SCIH Swiss Centre for International Health

Improving Health Systems Worldwide

Financing and payment of health services

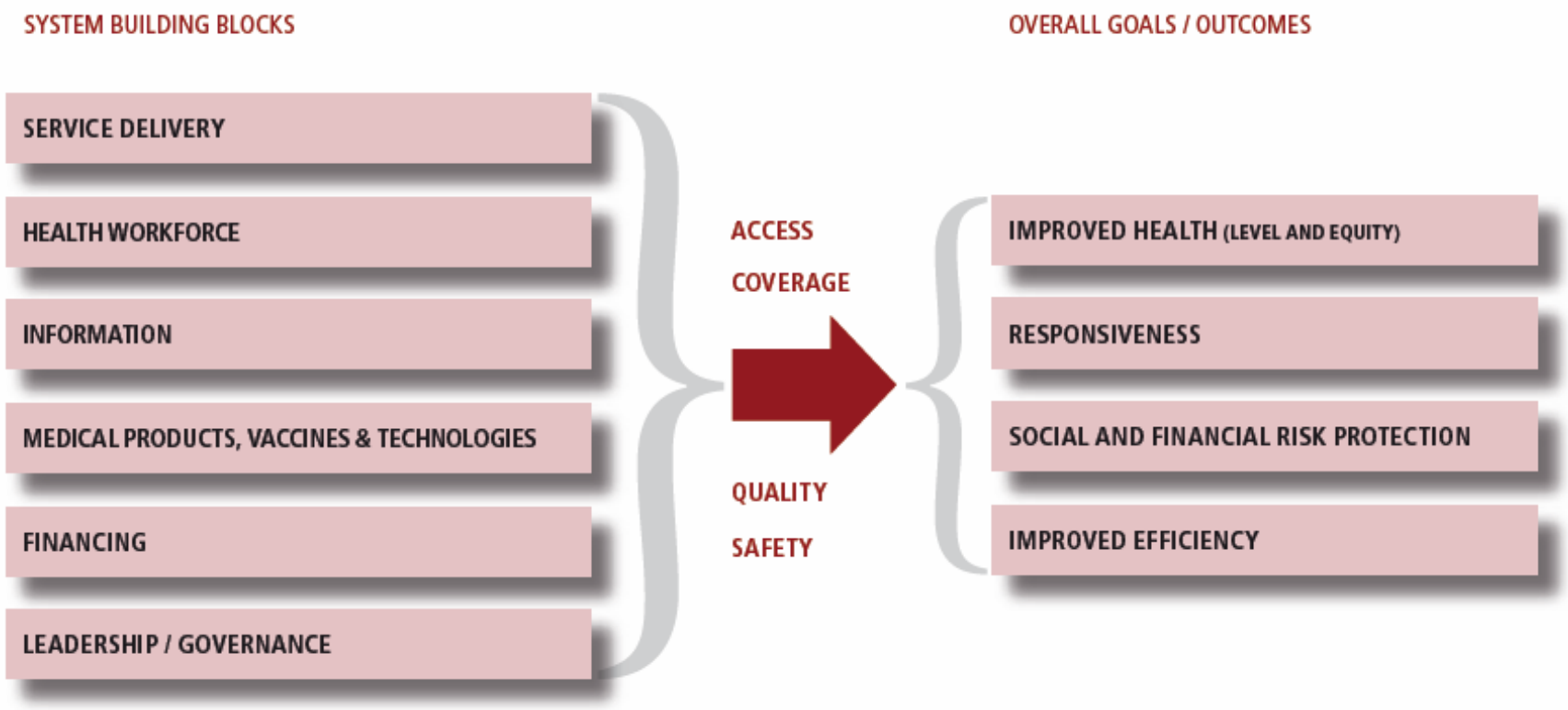
Masters Program Infectious Biology and Epidemiology

Health systems (Vorlesung 18423-01)

Kaspar Wyss, 10 December 2009

A department of the Swiss Tropical Institute

Relations between functions and objectives of a health system



Source: WHO, 2007

Dynamic architecture and interconnectedness of the health system building blocks

Source: WHO, 2009

Objectives of the session

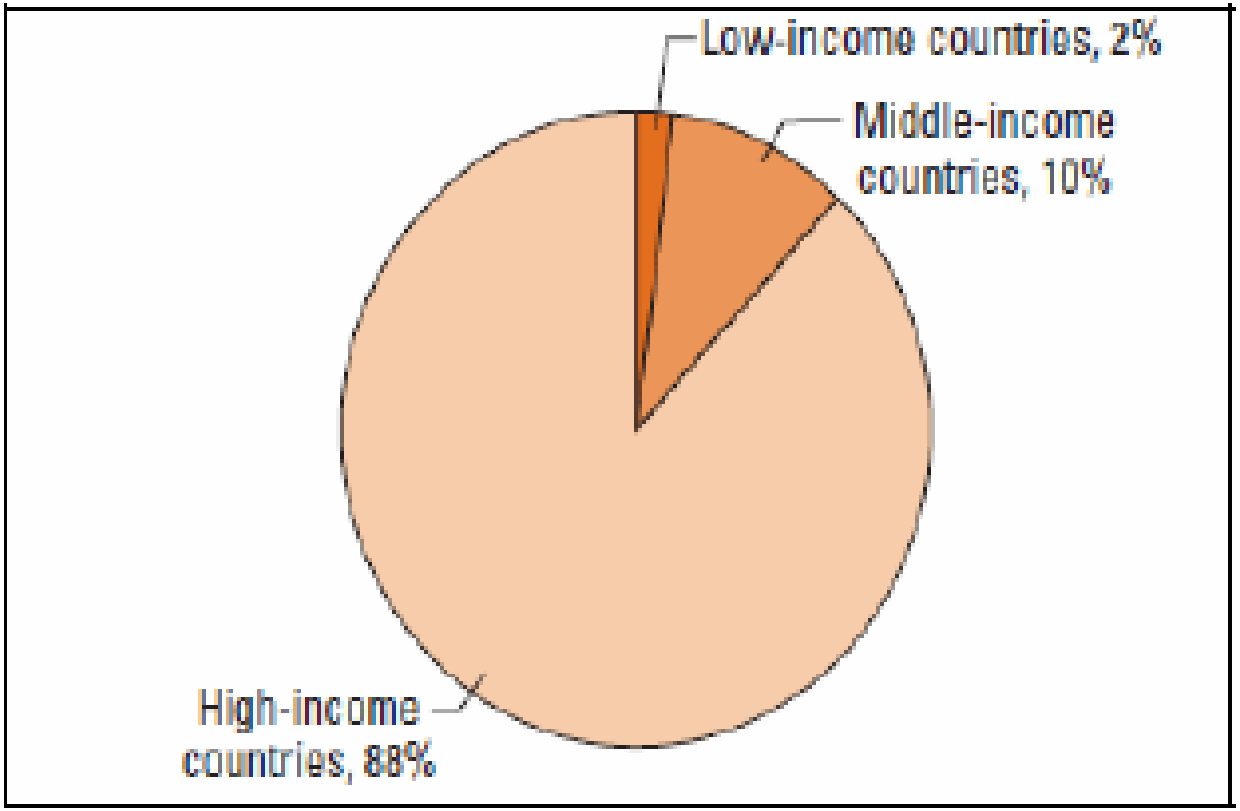
- Overview on principal financing and payment mechanisms of health services at district level
- Establishment of critical analysis of the different financing and payment mechanisms of health services at district level and their effects on equity, efficiency and the sustainability of the system
- Review and analysis of available options for improving financing of health services at district level

Structure of the session

- Overview on financing of health services
- Presentation on different financing mechanisms (around 45 minutes)
- Group work and presentation of group work
- Presentation on payments mechanisms at district level
- Conclusions

Health spending in developing countries

2004: US$4.1 Trillion on Health



Source: Baker 2009

Why is financing important?

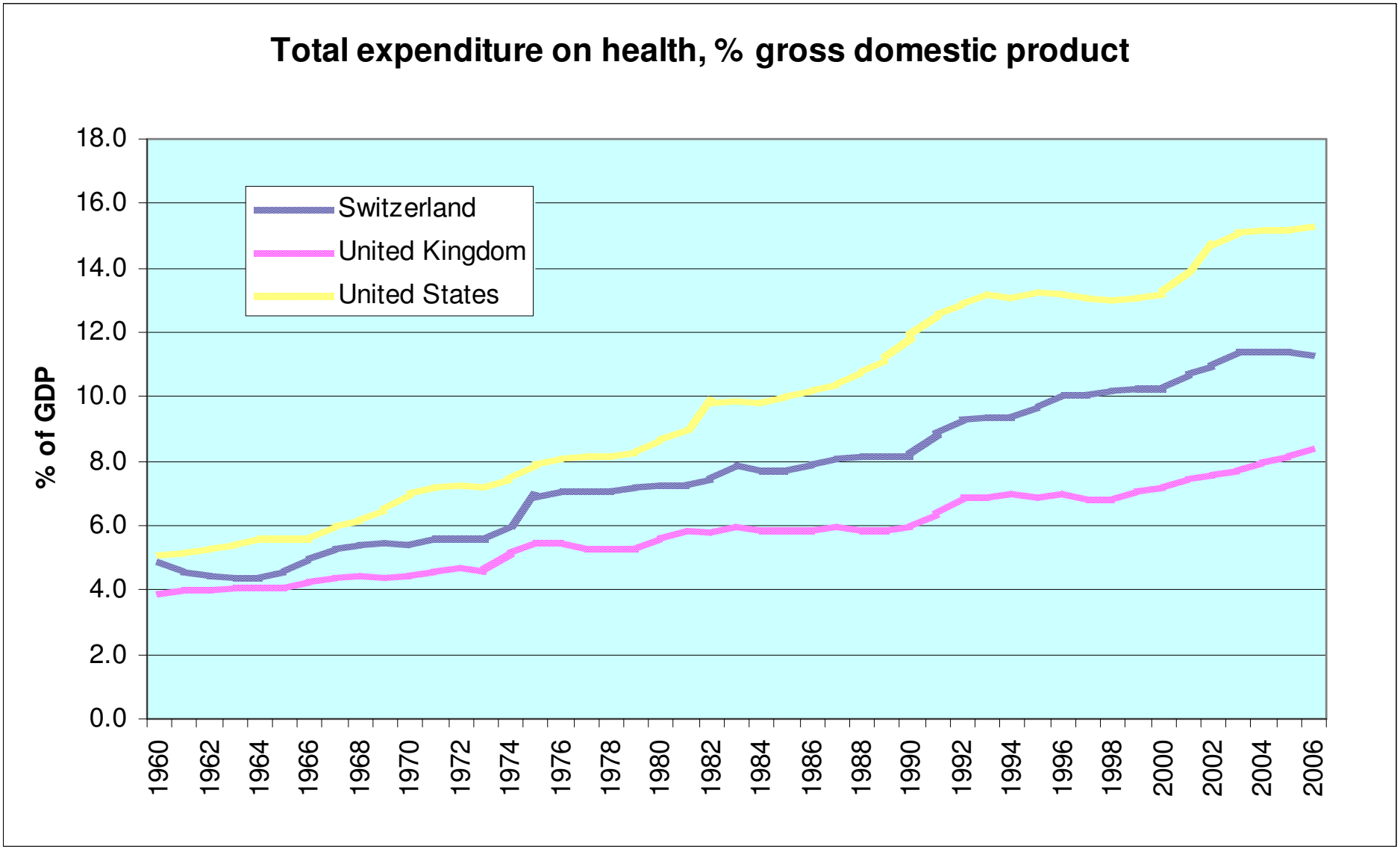
- How the health system is financed is important because it determines
  - How many resources will be devoted to health care
  - Who controls fund distribution
  - Intersectoral collaboration
  - The incentives for those in the system
    - Managers & administrators
    - Providers
    - Patients
  - What health services are provided
  - Who receives financial protection

Objectives of financing (1)

- The overall aim of the financing mechanism is, ideally, to provide the finances necessary to meet peoples needs for health care. But...
  - Health needs are potentially infinite
  - There are (very) limited resources in society

