Pharmacy Benefit Managers
As Conflicted Countervailing Powers

By
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1/24/07

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Disclosures:
I have not received any remuneration for this paper nor have I financial interest in any company cited in this paper.
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Introduction

CVS, one of the two largest drugstore chains in the United States, announced on November 1, 2006 that it was merging with Caremark Rx, one of the three largest pharmacy benefit managers (PBMs) in the United States. The proposed merger cannot be easily classified as vertical or horizontal because Caremark is both a buyer of CVS prescriptions and a competitor of CVS via its captive mail order operations.

We believe that this merger is pro-competitive. It is a sign that CVS is accepting a future of price competition, but working to make it more elastic by motivating Caremark to steer traffic its way in return for reduced prescription prices.¹

On December 16, 2006, Express Scripts, the third largest PBM, announced a competing bid for Caremark. This horizontal merger of two of the Big 3 PBMs would be competitive if the combined company acted as a “countervailing power” as envisioned by economist John Kenneth Galbraith. PBM countervailing power can be used in the negotiation of rebates with brand name drug manufacturers (Pharma) and in the negotiation of reimbursements with retail pharmacies.

While it is possible that large resellers can be countervailing and pro-competitive, we believe that this particular merger would be anti-competitive. The economist George Stigler was skeptical of Galbraith’s optimism that an intermediate market countervailing power would behave asymmetrically – a powerful buy-side opponent to up-stream oligopolists, but a benevolent agent of down-stream consumers. Our analysis of the evolution and current behavior of large independent PBMs confirms Stigler’s skepticism.
The first section of this paper reviews our prior work on brand drug rebate negotiations. Our conclusion here is that the Big 3 PBMs are not pro-competitive countervailing powers, but co-opted partners with Pharma in a series of bilateral oligopolies, as embodied in therapeutic classes in formularies. Big 3 PBMs shelter blockbuster “me-too” drugs from price competition by cheaper generics that are therapeutic equivalents. Today, drug rebates mostly are passed on to consumers, but on balance, we still believe that the Big 3 PBMs are not acting in the best interest of clients.

In the next section of the paper, we analyze the role of PBMs in negotiating retail prescription reimbursements with pharmacies. Our conclusion again is that the Big 3 PBMs are neither pro-competitive countervailing powers nor anti-competitive oligopsonists. They have evolved into a species not previously identified by economists – what we call a conflicted countervailing power.

The failure to countervail retail pharmacies can be traced to the evolution of PBMs as both payers and providers of pharmacy benefits. Mail order operations have become central to the business model of the Big 3 PBMs. They serve now as a dual source of gross profits. First, PBMs earn margins on mail order transactions. Second, captive mail order operations strengthen PBMs’ negotiating position with brand name drug manufacturers by making credible threats to disadvantage a brand drug should rebates negotiations not go their way.

The choice of role to play in retail reimbursement negotiations can only be understood in the context of the evolution of the PBM business model. The Big 3 PBMs have buy side power vis-à-vis retail pharmacies, but choose to act like they have none because the resulting “hold up” of retail prices serves to steer demand to their captive mail order operations. PBMs might not have developed large mail order operations had they adopted a fee-based business model rather than a transactions-based model. Small mail order operations still might have been developed, but only used as a threat to ramp up if retailers failed to give them rock-bottom prices.
In the last section of this paper, we present data from the recent Medicare Part D discount drug card program (DDC) to support our contention that independent PBMs with captive mail order operations hold up retail prices in order to make their captive operations price competitive.

The Role of the Big 3 PBMs in Rebate Negotiations

Even though brand drugs are protected by patents, there may be other brands and generics that are close substitutes, known in the industry as therapeutic equivalents. PBMs can affect demand by employing a variety of managed care techniques such as differential co-payments keyed to formulary placement, prior authorization and step therapy restrictions, and retrospective therapeutic interchange (calling the prescribing physician to request a switch to lower cost drug that is therapeutically equivalent). Pharma pay PBMs rebates in order to influence discretion in the use of these managed care techniques.

