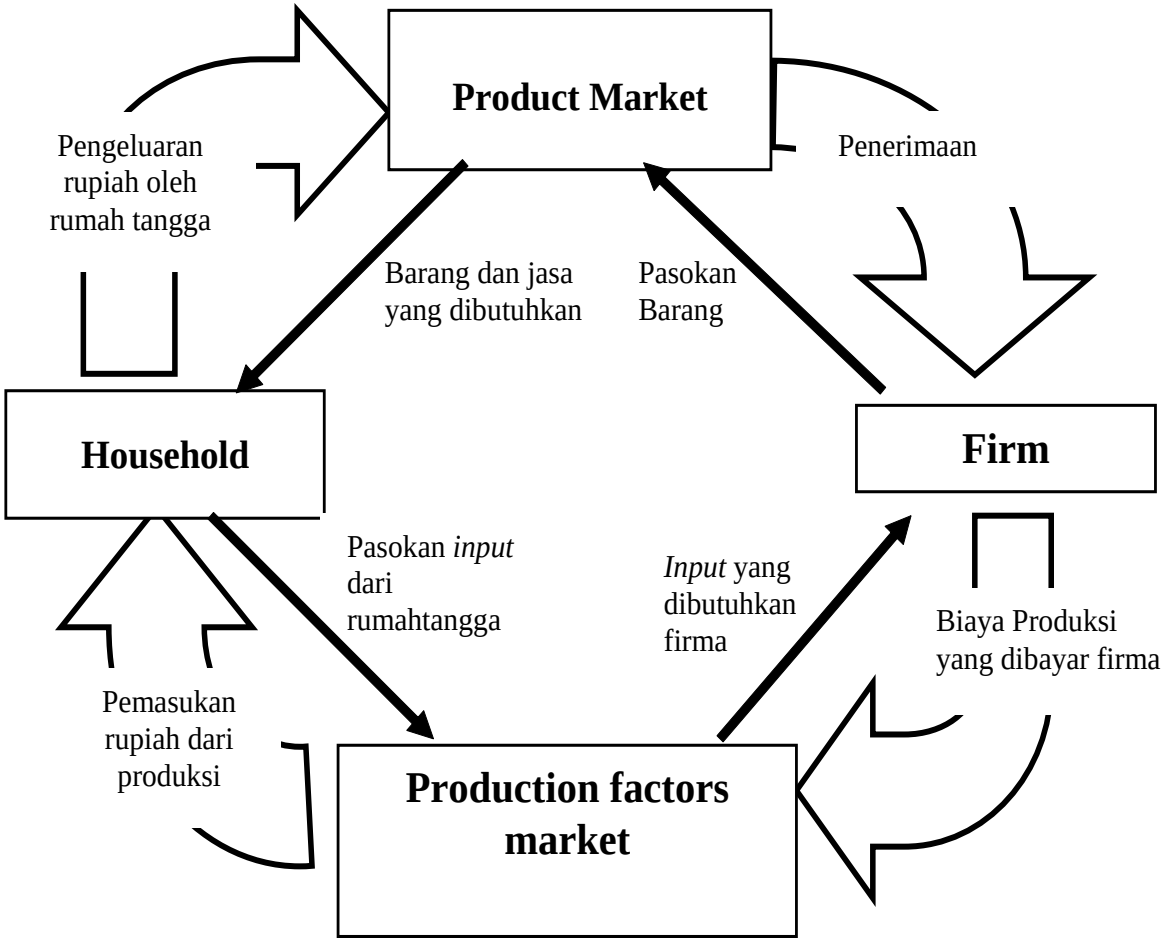
- Ideological drivers or health systems
  - What is the role of government and how large should it be?
  - Health as a basic human right. Is health care also a right?
  - Free markets vs. government role in addressing market failures and promoting social equity. (Equity in access to products and services; equity in outcomes.)
  - What is a “public” vs. a “private” health service?

Ideologi

- *A set of doctrines or beliefs that form the basis of a political, economic, or other system*

- **Ideologi negara dan partai politik**
- **Ideologi sektor kesehatan**
- **Ideologi dalam kehidupan seorang manusia (budaya)**

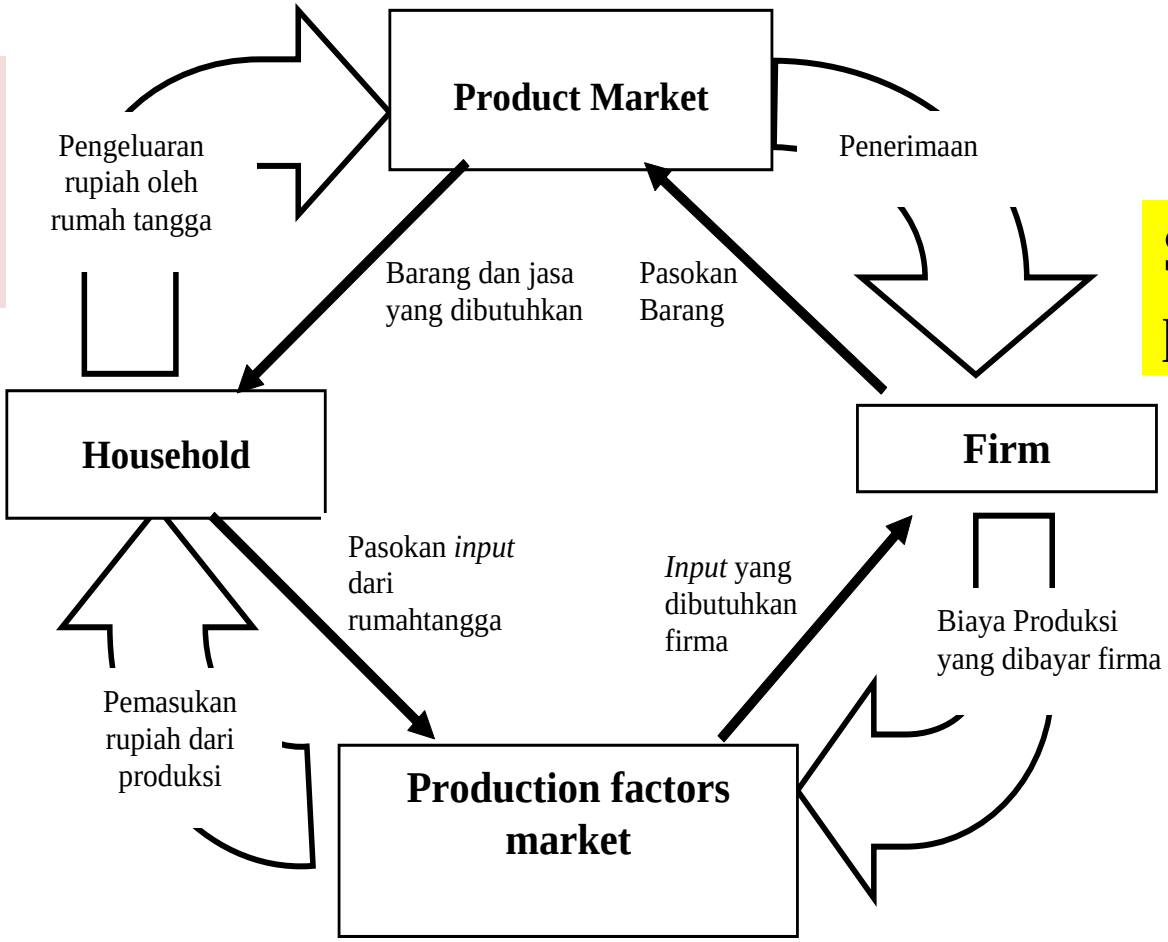
Market Ideology



The Risk of market Failure:
Poor people can not have access to medical service

Government Intervention

Social Security such as Jamkesmas



Subsidy for providers

Insentif para dokter

The Ideology: Increasing Government Intervention

The Popular Ideological Spectrum

Sosialism

Neoliberalism

Social Democrate

Leftist **Right**

Socialism

- Free Health Care for everybody is a pure socialism.
- It is not in a capitalist community.

—Aneurin Bevan, *In Place of Fear, p106*

Ideologi neoliberal

Has 3 approaches (Ham 1997):

1. The systems required the forces of private markets to improve their efficiency and increase the range of services available
2. Needs managerialism
3. It needs reform of budgetary systems and creation of financial incentives to improve performance.

Ideological debate: Whether government is able to pay

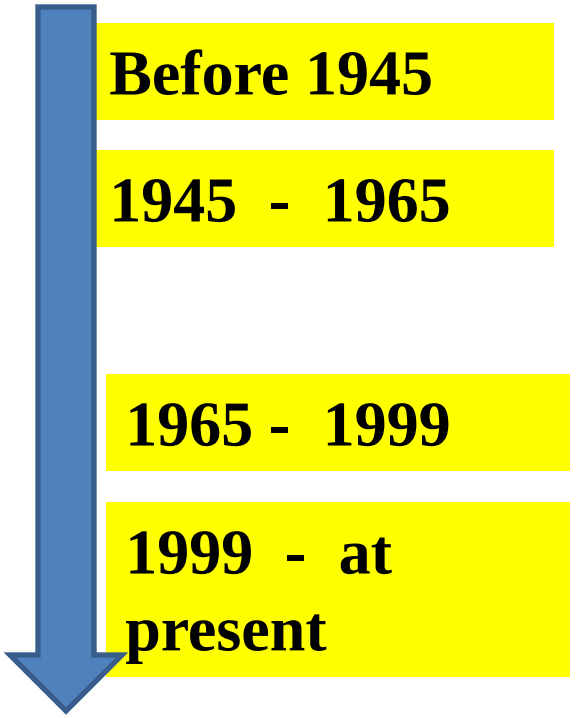
Government pays all health service. Community is not forced to pay. Tax and other state revenues pay the cost of health service.

Government plays minimum roles. The rich person should pay..

Leftist **Rights**

How the Indonesian position?

Historical Stage



- Colonial Period
- Independence and the "Old Order"
- "New Order"
- Decentralized era

Colonial Period

- The Dutch Indie was not administered as a welfare state
- Health services were provided for government employees, military personnel, and big company employees.
- Missionary hospitals and health services worked with limited coverage

1945 - 1965

- The period of market forces suppression
- There was no clear national health financing policy.
- There was an Act on poor family health services in early 1950s, but poorly implemented.
- Health insurance and social security is limited for government employees, military personnel, and big company employees.

1965-1998

- The market economy was introduced
- The private sector grew rapidly, incl, for profit hospitals.
- There was a corporatization of medical services based on market forces
- There was no clear regulation of health market
- Medical doctors have multiple practice culture and tend to serve the aflluent community
- 1997: Economic crisis induced the Social Safety Net incl. Health.

1999 - current

- Decentralization era since the stepdown of Suharto in 1998
- Direct Presidential and Governor/Major election
- More populist policies at national,provincial, and district level
- Poor family has free health and hospital services
- Poor family scheme becomes political issue

After decentralization and economic crisis: Financial Protection Policy in Health Care (1999)

- Reducing Out of Pocket

- Increasing central government finance for health proctection to the poor.
- Immediate after the crisis, using Social Safety Net
- Have steady growth of central government budget.

Public-Private Partnership

	Public Provision	Private Provision
Public Finance	1	2
Private Finance	4	3

Discussion:

Part 4

- **Cross Country Comparisons**

4a.Health Finance Comparison

The dynamic of health financing across Asia

The trend: Using WHO's NHA

(note: the data accuracy is debatable. Be aware and will be discussed)

Three groups of countries which started in 1995 as the following:

- *Group 1 countries*: Private expenditure funds most healthcare (more than 50% of Total Health Expenditure,THE)
- *Group 2 countries*: Governments are major funding source for healthcare (Private expenditure are between 25% to 50% of THE)
- *Group 3 countries*: Governments is almost the only funding source for healthcare (Private expenditure less than 25% of THE)

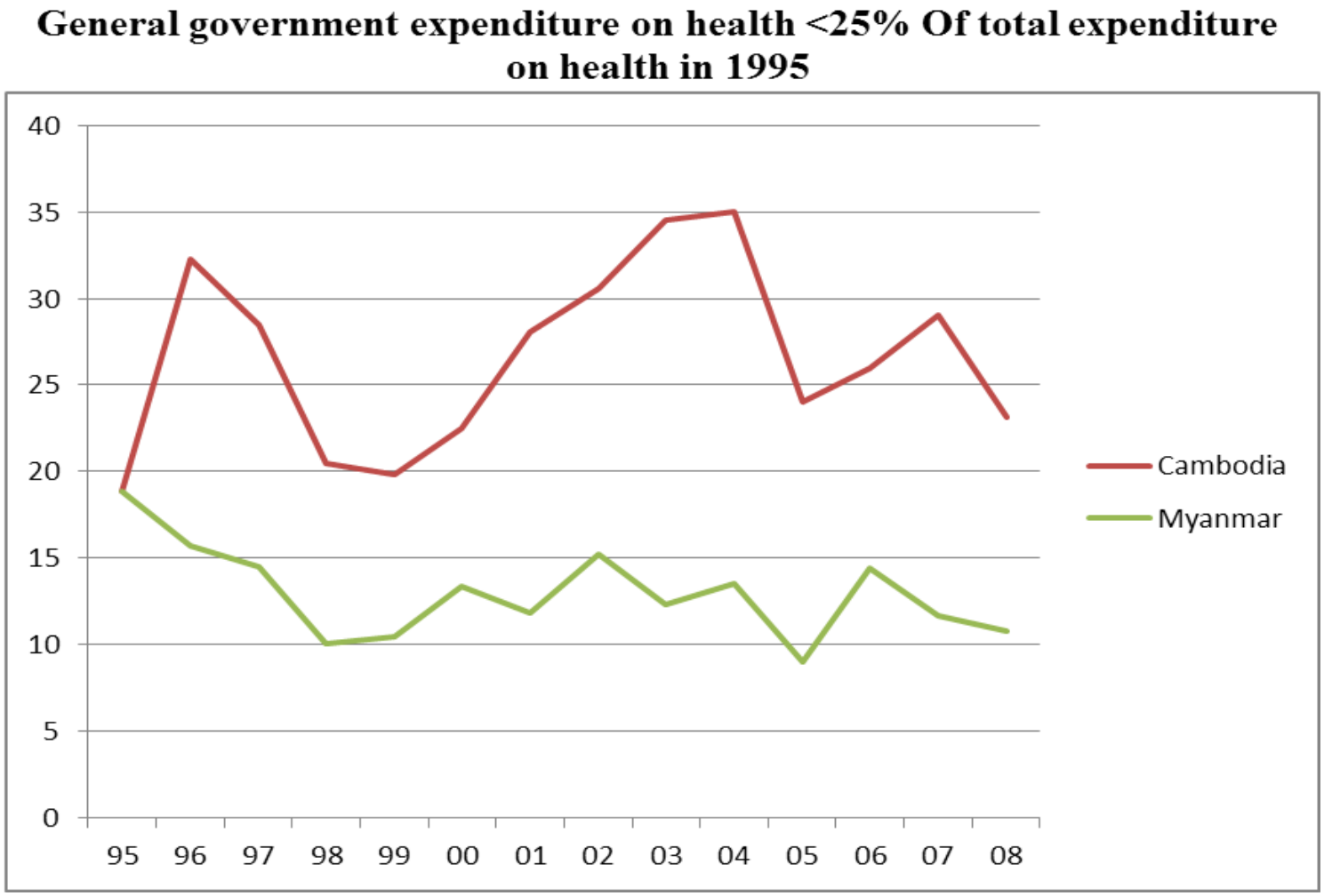
Group 1 countries: Private expenditure funds most healthcare (more than 50% of the Total Health Expenditure).

