



engro polymer & chemicals

Engro Polymer and Chemicals ltd Capital Structure and Dividend Policy Analysis

Financial Management 7469 Term Project



Group Members

Abdul Rahim Shaikh 26570

Muhammad Ziyad Khan 26658

Anas Mobin 26559

Saim Ahmer 24943

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EPCL's Capital Structure

A company's capital structure is the combination of finance sources it uses to run and expand. Debt and equity are the two main parts of a company's capital structure. The capital structure of a business is crucial since it affects both its risk profile and financial performance. The proportion of debt to equity can have an effect on financial flexibility, cost of capital, and likelihood of financial hardship.

In FY 2019, Engro changed its capital structure significantly, as the company had announced a major expansion and several reliability/efficiency projects in 2017, and in 2019, the non-current assets increased by 103% because the company purchased Property, Plant & Equipment, and Leasehold Land. It increased the company's long-term debt by 158% as a long-term financing agreement with IFC for USD 35 Million was signed. The reason behind the company's use of debt was the Company's credit rating was upgraded twice during the year. In January, PACRA upgraded the Long-term / Short-term rating of Company from "A / A1" to "A+ / A1+". Because of the company's solid liquidity and encouraging fundamentals, JCR-VIS gave EPCL its highest-ever credit rating of "AA- / A1+," and the PACRA upgraded the company. After that, the company's current liabilities grew by Rs. 5,422 million, which was the funds obtained under the Musharaka Agreement with Dubai Islamic Bank Pakistan Limited. In addition, short-term financing facilities of Rs. 2,159 million and incremental provisions of Rs. 1,019 million for the Gas Infrastructure Development Cess (GIDC) were included in current liabilities. and the recognition of the Rs. 988 million current maturity of lease liabilities recorded under IFRS-16. Additionally, the Company's borrowing costs have grown due to the increase in both long-term and short-term borrowings; as a result, as of December 31, 2019, the interest payable was Rs. 366 million. In order to maintain its capital structure, the company increased its equity from right shares issued in 2018 of Rs. 5,365 million. The company changed its profile because it was expanding and was willing to take additional debt to fund it. By these activities, the weight of debt was increased from 11% to 33% from 2018 to 2019, increasing the debt-to-equity ratio from 12% to 49%.

In FY 2020, the weight of debt increased to 42%. The non-current element of the GIDC provision was recognized from the current liabilities of Rs. 2,991 million, resulting in an increase of Rs. 3,645 million in non-current liabilities. Recoupment of MTOT and ACT resulted in a 1,183 million dollar deferred tax liability. The current liabilities of Rs. 15,388 million have stayed relatively constant. The current maturity of long-term borrowing has increased, and obligations related to leasing, trading, and other payables adding up to 4,848 million rupees. Conversely, however, the provision for GIDC and quick loans have decreased by 5,360 million rupees. The equity has increased significantly this year by Rs. 8,350 million. The issuance of Rs. 3,000 million in preference shares for the expansion project is credited with the rise. The year's stated net profit of Rs. 5,730 million is a 55% increase over the previous year's earnings. Due to the issuance of right shares in 2018 and preference shares in 2020 valued at Rs. 5,365 million and Rs. 3,000 million, respectively, equity has steadily increased from Rs. 5,334 million to Rs. 26,126 million. The company's non-current assets have grown by Rs. 4,843 million, or 12.1%, over the previous year. A year ago, the Company identified a right-of-use property on the agreements for storage and others under IFRS 16, the rental contracts amounted to 2,845 million rupees.

From FY 2021 to 2022 the weight of debt has shown a stable and stagnant growth from 41% to 42% meanwhile the weight of equity has shown a stable and stagnant decline from 58% to 57%. By the end of 2022, Engro had effectively arranged PKR 8.75 billion in funding through syndication. Eight years of payback are stipulated in the financing agreement, followed by a five-year grace period. The loan was taken out in order to pay off the Company's previous Sukuk commitments, which were benchmarked at a higher spread rate and resulted in considerable financial cost reductions. Due to a decrease in leverage brought about by loan repayments exceeding the amount of new loans taken out, EPCL's capital structure saw a shift towards equity in 2022. The Company's non-current assets have increased by 10%, or about Rs. 4,430 million, over the previous year. The company invested in a wide range of CAPEX projects, including as OVR, HTDC, H2O2, PVC III expansion, and other operational efficiency and reliability initiatives.

