White Paper

International Comparison for Drug Prescription Prices

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This white paper is based on the published *Policy Brief: International Price Differences for Drug Prescriptions* from ECCHC, University of Chicago[1]

Executive Summary

Many international drug price comparisons conclude that the U.S. has the highest prescription prices in the world. However, these studies typically focused only on brand-name drugs, which represent just 7% of prescription sales volume in the U.S. This analysis evaluates whether the U.S. truly has higher drug prices by examining both brand-name and generic drugs across six developed countries: the U.S., Canada, Germany, the United Kingdom, France, and Japan.

We compare the volume-weighted average prescription net prices in the public sectors of the sampled countries. The analysis found that the U.S. public-sector prescription net prices are 18% lower on average than those in the peer countries. This challenges the common viewpoint that the U.S. drug prices are universally higher. We found that this outcome is driven by three key factors in the U.S.: the strong negotiating power of public programs, the large volume of generic drugs, and the low price of generic drugs.

The U.S. pricing pattern is efficient because it balances the affordability and incentives for innovation: low-cost generics benefit patients, and high-priced branded drugs help subsidize pharmaceutical innovation for manufacturers. Adopting the U.S. model can reduce global free riding on American-funded pharmaceutical research and development without increasing the overall drug spending abroad. Trade agreement offers a viable pathway to export the U.S.-style reforms.

[1] Full paper available at the ECCHC website, University of Chicago: https://ecchc.economics.uchicago.edu/project/policy-brief-international-price-differences-for-drug-prescriptions/

Introduction

This paper examines cross-country comparisons of prescription drug prices in light of ongoing debates about U.S. price controls. Previous studies often justify such proposals by comparing average prices while focusing narrowly on brand-name drugs. This approach overlooks important differences in drug availability and the structure of national pharmaceutical markets, especially the dominant role of generics in the United States. To address these limitations, we consider the full distribution of drug prices, including both brand-name and generic medications. The U.S. has the highest generic market share (93 percent) and some of the lowest generic prices among developed countries. Based on this broader approach, we find that average prescription prices for Medicare and Medicaid are 18 percent lower than in the United Kingdom, Germany, Canada, Japan, and France. We also take into account cases where brand-name drugs are unavailable or prohibitively expensive abroad. Our analysis aims to provide a more comprehensive and nuanced comparison of prescription drug prices across countries.

Background: Distribution of Prescription Drug Prices Across Countries

To better understand international differences in prescription drug prices, it is important to move beyond average price comparisons and examine the full distribution of prices within each country. This section provides background on how differences in market composition, particularly the role of generic drugs, contribute to variation in price distributions across countries and influence the way cross-country comparisons should be approached.

First, the United States has both a higher share of generic prescriptions and lower generic prices than other countries. As shown in Figure 1, generics make up a much larger portion of the U.S. market. Figure 2 shows that generic drugs in peer countries are often several times more expensive than those in the United States.