Most country in Asia within this group.

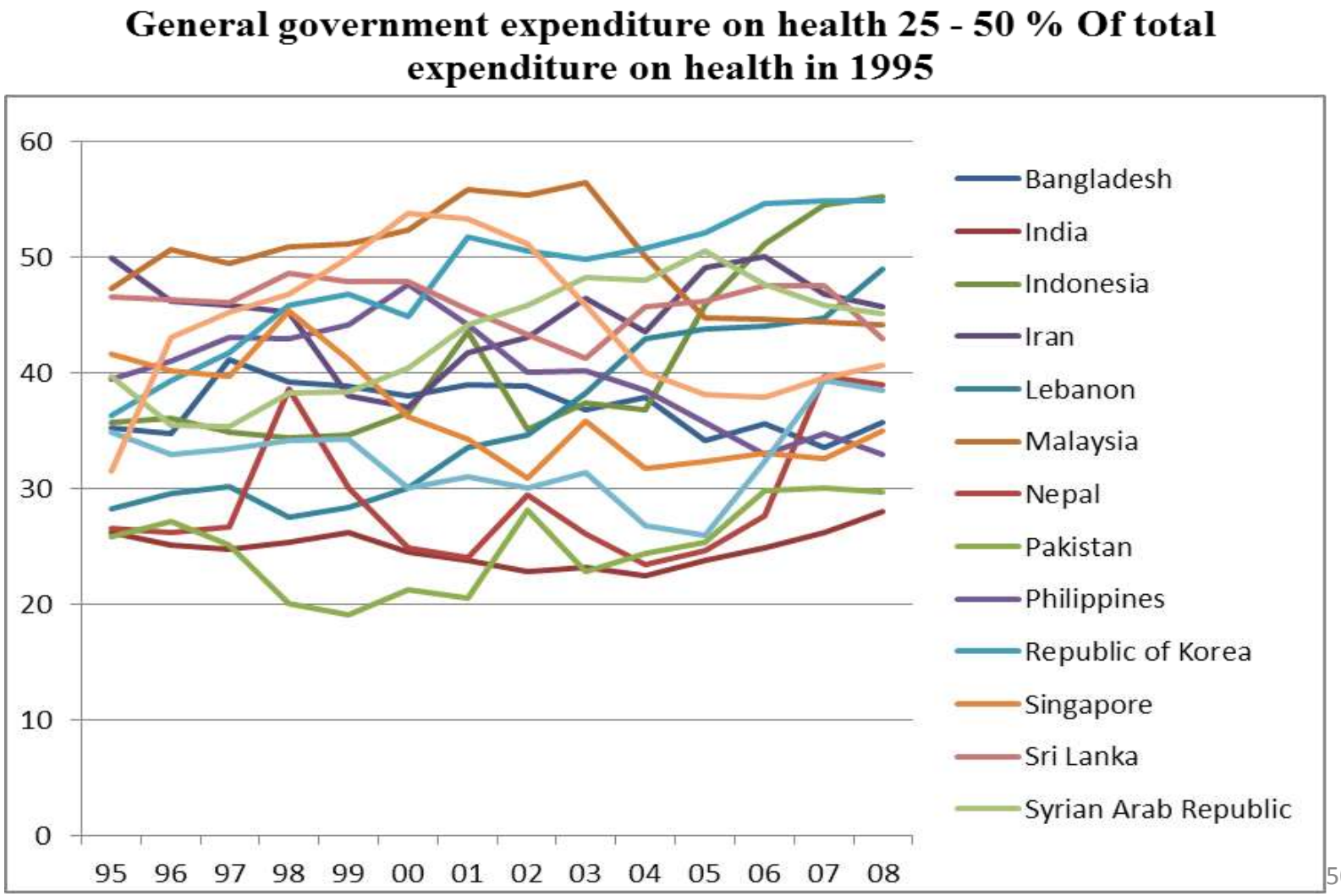
1a. The least government funding

1.b. Government expenditure between 25%-50% of THE in 1995.

1a. The least government funding



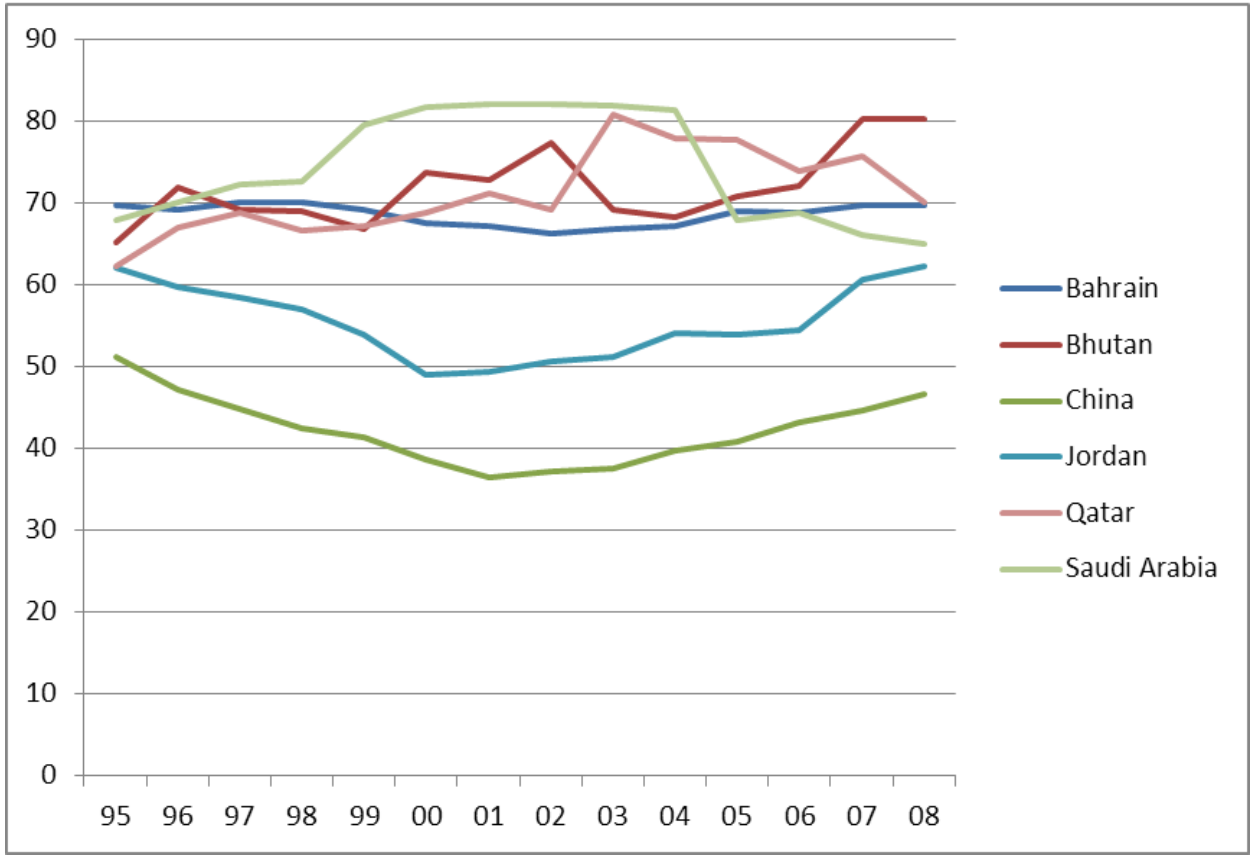
1.b. Government expenditure between 25%-50% of THE in 1995.



***Group 2 countries*: Governments are major funding source for healthcare**

6 countries were in this group in 1995: Bahrain, Bhutan, China, Jordan, Qatar, and Saudi Arabia

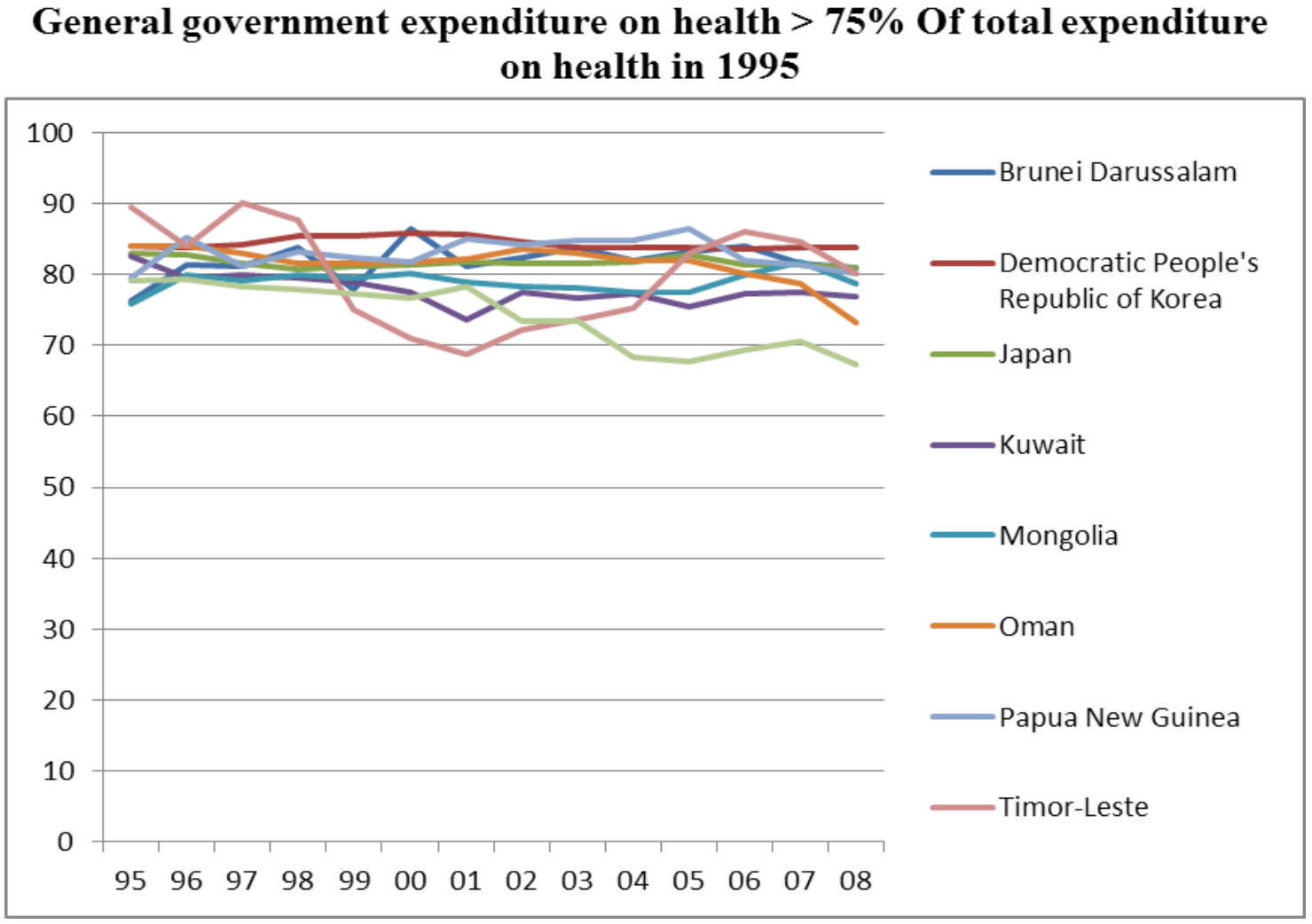
General government expenditure on health 50 - 75 % Of total expenditure on health in 1995



Note:
In 2008, some countries moved in to this group: Indonesia (up), Republic of Korea (up).
UAE (down).

***Group 3 countries*: Governments is almost the only funding source for healthcare.**

(These countries can be classified as rich countries and socialists government.



