

# **Innovations and Policy Learning in Catalonia: Similarities and differences between the English and Catalan Reforms**

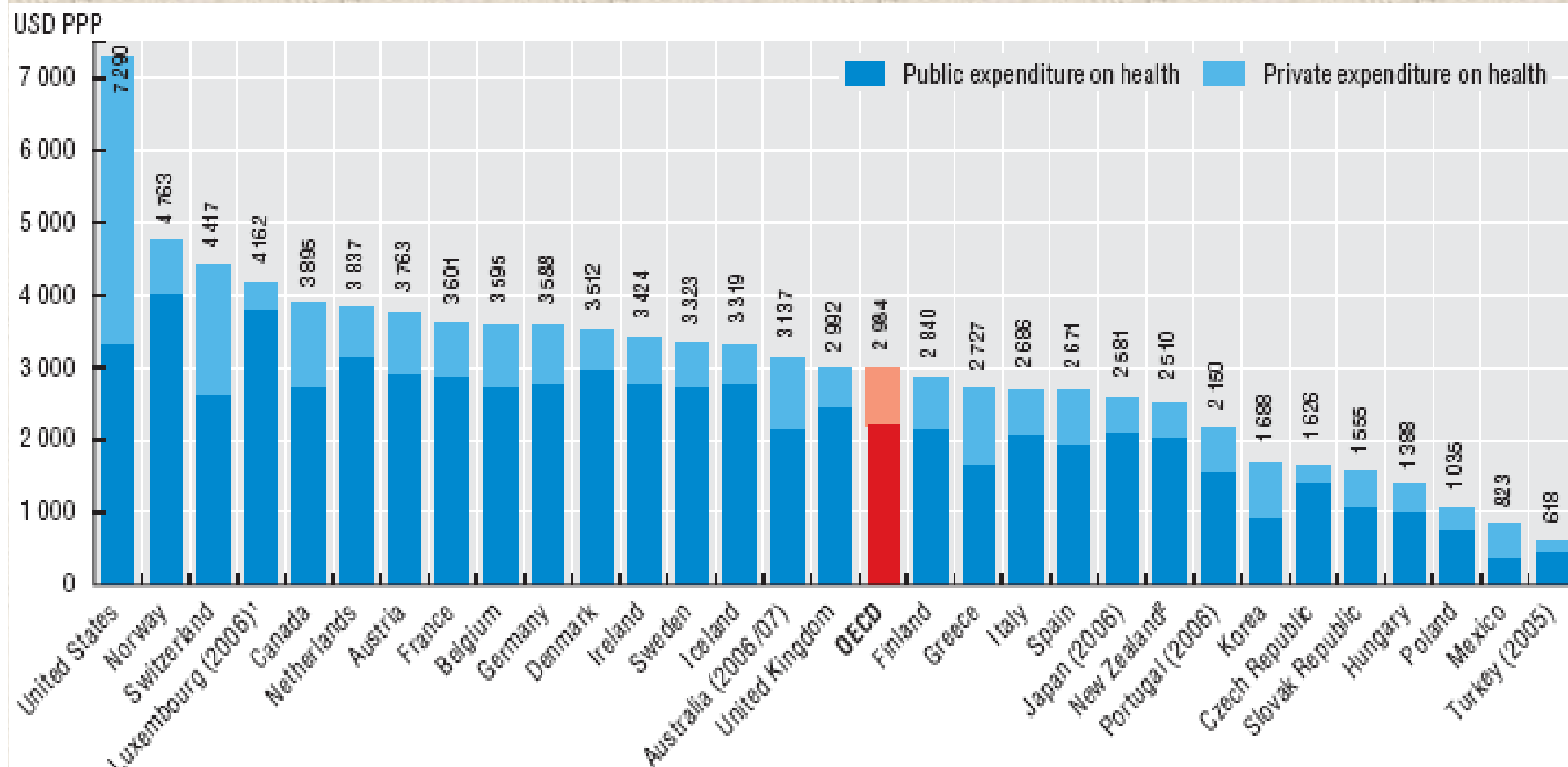


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**CATALAN OBSERVATORI.- LSE March 17th 2010**

