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Equity in Health and Health Care : how does Italy compare?

AIES, Firenze, 19 October, 2007

Sources: recent publications from ECuity (EU) and OECD Project

- *Finance:*
  - *Wagstaff, A, E van Doorslaer, et al, Journal of Health Economics, 18, 1999, 263-290*
- *Delivery:*
  - *Van Doorslaer, E, C Masseria and the OECD Health Equity Group, Income-related inequality in the use of medical care in 21 OECD countries, In: OECD, 2004, Towards high-performing health systems, OECD Health Policy Studies, Paris*
  - *Van Doorslaer, E, C Masseria, X Koolman and the OECD Health Equity Group, Inequalities in access to medical care by income in developed countries, Canadian Medical Association Journal, 2006, 174: 177 - 183*
  - *Jones, AM, X Koolman and E van Doorslaer, The impact of supplementary private health insurance on the use of specialists in selected European countries, Annales d'Economie et de Statistique, 2007, 83-84, 251-275*
  - *Masseria, C, E van Doorslaer and X Koolman, Income-related inequality in the probability of a hospital admission in Europe, Erasmus University Rotterdam (submitted)*
- *Health:*
  - *Van Doorslaer and Koolman, 2003, Explaining the differences in income-related health inequalities across European countries, 2004, Health Economics, 13(7): 629-647*

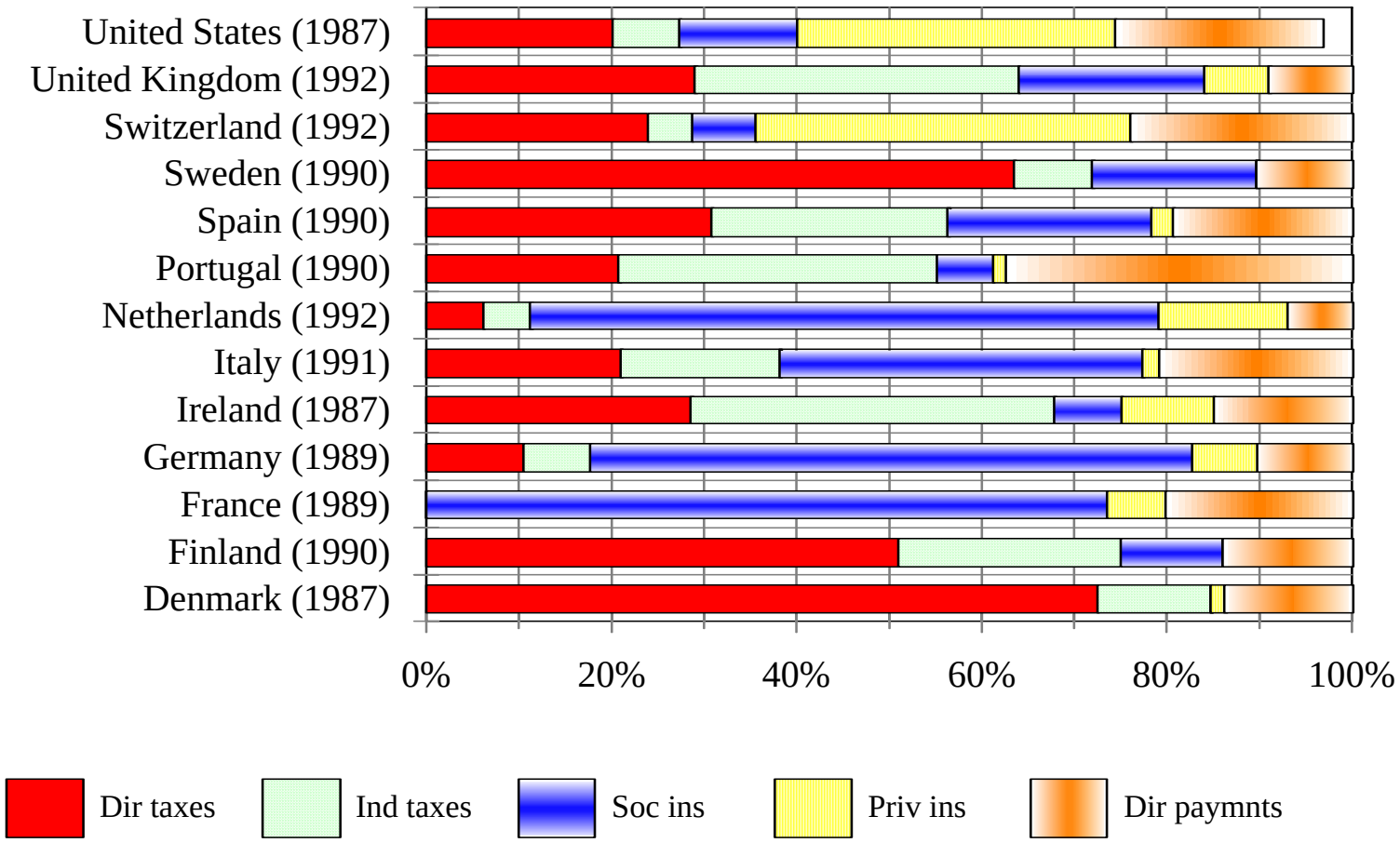
Introduction

- *What do we mean by equity in health care?*
  - *Payments according to ability to pay*
  - *Equal treatment for equal need*
  - *Contributing to lower health inequality*
- *How does Italy's health care system perform in comparison to other OECD/EU countries in terms of:*
  - *Progressivity of payments?*
  - *Distribution of utilisation in relation to need?*
  - *Health inequality by income?*