Is EPCL's current capital structure optimal?

The term optimal capital structure can be used to describe the combination of debt, equity and retained earnings to maintain maximum amount of cash flows/maximizing wealth and minimizing the cost of debt thus increasing the intrinsic value of the stock. We will be using the debt-to-equity ratios and the market price of the stock to analyze the capital structure of Engro Polymer and Chemicals.

	2022	2021	2020	2019	2018
Market price per share	64.66	53.22	34.20	30.53	31.90
Debt to Equity Ratio	2.15	1.60	1.64	2.24	1.14

***THE DEBT/EQUITY ONLY CONSIDERS LONG TERM DEBT /MARKET VALUE EQUITY**

If we compare the years 2018-2022, we can see that the EPC's highest market price is during the year 2022 which is Rs 64.66 per share and the lowest is in the year 2019 which is Rs 30.53 per share. We can also infer that the optimal capital structure is the point where the price of the stock is high in order to increase shareholder wealth indicating that WACC is minimum and when a company takes on debt there are various ways in which it can increase the stock price from which some are that debt is a cheaper form of financing compared to equity because interest payments are tax-deductible. Moreover, investor perception and confidence are also increased as it is expected that the borrowed debt will be used to finance profitable projects which will generate future cash flows thus increasing the stock price. Now the point at which the capital structure of EPC is optimal is in 2022 where the stock price is at maximum compared to other fiscal years and the debt-to-equity ratio is 2.15. The reason for this change in 2022 is because debt has increased to 42% and a decline in equity to 57% as EPC had acquired a loan of PKR 8.75 billion with a repayment of 8 years, moreover

loan repayments exceeded the amount of new loans obtained thus shifting to more equity.

If we compare the average long term debt ratios of EPC with the industry average of some competitors like Tri-Pack Films Pakistan, Archroma Pakistan, Nimir Industrial Chemicals, the average ratios lie between 50%-134.33% which are higher than EPC's net debt to equity ratio of 48.7% indicating a greater reliance on equity rather than debt. The reason might be that the management wants to avoid any financial obligation and burden on the company.

The factors that the company considers before deciding the financing source for its projects/assets.

Like many companies, Engro polymers take into account various factors. These factors mainly include cost of capital, interest rates, market conditions, risk associated with the project and the overall capital structure strategy. Upon analyzing the data, we can conclude Engro Polymers is a company that isn't looking to increase its shareholders. Despite an increase in interest rates and a decline in market prices, EPCL continues to acquire an increasing amount to fund its projects.

To further justify this if we look at the years 2018-2020, we can see the number of issued stocks remained the same, however there was an increase in the long-term debt from 7500 in 2018 to 23404 in 2020. No new stock was issued and debt to equity ratio surged 62.5%. This can be justified if we take into consideration Covid 19, and it was pretty common for companies to do this. However, in the coming years from 2020-2022 the company borrowed more money however, this time the debt-to-equity ratio improved. Throughout the years the interest rates kept increasing giving more reason to decrease borrowing.

Cost of Debt and Equity

CAPM		8.65%			
Average cost of debt - short term plus long term		5.58%			
WACC Calculations					
Years	2022	2021	2020	2019	2018
wd	42.84%	41.75%	42.96%	33.10%	11.32%
ws	57.16%	58.25%	57.04%	66.90%	88.68%
tax rate	29.99%	24.65%	30.41%	26.66%	23.72%
wd(rd)(1-T)	1.672%	1.754%	1.667%	1.354%	0.481%
ws(rs)	4.945%	5.039%	4.935%	5.788%	7.672%
WACC	6.617%	6.793%	6.602%	7.141%	8.153%

