

# “Measuring Up”

Improving Health Systems Performance in OECD Countries



Equity in the use of physician services: has equal treatment for equal need been achieved?



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Health  
Canada Santé  
Canada

Canada

# What is the ECuity Project?

- **A series of “concerted action” research projects**
- **funded by the European Union**
- **in which teams of health economists from EU member states**
- **jointly investigate the determinants of equity in the finance and delivery of health care and inequalities in health**
- **Website: [www.eur.nl/bmg/ECuity/](http://www.eur.nl/bmg/ECuity/)**

# What is equity in health care?

- Does it require equality of something or a guaranteed minimal standard?
- Equality of what? Access, utilization, health benefits?
- European and Canadian health policy documents aim for “equal access/treatment for equal need”
- Horizontal equity principle requires that those in equal need are treated equally, irrespective of other characteristics like income, sex, race, place of residence, etc
- Focus here on violations/deviations from this principle by income

# Describing horizontal inequity

- Compute distribution of actual use by income  
Example: mean # of doc visits by income quintile
- But unequal distribution does not mean inequitable distribution
- Correct for the fact that “need for care” is also unequally distributed by standardizing for age, sex and morbidity differences across quintiles
- Compute the need-standardized distribution of use
- Compute quintile ratios (e.g. Q5/Q1) or quintile differences (e.g. Q5-Q1) to compare countries