Countries which increased Government Expenditure (%)

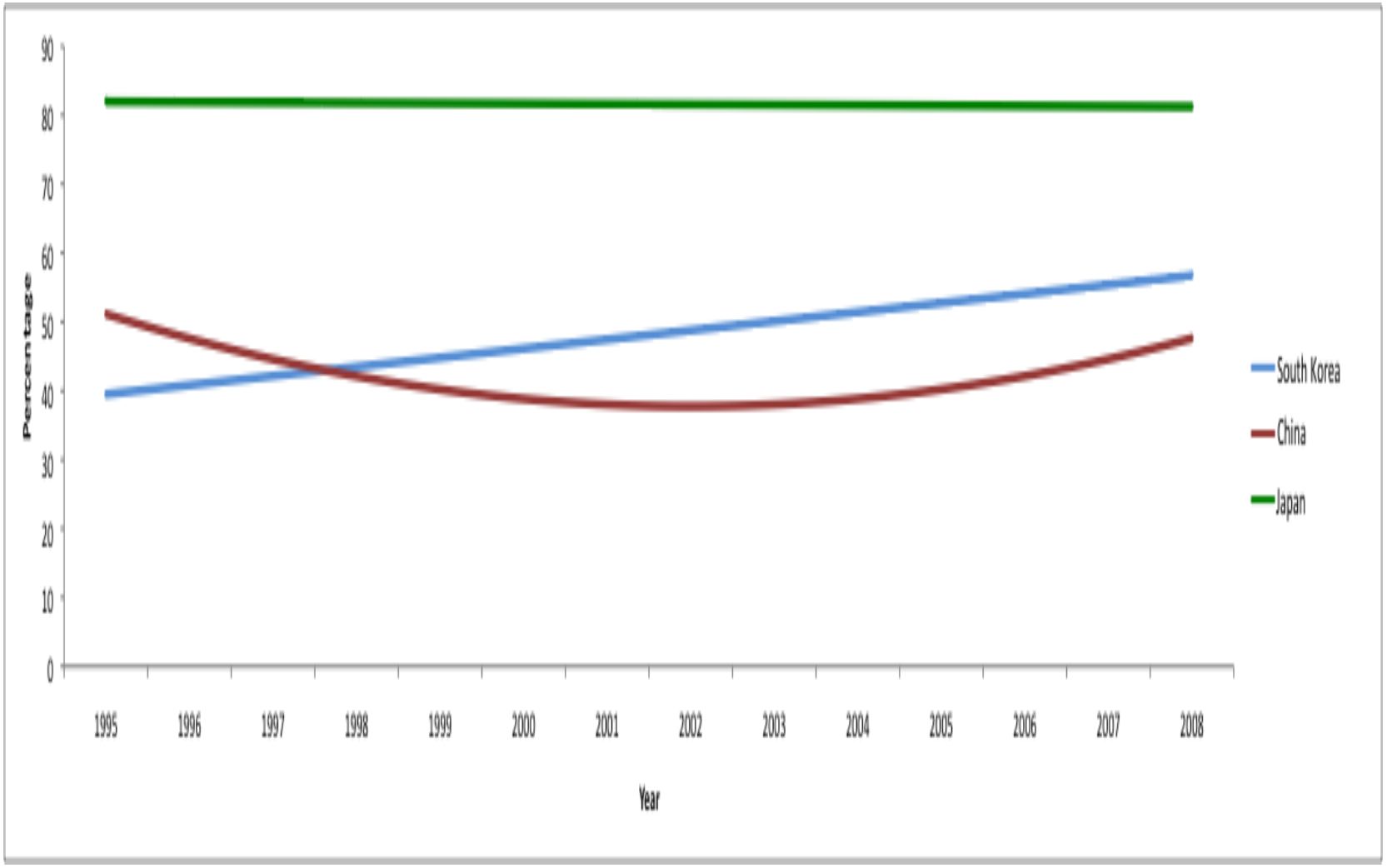
Location	GDP Per Capita (USD)		diff	GGE on Health		diff
	1995	2008		1995	2008	
Thailand	**2793.79**	**4042.78**	**1249.00**	**47**	**75.1**	**28.1**
Libyan Arab Jamahiriya	5283.52	14802.20	9518.68	51.9	75.9	24.0
Lebanon	3357.11	7137.51	3780.41	28.3	49	20.7
Indonesia	**1055.51**	**2245.49**	**1189.98**	**35.7**	**55.3**	**19.6**
Republic of Korea	11467.81	19161.89	7694.08	36.3	54.9	18.6
Bhutan	563.16	1812.32	1249.15	65.1	80.3	15.2
Nepal	203.52	437.87	234.35	26.5	39	12.5
Yemen	272.91	1174.53	901.63	31.5	40.7	9.2
Qatar	15479.08	86435.82	70956.74	62.2	70.1	7.9
Syrian Arab Republic	780.04	2648.82	1868.78	39.7	45.1	5.4
Brunei Darussalam	16049.59	30390.64	14341.04	76.3	81	4.7
Cambodia	302.38	710.21	407.83	18.9	23.1	4.2
Pakistan	495.49	986.64	491.14	25.8	29.7	3.9
Viet Nam	**284.13**	**1047.13**	**762.99**	**34.9**	**38.5**	**3.6**
Mongolia	540.38	1990.59	1450.21	75.9	78.7	2.8
India	382.22	1066.69	684.47	26.2	28	1.8
Papua New Guinea	984.45	1217.97	233.52	79.4	80.1	0.7
Bangladesh	296.20	497.21	201.01	35.2	35.7	0.5
Bahrain	10125.60	28240.48	18114.88	69.6	69.7	0.1
Jordan	1603.68	3905.18	2301.50	62.1	62.2	0.1

Countries which decreased Government Expenditure (%)

Location	GDP Per Capita (USD)		diff	GGE on Health		diff
	1995	2008		1995	2008	
United Arab Emirates	17604.89	58272.39	40667.50	79	67.3	-11.7
Oman	6355.28	21648.57	15293.29	83.9	73.2	-10.7
Timor-Leste	387.83	453.32	65.49	89.5	80.2	-9.3
Philippines	1059.38	1843.95	784.56	39.5	32.9	-6.6
Singapore	23915.62	39949.51	16033.88	41.6	35	-6.6
Kuwait	15089.73	54260.08	39170.36	82.6	76.8	-5.8
China	604.23	3413.59	2809.36	51.2	46.7	-4.5
Iran	1540.68	4699.90	3159.21	49.9	45.7	-4.2
Sri Lanka	720.66	2019.99	1299.33	46.6	42.9	-3.7
Malaysia	**4313.52**	**8211.51**	**3897.99**	**47.3**	**44.1**	**-3.2**
Saudi Arabia	7796.67	19200.42	11403.75	67.8	64.9	-2.9
Japan	41967.65	38267.92	-3699.74	83	80.9	-2.1

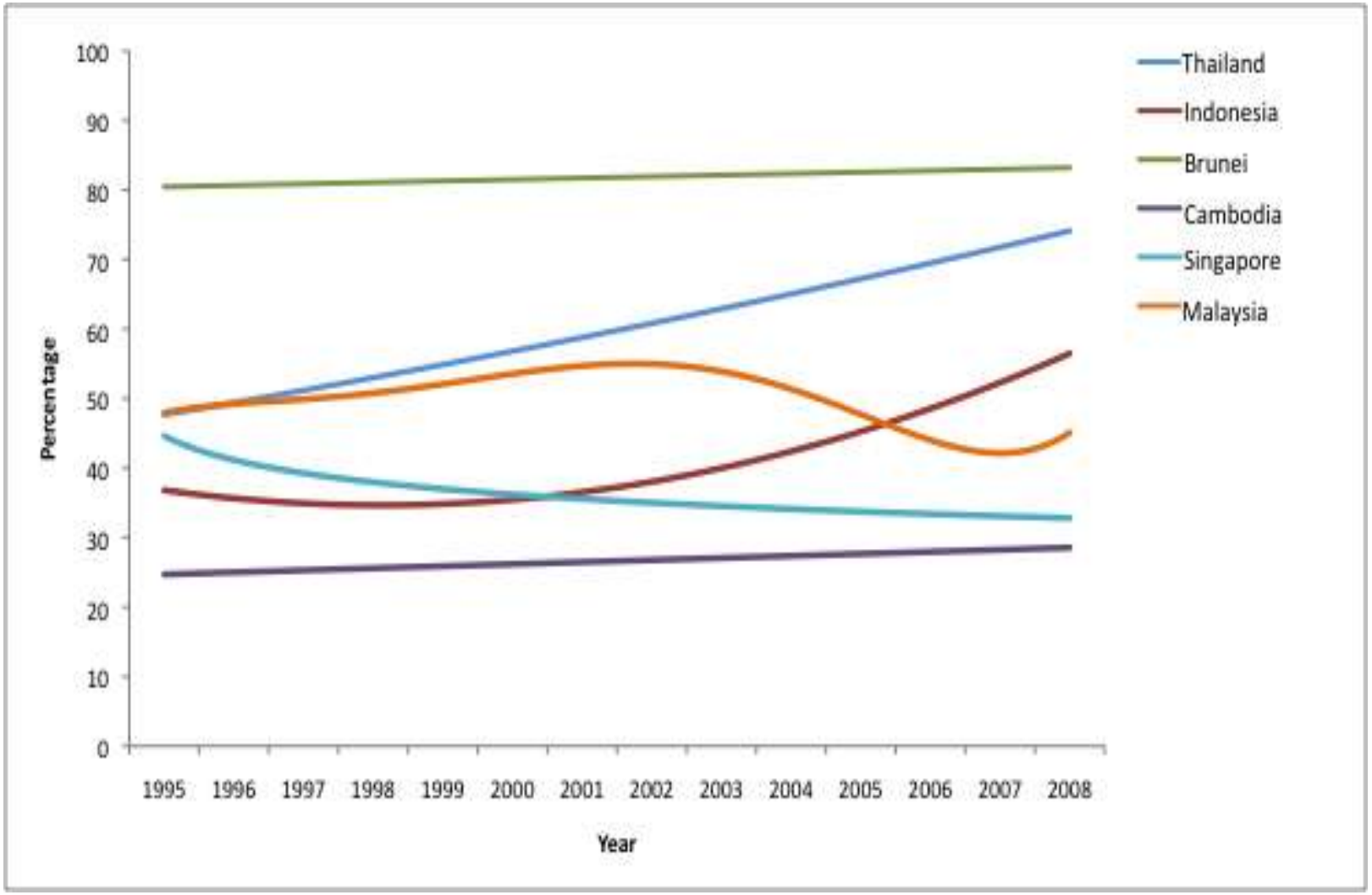
Percentage of Government Expenditure to Total Health Expenditure in

East Asia region



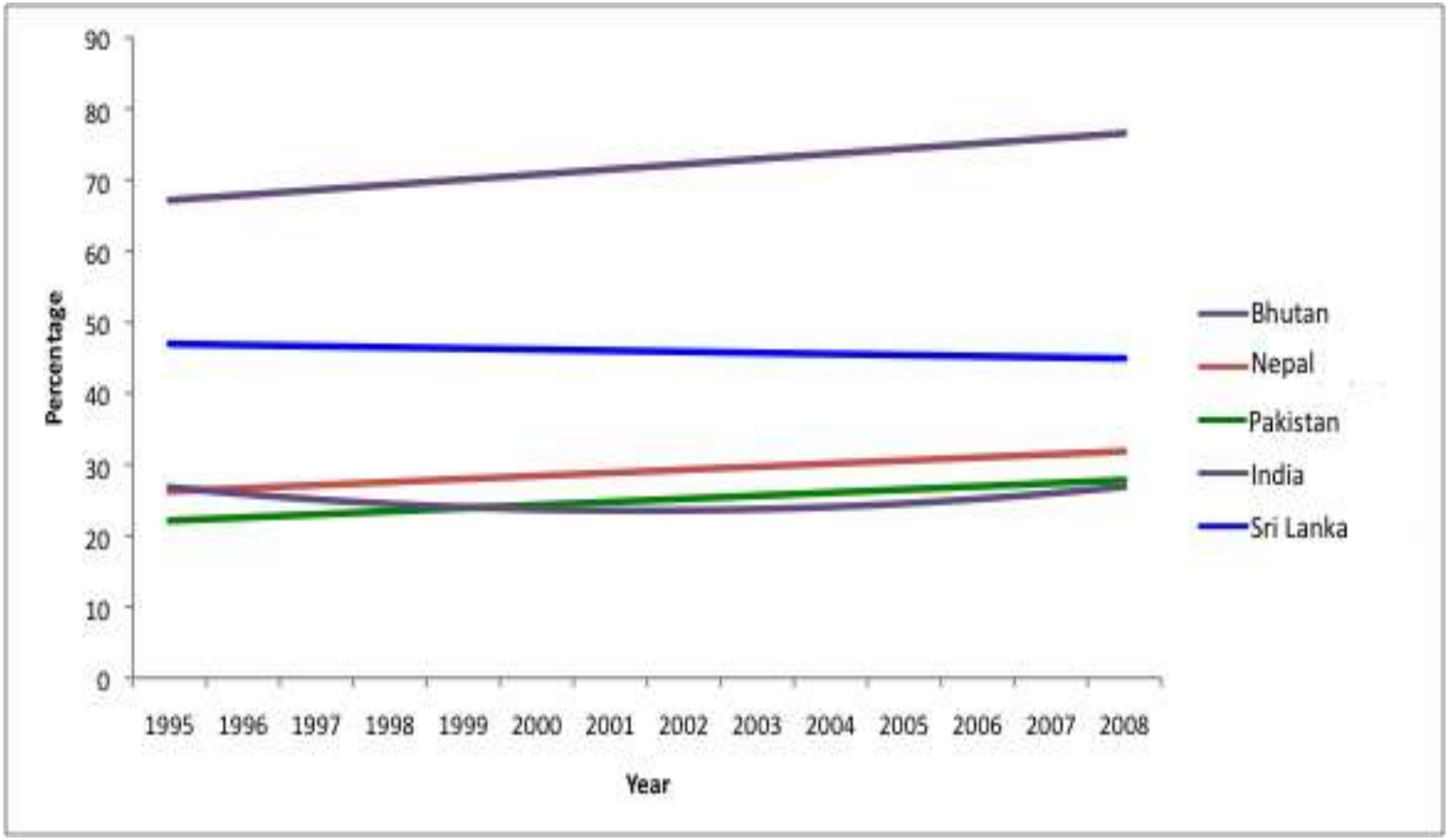
Percentage of Government Expenditure to Total Health Expenditure in