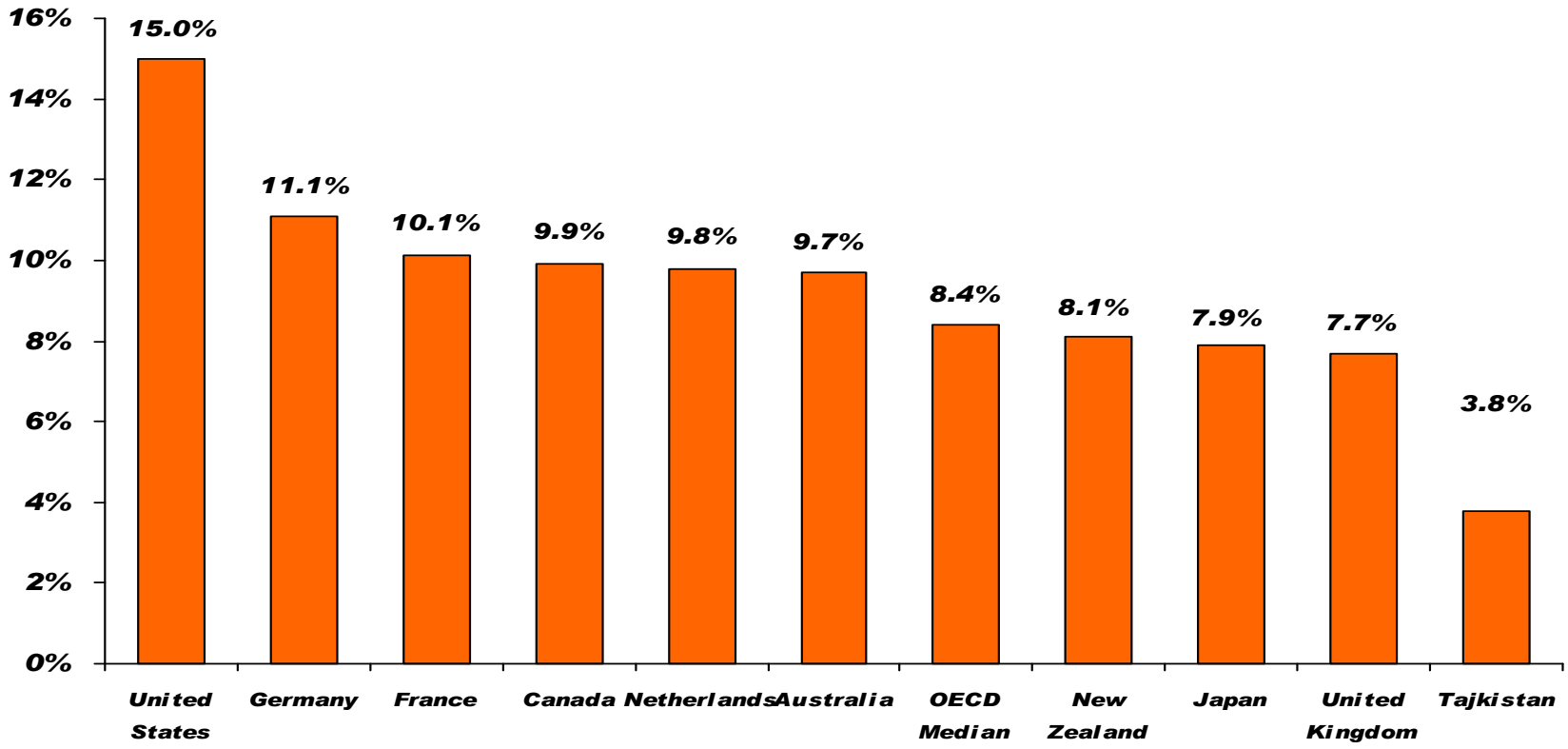
Health financing reforms

- Quest for greater:
  - Greater efficiency
    - Technical efficiency (e.g. standard treatement guidelines, pharmaceutical policy for generics, reduce length of stay in hospitals and over-use of services)
    - Allocative efficiency (e.g shift to ambulatory care, task shifting)
    - Administrative efficiency
  - Equity
  - Quality of services
  - Financial soundness (cost containment, sustainability)
  - Satisfaction



Source: OECD, http://www.oecd.org/document/16/0,3343,en_2649_34631_2085200_1_1_1_1,00.html

Health care expenditure and financing statistics: 2004

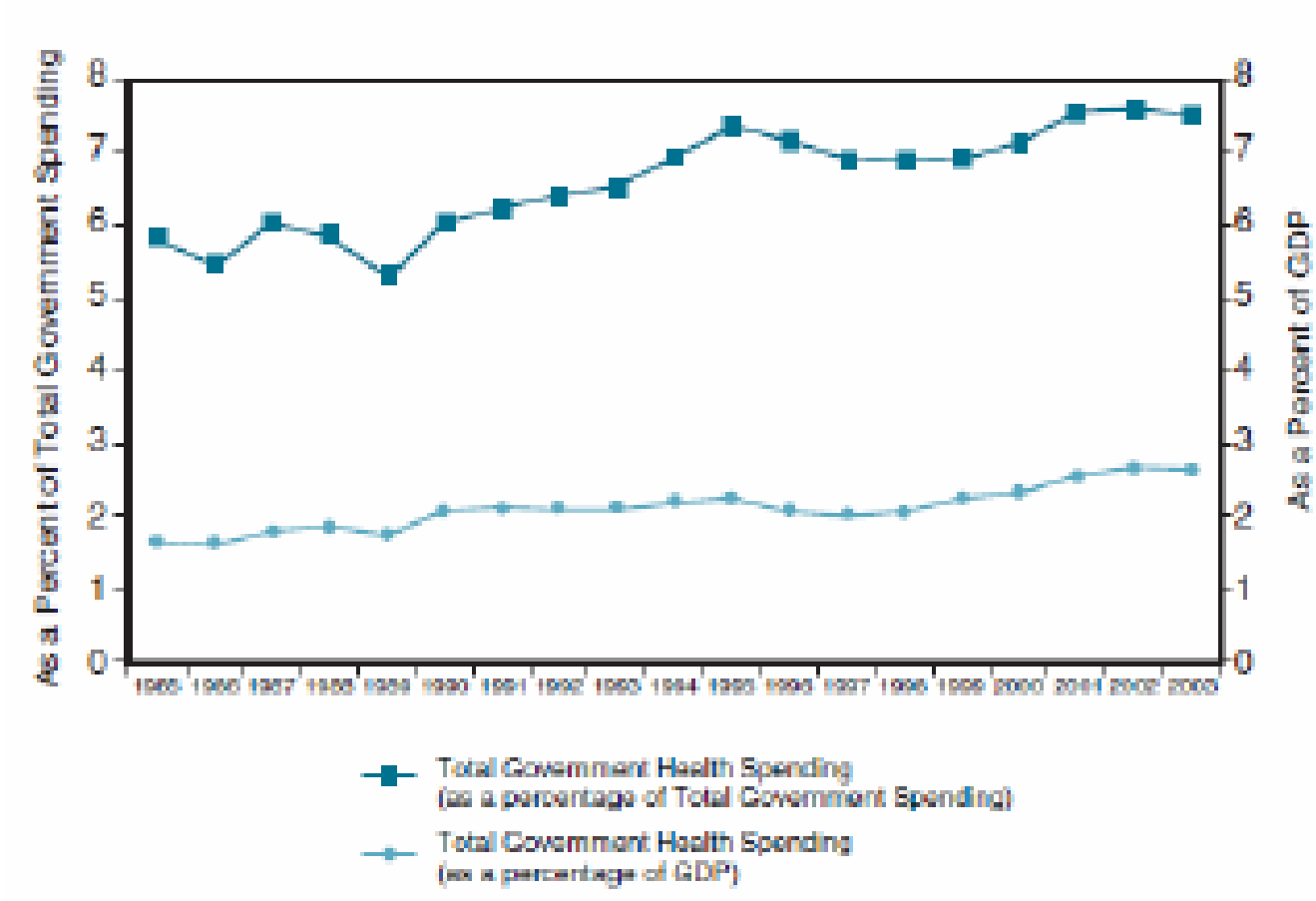


Expenditure

- By level of health system
  - Central, regional, district
  - Primary, secondary; curative, preventive, promotive
  - Inpatient, outpatient
- By health provider type
  - Government, non-government for profit, not-for-profit
  - By patient grouping
- Disease
- Income
- By resource type
  - Personnel, medications, equipment, materials, etc.

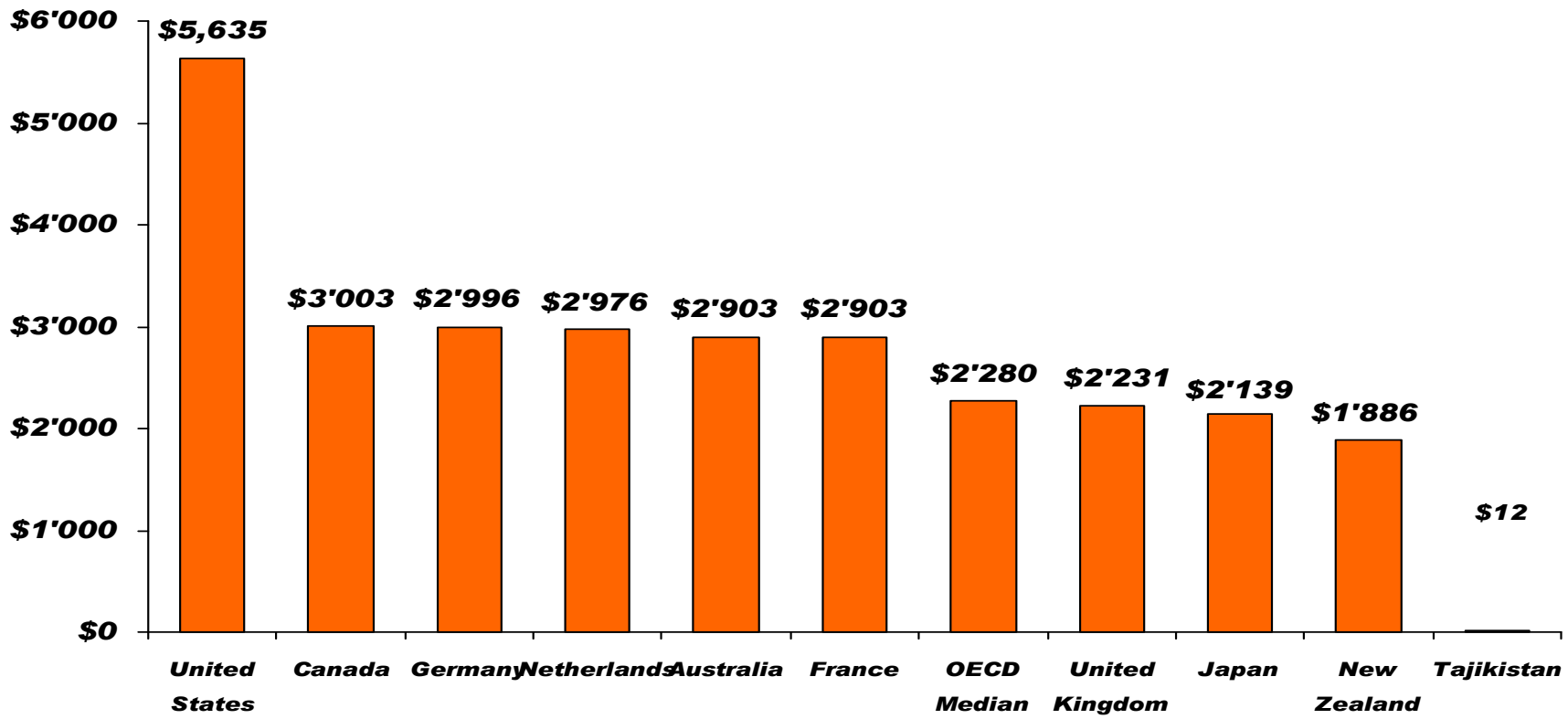
SCIH Swiss Centre for International Health