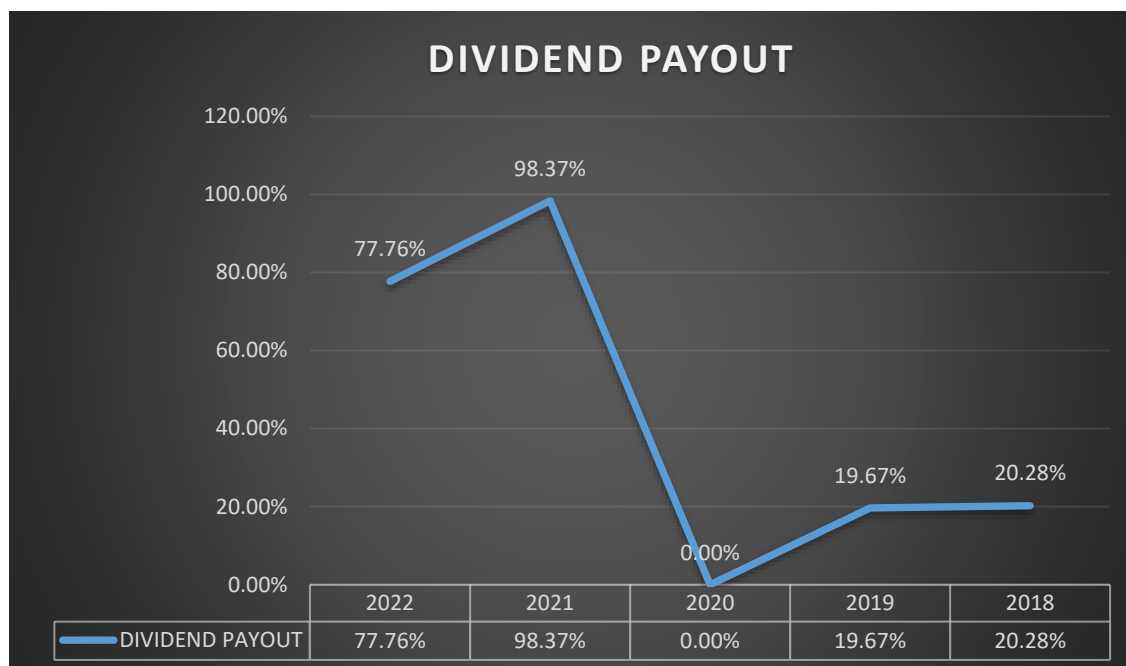
The numbers from the 5-year average indicate that the cost of debt for the company is less than cost of capital that explains Engro's strategy to change their capital structure more inclined towards debt. The major change can be seen from FY 2018-19 when the company drastically change its weight of debt from 11% to 33%, mainly because it was planning on an expansion project. Moreover, it increased its equity from right shares issued in 2018 of Rs. 5,365 million, this indicated that they cannot further issue shares either to current shareholders or to new ones', because issuing new shares to new shareholders will dilute the control and percentage ownership of the existing shareholders so opting for debt was the optimal choice. One important factor that supports this decision is the improved credit rating of the company as PACRA upgraded the Long-term / Short-term rating of Company from "A / A1" to "A+ / A1+". Owing to the Company's promising fundamentals and strong liquidity, the PACRA upgraded, and JCR-VIS assigned "AA- / A1+" credit rating in 2019. Following that, the company issued a short-term loan in its current liabilities from the proceeds received under the Musharaka Agreement with Dubai Islamic Bank Pakistan Limited of Rs. 5,422 million. In FY 2020, the weight of debt

increased from 33% to 43% mainly due to the GIDC provision, resulting in an increase of Rs. 3,645 million in non-current liabilities. Recoupment of MTOT and ACT resulted in a 1,183 million dollar deferred tax liability. Moreover, the issuance of Rs. 3,000 million in preference shares for the expansion project increased the shareholder equity, however, the weights decreased from 66% to 57%. In FY 2021 The Company negotiated several Temporary Economic Refinance Facility (TERF) loans totaling Rs. 3,650 million during the year to fund its ongoing capital expenditure, expansion, and efficiency programs. All loans have 10-year terms with two-year grace periods. The TERF concessional prices will produce notable savings in the form of lower borrowing expenses. Additionally, the business has signed a long-term credit contract with International Finance Corporation for \$15 million US dollars. Within a two-year grace period, the facility has a five-year duration. During the year company's assets were funded by a debt and equity ratio of 42:58, down from 47:53 in 2020. Since the amount of loan repayments was greater than the fresh loan secured throughout the year, the capital structure has migrated more towards equity, hence lowering the company's leverage.

