Are Medicaid Health Plans Making Too Much Money?

Medicaid health plans are often criticized for making too much money at the expense of tax payers and the indigent population, measured in billions of dollars. However, real profitability goes far beyond the simple measure of profit dollars. This post explores the profitability of Medicaid health plans from a corporate finance point of view, how the levels have changed over the years, and how they compare in today's corporate context.

Beyond Profit Dollars: Evaluating Profitability on Operating Margin

The public often focus on *absolute profit dollars* as a measure of profitability, but it is a poor measure because it does not provide context in terms of the cost to generate those profits. For example, which is a better business: Company A that makes $50 for every $100 in sales, or Company B that makes $100 for every $1000 in sales? The answer is Company A. Even though it makes less absolute profit dollars than Company B, it has a much better business since it makes 50 cents for every dollar of sales, compared to 10 cents for company B.

A common measure of corporate profitability is the *operating margin*, which is the amount of profit a company makes as a percent of sales after all expenses are paid.[1] The operating margin is a better measure of corporate profitability than the dollar amount of profits because it is measured as a percentage of sales, which normalizes for differences in the costs for the companies to generate these profits. For a health insurance company, this is called an *underwriting margin*, defined as profitability on insurance premiums after all expenses to underwrite the premiums are paid.

According to an annual study conducted by Millman, Medicaid health plans generated an average underwriting margin of 0.6% in 2018, and had generally stayed within a range of 0.5% to 2.5% over the past 10 years.[2] This means that the plans made around 60 cents for every $100 in premiums that they underwrote in 2018. So while Medicaid health plans do make billions of dollar in profits, their profitability is much lower when measured in terms of operating margin.

An Even Better Measure of Profitability: Return on Capital

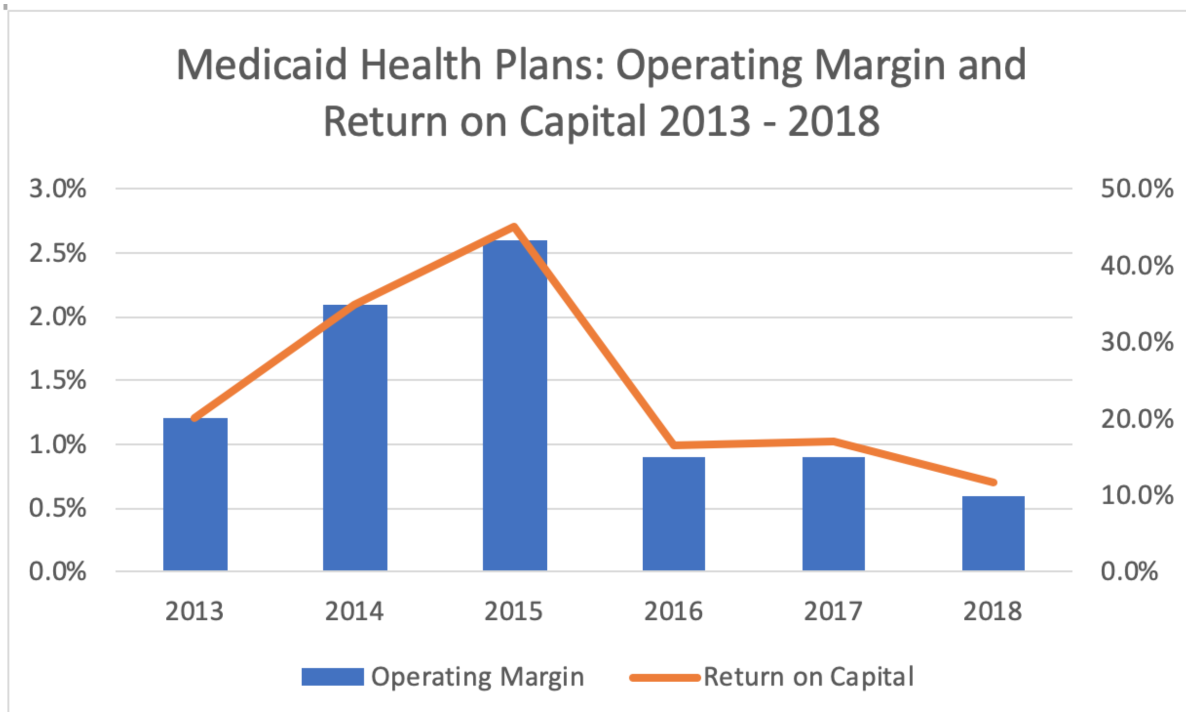
An even better measure of profitability is *return on capital*. For a business to generate profits, it must first invest the necessary capital to establish the infrastructure. Return on capital measures profitability in the capital investment.[3] It is a superior measure of profitability because it captures the efficiency in creating the underlying infrastructure to generate the profits.[4] Return on capital is compared against the *cost of capital*, which is the cost for the company to raise the necessary funds for investments. When return on capital is higher than cost of capital, the company should invest in the project, and vice versa.[5]

