Walgreens' Transparency Issue

By
Lawrence W. Abrams, Ph.D.
P.O. Box 1285
Watsonville, CA. 95077
831-254-7325
labrams@nu-retail.com

11/25/2003

Key words: chain drugstores, pharmacy benefit managers, Medicare drug benefit, PBMs

Abstract

When the tax-financed share of an industry's revenue approaches 50%, a company will often find that its financial statements are held to a higher standard. That higher standard is often labeled "transparency". With the recent extension of Medicare to cover outpatient prescriptions of the elderly, it is expected that the tax-financed portion of expenditures on outpatient drug prescriptions will approach 50%.

The purpose of this paper is to raise the transparency issue with regard to a major institution in the pharmaceutical supply chain – Walgreens – the dominant retail chain drugstore in the country. The key result is that in 2003, there was considerable disparity between the net profitability of Walgreens front store operations – 1.4 % -- and the net profitability of its pharmacy operations – 8.3%. The front store drives a disproportionate share of Walgreens labor and occupancy operating expenses – 61.5% -- versus 38.5% for the pharmacy operation. Even though the front store enjoys a higher gross profit margin than the pharmacy – 36.1% versus 21.6% -- it incurs an even greater operating expense margin – 34.6% versus 13.3%. This disparity may be interpreted as a cross-subsidy and that this may become an issue as Medicare is extended to cover outpatient prescriptions of the elderly.

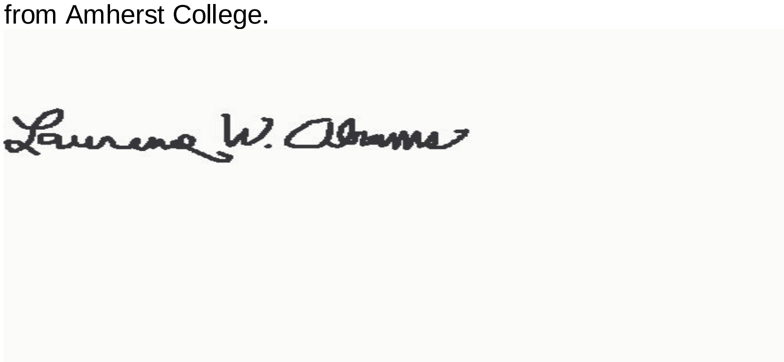
Disclosure

I do not work for a PBM, chain drugstore, pharmaceutical manufacturer, health care plan sponsor, or school of pharmacy. I have not received any remuneration for any papers published on my Website to date. If I ever do, I will disclose that.

.

I call it like I see it and expect to be criticized equally by PBMs and chain drugstores.

I have a Ph.D. in Economics from Washington University in St. Louis and a B.A in Economics from Amherst College.



Introduction

The financial statements of publicly held companies normally are judged by generally accepted accounting principles (GAAP). These standards have been established by the Financial Accounting Standards Board (FASB) and reinforced by the Securities and Exchange Commission (SEC). When the tax-financed share of an industry's revenue approaches 50%, a company will often find that its financial statements are held to a higher standard. That higher standard is often labeled "transparency". A recent study by a team at Harvard Medical School has estimated that the tax-financed share of health care spending in the United States reached 59.8%, or $723 Billion, in 1999.[1] With the recent extension of Medicare to cover outpatient prescriptions of the elderly, it is expected that the tax-financed portion of outpatient drug prescriptions will approach 50%. This new entitlement comes with a funding commitment of $400 Billion over 10 years and is on top of existing expenditures for outpatient prescriptions by state and federal Medicaid programs, the military, and the Federal Employee Health Benefit Plan (FEHBP).

As one might expect, companies involved in the prescription drug supply chain are beginning to see their financial statements judged by the higher standard of transparency. The National Association of Chain Drug Stores (NACDS) was the first to raise this issue. They claimed that pharmacy benefit managers (PBMs) go out of their way to hide the portion of earnings derived from drug manufacturer rebates. Craig Fuller, the President of NACDS has been particularly effective at criticizing PBMs for their lack of transparency:[2]

> Without rules of transparency, any money collected through rebates and retail network concessions may never flow to the beneficiaries. Let's not create a situation that allows these contractors to keep their financial records in a black box and repeat the experience of many states that have spent millions of dollars investigating their financial practices. The Medicare program is funded through taxpayer dollars. There ought to be a much higher level of transparency than exists today to ensure that government officials and the public know where the billions of dollars paid in rebates really goes.

Craig Fuller has been so successful that he was subject of a recent article in the **New York Times**:[3]

> Lobbying here is often about the little things — a few choice words whispered in a few choice ears. That certainly was the case this year for Craig L. Fuller, a former White House official who lobbies for the nation's big drugstore chains, as Congress drafted legislation on a Medicare drug benefit.
>
> For years, Mr. Fuller urged his membership to oppose every such bill. But this year he decided that passage of a drug benefit was inevitable.
>
> So this spring, at the annual convention of the National Association of Chain Drug Stores in Palm Beach, Fla., Mr. Fuller pushed his members to swing 180 degrees and support the legislation — if it could be modified to include just four provisions of concern to the industry.
>
> For each of those issues, Mr. Fuller coined a catch phrase, and he used them in his April speech. He spoke of "a level playing field," "transparency," freedom from "insurance risk" and "convenient access."
>
> Two months later, when the Senate and the House passed bills that would add a drug benefit to Medicare, both included new sections with headings that seemed as if they had been lifted directly from Mr. Fuller's speech.

The purpose of this paper is to raise the transparency issue with regard to another major institution in the pharmaceutical supply chain – Walgreens – the dominant retail chain drugstore in the country. The financial statements of other major chain drugstores in the industry – CVS, Rite-Aid, Eckerd, and Long's – also have transparency issues similar to Walgreens. But, we have chosen Walgreens because financial issues such as those facing Rite-Aid and Eckerd do not cloud Walgreens' financial statements.

