

Turkey's Healthcare Spending: Adequacy, Efficiency, Equity

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Overview of the Presentation

- Objective & Approach
- Major Findings
- Policy Implications

Major Study Questions

- How much is Turkey spending on what?
- Is the spending level “adequate”, compared to other countries?
- What policy recommendations can be made to address any “imbalances”?

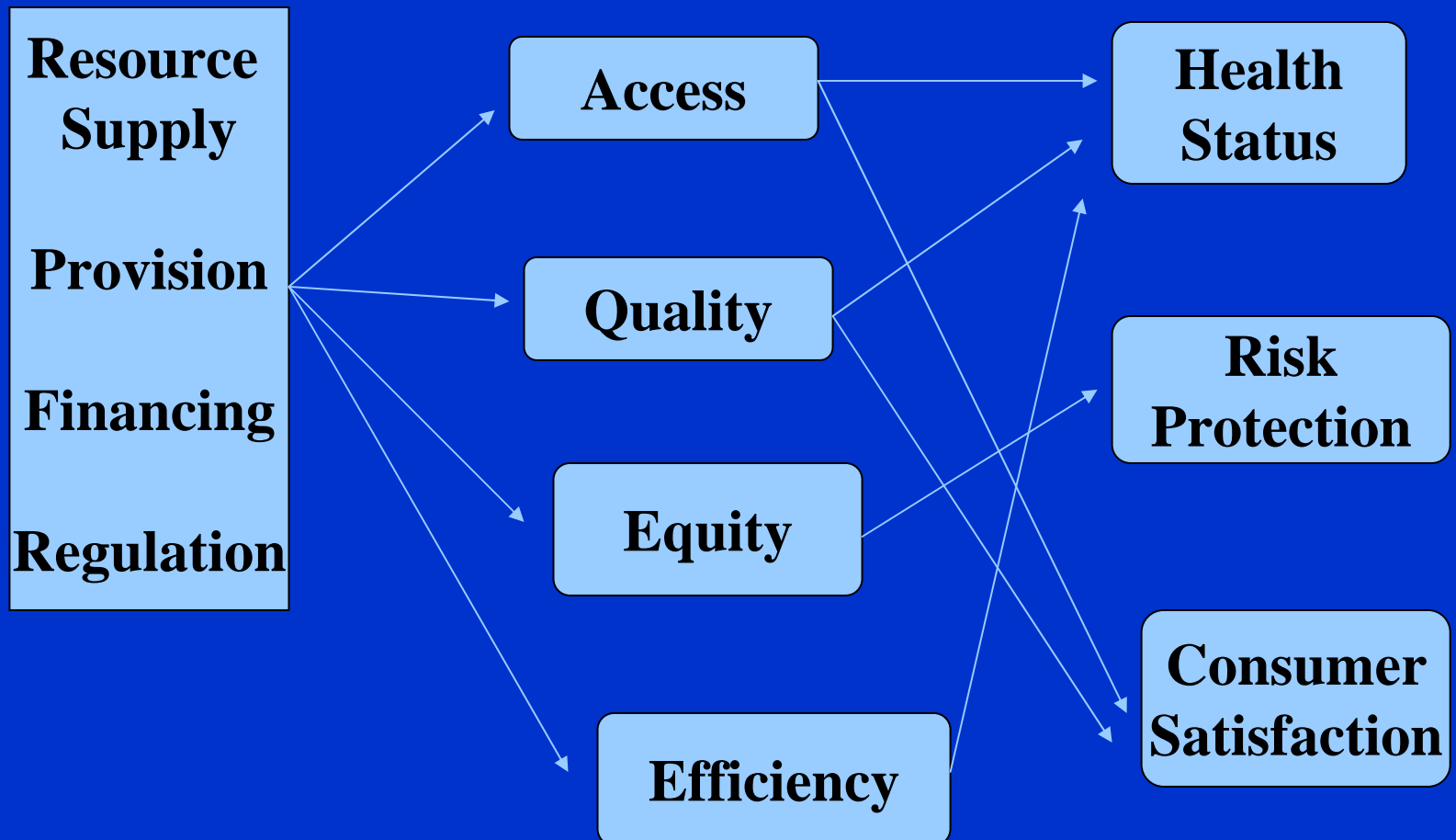
Measuring “Adequacy” is difficult, because...

- Healthcare spending is a product of price and quantity, which depends on various demand-side and supply-side factors
- “Adequacy” depends on our definition and measurement of “value for the money”
- “Value” depends on our desirable outcomes

System Structure

Intermediate Goals

Final Goals



Measuring “Adequacy” is difficult, also because...

- There are different uses of scarce resources on different determinants of health
- It is difficult to measure relative returns from alternative investments in health of the resources
- It is difficult to select an “ideal” set of countries for international comparisons

Our Approach

- Assess overall level of spending
 - ➔ International: is Turkey an outlier?
 - ➔ Structure: is the spending pattern justifiable?
- Assess performance
 - ➔ Any inefficiency in resource allocation?
 - ➔ Any inequality in financial access/burden?

Data Issues

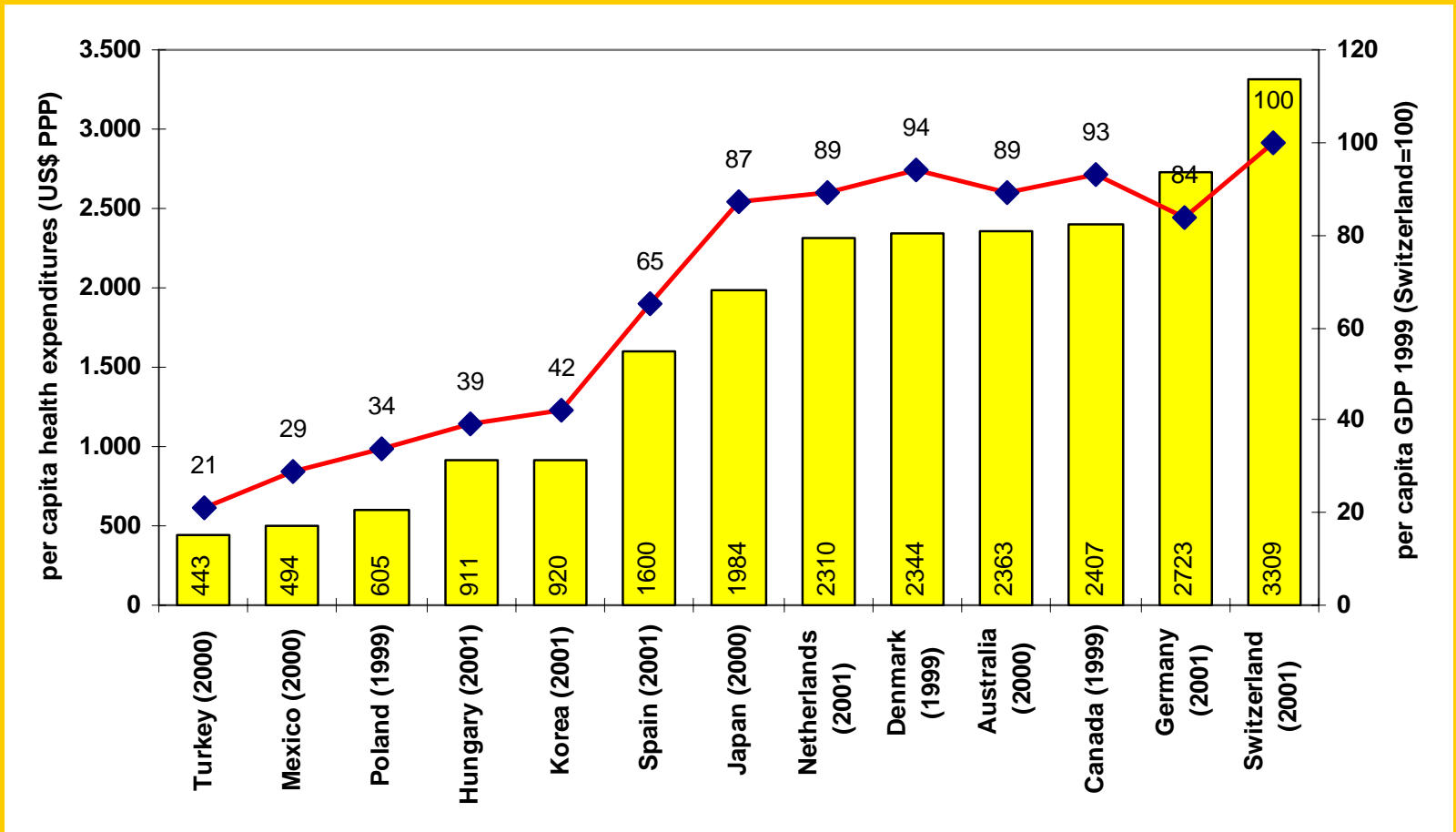
- Turkey only conducted NHA studies for 1999 and 2000
- Data from before 1999 and after 2000 are based on other collection methods
- Unable to study the trends

Healthcare Spending in Turkey:

How does it fair in comparison?