Trends in Government spending in low-income countries 1985-2003



Source: Goldsborough 2007

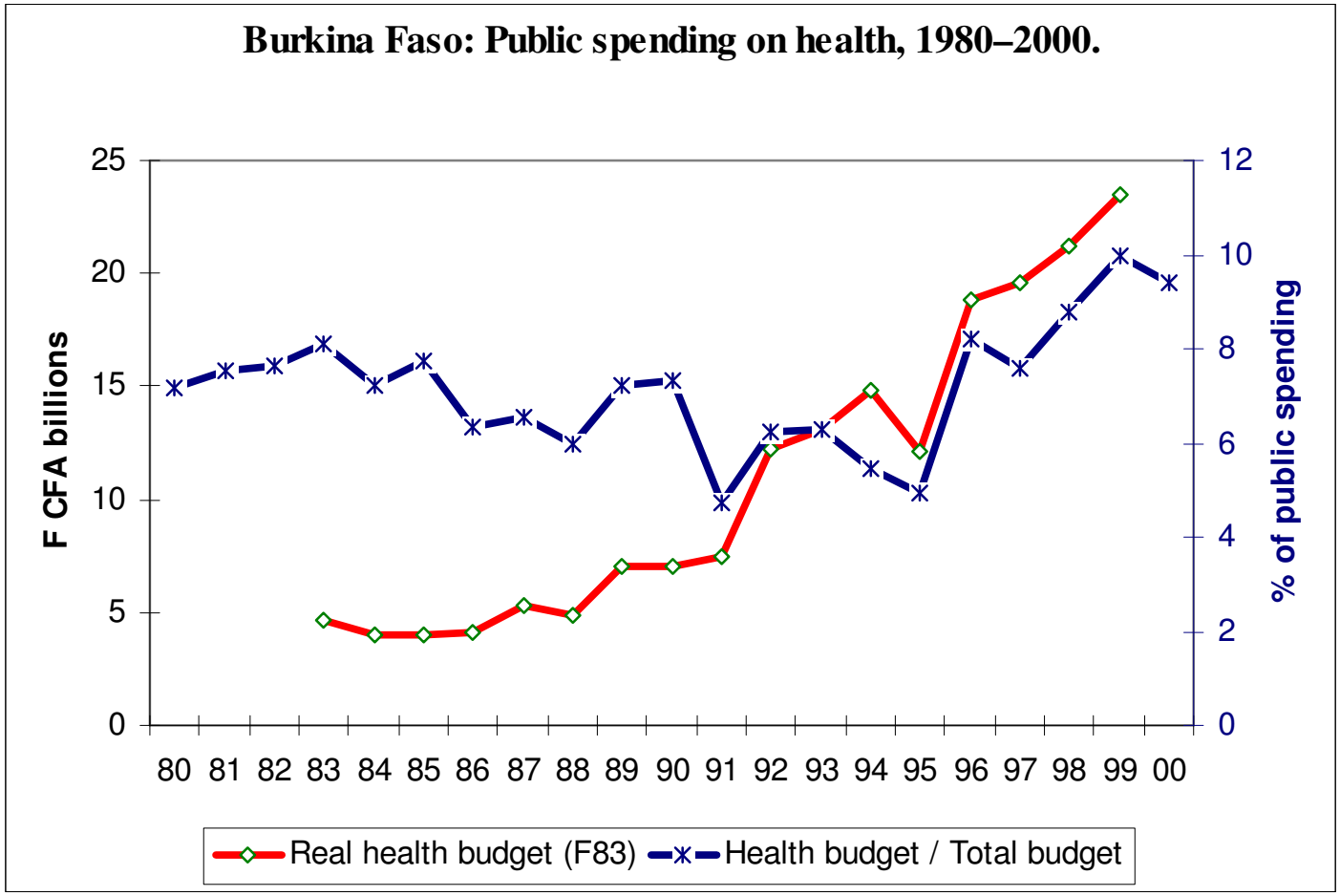
Health care expenditure per capita: 2004



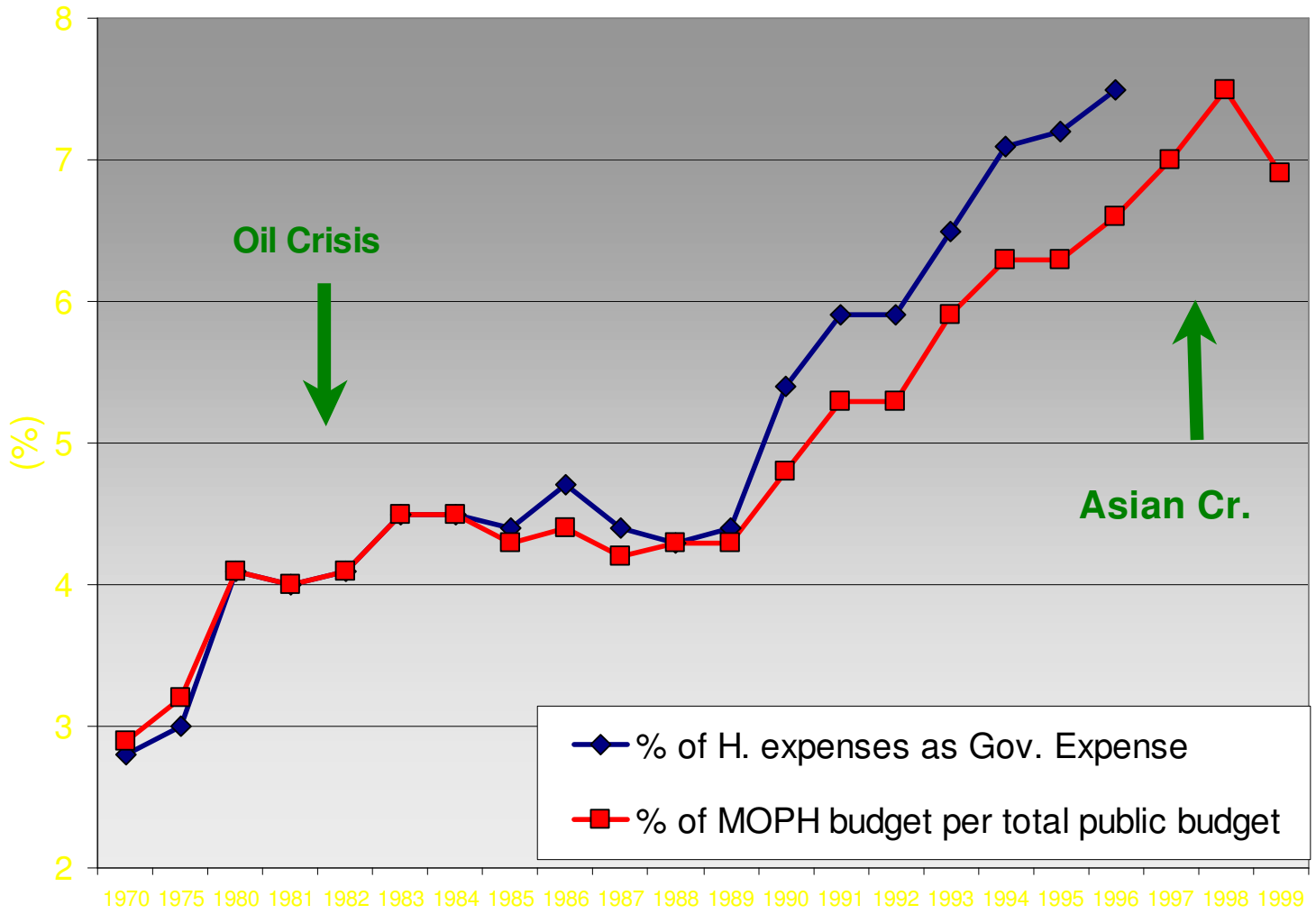
Expenditure

- By level of health system
  - Central, regional, district
  - Primary, secondary; curative, preventive, promotive
  - Inpatient, outpatient
- By health provider type
  - Government, non-government for profit, not-for-profit
  - By patient grouping
- Disease
- Income
- By resource type
  - Personnel, medications, equipment, materials, etc.

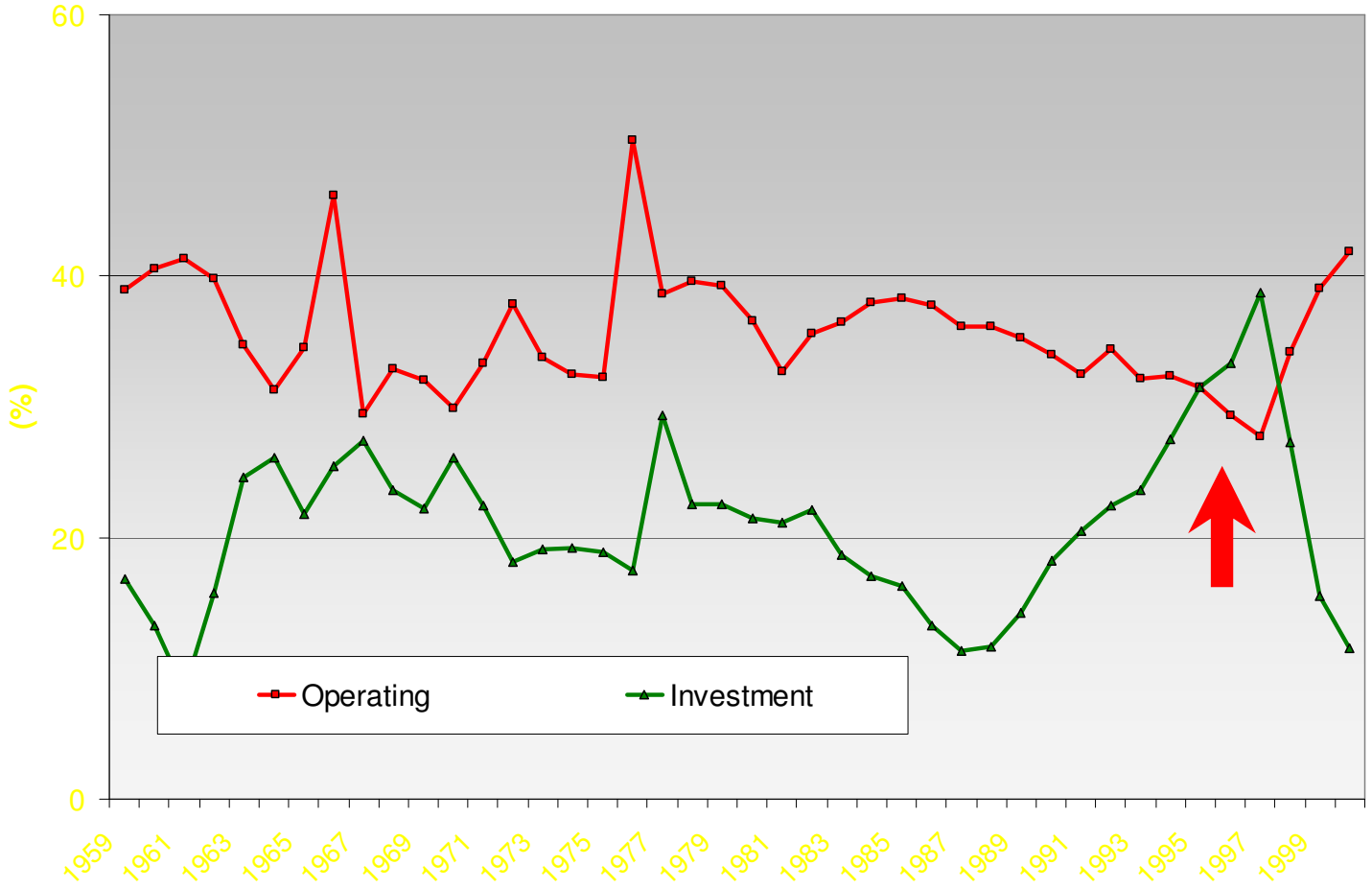
Health care expenditure and financing statistics