The Transparency Standard

There is no formal definition of the transparency standard because a watchdog agency like the FASB or the SEC did not create it. It is a term used loosely by critics of corporations in industries with a large share of revenue that is tax-financed. The issue of transparency is fundamentally an issue of "agency". Normally, companies are justified in acting in their own self-interest as principals in transactions with customers. But, a different behavior is expected of them when they are dealing with government or individuals whose expenditures are tax-financed. In these cases, corporations are expected to act as agents --- looking out for the interest of their clients – rather than looking out for their own self-interests as principals. Whether this expectation is justified or not is another matter. What matters here is that corporations as agents are not expected to profit much on tax-financed business, at least no more than their other lines of business.

The call for transparency in financial statements is fundamentally a call for a separate profit and loss statement for the tax-financed portion of a company's business. Even if a company does not have a significant tax-financed business, there is a call for more detail in financial statements if a company is expected to act as an agent in one line of business, but is expected to act as a principal in other areas. This seems to be the case for PBMs where they explicitly declare in statements to the SEC that they act as agents when managing formularies and collecting rebates, but they act as principals when managing pharmacies. Calls for PBMs to produce transparent financial statement are calls to produce separate gross profit margins for rebate retention and for pharmacy management.

There is a formal standard for segment reporting that has been established by FASB and enforced by the SEC. It is the Financial Accounting Standards (FAS) No. 131 -- "Disclosures about Segments of an Enterprise and Related Information". The standard was established to promote more informed decisions by investors. It has been clarified in recent years by specifying that the segmentation disclosed should mirror management's own internal accounting rather than some academic view of how the business world is divided up into different industries. This benefit of more a detailed disclosure of a company's financial performance is balanced against a company's need keep confidential its pricing strategies. Companies claim that disclosure of line of business margins or mark-ups weakens their negotiating position with customers and their competitive position with rivals. This fear was raised effectively by PBMs who blocked a Congresswoman's attempt to add clauses in Medicare drug benefit legislation forcing PBMs to disclose rebate retention rates.[4]

Currently, PBMs say that they are complying with FAS No. 131. PBMs have made some partial and one-time disclosures that hint of the profitability of their formulary management business versus the profitability of their pharmacy management business. AdvancePCS and Express Scripts, Inc. revealed gross receipts from rebates for the fiscal years 2000, 2001, and 2002 in conjunction with a one-time change in accounting practices. [5] In terms of rebate retention, only Express Scripts in 2002 revealed that it remitted an excess of 50% of all rebates and data management fees received from drug manufacturers. [6] In the case of the “rising star” mail order business, PBMs reveal only revenue levels and growth rates. Data on mail order gross profit margins and gross profit share are conspicuously absent from official financial statements. We have been one of the few to make available publicly an analysis of a PBMs’ gross profits broken down into various lines of business.[7]

Financial statements of publicly held chain drugstores make it clear that they have two lines of business: the pharmacy and the rest of the “front store”. The industry has a practice of disclosing relative sales of their two lines of business in official financial statements. They also make three kinds of qualitative statements about gross profit margins: (1) the gross profit margin of the “front store” is greater than the margin of the pharmacy; (2) the gross profit margin on prescriptions paid by cash is greater than the margin on prescriptions covered by insurance; and (3) the gross profit margin on generic drug prescriptions is greater than the margin on brand name prescription. But, they fail to make any detailed quantitative statements about gross profit margins or to breakout operational expenses – selling, occupancy, and administrative – by line of business.

The following is a typical Walgreens statement made in their annual Form 10-K Financial Statement to the SEC: [8]

> Gross margins as a percent of total sales were 26.5% in 2002, 26.7% in 2001 and 27.1% in 2000. The decrease in gross margin was caused by a number of factors. Non-pharmacy margins declined as a result of more aggressive advertising and in-store promotions. Although prescription margins increased, due in part to the shift to more generic medications, the trend in sales mix continued toward pharmacy, which carries lower margins than the rest of the store. Within the pharmacy, third party sales, which typically have lower profit margins than cash prescriptions, continue to become a larger portion of prescription sales.

Obviously, one reason why drugstores don’t reveal gross profit margins by segment is that it reveals pricing strategies to competitors. Another reason is that the allocation of labor, occupancy, and administrative costs between the two segments is so subjective that the accounting profession, and the investment community, does not believe this breakdown is worthy of public disclosure. Yet, management does this privately and it is key to making critical operating decisions. Today, we believe that large chain drugstores are reluctant to disaggregate their financial statement because it would reveal a growing disparity between the profitability of their pharmacy business versus the profitability of their front store operations. Drugstore executives must be aware that this disparity may be interpreted as a cross-subsidy and that this may become an issue as Medicare is extended to cover outpatient prescriptions of the elderly.

Margin Analysis of Walgreens' Financials

The purpose of this section is to make transparent what Walgreens does not. We will present a complete disaggregation of Walgreens profit and loss statement by its two segments -- pharmacy and front store -- for its latest fiscal year ending August 31, 2003. The financial statements of other major chain drugstores in the industry – CVS, Rite-Aid, Eckerd, and Longs – have transparency issues similar to Walgreens. But, we have chosen Walgreens because other financial issues, such as those facing Rite-Aid and Eckerd, do not cloud their financial statements.

Another reason Walgreens was singled out for investigation has been its importance in the history of the drugstore business model.[9] The key feature of that model is a synergy between a retail pharmacy operation and a front store. It was Charles Walgreen who first conceived of the idea of pairing a pharmacy with a sundry store in 1901. It was Charles Walgreen who asked his wife Myrtle in 1910 to make sandwiches and cook soup to sell to workers during their lunch hour in order to create daily traffic to their pharmacies. It was Charles Walgreen who first installed a fountain dispensing carbonated water in his stores. It was Charles Walgreen who conceived of the idea of manufacturing "private label" items such as bulk ice cream to sell in drugstores. It was Ivar "Pop" Coulson, an employee of Walgreens, who in 1922 invented the milkshake that propelled the chain to a dominant position in the industry that it has held to this day. After World War II, it was Walgreens who ushered drugstores into the world of "self-service" merchandising.