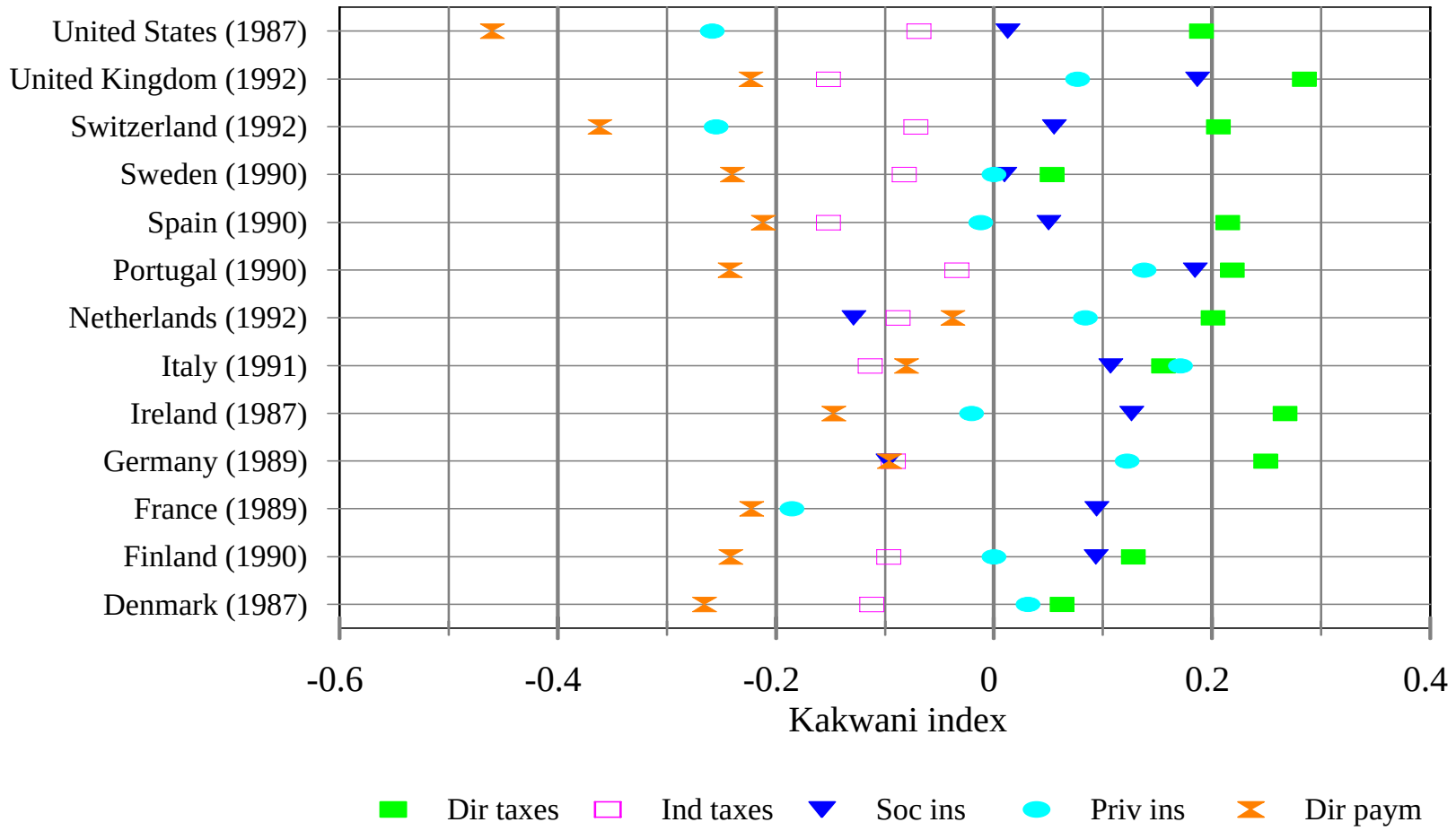
Part 1: Equity in health care financing

- *Is the distribution of health care payments in relation to income proportional, progressive or regressive?*
- *A progressive (regressive) payment distribution decreases (increases) income inequality.*
- *There are four possible sources of finance (taxes, social insurance, private insurance or direct payments) …*
- *… and they have very different redistributive effects*
- *Progressivity of health care payments can be measured using a Kakwani index, which is:*
  - *Positive if progressive*
  - *Zero if Proportional*
  - *Negative if regressive: -*

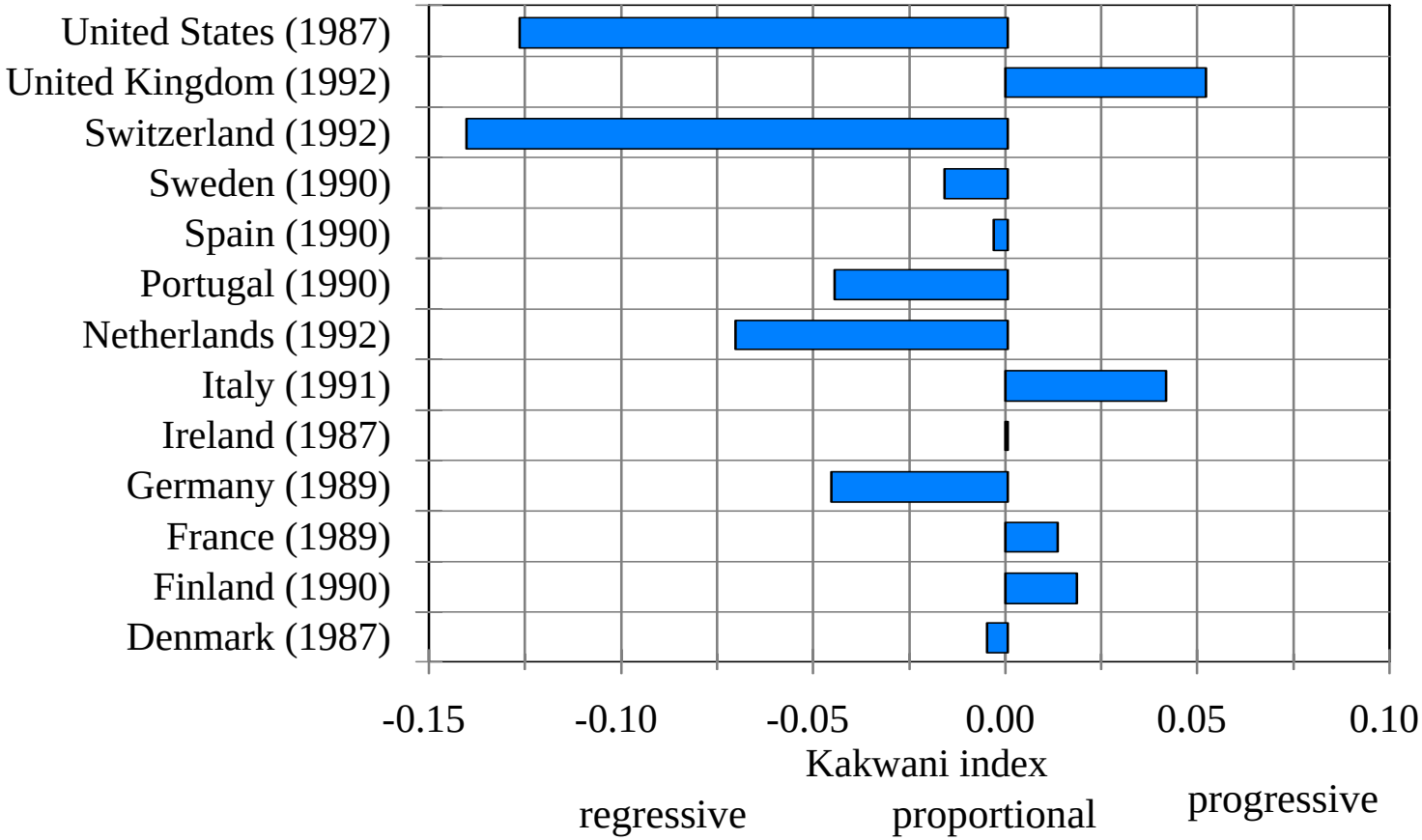
The health care financing mix: revenue shares of payment sources



Progressivity of financing sources: 11 EU and 2 non-EU countries



Overall progressivity of health care finance in 13 countries



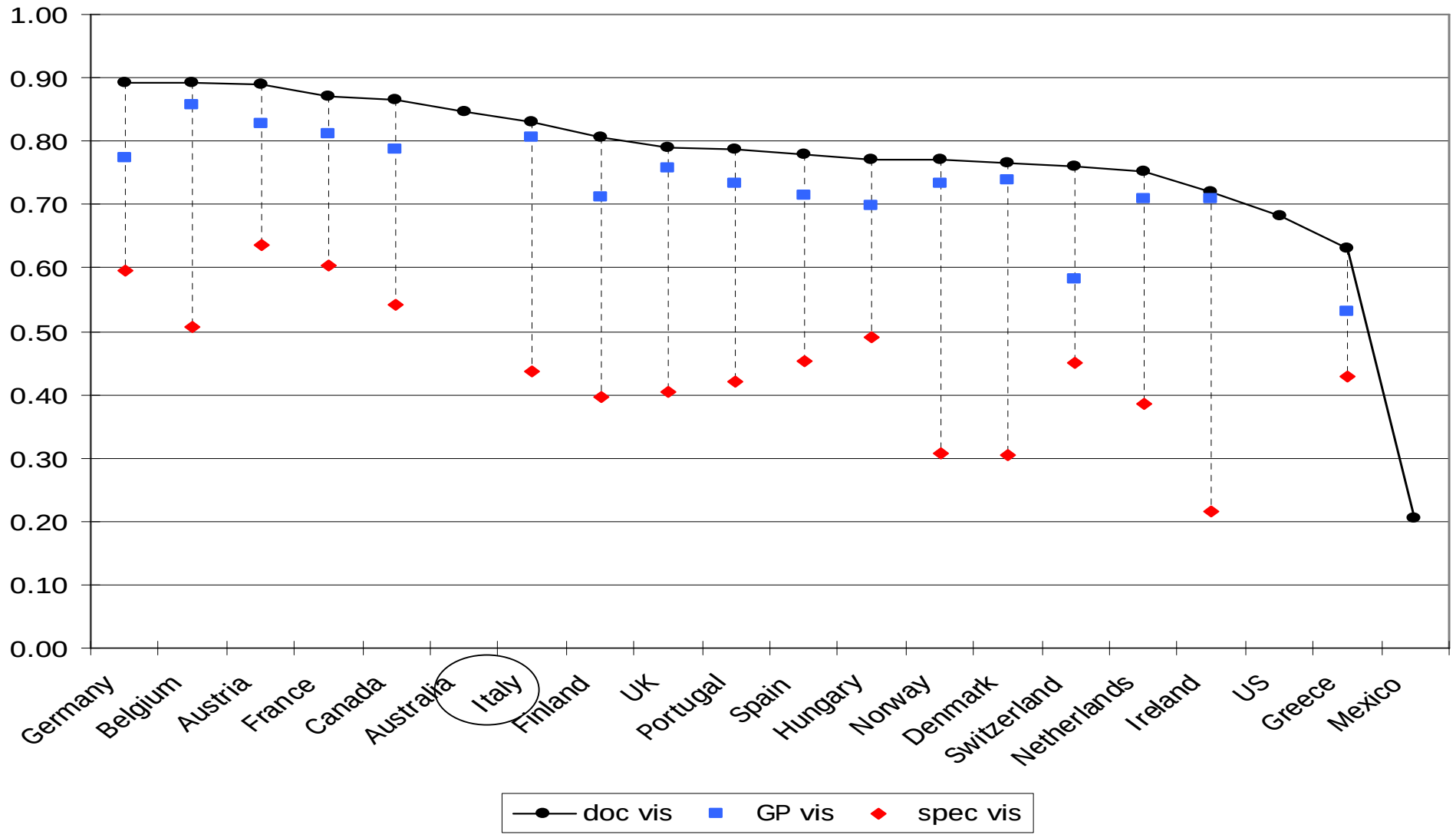
Equity in health care financing - conclusions