South East Asia region



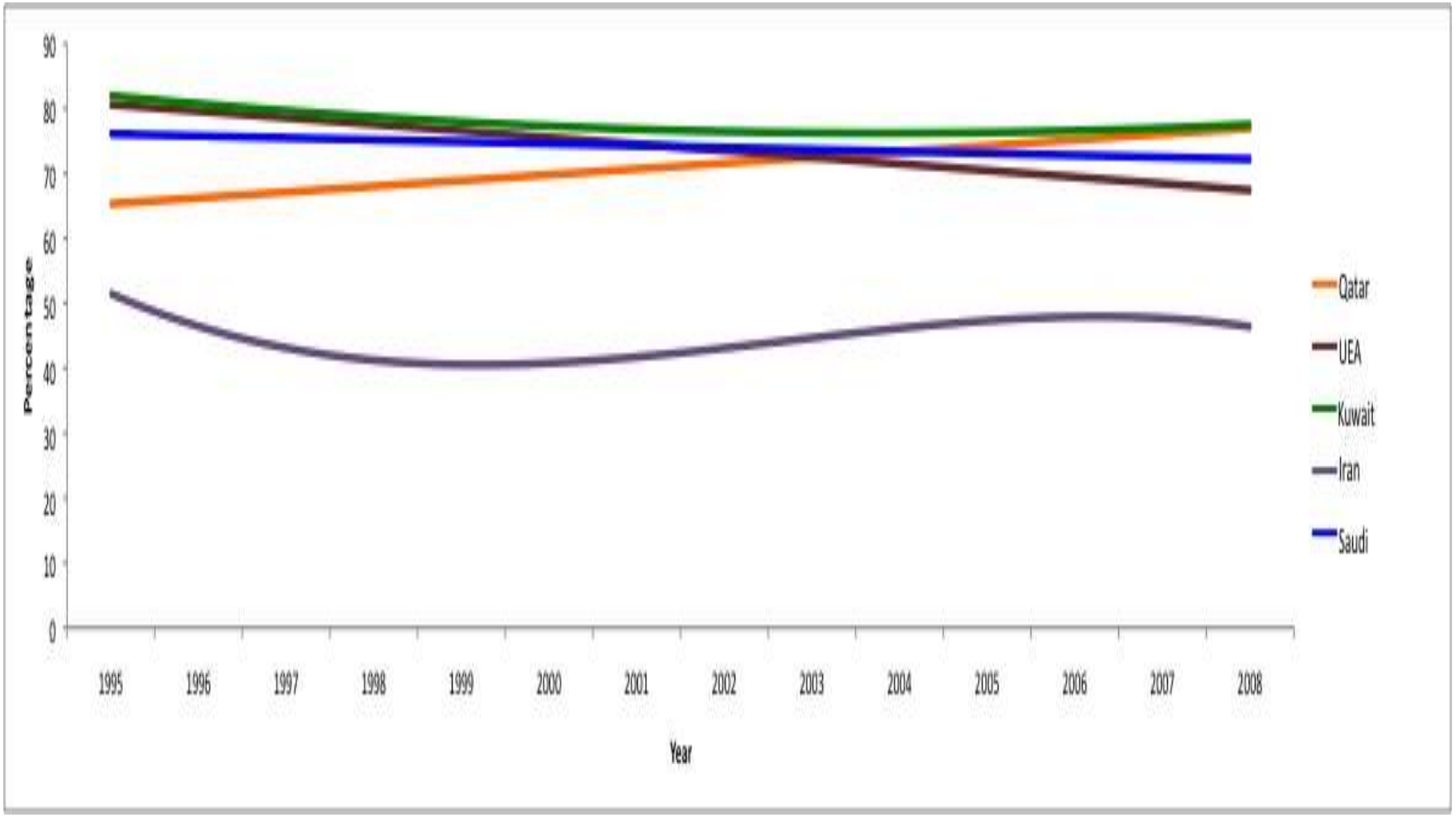
Percentage of Government Expenditure to Total Health Expenditure in

South Asia region



Percentage of Government Expenditure to Total Health Expenditure in

West Asia region

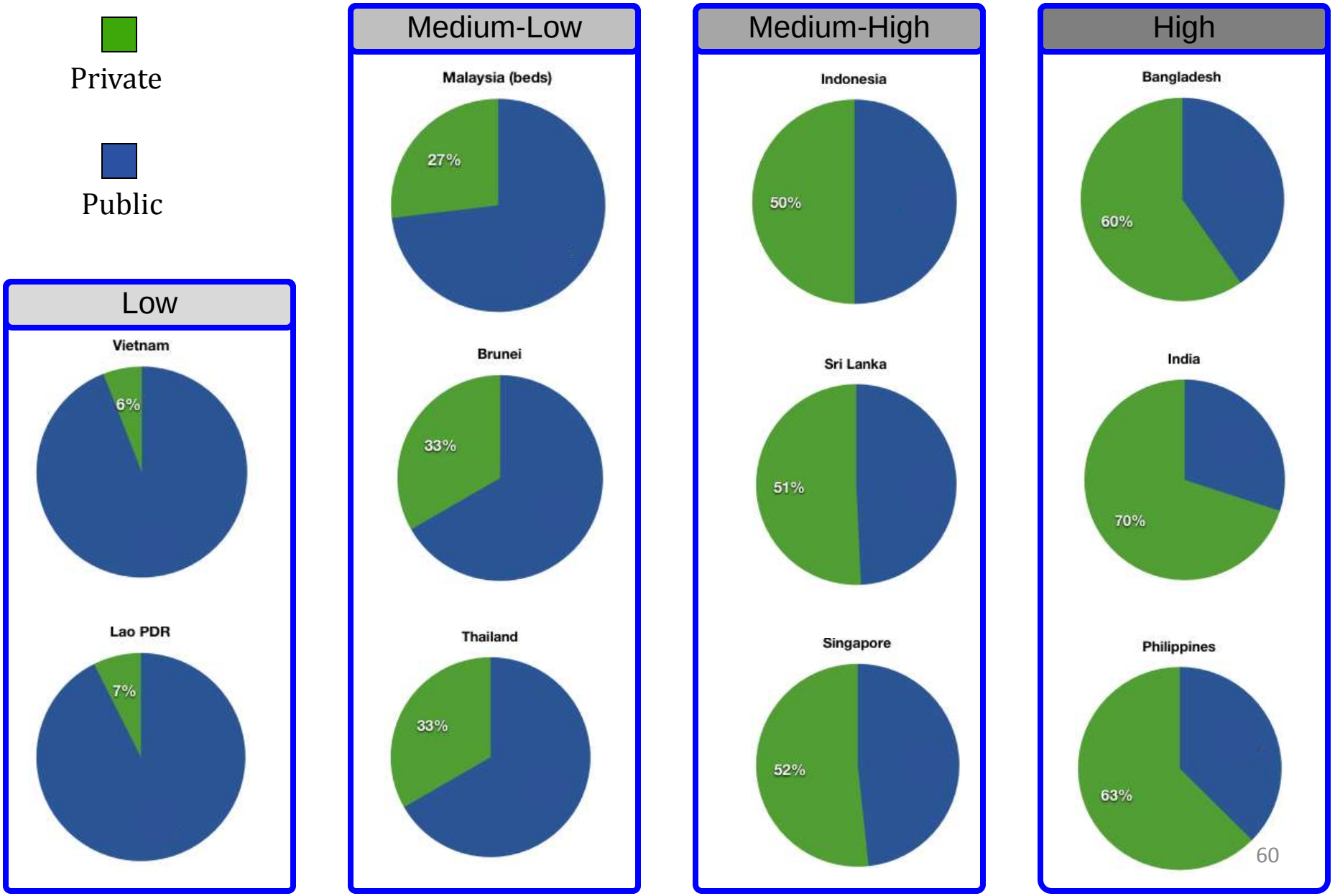


4b. Health Service Provision

Who provides the health service?

- Government or Private or both?

The Private Hospital Share (Montague 2011)



The mapping of private hospitals as analysed in the seminar: The role of private hospitals in equity in South East Asia (18 -20 My 2011)

User/Patients	Indonesia	Malaysia	Thai	Vietnam
Upper Class	**++** (mostly For Profit Hospitals)	**++** (For Profit Hospitals)	**++** (For Profit Hospitals)	**++** (For Profit Hospitals)
Middle	**+++**		**+**	**+**
Lower Class	**+++**			**+**

Note:

- **Indonesia has good prospect for involving private hospitals in Social Health Insurance (SHI).**
- **Malaysian private hospitals aim for upper class.**
- **Thai private hospital share to SHI is very limited .**
- **Vietnam has no intention for equity**

Private Hospitals for Medical Tourism in South East Asia region

Private Hospital for the Upper class in Indonesia

The Non-profit hospitals for lower class in society

The case in some countries

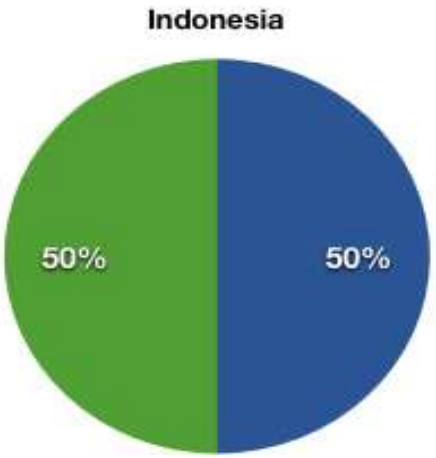
Who – what and for whom on private sector in health.

- Who are the private health service providers?
- For whom they serve? The poor or the rich or both?
- How the partnership between government and private sector?

Indonesia

Primary Health Care:

- Non-profit: Indonesian NGOs, International NGOs., Professional Private Practice, Christian/Moslem/Humanities Foundation
- Forprofit: SOS Company which work in mining industry



Secondary Health Care (around 700 hospitals):

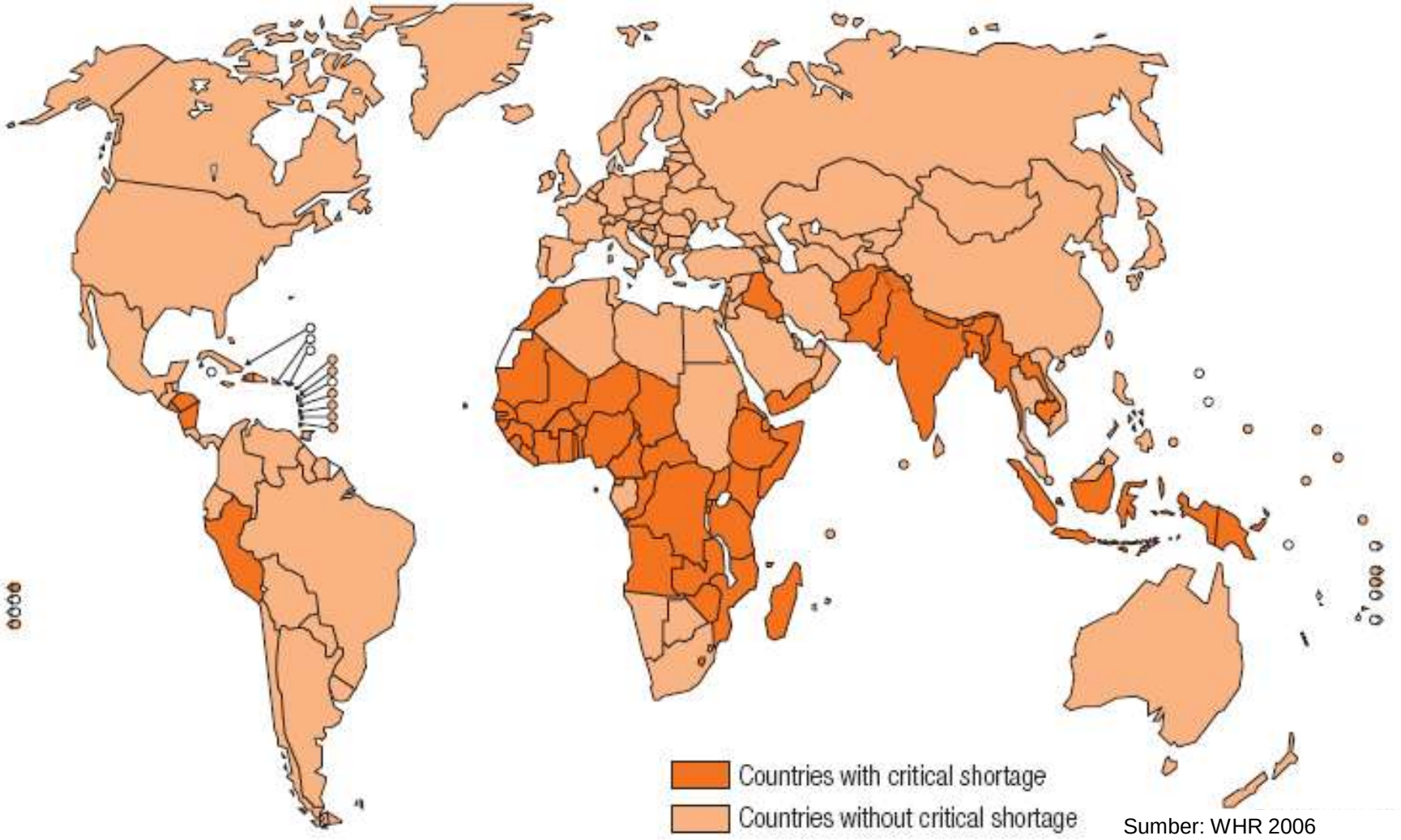
- Non-profit: Hospital owned by Society, Hospital Owned by Foundation (85%)
- For-Profit: Hospital Owned by Company (15%

For profit and non-profit hospitals in practice sometimes is not easy to differentiate. In general for-profit hospitals aims to serve the rich.

