

LAXMI CAPITAL MARKET LIMITED

NEWSLETTER FOR Ashwin 2078

MONTHLY NEPSE SUMMARY OF ASHWIN 2078

Monthly NEPSE Summary

This Month NEPSE made volatility of 340.21 points. NEPSE made a high of 2882.32 and low of 2542.11 within a Month. Index opened at 2817.98 points and closed at 2656.96 points with the loss of 161.02 points.



Exponential Moving Average:

We have used EMA's of 5 days' time period (green line), 20 days' time period (red line). At present, NEPSE Index is below Exponential moving average, which indicates a down trend.

Relative Strength Index:

The relative strength index (RSI) is a momentum indicator that measures the magnitude of recent price changes to evaluate overbought or oversold conditions in the price of a stock or other asset. The RSI is displayed as an oscillator (a line graph that moves between two extremes) and can have a reading from 0 to 100.

Relative Strength Index is currently at 39. (close to over sold zone)

This month's market statistics:

Index Open-2817.98 points **Index closed**-2656.96 points

Index High- 2882.32 points **Index low**- 2542.11 points

Pivot Points Standard:

A pivot point is a technical analysis indicator, or calculations, used to determine the overall trend of the market over different time frames. The pivot point itself is simply the average of the intraday high and low, and the closing price from the previous trading day. On the subsequent day, trading above the pivot point is thought to indicate ongoing bullish sentiment, while trading below the pivot point indicates bearish sentiment.

The pivot point is the basis for the indicator, but it also includes other support and resistance levels that are projected based on the pivot point calculation. All these levels help traders see where the price could experience support or resistance.

Support and resistance level for according to Pivot Point.

1st Resistance-2744.40 point **1st support**-2472.91 point

2nd Resistance-2905.29 point **2nd support**-2301.97 point

Current NEPSE index is 2625.13, which is below pivot level indicating bearish trend.

PERFORMANCE OF SCRIPTS DURING DOWNTREND IN STOCK MARKET

Introduction

Ideally, investing in fundamentally strong companies should provide a return at par or should exceed returns of the market. Nevertheless, a similar pattern could not be observed in the stock market of Nepal in recent times as a significant rise in prices of all types of companies could be observed. The market has acted erratically and prices of many companies reached new highs that were not expected nor could be explained in a rational manner.

However, during the recent downfall of the market which happened from late August, an empirical observation regarding the top losers could be made and a significant number of such companies were companies whose prices could not be supported by many factors including the financials and future prospects of the company. Thus, this study intends to go further and test statistically the hypothesis that in general that investments in financially sound companies were better off (safer) in comparison to other companies.

Scope

For the purposes of this study, the prices of all traded companies have been taken as on 19th August, 2021 (index at 3180.78) and on 17th October, 2021 (index at 2656.96).

Methodology

A list of all actively traded stocks as on 19th August, 2021 has been taken into consideration for the purpose of this study. Any new listings that occurred during 19/08/2021 to 17/10/2021 have not been taken into consideration while the prices have been adjusted for any book close for right shares or bonus shares. The study has taken into consideration a total of 183 scripts while mutual funds and other non-equity scripts have been excluded from this study. The study has used one-way ANOVA to test the hypothesis and has used PE Ratios, Book Value per Share and times of graham number as a basis for comparison between companies.

Data and Analysis

The index as on 17/08/2021 was 3,180.78 while the index on 17/10/2021 was 2,656.96, thus a fall of 532.82 index points can be observed which is ~16.46% fall from the starting date. However, a total of 115 companies (62.84%) have fallen at least as much or more than the market's fall. The price of Mountain Hydro Nepal Ltd. (MHNL) has fallen the most (by ~40.86%) during the assessment period and on the

contrary, Mahila Laghubitta Bittiya Sanstha Limited (MLBSL) has managed to rise by ~4.75% during the same period.