Rebates are integral to the creation and growth of PBM buy-side power. They are more than payments for value received. There are two basic types of rebates: formulary and market share. Nominally, formulary rebates are paid in return for favorable placement in a formulary. They are not tied to prescription volume, but are multi-million dollar lump sum transfers of oligopoly surplus from the sell-side to the buy-side. Formulary rebates give large PBMs a competitive advantage over smaller PBMs. They enable the Big 3 PBMs to win contracts by recouping low margins on claims processing and mail order brands with secretive rebate retention. Horizontal merger activity in the PBM industry has been driven by the desire to gain more power to extract formulary rebates from Pharma.

Other the other hand, market share rebates are non-discriminatory. The same rebate schedule -- $/script as a function of market share -- is available to all PBMs big and small. We do not believe that market share rebates serve as a barrier to entry for new “me-too” drugs. Rather, they serve
more as a “back-end” barrier of an aging therapeutic class, or market, from brands that lose their patent protection.

For example, the ACE-Inhibitor cardiovascular therapeutic class was once a major source of rebates when seven or more “me-too” drugs like Zestril, Prinivil, and Vasotec were under patent protection. Today, we classify this therapeutic class as “aged” as most of brand drugs have lost their patent protection and cheap generics are available. It is doubtful that manufacturers of the remaining brands like Altace still pay substantial rebates as a “back-end” protection against generic competition.

On the other hand, the cholesterol-lowering “statin” therapeutic class has recently “come of age” as source of rebates as the original innovator brands, Mevacor and Zocor, have come off patent protection. Today, Pfizer’s Lipitor, is the premier remaining on-patent brand and probably represents the #1 source of rebates in the United States. Pfizer does not pay rebates to block newer entrants like Crestor or the combo drug Vytorin. Pfizer, as well as AstraZeneca and Merck/Schering, the manufacturers of Crestor and Vytorin, respectively, pay substantial market share rebates to protect the “back-end” of the statin therapeutic class from price competition from the generics lovastatin (Mevacor) and simvastatin (Zocor).

They key to understanding the function of market share rebates is the definition of “market” which is set by Pharma to include generic drugs as well as brand drugs in a therapeutic class. This fact, coupled with our belief that market share rebate schedule are “F-shaped” rather than “S-shaped”, suggests that market share rebates serve mostly as a deterrent to favoring generics rather than an incentive to favor a single brand drug in a therapeutic class.

We have presented evidence in other papers showing that, in the early 2000’s, a large portion of gross profits of the Big 3 PBMs came from rebates received from Pharma. The rebate transaction is much more complex than the price theory conceptualization of rebates as volume
discounts. These rebates are paid not for “moving markets”, which would be the case if PBMs behaved as pro-competitive countervailing powers.

We have presented the case in two papers that the Big 3 PBMs tend not to play favorites, but extract rebates from competing manufacturers by promising each not to engage in disadvantageous activity like higher co-payments, “prior authorization” restrictions and switching on-patent brand prescriptions to lower cost therapeutic equivalents.\(^3\)\(^4\) This passivity allows non-price competition like advertising and physician “detailing” to take over.

The U.S. District Court of Southern Ohio in _JBDL v. Wyeth-Ayerst Laboratories, Inc._ has recently taken a thorough look at the issue of whether rebate payments by Pharma to PBMs violate anti-trust laws.\(^5\) The judge summarily dismissed the suit concluding that there was “no actionable market foreclosure”. PBMs received rebates from Wyeth in return for favorable formulary placement of Wyeth’s estrogen tablet Premarin. However, the court found that this favoritism was not exclusive as other brands that were therapeutic equivalents were given similar treatment.