## Health expenditure per capita across OECD countries (\$ ppp).

2007

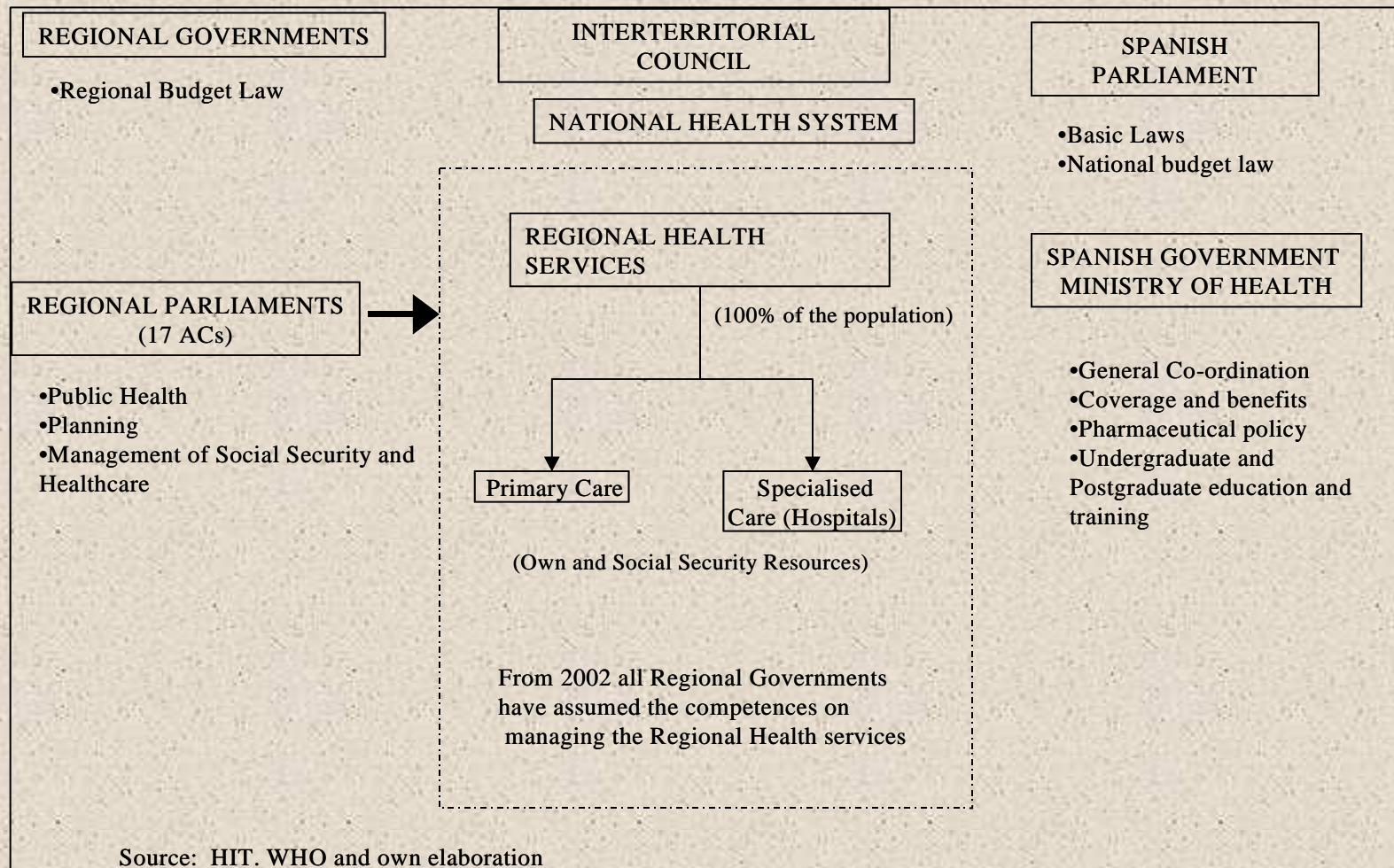


1. Health expenditure is for the insured population rather than resident population.

2. Current health expenditure.

**Source:** OECD Health Data 2009, OECD (<http://www.oecd.org/health/healthdata>).

# Organisational structure of the Decentralised Spanish National Health System



## The Spanish Health System Decentralization

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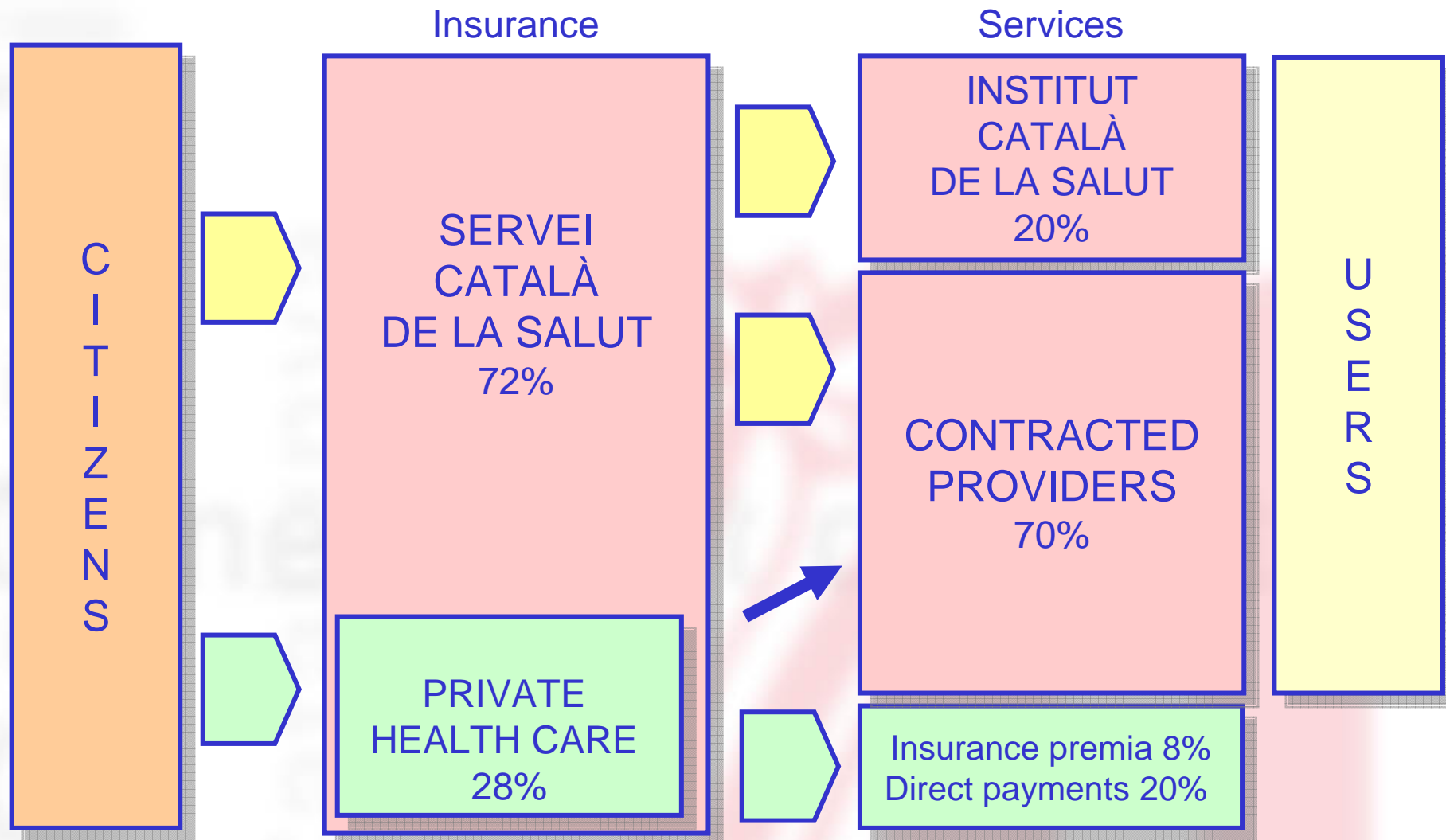
### **Central Government**

- Basic legislation and coordination
- Financing
- Package funded through NHS
- Pharmaceutical policy (up to prescription)
- International health policy
- Educational requirements

### **Autonomous Government**

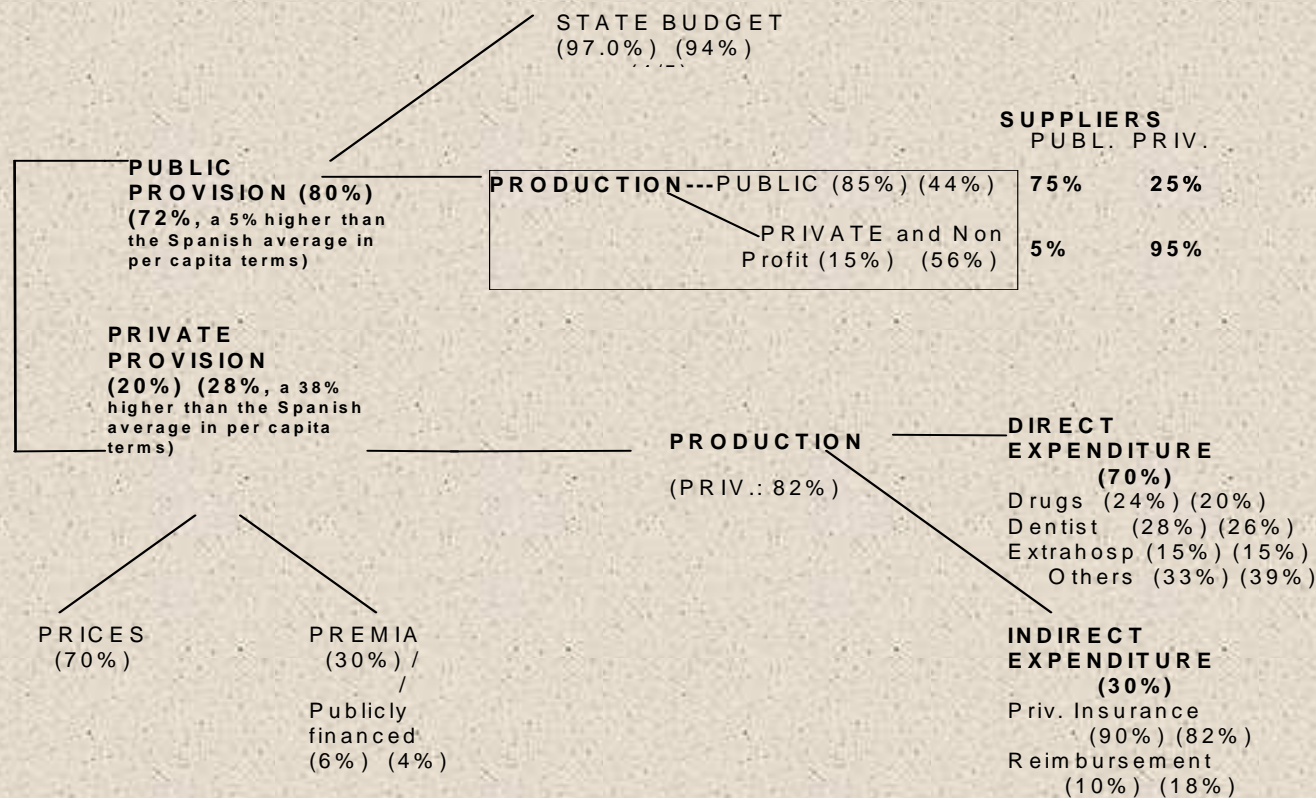
- Top up central finance
- Public health
- System's organizational structure
- Accreditation and planning
- Purchasing and service provision