- *Italy raises health care revenues from taxes, social insurance and private payments in roughly equal proportions (a third each)*
- *Direct taxes and social security premiums used quite progressive*
- *Direct payments and indirect taxes are regressive*
- *Overall, the financing is (was?) fairly progressive in 1991 (second most progressive)*

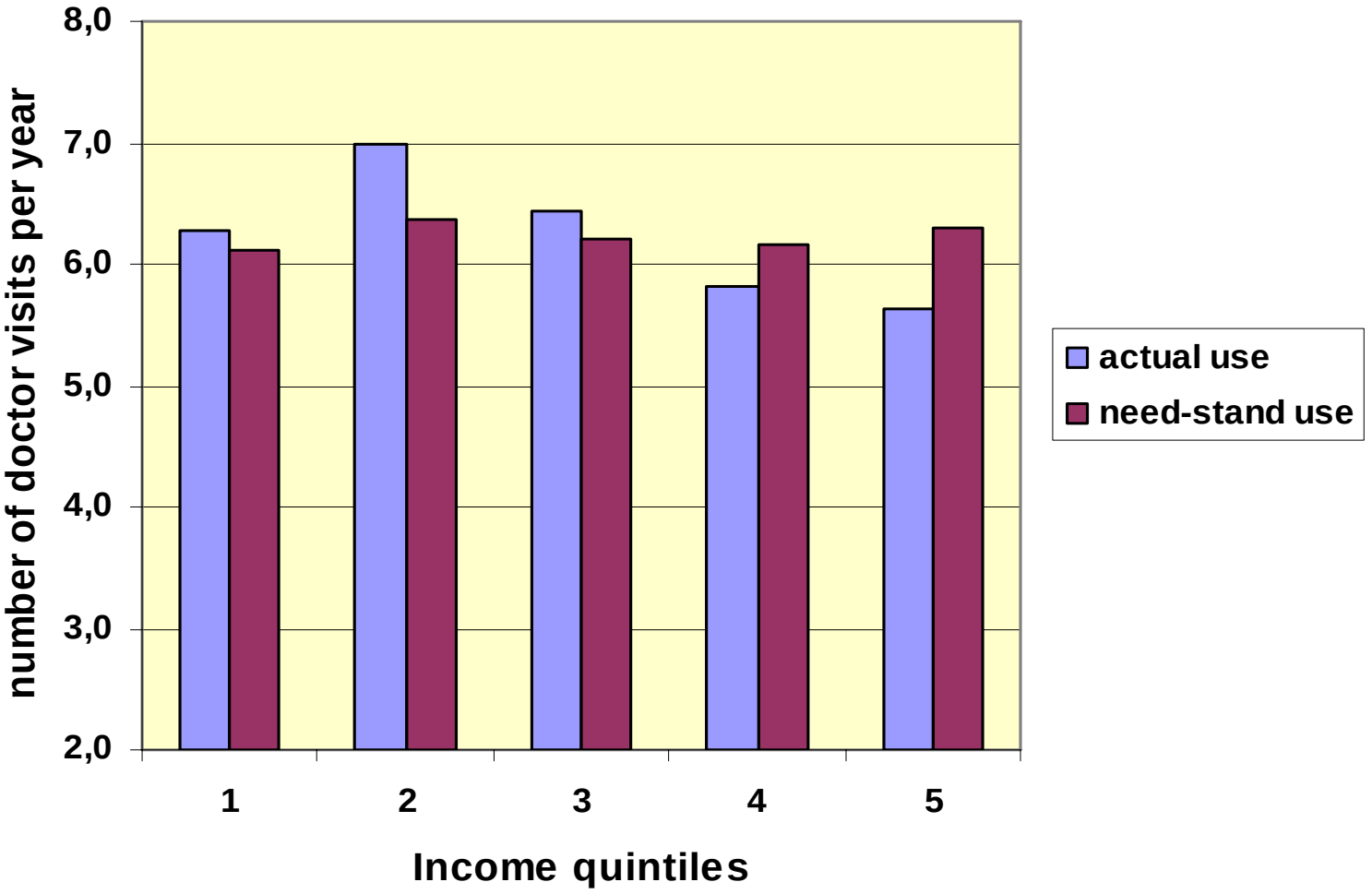
Part 2: Equity in utilisation: are those in equal need treated equally?

- *Can be assessed by comparing the actual distribution of health care use in relation to the expected distribution on the basis of need characteristics*
- *Does not require equality of utilisation*
- *Equitable if use and need distributions (by income) coincide*
- *Degree of inequity can be measured by an index of (horizontal) inequity, which is negative if pro-poor and positive if pro-rich*
- *Italian data for comparison taken from Eurostat's European Community Household Panel, wave 8 (2001)*

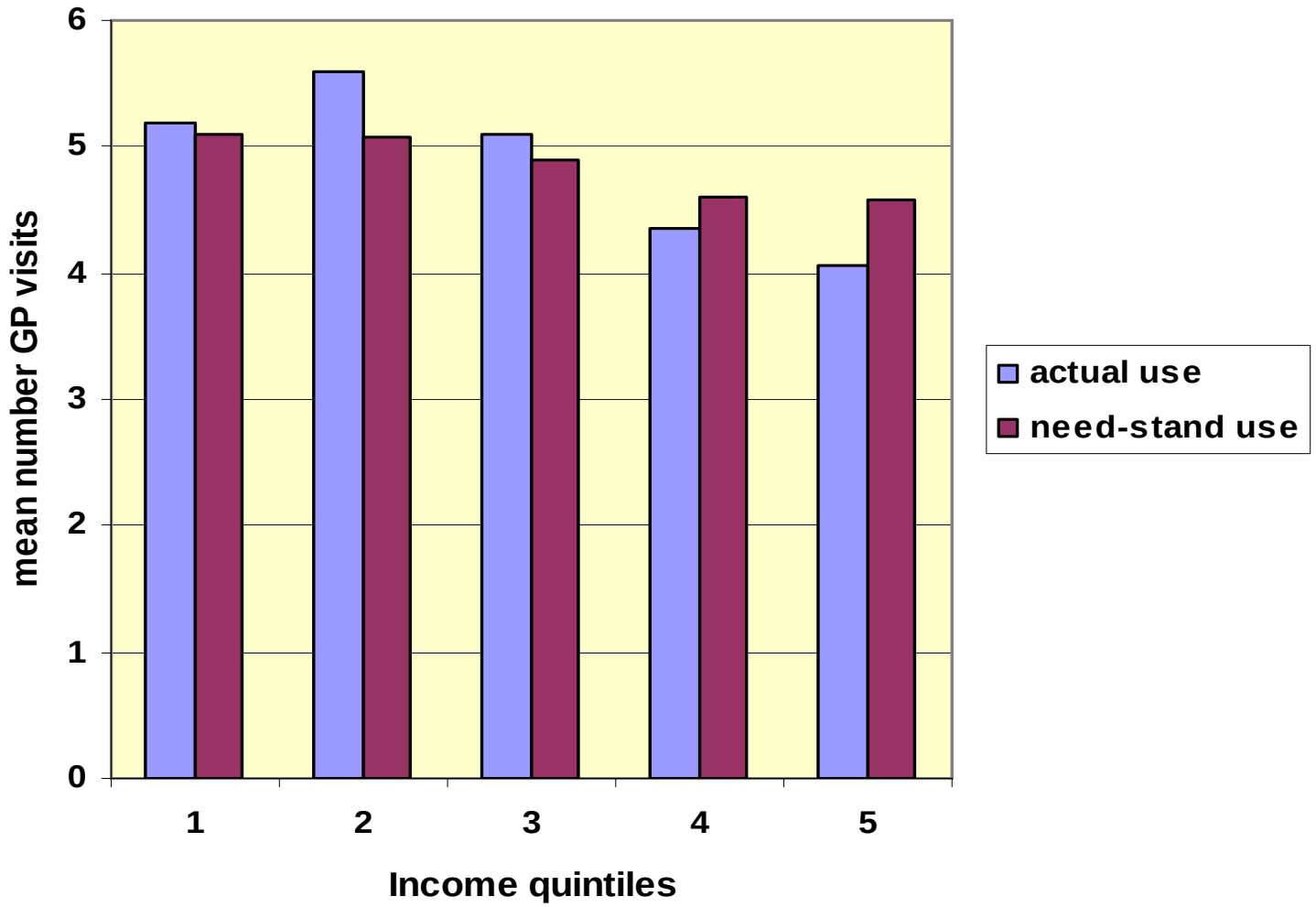
Variation in mean probability of a doctor visit (GP, specialist, total)