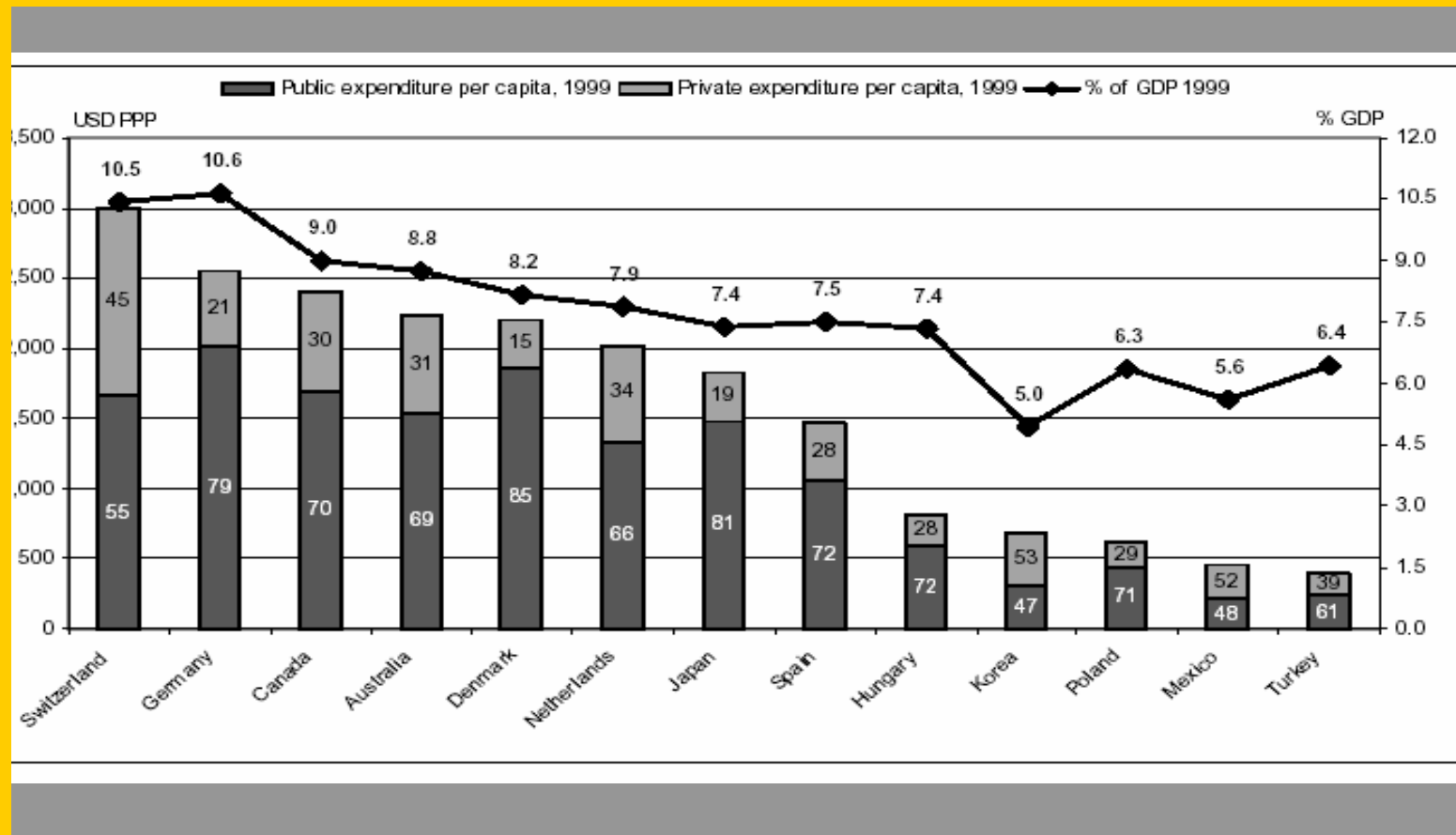
- Per capita spending low, but not %
- Close relationship to GDP per capita
- Remarkable: hospital outpatient

Per Capita Health Spending in OECD Countries (US\$, PPP)



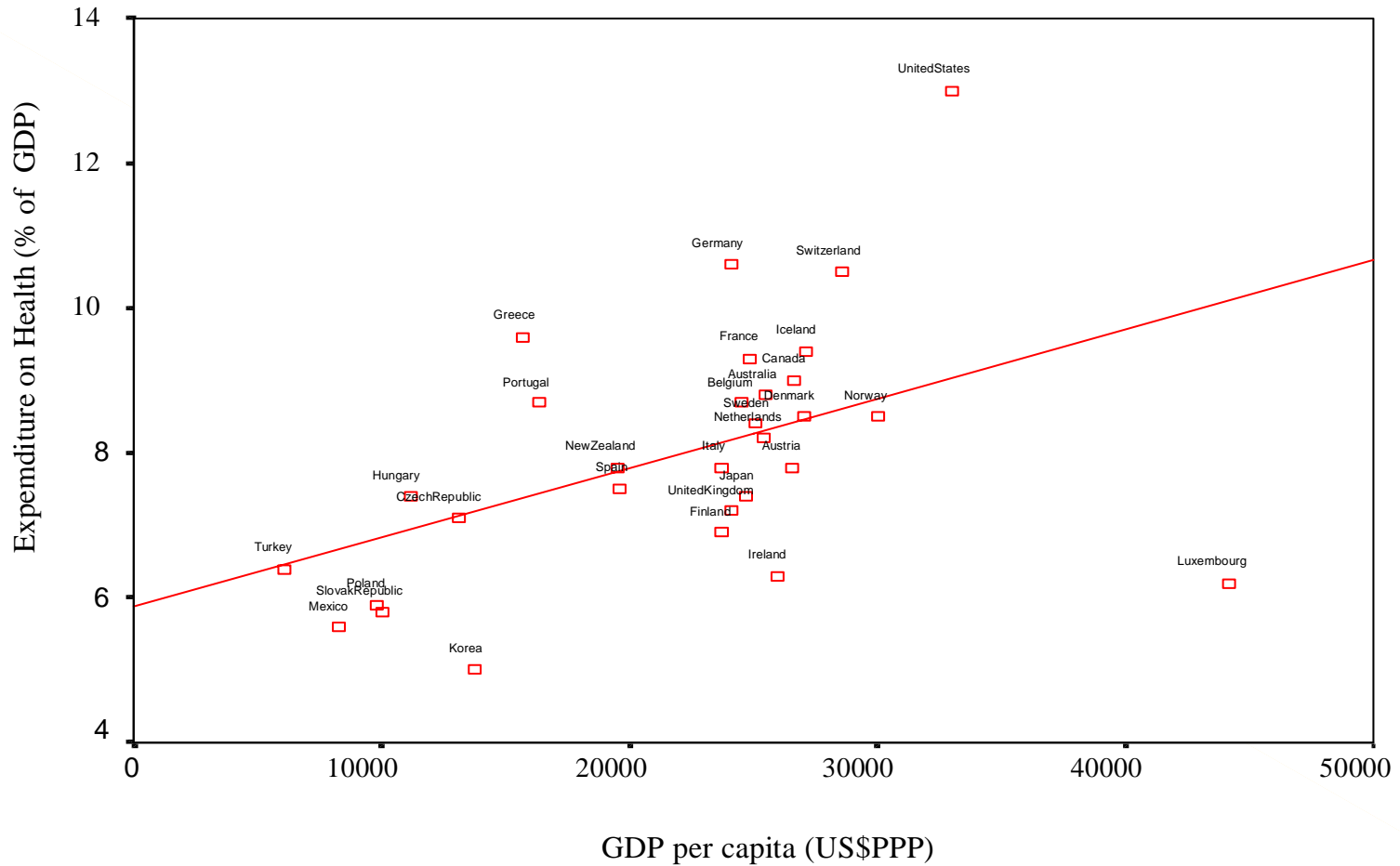
Source: OECD Health Data, 2004. 3rd Edition.