**Catalonia: 7 million citizens. Public spending in health care a bit below the Spanish average. Offset by a higher private expenditure**  
**General diagram of the Catalan Healthcare System**



# THE SPANISH vs CATALAN (approach of flows)

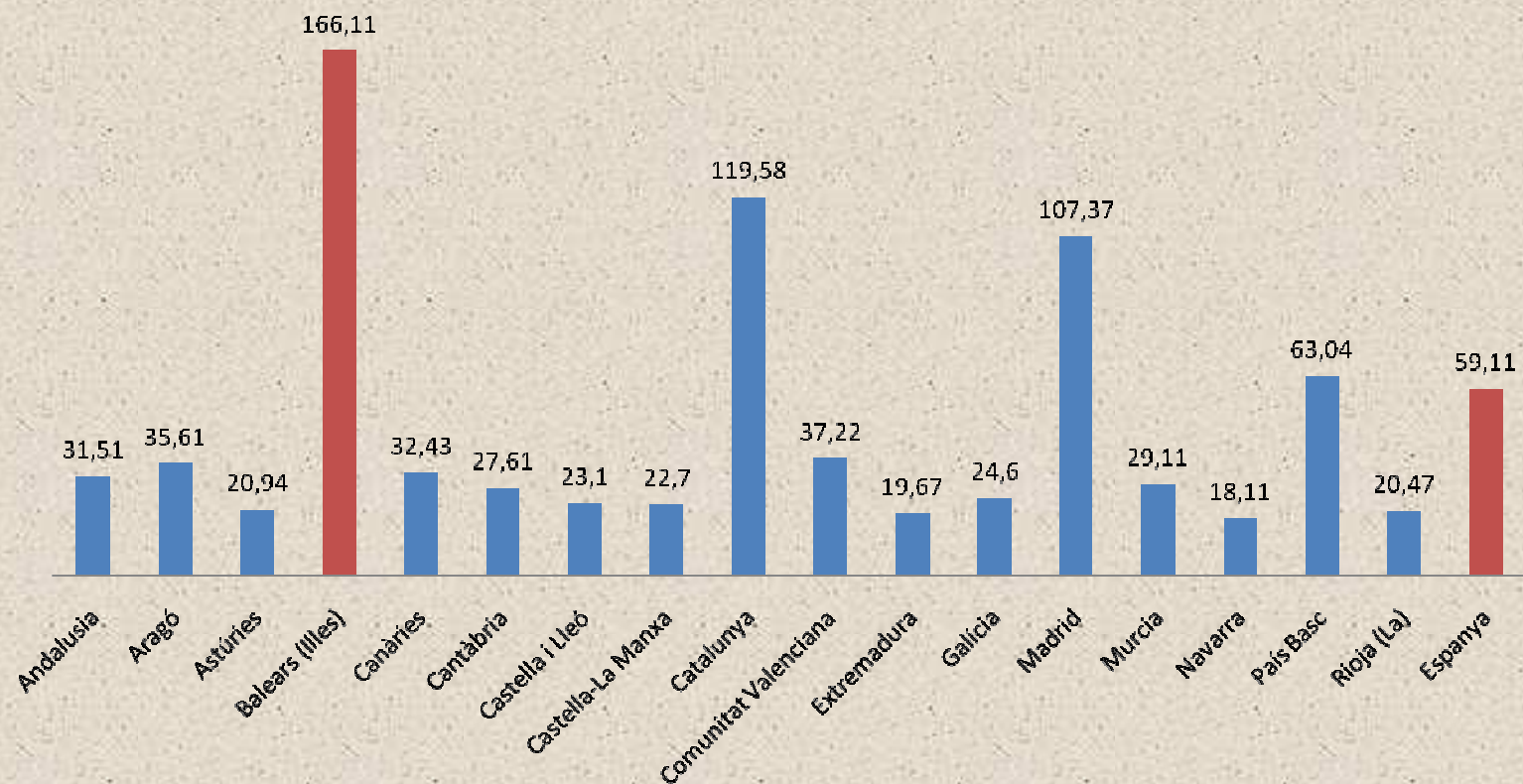
**Figure 1. An overview of the Spanish NHS and the Catalan Health Service for Comparative purposes (both respectively in brackets).**



*Key words: **Finance** refers to the revenue sources; **provision** to the service responsibilities; **production**, regards to who produces the service; and **supply**, to the inputs ownership. Prices can be identified with direct expenditure and premia with indirect expenditure. Source: own elaboration, from different sources. In the second bracket, similar figure for the region of Catalonia, with the most different idiosyncratic model of health care.*