Today, only Walgreens among the large chain drugstores has the financial resources to transform its store infrastructure from smaller 8,000 square feet stores buried deep within strip development into stand-alone corner stores averaging 14,500 square feet. Only Walgreens has the confidence to announce publicly a specific store expansion goal which is to double its store count from 3500 to 7000 by 2010 in order to capture a disproportionate share of the explosive new demand for maintenance drugs. And, we believe that it will be Walgreens who will push their expansion of retail stores in spite of growing signs that mail order pharmacies will be a cheaper, more convenient alternative for consumers of maintenance prescription drugs. It is our opinion that Walgreen' continued store expansion strategy in the face of the trend toward mail order fulfillment will drive Walgreens' net profit margin down to the point of unraveling the very business model that Charles Walgreen invented over one hundred years ago.

Our margin analysis is based on one key statistic external to Walgreens' official financial statements: estimates of the gross profit margin from pharmacy operations. We obtain these numbers for the period 1990-2002 from a presentation made by John Coster, Vice President of Research of the NACDS.[10] These figures have served us well elsewhere as a guidepost in developing estimates of retail pharmacy margins by drug type and customer type.[11] Armed with these figures and Walgreens-provided data on the distribution of sales by segment, one can use simple algebra to calculate the gross profit margin of the front store.

The most subjective piece of our analysis is a segmentation of operating expenses by business unit. The exercise is subjective for Walgreens own internal cost accountants armed with reams of numbers. So, our subjectivity must be judged in relative terms. The chain drugstore industry traditionally includes as pharmacy revenue reimbursement for ingredients plus dispensing fees. On the other hand, it includes only ingredient costs in costs of goods sold. Direct labor and occupancy costs for both of its business units are classified as operating expenses rather than costs of goods sold. This "vertical mismatch" of revenue and costs in their profit and loss statements causes several misconceptions. Because dispensing costs are such a high percentage of overall generic drug prescription costs, the "mismatch" significantly inflates the gross profit margins of generic prescriptions.

The result of our margin analysis is presented in the table below. The key result is that in 2003, there was considerable disparity between the net profitability of Walgreens front store operations – 1.4 % -- and the net profitability of its pharmacy operations – 8.3%. The front store drives a disproportionate share of Walgreens labor and occupancy operating expenses – 61.5%-- versus 38.5% for the pharmacy operations. Even though the front store enjoys a higher gross profit margin than the pharmacy – 36.1% versus 21.6% -- it incurs an even greater operating expense margin – 34.6% versus 13.3%.

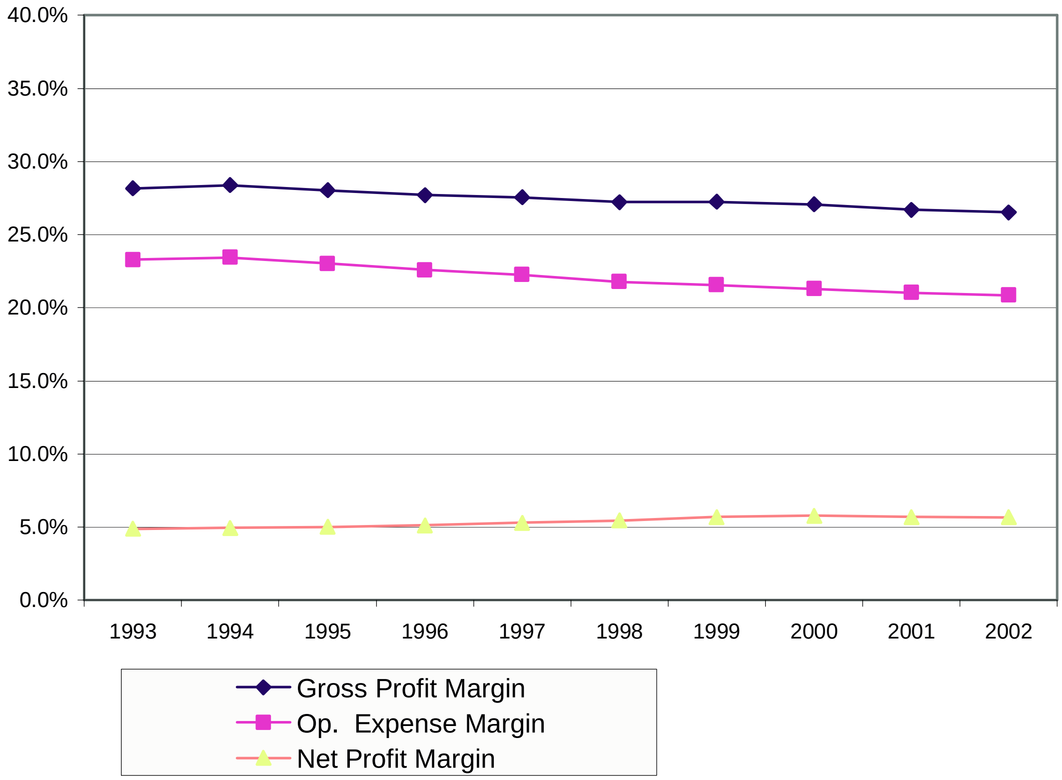
Exhibits 1 - 9 reveal in graphs some of the underlying cause of this net profit margin disparity. It is due to a combination of a significantly different growth rate in revenue by Walgreens two business segments coupled with a corporate strategy of meeting both demands with a single, rigid supply response that maintains a fixed ratio of pharmacy to front store labor and occupancy costs. The result has been a growing divergence in revenue per store and operating expense margin rates for the two business segments. While it appears on the surface that Walgreens profitability has remained remarkably stable over the last decade, making their financials more transparent reveals an alarming trend toward a divergence in profitability between its pharmacy and its front store. Both segments present problems to Walgreens. The growing net profitability of its pharmacy business undermines Walgreens' complaints about how third party payers such as state Medicaid agencies and PBMs are killing their pharmacy business. The falling net profitability of their front store operations calls into question Walgreens' rigid adherence to a century old business model that says no matter what the relative demand is for prescriptions or convenience goods, one meets both demands by building more retail stores with the same, traditional ratio of labor and occupancy costs.