4c. Health Workforce Comparison

- Who are they?
- What are the problems?

Indonesia is experiencing critical shortage of doctors, midwives and nurses



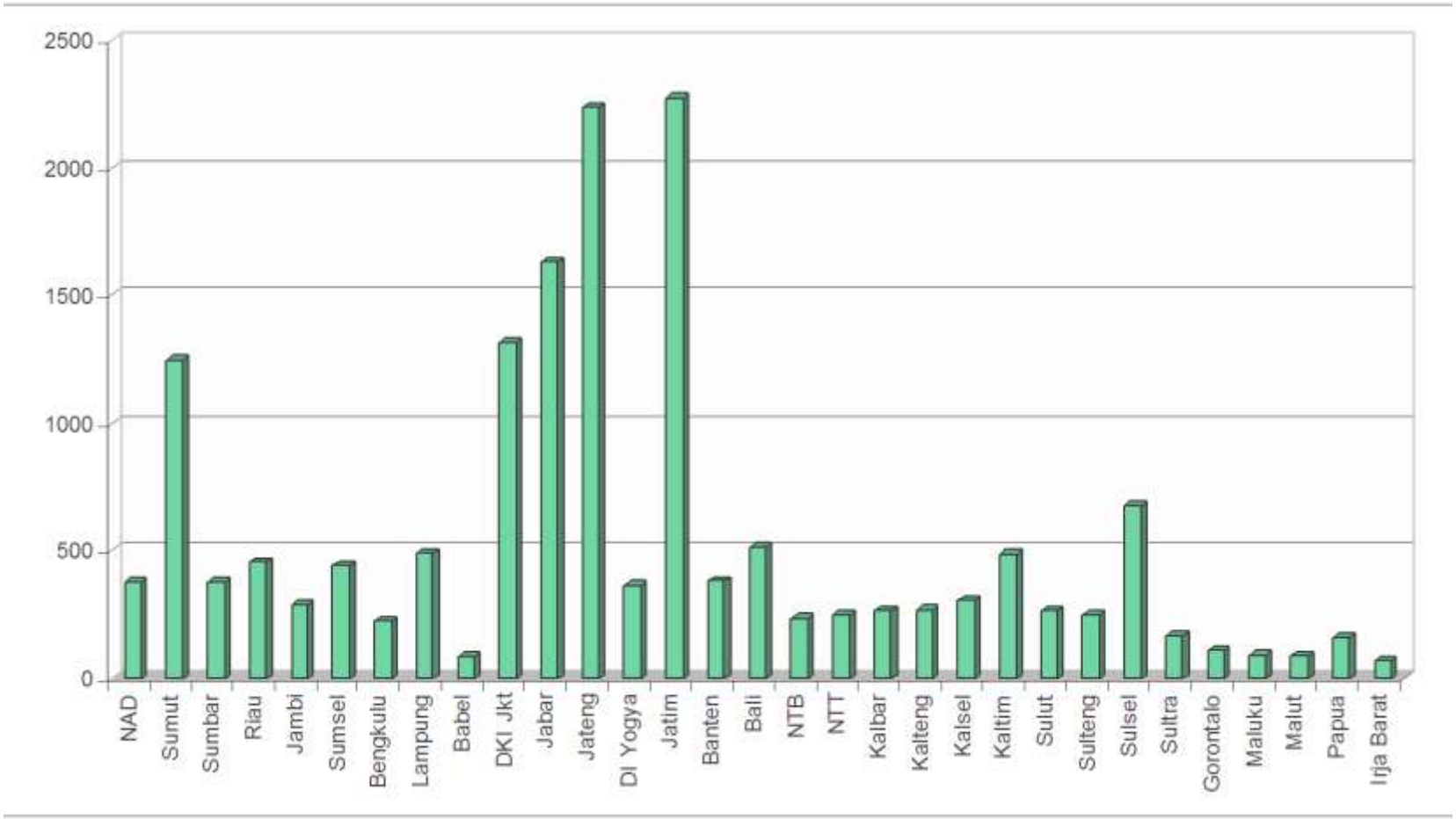
Sumber: WHR 2006

How many are really needed? → Perception of 32 districts*

	Need	Availability	GAP (%)
Doctor	987	593	39,9
Specialist Doctor	64	30	53,1
Dentist	497	294	40,8
Midwife	4565	2951	35,4
Nurse	4492	3295	26,6
Pharmacist	89	47	47,2
Dietician	652	404	38,0
Public Health	415	312	24,8
Sanitarian	737	530	28,1
Public Health	182	82	54,9
Epidemiologist	21	0	100,0
Total	13.793	9.216	33,2

*) *Bappenas Study in 2005*

Doctor Distribution in 2003-2004

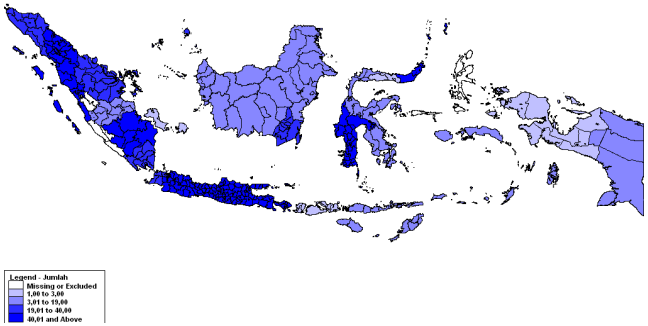


Specialist distribution (KKI, 2008)

Province	Number	%	Cumulative	People served	Ratio
DKI Jakarta	**2.890**	**23,92%**	**23,92%**	**8.814.000,00**	**1 : 3049**
Jawa Timur	**1.980**	**16,39%**	**40,30%**	**35.843.200,00**	**1 : 18102**
Jawa Barat	**1.881**	**15,57%**	**55,87%**	**40.445.400,00**	**1 : 21502**
Jawa Tengah	**1.231**	**10,19%**	**66,06%**	**32.119.400,00**	**1 : 26092**
Sumatera Utara	**617**	**5,11%**	**71,17%**	**12.760.700,00**	**1 : 20681**
D.I.Jogjakarta	**485**	**4,01%**	**75,18%**	**3.343.000,00**	**1 : 6892**
Sulawesi Selatan	**434**	**3,59%**	**78,77%**	**8.698.800,00**	**1 : 20043**
Banten	**352**	**2,91%**	**81,69%**	**9.836.100,00**	**1 : 27943**
Bali	**350**	**2,90%**	**84,58%**	**3.466.800,00**	**1 : 9905**
Sumatera Selatan	**216**	**1,79%**	**86,37%**	**6.976.100,00**	**1 : 32296**
Kalimantan Timur	**203**	**1,68%**	**88,05%**	**2.960.800,00**	**1 : 14585**
Sulawesi Utara	**173**	**1,43%**	**89,48%**	**2.196.700,00**	**1 : 12697**
Sumatera Barat	**167**	**1,38%**	**90,86%**	**4.453.700,00**	**1 : 26668**
Propinsi Lainnya	**1.104**	**9,14%**	**100,00%**	**52.990.200,00**	**1 : 47998**
	12083	**100,00%**		**224.904.900,00**	**1 : 18613**

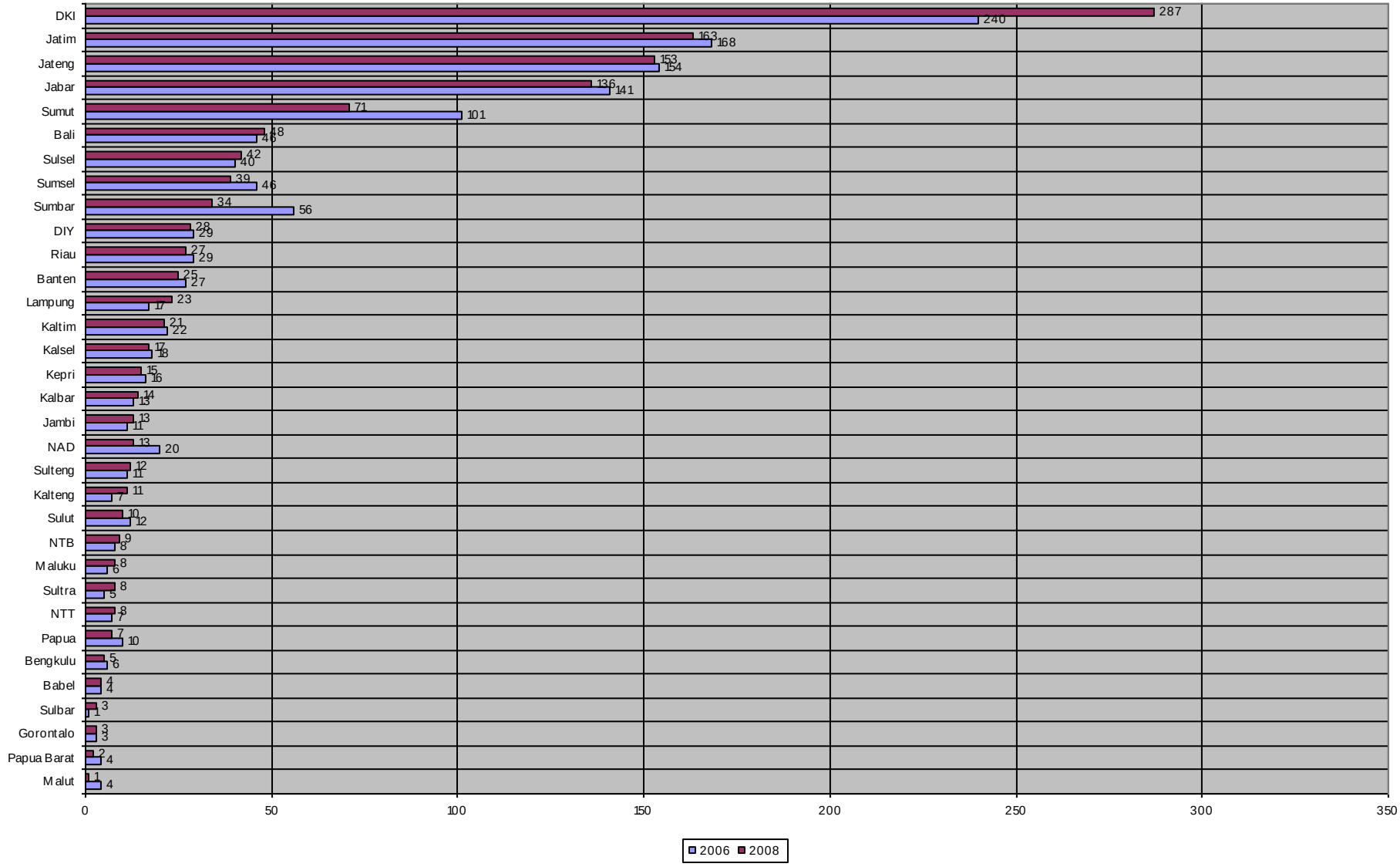
Specialist distribution

(KKI, 2008)



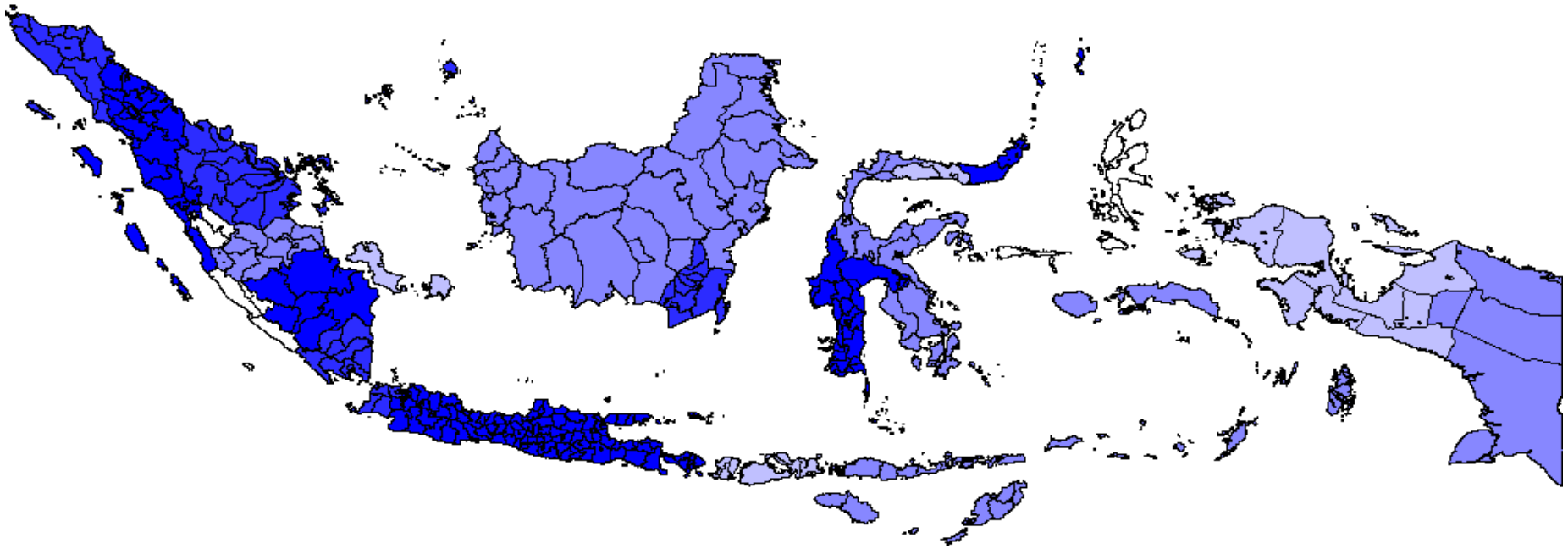
- Jakarta: 24% of specialists, serves around 4% community in a relatively small area
- Provinces in Java: 49% of specialists, serves around 53% community
- Rest of Indonesia: 27% of specialists, serves around 43% community in a very large area