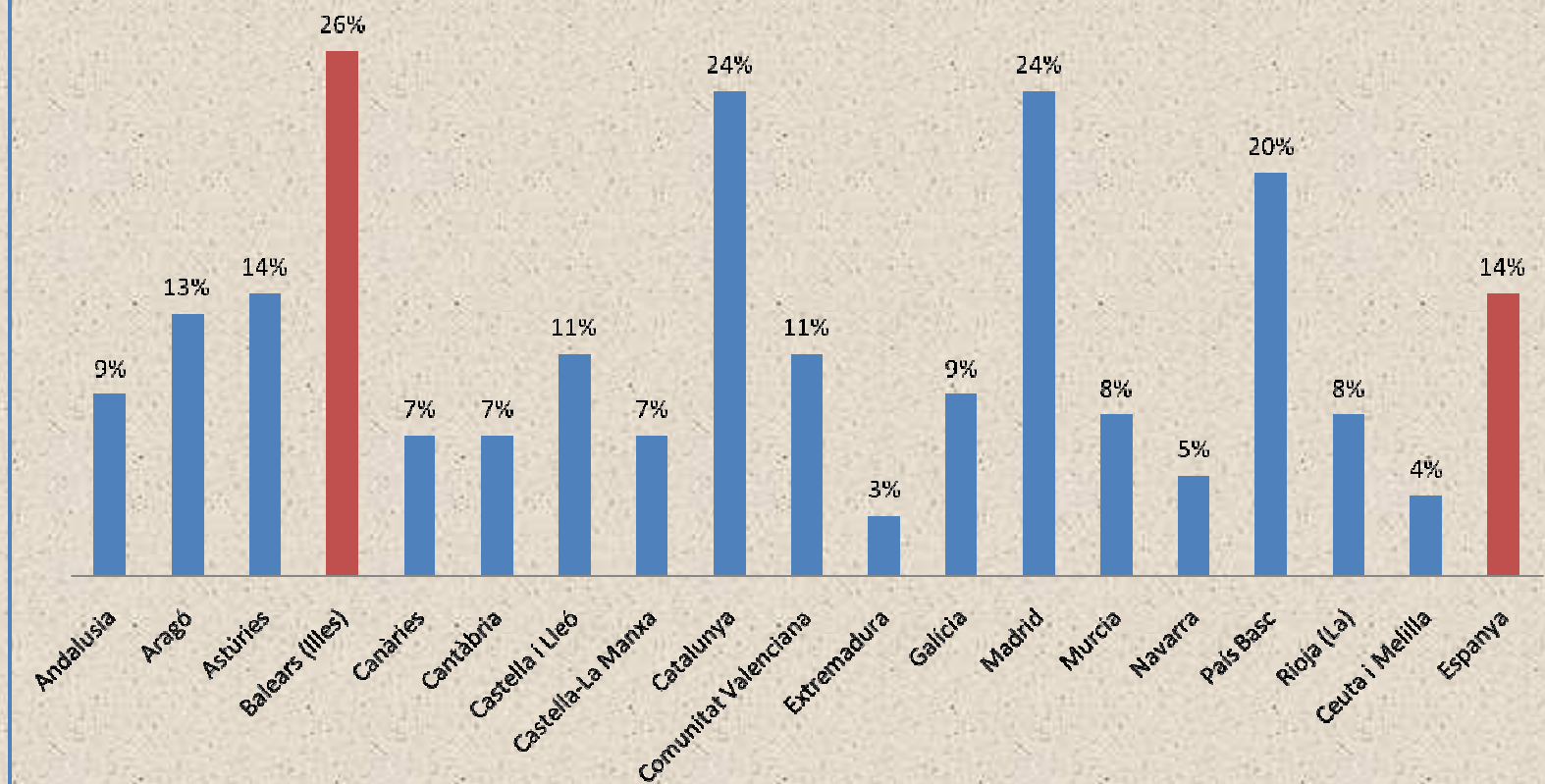


### Despesa mitjana per persona en assegurances privades relacionades amb la salut. Any 2007



Font: INE. Enquesta de pressupostos familiars

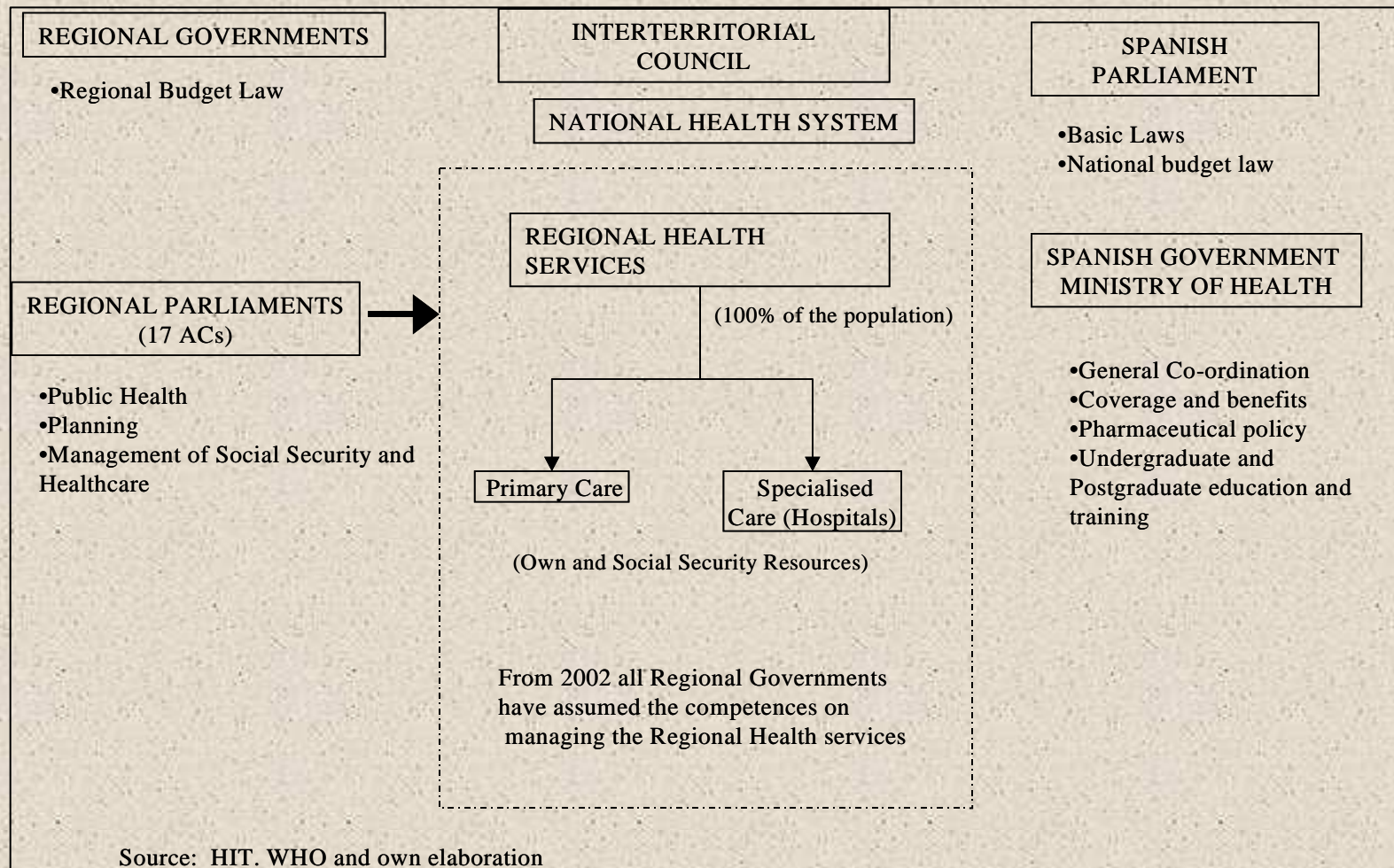
### Població amb cobertura privada. Any 2006



Font: MSyC - INE. Enquesta Nacional de Salut 2006



# Organisational structure of the Decentralised Spanish National Health System



***IN A DECENTRALISED HEALTH SYSTEM, 17  
AUTONOMOUS COMMUNITIES, WITH 5  
UNDER 2 MILION PEOPLE***

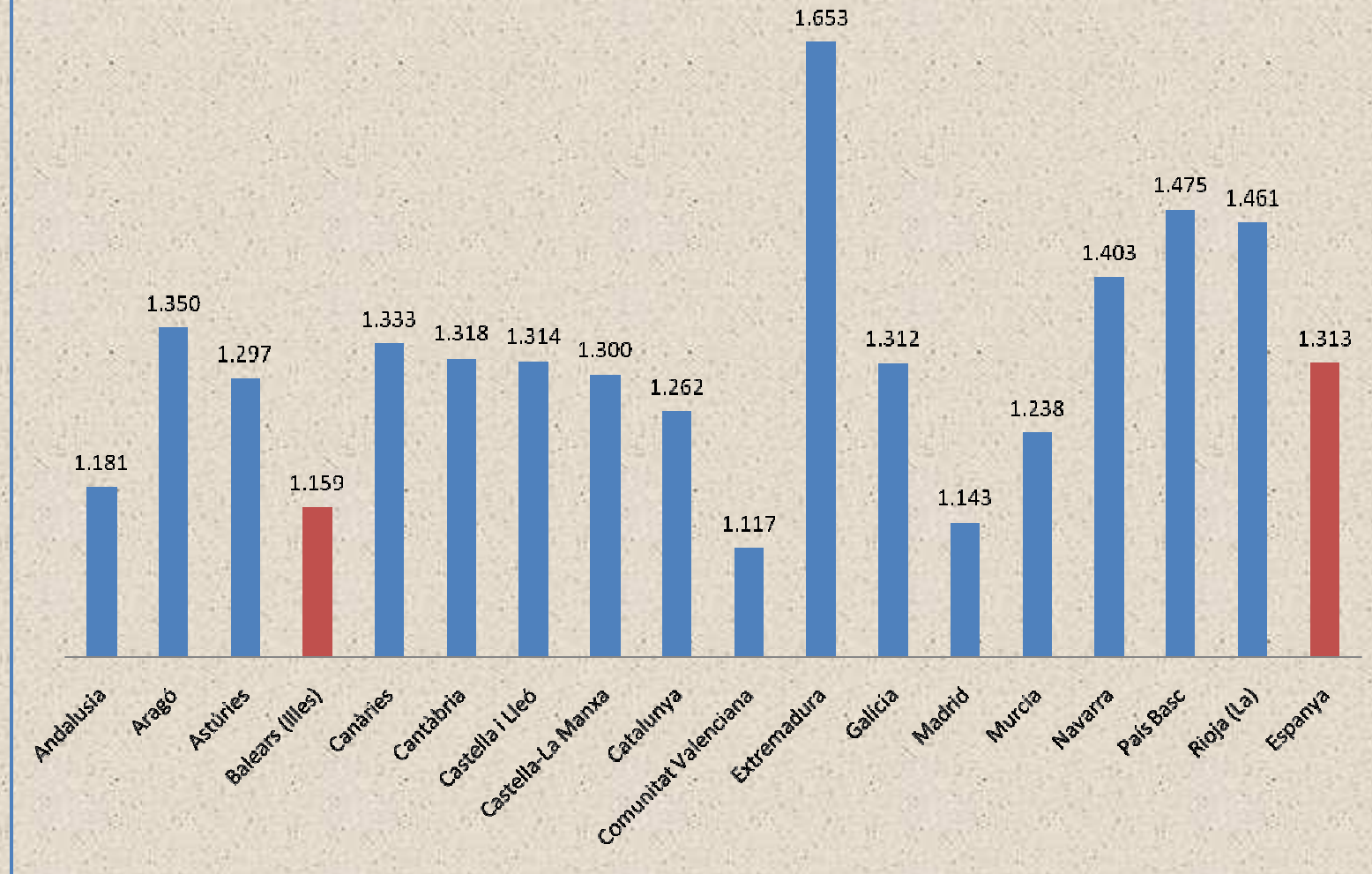
***THE WORST: ALL OF THE ACs TRYING TO  
BEHAVE AS SELF-SUFFICIENT AND  
POLITICALLY INFLUENCED NATIONAL  
HEALTH SERVICES***