We want to put some perspective on Walgreens transparency issues as compared to other pharmaceutical supply chain cost issues. The overall net profit margin of Walgreens in 2003 was 5.7%, but we have broken this down into pharmacy and front store business unit net profit margins of 8.6% and 1.4%, respectively. One might argue that Walgreens has overbuilt in an attempt to capture a disproportionate share of the retail pharmacy business and that the taxpayers will be paying too high of a price for Medicare prescriptions filled at Walgreens. It might be argued that Walgreens should reduce its prescription prices to a point where its pharmacy margins are no higher that its historical overall net profit margin around 5.7%. The question is what is the significance of a Walgreens' 3 percentage point bulge in pharmacy margins? Drug manufacturers have been criticized recently for wasting money on direct-to-consumer (DTC) advertising. A recent GAO study has estimated that drug manufacturers have spent $2.7 Billion on DTC advertising in 2001.[12] We have estimated that this amounts to 1.5% of drug manufacturer revenue, fully one-half of the 3 percentage point disparity between Walgreens' pharmacy net profit margin and their overall net profit margin.

Margin Analysis, --Walgreens - Fiscal Year Ending August 31, 2003							
Column		A		B		C	
Description	Row	Total	Source Total	Pharmacy	Source Pharmacy	Front Store	Source Front Store
Share of Revenue - %	1	100.0%	Form 10-K	62.0%	Form 10-K	38.0%	Form 10-K
Gross Profit Margin - %	2	27.1%	Form 10-K	21.6%	Costner, NACDS	36.1%	=(A2-(B1*B2))/C1
Share - Gross Profit Margin - %	3	100.0%	sum rows	49.4%	=(B1*B2)/A2	50.6%	=(C1*C2)/A2
Operating Expense Margin %	4	21.4%	Form 10-K	13.3%	=(B5*A4)/B1	34.6%	=(C5*A4)/C1
Share -- Op. Expense Margin %	5	100.0%	row 14	38.5%	Derived	61.5%	Derived
Net Operating Profit %	**6**	**5.7%**	**=A2-A3**	**8.3%**	**=B2-B3**	**1.4%**	**=C2-C4**
Share of Operating Income	7	100.0%		90.4%		9.6%	
Share of Labor Expense	8			45.0%	estimate	55.0%	=100%-B8
Share of Occupancy Expense	9			30.0%	estimate	70.0%	=100%-B9
Share of Admin Expense	10			35.0%	estimate	65.0%	=100%-B10
Labor share of Op. Expense	11	50.0%	estimate	22.5%		27.5%	
Occupancy share of Op. Expense	12	30.0%	estimate	9.0%		21.0%	
Admin share of Op. Expenses	13	20.0%	estimate	7.0%		13.0%	
BU Share of Op. Expenses	14	100.0%	sum	38.5%		61.5%	

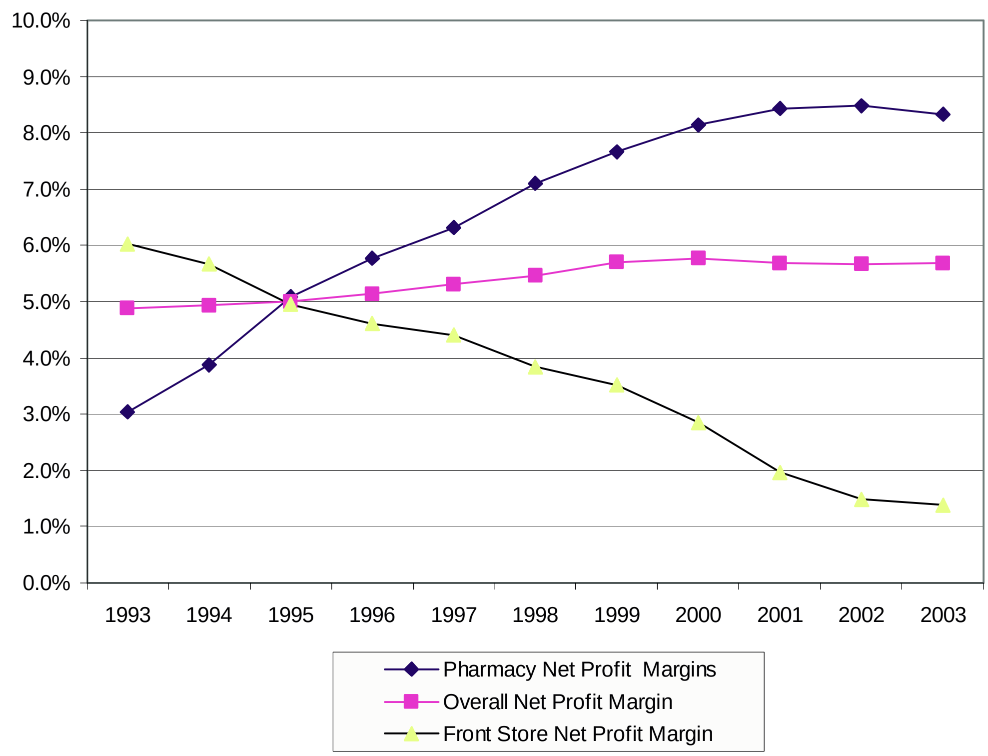
Underneath the surface of stable margin trends overall…