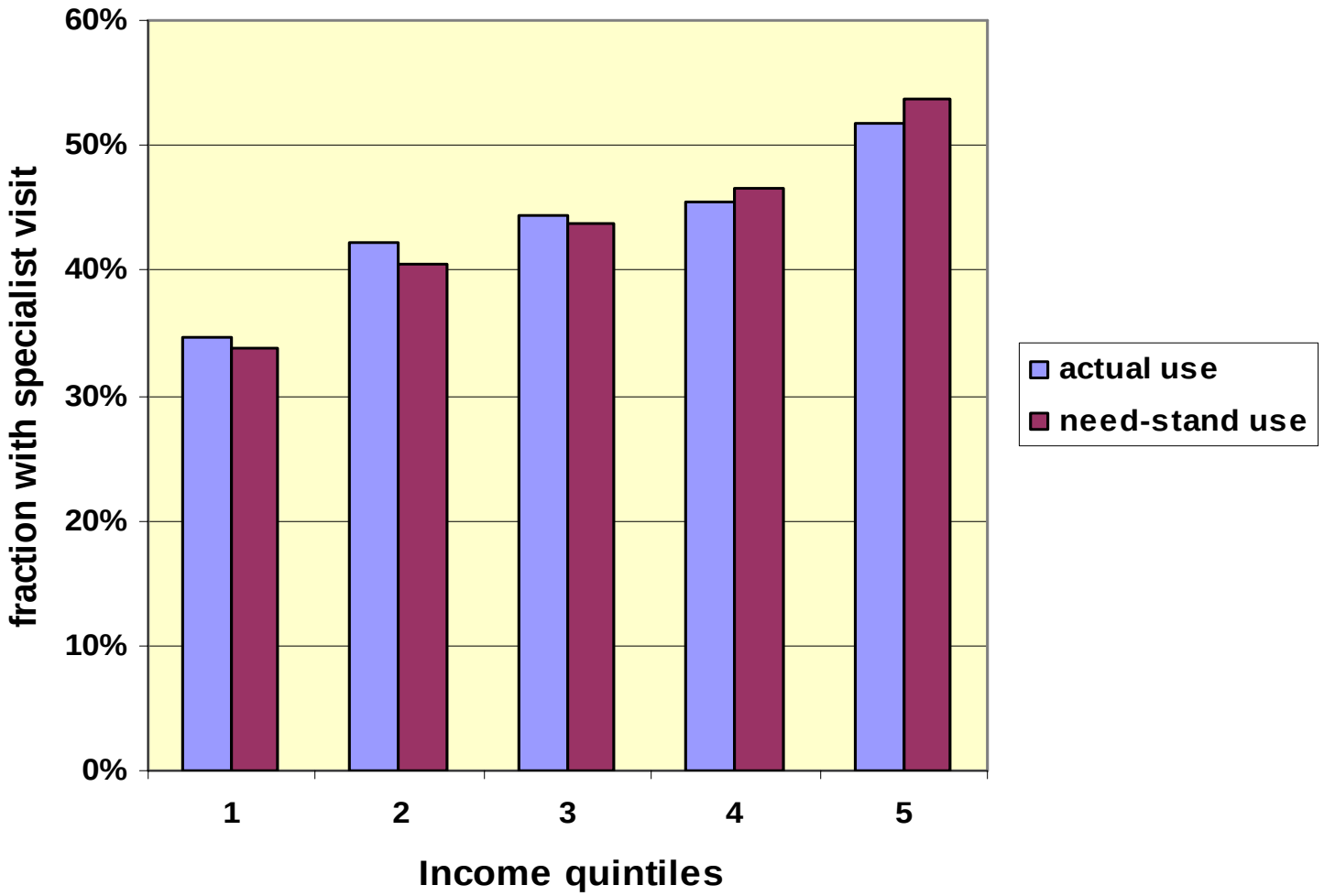
Doctor access high and equitable in Italy, in 2001 (ECHP data), but



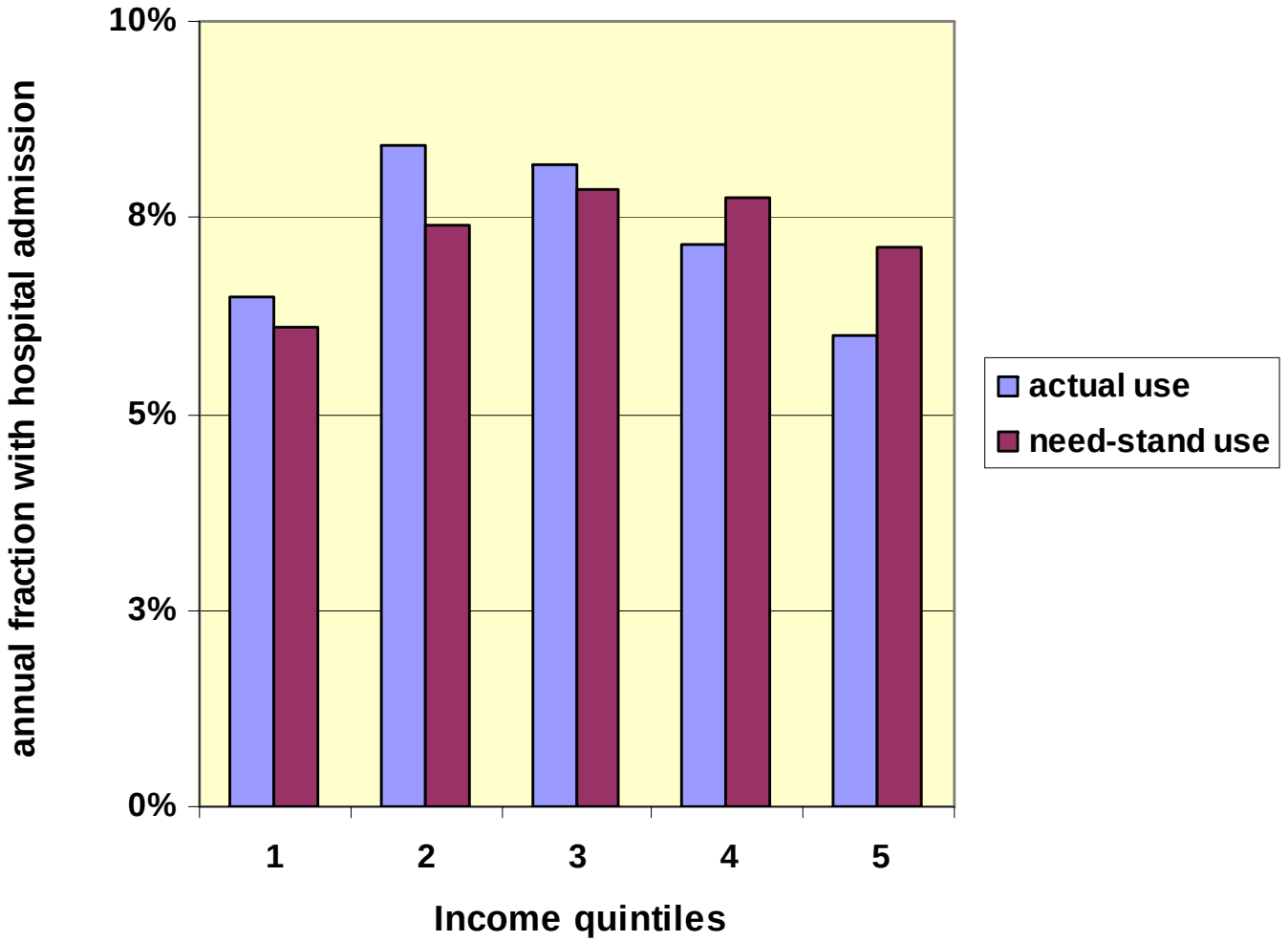
General practitioner access is pro-poor (Italy, 2001)