***THE BEST: IT OPENS PLENTY OF  
OPPORTUNITIES IN ORDER TO INNOVATE  
AND BREAK THE CENTRAL MONOPSONY  
AND MONOPOLISTIC POWER IN HEALTH  
CARE***

# THE SPANISH allocation of public resources from Central Funds for Health Care --per capita differences 2004



## Despesa sanitària pública per càpita. Any 2008



Font: Pressuposts 2008 de les comunitats autònomes

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- From transfers to the LOSC: The Health Care Organisation in Catalonia Act (1981-90): The Catalan Health Service as a separate organisation from the Catalan Health Institute and Non Profit Organisations under the Public Financed Network of Health Care
  - From the LOSC to CatSalut as the public provider of coverage (1991-2003): the public insurer half way wrt. direct involvement in provision
  - Primary Care new 'entities' EBAs (coop, Trustees and Limited Liability Corporations): 14 pilot experiences
  - A new model: Healthcare governance, integrating health care providers on a geographical basis and a population based finance: 5 pilot regions



# NEW BALANCES OF FINANCIAL RISK HOLDING AND MANAGEMENT

*How financial resources are allocated at the micro level*

**Table 1: FRAMEWORKS FOR HEALTH CARE AND EVOLUTIONARY STAGES**

**Departure point:**

**Planning/ Finance/ Insurance coverage/ Purchasing care/ Production**

**Health Department, integrating all the providers as budget units (cost centers)**

**Evolution:**

**A)**

**Planning/ Insurance**

**Purchasing**

**Production**

**Health Depart.**

**Central Health Care Service Unit**

**Manag. Units**

**B)**

**Planning/ Insurance**

**Purchasing**

**Production**

**Health Depart.**

**Regional Health Care Service Unit**

**Manag. Units**



## **NEW BALANCES OF FINANCIAL RISK HOLDING AND MANAGEMENT RESPONSIBILITIES**

*How financial resources are allocated at the micro level*

**C)**

<u>Planning</u>	<u>Insurance</u>	<u>Purchasing</u>	<u>Production</u>
Health Depart.	Health Care Service	Health Areas	Manag. Units

**D)**

<u>Planning</u>	<u>Insurance</u>	<u>Purchasing/ Production</u>
Health Depart.	Health Care Service	Health Areas, Primary care physicians, Networks of Manag. Units

**E)**

<u>Planning/ Insurance</u>	<u>Insurance Management/Purchasing</u>	<u>Production</u>
Health Depart/ Health Care Service	Networks of providers/ Non public Insurers	Health Care Manag. Units

## **THIRD GENERATION OF DEVOLUTION POLICIES**

and the search for the optimal transfer of risks between  
financers and providers...

- *...In a more coordinated context of providers' networks on a geographical area in which no one wants to be the weakest part (the last holder of the financial pressures, under competitive tendering) of the new integrated chain of the added value for health: disease management, partnerships, risk-sharing agreements...*

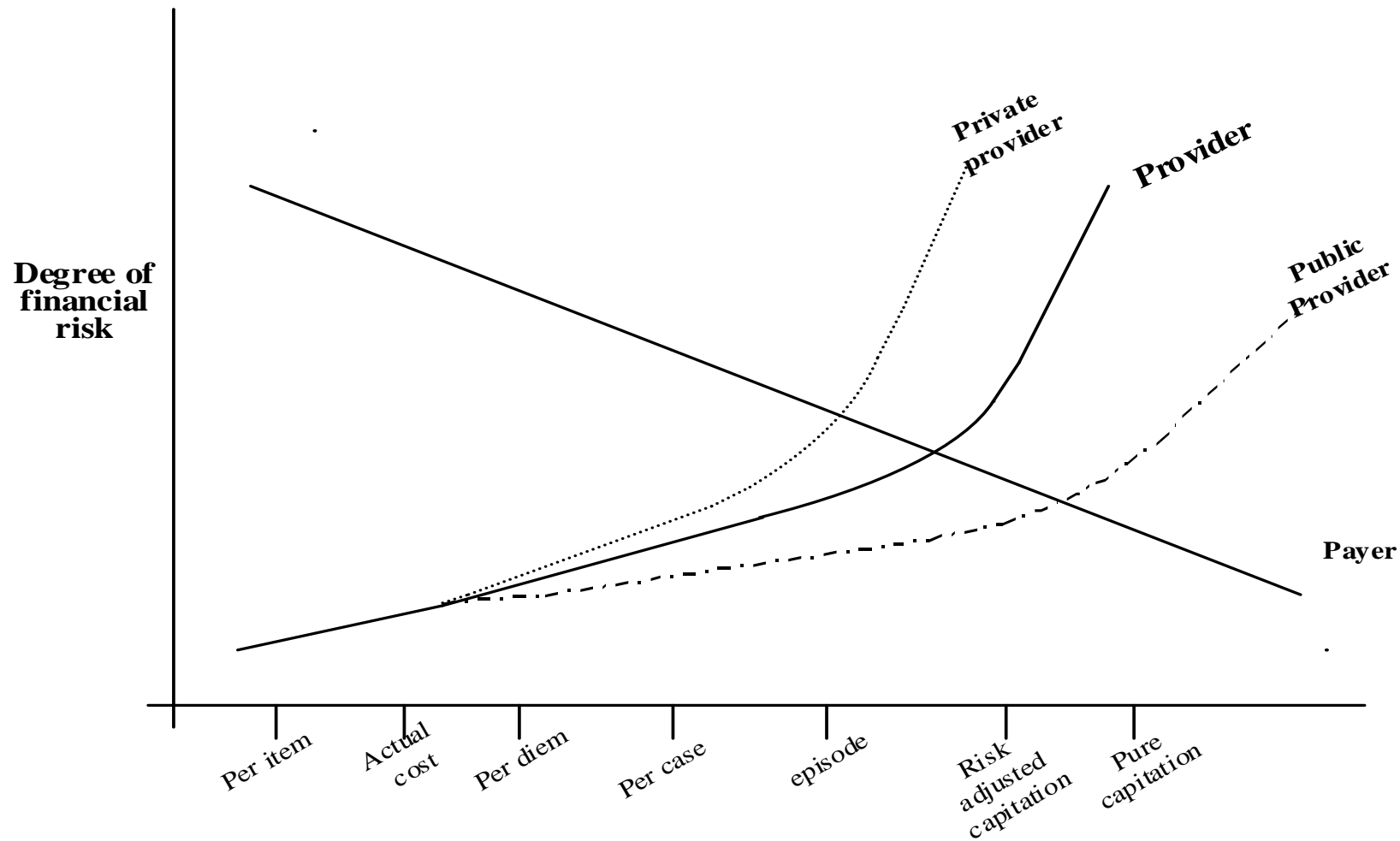
## *Trends at present...*

**RISK TRANSFER** from insurers to providers  
(risk-rating, prospective case-mix payments,  
global budgeting...)

**INCENTIVES FOR COORDINATION** by  
inserting into the system new ‘brokers’ of the  
individuals’ care

**NEW STRATEGIES IN MANAGING  
ILLNESS EPISODES:** the importance of  
being part of the chain rather than the last  
resort input purchased-out in times of budget  
constraints.