Exhibit 1: Overall Margin Trends -- Walgreens



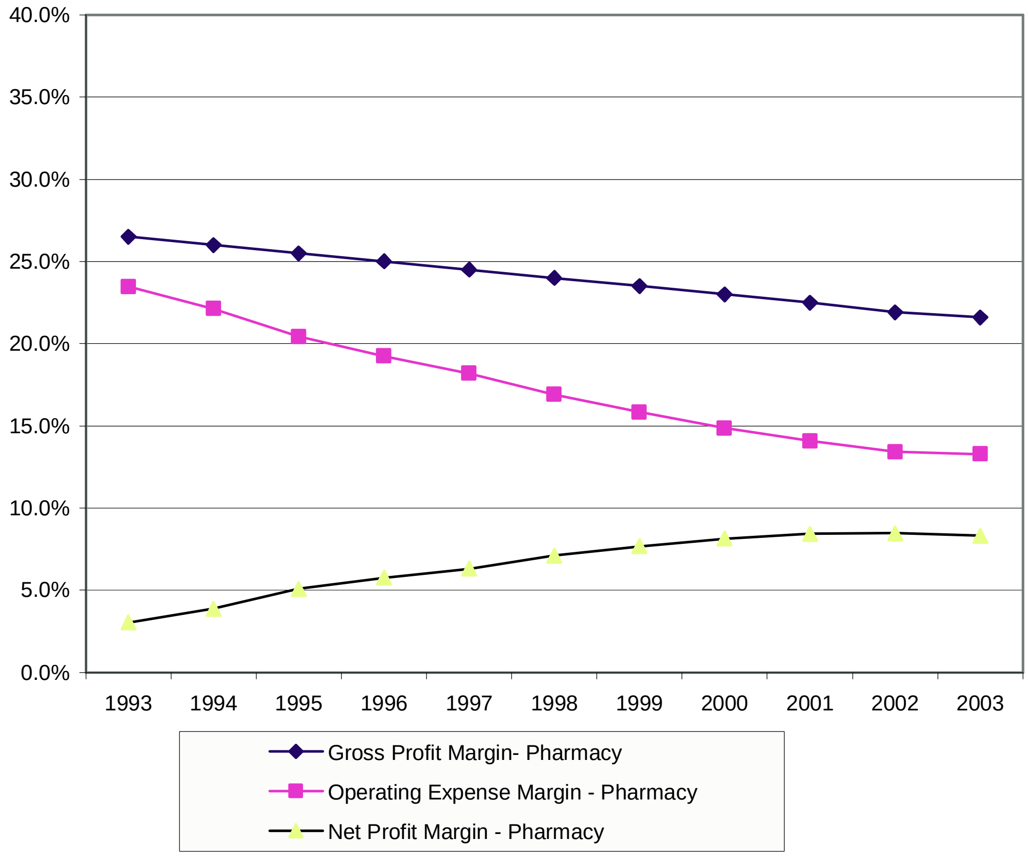
There is a growing divergence between the net profit margin of the pharmacy and the front store…..

Exhibit 2: Business Unit Net Profit Margins-- Walgreen Co

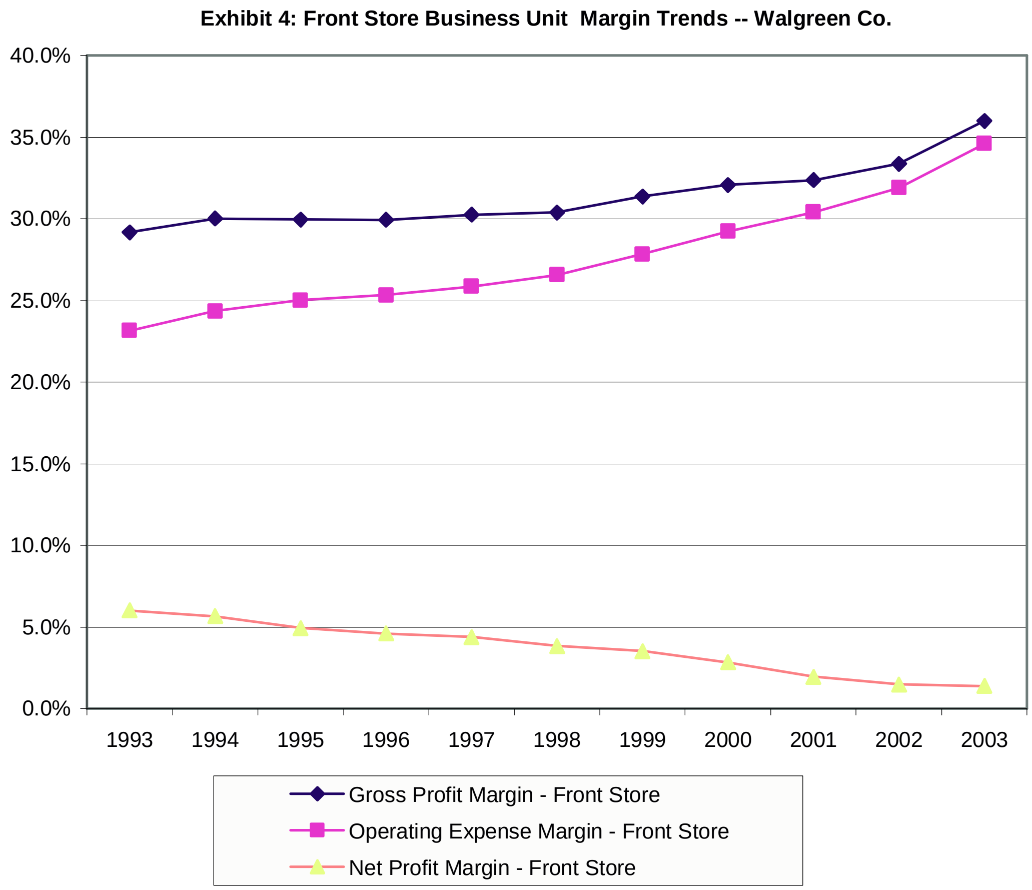


While the gross profit margin of the pharmacy is falling, its operating expense margin is falling faster…

Exhibit 3: Pharmacy Business Unit Margin Trends -- Walgreen Co.