Percentage % of GDP On Health and Relative Share of Public/Private Sector



Source: OECD Health Data

Expenditure On Health (% of GDP) and Per Capita GDP



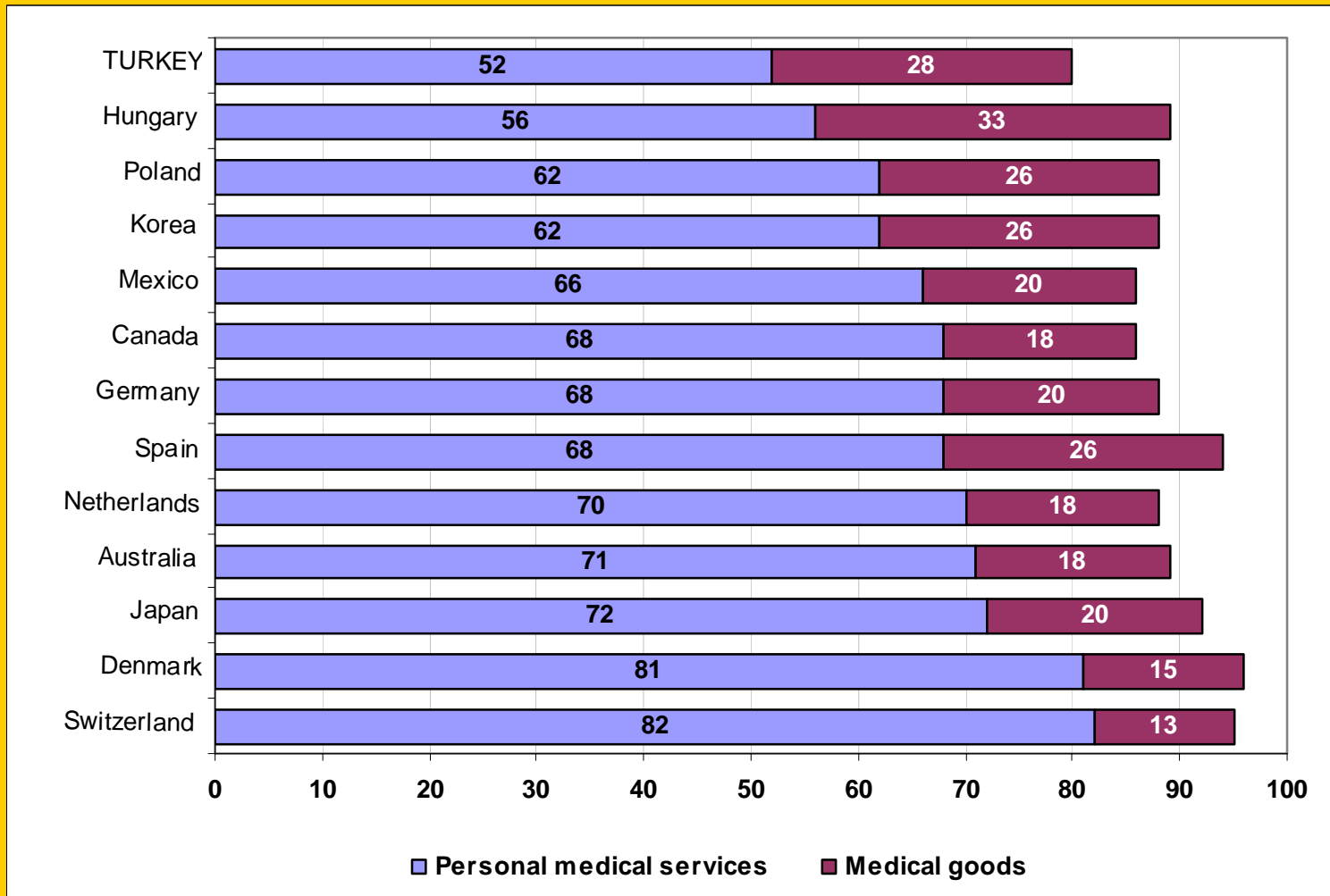
Source: OECD Health Data

Comparing Turkey and Thailand

Indicator	Turkey	Thailand
Population	68 million	62 million
GDP/capita (USD, PPP)	6,380	6,132
Health \$ as % of GPD	6.6% (2000)	6.1% (2001)
Share of health \$ by public \$	62%	33%
Drug \$ as share of health \$	24%	34%

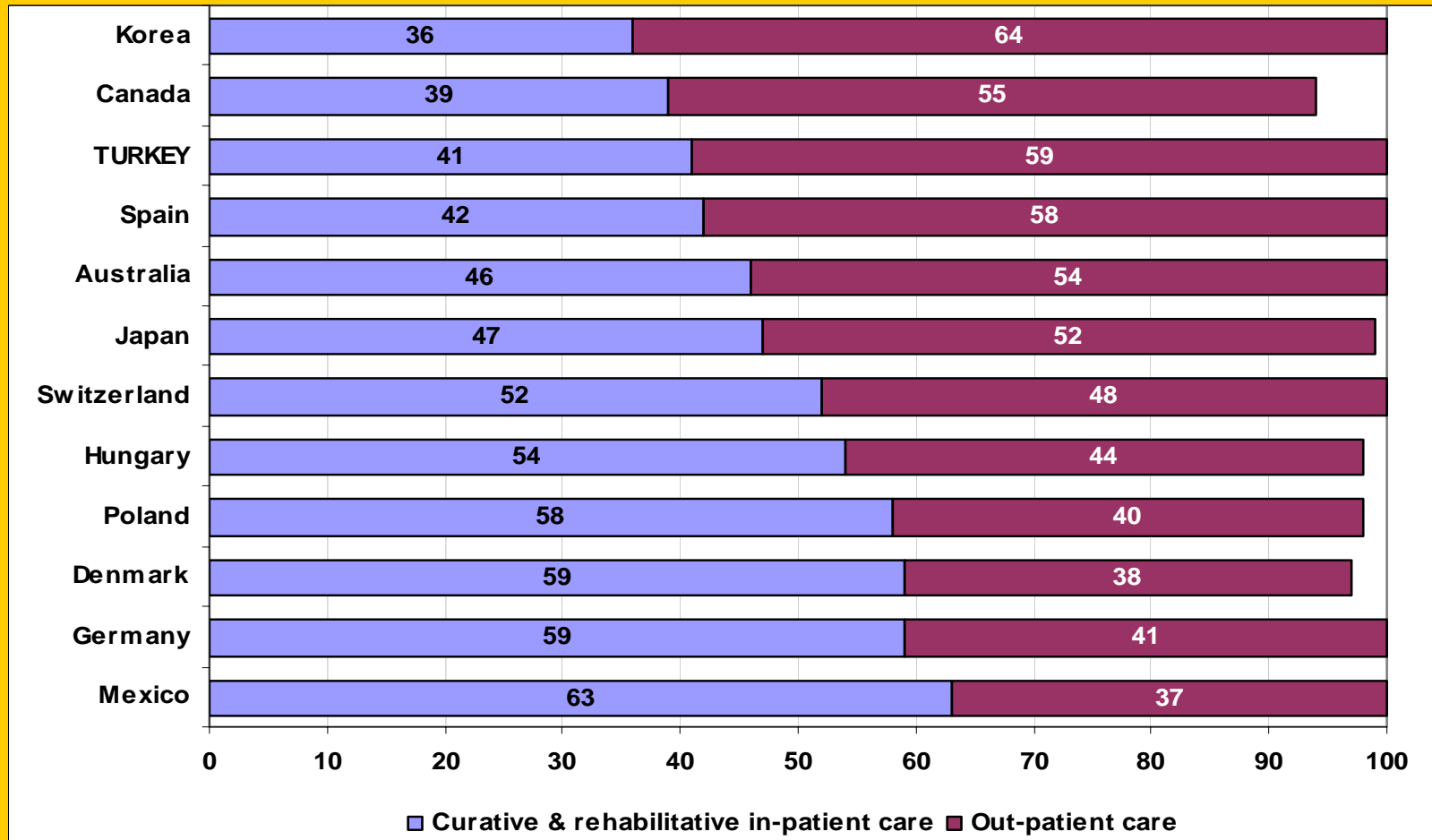
Source: UNDP 2003; OECD 2004; Thailand Institute of Health Policy, 2003.

Health Expenditure By Function of Care (Total Expenditure On Health=100)



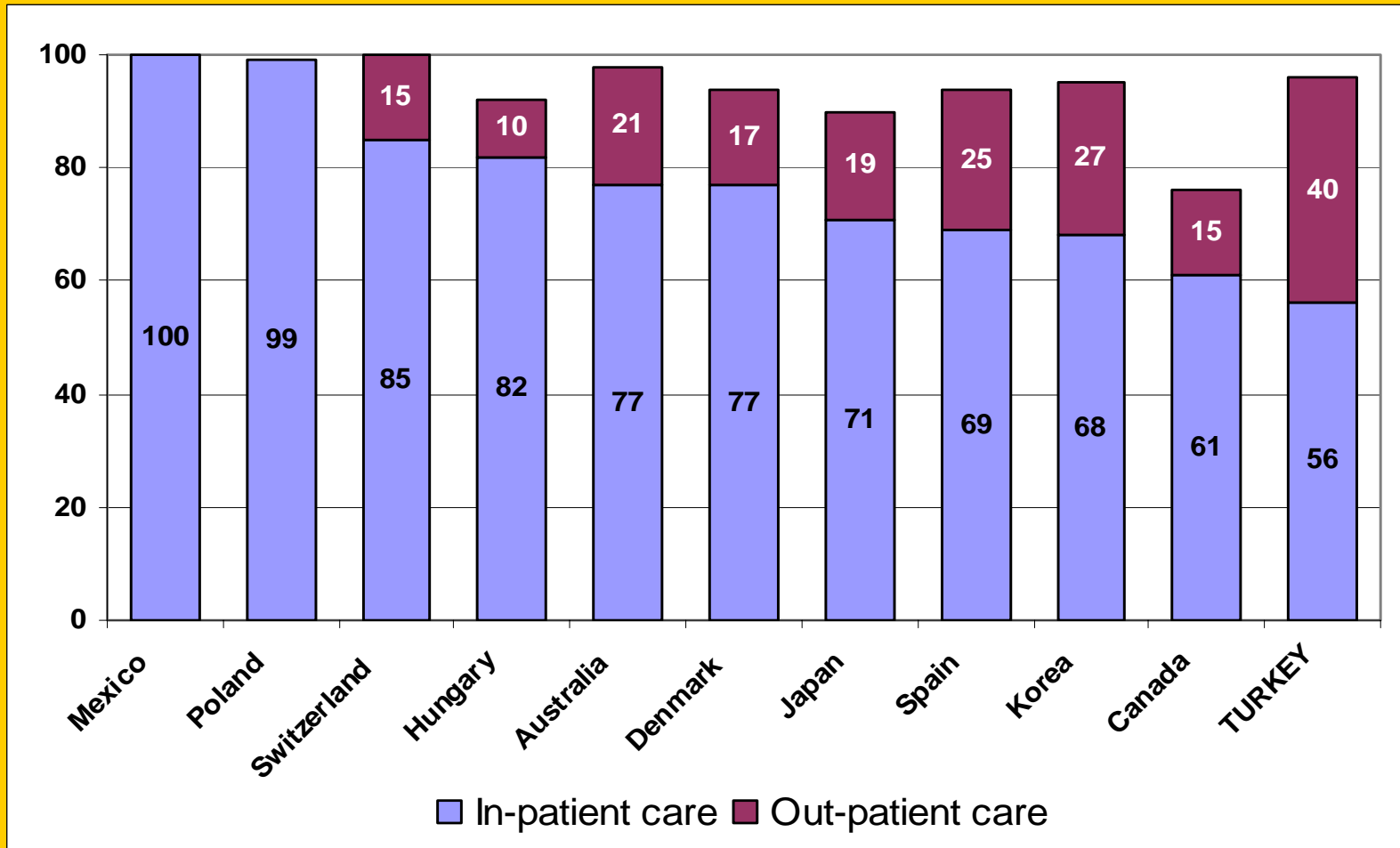
Kaynak: Orozs and Morgan 2004

Health Expenditure By Mode of Production (Curative and Rehabilitative Care=100)