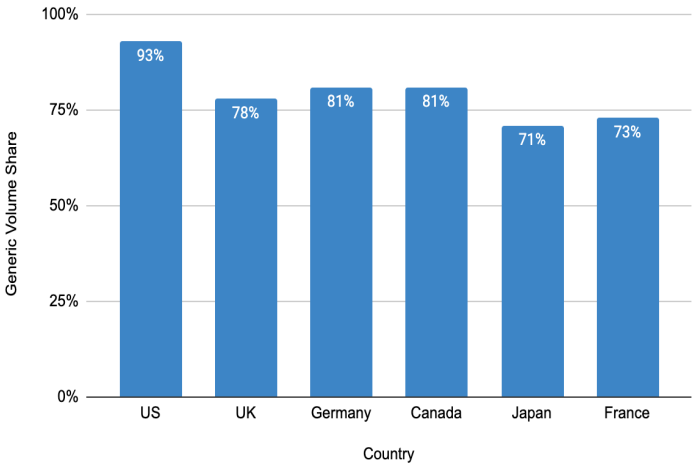

Figure 1: Volume Shares of Generic Drugs in the Selected Countries

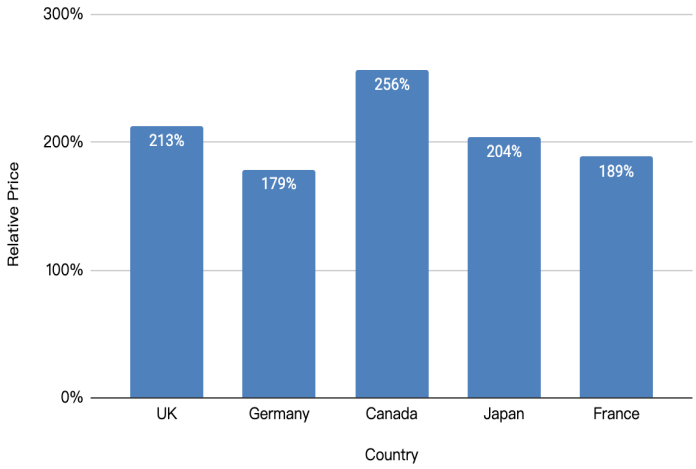

Figure 2: Foreign-to-U.S. Relative Prices of Generic Drug

Second, these patterns lead to a distinct price distribution in the U.S. market. Figure 3 illustrates that most U.S. prescriptions fall at lower price points compared to peer countries due to the prevalence of affordable generics. However, the U.S. also has some higher-priced brand-name drugs, reflected in the upper end of the distribution. In contrast, the foreign distribution may exclude some drugs entirely when they are unavailable or prohibitively expensive. These differences make average prices difficult to interpret on their own, which is why the next section turns to empirical comparisons of overall price levels.

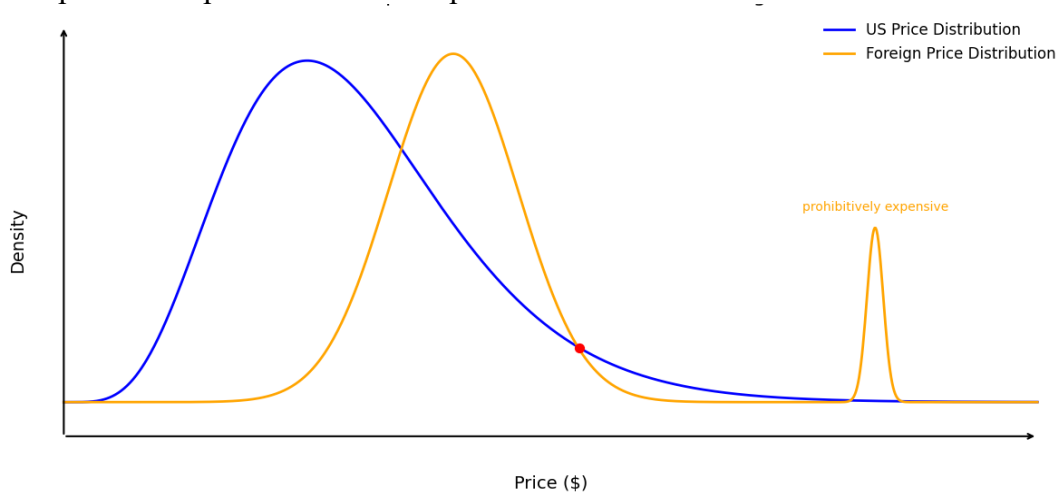

Figure 3: Basic Features of Price Distributions of Prescription Drugs: United States vs. Foreign

Methodology

We compare net public-sector prescription drug prices across the six selected countries. We begin by collecting U.S.-to-foreign list price ratios for both branded and generic drugs. These are then adjusted using each country's public-sector rebate rate to obtain the net price ratios. Finally, using these net price ratios, we compute volume-weighted average prescription prices based on each country's branded and generic drug utilization mix.

Key Findings

The public-sector prescription net price ratio is shown in Figure 4, expressed as the U.S. price over the foreign price. We find that U.S. public-sector prescription net prices are 18% lower on average than those in the five peer countries, challenging the common narrative that U.S. prescription drugs are universally more expensive.