This supports our contention that rebates are not paid to exclude, foreclose, or to play favorites, all of which would raise anti-trust concerns. Rather, PBMs are paid to be passive when action might have been the better way to go. This profitable abstention from the exercise of buy-side power is one example of the tendency of the Big 3 PBMs to commit “sins of omission” – not acting bad, but failing to do good.\(^6\)

PBMs’ role in rebate negotiations may not be anti-competitive as defined by anti-trust law. Furthermore, even if passivity were covered by anti-trust law, it is very difficult to develop statistical evidence of “sins of omission”.\(^7\) Yet, the fact that the “purple pill” Nexium, a “me-too” brand, is the fourth best selling brand name drug in the United States is clear evidence to us of “sins of omission” committed by managed care pharmacy. This includes both private PBMs and state government authorities in charge of Medicaid preferred drug lists.
PBM
d does not actively foreclose competition as would an anti-competitive oligopsonist, nor do they actively countervail as would a pro-competitive buy-side power. The particular evolution of independent PBMs has resulted in a new species that we call a conflicted countervailing power. As we will show in the next section, PBMs behave similarly when they negotiate reimbursements with retail pharmacies – neither foreclosing nor countervailing.

Obviously, supporting this contention is difficult as it is hard to distinguish “acting” powerless from “being” powerless when negotiating reimbursements with retailers. It is similar to proving that someone is “playing not to lose, rather than playing to win.” In the final section of the paper, we hope to provide evidence of this distinction by comparing performance of PBMs operating under different corporate structures (e.g. integrated drugstore/PBM, independent PBM, and insurance company with captive PBM).

The Role of the Big 3 PBMs in Prescription Reimbursement Negotiations

Plan sponsors hire PBMs for their expertise in negotiating prescription reimbursements with retail pharmacies. At the same time, the Big 3 PBMs have captive mail order pharmacy operations that compete with retailers. This causes a conflict-of-interest. Having the power to set the prices of competing retail pharmacies has created a situation where the Big 3 PBMs tacitly collude to hold up prices at retail in order to offer plan sponsors lower prices for mail order prescriptions without have to resort to pricing below cost.

Economists from the Federal Trade Commission (FTC) have assumed that the Big 3 PBMs have only two options. They can act like anticompetitive oligopsonists that restrict purchases resulting in lower prices from suppliers. Or, they can act like countervailing powers by creating preferred provider networks which is a form of price discrimination designed to wrest producer surplus from low cost suppliers. Because there is no history that large independent PBMs have acted like oligopsonists, the FTC economists concluded that they act competitively and that horizontal
mergers would not be harmful to consumers. This line of reasoning led the FTC to pass on further scrutiny of a proposed merger between Caremark and AdvancePCS, the 2\textsuperscript{nd} and 4\textsuperscript{th} largest independent PBMs at the time.

There is a third option that was not considered by the FTC economists because their model assumed that buy-side entities have a single line of business with a single price. However, the Big 3 PBMs are both buyers of prescriptions from retailers and owners of mail order pharmacy operations that compete with retailers. PBMs have the power to set their competitors’ prices, a conflict of interest if there ever was one. This power is the ultimate “facilitating practice” to anti-competitive behavior, much more powerful than raising rival’s costs or most-favored-customer pricing.

The main reason why the Big 3 PBMs covet mail order brands is not as a source of transactional gross profits, but as a source of rebate negotiating power. PBMs covet tighter control over dispensing brand drugs because this boosts the threat of retrospective therapeutic interchange.

In 2005, at the request of the U.S. Congress, the FTC did a study of potential PBM conflict of interest stemming from the practice of steering all mail order prescriptions to their captive operations.\footnote{They found that prices of the both brand and generic prescriptions dispensed from captive mail order operations of the Big 3 PBMs were below that of prescription prices dispensed by retail pharmacies. The FTC economists concluded that the Big 3 PBMs priced mail order competitively.} They found that prices of both brand and generic prescriptions dispensed from captive mail order operations of the Big 3 PBMs were below that of prescription prices dispensed by retail pharmacies. The FTC economists concluded that the Big 3 PBMs priced mail order competitively.

The problem with this analysis is that the FTC economists failed to consider the possibility of recoupment elsewhere. We have found that Medco Health Solutions, the largest independent PBM, won the contract to service the Federal Employee Health Benefit Plan only by pricing mail order brands at, or below, cost. While there was recoupment through rebate retention, we do not
believe that Medco earned supercompetitive profits on the contract. Unfortunately, we failed to consider mail order generics and the possibility of hold up of retail pricing of generics.

