Value Assessment of Primary Health Care Company based on DCF Model

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Abstract. As one of the largest healthcare companies in Australia, Primary Health Care Limited (PRY) plans to focus more on private billing and provide high-quality Medicare service for customers. Whether it is worth investing in is a concern for the investors. In this paper, Free Cash Flow to the Firm (FCFF) Model was utilized to analyze the intrinsic value of Primary Heath Care, and the recommendation of buying was given.

Keywords: Free Cash Flow Model; Corporate Valuation; Primary Health Care Limited.

1. Introduction

Primary Health Care Limited (PRY) is one of the leading companies in Australian healthcare industry, which has been the top national provider of large-scale medical centres and covers its sites across the whole country (PRY 2016). It started its business by operating medical centres, and then expanded to pathology and medical software through acquisition, providing healthcare service in Australia for over 30 years. In order to analyze its investment value, Free Cash Flow Model is utilized below to figure out its intrinsic value

2. Assumptions for Free Cash Flow Model

2.1 Discount Rate

The discount rate chosen in a valuation analysis should reflect the time value of money and the risk incurred in earning cash flows, so discount rate should be adjusted to the valuation model. Considering that FCFF valuation model is used, WACC should be the discount rate of the firm.

2.1.1 Cost of Equity

CAMP model is shown as followed to work out cost of equity:

$$(R_i)=R_f+(R_m-R_f) \tag{1}$$

$$\beta=(R_i,R_m)/\sigma_m^2 \tag{2}$$

The β value, which is calculated by this model, is the leverageβ. This leverage β is also changing with the market condition and firm's capital structure. According to the Yahoo Finance, there is a large different between the performance of PRY shares in the beginning of 2016 and Australia market index(S&P/ASX 200), which also reflect that the PRY's β might have changed in recent years

To reflect the relationship of price of PRY and ASX 200 index, most current one year historical data is chosen to calculateβ, which can reflect firm's current condition and would be close to the β in next few years. Furthermore, there is an assumption that the firm's capital structure will not have a big change in the next few years.

Use the function 2 to work out that PRY's β value is 0.958. The Rm=0.0895 (the weekly market expected return is 0.165%, which equals to the annual return 0.0895). What is more, the yield of 5 years Australia Government Bonds is used to be the market risk-free rate, which is about 0.02245 currently (Bloomberg 2016). Therefore, by function 1 to calculate PRY's cost of equity, which is 0.08668.

2.1.2 Cost of Debt

Primary Health Care did not issue corporate bonds in the past years. Therefore, the yield to maturity on a straight bond outstanding from the firm cannot be found. Then the better model is used:

$$YTM = Benchmark + Default\ Premium \qquad (3)$$

Firstly, Altman Z –score model is utilized to estimate PRY's rating.

$$Z=1.2(X_1)+1.4(X_2)+3.3(X_3)+0.6(X_4)+1.0(X_5) \qquad (4)$$

X_1 = Working Capital/Total Assets
X_2 = Retained Earnings/Total Assets
X_3 = Earnings Before Interest and Taxes/Total Assets
X_4 = Market Value of Equity/Book Value of Total Liabilities
X_5 = Sales/Total Assets

According to the data of its annual report, PRY's Altman Z-score is 1.5762. Based on this score, estimating the rating of PRY by using the model provided by Czombera (2014) as shown in table 1.

Table 1. Z- Score and credit equivalency

Rating	Z-Score (Min)	Z-Score (Max)
AA	5.4	?
AA-	4.6	5.7
A-, A, A+	3.4	4.6
BB, BB+, BBB-, BBB, BBB+	2.8	3.7
BB-	2.3	3.2
B+	1.6	2.6
B-	?	1.7

Therefore, the rating of PRY is estimated as B +. The corresponding default spread is 0.025 base points (Bloomberg 2016). Then the risk-free rate is used as the benchmark, which is YTM on 5 years Australia Government Bonds (0.02245). At last, PRY's cost of debt can be worked out as 0.04745.

2.1.3 WACC

$$WACC = re * E/V + rd * (1 - tc) * D/V \qquad (5)$$

The tc is corporate tax rate, which is 30% in Australia. By using this formula and the data above, WACC of PRY is 0.0763. WACC is directly affected by firm's capital structure. What is more, when calculate the firm's β, leverage ratio is assumed to keep constant and the firm's capital structure is constant in the next few years. If the capital structure will change in the future, the WACC value will also change.