# ON RISK TRANSFER- Averhill (from payers to providers)

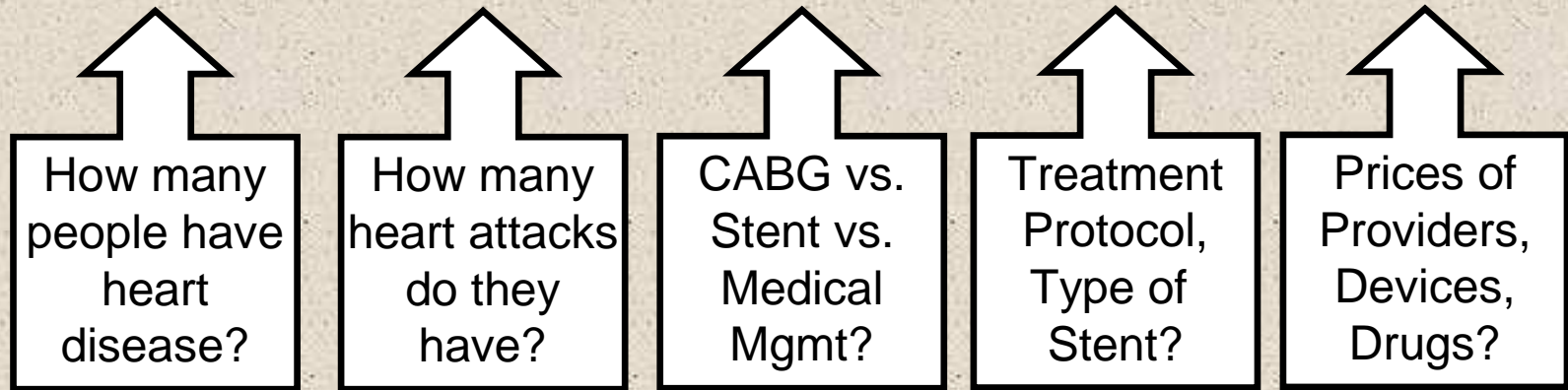




# THE FIRST FRONTIER: Managing population based finance: The general health care cost equation (Kitagawa)

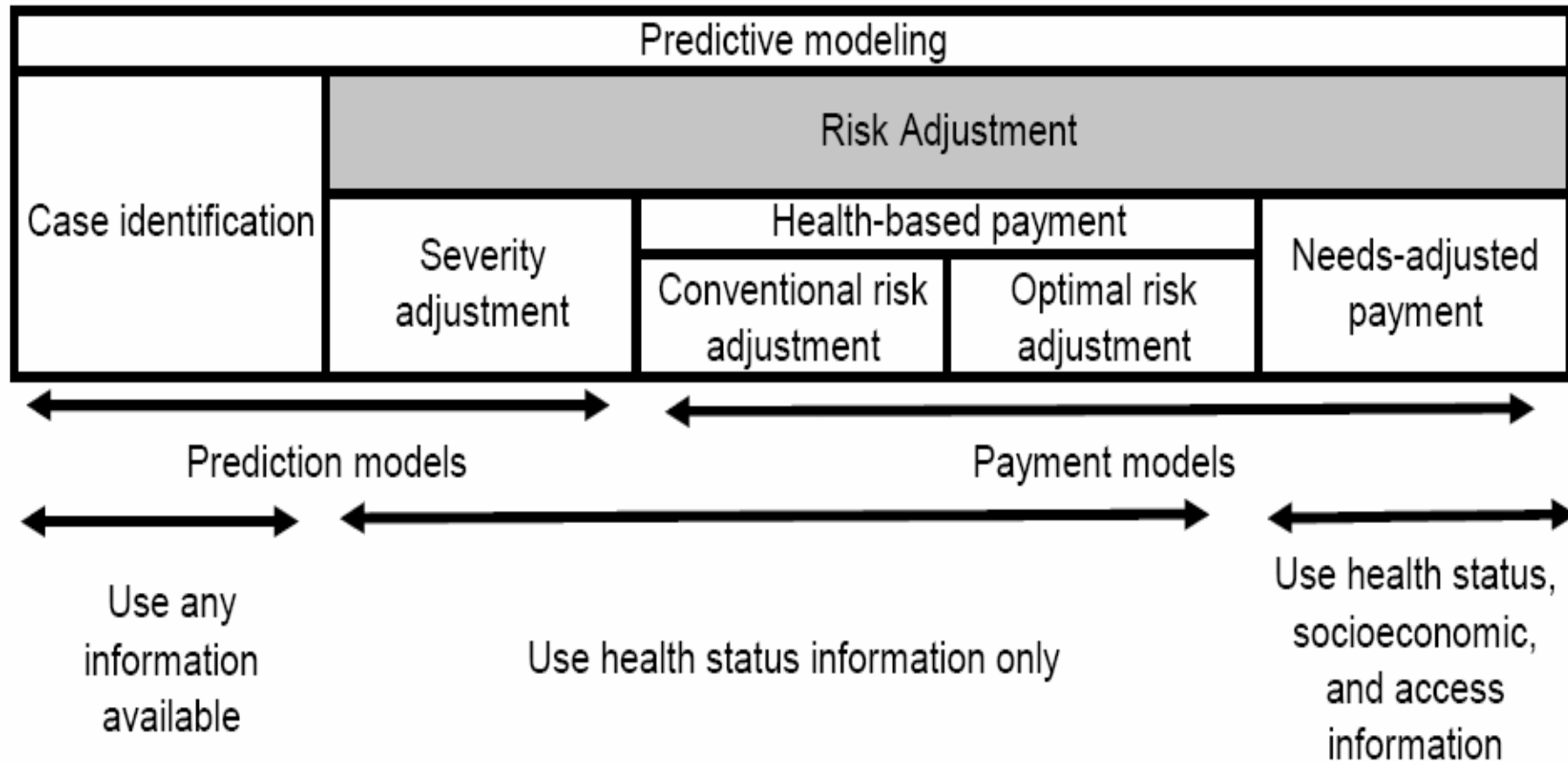
## VARIABLES CONTRIBUTING TO THE COST OF CARE

$$\frac{\text{Cost}}{\text{Person}} = \frac{\# \text{ Conditions}}{\text{Person}} \times \frac{\# \text{ Episodes of Care}}{\text{Condition}} \times \frac{\#/\text{Type Services}}{\text{Episode of Care}} \times \frac{\# \text{ Processes}}{\text{Service}} \times \frac{\text{Cost}}{\text{Process}}$$



