

Pharmaceutical price comparisons

Valérie Paris – OECD
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Conflicts of interest

- No personal conflict of interest
- The OECD receives a small compensation from a pharmaceutical company for my participation in a scientific committee (which represents a negligible share of its total budget).

International comparisons of pharmaceutical prices

Challenging, but receive a lot of attention:

- From governments, payers, price regulators and academics (+ pharma industry)
- With different objectives:
 - Assess the impact of price regulation in a specific country
 - Understanding companies' pricing strategies in a global market and their interactions with price regulation
 - International benchmarking



International comparisons of pharmaceutical prices: multiple methods

- Basket of products (originator, on-/off patent, generics branded or not) OR single product
- “Matching rules”
- Price considered (ex-factory, wholesale price, retail price)
- Monetary conversion (exchange rate / PPP)
- Volume unit (pack, standard dose, DDD)
- Sources of data (IMS, listed prices)
- Price index, volume-weights
- Bilateral / multilateral



Results sensitivity to methodology

Examples drawn from one study:

SNF (2010), Are pharmaceuticals still expensive in Norway?

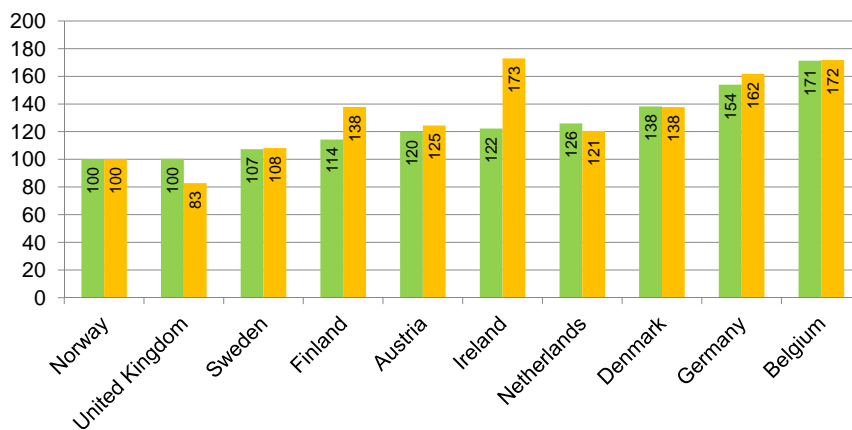
- Comparison pharmaceutical prices in Norway to 9 comparator countries used for international benchmarking
- IMS data for 300 top selling substances in Norway 2009-1/2
- Cost of a “shopping basket” in Norway (higher weights for products with high consumption in Norway)
- Bilateral and global indexes
- Matching on identical packs or volume-weighted average price by active substance
- Conversion with exchange rate



Results sensitivity to methodology: examples

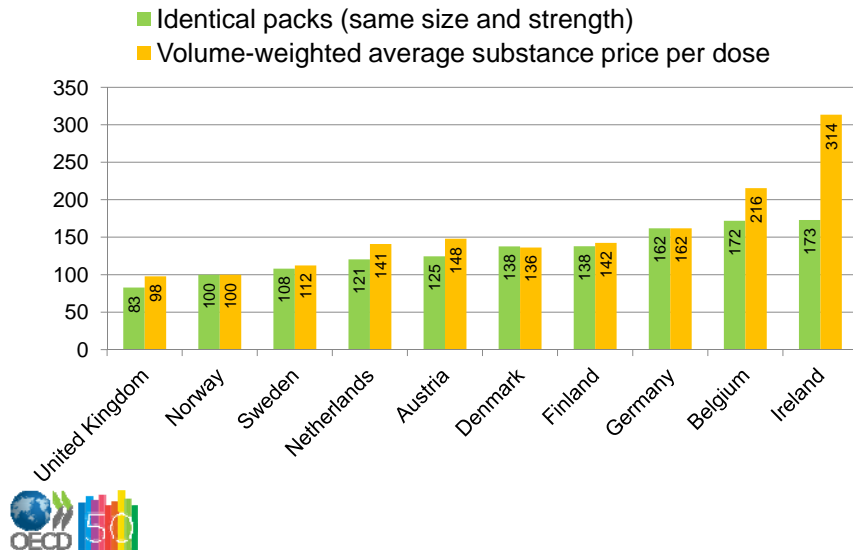
All substances, Bilateral price indices, based on prices of identical packs (N= 63 to 190)

■ Wholesale price ■ Retail price (without VAT)