In the context of health insurance, the return on capital is calculated as operating profits divided by the capital investment, which for insurance companies is a statutorily required capital reserve called Risk Based Capital (RBC)[6] as a percent of sales (5.31%).[7] The return on capital for Medicaid health plans in 2018 is therefore 0.6% / 5.31% = 11.6%.

Historical Data Suggests a Period of Excessive Profits

Given these profitability metrics, were Medicaid health plan profits excessive? The following table and chart show historical Medicaid health plan operating margin and return on capital calculations based on data from Millman and the National Association of Insurance Commissioners (NAIC).

	2013	2014	2015	2016	2017	2018
Operating Margin	1.2%	2.1%	2.6%	0.9%	0.9%	0.6%
Medicaid RBC	468%	426%	407%	399%	404%	394%
Industry RBC	624%	568%	563%	586%	609%	609%
Medicaid RBC/Sales	6.0%	6.0%	5.8%	5.4%	5.3%	5.2%
Return on Capital	20.0%	35.0%	45.0%	16.5%	17.0%	11.6%



An interesting trend emerges from the data: While the current operating margin is at 0.6%, it was at 2.6% in 2015. In simple terms, Medicaid health plans were four times more profitable just four years ago. In addition, the profitability as measured by return on capital was also much higher in the early days of

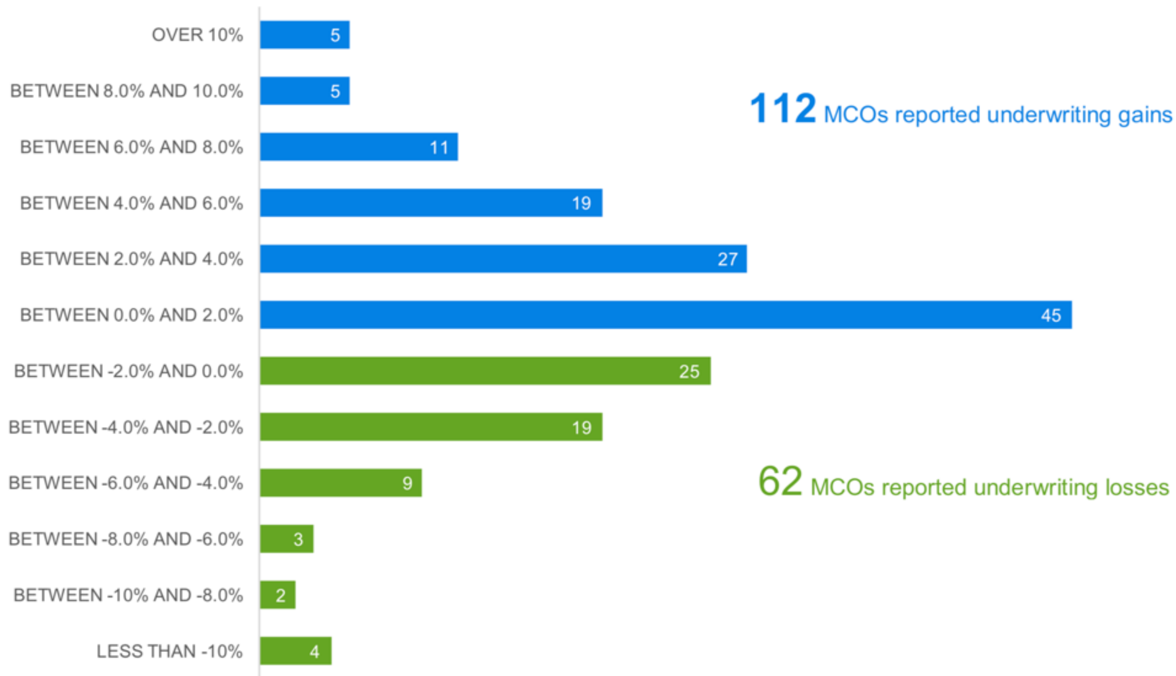
Medicaid expansion, which was 20% – 45% from 2013 – 2015. Those were indeed excessive levels of profitability: a 45% return on capital implies that the company would make back its investment in a little over 2 years[8]!