Comments on the Dividend Policy the company follows:

The dividend policy is a set of guidelines that the management follows in order to determine how much of the firms' earnings should be distributed among shareholders and how much should be retained in order to reinvest in the business. The main factor we will be using to discuss this policy will be the dividend payout ratio, which is the amount the investor would earn per share and also provides information about the performance of the company.

There are two major dividend policies which are residual dividend policy and low regular dividend policy out of which we can identify that EPC uses the residual dividend policy meaning that the profits are first used to fund investment projects and any remaining earnings are then paid out as dividends.



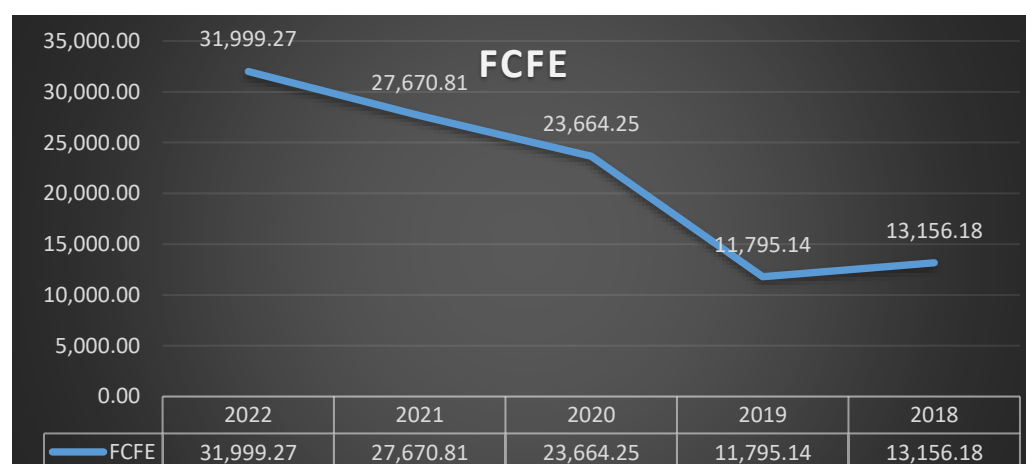
If we analyze the dividend payout ratio of EPC for five years, we can see that for the FY 2019-2019 the ratio was constant and then decreased to zero in 2020 as no dividends were paid that year. In FY 2021, we can see a sharp rise of up to 98.37% and then a slight decline in FY2022 to 77.76%.

First, we will talk about the FY2020 where EPC's revenue decreased by 6% mainly due to shutdown of plant due to Covid-19 restrictions and the higher PVC prices also contributed to costs due to global supply constraints, due to which no dividend was paid and less investments were also received as compared with other fiscal years. In the FY2021, the company was able to increase the net income after the pandemic restrictions due to increased sales of up to PKR70.02 billion which is an increase of 98.18% by maintaining a competitive pricing strategy and efficient operations. Moreover, the company commenced operations of its new pvc plant by increasing their capacity to 295 KT per annum which led to a high export value of \$28 million. These reasons contributed towards the high increase in the payout ratio. In FY2022, the reason for a decline in the ratio is due to the unexpected increase in fuel prices that challenged the availability of gas to production plants.

If we compare EPC's ratio with the industry average of competitors like Lotte Chemicals Pakistan, Nimir Industrial Chemicals and etc. we can see that EPC's dividend payments have not been stable and are volatile, however the company's ratio is above the industry average by approximately 20% due to the increased earnings of up to 15.28% per year.