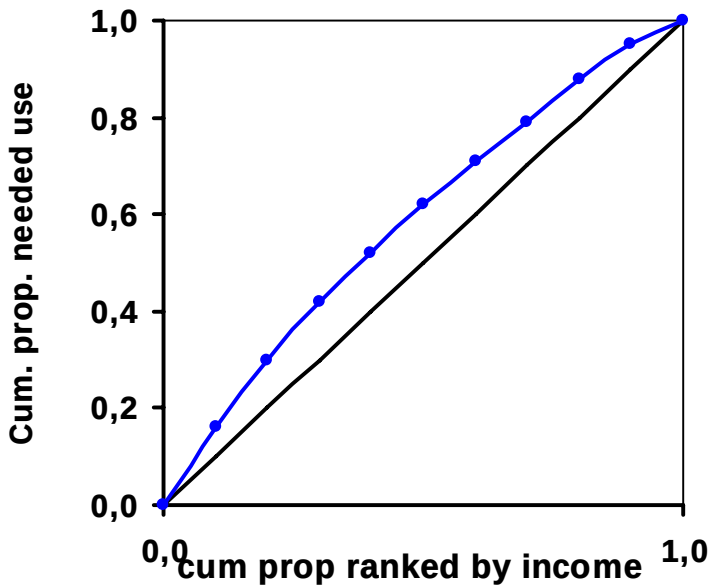
While specialist access is pro-rich (Italy, 2001)



Hospital access also pro-rich (Italy, ECHP 2001)