The historical high levels of operating margin and return on capital were likely due to the lack of experience by states in setting rates for the initial Medicaid expansion. Simply put, the initial rates were set at a much higher level than the actual underlying medical cost of the population, leading to very large operating margins and return on capital. However, the data shows that industry operating margin has generally been declining, and return on capital has decreased to much lower levels. This implies that states are getting better at rate setting to prevent the industry from earning excessive profits. Increased competition from additional participants also acted as downward pressure on industry profitability.

Current Levels of Profitability Are Reasonable

As we can see, Medicaid health plan profitability measures have decreased to much lower levels, but are these current numbers reasonable? One may argue that the current 0.6% underwriting margin is still too high since Medicaid is funded by taxpayers and serves the indigent population. However, we should put this number in perspective. Commercial health insurance companies generate 3.4% margin in the individual market, 3.4% margin in the small group market, and 1.5% margin in the large group market. In other words, the profitability of commercial health insurance is approximately 2.5 – 6 times higher than Medicaid health insurance. To further put the Medicaid underwriting margin in perspective, Google and Apple both generate an operating margin of approximately 25%. In other words, for every 100 dollars of revenue, the tech giants make 25 dollars, while Medicaid health plans make 60 cents, a difference of almost 42 times. So while Medicaid health plans do make billions of dollar in profits, their profitability, measured in terms of operating margin, is much lower compared to both their peers in health insurance, as well as other reputable companies like Google.

Additionally, while Medicaid health plans on average do generate a small profit of 0.6% underwriting margin, there is wide variability at the individual health plan level. According to Millman, 35% (62 out of 118) of health plans in the study lost money in 2018. Furthermore, the percentage of health plans that lost money had been consistently around 30 – 35% over the past 5 years. Of course, it's highly unlikely that it's the same health plans that lose money every year, as they would have gone out of business. This is precisely why having a reasonable operating margin is important to ensure adequate participants in the market. If operating margins are lowered to the point where the health plans have difficulty recovering losses from prior years, they will eventually exit the market. **For an industry where over 1/3 of the participants risk losing money in any given year, the current operating margin of 0.6% is very reasonable, even if that profit is generated from tax payer dollars.**



<u>Source</u>: Palmer, Jeremy et cal. Medicaid Managed Care Financial Results for 2018. Pg. 4, Figure 2.

In the context of capital investment profitability, we can also look at return on capital as measured against the cost of capital, which varies based on the capital structure and financial strength of each individual company. While there is no available aggregate industry statistic, we can estimate the cost of capital through publicly available data from health insurance companies. UnitedHealth, arguable the best run for-profit health insurance company in the U.S., has a cost of capital of 8.36% in 2018. Molina Health, one of the largest and longest running Medicaid insurers in the U.S., has a cost of capital of 12.17% in 2018. Given this context, we can see that while Medicaid health plan return on capital of 20 – 45% between 2013 – 2015 were indeed excessive, the current industry level of 11.6% is a reasonable level as even an experienced participant like Molina Health would have lost money in 2018[9].