Dividends and Free Cash Flows

The cash available to a company's equity owners after deducting operating costs, capital expenditures, debt repayments, and other investments required to sustain or expand the firm is measured by the Free Cash Flow to Equity (FCFE) ratio. Given its financial commitments and reinvestment requirements, it's an important metric for investors since it indicates how much cash a business may give to its owners in the form of dividends, share buybacks, or other distributions.



Talking about FCFE, it started at Rs.13156.18 thousand in 2018 and then had a 10.35% decrease in FY 2019. This was due to a decline in revenues as Revenues fall about 7% from 2018 due to the covid 19 pandemic and there was an increase in Capital Expenditure from Rs.4260 in 2018 to Rs.13111 in 2019. Dividend payments have also increased from 2018 to 2019 which means that the company has paid out more so it will retain less thus FCFE decreases. During the economic downturn, EPCL encountered reduced consumer

demand as Covid restricts everything. This led to lower cash inflows from sales and services. These circumstances compel companies to implement cost-cutting strategies, reduce their capital expenditure plans, or postpone investments, which reduces the amount of free cash flow that is available to equity shareholders (FCFE).

Then in FY 2020 there is a huge increase in Free cash flow to Equity. There is a 100% increase or doubling of FCFE from FY 2019 to FY 2020. This was due to the reduced Capital expenditure of EPCL from FY 2019. The company was still operating in Covid 19 pandemic restrictions, but EPCL is part of major suppliers to House building (Construction) industry the demand of PVC remained unchanged as Construction projects continued and construction is not something to be done in a month. It needs a Year or more so the projects which were still operating demanded EPCL products. EPCL also continued with farmers and providing them paid programs to Vaccinate their farms from Covid 19. These push efforts help EPCL maintain its revenue with lesser Capital expenditure. Lowering capital expenditure lowers cash outflows designated for long-term investments, which directly supports FCFE, or free cash flow to equity. This decrease increases the amount of cash available for distribution to equity shareholders by freeing up more funds in the current period. As a result, the reduction in expenditure increases the cash available to equity investors, which has a favorable effect on FCFE.

We can see FCFE is increasing at a constant rate from FY 2020 to FY 2022. This is due to the revenue which is also following an increasing trend. There are no such huge fluctuations in debt levels too. There is an increase of 11.67% in total debt from FY 2020 to FY 2021 and 20.83% from FY 2021 to FY 2022. This reflects the trend of Cash from Operating activities as we can see it will be Increasing at maintained rate due moderate debt levels. The Dividend Payout is also consistent from FY 2021 to FY 2022. This tells us that as the company has increased its Net income after Covid 19 restrictions, now it has better profits but as it is paying out same as before, so the greater amount left out is Retained thus money is available for Future expansionary projects which increases FCFE.

The Textbook Relation between FCFE and Dividends; One way a firm can lower its available cash for reinvestment uses is by paying dividends to its shareholders. One of

the key sources of FCFE is the remaining cash that is not paid out as dividends, or the earnings that the company retains. This retained sum is included in the FCFE computation since it is cash that can be used for debt repayment, future investments, or other shareholder-beneficial purposes. Consequently, a larger dividend distribution has the tendency to lower profits retained, which has an impact on the FCFE that could be available for future growth or investment possibilities.

Factors Investigated before deciding on the dividends for each year.

Firstly, a corporation should be aware of the taxing situation in the country. As first the tax rate gets deducted then the dividend is distributed. So higher tax leaves less dividend payments all other things left in isolation and the situation in Pakistan worsened throughout the years we accounted for.