Thailand: Govt Health expenditures

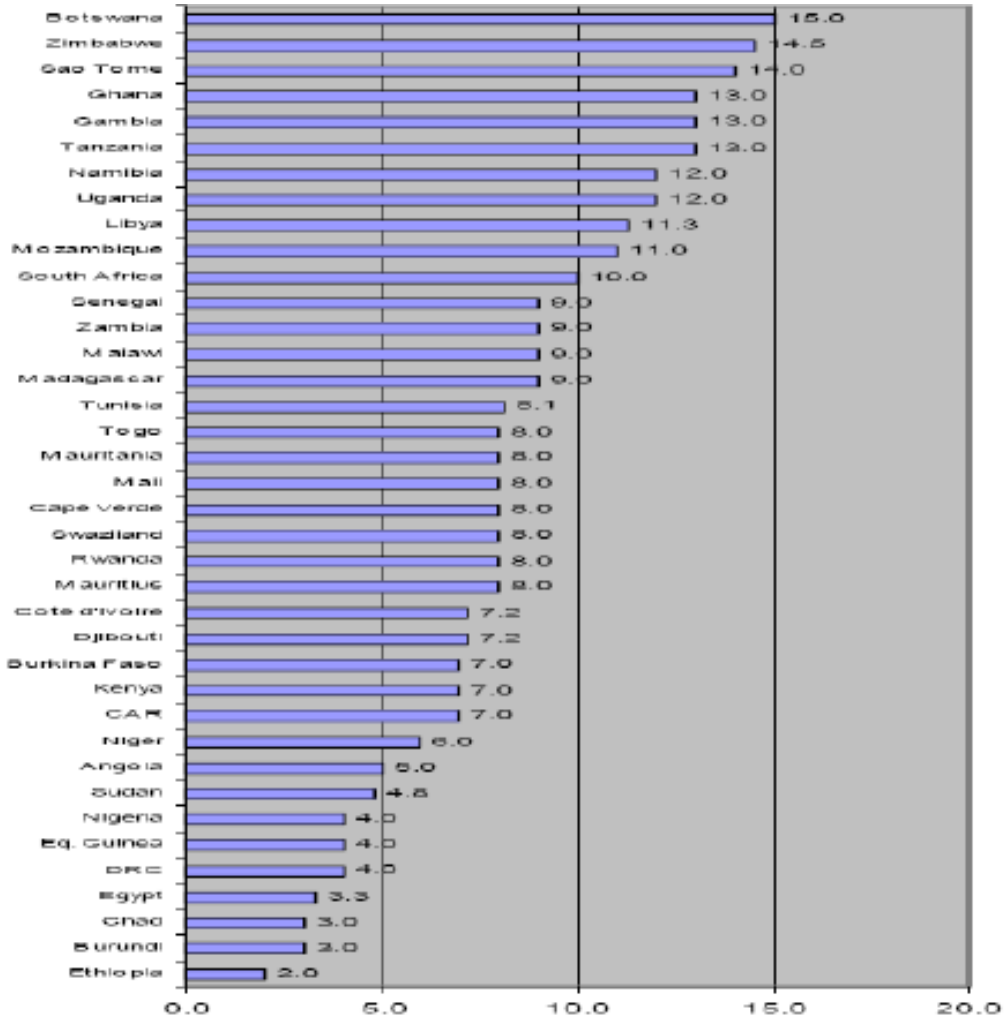


Thailand: Govt Health expenditures: Salaries, Operating and Investment costs



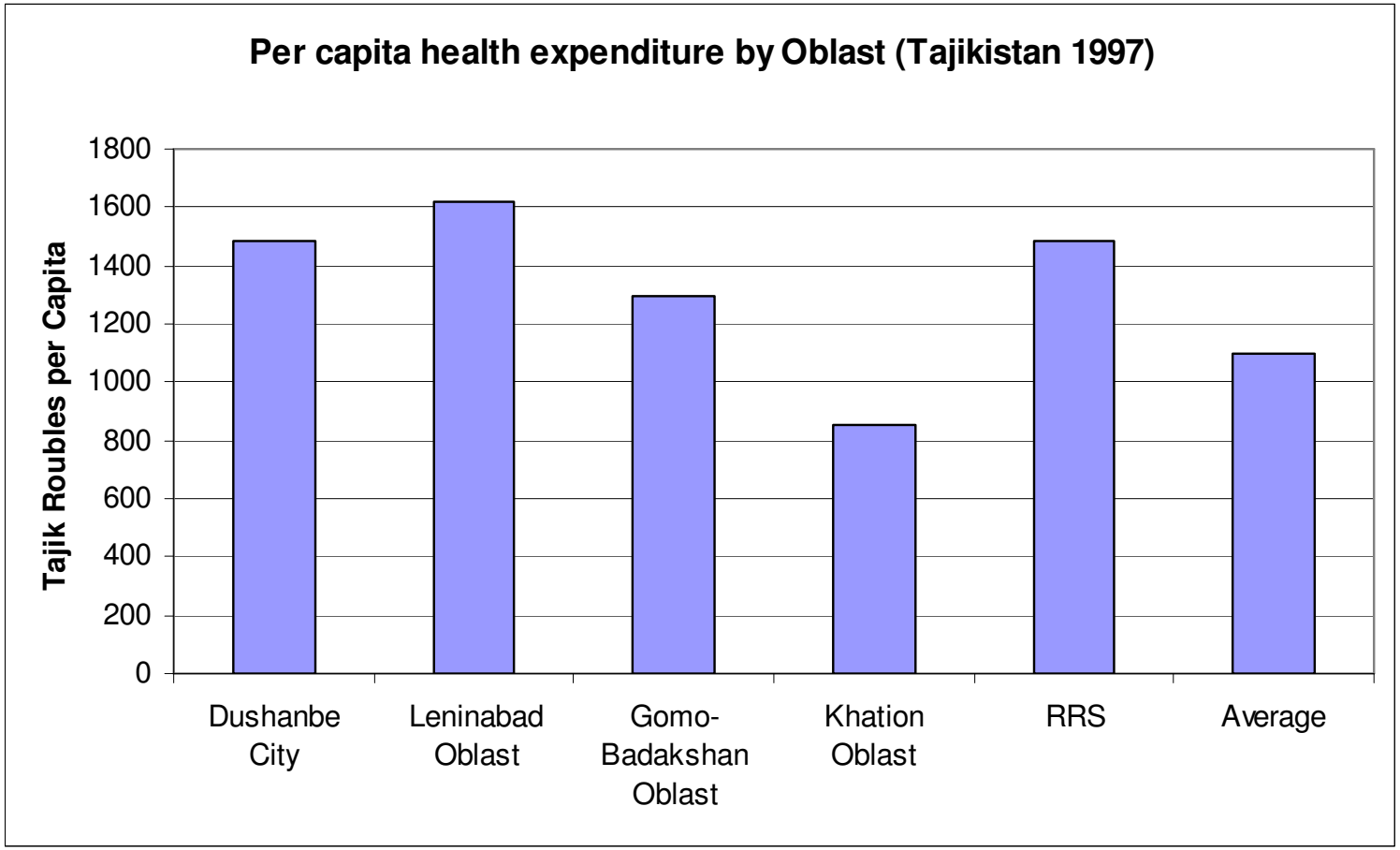
SCIH Swiss Centre for International Health