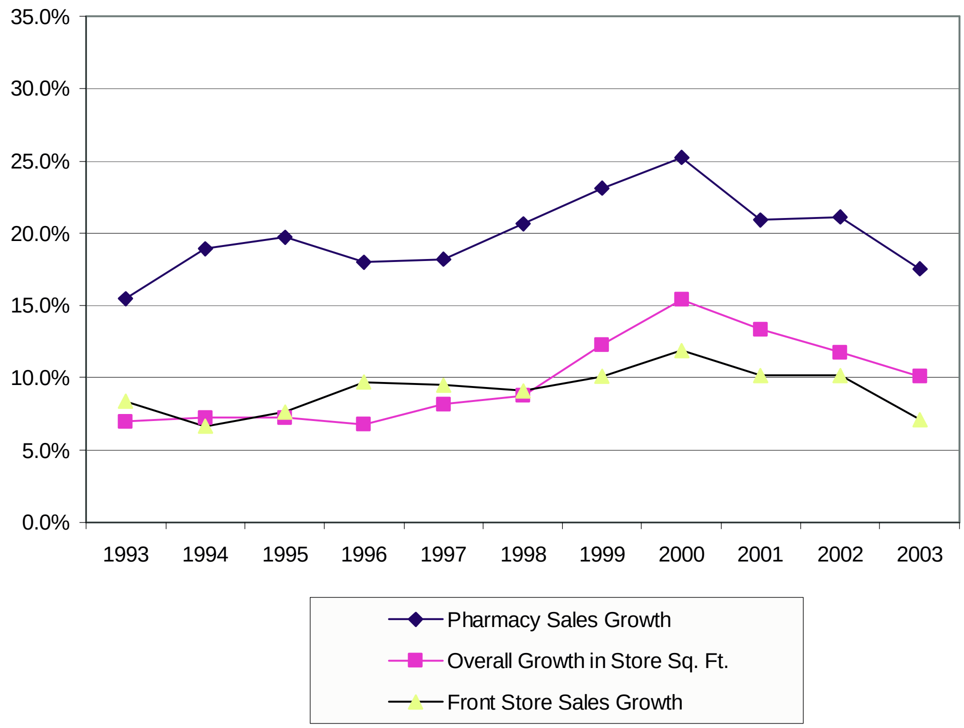


While the gross profit margin of the front store is rising, its operating expense margin is rising faster…



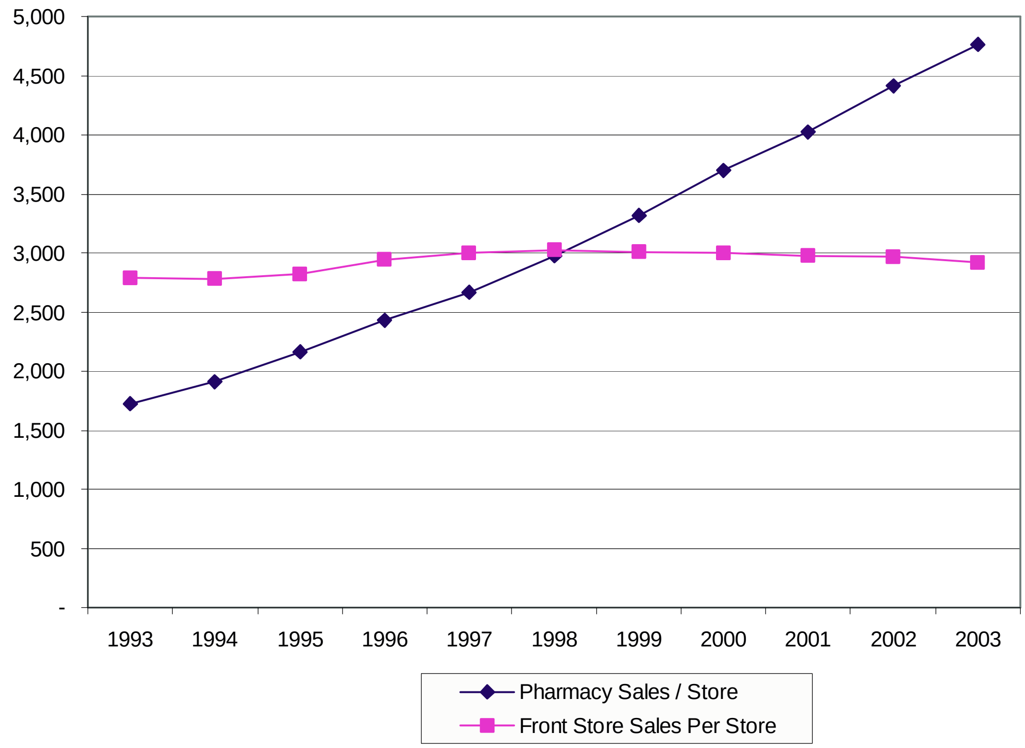
Walgreen is pursuing two markets with divergent growth rates. Pharmacy sales have been growing faster that store expansion while front store sales have been growing slower than store expansion.

Exhibit 5: Sales Growth versus Store Growth-- Walgreen Co.