Cost of Treating Heart Disease

# Understanding risk-adjustment





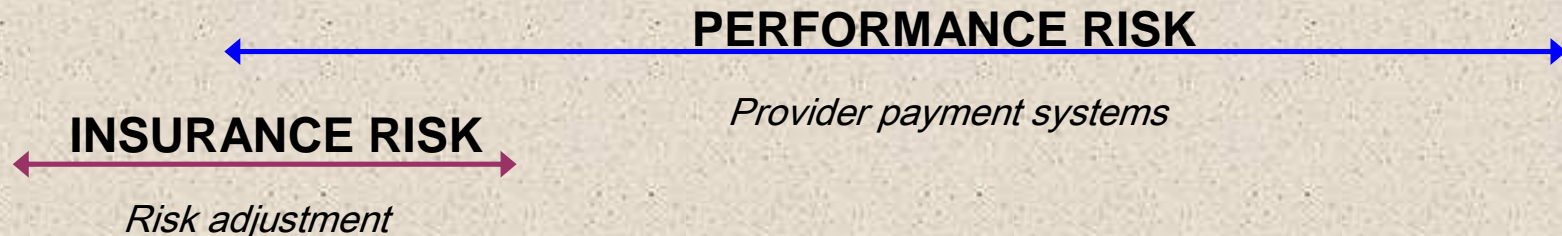
# The health care cost equation

**VARIABLES FOR WHICH THE PROVIDER IS AT RISK  
UNDER ALTERNATIVE PAYMENT SYSTEMS**

$$\frac{\text{Cost}}{\text{Person}} = \frac{\# \text{ Conditions}}{\text{Person}} \times \frac{\# \text{ Episodes of Care}}{\text{Condition}} \times \frac{\#/\text{Type Services}}{\text{Episode of Care}} \times \frac{\# \text{ Processes}}{\text{Service}} \times \frac{\text{Cost}}{\text{Process}}$$

- FEE FOR SERVICE -

-----TRADITIONAL CAPITATION-----



# Population based purchasing

- May 2002. Pilot Project, initially 5 areas with capitation payments
- Goals:
  - Promote quality of services and avoid activity growth
  - Promote activity and services to the right place through coordination of providers
  - Promote patient centered care
  - Transfer risk and responsibility to those providers that can create more value.
- A combination of funding (capitation) and organizational (coordination) approach.
  - Providers are still compensated through payment system, however there is a population ceiling that promotes an agreement ex-ante and a review ex-post of the goals and activities of each provider within the Geographical Areas (Governs Territorials de Salut)

## **THE SECOND FRONTIER: The role of the providers The case of the Hospital payment system**

- **Inpatient income= Number of expected discharges\* Price per discharge**
- **Price per discharge=  $(0,65 * \text{Structural average price} * \text{Structural Relative Index}) + (0,35 * \text{Casemix average price} * \text{Casemix Index})$** 
  - *A hospital with the same structure and casemix as the average will receive the average price of the network.*

**\*\*\***

- **Visits Income=Number of expected first visits\*Index of repetition\*Forfait price(1 and 2nd visit) by type of hospital**

**\*\*\***

- **Emergencies income=Number of expected emergencies\*Price emergency by type of hospital**

**\*\*\***

- **Idem for day hospital**

**\*\*\***

- **Beyond the expected volume: marginal production paid at 20% price.**

## The way we have faced it: Hospital payment: structure

- Measurement of structural differences according to a fuzzy classification model (Grade of Membership analysis).
  - *Vertrees, J.C., & Manton, K.G. (1986). A multivariate approach for classifying hospitals and computing blended payment rates. Medical Care, 24(4), 283-300*
- Number of groups defined statistically.
- The model provides probabilistic pure types
- Each observation belongs to a pure type in a certain degree.



## The way we have faced it: Hospital payment: structure **Structure and case-mix**

- *Estimation of expected structural cost per discharge* through regression on grades of membership.
- Knowing total costs of hospitals, and proportion of inpatient costs and number of discharges, we can obtain an average observed cost per discharge
- Since we have grade of membership that adjusts structure, we can get the expected cost according to structure. This expected cost is transformed into an index, Relative index of structure IRE
- *Calculating case-mix index per hospital.* Using ICD9-CM of all discharges and AP-DRGs. Relative index of resource consumption according to diseases, IRR

# Assessment of the payment system

## Positive elements:

- Efficiency improvement
- Contribution to transparency between funding and provision
- Improvement of information systems
- Promotion of new activities: ambulatory surgery with strong incentives.

## Controversial elements

- Payment system based on intermediate products, not the episode of care
- Based on current supply, and promotes incremental activity
- Avoid collaboration between providers
- Quality of services need better goals
- Some areas (visits, mental health) underdeveloped



## THE THIRD FRONTIER: REFORMING THE PRIMARY CARE. The way we have faced it

- Salaried staff in traditional health centres
- New associative basic entities (coops, Lted respons. corporations..)
- Enlarging the primary providers autonomy
- Primary services capitation finance
- Virtual integration with acute specialised care in a geographical based towards a more complete risk-adjusted capitation

# Final comments

- To increase action
- To manage transition
- From paying for inputs (to be), to pay for activity (to do), to P4P (to achieve), to population based finance (to cover)
- To clarify governance structures and financial responsibilities of the parts
- To maintain providers' autonomy under a common contracting out approach
- To identify the agent best located in order to increase users' additional finance for health care

THANKS FOR YOUR ATTENTION!!

...follows some addenda...

# Current Payment Systems Catalonia (P. Ibern, CRES 2010)

		Acute care	LTC	Mental Health	Primary care	Integrated care
	Bedday		Discharge RUGH	Discharge		
<b>Activity</b>	Discharge	Adjusted by case-mix and structure				
	Unit	Visits, Emergencies, AS				
<b>Budget</b>			Home Care	Programs		
<b>Capitation</b>					Age/Sex. Rural Utilization	Pilot Plan Population based-purchasing

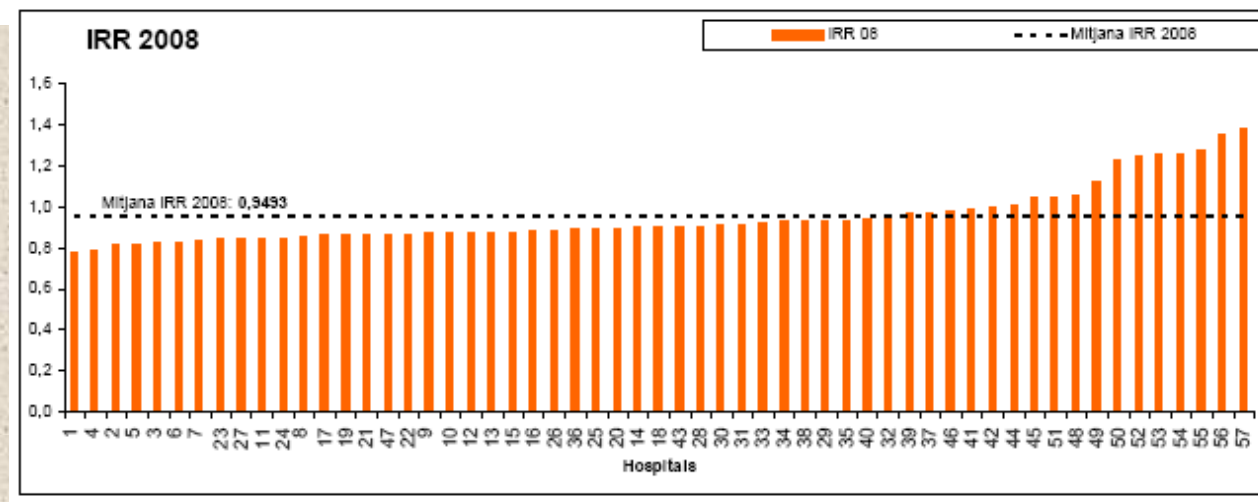
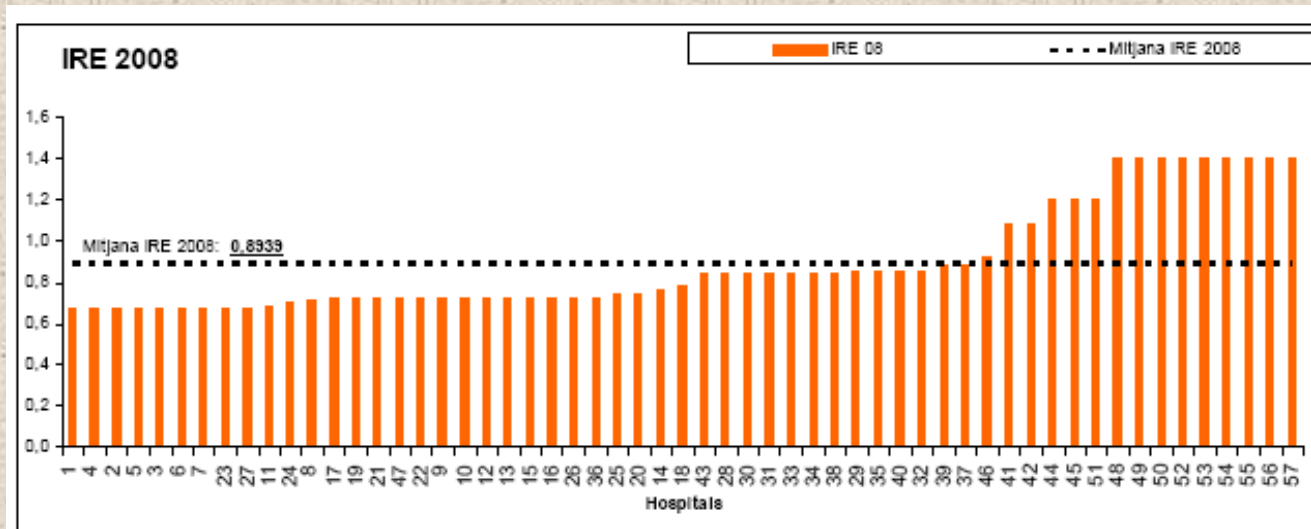