Percentage of national budgets committed to the health sector

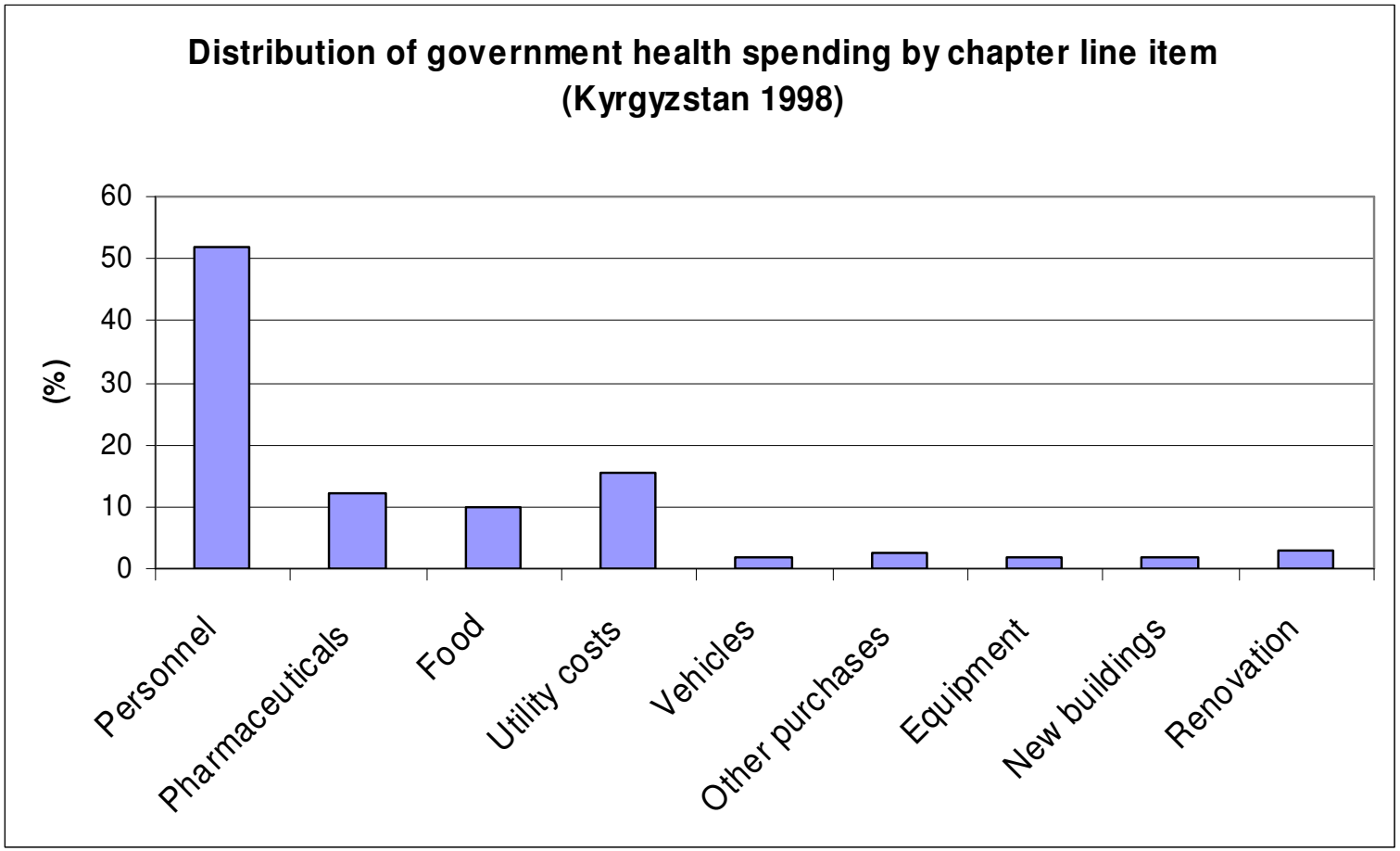


Source: African Union 2005

Health care expenditure and financing statistics



Resource type



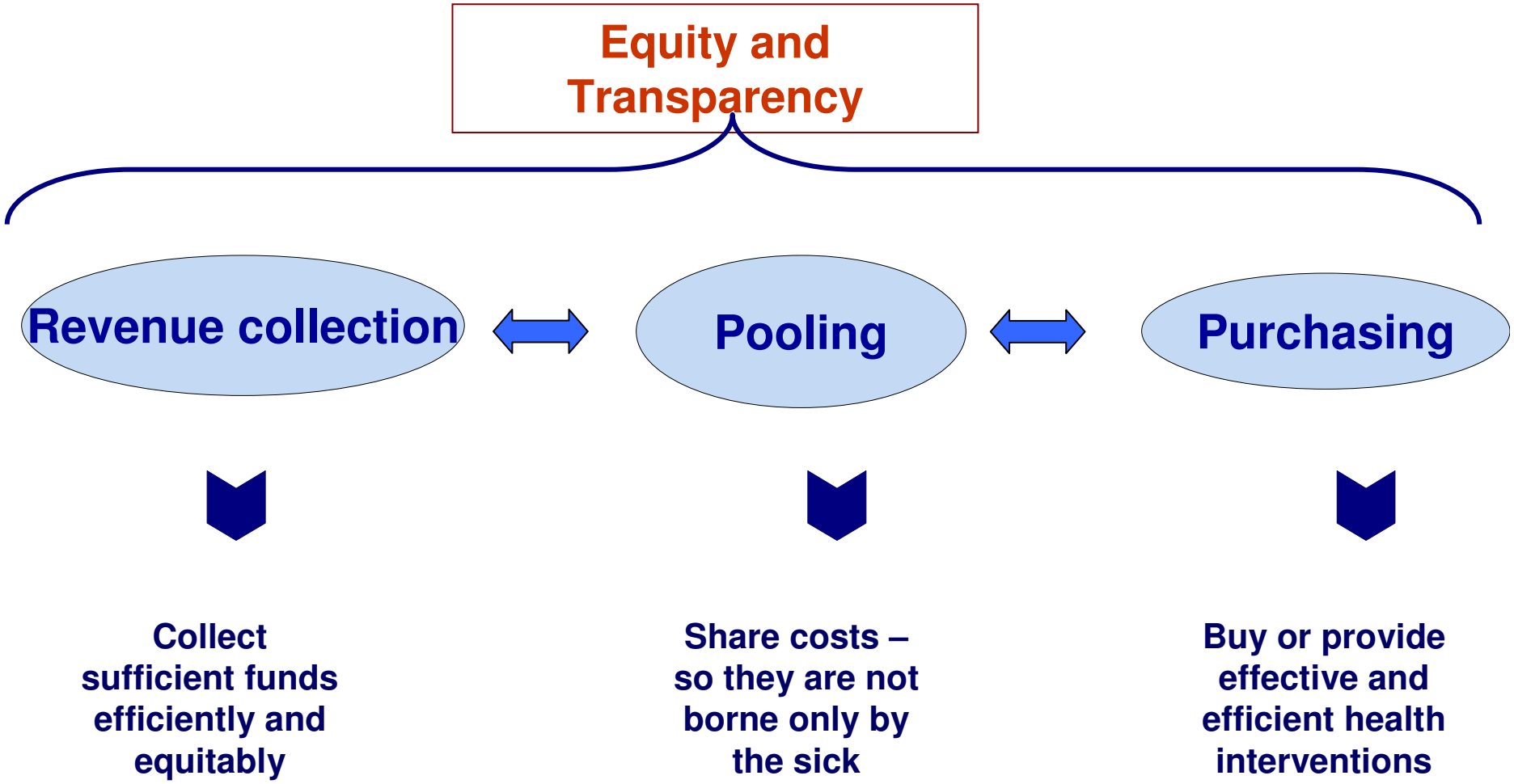
SCIH Swiss Centre for International Health

Improving Health Systems Worldwide

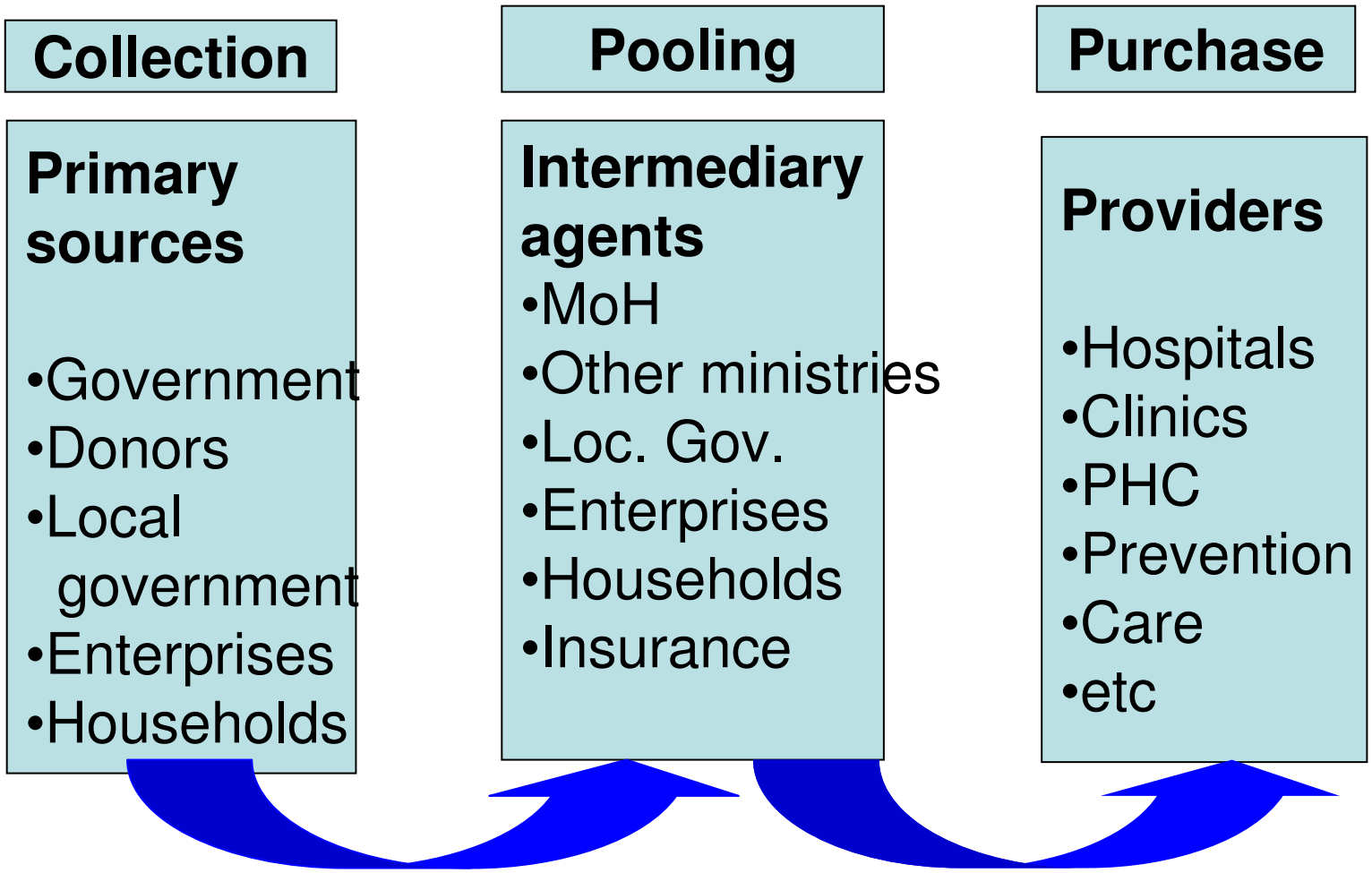
Part I
Financing of district health services

A department of the Swiss Tropical Institute

Health system financing policy levers



Health system financing policy levers



Analysis of financing sources **Analysis of payment modalities**

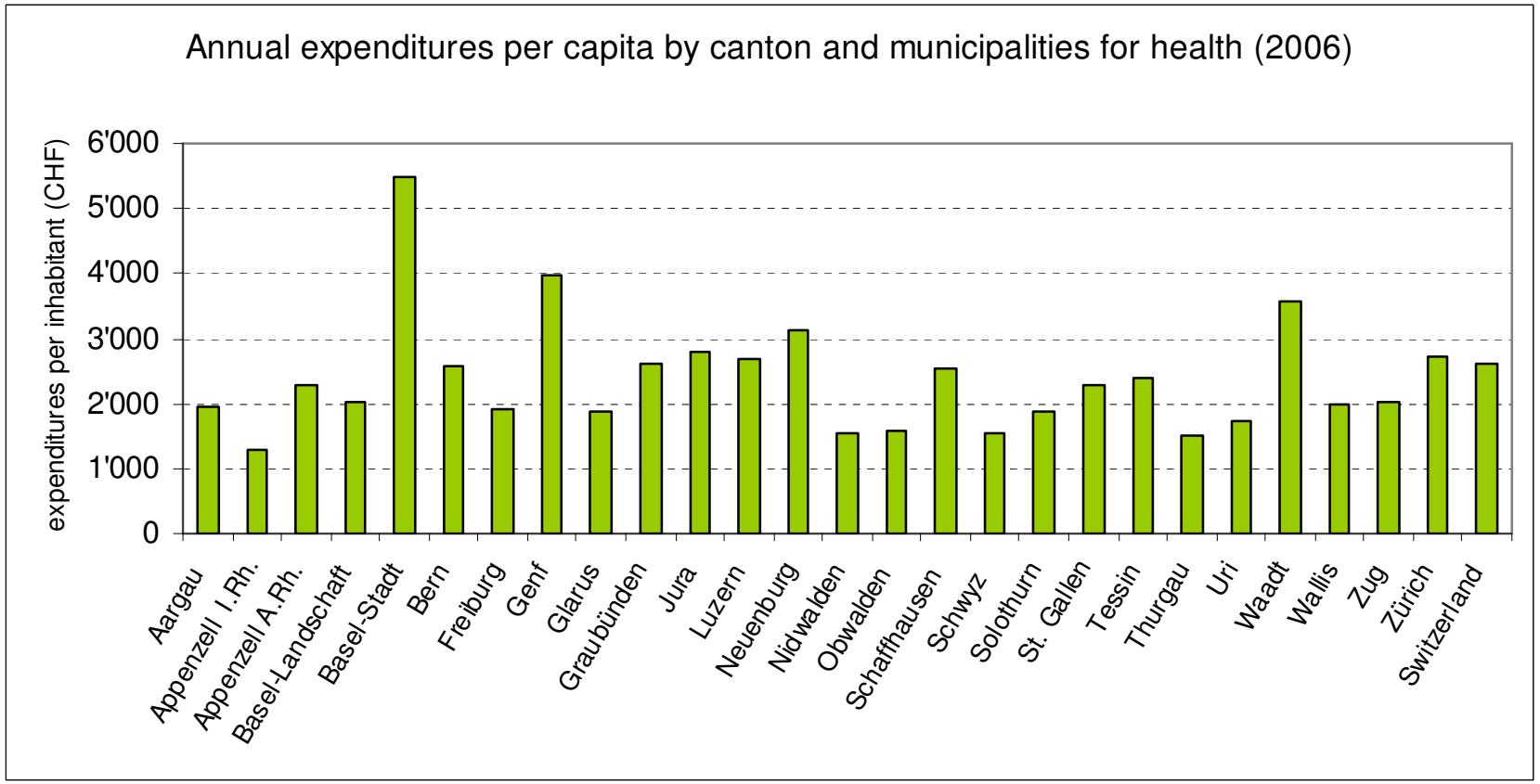
Sources

- Government
  - General taxation (from government revenues)
  - Social insurance (tax on income earners earmarked for health)
  - Credit (i.e. taxation on future government revenues)
- Donations and non-government organisations
- Household
  - Official fee for service (use of public or private sector services)
  - Unofficial fee for service (use of public sector services)
  - Private insurance
  - Community health insurances („mutuelles“)
- Companies
  - Own services
  - Insurance