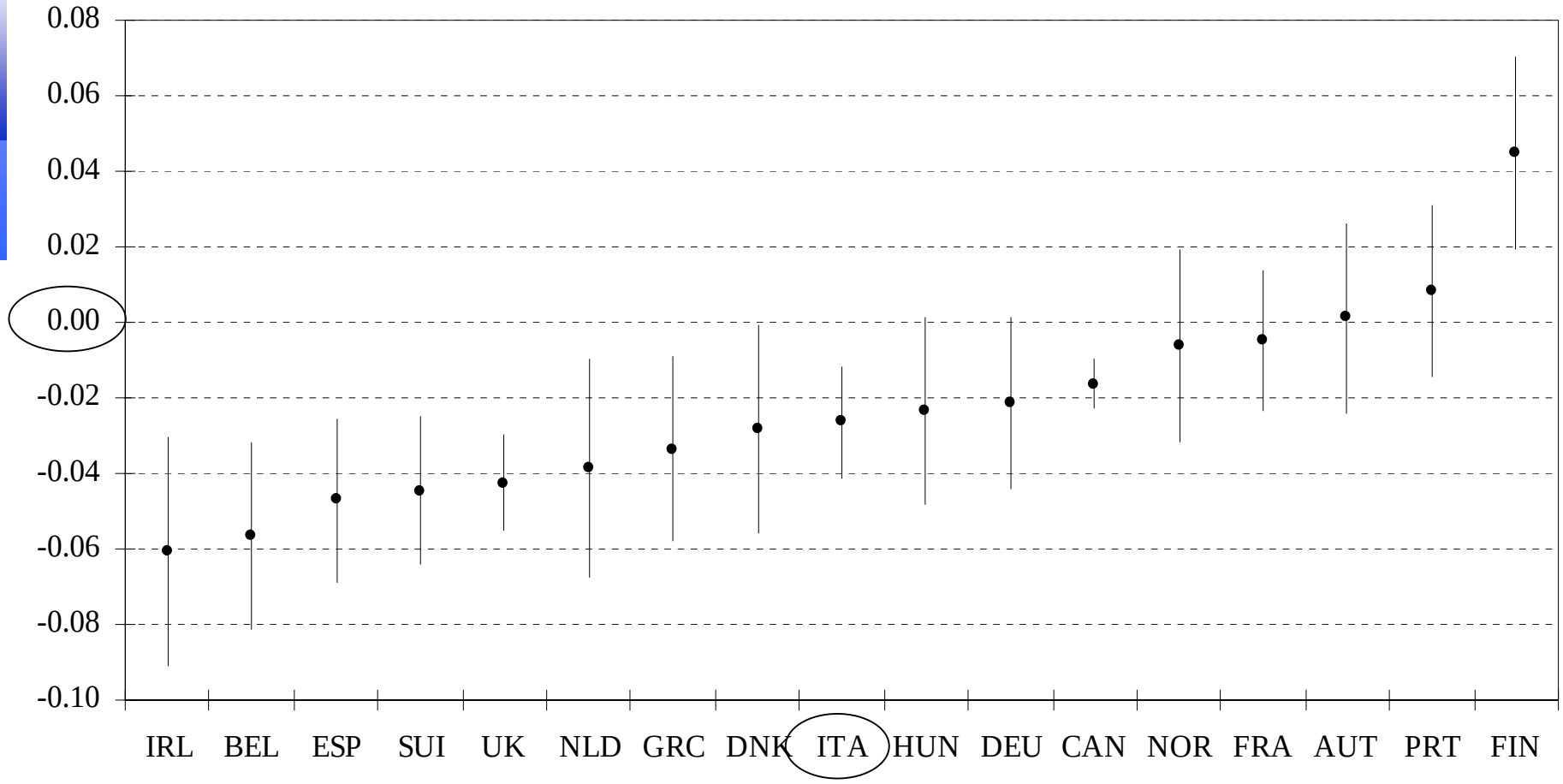


Let's measure inequity by C = HI*

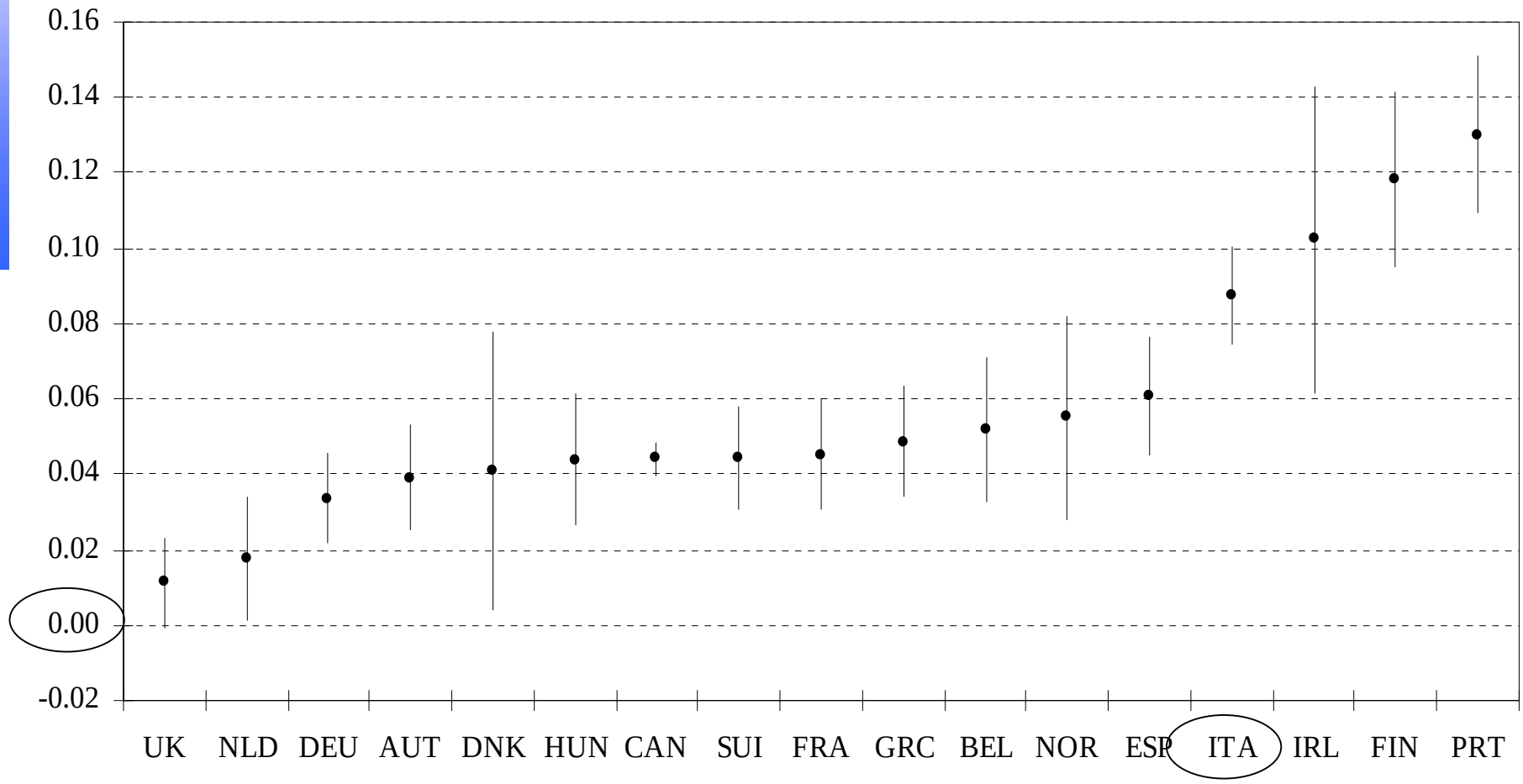


- *Convert relative (eg quintile) into cumulative distributions of need-standardized use*
- *Concentration curve L*(s) lies above diagonal when use is concentrated among the poor*
- *HI=C**
- *Concentration index C* based on area between conc curve and diagonal*
- *HI=C* >0 if inequity "favours" rich, HI=C*<0 if it "favours" poor*
- *Equity only if HI=C*=0*

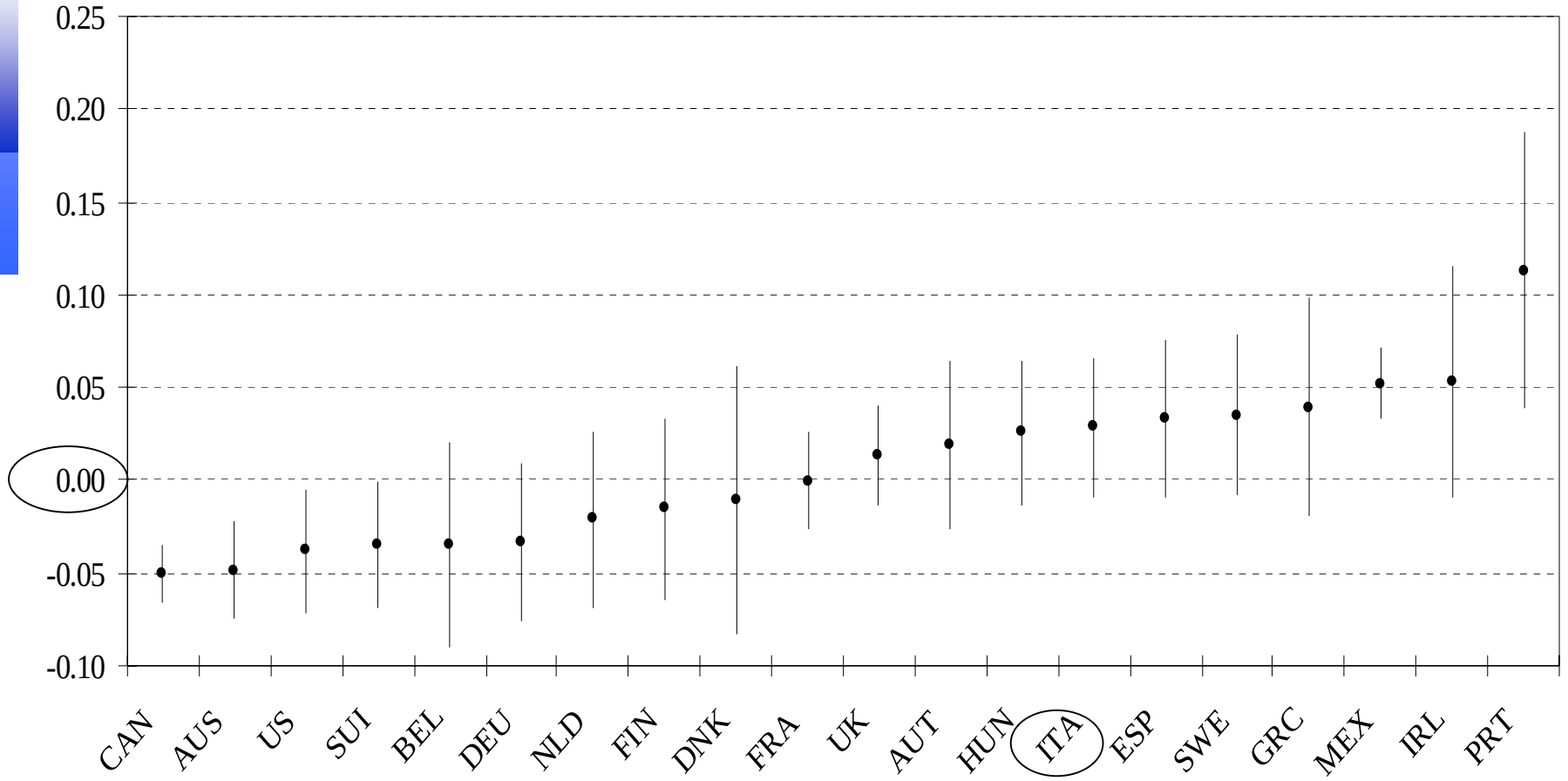
Inequity indices for number of GP visits — OECD (2003) *(with 95% confidence intervals)*



Inequity indices for probability of specialist visit — OECD (2003) *(with 95% confid intervals)*



Inequity indices for probability of hospital admission — OECD (2003) (with 95% confid intervals)