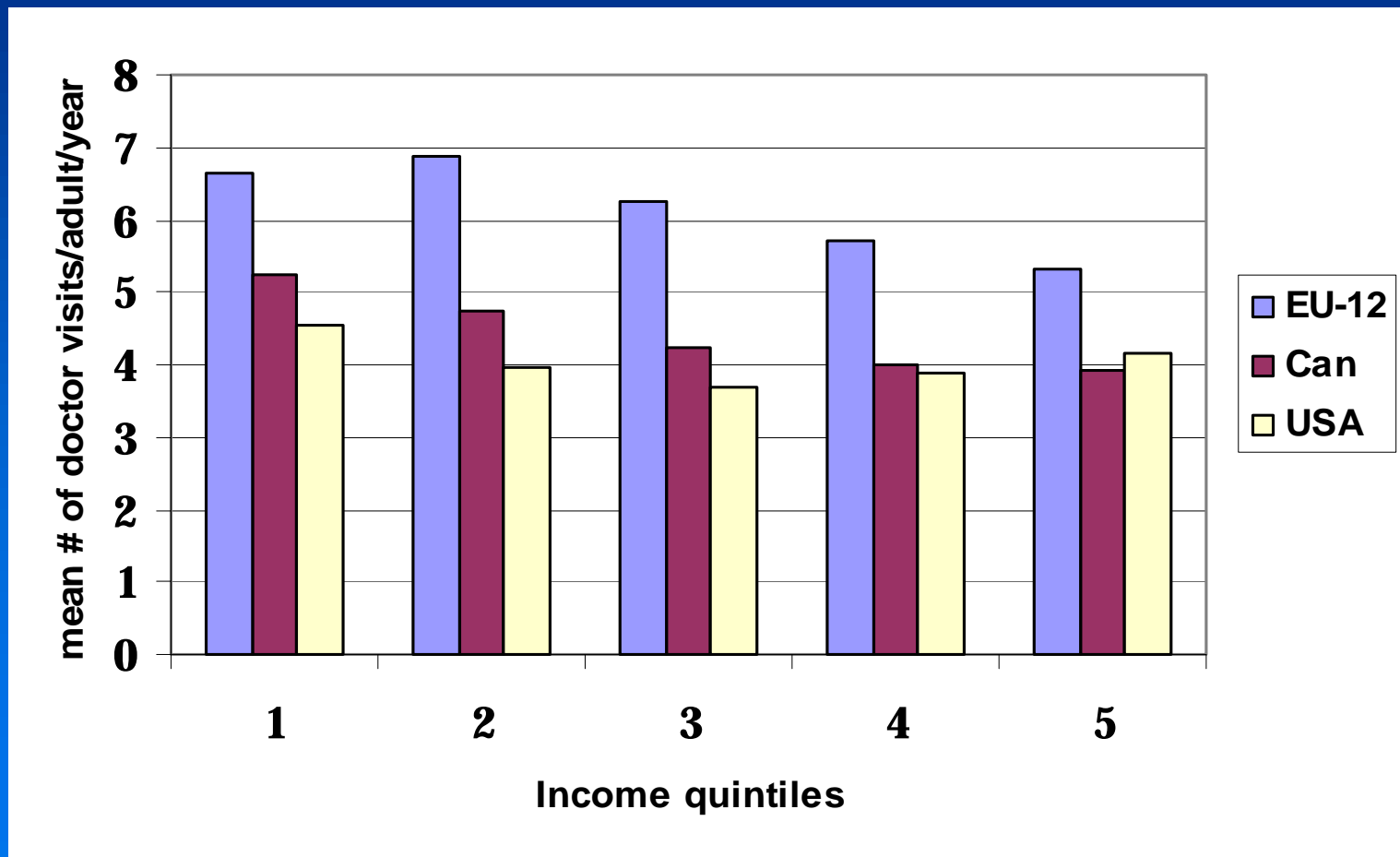
# Data sources

- **Three household surveys held in 1996**
- **Europe: *European Community Household Panel (ECHP)* surveys, wave 3, Eurostat, for 12 EU member states, n = 105 889 adults**
- **Canada: *National Population Health Survey (NPHS)*, wave 2, Statistics Canada, n = 55249 adults**
- **US: *Medical Expenditure Panel Survey (MEPS)*, wave 1, Agency for Healthcare Research and Quality, n = 15973 adults**