Government general tax

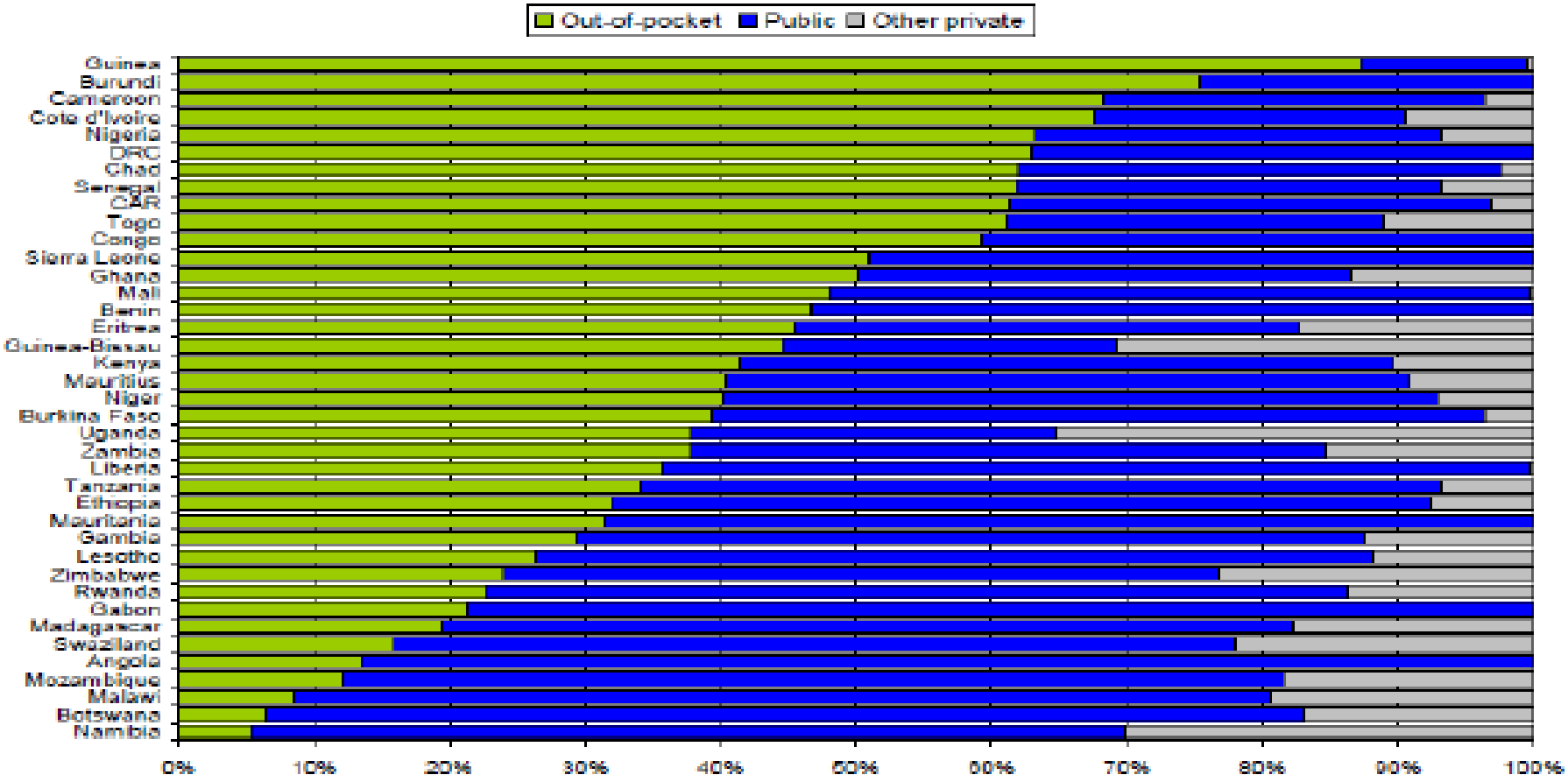
- Characteristics
  - Collected from various tax sources usually by the MoF
  - Usually a set of defined services free to all (unless it is not the dominant mode of financing)
- Pros
  - No additional collection mechanism required
  - Offers stable core support to the health sector
  - Reduced incentives for supplier-induced demand
- Cons
  - Income depends on taxable items and low tax avoidance
  - Variations likely from year to year
  - Incentive system tends to low quality care
  - Rationing devices develop such as waiting lists

Health care expenditure and financing statistics: Switzerland



SCIH Swiss Centre for International Health

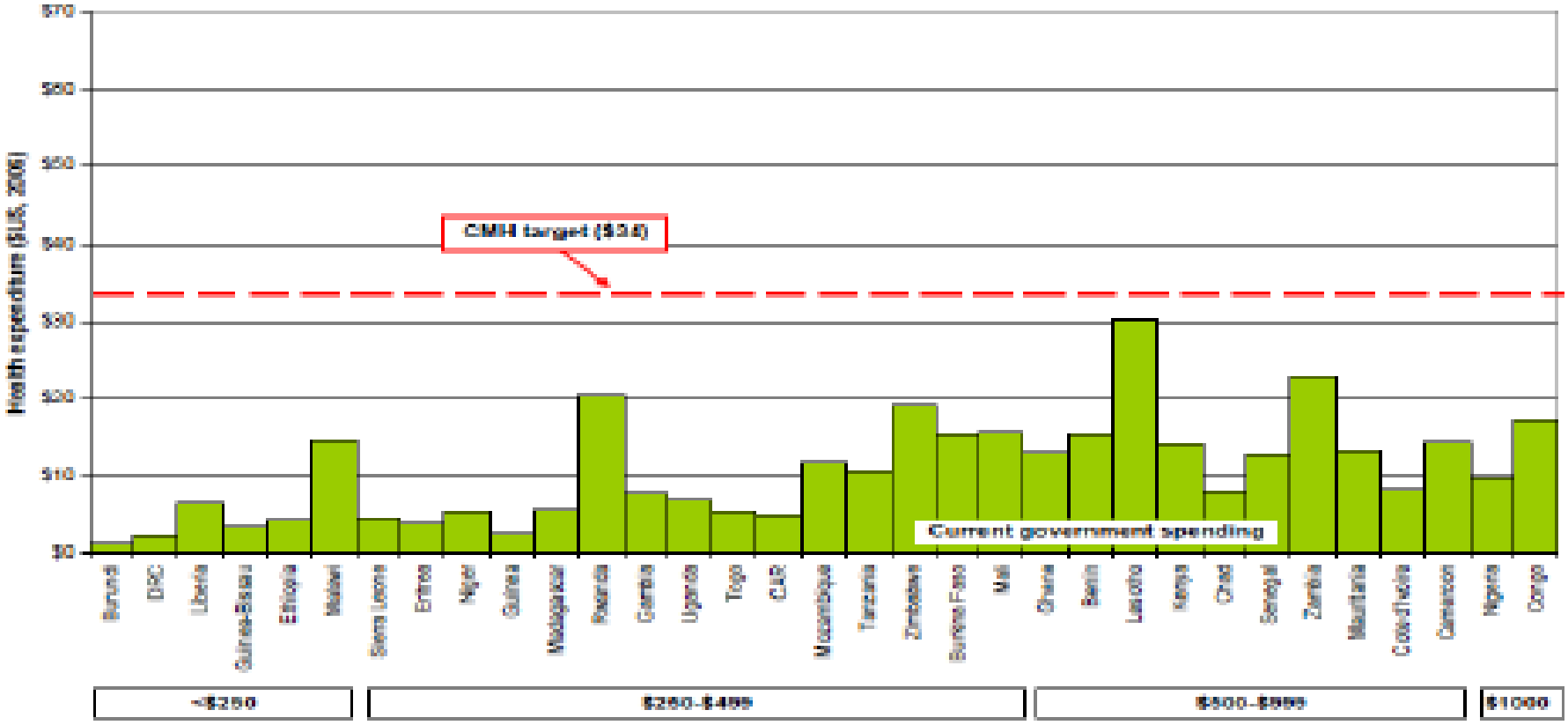
Africa total health spending by source, 2006



Source: USAID 2008

SCIH Swiss Centre for International Health

Africa government health spending per capita per year, 2006



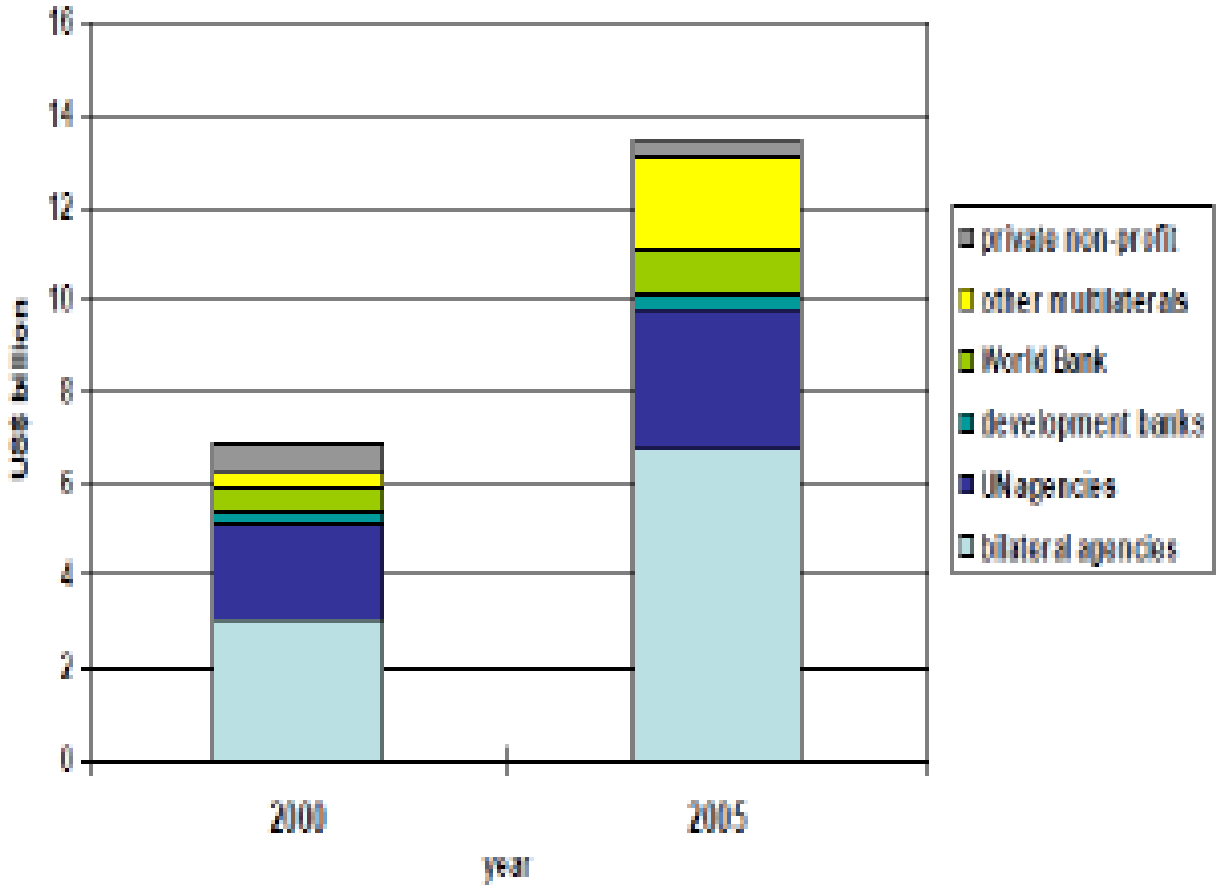
Source: USAID 2008

Government credit

- Characteristics
  - Government borrows against future income
  - In low- and middle income countries usually from World Bank / IDA, or regional ‘Bank‘ -Spending targets infrastructure and equipment
- Pros
  - Makes additional resources to the health sector available - boosts investment in health
- Cons
  - Debts accumulate, made worse by corruption
  - May not be able to attack fundamental health reform issues

SCIH Swiss Centre for International Health

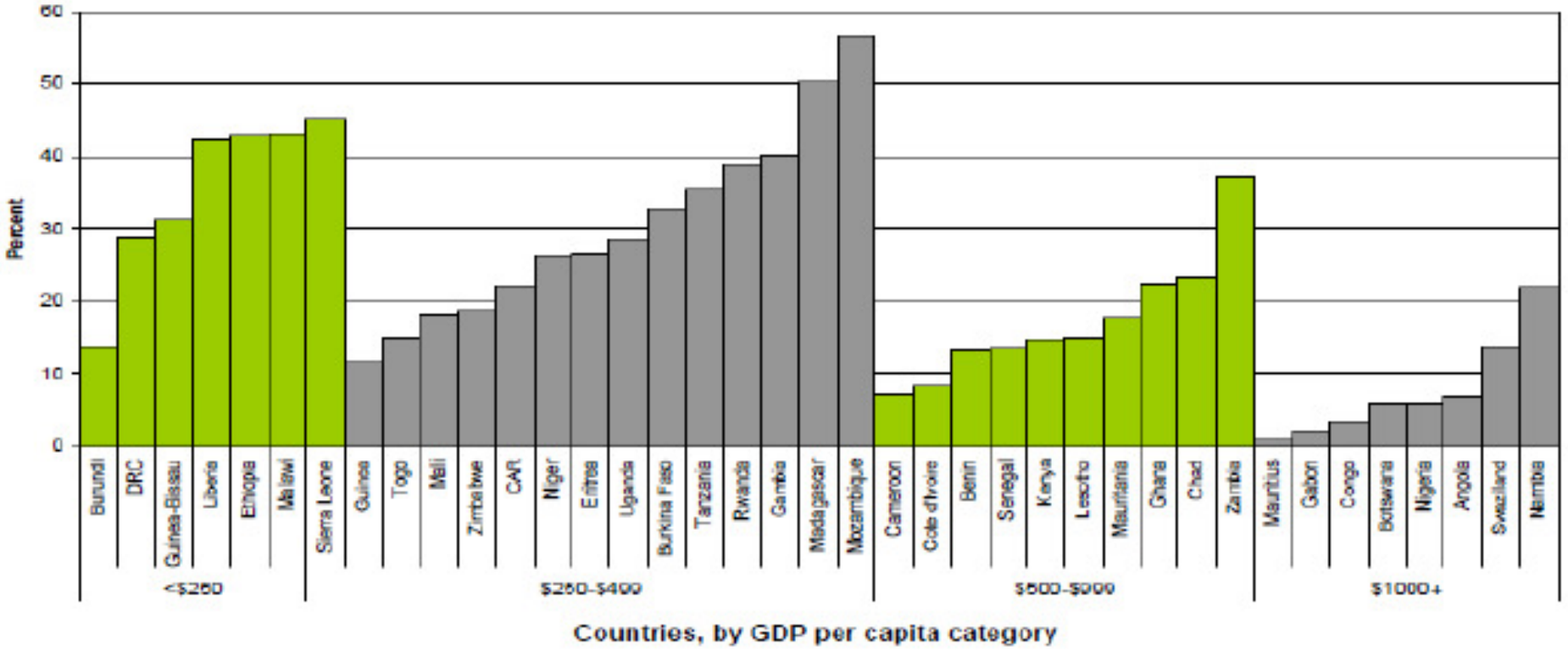
Development assistance to health sector by source