2.2 Income Statement Assumptions

2.2.1 Revenue Growth

Primary healthcare has four business segments, which are medical centres, pathology, imaging and HCN. From 2011 to 2016, these four segments contributed the constant portion to the total revenue as showed in table 1. But in 2016, PRY disposed HCN and it didn't disclose acquisition plan for the future. So for analysis purpose, the left three segments are assumed to operate continually. The average of constitution for medical centres, pathology, and imaging to total revenue are 20%, 57% and 21% respectively, which are used to derive growth rate (Figure 1).
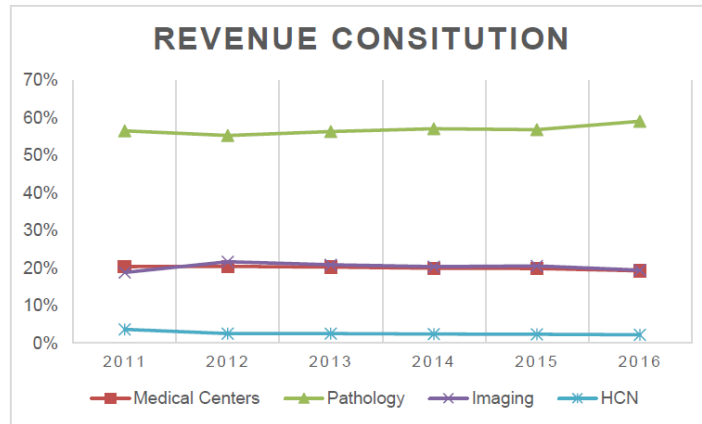
Figure 1. Revenue constitution in segment

Then analyze the growth in each segment from 2012 to 2016 and display it in table 2. Medical centres in 2016 didn't change much compared to 2015. Fewer than expected general practitioner (GP) and pressure of funding from government for Bulk billing explained the reason for Medical centres performance. PRY is expected to recruit more GP in the future and get more involved into private billing market through acquisition. Also, it will develop digital health and technology. The new strategy on private billing and innovative health care may boost revenue for Medical centre segment, so the growth rate for medical centre could go back to the average point at 5% in the previous 3 years.

Table 2. Revenue growth rate for each segment from 2012 to 2016

Growth in each segment	2013	2014	2015	2016
medical centers	3.7%	3.0%	5.9%	-1.3%
pathology	6.5%	6.1%	5.7%	6.0%
imaging	0.5%	2.1%	7.2%	-3.6%

The pathology segment suffers challenging operating environment in Australia. However, "pathology division enjoys strong-state based brand recognition" (PRY 2016). Furthermore, although government policy about moratorium has not finalized, PRY has flexibility in its lease portfolio. Also, the development of medical centres will further increase the sales of pathology. Thus revenue from pathology is assumed to increase at average 6.1% continually.

Imaging didn't perform well in 2016 due to pessimistic environment and loss of private hospital contracts. This division is experiencing strategy transforming to diversify revenue so imaging is expected to increase at average 2% of nearest 4 years. Thus, derive 0.04 for the future revenue growth rate.

2.2.2 Expense

Assume that all expense is driven by revenues. Then average ratio of expense to sales is used to estimate expense. Also, excluding extreme numbers when expense happened in that year is unusual. And if the proportion is increasing, simply follow the trend and make estimation. The exception for above estimation method is: employee expense.

About employee, the 2016 annual report stated the lack of GP in 2016 and plans to hire more GP in the future. Also, it plans to increase the GP retention rate. So assume that the ratio of employee expense to revenue will increase 2% and use 45.8% to calculate future employee expense.

Table 3. Key assumptions for pro-forma analysis

Income Statement Assumptions	2017E	Balance Sheet Assumptions	2017E
Revenue growth (%)	3.6%	Cash as % of revenue	2.46%
Employee expense	45.8%	Account Receivable as % of revenue	5.7%
Operating expense	34.2%	Inventory as % of revenue	1.76%
D&A rate (%)	19.2%	Short term assets as % of revenue	4.46%
Interest expense (%)	6.1%	Account Payable as % of revenue	15.4%
Effective Tax rate (%)	34.5%	Short term debt as % of revenue	0.2%

2.3 Balance Sheet Assumptions

Assume that each item has a direct relationship with revenue. Then calculate each account as a percentage of revenue and average the ratio to predict future numbers. The exceptions for this estimation method are:

2.3.1 Property, Plant and Equipment

In 2016, Primary healthcare disposed of many fixed assets to build a flexible CAPEX model. However, it plans to open more medical centers and invest more in digital health. The proportion of PPE in revenue is expected to increase. Estimate that the proportion will increase gradually and achieve the 2016 level in 2018 and keep this level in the future.

2.3.2 Long Term Debt

The company payback much long-term debt in 2016 and declined its gearing ratio from 35% to 28%. However, this trend may not continue in the next year. As the PPE increase, the company is assumed to raise more debt to finance its operating assets. So, the long-term debt is assumed to grow at 4%, which is the growth rate of revenue. Assumptions result is displayed in Table 3.