The study of captive mail order pharmacies is another instance of the lack of holistic thinking about PBMs as the FTC economists focused only on the mail order pricing and did not consider the link between retail reimbursements and mail order pricing. The opposite was the case in the FTC opinion of the Caremark/AdvancePCS merger. Here the FTC economists focused only on retail reimbursements and failed to consider the impact of ownership of mail order operations on how PBMs might negotiate with retailers.

The FTC economists need to expand their view of PBMs beyond the theory of the firm. PBMs have multiple business segments and employ sophisticated bundle price strategies. While the Big 3 PBMs claim to be agents of clients, their behavior is governed by a conflicted, transactions-based, business model involving the setting the prices of horizontal competitors and accepting secretive rebates from vertical suppliers.

The Big 3 PBMs tacitly collude to hold up retail prices for generics drugs for a different reason. They covet dispensing mail order generics because this has become a major source of gross profits. Dependency on retained rebates declined dramatically after 2003, as cries for transparency reached a crescendo. Since then, the Big 3 PBMs have transformed their business model without suffering any overall erosion in gross profit margins by substitution reductions in rebate retention with gains in mail order generics.

The market for generic drugs on the sell-side is highly competitive. Generic drug manufacturers do not offer rebates to PBMs. Rather it is pharmacy operations, retail and mail order, that have discretion in choosing among a number of manufacturers for each generic drug. The generic manufacturers offer traditional volume discounts to pharmacies in the form of charge-back credits posted to pharmacy accounts receivable with drug distributors.
Even though average wholesale prices are listed and published for all to see, it is difficult to determine what pharmacies actually pay for generic drugs because charge-back credits are secretive and are a large percentage off list prices. As a result, the Big 3 PBMs have found it advantageous to steer demand for generics to their captive mail order operation by holding up retail reimbursement prices.

**Evidence from the Medicare Part D Drug Discount Card Program**

The purpose of this section is to present evidence of a Big 3 PBM hold up of retail brand prescription reimbursements. The data comes from a survey conducted by the AARP Public Policy Institute of prices offered by various Medicare-endorsed, discount drug card programs (DDCs) in the year preceding Medicare Part D. The identification of the sponsoring PBM of the various card comes from a table published by the Center for Medicaid and Medicare Services (CMS). Although DDCs were not designed specifically to be a stepping-stone to the full Medicare Part D benefit plan, it has provided a showcase for the how various PBMs price retail and mail order prescriptions. The data represents weighted average prices of 20 top selling drugs, which a fortiori are all on-patent brand drugs, dispensed by 6 of 25 national Medicare card programs with mail order options. The data was extracted from the Medicare website during the week of September 20, 2004 for all pharmacies listed for the Chicago, Illinois metropolitan area. Unfortunately, all price data for Walgreen’s DDC were missing from the website for that week.

There were several aspects of this program that made it ideal for investigating the performance of PBMs as price negotiators. First, this was not an insurance program where the consumers chose on the basis of premiums and sponsors could earn a profit based on the difference between
premium revenue and reimbursement expenses. The main reason why seniors chose one DDC over some other was information on negotiated prices that were published on a CMS website. We believe that the primary reason why companies decided to sponsor a DDC was marketing rather than transactional profit. This program provided companies a cheap way to build relations with seniors a year in advance of the roll out of the full Medicare Part D program. Card sponsors were motivated to negotiate low prices in order to build mailing lists and brand identity.

But, given that all card sponsors were motivated to attract customers via low prices, some sponsors were more motivated than others to steer customers to retail versus mail order. The sample includes data from companies with different corporate structures that we believe affect behavior:

1. Three large, independent PBMs with captive mail order operations – Medco, Express Scripts, and Caremark
2. Two insurance companies with captive PBMs with captive mail order operations – Wellpoint and Aetna
3. One drugstore chain with a captive PBM with captive mail order operations – CVS/PharmaCare

**Results**

Table 1 indicates that PharmaCare, the PBM operation of the large drugstore chain CVS, was the retail price leader among 25 cards with a weighted average of $78.96 for brand name prescriptions dispensed by their retail network. The card managed by Express Scripts, the third largest independent PBM, and sponsored by the Pharmacy Care Alliance (PCA) – an *ad hoc* association of chain and community pharmacies – was a retail price laggard with a weighted average of $86.13.