Source: World Bank 2007

SCIH Swiss Centre for International Health

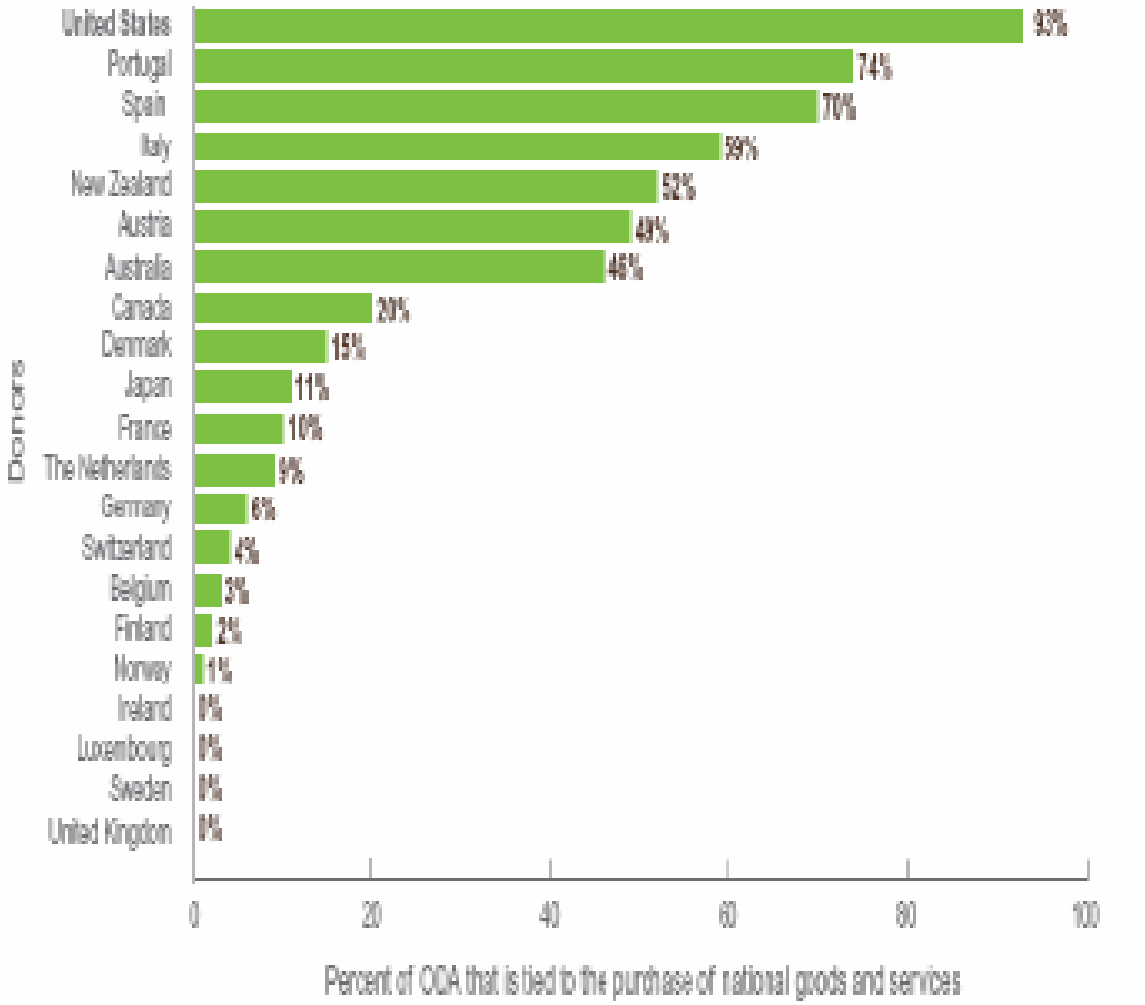
Development assistance to health sector as % of total health expenditures



Source: WHO 2009

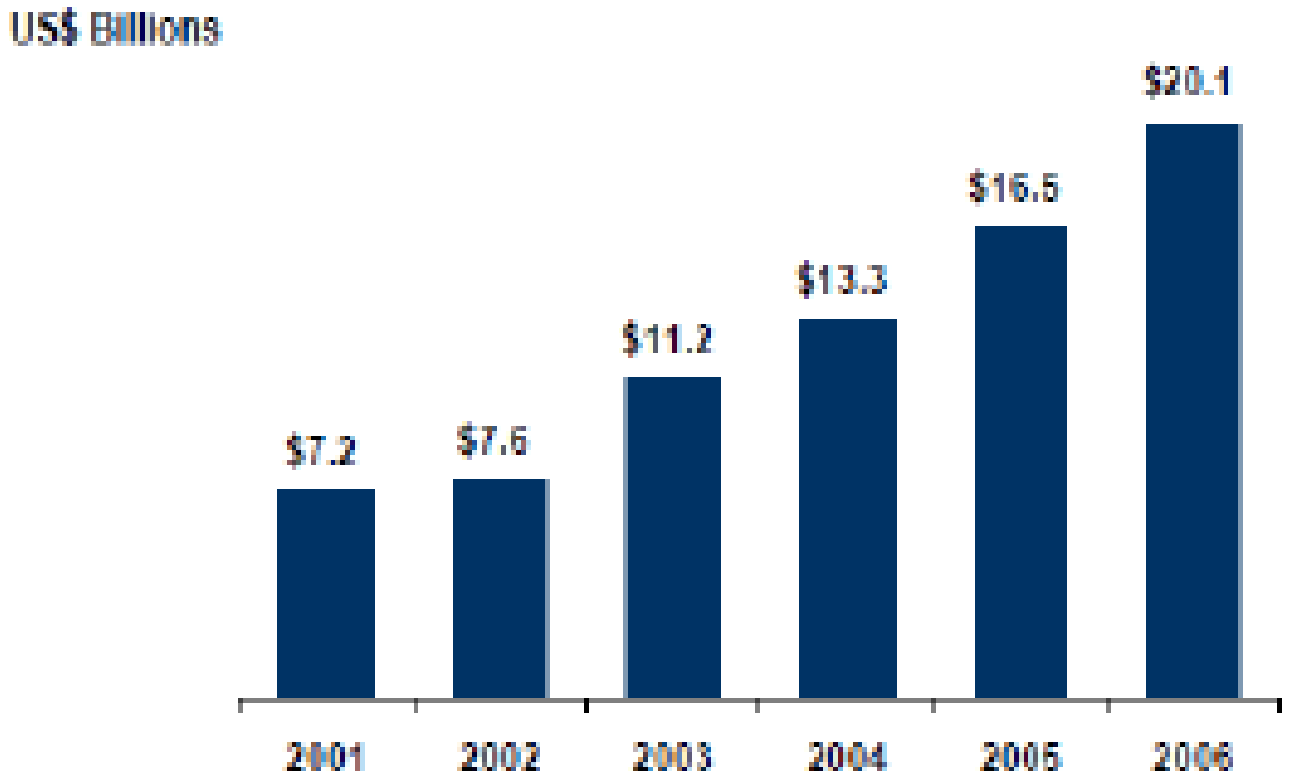
SCIH Swiss Centre for International Health

% of development aid that is tied to the purchase of national goods and services



Source: WHO 2009

Development assistance to health 2001-2006



Source: Kaiser Network 2008

Government – Social insurance

- Characteristics
  - Payroll tax (usually)
  - Significant and stable financing source in many countries where applied
- Pros
  - Visible flow of funds to health sector
  - Degree of independence from government
  - Wider pooling of risk based on compulsory insurance
    - Coverage of family of those contributing
  - Cost can be shared between employer and employee
  - Highly progressive if non-insured covered by general tax sources
- Cons
  - Service coverage limited to those (families) paying
    - Not those in agricultural and the informal sector
  - Low revenue collected in countries with low formal employment
  - Less control over cost and expenditure increases

Government - social insurance

Country	Share of contribution Employer - Employee (%)
Albania	50-50
Bulgaria	50-50
Croatia	50-50
Czech Rep.	66-33
Hungary	75-25
Macedonia	100-0
Poland	0-100
Romania	50-50
Slovakia	66-33
Slovenia	50-50

"Moral Hazard" and Adverse Selection

- **Moral Hazard** Ex ante:
  - Individuals do behave more risky due to insurance coverage
- **Moral Hazard** Ex post
  - Over consumption due to insurance coverage
- **Adverse selection**
  - Tendency of indiduals with adverse risks to seek protection
- **Scream skimming**
  - Tendency of insurers to select individuals with good selection

Private insurance

- Characteristics
  - Country-specific phenomenon based on competitive factors
  - Specific benefit packages for those adhering, typically for middle and higher socio-economic groups
- Pros
  - Reduces pressure on social health insurances, government system and funds
- Cons
  - Encourages two-tier system

Households - Community health insurance (& private insurance)

- Characteristics
  - Prepayment to insurance for predefined packages of care
  - Voluntary membership based on willingess and ability to pay
- Pros
  - Markets usually heavily regulated to ensure competition and reduce exploitation
  - Copayment to reduce moral hazard
- Cons
  - Higher income groups, particularly when other options lacking (social or company insurance)
  - Problem of adverse selection
  - Providers must treat patients based on trust that company will reimburse (needs building of relationships)

Household formal – direct payments

- Characteristics
  - Highly important (especially in less developed health systems)
  - Co-payment, deductible and applies to those not exempted or not covered elsewhere
  - Services not covered by other sources
- Pros
  - Assures running costs are covered, especially drugs
  - May reduce excess demand
  - Can control for moral hazard
- Cons
  - Disincentive effect on those least able to pay
  - Can lead to supplier-induced demand

Household informal payments

- Characteristics
  - Health providers demand or expect specific payments for their services
  - In-kind as well as monetary payments
  - Extent of informal payments not well known
- Pros
  - Can contribute to financing
  - Helps keep underpaid workers in public sector
- Cons
  - Potentially impacts poor and vulnerable groups more
  - Negative incentive to improving health of patients

Group work

Select one concrete situation

- What are the prevailing financing mechanisms of district health services?
  - Technical, allocative and administrative efficiency
  - Equity
  - Quality of services
  - Financial soundness (cost containment, sustainability)
  - User satisfaction
- What are the advantages and disadvantages of the prevailing financing mechanisms?

