

Prices and affordability of reimbursed pharmaceuticals: A European cross-country study

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Objectives

Within the European health-care-systems expenditures of medical goods including pharmaceuticals account for 12% to 36% of total health-care budgets. Obviously, they are a major concern for decision-makers. Pharmaceutical prices significantly differ across countries, due to different cost-containment measures, national attitude of accessibility and affordability. Unfortunately, there is no generally accepted methodology on how to conduct price comparisons. In 2003, the first WHO/HAI medicine price manual has been published, but the majority of price comparisons assessing price levels still has violated standard methods of index number theory and is based on small samples (from 5 products to entire market). The aim of the present analysis was to draw a comprehensive picture of the pharmaceutical price levels in Europe.

Methods

The study analyzed drug prices of the reimbursed retail market of all countries of the European Union except Denmark, but plus Switzerland. It is stipulated that all reimbursed medicines or, at least a representative market share is included. Based on ex-factory prices and reimbursement prices per Standard Unit SU (tablet, vial etc.), price indices were calculated using purchasing-power-parity € (PPP€). The observation period was the year 2014. Data were collected via international literature review as well as statistics and based on IMS data on file.

Results

Expressed in absolute figures: In 2014, in the analyzed country sample, with a total population of 510 million people (EU except DK, plus CH), a total Local Currency Euro (LEU) of 96 million and the corresponding total number of 436 million Standard Units and 11 million pharmaceutical packages have been sold in the outpatient Rx market.

Tab. 1: Overview of the pharmaeutical market in the European Union (- DK + CH), 2014

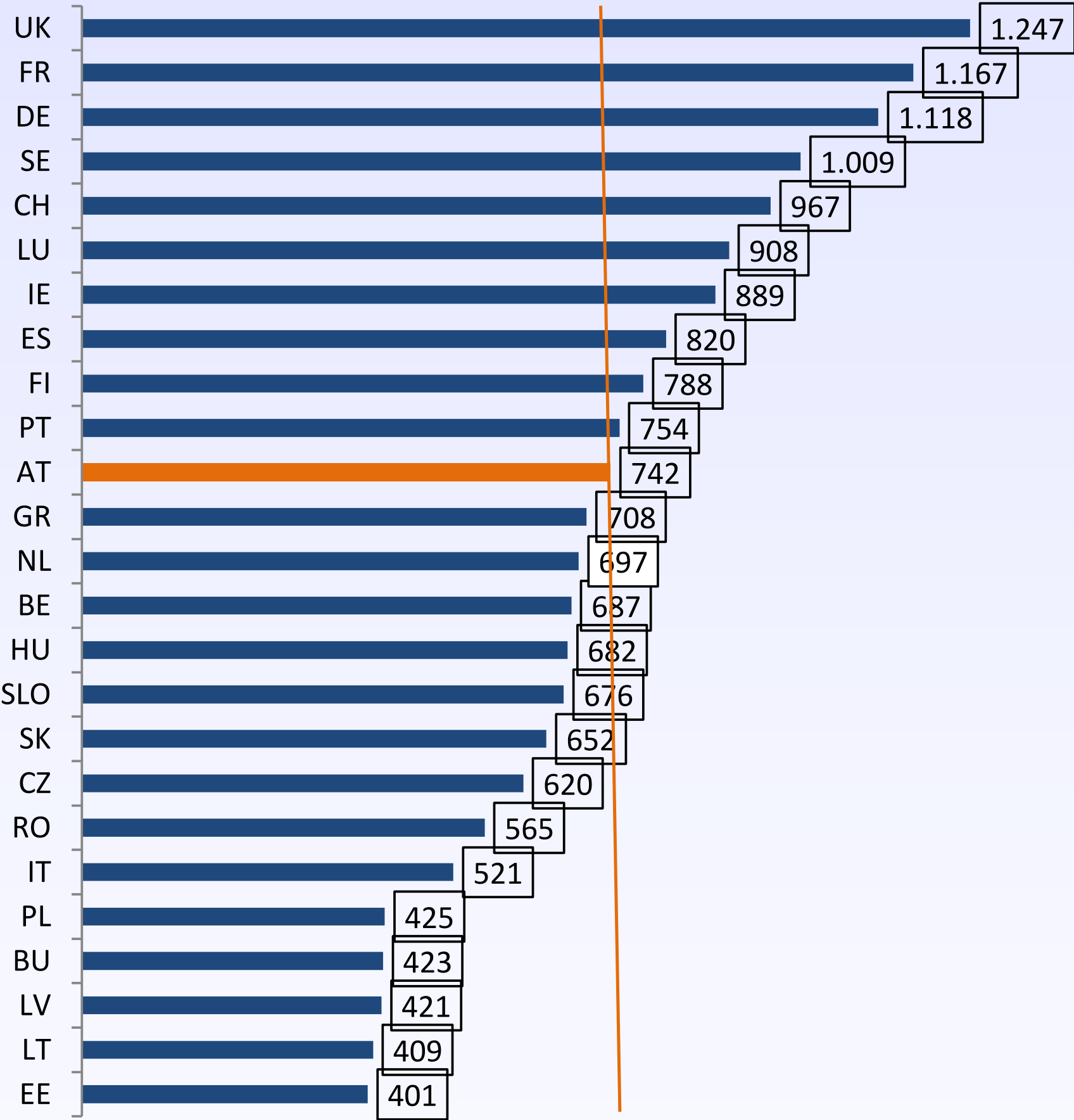
Population of the EU except DK plus CH	Total - LEU Rx	Total - Units Rx	Total - SU Rx
509.862.542	96.111.216.737	10.894.496.363	436.248.196.853

