IP1: GLOBAL BIOPHARMACEUTICAL INNOVATION—TOO MUCH, TOO LITTLE, OR BOTH?

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ISPOR Barcelona 2018

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Agenda

- CEA and HHS claims of European "freeloading"
- How much should "Europe" pay for innovation?
- Could we measure the extent of "freeloading"?
- The latest whizzo scheme from HHS
  - Will the International Pricing Index solve the problem?

Higher European prices, or lower US prices, or both?

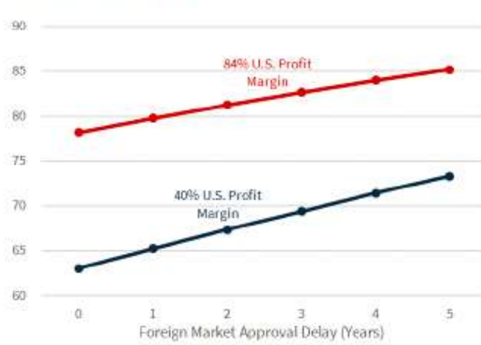
"One of my greatest priorities is to reduce the price of prescription drugs. In many other countries, these drugs cost far less than what we pay in the United States. That is why I have directed my Administration to make fixing the injustice of high drug prices one of our top priorities. Prices will come down."

— President Donald J. Trump (July 2018)

The CEA Report[1.]

Figure 3. Hypothetical Net Present Value of U.S. Share of OECD Patented Pharmaceutical Profits

(Percent of OECD Profits)



Source: CEA calculations. Note: Assumes 20 percent profit margin in foreign OECD markets.

[1.] The Council of Economic Advisers. Reforming Biopharmaceutical Pricing at Home and Abroad. February 2018

The CEA Report part (ii) (page 14)

- .. given that innovation is not substantially affected by their pricing, most OECD nations employ price controls in an attempt to constrain the cost of novel biopharmaceutical products, e.g. through cost-effectiveness or reference pricing policies.
- foreign governments with centralized pricing exploit the fact that once a drug is already produced, the firm is always better off selling at a price above the marginal cost of production and ……insist on a price that covers the marginal production cost—but not the far greater sunk costs from years of research and development—and firms will continue to sell to that country.
- Meaningful reforms could address the free-riding that takes unfair advantage of American innovation, whether through enhanced trade policy **or policies that tie public reimbursements in the United States to prices paid by foreign governments that free-ride** or other methods.

Being careful with the economics..

- "two goals of reducing American prices and stimulating innovation are consistent, but can be achieved through a combined strategy that corrects government policies that hinder price-competition at home, while at the same time limiting free-riding abroad." (page 1)
- Note that *higher European prices do not mean lower US prices, but more innovation* (conditioned on US prices)

How much should "Europe" pay for innovation?

HEALTH ECONOMICS
Health Econ. 24: 294–301 (2015)
Published online 11 December 2013 in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/hec.3021

VALUE-BASED DIFFERENTIAL PRICING: EFFICIENT PRICES FOR DRUGS IN A GLOBAL CONTEXT

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ABSTRACT

This paper analyzes pharmaceutical pricing between and within countries to achieve second-best static and dynamic efficiency. We distinguish countries with and without universal insurance, because insurance undermines patients' price sensitivity, potentially leading to prices above second-best efficient levels. In countries with universal insurance, if each payer unilaterally sets an incremental cost-effectiveness ratio (ICER) threshold based on its citizens' willingness-to-pay for health; manufacturers price to that ICER threshold; and payers limit reimbursement to patients for whom a drug is cost-effective at that price and ICER, then the resulting price levels and use within each country and price differentials across countries are roughly consistent with second-best static and dynamic efficiency. These value-based prices are expected to differ cross-nationally with per capita income and be broadly consistent with Ramsey optimal prices. Countries without comprehensive insurance avoid its distorting effects on prices but also lack financial protection and affordability for the poor. Improving pricing efficiency in these self-pay countries includes improving regulation and consumer information about product quality and enabling firms to price discriminate within and between countries. © 2013 The Authors. *Health Economics* published by John Wiley & Sons Ltd.

Danzon, Patricia M., Adrian K. Towse, and Jorge Mestre-Ferrandiz. 2015. "Value-Based Differential Pricing: Efficient Prices for Drugs in a Global Context." *Health Economics* 24: 294–301

Achieving Appropriate Price Differentials Across Countries using Value Assessment

- If two countries differ in per capita income but otherwise have similar preferences for medical care, the optimal ICER or willingness to pay for medical care will be higher in the country with the higher income per capita.
- If each country chooses its own ICER threshold(s) based on its citizens' willingness-to-pay for medical care, countries with higher income per capita are likely to choose higher ICERs
- Manufacturers can set higher prices in these countries.
- There will not be exact proportionality of prices with income - other factors play a role, including preferences, disease burdens, income distribution and health system design.
- These prices should differ appropriately across countries and in aggregate should add up to an appropriate global incentive for manufacturers to invest in R&D.

Could we measure the extent of "freeloading"? (or lack of it?)

- Working hypothesis is that monopsonist is pushing price below WTP towards MC, and not wanting to contribute to sunk (R&D) cost
- Could look at citizen WTP for health gain and compare with implicit (revealed) or explicit (stated) ICER threshold
- But also need to look at health system funding, budget constrained ICER threshold
- Is the key to explore if the ICER for drugs is lower than the ICER for other technologies?

The latest whizzo scheme from HHS

HHS.gov U.S. Department of Health & Human Services

FOR IMMEDIATE RELEASE
October 25, 2018

Contact: HHS Press Office
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What You Need to Know about President Trump Cutting Down on Foreign Freeloading

"When foreign governments extort unreasonably low prices from U.S. drug makers, Americans have to pay more to subsidize the enormous cost of research and development. . . . It's unfair and it's ridiculous, and it's not going to happen any longer." — President Donald J. Trump

The President is proposing a new Medicare model, the International Pricing Index (IPI) model, that fulfills his promise to bring down drug prices and cut down on foreign freeriding.

The latest whizzo scheme from HHS part (ii)

- IPI to be used for Medicare Part B drugs
- "American and Foreign Drug Companies will have to reform their business models. However, the impact to their revenue would not be enough to substantially reduce current levels of research and development, and *their impact would be reduced if foreign prices were more in line with U.S. prices*." (my emphasis)
- Free loading on European pricing and value assessment mechanisms or a strategy to force up European prices?
- What will happen in Europe? Most likely: Higher list prices with higher confidential discounts, no change in net price. Worst case: Products withdrawn. Less innovation.

THANK YOU FOR YOUR ATTENTION

To enquire about additional information and analyses, please contact Professor Adrian Towse at atowse@ohe.org

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