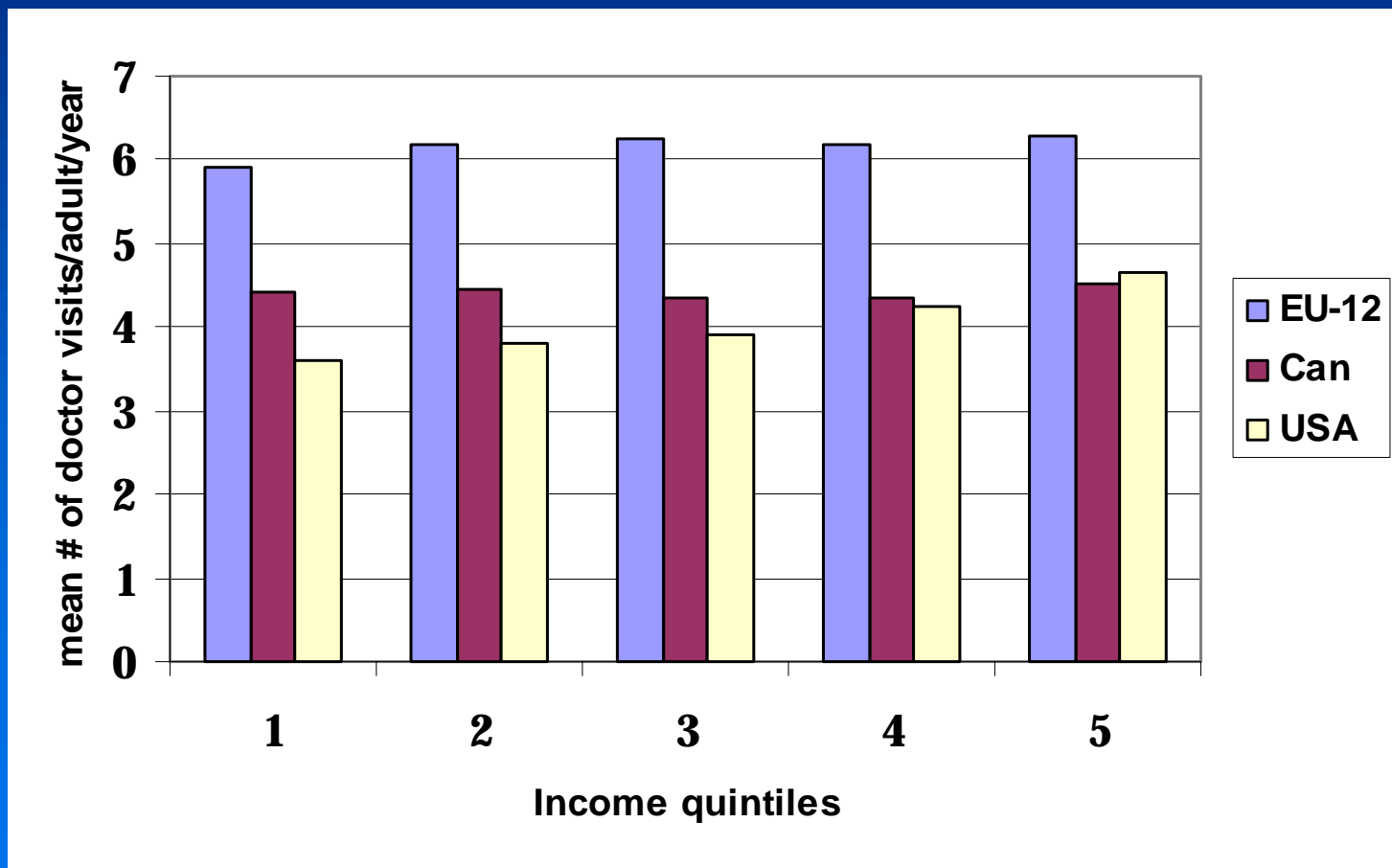
# Variables

- **Utilization: # of GP and specialist consultations in last 12 months**
- **Need proxies used: age, sex and two morbidity indicators: self-reported health status and (degree of impairment due to) health problem**