Source: IMS Health data on file, IPF own depiction 2016

Almost all pharmaceuticals were launched in different package sizes in various countries. The range in the average package size in Europe lies between 24 SU in Italy and 80 SU in Finland. In order to counteract these problem SU are a suitable value for price comparison. IMS defines an SU as the smallest unit, like one tablet, one capsule, 5ml of a liquid etc.

Among the analyzed European Countries (see Figure 1), SU consumption of people having used prescribed medicines during 2014 ranged from 1.247 SU in the UK to 401 SU in Estonia.

Fig. 1: Pharmaceutical consumption in SU, Rx market, 2014

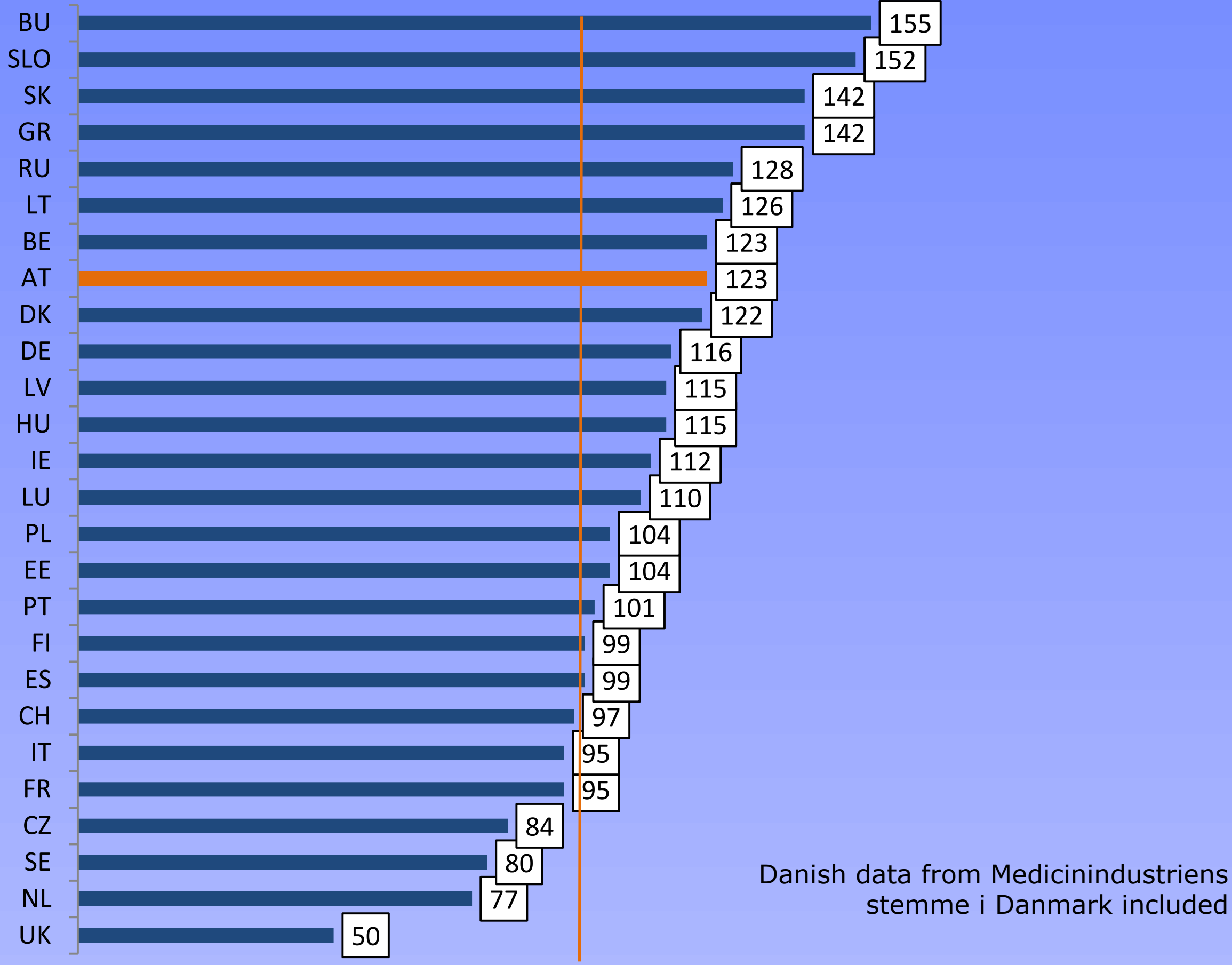


Source: IMS Health Data, IPF own depiction 2014

