

Seniors and Drug Prices in Canada and the United States

This paper compares Canada-US price differences for the drugs that were most important to Canadian seniors (aged 60 and older) in 2006. Prices are compared separately for *brand name* and *generic* prescription drugs.

Prices paid by Canadian and American seniors for identical drugs

The results (see figure 1) show that on average in 2006, prices for the *generic* drugs that were most commonly prescribed to Canadian seniors were 118 percent higher in

Canada than for identical drugs in the United States. By contrast, prices for the *brand name* drugs that were most commonly prescribed to seniors were on average 52 percent less in Canada than for identical drugs in the United States.

A previous study (Skinner, 2005a) using 2003 data (see figure 1) found



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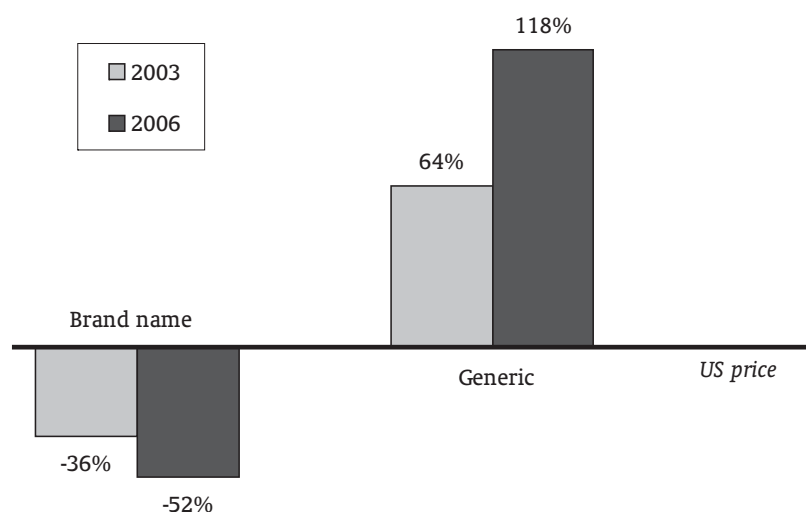


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Main Conclusions

- On average, Canadian seniors pay 118 percent more than American seniors for identical *generic* drugs
- On average, Canadian seniors pay 52 percent less than American seniors for identical *brand name* drugs.
- Higher Canadian *generic* prices are caused by government policies that shield retail pharmacies and generic manufacturers from competitive market forces that would put downward pressure on *generic* prices.
- Lower *brand name* drug prices in Canada are a result of strategies used by patented drug makers to match prices to local market conditions, particularly lower Canadian incomes. American incomes are significantly higher than Canadian incomes, so it is not surprising that Americans pay higher prices for *brand name* drugs.

Figure 1: Average Canada-U.S. Price Differences for the Brand Name and Generic Drugs most commonly Prescribed to Seniors, 2003 and 2006



Source: Skinner, 2005b; Skinner and Rovere, 2007.

that on average, Canadian seniors paid 64 percent more than American seniors for the same *generic* drugs. For *brand name* drugs, prices paid by Canadian seniors were 36 percent lower on average than prices in the United States for identical drugs.

These updated findings suggest that in Canada over the four years covering 2003-2006, prices for the

generic drugs that are most commonly prescribed to seniors have increased significantly relative to the US, while prices for the *brand name* drugs most important to seniors have decreased.

Data and methodology

This current study used data from previous research that contained

price and volume information on the 100 most commonly prescribed brand name drug products in Canada, and the 100 most commonly prescribed generic drug products in Canada in 2006, as well as actual US price data for identical drugs (Skinner and Rovere, 2007).

Data was also obtained on the top ranked therapeutic classes for drugs most commonly prescribed to Canadian seniors (see table 1). Published data were available on the top four therapeutic classes by gender. Ranking was based on IMS Health Inc. data for the number of prescriptions dispensed to Canadian seniors aged 60 years and older in 2006 within each therapeutic class (Cavalucci, 2006). The top therapeutic classes for seniors shown in table 1 were described more generally than those specified by Health Canada's Therapeutic Products Directorate in the price data for the top 100 brand name and 100 generic drug products. We included all drugs among the top 100 brands and 100 generics with therapeutic class descriptions that could also be included under the more general descriptions of the top therapeutic classes for seniors in table 1. This allowed us to isolate a sample of Canada-US price comparisons for the drugs most commonly prescribed to Canadian seniors.

To make cross-national comparisons, all prices were converted to 2006 US dollars at purchasing power parity (PPP). Price differences are stated as a percentage of the US price. Detailed methodology for comparing prices has been published in previous research (Skinner and Rovere, 2007).

Table 1: Top 4 Therapeutic Classes for Canadian Seniors, 2006.