- **Income: annual household disposable income per OECD-equivalent adult**
- **Private insurance coverage**
- **Region of residence**

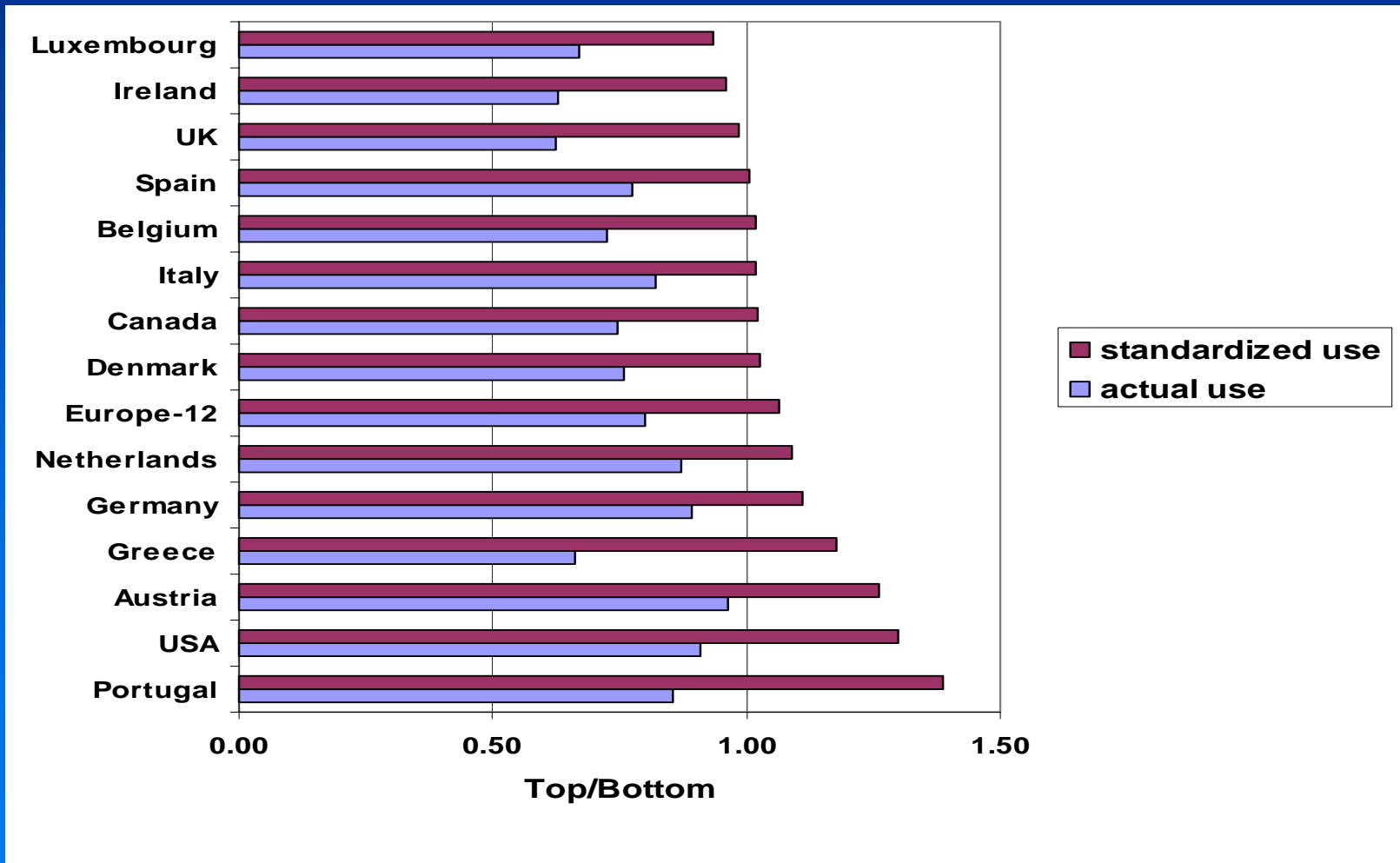
# Examples: actual distribution of doctor visits