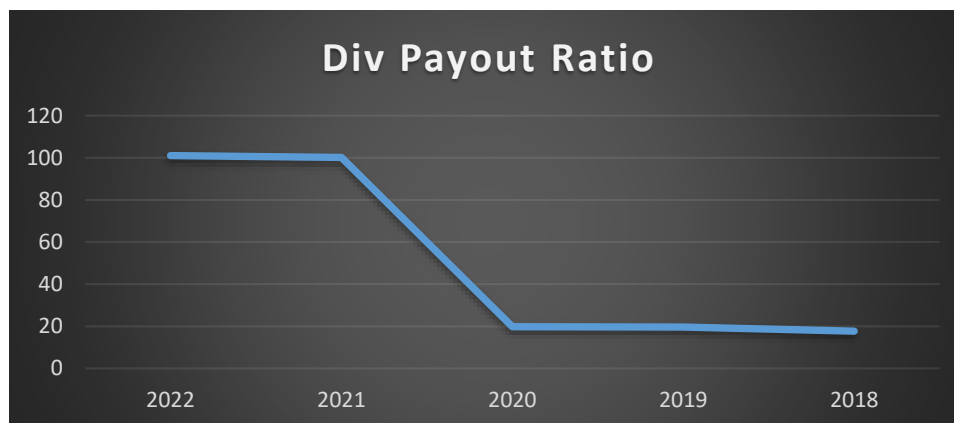
The preference for shareholders can be narrowed down to two parts: capital gains and dividends. Investors often have different goals, and one company might not be suitable for every investor out there. For instance, there might be a group of people for whom dividends don't matter but when they sell their stock after holding, they require an increase in the value from that they paid for earlier. These people look for "capital gain". On the other hand, there's another group of people for whom capital gain would have low meaning rather they require payments in intervals known as dividend. They strive off of this income and this becomes the deciding factor for when going to purchase stocks. This brings us to "Catering theory", In summary this refers to the fact that a company has to pay its dividends according to its investors demand, this may include a dividend premium.

Another thing to take into consideration is the "clientelle effect", which refers to the change in stock price due to the demands and goals of its investors. This may be due to the change in tax, dividend, and policy change or a change in the way the corporation acts which may affect the dividend. This can be applied to engro polymers as well. There can be seen a movement downward in the company's stock price due to the poor performance in terms of dividends payment through the years 2018-2021.

A client investing in engro polymers would not be one looking for capital gain as there can be seen a decline in the company's stock price however one might be looking for a dividend. Dividend performance was low through the years 2018-2021. However, there can be seen an improvement in the coming years.

Reasons for Inconsistent Payout

The Payout of Engro Polymer and Chemical Ltd has not been consistent over last 5 years. There is a small push of Rs. 2 from 2018 to 2019. This is due to a decline in Net Income of EPCL as reported in 2019. The Dividend data is however subject to be different in financial reports and Company website, we will use the Payout ratios written in financial statements. The Increase in Payout can also be a signal for better future prospects as they say that PVC market in Pakistan is affected by Covid 19 but as Pakistan is relied on PVC the market will rise again sooner. We see a Huge Increase in Payout ratio from 2020 to 2021. While Pakistan's domestic market declined, EPCL managed to gain its high share by maintaining competitive prices and getting confidence in the market. The company managed to increase its sales by 28%. And as Pakistan's government focus on housing improved, PVC consumption increased. Also, Pakistan came out of Covid 19 pandemic, and every industry started working. Thus, Earnings per share also increased and all these huge profitability coming forward raised the Dividend payout ratio.



Stocks split or repurchases.

There are no Stock repurchases and stock splits in EPCL History.

Contribution Sheet

Group Member	Contribution	Contribution%
Abdul Rahim Shaikh 26570	Cost of Debt and CAPM calculations Target Capital Structure Calculations Dividends and Free Cash Flows Analysis Reasons for Inconsistent Payout and Stock Splits/repurchases research.	25%
Anas Mobin 26559	Data Extraction from System Ratios and Financial Calculations EPCL's Capital Structure Cost of Debt and Equity	25%
Muhammad Ziyad Khan 26658	Ratios and Financial Calculations Data Extraction from System Is EPC's current capital structure optimal? Comments on the Dividend Policy the company follows.	25%
Saim Ahmar 24943	Graphs Module 1 Finalization The factors that the company considers before deciding the financing source for its projects/assets. Factors Investigated before deciding on the dividends for each year.	25%