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Prescription Drug Price Comparisons: The United States, Canada, and Mexico

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Summary

The question of differential prices of prescription drugs across U.S., Canadian, and Mexican national borders is invariably raised in any discussion of public policy related to the regulation of the pharmaceutical industry, and, especially, the research-based pharmaceutical industry. The implication of the question is that the American consumer is being gouged by the drug manufacturer at the pharmacy.

The reality is that retail prescription drug prices in the United States are higher than in neighboring countries. While it is likely that the pharmaceutical companies price their products in these countries with a view to maximizing profits, consistent with what the market will bear, it is also demonstrably clear that the structure of the markets in the three countries are very different, making it difficult, if not impossible for a single price to be charged in all three countries. In particular, government plays a significant role in the marketing of prescription drugs in both Canada and Mexico as compared with its role in the United States. Also, U.S. government regulations preventing the importation of retail lots of prescription drugs may give rise to the unintended consequence of creating a barrier to price equalization across national borders.

Prescription Drug Price Differentials: The United States and Canada

On average, and based on the most comprehensive data available — for 1991 in a report compiled by the General Accounting Office (GAO)[1] — prescription drugs in the United States were priced about 34% higher than the same products in Canada.[2] The

[1] U.S. General Accounting Office. *Prescription Drugs: Companies Typically Charge More in the United States Than in Canada. GAO/HRD-92-110.* Washington, 1992. 37 p. (Hereafter cited as: GAO. *Prescription Drugs.*)

[2] The concept of the same product includes the same quantity dispensed, the same form of
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average price for the products sold in the United States was $45.17, ranging from $2.35 (for Deltasone, 5 mg. tablets) to $304.32 (for PCE, 333 mg. tablets). The average price for the same products sold in Canada was $33.78, ranging from $1.29 (for Deltasone, 5 mg. tablets) to $211.98 (for PCE, 333 mg. tablets). The comparisons were based on data collected in both countries for 121 prescription drugs in the same quantities for each product.

It should not be assumed that U.S. prices were higher on every product. Of the 121 products, 22 were priced lower in the United States than in Canada. Of the 99 products with higher U.S. prices, the differential was less than 10% in 11 cases. Thus, in about one-fourth of the products, the U.S. price was either moderately higher or lower than the same product price in Canada. At the same time, it should be noted that the price differential exceeded 100% in 21 cases; of these, the differential was greater than 200% in 8 instances.

The products selected by GAO for its analysis were the most frequently dispensed drugs in their most commonly used dosages and package sizes by U.S. drugstores.[3] The U.S. prices were obtained from private U.S. databases, and are the wholesale acquisition costs paid by the drugstores. Given the list of drugs, the Canadian prices were the Canadian factory prices listed by the Ontario Drug Benefit Formulary (ODB).[4] The ODB is a provincial government plan; its formulary — the list of drugs covered under the plan — indicates the maximum amount of reimbursement to the druggist for each prescription drug.[5]

GAO offers two principal reasons for the differential in the drug prices in the two countries. First, Canadian law controls prices of both new drugs entering its market and any increases in the prices of pharmaceuticals already on the market. Second, provincial government drug benefit plans, in which the provinces are third-party payers, confer on government market power in determining prices.[6] For example, the Ontario Drug Benefit plan serves 40% of the prescription drug market, according to GAO, enabling it to exert significant pressure on prices that it will pay.[7]

Prescription Drug Price Differentials: The United States and Mexico

PhRMA, the trade association representing the research-based pharmaceutical companies in the United States, acknowledges that prescription drug prices in Mexico are significantly lower than in the United States.[8] It offers two main reasons for these price differentials: international income inequality and the lower value of the peso *vis-a-vis* the

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[2](...continued)
the product (e.g., tablets, capsules), and the same dosage. See, GAO. *Prescription Drugs.* p. 10.

[3] *Ibid.*

[4] *Ibid.*, p. 11.

[5] *Ibid.*, p. 16.

[6] *Ibid.*, p. 15 f.

[7] *Ibid.*, p. 17.