Top 4 Therapeutic Classes by Gender (age 60 +)	
WOMEN	MEN
Diuretics, Non-Injectable	Cholesterol Reducers
Tranquillizers	Ace Inhibitors and Combinations
Cholesterol Reducers	Beta-Blocker and Combinations
Calcium-Blocking Agents	Analgesics

Source: Cavallucci, 2006.

Detailed findings

Among the 100 most commonly prescribed *brand name* drugs in Canada in 2006, 12 drugs matched the most commonly prescribed therapeutic classes for seniors (table 2). For all 12 drugs, Canadian prices averaged 52 percent less than US prices.

Of the top 100 *generics* prescribed in 2006, 16 drugs (grouped by active ingredients) matched the top prescribed therapeutic classes for seniors (table 3). Five drugs were less expensive in Canada, and the remaining 11 drugs were more expensive in Canada. Of the five that were less expensive in Canada, prices averaged 37 percent less. Prices for the remaining 11 generic drugs that were more expensive in Canada averaged 188 percent higher. Therefore, on average, over all 16 active ingredients that were most commonly prescribed to seniors, Canadian prices averaged 118 percent more than American prices.

Why higher generic prices and lower brand name prices in Canada?

Lower Canadian prices for brand name drugs are largely a result of the fact that Canadian incomes are lower than American incomes (Danzon and Furukawa, 2003). This is because when markets can be segmented, manufacturers can charge different prices in each market that are appropriate for the average income levels in each. This pricing strategy benefits consumers in lower income markets, but sellers also benefit from varying prices based on income conditions in the

Table 2: Canada-US Price Differences for the Top-Selling 12 Brand Name Drugs Matching the Therapeutic Classes Most Commonly Prescribed to seniors in Canada, 2006.

Brand Name Product	CAN-US Price Difference as a Percentage of the US Price, Stated in 2006 US\$ PPP
Lipitor	-38%
Altace	-49%
Crestor	-54%
Ativan	-87%
Celebrex	-57%
Vasotec	-30%
Coversyl	-51%
Arthrotec	-64%
Oxycontin	-63%
Diovan hct	-47%
Accupril	-33%
Duragesic	-57%
AVERAGE	-52%

IMS Health Canada Inc., 2007; Skinner & Rovere, 2007; calculations by authors.

market. For example, if Canadians had to pay American prices, fewer drugs might be sold in Canada. In some cases, this is less profitable than selling a higher quantity of drugs at prices matched to lower Canadian income levels. Knowing that American incomes are significantly higher than Canadian incomes, it is not surprising that Americans pay higher prices for brand name drugs.

Table 3: Canada-US Price Differences for the Top-Selling 16 Generic Drugs Matching the Therapeutic Classes Most Commonly Prescribed to Seniors in Canada, 2006

Generic Active Ingredient[s]	CAN-US Price Difference as a Percentage of the US Price, Stated in 2006 US\$ PPP
Furosemide	163%
Hydrochlorothiazide	197%
Lorazepam	-10%
Oxazepam	-68%
Naproxen	244%
Metoprolol	75%
Simvastatin	318%
Bisoprolol	-66%
Ibuprofen	106%
Lisinopril	587%
Diazepam	44%
Atenolol	236%
Triamterene/ hydrochlorothiazide	-1%
Pravastatin	68%
Acetaminophen/ codeine	28%
Acetaminophen/ oxycodone	-39%
AVERAGE	118%

IMS Health Canada Inc., 2007; Skinner & Rovere, 2007; calculations by authors.

Lower Canadian incomes should also tend to produce lower prices for generic drugs as well. Yet, instead, Canadian prices for generics are more than double

American prices for identical drugs. Why? The high cost of generic drugs in Canada is due to public policies in Canada that shield retail pharmacies and generic drug manufacturers from competitive market forces that would put downward pressure on the prices of generic drugs (Skinner and Rovere, 2007). Some of the key government policies that lead to inflated generic drug prices in Canada include:

- Public drug programs direct reimbursement of prescriptions to pharmacies instead of consumers. This insulates consumers from the cost, thereby removing incentives for comparative shopping that would put downward pressure on prices.
- Many public drug programs also reimburse generic drugs

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at a fixed percentage of the brand name original drug. Under fixed-percentage reimbursement, there is no incentive for retailers to undercut each other to win sales. This is because the buyer (government) offers every seller the same price, and the price is known in advance.

- Large established generic companies take advantage of the fixed price public reimbursement system to offer rebates to retailers that are “bundled” across many products in exchange for exclusive distribution rights. This frequently results in a virtual monopoly within particular retail pharmacy chains for a particular generic label. Because pharmacies are reimbursed directly, discounts are

not passed on to consumers and the exclusive distribution allows pharmacies to charge the same inflated generic prices to public and private payers alike.

- Governments also force generic substitution for brand name drugs. Under these circumstances, generic products no longer have to compete on price to overcome consumer loyalties toward brand name drugs. Consumers who need the drug will buy it at a higher price, because it is the only drug eligible for reimbursement.

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