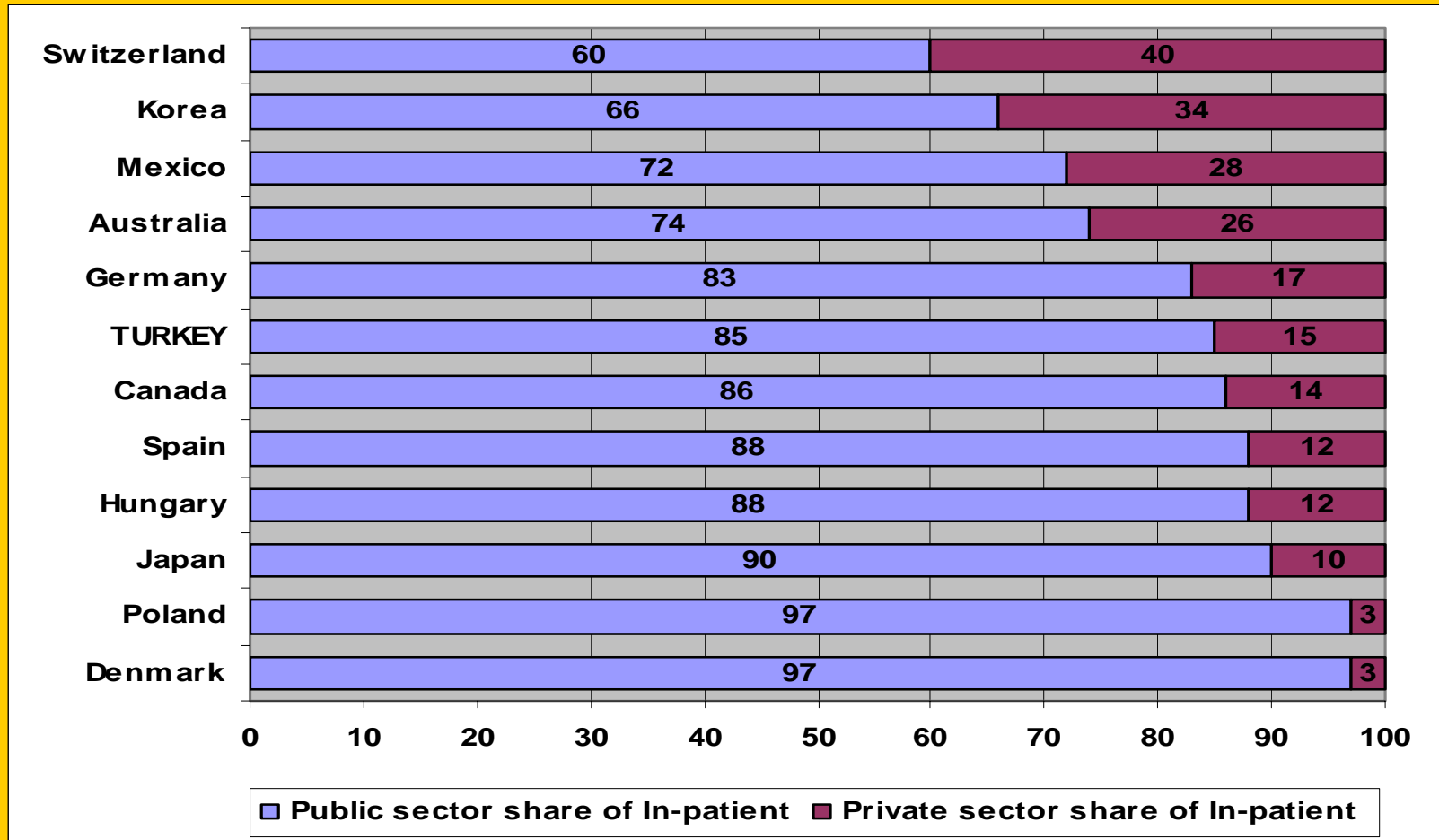
Kaynak: Orozs and Morgan 2004

Hospital Expenditure by Function (Hospital Expenditure=100)



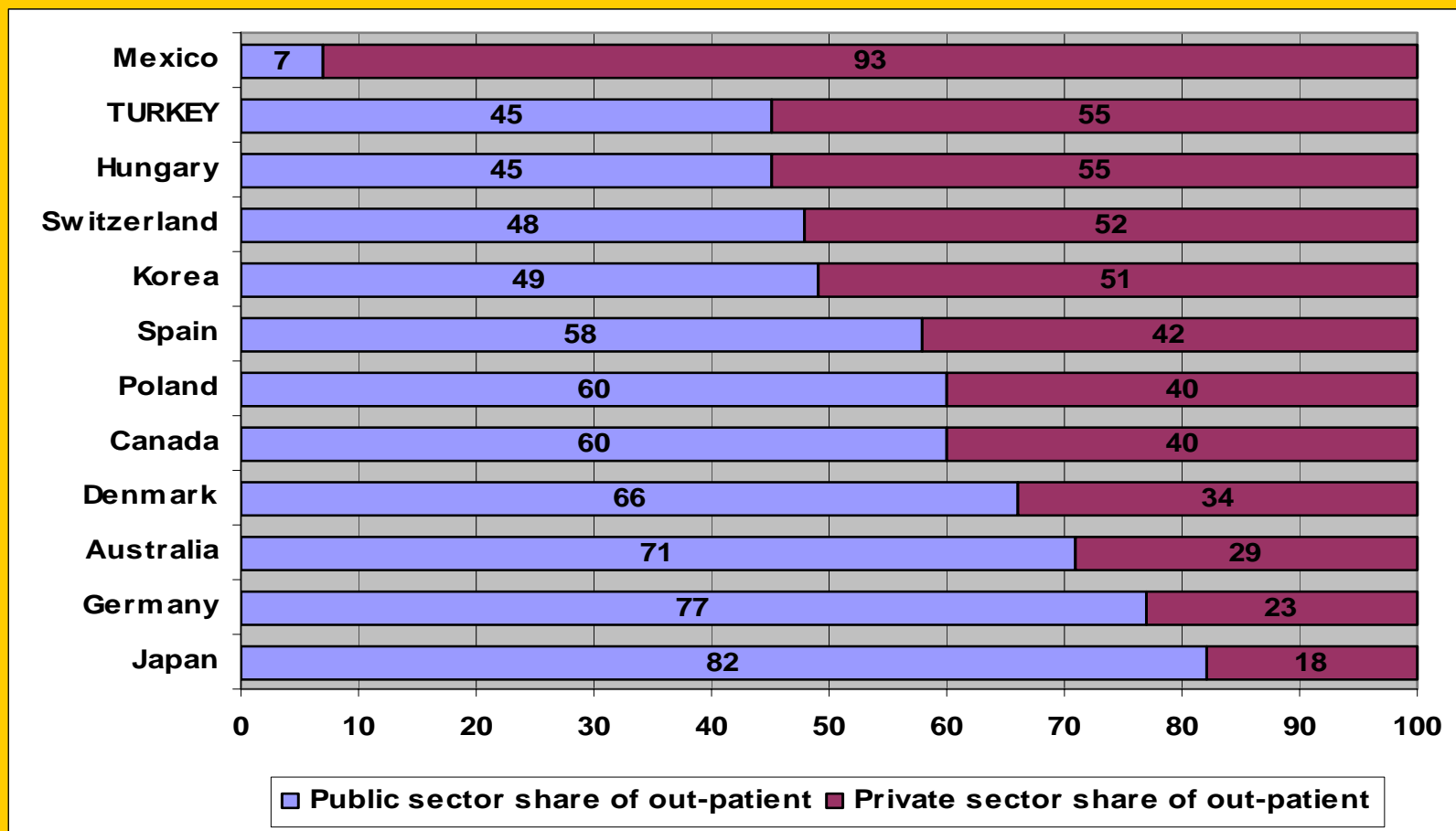
Kaynak: Orozs and Morgan 2004

Share of Inpatient Expenditure by Agent (In-patient Expenditure=100)