Obstetric and Gynecologist



Typical graphic description of medical specialist distribution

Specialists Distribution (Pediatrics)



Data: IDAI (Pediatrician Association, 2006)

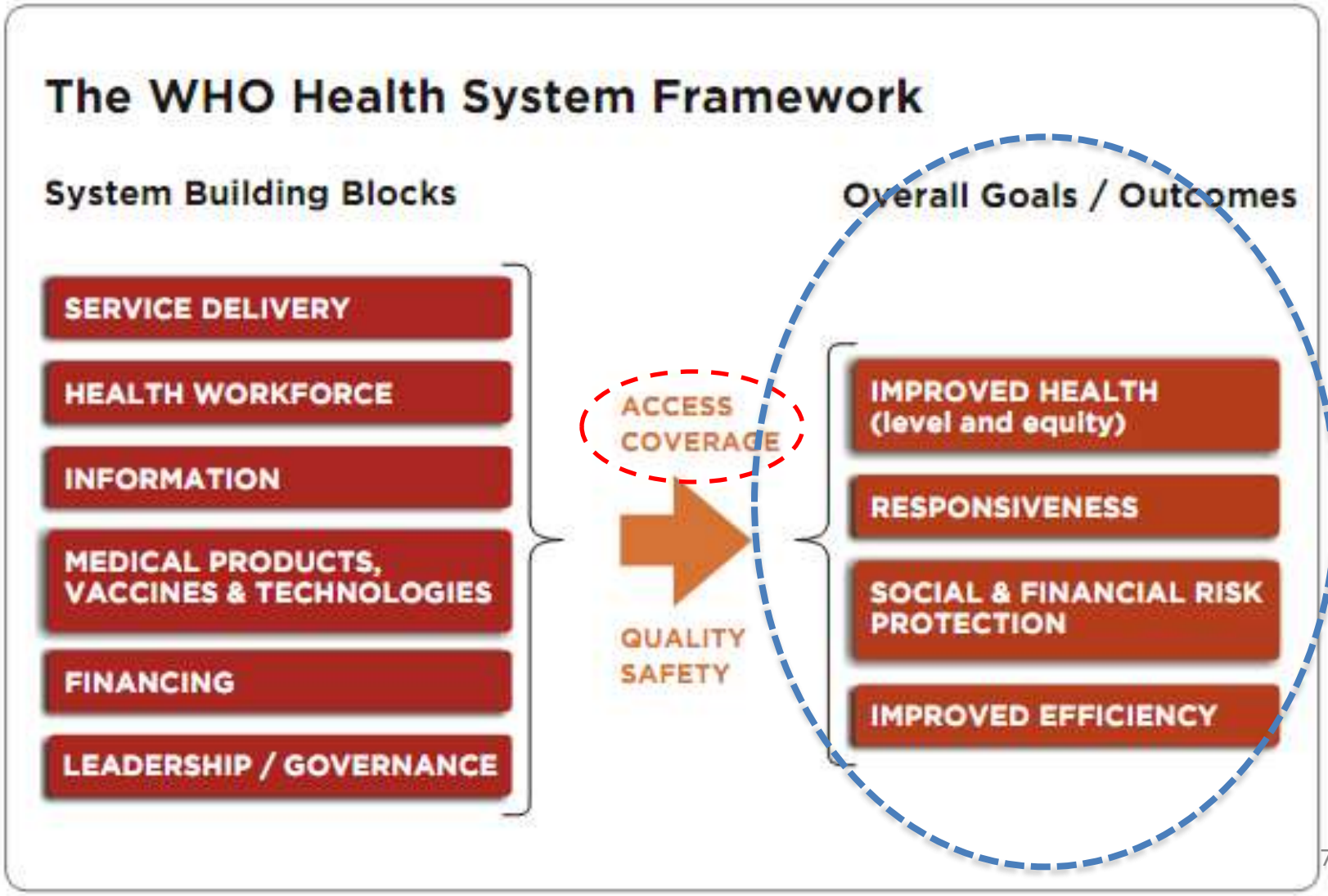
Discussion

Part 5

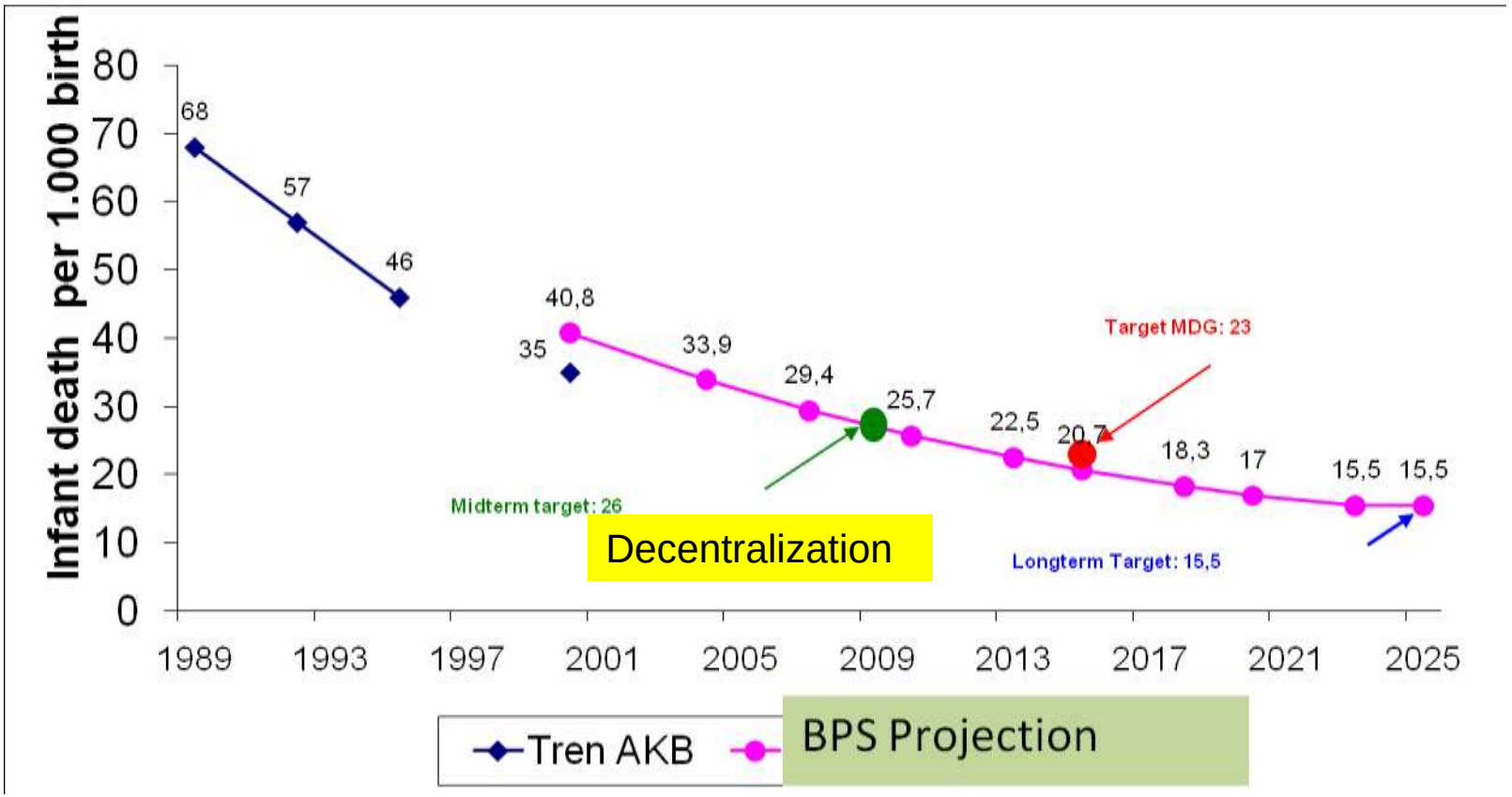
Health System Outcome problems

- Quality of Services and Patient Satisfaction
- Insurance Coverage
- **Who benefit from the system? Access and equity**

Outcome Problems

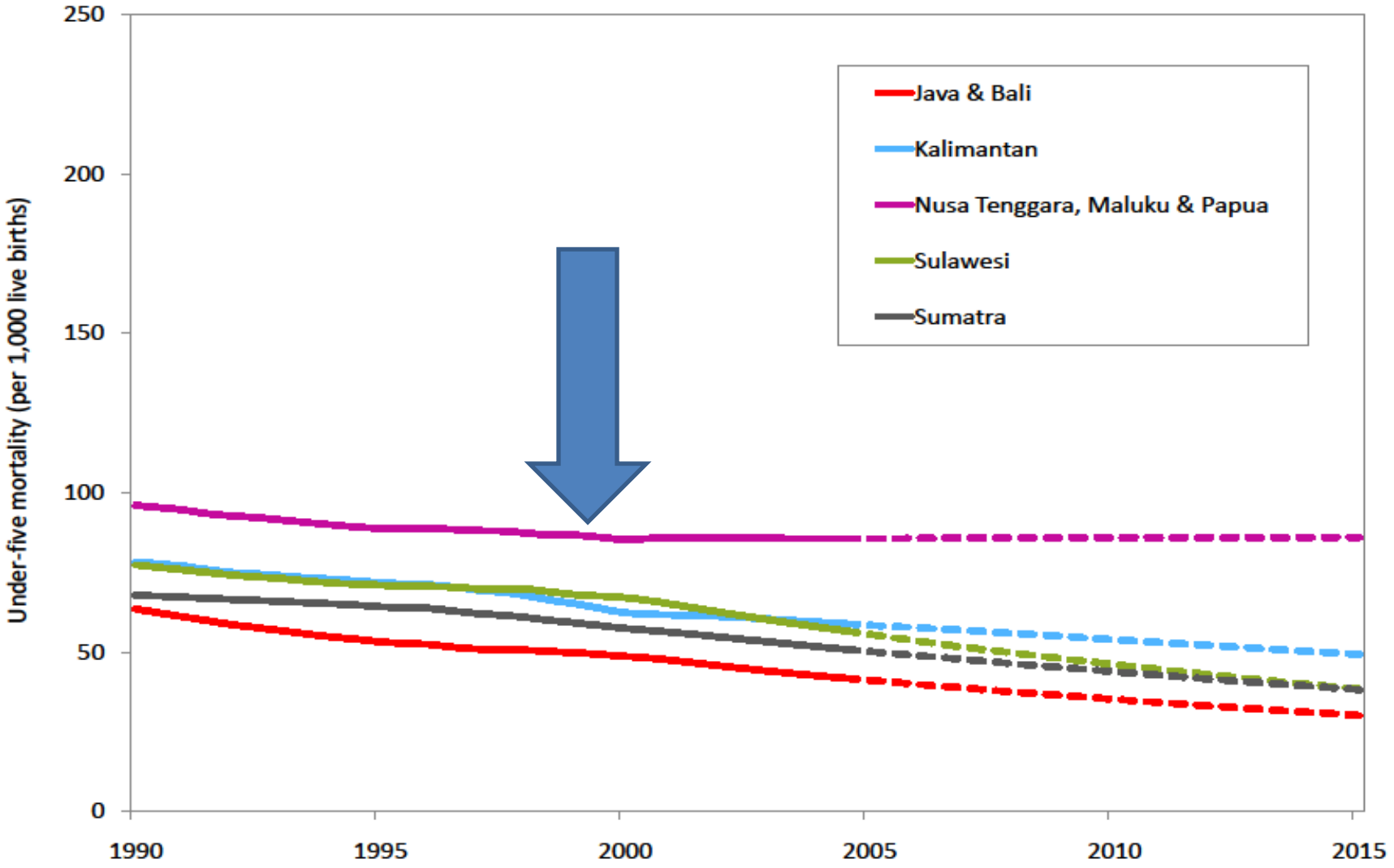


The case of:
Infant Mortality Rate (MDG4)