Financing and aims of health financing reforms

	Efficiency	Equity	Quality of services	User satisfaction	Financial soundness
Government (national and local tax collection)					
Social health insurance					
Fee for services					
Other (companies, NGOs)					

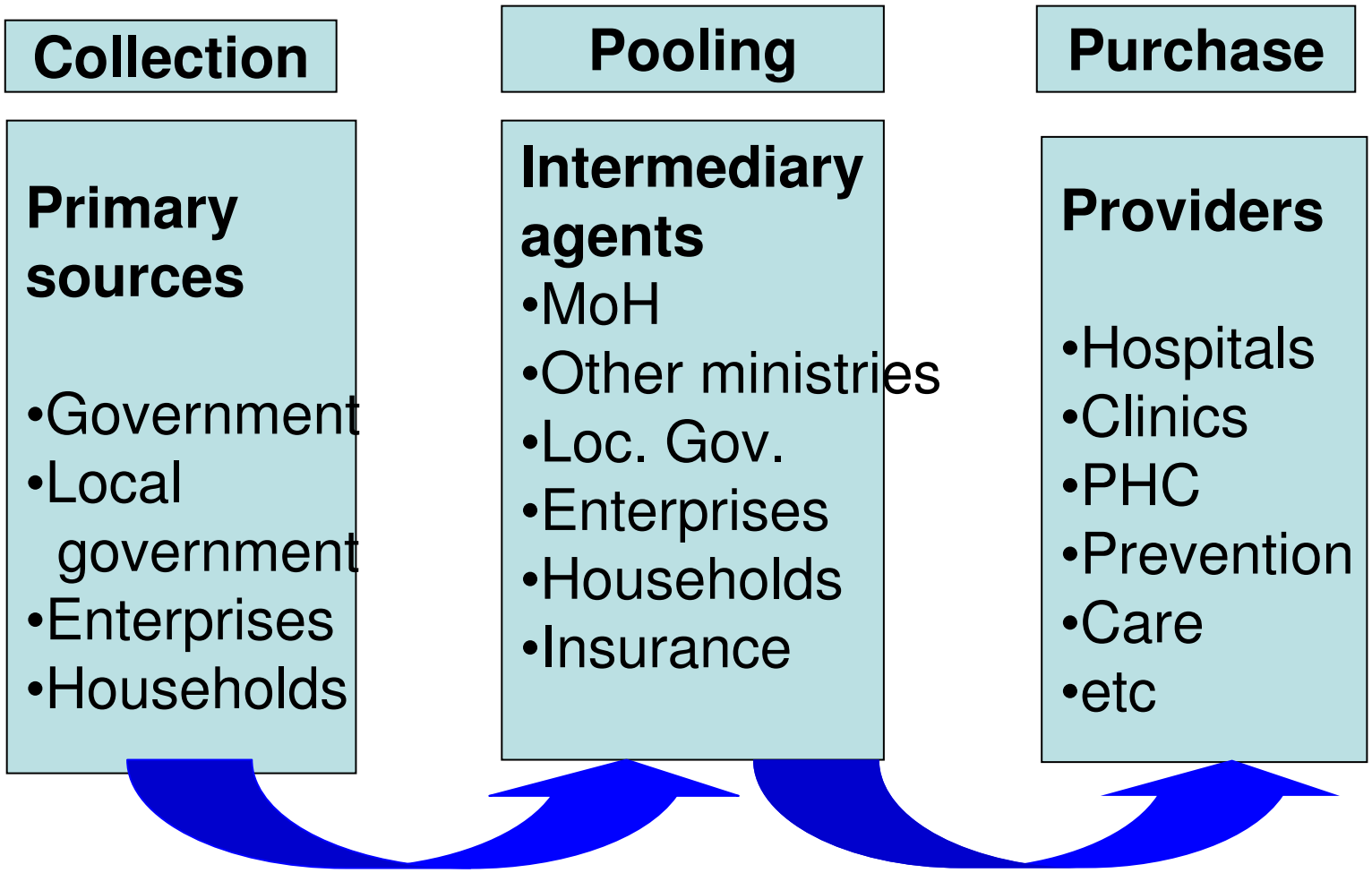
SCIH Swiss Centre for International Health

Improving Health Systems Worldwide

Part II
Payment methods of district health services

A department of the Swiss Tropical Institute

Health system financing policy levers



Analysis of financing sources **Analysis of payment modalities**

What do we understand by payment method

- A payment method corresponds to methodology on how (financial) credits are transferred from an intermediary agent to a health care provider
- Each payment method leads to some behavioural effects at the level of the provider and influences the performance of the health system
- The payment method determines who bears the financial risk (provider or intermediary agent)

Importance of the payment method

The payment of providers can also be used for:

- Induce demand (provide more care than needed)
- Tendency of the provider to minimise the financial risk to bear for services required by the patient
- Over-utilisation of costly equipment and laboratory facilities for an amortisation of investment costs

Importance of the payment method

- The payment of providers can be used as a regulatory tool for determining:
  - Accessibility
  - Quality of services
  - Continuity of care
    - Induce demand (provide more care than needed)
  - Control of costs
  - Efficiency
    - Tendency of the provider to minimise the financial risk to bear for services required by the patient

Global Budget

- Prospective financial allocation to an organisation for a defined set of services and for a given time period
- Advantages:
  - Handling of payments
  - Flexibility in using resources
  - Dialogue between intermediary agent and provider
  - Incentive for good quality of care
- Disadvantages:
  - Weak incentive for efficiency (tendency to expend everything)

Budget by cost item

- Annual financial allocation according to cost item (salary, drugs, investment, etc.)

- Advantages:
  - Easy to apply
  - Minimise the financial risk to the provider
- Disadvantages:
  - Weak incentive for efficiency (tendency to expend everything)
  - Not flexibility

Capitation

- Allocation of financial resources to a provider for a defined service package, period and population

- Advantages:
  - Flexibility in the use of resources
  - Incentive for efficiency
  - Favours continuity of care
  - Incentive for prevention
- Disadvantages:
  - Cost reduction may have negative effects on the quality of care
  - Adverse selection
  - Limited choice of providers

Flat rate by case or episode (DRG)

- The provider receives a global amount which may vary according to the diagnosis (DRG – diagnosis related groups)

- Advantages:
  - Predicable prices
  - Favours continuity of care
  - Integration between preventive and curative care
  - Favours efficiency
- Disadvantages:
  - Requires an analytical accounting system
  - Financial risk for the provider
  - No guarantee for a good quality of care

Payment by act

- The provider is being paid for every service consumed. Retrospective payment

- Advantages:
  - Flexibility
  - Promotes autonomy
  - In case of concurrency: favours quality of care
- Disadvantages:
  - Supplier induced demand
  - Case selection by provider
  - Inequity in access
  - Unfavourable for the continuity of care

Other payment methods

- Fix salary - Contract with a provider for the payment of a salary for a defined set of services
  - Easy to administer
  - A salary in a situation of concurrency may increase the productivity
  - Low control over the production of services (may provide to provide few services)
- Salary and prime for achieving performance targets
  - Pay for performance
- Daily payment of an institutional provider for every day of care. With or without adjustment

Payment mechanism and administration

Payment by act	Very difficult
Salary	Easy
Salary and bonus	Difficult
Capitation	Very easy
Global budget	Easy
By case or by episode	Very difficult
By day	Easy

Payment of hospitals and financial risk

Payment method	Intermediary agent	Institutional providers - hospital
Payment by act	High risk	No risk
Payment by case or episode (DRG)	No risk	Risk of additional costs for a case
Global budget	No risk	Risk
Capitation	No risk	Risk
Daily prices for hospital bed	Risk	No risk

Payment of individual providers and financial risk

Payment method	Intermediary agent	Individual provider (e.g. private doctor)
Payment by act	High risk	No risk
Salary	Risk	No risk
Salary and bonus	Risk on the salary part	Risk on the bonus part
Capitation	No risk	Risk

Payment method and perspective of patient

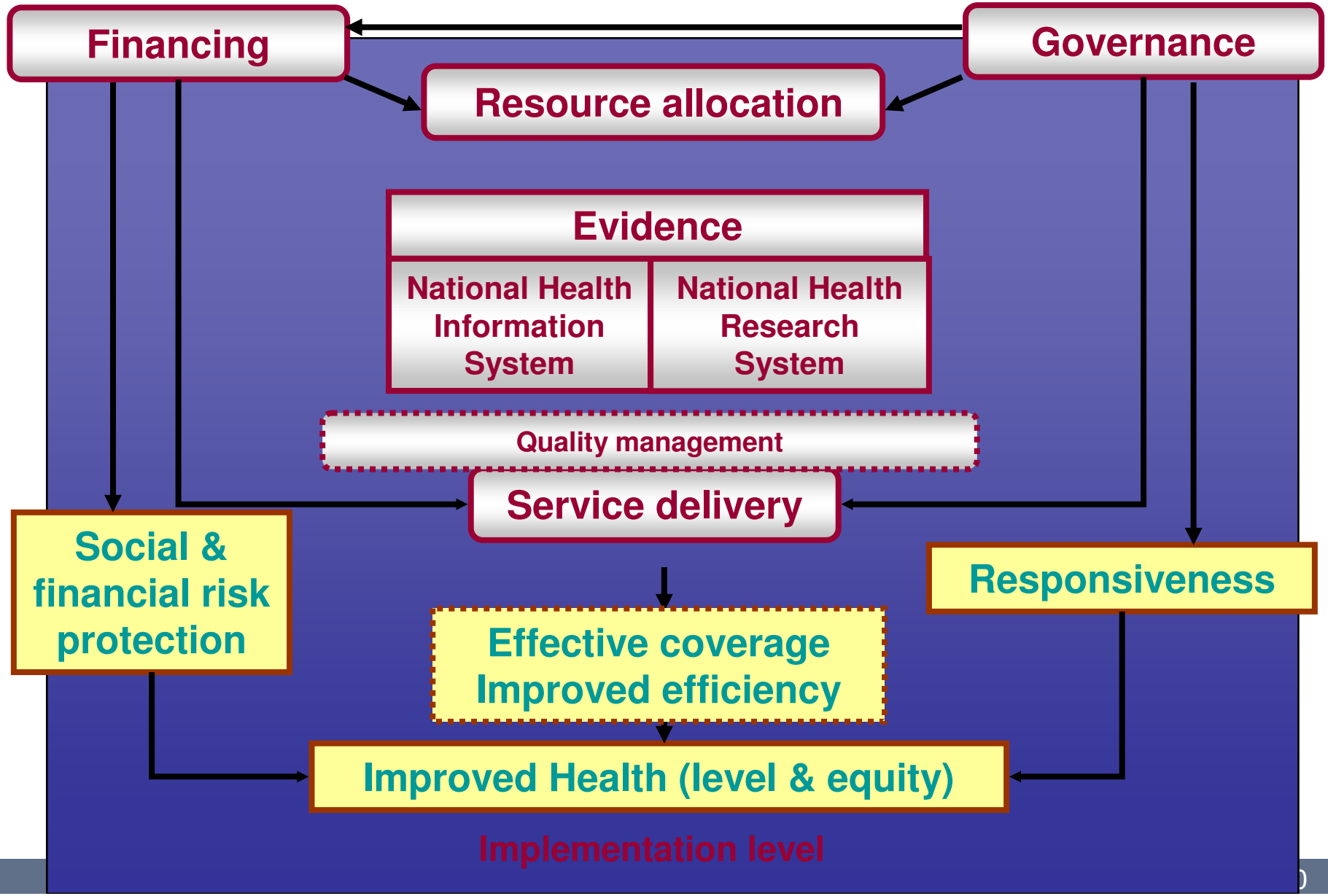
Payment	Accessibility	Quality	Continuity
Salary	+-	+-	+-
By act	+	+-	+-
Capitation	++	+-	++
Global budget	+-	+-	+-
By day	+-	+-	+-
By case or episode	+	+-	++

Conclusions

- There is no optimal payment system of providers. Every system payment method has advantages and disadvantages. Effects do vary according to the context

- A mix of different payment methods of providers can maximise the positive effects

Health system intervention points



Conclusions

- Desirable characteristics of financing mechanisms:
  - Be efficient in terms of collection of money
  - Administrative efficiency (paper work)
  - Reduce opportunities for corruption
  - Allow access to a minimum level of health services for all
  - Not exclude those with limited finances from attending
  - Not exert an unmanageable burden on those who tend to use health services more
  - Ensure increases in overall resource allocations into the future
- Relate to other building blocks of health systems