The average value of consumed amounts to 732 SU of prescribed medicine in the year 2014.

The international comparison of price indices based on ex-factory prices PPP € per SU per capita shows that (European average Price = 100), Bulgaria (156), Slovenia (152) and Slovakia (142) exhibit the highest price indices. In contrast, the Netherlands (72) and the UK (50) are at the lower end. Austria (123) is positioned in the upper third of the European average price indices evaluation. An excerpt from the comprehensive results is presented and explained in the following Figure 2.

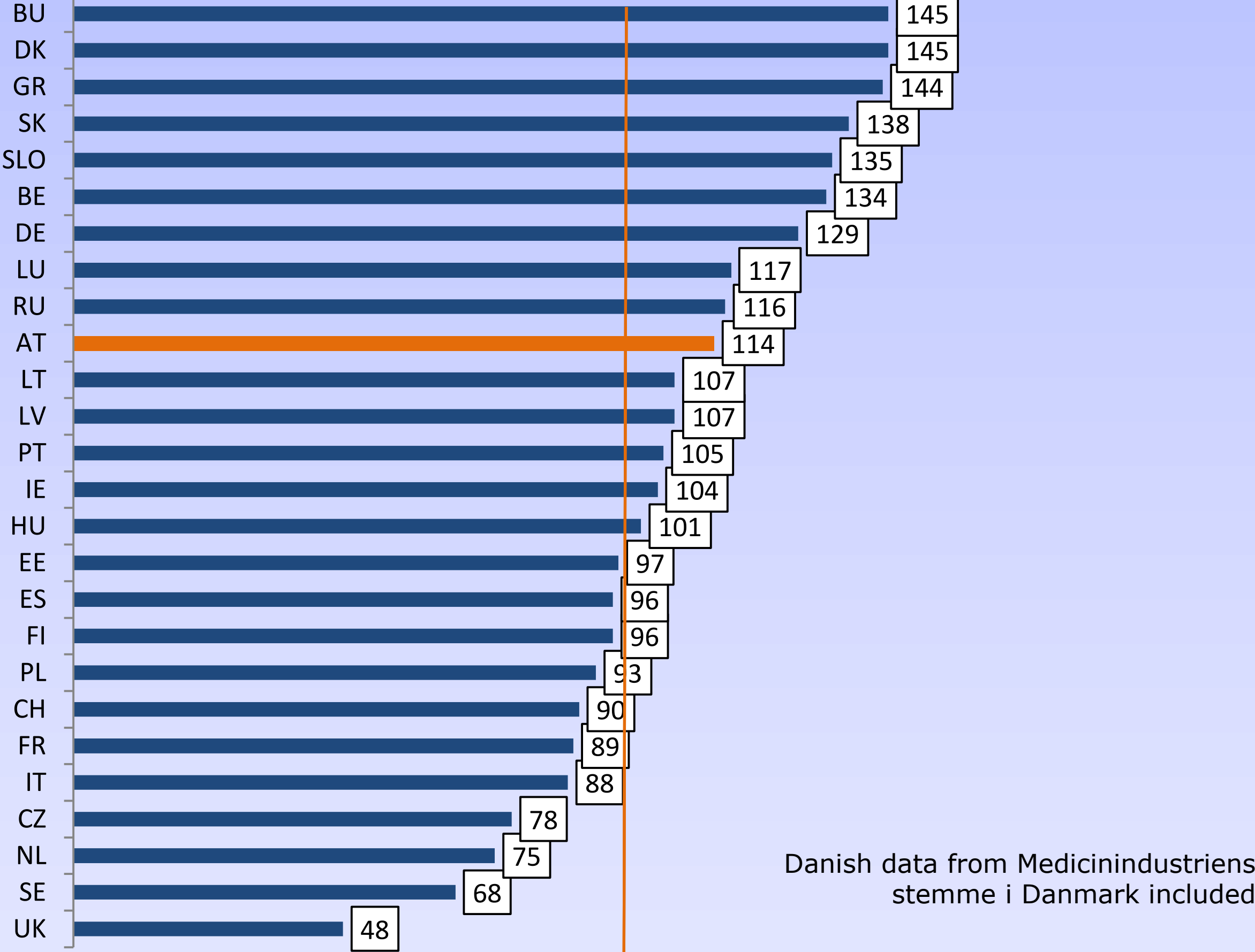
Fig. 2: Ex-factory price index in PPP€ in the reimbursed retail Market in the European Union + CH, 2014