# Examples: need-standardized distribution of doctor visits



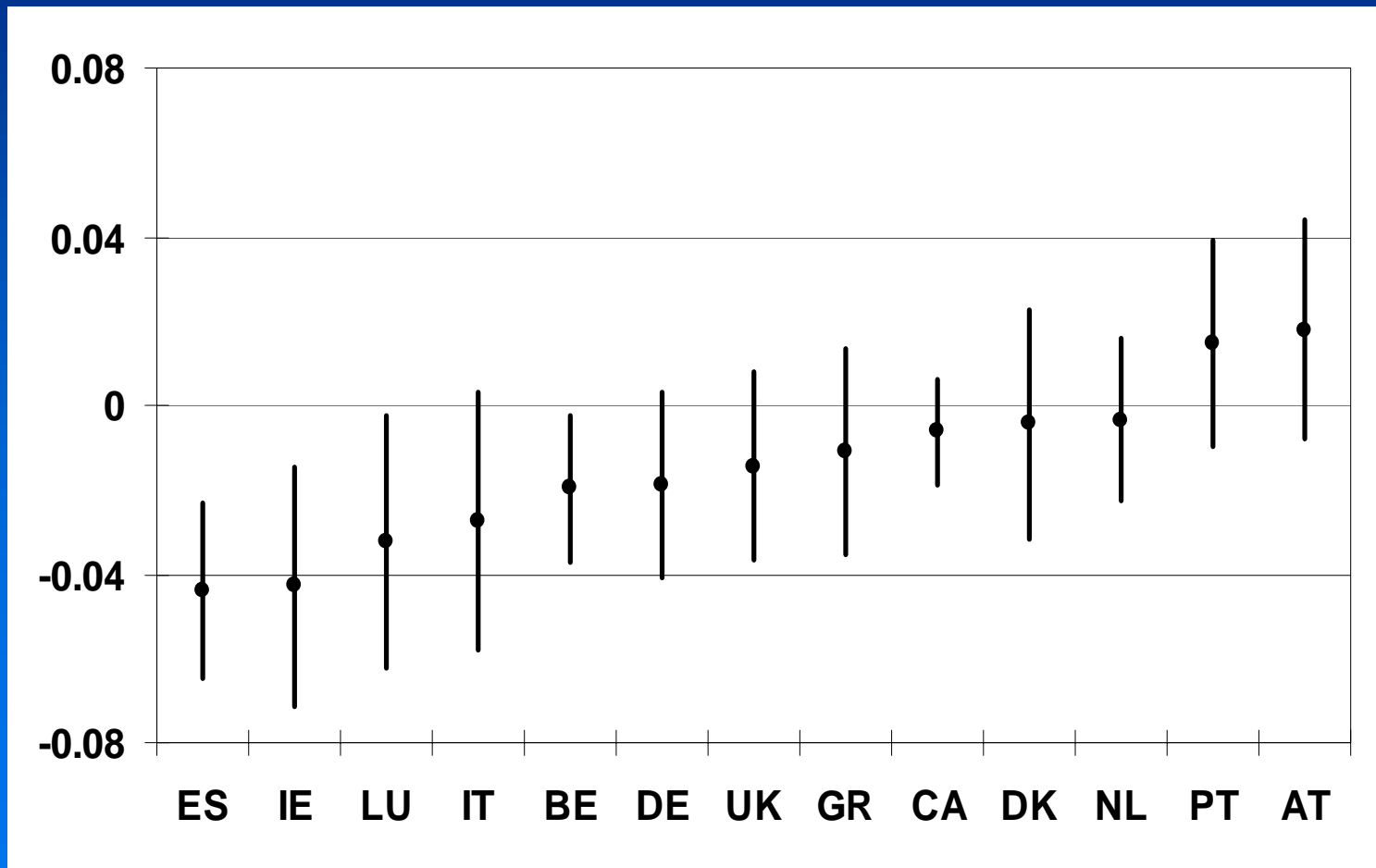
# Ratio of top/bottom quintile: number of doctor visits