# Hospital payment: Structure

	Tipo puro 1	Tipo puro 2	Tipo puro 3	Tipo puro 4	Tipo puro 5
1	1.0000	0.0000	0.0000	0.0000	0.0000
2	1.0000	0.0000	0.0000	0.0000	0.0000
3	0.1219	0.8781	0.0000	0.0000	0.0000
4	0.1074	0.8926	0.0000	0.0000	0.0000
5	1.0000	0.0000	0.0000	0.0000	0.0000
6	0.0000	0.0000	0.8306	0.1694	0.0000
7	1.0000	0.0000	0.0000	0.0000	0.0000
8	0.0000	0.8979	0.1021	0.0000	0.0000
9	1.0000	0.0000	0.0000	0.0000	0.0000
10	0.4336	0.5664	0.0000	0.0000	0.0000

Example of estimated values of grade of membership  
*g<sub>ik</sub>*

# Hospital payment system: structure and casemix index





# Hospital payment: Structure and Casemix

Structure

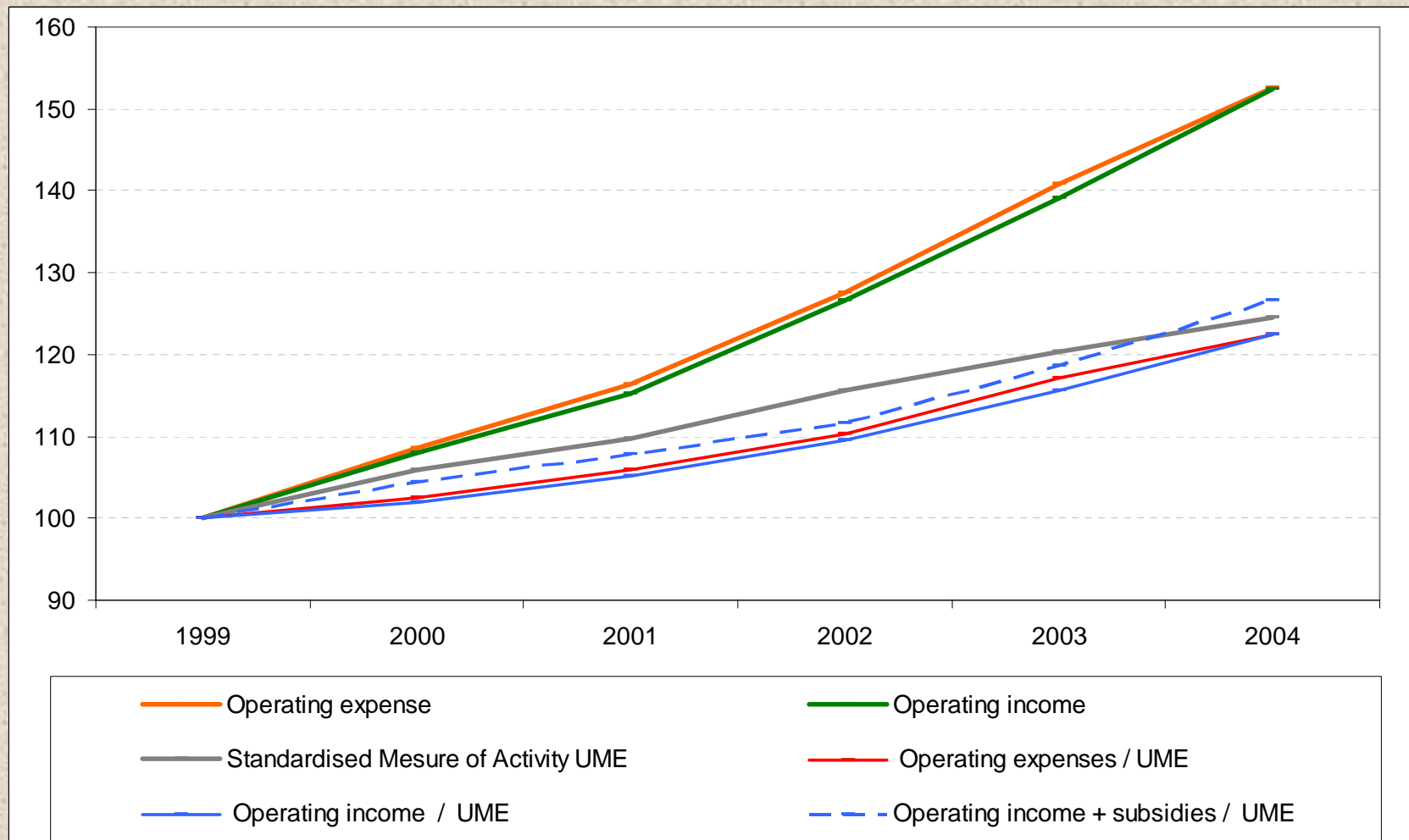
Casemix

Any	Preu IRE	Creixement preu IRE	Preu IRR	Creixement preu IRR
1998	1.416,82 €	0,00%	1.402,09 €	0,00%
1999	1.442,32 €	1,80%	1.427,33 €	1,80%
2000	1.476,94 €	2,40%	1.461,58 €	2,40%
2001	1.532,32 €	3,75%	1.516,39 €	3,75%
2002	1.581,36 €	3,20%	1.564,91 €	3,20%
2003	1.669,13 €	5,55%	1.651,76 €	5,55%
2004	1.719,20 €	3,00%	1.701,31 €	3,00%
2005	1.779,89 €	3,53%	1.761,37 €	3,53%
2006	1.854,82 €	4,21%	1.835,52 €	4,21%
2007	2.025,28 €	9,19%	2.004,20 €	9,19%
2008	2.141,53 €	5,74%	2.119,24 €	5,74%

Font: CatSalut

Nota: L'any 2007, l'augment de les tarifes d'hospitalització incorpora l'aplicació a tarifes del VI Conveni de la XHUP

# Evolution of hospital economic results



Source: Central de Balanços. Departament de Salut.

# Capitation payment evolution