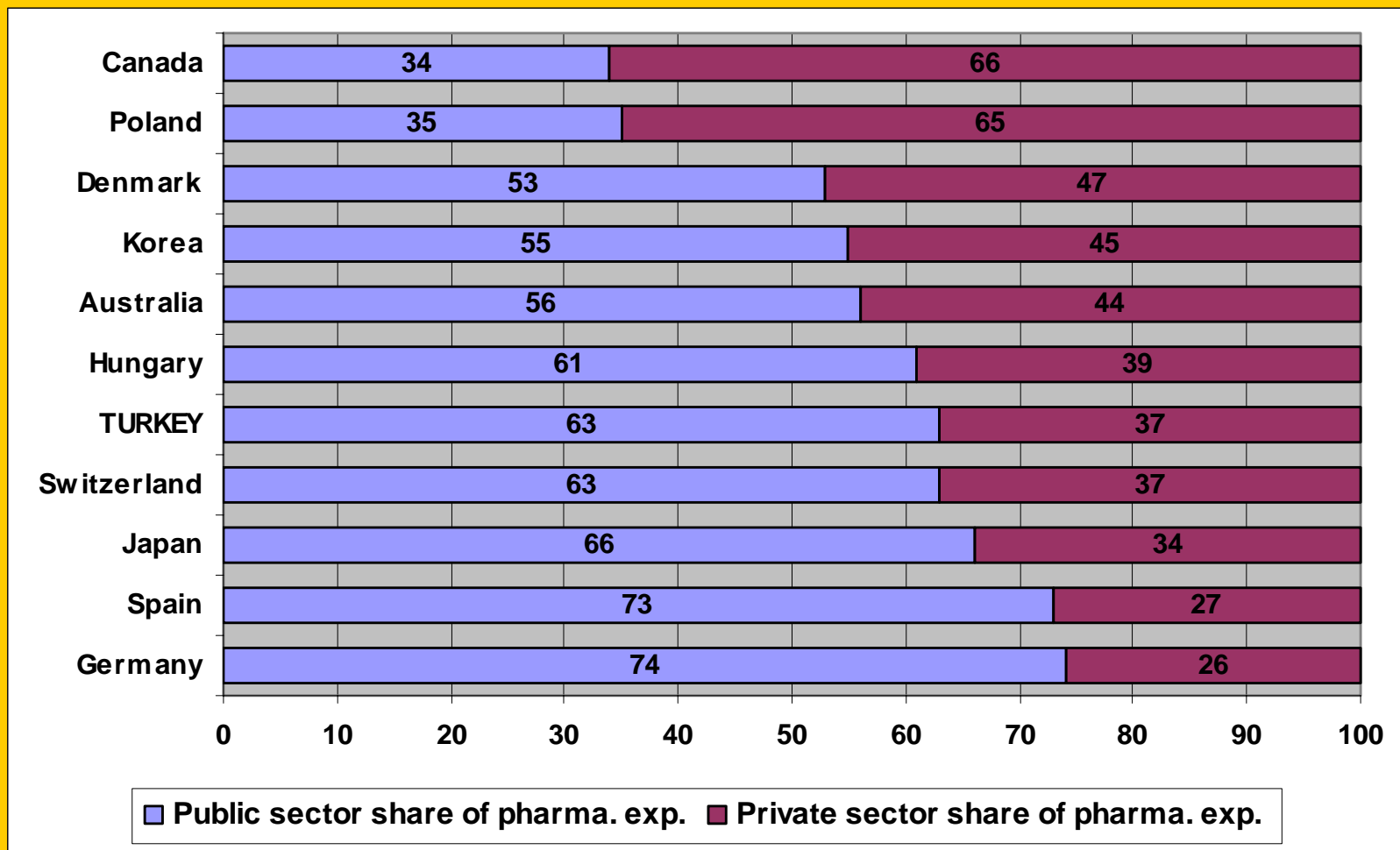
Kaynak: Orozs and Morgan 2004

Share of Outpatient Financing by Agent (Out-patient Expenditure=100)



Kaynak: Orozs and Morgan 2004

Share of Pharmaceutical Expenditure by Public vs. Private Sources (Drug Expenditure=100)



Resource: Orozs and Morgan 2004

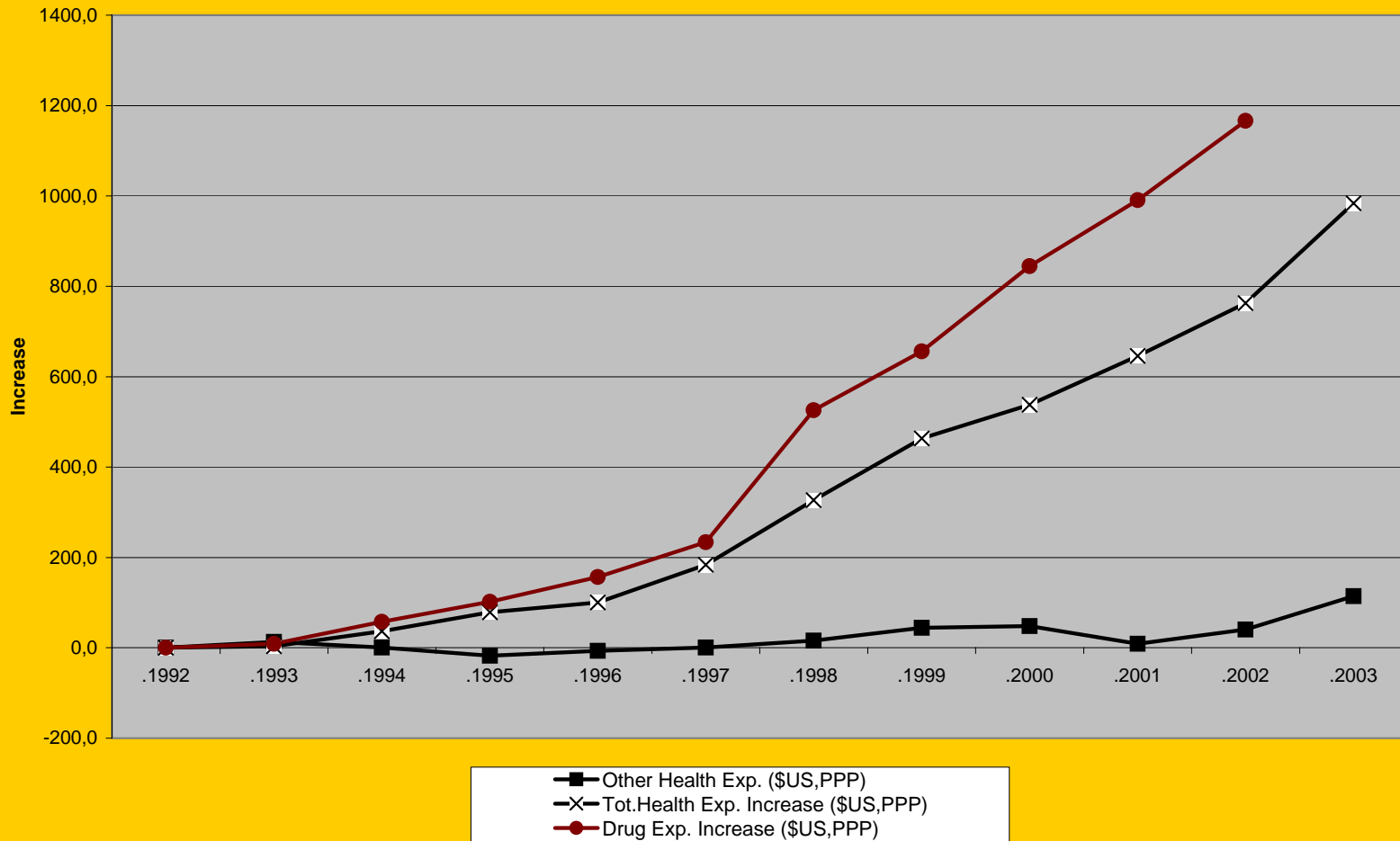
Healthcare Spending in Turkey:

Efficient ?

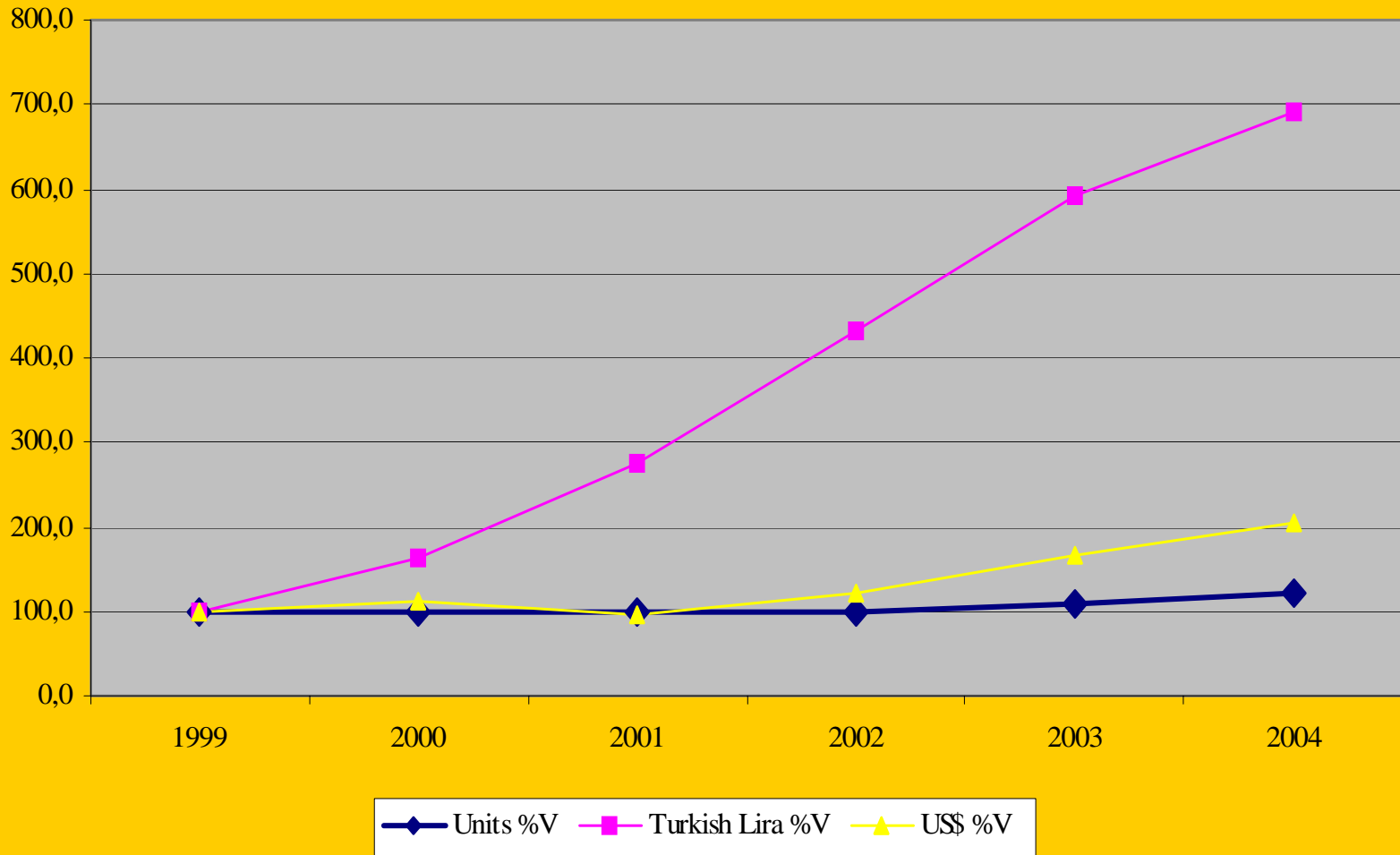
Some indication of inefficiency:

- Drug spending and priority needs?
- Remarkable use of antibiotics
- Significant variation among payers
- Excessive use of hospital outpatient care

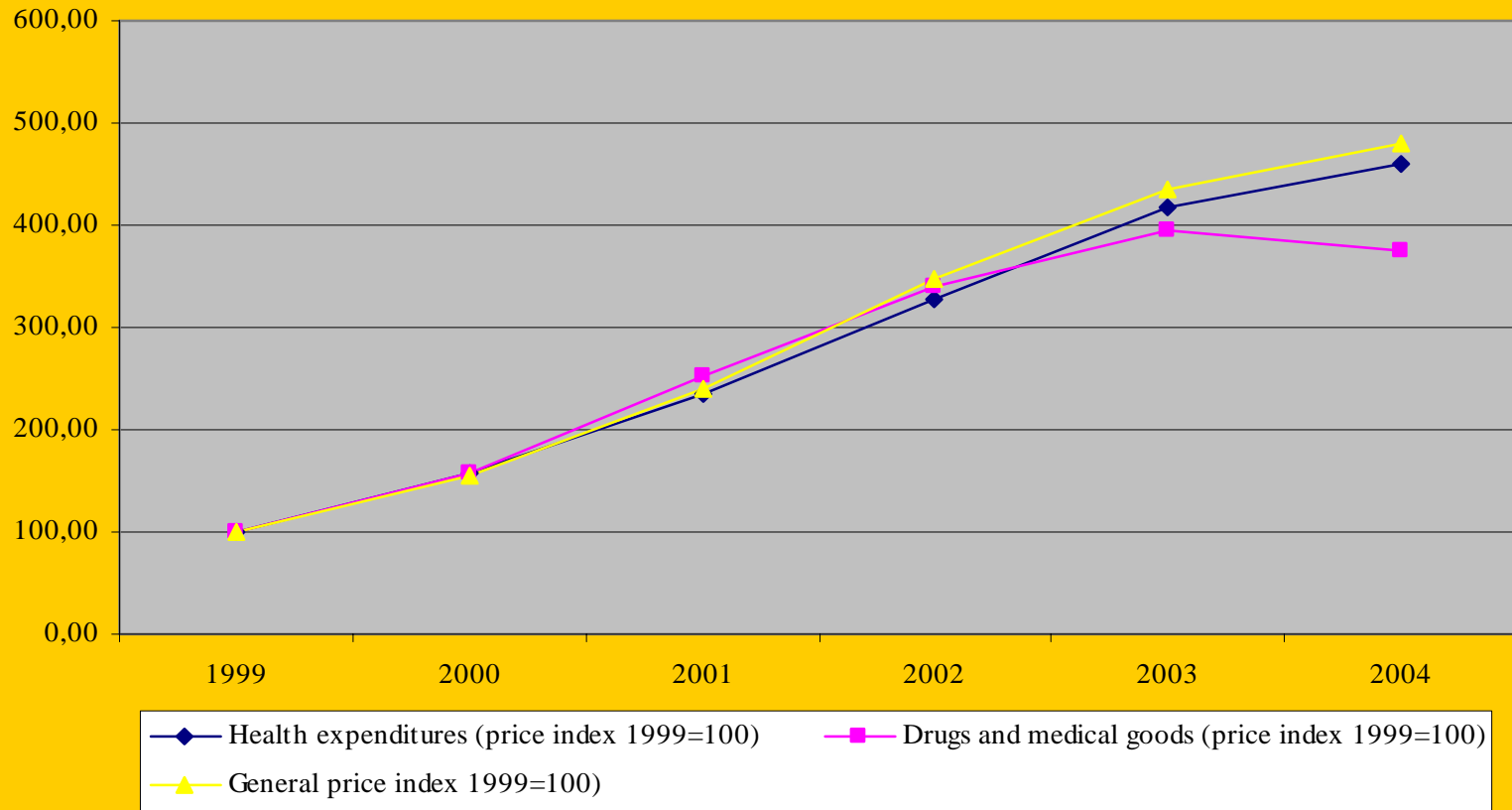
Changes in Drug, Non-drug, and Total Health Expenditure of Main Public Institutions



Growth of Drug Market Size in Turkey (% V)



Changes in Prices of Medical Services, Drugs and General Consumer Price Index in Turkey (1999-2004)



Top 5 Leading Causes of Death (2000)

Rank	Cause of Death	% of deaths
1	Ischaemic heart disease	21.7
2	Cerebrovascular disease	15.0
3	COPD	5.8
4	Perinatal causes	5.8
5	Lower respiratory infections	4.2

Consumption of Medicines by Therapeutic Classes in Turkey (% of The Total Value)

Treatment Group	1999 (%)	2000 (%)	2001 (%)	2002 (%)
Antibiotics	20.4	19.0	18.2	18.1
Analgesics and Anti-Migraine Preparations	13.2	12.0	12.1	12.3
Anti-Rheumatic System Muscle Relaxants	10.2	11.0	11.6	11.0
Cough and Cold preparations	8.9	8.6	7.9	8.4
Vitamins, Minerals and Anti-Anemics	7.2	7.3	6.5	6.4
Dermatological	5.2	5.3	5.4	5.3
Stomatological, Antacids and Anti-Emetics	5.0	5.3	5.2	5.2
Cardiovascular System Preparation	4.4	4.8	5.5	6.3
Hormones and Gynecological Preparations	4.0	4.3	4.5	4.5
Otology and Eye-Ear Preparations	4.1	4.2	4.4	4.3