A closer look

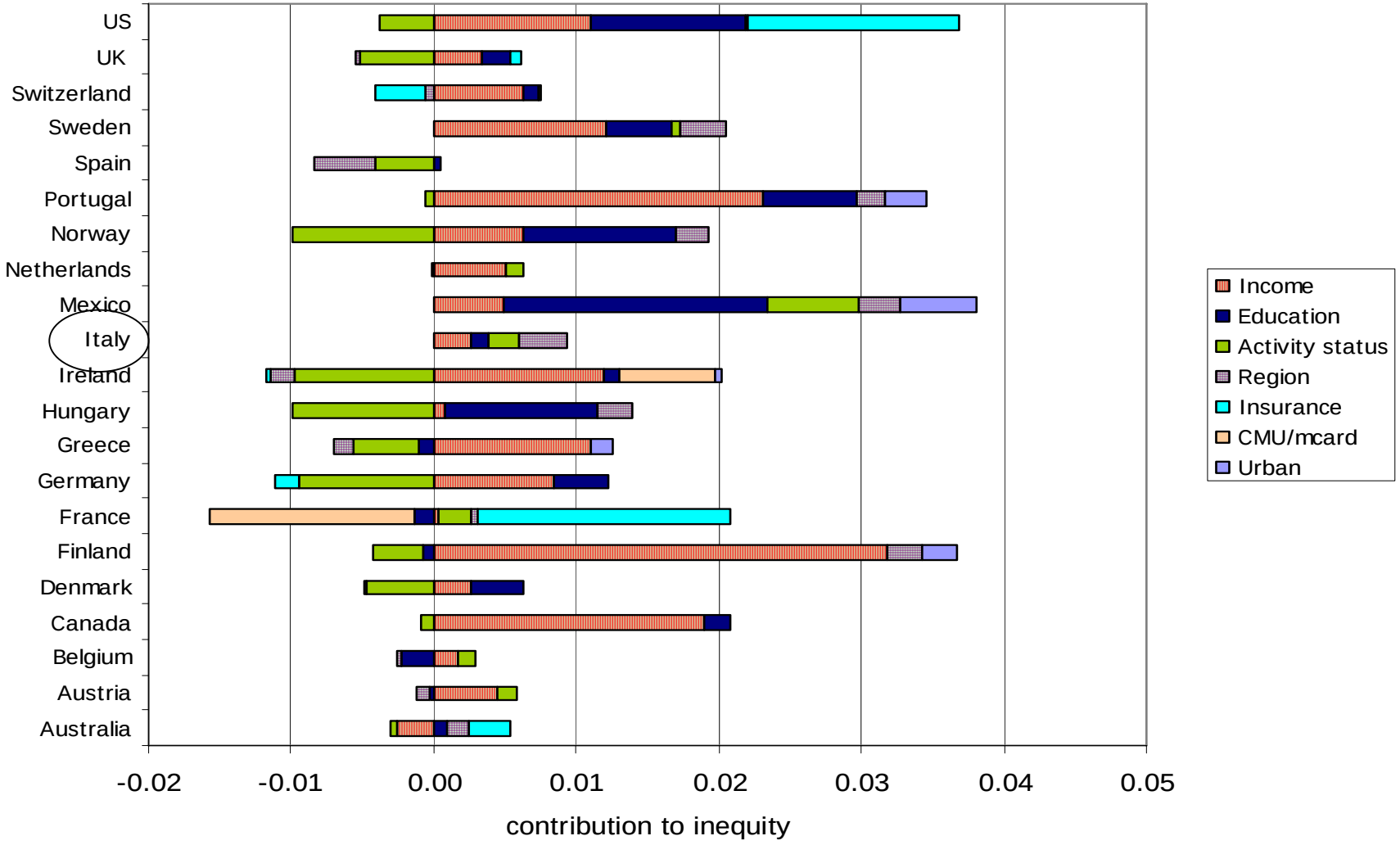
Given (equal) need, high and low income groups are roughly equally likely to see a doctor, but

- *not the same doctor: they are not equally likely to see a GP or a medical specialist*

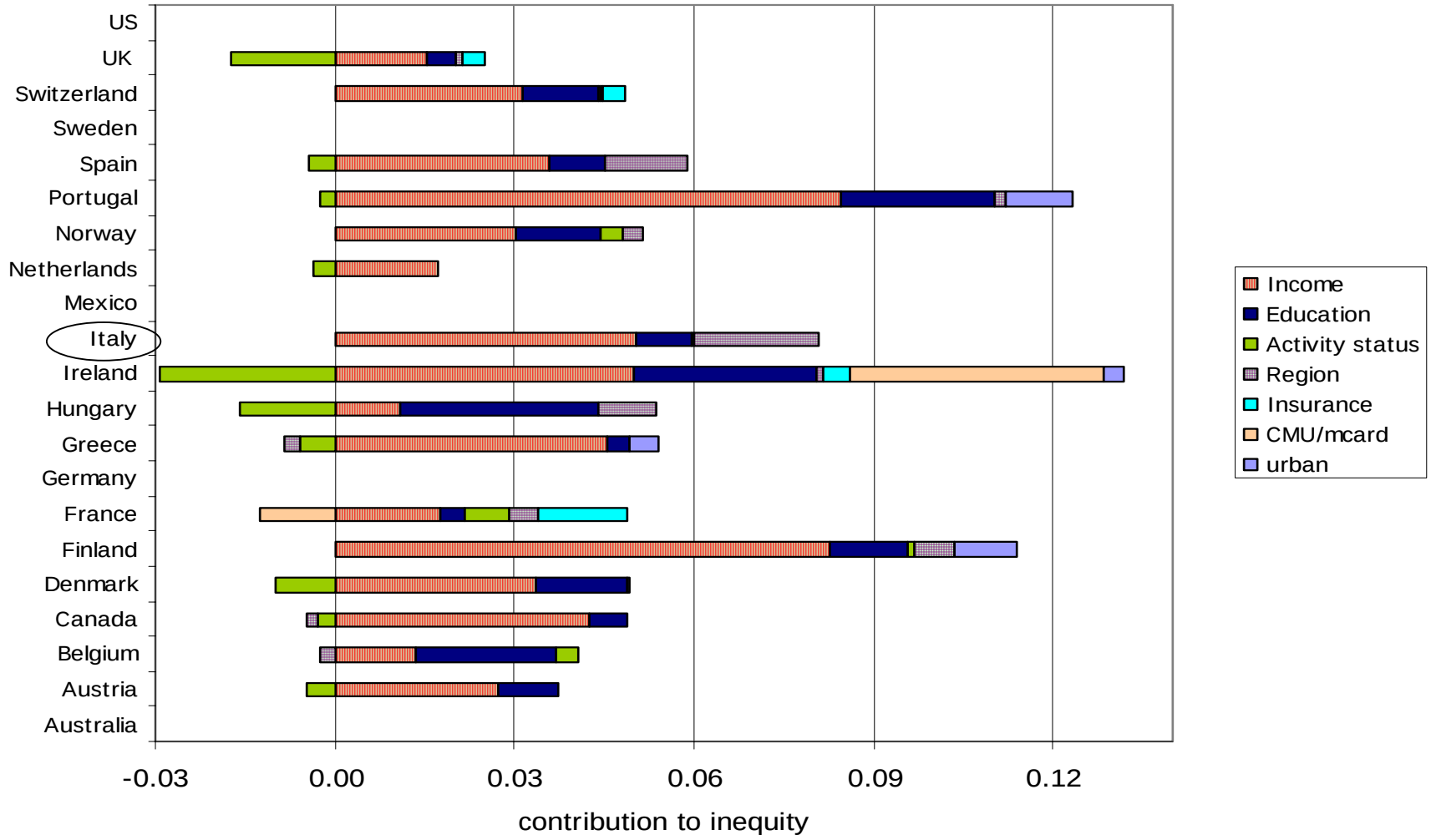
Why? Insurance cover? Regional differences?

Let's decompose the degree of inequity

Decomposition of inequity in probability of a physician visit



Decomposition of inequity in probability of specialist visit



Role of private insurance?

- *Private health insurance was only measured in first four waves (1994-1997) of European Panel*
- *We know that supplementary private cover has pro-rich contribution, especially for specialist care*
- *In Jones et al (2007), we examined to what extent selection versus moral hazard is responsible for this pro-rich contribution (for I, IRL, P, UK), and find that:*
- *Only 6% report private cover in Italy*
- *But these have 10% higher probability to see a specialist*
- *And this is raised to 15-20% when correcting for positive selection*