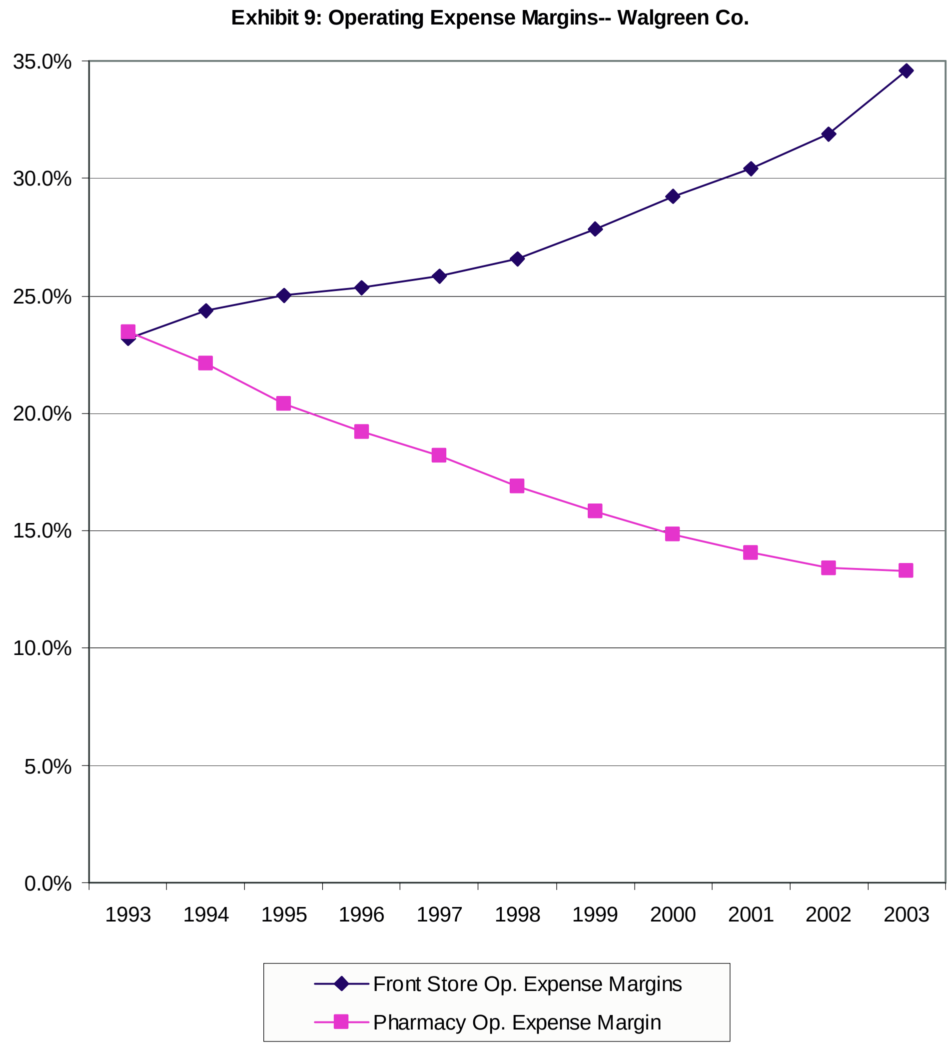


The result has been a diverging level of sales per business unit per store…..

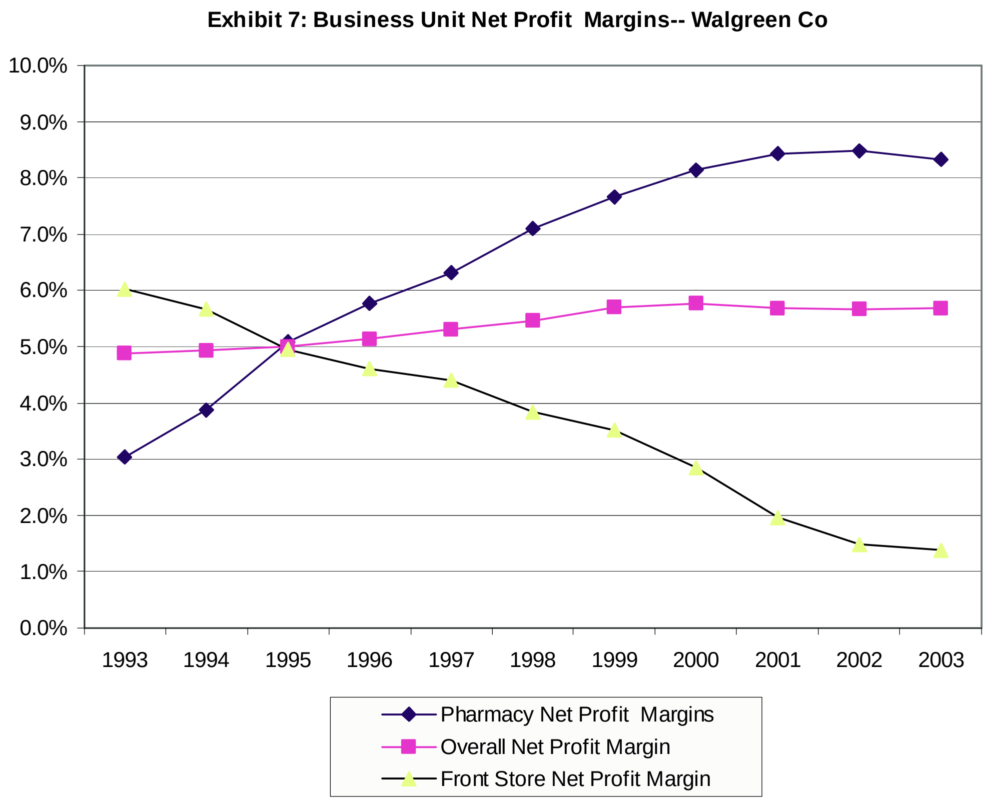
Exhibit 6: Sales Per Store ($ thousands)-- Walgreen Co.



And a diverging business unit operating expense margin….



This has cause Walgreens to have a transparency issue as the tax-financed share of retail prescriptions filled by its pharmacies approaches 50%…



Database for Graphs

Column	B	C	D	E	F	G	H	I	J
Description	Year	Revenue Share	Revenue	Revenue	Cost of Sales	Gross Profit	Op. Expense	Net Profit	Gross Profit
Business Unit		Pharmacy	Front Store	Total	Total	Total	Total	Total	Total
Unit of Measure		%	%	Million $s	Million $s	Million $s	Million $s	Million $s	%
Derivation		Form 10=K	=100%-C	Form 10=K	Form 10=K	=E-F	Form 10=K	=G-H	=G/E
	1992	36.7%	63.3%	7,475.0	5,377.7	2,097.3	1,738.8	358.5	28.1%
	1993	38.2%	61.8%	8,294.8	5,959.0	2,335.8	1,930.9	404.9	28.2%
	1994	40.8%	59.2%	9,235.0	6,614.4	2,620.6	2,164.9	455.7	28.4%
	1995	43.4%	56.6%	10,395.1	7,482.3	2,912.8	2,392.7	520.1	28.0%
	1996	45.2%	54.8%	11,778.4	8,514.9	3,263.5	2,659.5	604.0	27.7%
	1997	47.1%	52.9%	13,363.0	9,681.8	3,681.2	2,972.5	708.7	27.5%
	1998	49.6%	50.4%	15,306.6	11,139.4	4,167.2	3,332.0	835.2	27.2%
	1999	52.4%	47.6%	17,838.8	12,978.6	4,860.2	3,844.8	1,015.4	27.2%
	2000	55.2%	44.8%	21,206.9	15,465.9	5,741.0	4,516.9	1,224.1	27.1%
	2001	57.5%	42.5%	24,623.0	18,048.9	6,574.1	5,175.8	1,398.3	26.7%
	2002	59.8%	40.2%	28,681.1	21,076.1	7,605.0	5,980.1	1,624.9	26.5%
	2003	62.0%	38.0%	32,505.4	23,706.2	8,799.2	6,950.9	1,848.3	27.1%