Additionally, it is important to recognize that a well-functioning market requires multiple competitors. In the Medicaid setting where reimbursement for services is generally much lower than Medicare and commercial rates, it is vital for the state to set Medicaid rates at a sufficient level to ensure adequate participation by health plans and providers.

Conclusion

So are Medicaid health plans making too much money? The short answer is not anymore. There was clearly a period of excessive profitability during the initial stages of Medicaid Expansion. However, the annual rate setting process and ongoing competition had pushed profitability down to reasonable levels. As demonstrated in this analysis, regulators should focus on operating margin and return on capital metrics rather than absolute dollar profits in measuring profitability, and allow an adequate level of profitability for Medicaid health plans in order to adequately attract participants and entice competition.

As an op-ed column that serves as a public forum for general discussion of health system reform, "Wall Street Perspective" invites our readers to share their opinions, particularly on topics of healthcare economics and corporate finance. Comment below or submit your questions and thoughts to Gary here.

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[1] The operating margin is commonly referred to as the EBIT (Earnings Before Interest and Taxes) margin. The expenses are calculated before interest and taxes since they vary due to the capital structure of the company.

[2] See Milliman. (May 2019). Medicaid managed care financial results for 2017. Pg. 4, Figure 2. Retrieved from https://www.milliman.com/medicaid-results-2017/

[3] For example, Company A generates $1,000,000 in revenue, spends $750,000 in cost of materials and labor, and generates $250,000 in operating profit after expenses. This implies an operating margin of 25%. However, in order to generate the $250,000 in operating profits, Company A has to make an initial investment in machinery and equipment, which cost $5,000,000. The return on capital is therefore $250,000 / $5,000,000, or 5%. Note that the recurring cost of running the equipment is already captured in the $750,000 expense. Return on capital captures the return on the initial investment of $5,000,000 on the equipment and machinery necessary to generate the $250,000 in operating profits.

[4] Assume that Company A and Company B both generate $1,000,000 in sales. Company A makes $100,000 in operating profit and require a $500,000 capital investment. Company B makes $200,000 in operating profit but require $5,000,000 capital investment. Which is the better business? While Company A has a lower operating margin of 10% vs. Company B's 20%, it takes much less capital investment for Company A to generate that profit. Company A is the better business with a 20% return on capital ($100,000 / $500,000), compared to company B, which only has a 4% return on capital ($200,000 / $5,000,000).

[5] Let's say both Company A and B can raise money at 10% rate (either by borrowing from the bank or issuing stock). Since Company A has a return on capital of 20%, it would make the investment as it can make 20% return on capital with a cost of 10%. On the other hand, Company B would not make the investment, since it can only make 4% return on capital. In a simpler every day example, let's assume your bank pays you 2% for savings. It would make loans at rates higher than 2%, but not below.

[6] Risk Based Capital (RBC) is established by regulators to

ensure insurance companies have enough money in reserve to play claims. If an insurance company wants to grow its business by getting more customers and underwriting more premiums, it will need to invest in more capital to increase its reserves accordingly. RBC is not a static metric, as it is dependent on the underlying risk profile of the insurance that's being underwritten. A higher risk population will have a higher RBC due to higher expected chance of loss, and vice versa.

[7] According to Millman, the industry average RBC as a percent of revenue is 8%. The calculation is then adjusted for the lower RBC requirement for Medicaid plans, since regulators require less capital held in reserve for Medicaid compared to commercial plans. In 2017, the median RBC ratio for the entire health insurance industry is 609%, while the RBC ratio for Medicaid health plan is 404%. This implies Medicaid health plans generally hold 404% / 609% = 66.3% of the industry median RBC, which translates to 66.3% x 8% = 5.31% of RBC as percent of revenue.

[8] 45% return on capital implies every $100 invested in growing the business will generate $45 in operating profits annually and perpetually. The company would make back its initial investment in $100 / $45 = 2.22 years.

[9] Molina Health's cost of capital is 12.17% in 2018, which is below the industry return on capital of 11.6%. Since the company earns a lower return on capital than cost of capital, it would have considered withdrawing from the market.