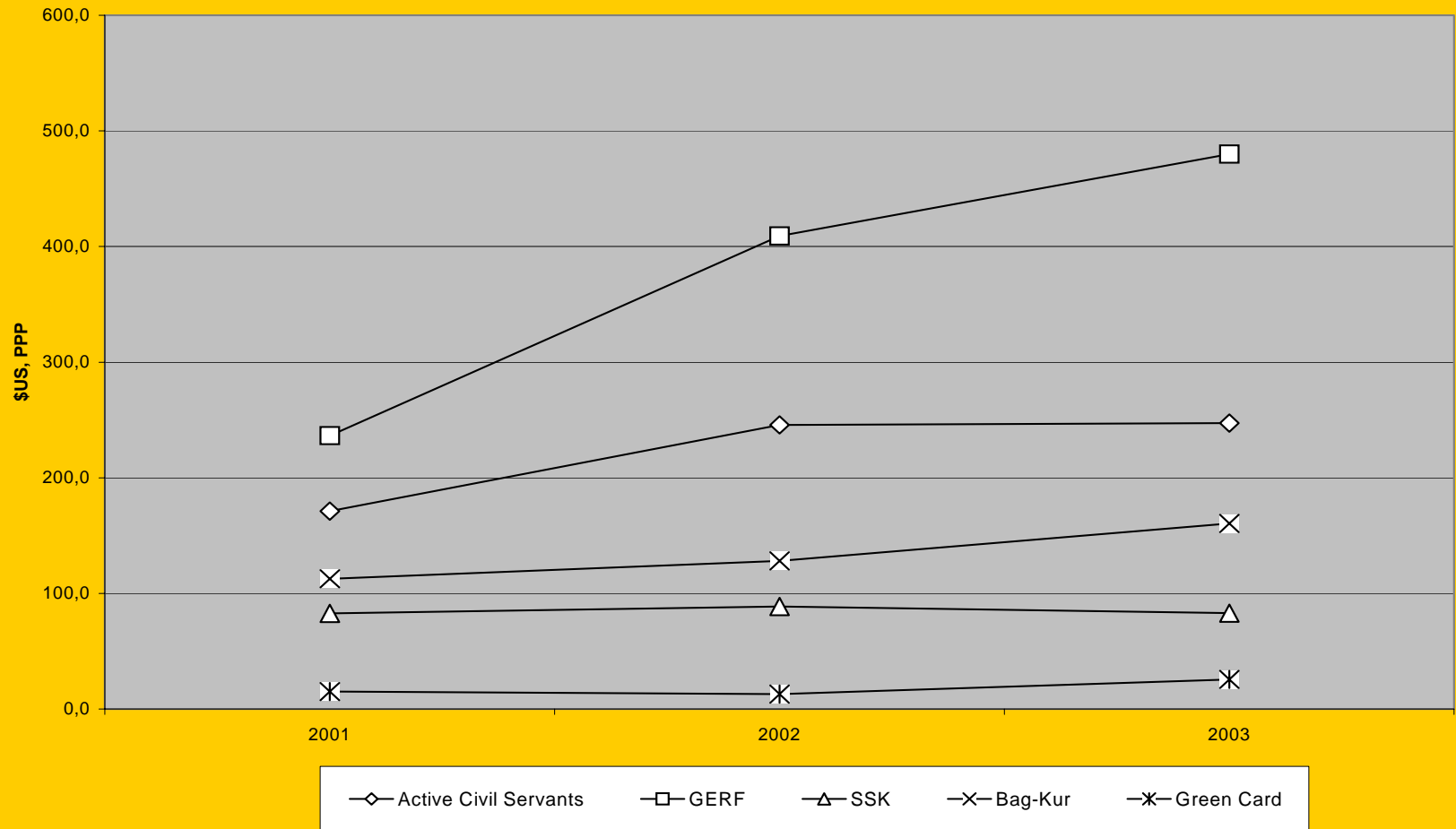
Source: IEIS 2002, IEIS 2003, WB 2003b

Consumption of Medicines by Therapeutic Classes in Turkey and The World

Therapeutic Class	Average share in the world	Share in Turkey
Cardiovascular	19.3	11.9
Central nervous system	15.8	9.5
Alimentary T & Metabolics	15.3	12.8
Systemic Anti-infectiveness	9.9	26.2
Respiratory system	9,3	7.8

Source: IEIS 2002, IEIS 2003, WB 2003b

Per Capita Drug Expenditure by Agent



% of Main Public Payers' Health Expenditures Devoted to Pharmaceuticals

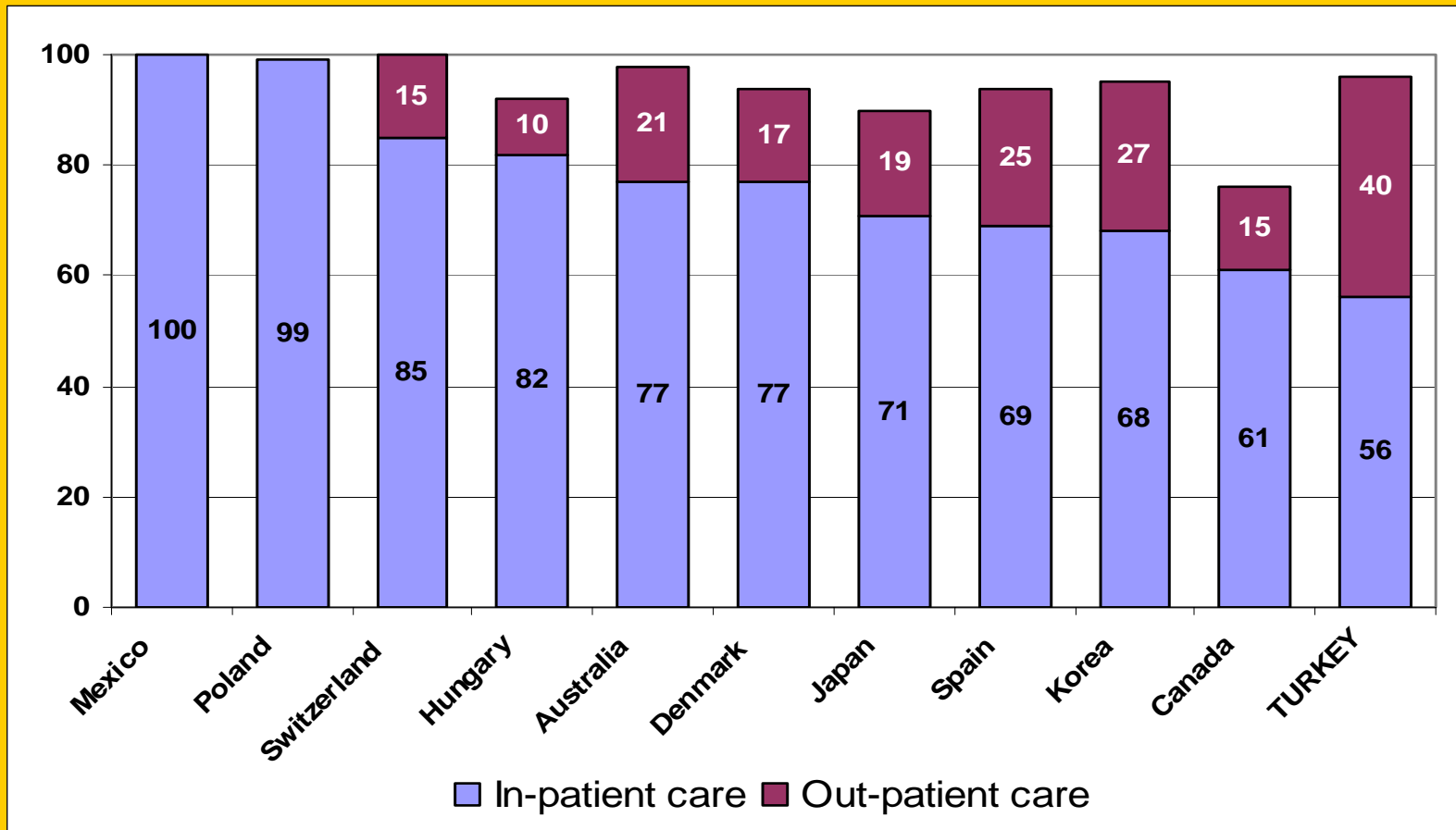


Functional allocation of health spending in Turkey (2000)

Main Functional Classifications	Shares of Current Expenditure (%)
Curative Care Inpatient	19.89
Curative Care Outpatient	29.74
Services of Rehabilitative Care	0.88
Ancillary Services	3.48
Dispensing of Medical Goods	29.07
Public Health Services	2.41
Administration	2.27
Not Specified by Kind	12.26
Total	100.0

Resource: Orozs and Morgan 2004

Hospital Expenditure by Function (Hospital Expenditure=100)