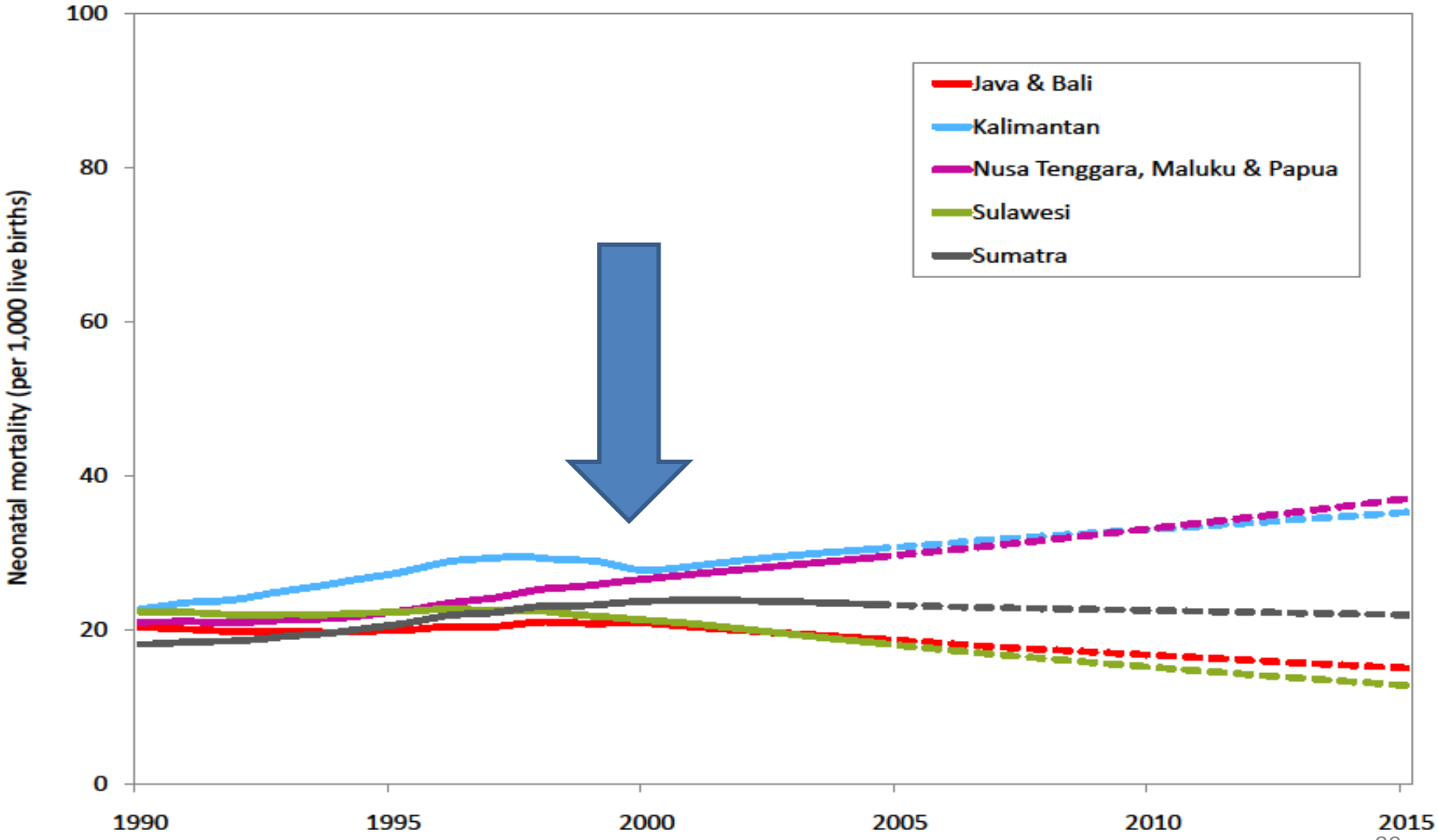
Source: Bappenas, 2008

- Equity for under-five mortality is not improving



Source: Universty of Queensland, Balitbang Kemenkes, UGM

- The situation is worsening (gap widening) for neonatal mortality which is more dependent on health systems improvements



Source: Universty of Queensland, Balitbang Kemenkes, UGM

The impact of changing financial protection policy

- The incidence of catastrophic OOP health expenditures is relatively low and has declined over time.
- Equity in utilization of health services has improved over time, with significant improvements in access to public hospital services.
- **The public subsidies for health care has also become more pro-poor over time**.
- The financial protection program reduced financial barriers to access for poor households for both hospital and non-hospital services.

But,

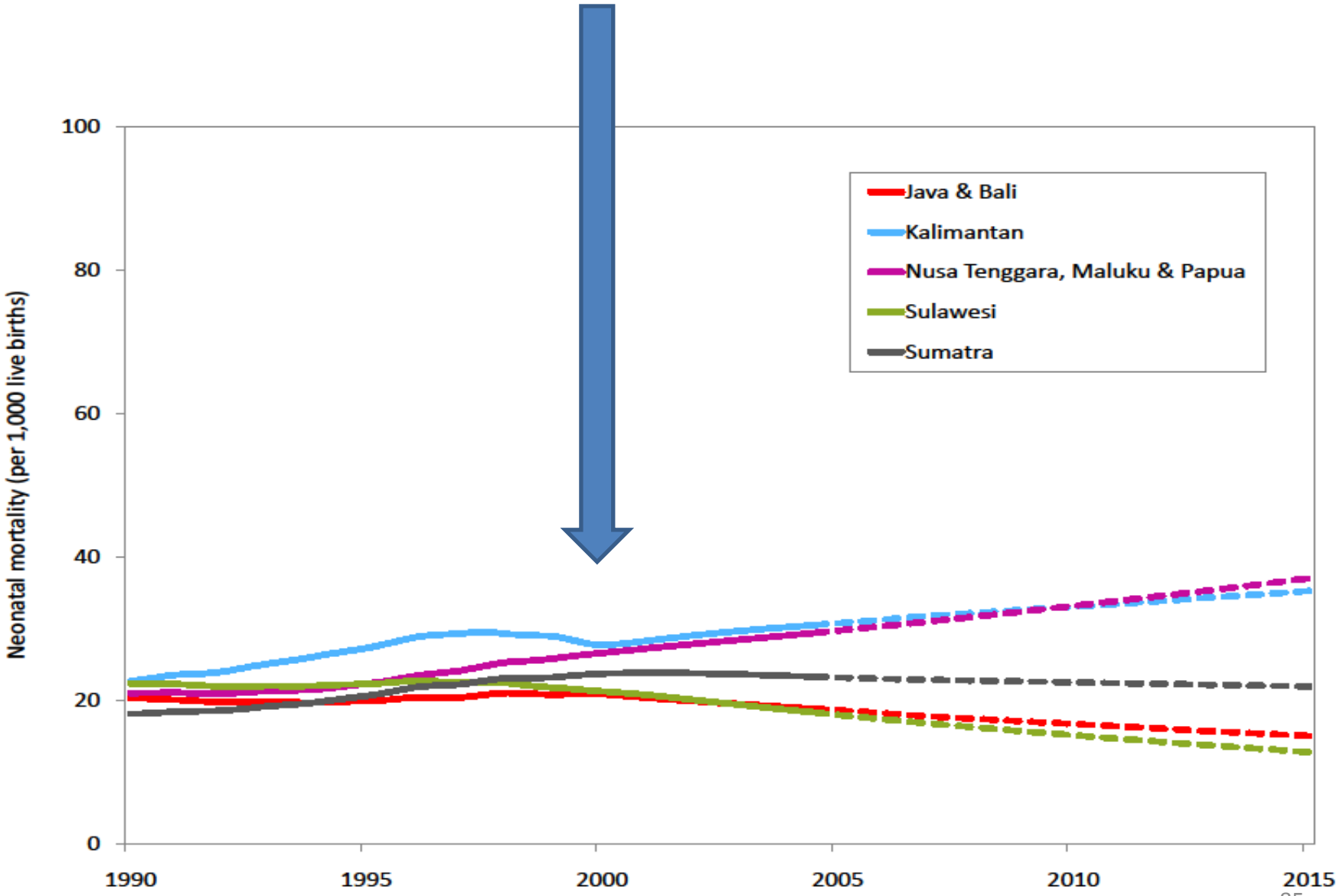
- Regional inequalities in access to services have not improved over time.
- Comparison of trends in inequalities with the distribution of health service infrastructure across Indonesia, suggests that physical barriers to access may underlie the regional inequalities.
- Shortages in inputs such as medical specialist and trained nurses.

Discussion:

Part 6.

- Decentralization and Centralization

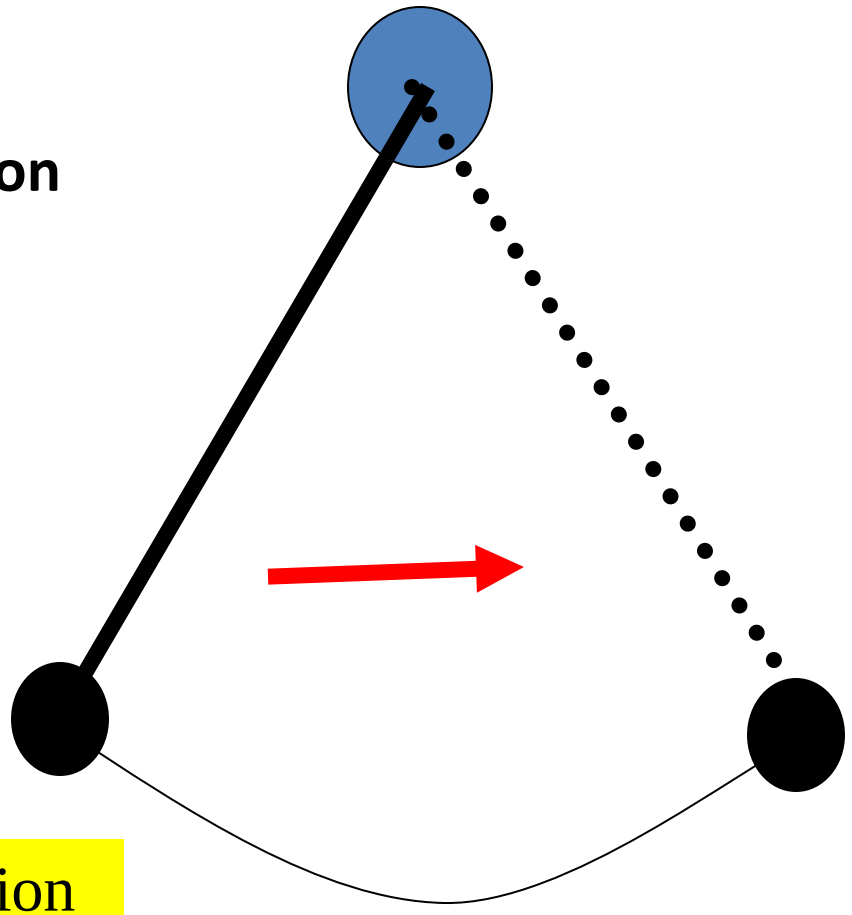
- 2000, was the beginning of decentralization



Source: Universty of Queensland, Balitbang Kemenkes, UGM

Decentralization Pendulum:

swinged to decentralisation far-end point in 2000



Law 22/99

centralization

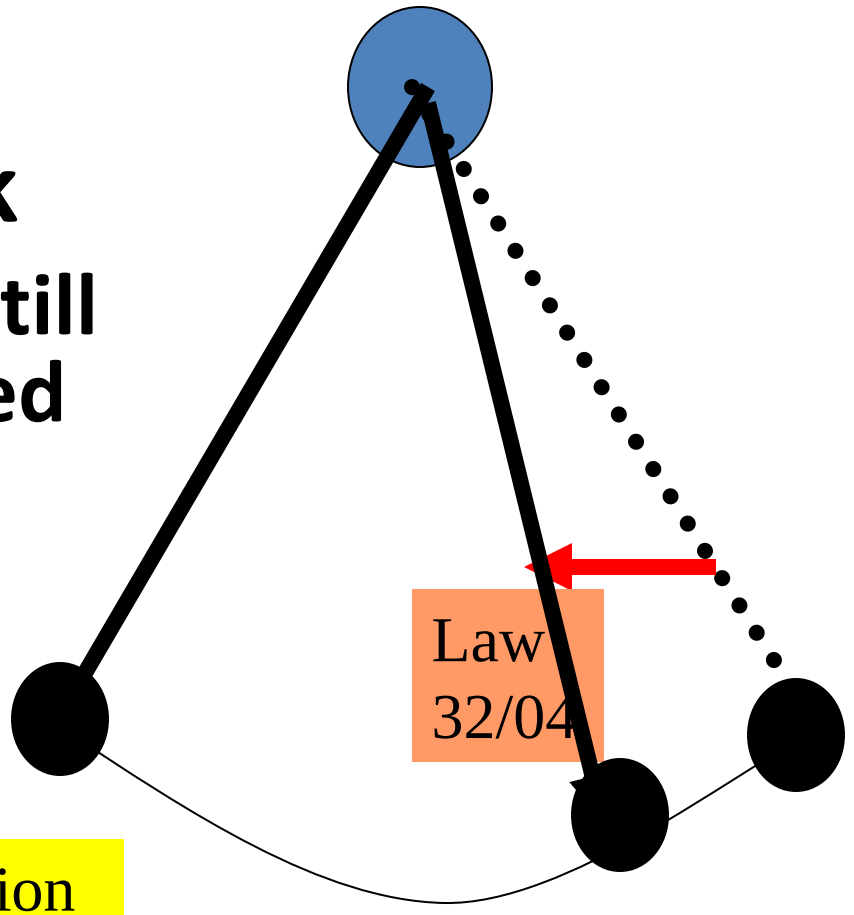
De-centralization

Decentralisation

Pendulum:

swinged back

(but, health is still a decentralised sector)