# Measuring horizontal inequity

- Use concentration curves and indices to measure degree of inequality
- Top/bottom quintile comparisons arbitrary
- Compare concentration of actual and “needed” usage to measure the degree of inequity
  - Positive index: pro-rich inequity
  - Zero index: no inequity
  - Negative index: pro-poor inequity
- Use standard errors to test for cross-country differences

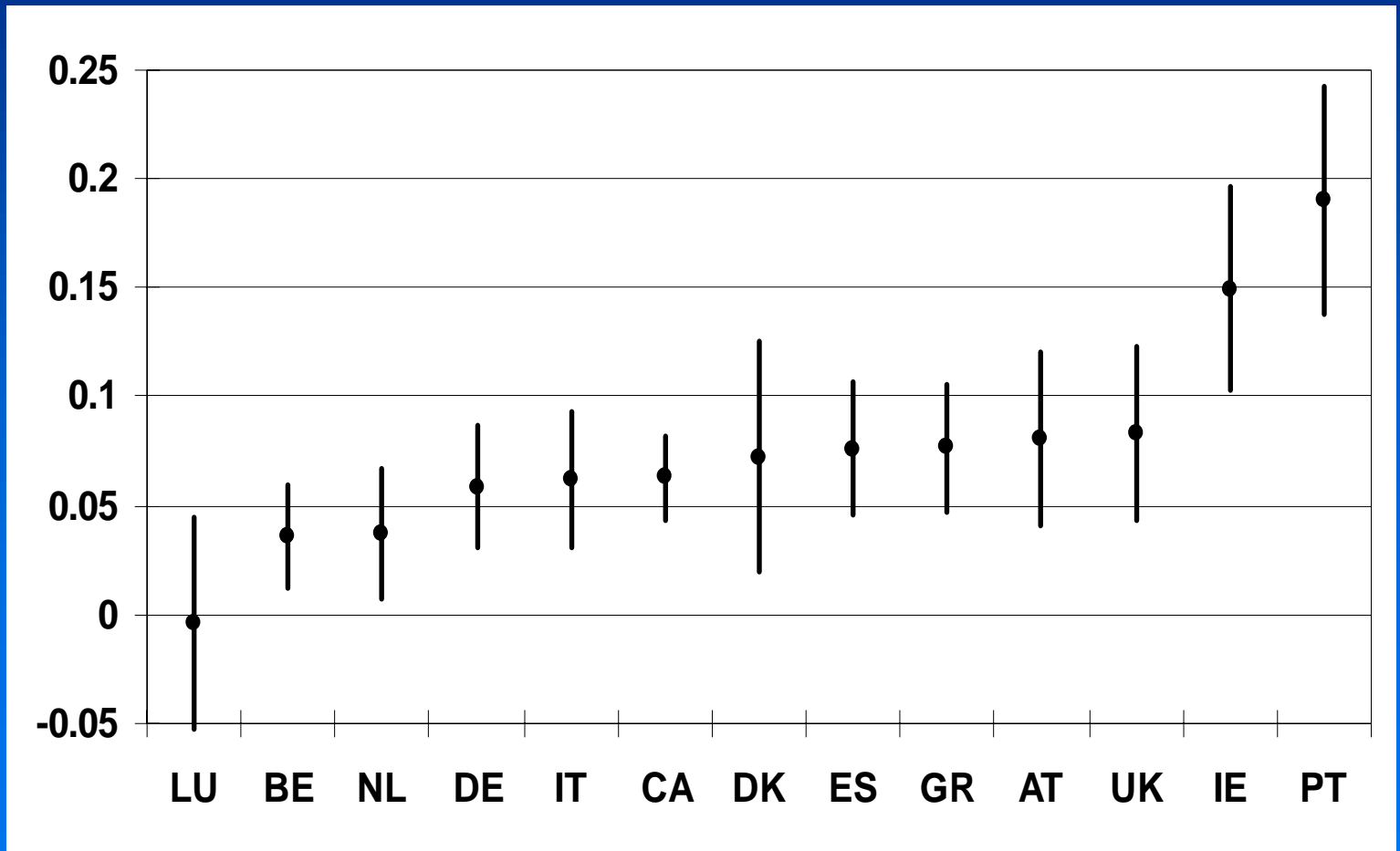
# Inequity indices (and 95% CI) : GP visits



# Visits to the general practitioner: results (EU and Canada)

- GP use higher among low income groups
- In almost all countries, GP visits are distributed according to need
- In only three countries -- Spain, Ireland and Belgium -- the distribution is significantly pro-poor
- The unequal distribution of private insurance and any regional use disparities have little influence on this finding