Column		K	L	M	N	O	P	Q	R
Description	Year	Op. Expense	Net Profit	Gross Profit	Gross Profit	Op. Expense	Op. Expense	Net Profit	Net Profit
Business Unit		Total	Total	Pharmacy	Front Store	Pharmacy	Front Store	Pharmacy	Front Store
Unit of Measure		%	%	%	%	%	%	%	%
Derivation		=H/E	=I/E	NACDS	=(G-(C*E*M))/(D*E)	=(0.385*H)/(C*E)	=(.615*H)/(D*E)	=M-O	=N-P
	1992	23.3%	4.8%	27.0%	28.7%	24.4%	22.6%	2.6%	6.1%
	1993	23.3%	4.9%	26.5%	29.2%	23.5%	23.2%	3.0%	6.0%
	1994	23.4%	4.9%	26.0%	30.0%	22.1%	24.4%	3.9%	5.7%
	1995	23.0%	5.0%	25.5%	30.0%	20.4%	25.0%	5.1%	4.9%
	1996	22.6%	5.1%	25.0%	29.9%	19.2%	25.3%	5.8%	4.6%
	1997	22.2%	5.3%	24.5%	30.3%	18.2%	25.9%	6.3%	4.4%
	1998	21.8%	5.5%	24.0%	30.4%	16.9%	26.6%	7.1%	3.8%
	1999	21.6%	5.7%	23.5%	31.4%	15.8%	27.8%	7.7%	3.5%
	2000	21.3%	5.8%	23.0%	32.1%	14.9%	29.2%	8.1%	2.8%
	2001	21.0%	5.7%	22.5%	32.4%	14.1%	30.4%	8.4%	2.0%
	2002	20.9%	5.7%	21.9%	33.4%	13.4%	31.9%	8.5%	1.5%
	2003	21.4%	5.7%	21.6%	36.0%	13.3%	34.6%	8.3%	1.4%

Column		S	T	U	V	W	X	Y	Z
Description	Year	Revenue	Revenue	Revenue Growth	# Stores	Total Sq Feet	Sq. Ft. Growth	Revenue / Store	Revenue / Store
Business Unit		Pharmacy	Front Store	Pharmacy	Total	Total	Total	Pharmacy	Front Store
Unit of Measure		Million $s	Million $s	%		Millions Sq Ft.	%	Million $s	Million $s
Derivation		=C*E	=E-S	= delta S	Walgreen.com	Walgreen.com	= delta W	=S / V	=T / V
	1992	2,743	4,731.7		1,736			1,580	2,726
	1993	3,169	5,126.2	15.5%	1,836	18.0	7.0%	1,726	2,792
	1994	3,768	5,467.1	18.9%	1,968	19.3	7.2%	1,915	2,778
	1995	4,511	5,883.6	19.7%	2,085	20.7	7.3%	2,164	2,822
	1996	5,324	6,454.6	18.0%	2,193	22.1	6.8%	2,428	2,943
	1997	6,294	7,069.0	18.2%	2,358	23.9	8.1%	2,669	2,998
	1998	7,592	7,714.5	20.6%	2,549	26.0	8.8%	2,978	3,026
	1999	9,348	8,491.3	23.1%	2,821	29.2	12.3%	3,314	3,010
	2000	11,706	9,500.7	25.2%	3,165	33.7	15.4%	3,699	3,002
	2001	14,158	10,464.8	20.9%	3,520	38.2	13.4%	4,022	2,973
	2002	17,151	11,529.8	21.1%	3,883	42.7	11.8%	4,417	2,969
	2003	20,153	12,352.1	17.5%	4,227	47.0	10.1%	4,768	2,922

Sources: Securities and Exchange Commission, Form 10-K for Walgreen Co. for the Year Ending August 31, 2002 and 2003

J. M. Coster, "Pharmaceutical Marketplace Dynamics," NACDS, May 31, 2000. For pharmacy gross profit margins

www.walgreen.com for number of stores and sq. ft

Notes:

1. S. Woolhandler and D.U. Himmelstein, "Paying for National Health Insurance --- And Not Getting It," **Health Affairs**. July/August 2002. pp.88-98.

2. Craig Fuller, "News Release," June 16,2003 NACDS. Available at http://www.nacds.org/wmspage.cfm?parm1=3049

3. Joel Brinkley, "Re-Examining Medicare: Drugstores Speak Out, With Success," **New York Times.** September 6, 2003. Available at http://www.informedpremed.com/community/viewtopic.php?p=38

4. Pharmaceutical Care Management Association, "$40 Billion Cost for the Cantwell Amendment: Too High A Price for Seniors," Press Release on July 22, 2003. Available at http://www.pcmanet.org/press_pcmanetorg/addReleases/press_34.html

5. U.S. Securities and Exchange Commission, AdvancePCS Form10-K/A for the Year Ending March 31, 2003.

6. U.S. Security and Exchange Commission, Express Scripts, Inc. Form 10-K for the Year Ending December 31, 2002.

7. L. W. Abrams, "Estimating the Rebate-Retention Rate of Pharmacy Benefit Managers," April 2003. Available at http://www.nu-retail.com/rrr.pdf

8. U.S. Securities and Exchange Commission, Walgreen Co. Form 10-K for the Year Ending August 31, 2003.

9. Walgreen, "Our Past: A History of Our Company, Available on Walgreens' Website at http://www.walgreens.com/about/history/default.jhtml

10. J. M. Coster, "Pharmaceutical Marketplace Dynamics," NACDS, May 31, 2000. Available at http://www.nhpf.org/handouts/costner.pdf

11. L. W. Abrams, "The Monopolization of the Mail Order Pharmacy Business," November 2003. Available at http://www.nu-retail.com/Mail-Order-Pharmacy-Monopoly.pdf

12. U.S. General Accounting Office, *Prescription Drugs: FDA Oversight of Direct-to-Consumer Advertising Has Limitations*, GAO 03-177. October 2002. p.3.