Furthermore, the Express Scripts-managed DDC offered the lowest average mail order prices and the greatest gap between mail order and retail prices. The CVS/PharmaCare-managed DDC
came close to matching mail order pricing of the Big 3 PBMs and offered the smallest gap between mail order and retail prices.

These results are what you might expect based on an examination of the differences in corporate structures of the PBMs who managed these DDCs. CVS/PharmaCare, an integrated drugstore-PBM, stood to earn gross profits no matter what channel dispensed the prescription. They were motivated to offer the lowest possible retail prices at their own stores. The performance of CVS/PharmaCare is indicative of a pro-competitive countervailing power motivated to set up a preferred provider retail network that passes on "producer surplus" to consumers. This performance might have contributed to CVS's interest in merging with Caremark.

On the other hand, the DDC sponsored by the Pharmacy Care Alliance, a retail association, and managed by Express Scripts, a Big 3 PBM with captive mail order operations, is indicative of the performance of an entity riddled with conflicts-of-interest. We interpret its performance as a hold-up in retail prices -- good for the retailers and good for Express Scripts. The relatively high average retail price offered by this DDC reflects an "any willing provider" orientation that dampens intra-network cost differences with fairly uniform pricing. We believe that the performance of this DDC is indicative of a conflicted countervailing power and what might be expected if Express Scripts outbids CVS for Caremark.
<table>
<thead>
<tr>
<th>PBM Name</th>
<th>Medicare Discount Card Name</th>
<th>Weighted Average Retail Price Per Rx</th>
<th>Weighted Average Mail Order Price Per Adj. Rx</th>
<th>Mail -Retail - Price Difference</th>
<th>Mail-Retail % Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVS</td>
<td>myPharmaCare</td>
<td>$78.96</td>
<td>$75.21</td>
<td>($3.75)</td>
<td>-4.7%</td>
</tr>
<tr>
<td>Wellpoint</td>
<td>PrecisionDiscounts A</td>
<td>$84.54</td>
<td>$78.19</td>
<td>($6.35)</td>
<td>-7.5%</td>
</tr>
<tr>
<td>Medco</td>
<td>Prescription</td>
<td>$84.30</td>
<td>$77.70</td>
<td>($6.60)</td>
<td>-7.8%</td>
</tr>
<tr>
<td>Aetna</td>
<td>AetnaRx Saving</td>
<td>$87.69</td>
<td>$79.90</td>
<td>($7.79)</td>
<td>-8.9%</td>
</tr>
<tr>
<td>Caremark, Rx</td>
<td>BD Advantage</td>
<td>$84.12</td>
<td>$75.41</td>
<td>($8.71)</td>
<td>-10.4%</td>
</tr>
<tr>
<td>Express Scripts</td>
<td>Pharmacy Care Alliance - Option B</td>
<td>$86.13</td>
<td>$73.89</td>
<td>($12.24)</td>
<td>-14.2%</td>
</tr>
<tr>
<td>Average</td>
<td>Average of 25 Cards</td>
<td>$85.21</td>
<td>$77.57</td>
<td>($7.64)</td>
<td>-9.0%</td>
</tr>
</tbody>
</table>

Data Source: AARP Public Policy Institute, "Medicare Drug Discount Program," # 2004-16
Name Source: CMS, "Approved Drug Card Sponsor List"
Countervailing Power in the Post-Industrial Era

Galbraith’s notion of the creation of countervailing power does not apply to the PBM industry. His conception is rather linear where market power on the sell side comes first, and then comes oligopolistic surplus, and finally, consolidation on the buy-side occurs to grab some of that surplus away. In the PBM case, the sell-side power of Pharma and the buy-side power of PBMs have risen in tandem to protect “me-too” brand drugs from price competition. Oligopolistic surplus is created jointly and both sides are co-dependent.