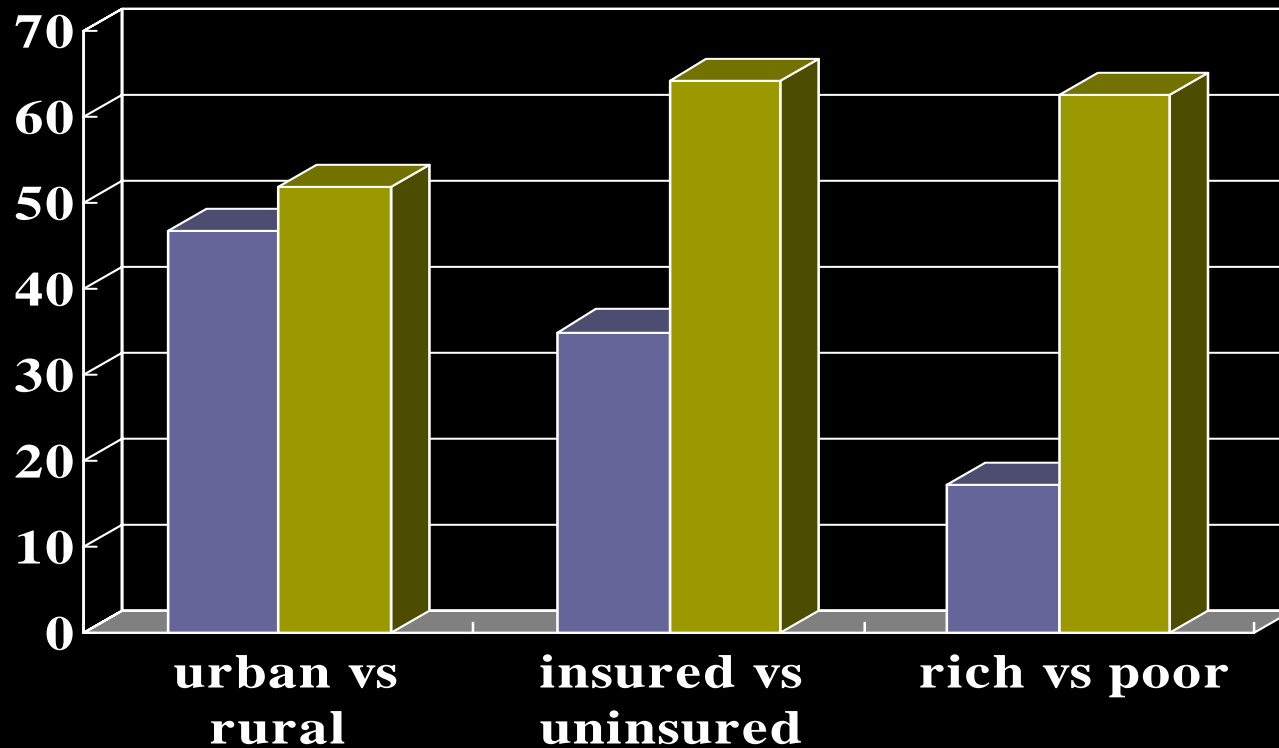


Kaynak: Orozs and Morgan 2004

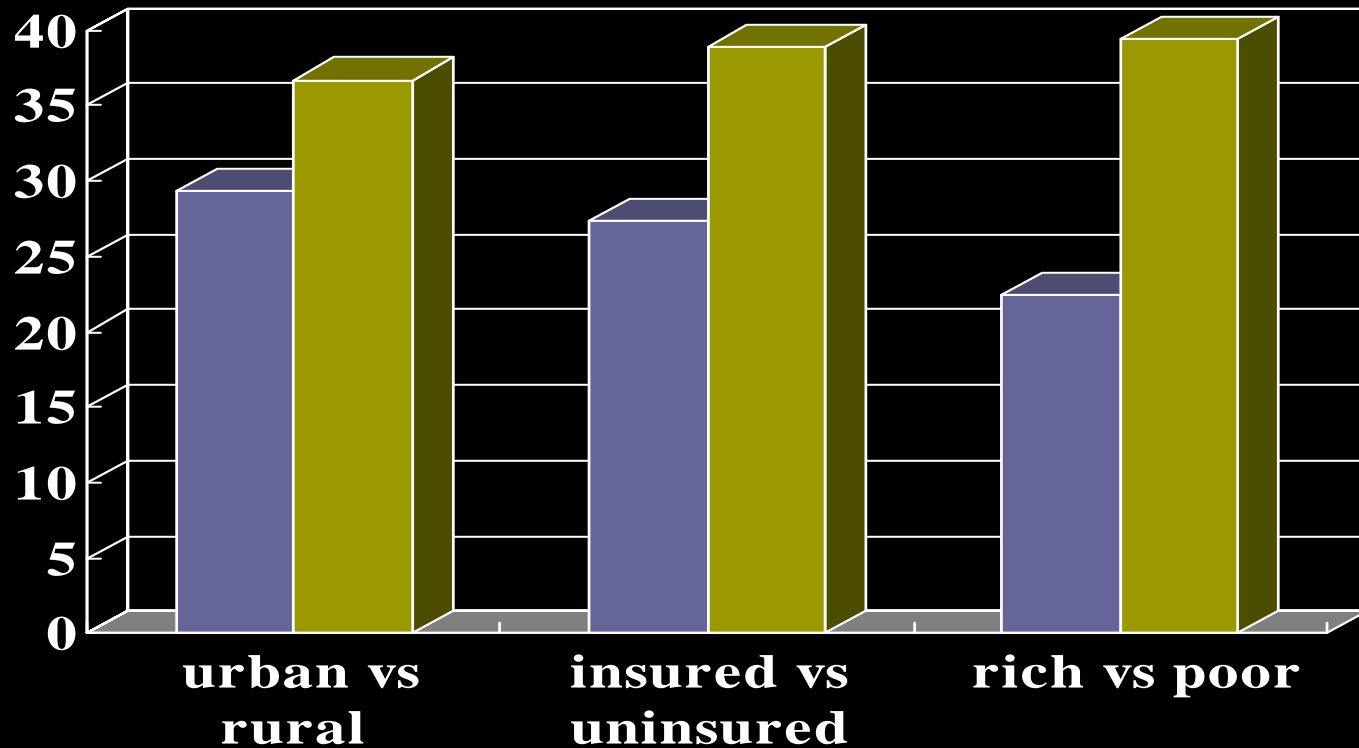
Healthcare Spending in Turkey: Equitable?

- Some indication of inequity:
 - Inequality in financial access & burden
 - Burden of the informal payments

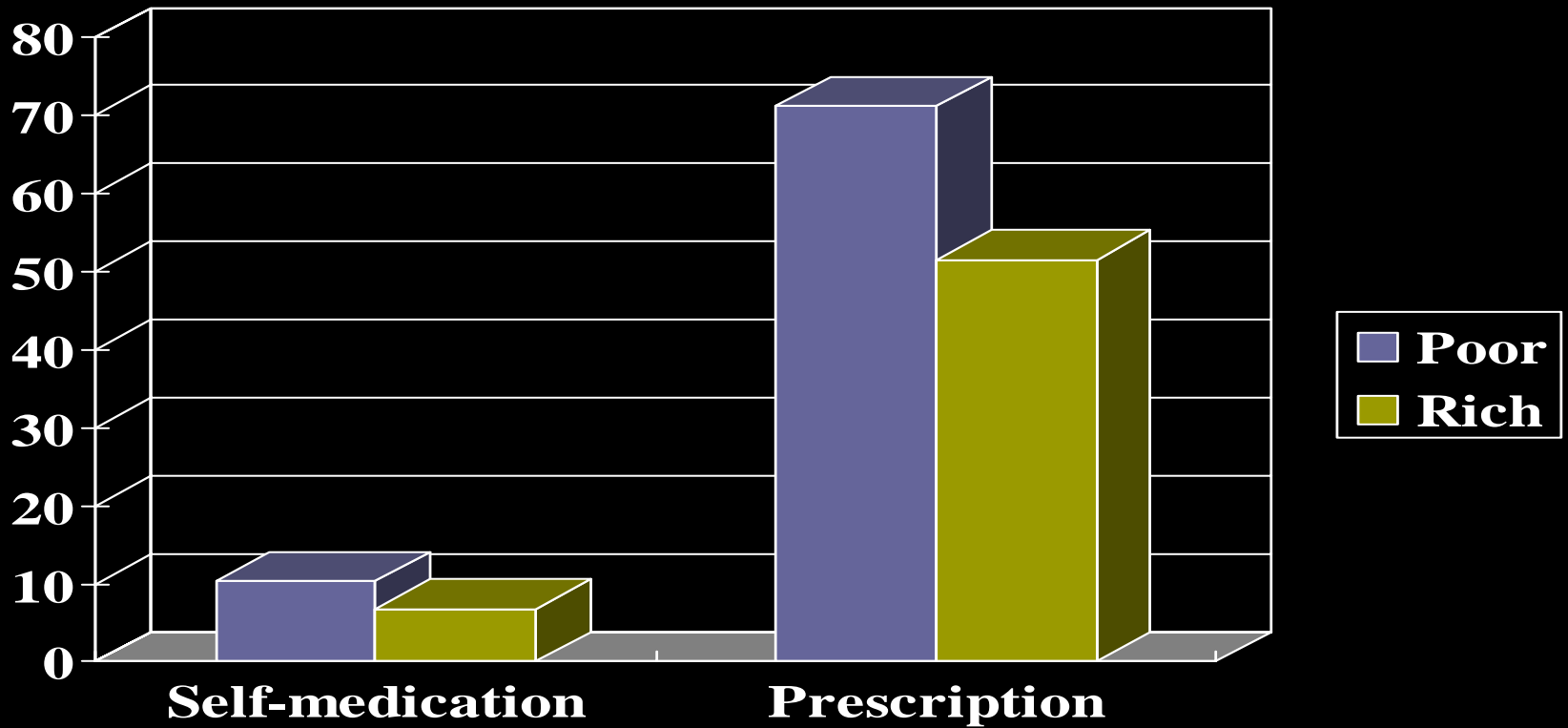
% of Patients Who Did Not Seek Care Due to Inability To Pay



% of Patients Needing To Buy Drugs Outside Hospital



Average Out-of-Pocket Expenditure on Drugs



Out-of-Pocket Payments by Provider and Purpose (%)

Purpose	Public		Private		Total
	Formal	Informal	Formal	Informal	
Donation	-	11.1	-	-	1.3
Physicians' medical services	9.2	2.3	29.8	99.0	32.6
Physicians' surgical services	8.2	23.5	-	-	4.4
Drugs	70.3	50.5	49.7	1.0	46.7
Nurses' /other staff's care	-	1.5	-	-	0.2
Laboratory/ imaging tests	8.1	-	12.2	-	8.2
Other services	4.0	11.1	8.3	-	6.6
Total	100.0	100.0	100.0	100.0	100.0

Source: Tatar M. et al (2003)

WHO's Ranking of Turkey's Health System Performance (1997)

- Health Spending: **82**
- Health: **73** (level) ; **109** (distribution)
- Responsiveness: **93** (level) ; **66** (distribution)
- Fairness in financing: **49-50**

Discussion of Policy Implications

- Overall Level of Healthcare/Drug Spending
- Efficiency Issues & Policy Implications
- Equity Issues & Policy Implications

Overall Level of Spending

- The level seems to be “adequate”
- % of total spending on drugs: 24%
 - High compared to developed countries
 - But at par with or lower than developing countries (e.g. Thailand: 34%)
- This may be due to relative pricing mechanisms of drugs and medical services as well as many other factors
- The need to establish periodic NHAs

Efficiency Issues

- Higher % of \$ on Hospital Outpatient
- The need for PHC & referral system
- Drug spending: higher use of antibiotics
- The need to rationalize drug utilization
- Variation among the social security schemes

Equity Issues

- Overall access to healthcare/drugs: ok
- But significant socioeconomic inequalities in financial access and burden
- The problem of “informal” payments
- Interventions: coverage, NDP, accountability

Key Messages

- Good news: The overall level of spending on healthcare/drugs does not seem to be “out of control”; healthcare access is good
- Bad news: there are concerns about disproportionate use of resources in hospital outpatient setting, significant variation of resource use among different social insurance schemes, and socioeconomic inequalities in financial burden
- Turkey can solve these problems by drawing on international and its own experiences