[8] Price data for prescription drugs in Mexico are not available in the same detail as the GAO study of Canadian drug prices.

dollar.[9] The change in the value of the peso is to all intents and purposes self-explanatory: a decline in the value of the peso increases the prices of U.S. goods imported into Mexico. The lower income levels in Mexico prevent or inhibit U.S. manufacturers from charging the same price in both markets.[10]

The PhRMA position on price differentials in the two markets may help to explain why the level of demand in Mexico could be lower than in the United States at any price. But it ignores business decision criteria on the supply side of the market. In an idealized free market, the proposition that people with low incomes may not demand large quantities of a product at any given price as compared with persons with high incomes does not mean that suppliers would simply make the same product available to the former group at lower prices. The suppliers in such a market are thought to be motivated by considerations of profit, if not maximum profit. As a result, unless the supplier can cover all costs of production — including embedded costs of research, development, and testing, they are not likely to enter the given marketplace.

Perhaps of greater importance in explaining price differentials in drug prices in Mexico and the United States is the fact that price controls and government procurement policies on pharmaceuticals are in place in Mexico, and have been for some time.[11] Since implementation of NAFTA and the introduction of new drugs in the Mexican market, the price differentials between the two national markets have narrowed somewhat. Still, price controls remain in place. The Mexican government is the largest purchaser of manufactured pharmaceuticals in Mexico, and, according to PhRMA, tends to favor domestic manufacturers in its purchasing decisions. The Mexican government sells its purchased drugs through the social security system in that country, a system that includes delivery of health and other services. The latter distribution system accounts for over 40 percent of the retail market for pharmaceuticals, according to PhRMA. These policies constitute a subsidy to the consumer of pharmaceuticals, which also helps to explain price differentials in the two national markets.

The subsidy to consumers does not necessarily mean that producers are selling their product in the Mexican market at lower prices than they might otherwise charge in the idealized free market. First, because it is a consumer subsidy, it is entirely possible that the Mexican government retails its supply at prices below its cost. Second, and possibly as a result of the consumer subsidy, the actual manufacture of pharmaceuticals is to a large extent concentrated in Mexico. Mexican firms along with transnational firms operate in Mexico. The transnational companies may have located in Mexico to take advantage of lower input costs to be able to manufacture product and sell that output in Mexico even at controlled prices that cover costs of production. A relatively recent report on the

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[9] Pharmaceutical Research and Manufacturers of America. *Industry Issue Brief: International Price Comparisons.* Washington, 1994. p. 1-3.

[10] Information obtained in a telephone conversation with PhRMA staff on June 2, 1995. The same assertion was made in congressional hearings in 1992 by an officer of the Upjohn Corporation. See: U.S. Library of Congress. Congressional Research Service. *Pharmaceutical Pricing: Does Federal R&D Support Justify Federal Review of Prices?* CRS Report 93-471 E, by Sylvia Morrison. Washington, 1993. p. 17.

[11] For a more extensive discussion of these policies, see: Grant, Jeanne. Headaches for Pharmaceuticals. *Business Mexico,* August 1991. p. 8 f.

Mexican pharmaceutical industry suggests that the country is largely self-sufficient in drug production.[12] This report tends to confirm the hypothesis that even foreign-based companies would establish manufacturing operations in Mexico to avail themselves of that market.

Additional Comments on The Explanations For Price Differentials

The question can be raised: if the manufacturers can realize profits in countries with price controls and/or government purchasing plans, why do they charge higher prices elsewhere? In a pure market economy, the objective of any firm is to *maximize* profits. When markets can be segregated so that consumers in one area cannot buy in another, the seller may be able to increase its profits by engaging in what economists call *price discrimination.* The prescription drug market in the United States can be segregated from the Canadian, Mexican or any other foreign market. Under regulations promulgated by the Food and Drug Administration (FDA), it is *illegal* for any retail purchaser to import drugs approved for sale in the United States from other countries.[13] The rationale for this is that, while the specifications for the product is identical in both or several countries, FDA cannot certify that the product sold at retail to the buyer was manufactured in an FDA-certified facility. The FDA approval process for new and generic drugs *includes* the approval of the facilities where the drug would be manufactured for commercial distribution in the United States. While some manufacturing facilities in Canada and elsewhere have been certified by FDA, they ship products in bulk and wholesale lots, and do not sell to individual consumers. Thus, U.S. government policy relating to maintaining the safety and effectiveness of our drug supply may create conditions under which prescription drug manufacturers can charge different prices in different markets in order to maximize their profitability.