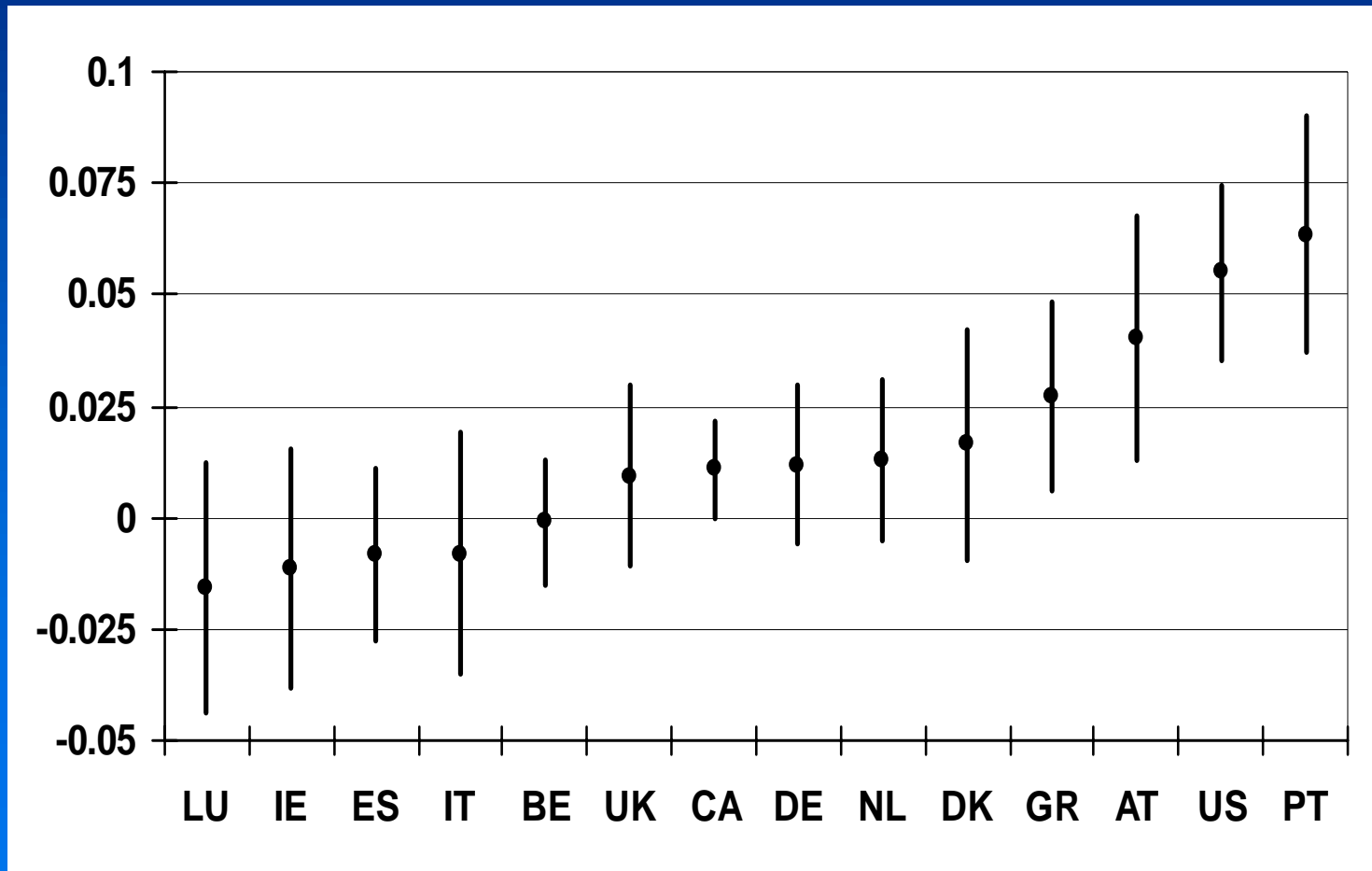
# Inequity indices (and 95% CI) : specialist visits



# Visits to medical specialists: results for EU and Canada

- Distribution is significantly pro-rich in all countries (except Luxembourg)
- Pro-rich inequity particularly high in Portugal and Ireland
- Private insurance plays a large role in generating this finding for Ireland, and smaller role in Spain, Portugal, Canada and UK
- Regional differences play a role in Italy, Greece and Spain

# Inequity indices (and 95% CI) : all physician visits



# Visits to the doctor: results for EU, Canada and US

- Significant pro-rich inequity in four countries only: Portugal, USA, Austria and Greece
- Distribution according to need in other countries
- Inequity in Greece largely 'explained' by regional disparities
- Distribution of private insurance plays a large role in the finding for the US, but not for Austria and Portugal

# Conclusions and discussion: limitations of methods

- Egalitarian ‘yardstick’ assumes all income-related inequalities after need-standardization are undesired
- “A visit is a visit is a visit”: differences in use rates do not capture any quality differences
- Influence of private insurance and region only captured by a “broad brush”.

# Conclusions and discussion: results

- Very little income-related inequity in distribution of GP visits
- Significant pro-rich inequity in distribution of specialist visits in all countries, despite universal and comprehensive coverage
- Pro-rich inequity in all doctor visits only in Portugal, US, Austria and Greece
- Private insurance and region do play a role in these findings, but do not entirely 'explain' them
- "True" degree of inequity may be higher because of quality differences not captured in volumes