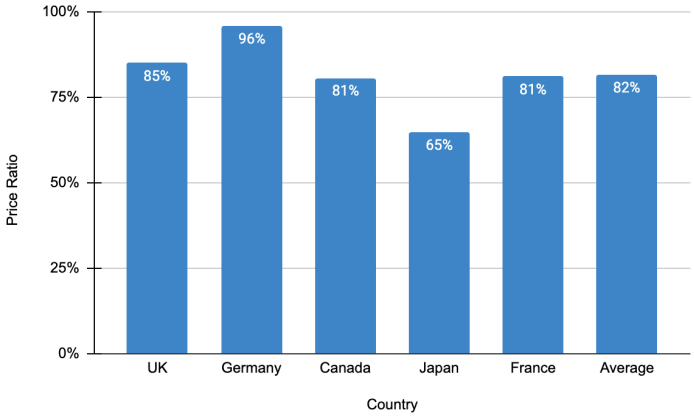

Figure 4: Public-Sector Prescription Net Price Ratios

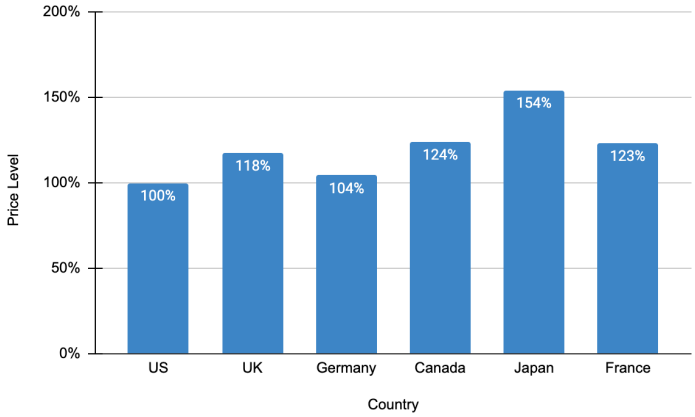

Figure 5: Public-Sector Prescription Net Price Levels

Note: The price levels are calculated by $\frac{100\%}{U.S.-to-foreign\ Price\ Ratio}$

To provide a more intuitive comparison, we normalize the U.S. public-sector prescription net price to 100% and derive the foreign price levels using U.S.-to-foreign price ratios presented in Figure 4. The result, as illustrated in Figure 5, indicates that the U.S. has the lowest prescription price level in the sampled countries, while Japan exhibits the highest prescription price level at 154% of the U.S. benchmark.

According to our analysis, this outcome is driven by three key factors as follows:

- The U.S. public-sector programs have stronger rebate-negotiating power
- The U.S. has the lowest generic drug price, which is half that of the peer countries
- The low-price generic drugs account for 93% of prescription volume in the U.S.

Many previous studies concluded that U.S. prescription drug prices are higher in peer countries because they focused solely on brand-name drugs, which account for only 7% of the prescription volume in the U.S. By ignoring the large and competitively priced generic drug market, those comparisons failed to capture the full price distribution and were thereby misleading.

Some critics argue that generic drugs are less important to patients because they account for only a small share of spending, at 13%. This argument is wrong, too. The spending share for generic drugs is low in the U.S. because their prices are low, and the prices for branded drugs are relatively high. The importance of generic drugs lies in volume, not their share of spending.

The distinction becomes clear when comparing the U.S. and European pricing systems. The spending share for generic drugs is higher in Europe because of the opposite reason: generic prices are higher, and branded prices are lower, compared to those in the U.S. This pricing pattern is inefficient from both consumer and producer perspectives: patients do not receive sufficient discounts on generics, and manufacturers face limited return on innovation. By comparison, the

U.S. system better aligns incentives. Low generic prices benefit consumers, while high branded prices help sustain pharmaceutical R&D.

Policy Implications[2]

The U.S. pattern supports both affordability and innovation by combining aggressive generic pricing with value-based pricing for brands. While the U.S. accounts for less than 25% of global GDP, it generates about 75% of global pharmaceutical profits, effectively subsidizing R&D for the rest of the world. Foreign countries suppress branded prices while protecting generic drugs from competition, leading to higher system-wide costs. Our findings suggest that adopting American-style reforms – higher brand prices with more competitive generic markets – could reduce free riding without increasing total drug spending abroad. Exporting the U.S. model through the trade agreement offers a viable solution.

Conclusion

This study shows that prior international price comparisons are misleading because they focus exclusively on the brand-name drugs. In reality, the U.S. has the lowest average prescription net prices, driven by the large volume and low cost of generics. The U.S. pricing structure is efficient: it balances affordability for patients with strong incentives to manufacturers for innovation. Exporting this model through trade agreements could reduce global free riding on U.S. R&D without raising total drug spending abroad.

[2] For more details, please see the op-ed by Dr. Tomas J. Philipson: https://www.nationalreview.com/2025/07/1851854/