The significant role of provincial and national governments as a third-party payer of drugs in Canada and Mexico stands in relatively sharp contrast to the relatively smaller role of government and other large buyers and/or payers of prescription drugs in the United States. As noted above, 40% of the prescription drug market in Ontario is served by the Ontario Drug Benefit Plan; its power to influence price is significant, because it can exclude specific products from its formulary.

The role of the government as a payer for prescription drugs is not so great in the United States as it is in Canada and Mexico. Institutional facilities — hospitals (including federal facilities), staffed HMOs, and clinics — accounted for about one-fifth of the market for drugs in 1995. Typically, these organizations buy and dispense drugs based on written orders of doctors. Chain drug stores, independent pharmacies, mass merchandise outlets

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[12] Toledano, Salvador Herrera. Drug Production and Free Trade. *Business Mexico,* August 1991. p. 14.

[13] U.S. Department of Health and Human Services. Food and Drug Administration. *Book on Importing Drugs Is Misleading and Could Cause Harm.* TALK PAPER. T91-1, January 9, 1991. Rockville, MD, 1991. 3 p.; and, U.S. Department of Health and Human Services. Food and Drug Administration. *Policy on Importing Unapproved Aids Drugs For Personal Use.* TALK PAPER. T88-51, July 27, 1988. Rockville, MD, 1988. 3 p.

(like Wal-Mart), and food stores accounted for about 70% of the market in 1995.[14] The institutional facilities have greater control over the products they use, and therefore the prices they pay. While drug stores and other retail outlets are associated with managed care programs to a large extent, they do not establish formularies and, therefore, have to stock virtually all pharmaceutical products. The retail outlets have considerably less power to influence price than their institutional counterparts, because they cannot exclude products from their inventory.

With few exceptions, no such public sector constraints on the pricing of prescription drugs exist in the United States.[15] This is not to say, however, that there are no constraints on the pricing of prescription drugs by pharmaceutical companies.[16] First, with the exception of the first patented product approved for marketing in the United States for a particular medical problem, the availability of other therapeutic remedies for the same medical problem introduces an element of competition among different manufacturers of research-based drugs.[17] Second, staffed health maintenance organizations (HMOs) and health insurance plans are able to exert pressure on drug manufacturers to control prices. Third, while bringing generic equivalents to market may be easier in Canada than in the United States,[18] generic drugs are increasingly more commonplace in the United States. Owing to their lower prices *vis-a-vis* research-based drugs, insurance companies and managed care organizations offer significant price inducements to their policyholders/members to use generic drugs whenever possible. Staffed HMOs and hospitals also maintain formularies listing those drugs that their medical staff may or are encouraged strongly to prescribe; price is a factor in the listing of drugs in the formulary.

In summary, there is no question but that prescription drugs in Canada and Mexico are less expensive than in the United States. But it would appear that the characteristics of the market significantly influence prices in both countries. U.S. government regulations related to the safety and effectiveness of drugs impose a barrier to the free-flow of prescription drugs between all three countries in principle.[19] Potentially as a result of this factor, sellers are able to charge different prices; the forces of competition that would tend theoretically to equalize prices in both markets are unable to function. That government is one of the largest payers for drugs in Canada and Mexico also gives it significant power to establish prices there; apart from its being a major payer for drugs, it also determines

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[14] Dillon Read Equity Research. *Industry Report: Specialty Pharmaceuticals: Generic Drug and Drug Delivery Industry Overview.* New York, Dillon, Read & Co., Inc., 1996. p. 43.

[15] The primary *public sector* constraints are those in the Medicaid and the Veterans Administration health benefit programs.

[16] For a fuller discussion of prescription drug pricing, see: U.S. Library of Congress. Congressional Research Service. *Prescription Drugs: Factors Influencing Their Pricing.* CRS Report 96-296 E, by David J. Cantor. Washington, 1996. 11 p.

[17] For example, Tagamet, Zantac, and Pepcid are prescribed to deal with the same medical issue. They differ in qualitative ways, such as dosage and frequency of use.

[18] GAO. *Prescription Drugs.* p. 19 f.

[19] The effectiveness of this barrier to trade depends upon the degree to which Customs officials enforce the regulations propounded by FDA at the border.

what drugs it will pay for. In both cases, it appears that government policy is a major factor giving rise in part to drug price differentials in these countries.