2000- 2007 Reflection

Reflection 1

The Big Bang Political Process in 1999

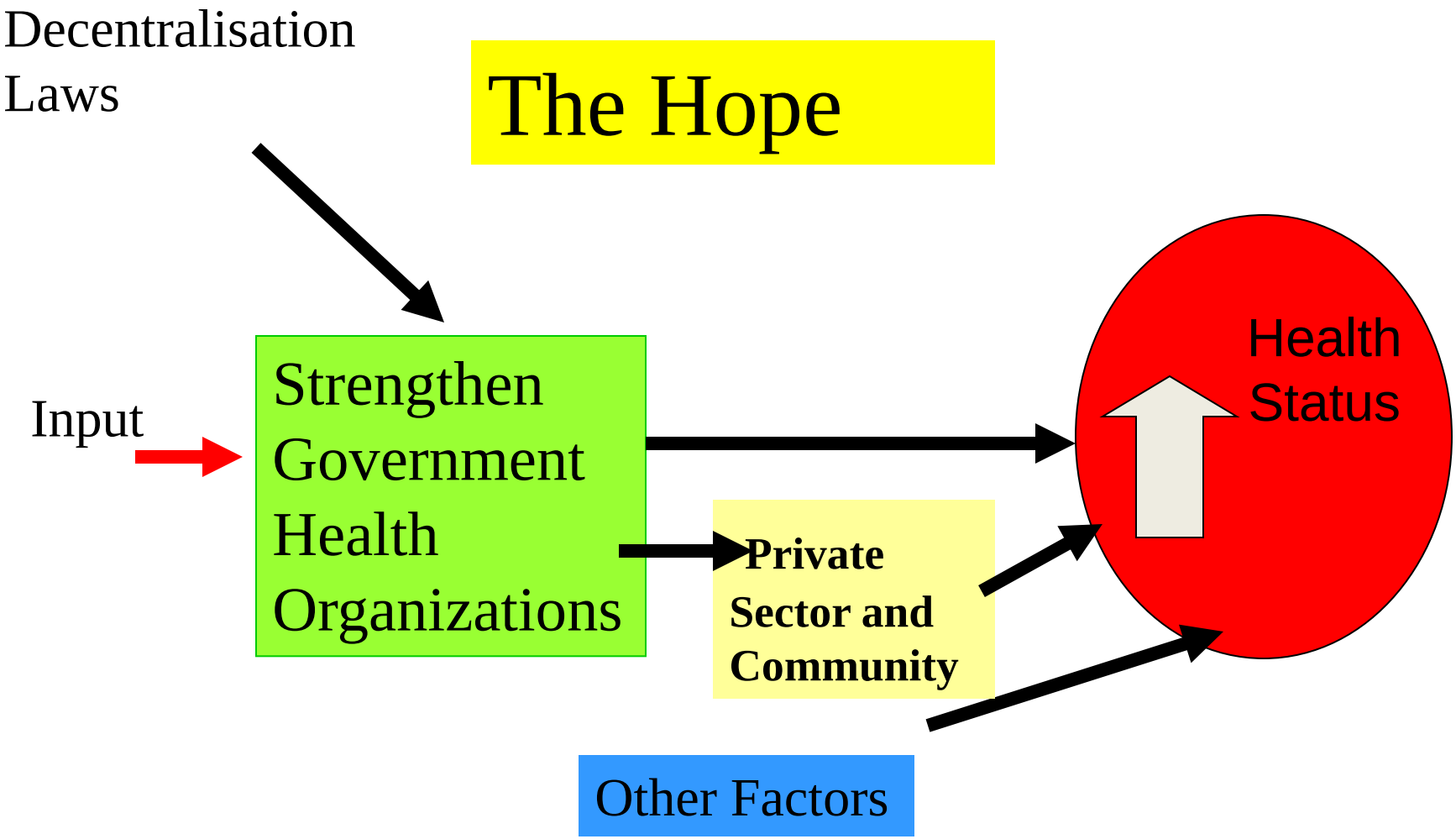
- President Habibie and parliament's political decision for preventing Indonesian break up
- Radical change at provincial and district level: A merger between Health Office at local government and Branch of MoH
- Sudden transfer of health finance

- Central Ministry of Health remains in the same organizational structure and function

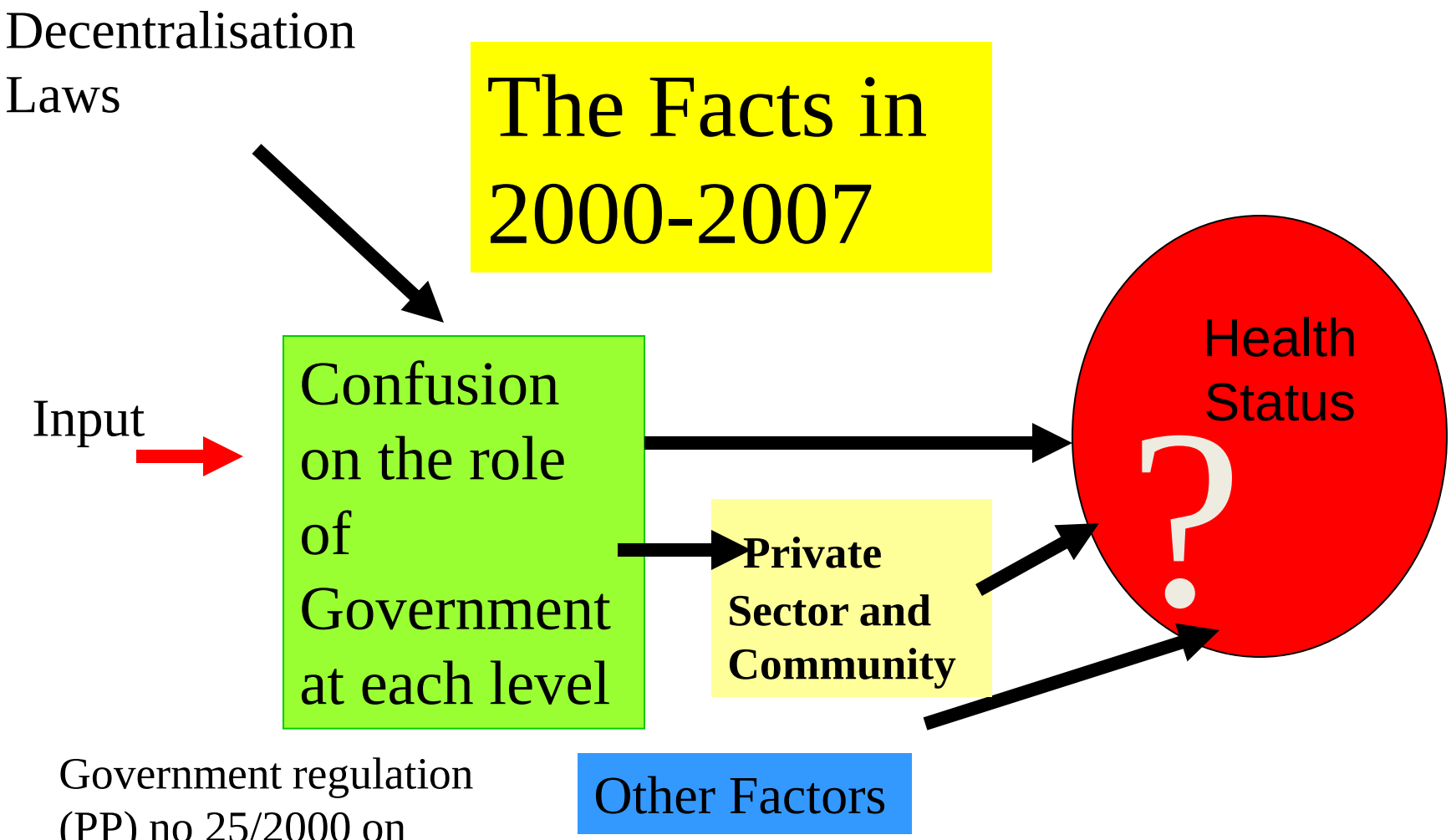
Health decentralisation policy in Indonesia

- Induced by political pressure
- Technically health sector was not ready
- Not a Ministry of Health initiative
- Local government capacity for managing health was low

Reflection 2



Reflection 2



Government regulation (PP) no 25/2000 on authority distribution was confusing one

Ineffective GR 25/2000

- In such unprepared situation the negative impacts of decentralisation emerged as experienced by various countries

- the failure of the system,
- lack of coordination,
- inadequate resources,
- poor career path of human resources (HR), and
- excessive political influence.

The Regulation No.25/2000 on the transfer of government level authority is not effective

Government Regulation 25/2000

- Was written just one year after the Law No 22 stipulated in 1999
- Based on political euphoria of decentralization
- Undermining the role of provincial government
- Lack technical implementation

Government Finance problems

Complexity of channelling mechanism

- Relying too much on deconcentration fund (againts the Law no 33/2004)
- Limited scope of DAK budget

- Health Finance from central government had problem in its allocation and absorption
- Late disburstment (around July, fiscal year starts in January)
- Low absorption

2000-2007: The era of confusion and "strange" situation

- Change without significant change
- Change in the Laws but no significant change in the technical process and the improvement of health status indicators.

Indonesian health sector is a decentralised sector but experiencing:

- a more "centralised" financing system (06-07).
- Not coordinated change.

Conclusion:

The policy implementation is poor

What Next?

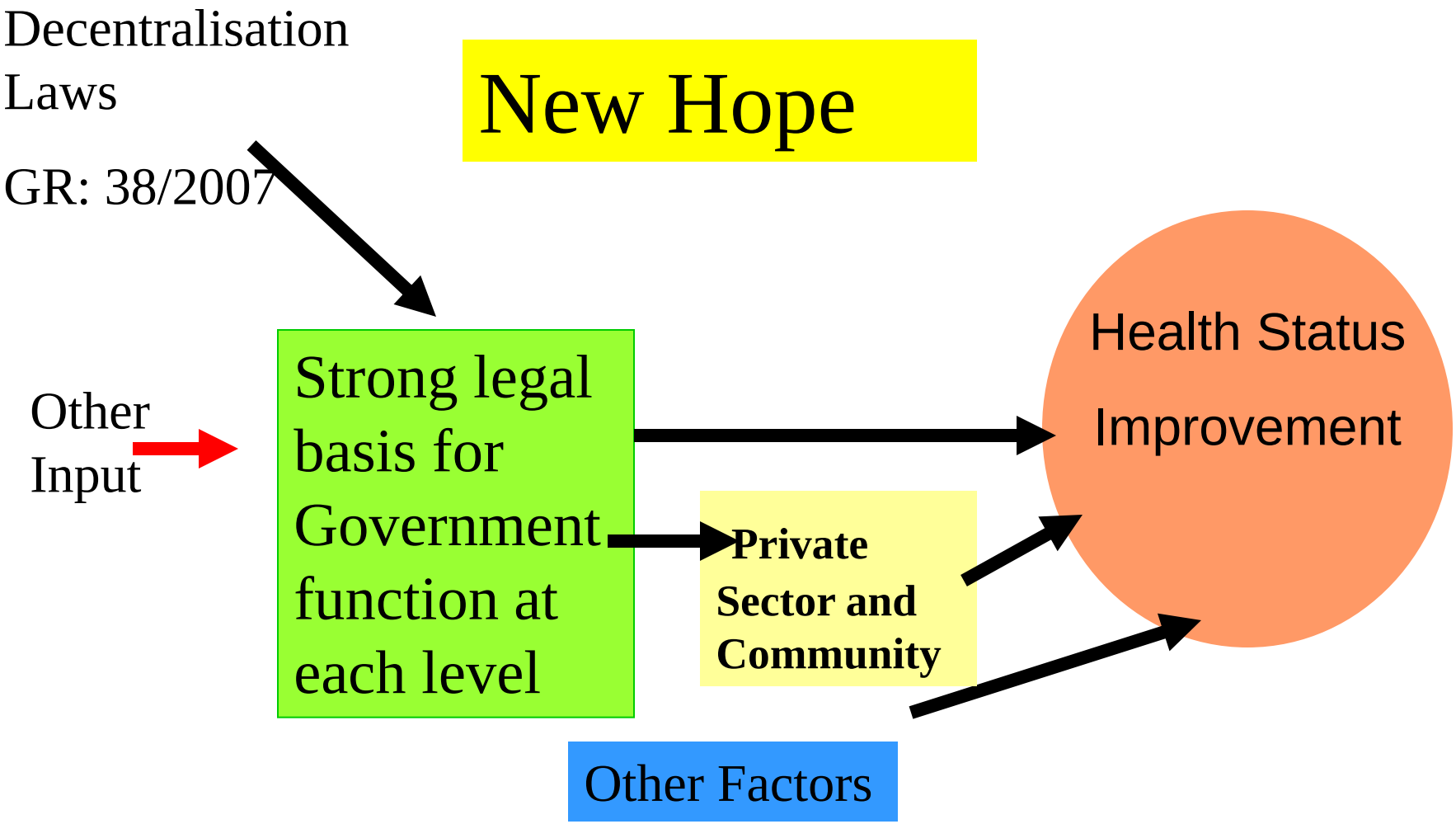
- Pesimistic? Decentralisation seems to be in the dark tunnel without no end.

- Optimistic?

A light in the dark tunnel:

- The Stipulation of Government Regulation no 38/2007, following Act no 32/2004
- A three year of making process, for replacing the confusing GR no 25/2000

- the new hope for a clear transfer of authority from central, provincial to district government


Decentralisation Laws
GR: 38/2007
New Hope
Other Input
Strong legal basis for Government function at each level
Private Sector and Community
Other Factors
Health Status Improvement

2000-2007: Period of transition

- **2008** → **is the new beginning of decentralisation in health**

Is that easy?

- The future is not certain still.

Depends

- on how the different views on decentralisation policy among various stakeholders can be resolved
- Leadership of central and local government.

Discussion:

Summary

- Health sector is a complex system.
- A physicians should understand that they live and work in a comprehensive and dynamic health system.
- Therefore, it is important to understand the current trend of health system that becomes more decentralized, having more managed carefeature funded by insurance or social security system, competitive and has remote areas health service.
- Health System has many values such as equity and efficiency which is still problematic.
- The understanding of health indicators of health system outcome such as health status, community satisfaction, and risk protection is important.

References

- Departemen Kesehatan RI. (2009). *Sistem Kesehatan Nasional: Bentuk dan cara penyelenggaraan pembangunan kesehatan*. Jakarta.
- Savigny, D., & Adam, T. (2009). Systems thinking for health systems strengthening/edited by Don de Savigny and Taghreed Adam. WHO Publication
- Trisnantoro, L. (2009). *Decentralization policy in health care in Indonesia: 2002-2007*. Yogyakarta: Gadjah Mada University Press.

- earning resources: www.kebijakankesehatanindonesia.net. Students are requested to learn this website for more understanding of health system and policy.

Question

1. What is System and what is Systemic thinking. Describe your answer using real example in day to day activities.
2. What is Health System? Describe using Indonesian or Malaysian example
3. What are the health system elements?
4. Health system functions: What are health system fuctions. How they link each other?
5. What are the meaning of health system objectives
6. What is the meaning of Access, Socioeconomic inequity, and Geographic inequity. How the relation among them?