2.4 Terminal Value Assumption

First, GDP growth rate is a sound upper limitation for terminal growth rate. A stable growth rate for a company needs to be related to macroeconomic factors, including industry, growth assumption (Pinto, 2015). According to Pinto (2015), "an earnings growth rate far above the nominal GDP growth rate is not sustainable in perpetuity", nominal GDP growth rate is estimated as a ceiling. Based on the last decade data, the average GDP annual growth rate in Australia was 2.75, and the estimated data is around 2.8% (Trade economics, 2016), and OECD projects that it would around 2.95% from 2017 to 2060; thus set the upper limit of the company's growth rate as 3.0%, that is the terminal growth rate of the company should no more than 3.0%.

Table 4. GDP growth from 2006 to 2015

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Average
GDP growth rate(%)	2.98	3.76	3.71	1.82	2.02	2.38	3.63	2.44	2.5	2.26	2.75

Table 5. Estimated GDP Growth

Year	2016	2017	2018	2019	2020	2025	2030	2035	2040	2045	2050	2055	2060
Estimated GDP growth(%)	3.83	3.92	3.79	3.65	3.55	3.25	3.03	2.78	2.55	2.36	2.26	2.17	2.1

Second, terminal growth rate g = ROE in the mature phase* (1- payout ratio in the mature phase).

As the table below shows, the moving average payout ratio from 2009 to 2016 is around 65.9%, which is a reasonable payout ratio in the mature phase of the company; also, the average ROE between 2009 and 2016 is around 5.102%, which is more prudent than cost of equity that is 8.668%, as a mature ROE. As a mature company, PRY generates a stable earning and without more investment opportunities, ROE tends to be stable at a present level in the long run. Thus, 1.74% (or 5.102%*65.992%) is figured out as the terminal growth rate, which is quite lower than 3%, estimated average GDP growth rate.

Table 6. Payout ratio and ROE

Ratio	2009	2010	2011	2012	2013	2014	2015	2016	Long-term
Payout ratio	43.68%	80.29%	41.47%	47.05%	57.22%	89.90%	42.49%	218.00%	65.922%
ROE(%)	5.73%	5.27%	3.81%	4.54%	5.58%	4.74%	9.97%	1.18%	5.102%
Sustainable growth rate	3.23%	1.04%	2.23%	2.40%	2.39%	0.48%	5.73%	-1.39%	1.74%

3. DFC Valuation

Under the assumption above, we use pro-forma analysis and then forecast next three years cash flow:

Table 7. Presentation of key result

In Millions of AUD except Per Share	2016	2017E	2018E	2019E
Revenue	1,636.9	1696.2	1764.0	1834.5
Operating Expense	1,374.0	1,357.2	1,411.5	1,467.9
EBIDA	262.9	339.0	352.5	366.6
Depreciation & Amortization	156.7	122.54	139.31	143.18
EBIT	106.2	216.4	213.2	223.4
Interest Expense, Net	53.4	49.7	54.2	56.4
Pretax profit	52.8	166.7	159.0	167.0
Income Tax Expense (Benefit)	18.2	57.5	54.8	57.6
NPAT exclude abnormals	34.6	109.2	104.2	109.4
Net income avail to shareholders	28.6	109.2	104.2	109.4
Free Cash Flows to the Firm	424.1	165.1	194.2	271.9
Present balue FCFF		153.4	167.7	218.1

Terminal value	4699			
Present value of terminal value	3769	WACC		7.63%
Enerprise value	4308	Terminal WACC		7.63%
Equity value	3494	Terminal growth rate		1.74%
Share price	$ 6.72	Tax rate		34.5%

The current price is 4.0 while the target price in 2017 is 6.72 so buying is recommended. Also PRY plans to focus more on private billing and provide high-quality Medicare service for customers. So it is predicted to maintain its revenue growth rate and even slightly higher. In addition, to build more centres and invest in digital health, the company may buy more PPE in the future and use less D&A rate to depreciate. As the result, the significant decrease in depreciation and amortization expense will lead more net income. At the same time, the long-term debt will gradually increase but not so much.

4. Summary

Free Cash Flow Valuation indicates PRY' share price has great potential to increase within next 12 months. Its new strategy is beneficial to increase the revenues in future. Current economic environment and industry trend also contribute to sustain PRY's growth ability within next three years(from 2018 to 2020). Therefore, a recommendation of 'buy' is given with confidence.

References

[1]. Primary Health Care Limited 2016, Annual report, St Leonards NSW, viewed 11 October 2018, <http://www.primaryhealthcare.com.au/irm/content/company-overview.aspx?RID=299>.

[2]. Pinto, J.E., Henry, E., Robinson, T.R., Cohen, A. and Stowe, J.D., 2015, Equity Asset Valuation. John Wiley & Sons.

[3]. Yahoo! Finance 2016, Yahoo! Finance, California, viewed 13 October 2018, < http: // finance. yahoo.com >.