Source: IMS Health Data on file, IPF own depiction 2014

Similar results were obtained for the reimbursement price index; the price level in Denmark and Bulgaria (145) is the highest and UK (48) the lowest. The country specific results are illustrated in Figure 3.

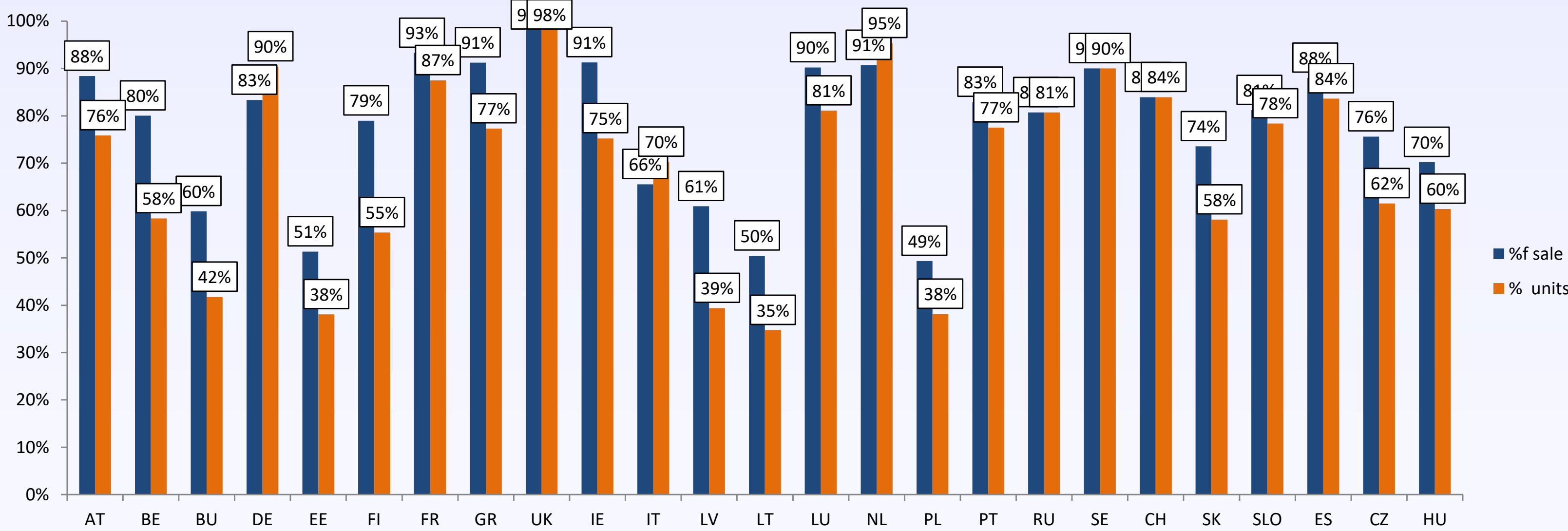
Fig. 3: Reimbursement price index in PPP€ of the retail Market in the European Union + CH, 2014



Source: IMS Health Data on file, IPF own depiction 2014

Price levels should be interpreted in context with access to medicines. Countries with high price levels in PPP€ like Bulgaria have a very low percentage of reimbursed drugs and due to that fact a lower accessibility to innovate medicines.

Fig. 4: Percentage of reimbursed medicines of the retail Market in the European Union (- DK + CH), 2014



Source: IMS Health data on file, IPF own depiction 2014

Conclusion

When converting drug prices with PPP, differences between drug prices and affordability in different countries were found. Low-income countries reported less affordability of drugs, leaving room for potential problems with drug access, and consequently, a negative impact on health.

References

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Additional Literature with the author