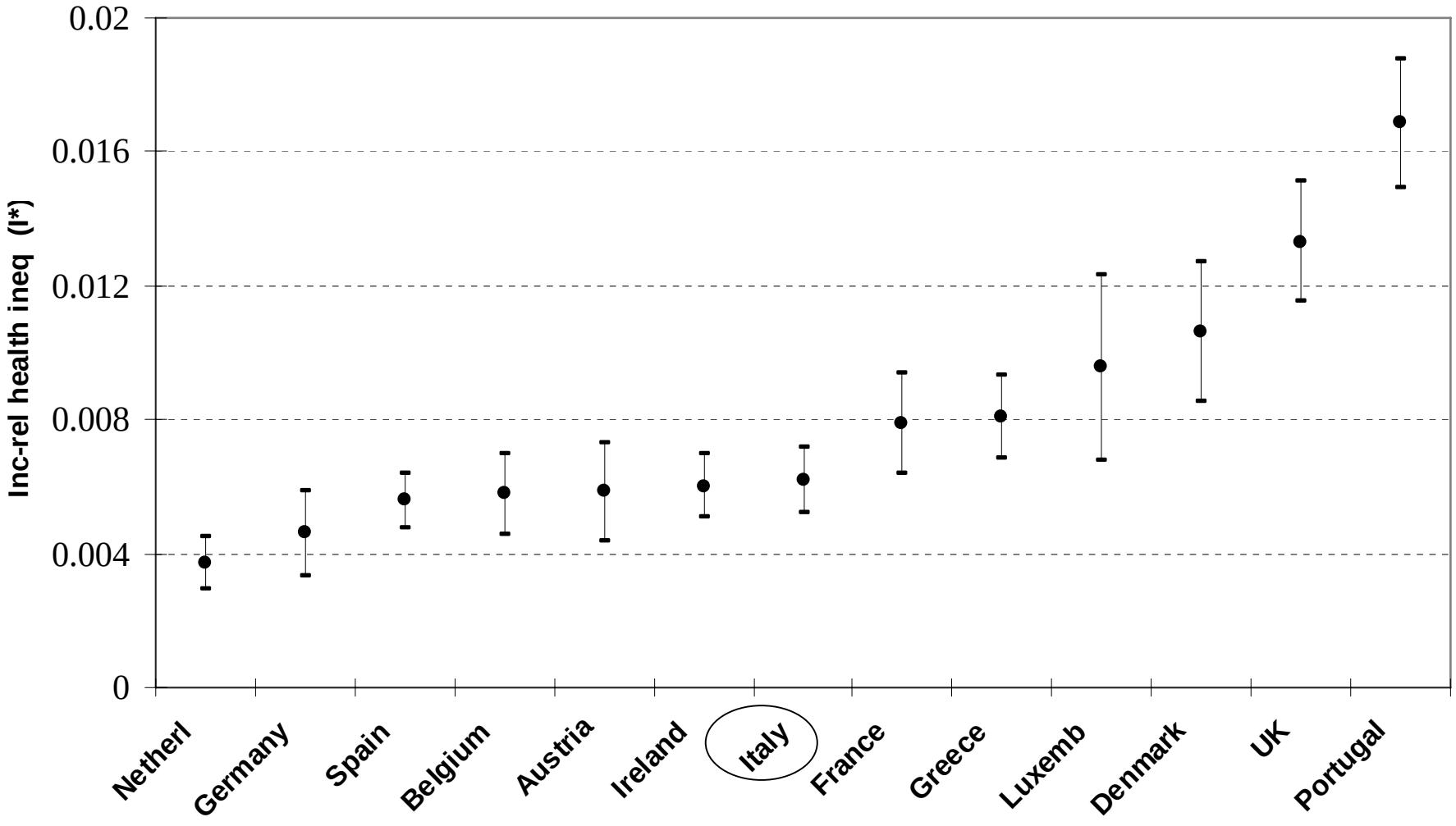
Equity in health care utilisation in Italy - conclusions

- *Overall mean health care utilisation close to European average*
- *Distribution of GP visits somewhat pro-poor*
- *Significant pro-rich distribution of specialist visits, and higher than EU average*
- *Pro-rich distribution of hospital care (but only significant for pooled 4 waves of data)*
- *Regional income and use differences contribute*
- *And so does private insurance for specialist access*

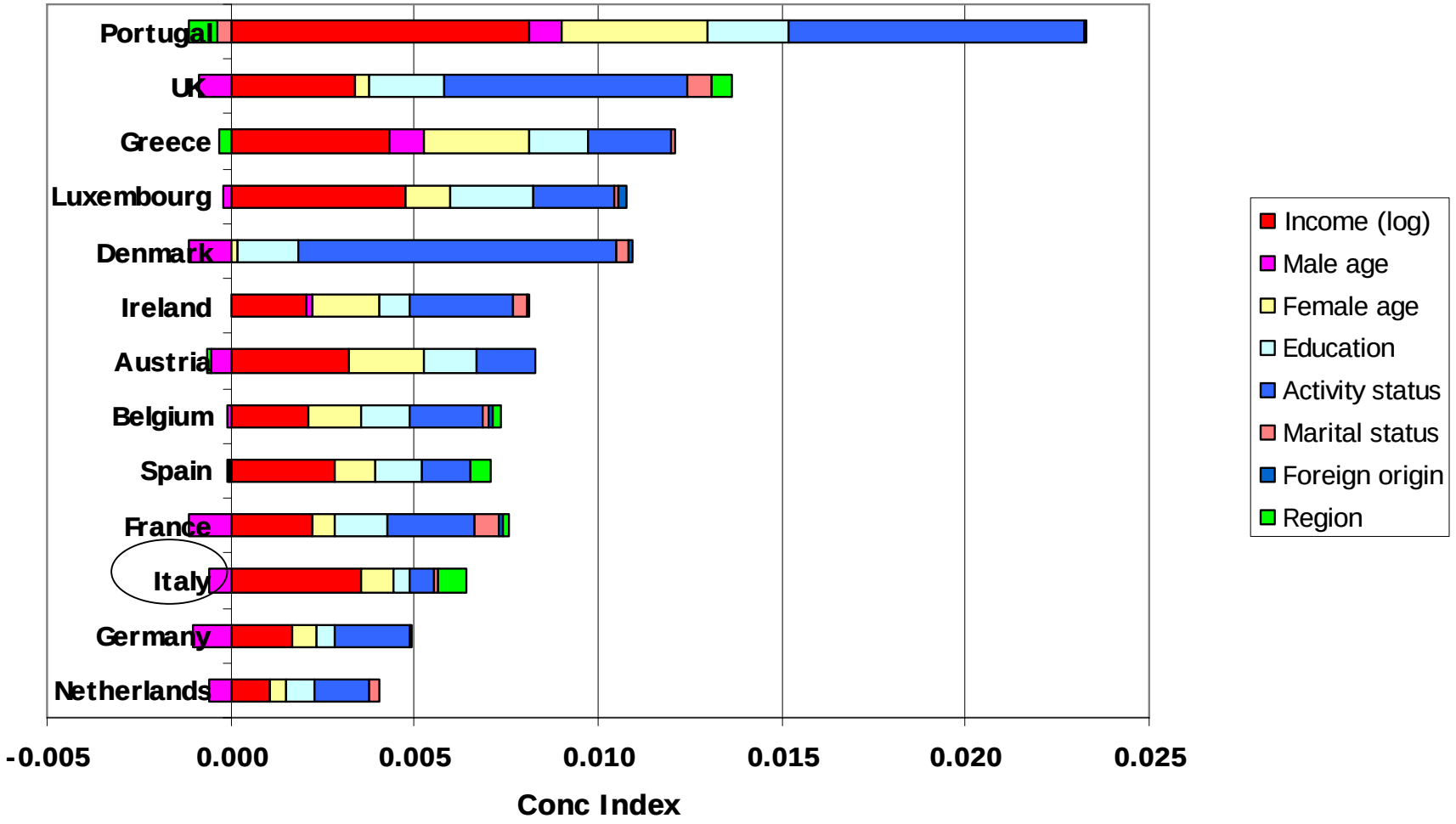
Part 3: What about health inequality by income?

- *Concern about equity in medical care stems from higher concern about inequalities in health*
- *In all countries, good health is more prevalent among higher income groups (social gradient)*
- *Degree of inequality can be measured using concentration index of (self-reported) health*
- *Health measured in ECHP using responses to the question: "How do you rate your general health status?" from 'very good' to 'very poor'*
- *Decomposition helps to understand what are contributing factors*

Income-related health inequality, 13 EU countries, 1996



Income-related health inequality by source (countries ranked by C)



Conclusions – overall equity performance of Italy's health care system

- *Italy performs quite well in comparison using broad equity measures*
- *Finance (1991):*
  - *Italy had the second most progressive financing structure*
  - *Higher income groups contributed a significantly higher proportion of their income than lower income groups*
  - *Progressive taxes and insurance premiums more than offset regressive direct payments*
- *Utilisation (2001):*
  - *Equitable distribution of GP care*
  - *Pro-rich distribution of specialist (and hospital) care*
  - *Private insurance and region play a role in this*
- *Health (1996):*
  - *Relatively low inequality in self-reported health by income, given its income inequality. High contribution of income and region, but not work status*

New book on how to do all of this yourself:

- *O'Donnell, O, E van Doorslaer, A Wagstaff, M Lindelöw, Analyzing Health Equity using Household Survey Data: a Guide to Techniques and their Implementation, World Bank Institute, World Bank, Washington DC (Forthcoming, October 2007).*

- *See http://publications.worldbank.org/ecommerce*