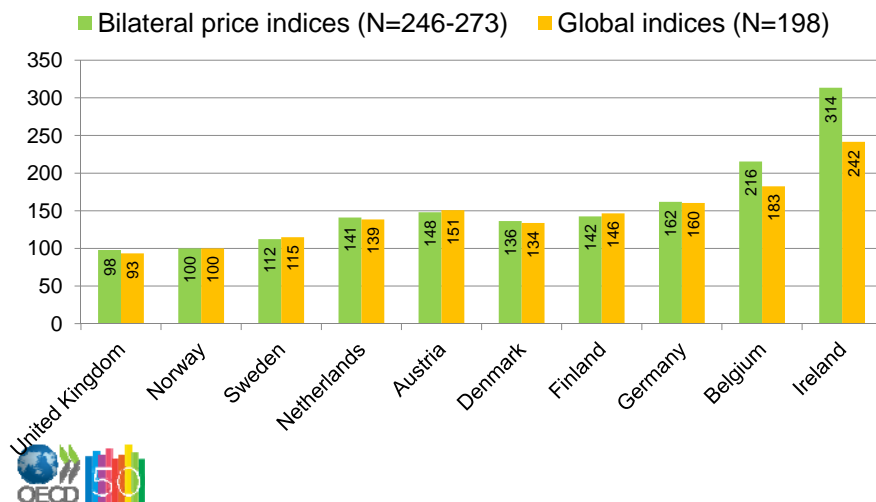
Results sensitivity to methodology: examples

All substances, Bilateral price indices, Retail price (without VAT)



Results sensitivity to methodology: examples

All substances, Retail price (without VAT), Volume-weighted average substance price per dose



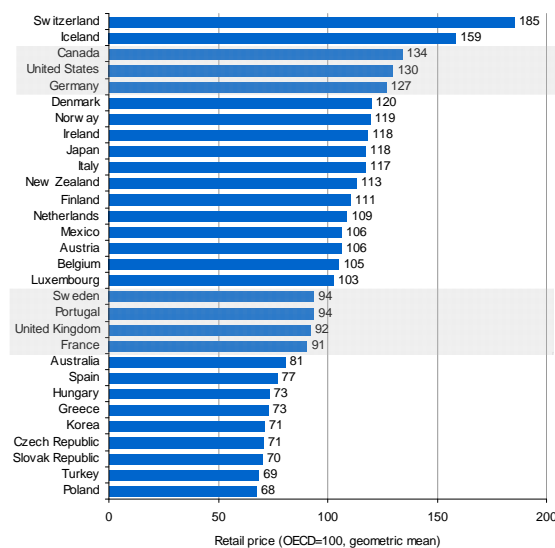
OECD study on comparative price levels (retail prices)

- Data collected by OECD and Eurostat (for European countries) to compute economy-wide purchasing power parities (PPP), every 3 years
- 181 drugs, top selling in Europe (75% originators, 15% generics)
- Price information completed by national institutes of statistics (retail price, including distribution margins and VAT but no dispensing fee)
- Retail price for a standardised consumption unit
- PPP = quasi-weighted geometric average of relative prices between pairs of countries + multi-step procedure to adjust differences in countries' baskets



PL = ratio of PPPs to exchange rates

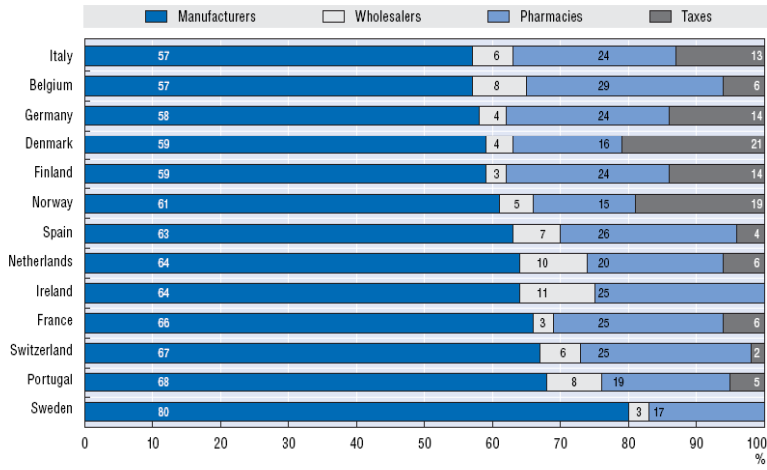
Retail pharmaceutical prices vary between -30% to +85% of the OECD average