Galbraith’s views came from a “new industrial” perspective where sell side power is slowly acquired by the accumulation of physical capital. The process by which the buy-side power evolves was never really considered. It just pops up to countervail once the oligopoly has amassed surplus.

PBMs started out as computer networking specialists in the 1980’s and were sought after by health insurance companies because they could port pharmacy claims processing to the retail point-of-sale. In the 1990’s, the insertion of a formulary, a lookup table of preferred drugs, in point-of-sale software marked the beginning of a countervailing power keyed to computer systems capable of aggregating and altering consumer demand.

This ability of computer networks to harness consumer demand was never envisioned by John Kenneth Galbraith and Ralph Nader in the 1960’s. We can only imagine if Nader’s Raiders has access to the Internet in the 1970’s to help consolidate consumer demand for home heating oil in the North East. We can only imagine how the 1960’s Federal food stamp program might have evolved had the government the ability to insert a formulary at the supermarket point-of-sale.
We believe that the Big 3 PBMs represent the first important countervailing power of the post-industrial era. The Pharma/PBM bilateral oligopoly was formed to protect surplus created initially by patented-protected intellectual property. This buy-side power comes from computer entrepreneurs seeking to realize the potential of computer networks to harness consumer demand. While there has been some development of software systems designed to enhance the buy-side, we believe that objective of these systems has been around lowering transactions costs through more efficient search and making prices more transparent. Computer entrepreneurs have yet to consider starting a company whose mission is to create a system designed specifically to harness consumer demand to counter, or shore up, oligopolies.

It is also interesting to note that the current conflicted state of the Big 3 PBMs is a factor in the development of the next generation of pharmacy networks. Here the Big 3 PBMs have formed a joint venture called RxHub that will offer physicians “e-scribing” -- hand-held PDA’s linked to dispensing pharmacies. These devices will move pharmacy benefit management, as embodied in formularies, from the point-of-sale to the point-of-care. However, large chain drugstores like Walgreen and CVS has resisted participation in this joint venture because they fear that PBMs will use these PDA’s to steer prescriptions to their own captive mail order operations at the point-of-care. If CVS is the successful bidder for Caremark, the “e-scribing” impasse might be broken. On the other hand, if Express Scripts outbids CVS, the “e-scribing” impasse will worsen.

The cautionary tale we have presented in this paper about the “conflicting” of the first great post-industrial countervailing power is important in that it might serve to inform future endeavors. One note of caution is that it is very dangerous when the payer is also a provider. The second note is that, while all countervailing endeavors involve accepting payments from the sell-side, and that some form of retention might be necessary as a motivation to bargain hard, it is essential to know exactly what is being given up for what is being received. The third note is that, if countervailing powers stray from the path of righteousness, it is more likely to be “sins of omission” than “sins of commission”. The number of years wasted by muckraking U.S. Department of Justice attorneys
looking for PBM “sins of commission” – switching low cost generic prescriptions to higher cost brands --- has been unfortunate. The same can be said of those who think that full disclosure fiduciary laws might help uncover misdeeds when they are “sins of omission”.

Proposals to countervail Pharma by allowing the federal government to negotiate rebates must be met with skepticism because bigger is not always better when it comes to receiving rebates from Pharma. Also, it is important that the FTC and other government agencies recognize that the evaluation of proposed mergers designed to increase buy-side power are not simply a matter of choice between anti-competitive oligopsonists and pro-competitive countervailing powers. Countervailing powers can be conflicted.

We can envision the day when Google evolves from a search agent to a bargaining agent by devising an effective scheme to harness consumer power to countervail OPEC and Big Oil. Its realization would be one of the most important economic events in the next ten years. Nevertheless, it will be important to remain vigilant.
Notes:


(14) Summary of Ralph Nader’s views on harnessing consumer power at http://www.nader.org/ecm.html