Note: Prices were converted to a common currency using the 2005 average exchange rate

Source: Eurostat-OECD Purchasing Power Parity Programme, 2007, Pharmaceutical Pricing Project Final Report, forthcoming

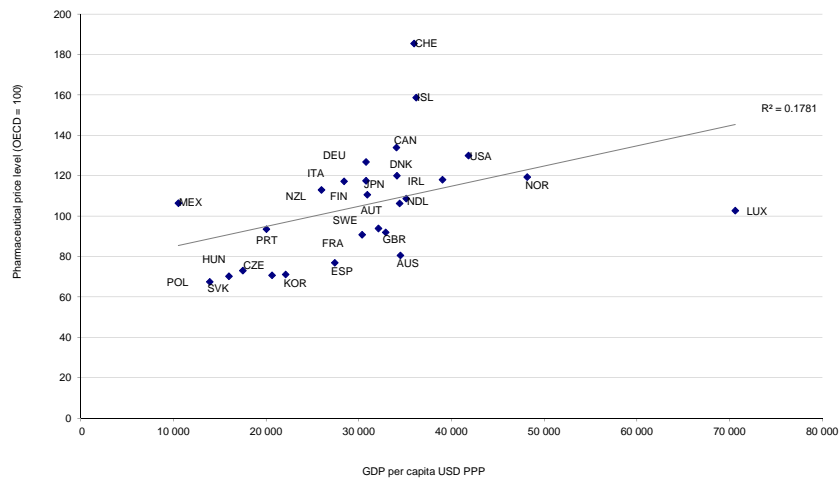
Figure 1.9. Components of retail pharmaceutical prices, selected OECD countries, 2004



Source: VFA (2006), *The Pharmaceutical Industry in Germany*, Verband Forschender Arzneimittelhersteller e.V. (German Association of Research-Based Pharmaceutical Companies) Berlin: the original source of these data is the European Federation of Pharmaceutical Industry Associations (EFPIA).

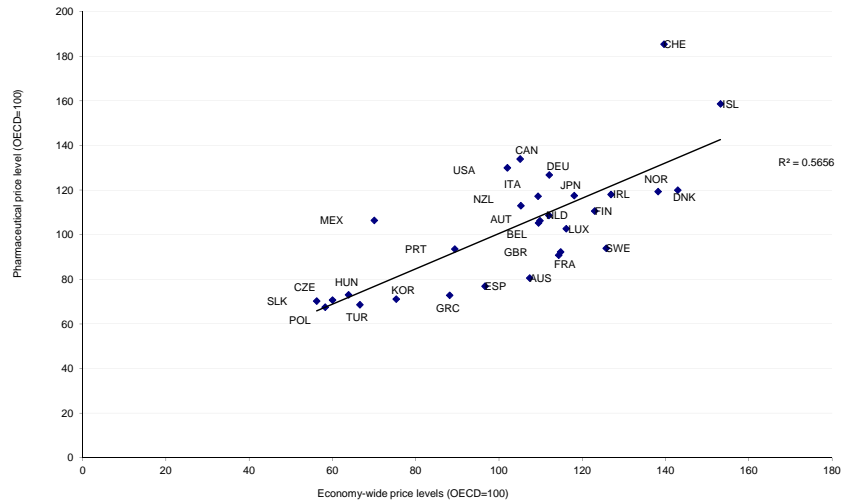


Retail pharmaceutical price levels and GDP per capita, 2005



Note: Prices were converted to a common currency (USD) using the 2005 average exchange rate. The coefficient on the independent variable "GDP per capita" (0.001) was statistically significant at the 5% level (t-statistic = 1.95).
Source: OECD Health Data 2007 and Eurostat-OECD Purchasing Power Programme, 2007.

Pharmaceutical retail price levels and economy-wide price levels, 2005



Impact of international benchmarking

- Strategic launches of pharmaceuticals
- Encourage confidential rebates
- Adopted by many countries for its apparent convenience
- Does not necessarily reflect “value of medicines” for each countries (pharmaco-evaluation would be better)
- Pharmaco-economic assessment and consideration of price-and-volumes would be preferable
- New OECD study investigates “value-based pricing”



For more information



*Pharmaceutical Pricing
Policies in a Global
Market (OECD, 2008).*

Case study reports available for
download at:

www.oecd.org/health/pharmaceutical

Canada, Germany, Mexico, Sweden,
Switzerland, Slovakia