PE Ratios

The price to earnings ratio has been used as a ratio to determine whether a company is overpriced or underpriced in comparison to its statement of profit/loss and other comprehensive income (SPLOCI). However, it is necessary to understand that referring to only the bottom line of SPLOCI may not provide a complete and true picture of the company. For instance, finance with huge losses and non-performing loans can post a significantly high profit due to write backs which are reflected in the SPLOCI. Nevertheless, it is still an effective tool in general to identify overpriced and underpriced stocks. The stocks have been classified as having low, moderate and high PE Ratio and One-way ANOVA test run with the stocks. The results of the test are as follows:

Table 1: Descriptive statistics of the groups (PE Ratios)

Particulars	No. of Observations	Mean	Std. Deviation	95% Confidence Interval for Mean		Minimum	Maximum
				Lower Bound	Upper Bound		
Low	87	(15.97)	8.10	(17.70)	(14.25)	(32.71)	3.04
Moderate	27	(21.08)	11.05	(25.45)	(16.70)	(35.54)	4.75
High	69	(25.74)	8.57	(27.80)	(23.68)	(40.86)	(4.60)
Total	183	(20.41)	9.80	(21.84)	(18.98)	(40.86)	4.75

The P-Value of the ANOVA test is statistically significant at confidence level of both 95% and 99%. A comparison of the means indicates that there is a significant difference between the mean values of the three groups. The fall of the moderate and high groups exceeded the fall observed in NEPSE and was significantly more than the low PE ratio group. Nevertheless, the Minimum and Maximum ranges of the data indicate that the lowest values of the 3 groups were much more than the market fall. Hence, there are some instances were irrespective of the PE Ratio being high or low the fall has exceeded the market but in general the companies with lower PE have seemed to perform better than the market. Furthermore, in case of stocks with negative PE Ratios are categorized separately the mean of the Low Category is ~ (14.79%) and the mean of the stocks with negative PE is 22.68% which indicates that they do not provide

the adequate hedge against the market. The results in this instant were also statistically significant as stocks with a non-negative lower PE had better capabilities to withstand a downtrend.

Table 2: Post Hoc Test (PE Ratios)

(I) rank	(J) rank	Mean	Std. Error	Sig.	95% Confidence Interval	
					Difference (I-J)	Lower Bound
Low	Moderate	5.10	1.93	0.02	0.54	9.66
	High	9.76	1.41	0.00	6.43	13.10
Moderate	Low	(5.10)	1.93	0.02	(9.66)	(0.54)
	High	4.66	1.99	0.05	(0.04)	9.36
High	Low	(9.76)	1.41	0.00	(13.10)	(6.43)
	Moderate	(4.66)	1.99	0.05	(9.36)	0.04

In respect with the difference in mean values between the 3 groups the differences of between low PE group & High PE group and Low PE group and Moderate PE group are statistically significant at 95% confidence level.

Book Value per Share (BVPS)

The book value per share is considered to be another general indicator that represents the strength of the company. The company with a minimum of BVPS of 150 has been categorized in Group A and the rest in Group B. The result of the one-way ANOVA has been presented as follows:

Table 3: Descriptive statistics of the groups (BVPS)

Particulars	No. of Observations	Mean	Std. Deviation	95% Confidence Interval for Mean		Minimum	Maximum
				Lower Bound	Upper Bound		
Group A	76	(13.70)	8.24	(15.59)	(11.82)	(35.25)	4.75
Group B	107	(25.17)	7.87	(26.68)	(23.66)	(40.86)	(7.08)
Total	183	(20.41)	9.80	(21.84)	(18.98)	(40.86)	4.75

The mean Value of Group A was found to be significantly different from group B as the P Value indicated that the results were statistically significant at both 95% and 99% confidence level. The fall of Group A was significantly less than the market's fall and the fall observed in group B. Nevertheless, it is noteworthy that the minimum values for both cases are quite in proximity to one another in the extreme cases but in general companies with better BVPS had a better chance of standing out in case of any significant fall or market corrections.

Conclusion

A market downfall due to any reason is expected to affect the prices of all companies within an exchange but there may be some instances in which a particular sector may only be affected. Only 4 companies had a positive return despite a fall of ~16.46% during the assessment period. Nevertheless, in theory placing selection criteria of a company based on financial and fundamental criteria is expected to reduce risks associated with the company. In the case of this study, it was observed that stocks with PE Ratio below 45 and BVPS of at least 150 performed comparatively better than the market. Thus, during a market crash or downfall investors holding fundamentally sound companies would be at an advantage as it is more likely that their portfolios will not be severely impacted. Hence, while making long term investments financial analysis can be quite important and can reduce risk in investments.

WHAT TO KNOW BEFORE INVESTING

Given the current market scenario, it is very important for one to rethink about changing their investment portfolio. It is seen that most of the investors are making rapid investment decisions without thinking about the long-term financial goals. In a volatile market, it is hard to tell exactly how one should manage their investment, but consideration of some areas can make decisions easier.

1. Personal Financial Roadmap

First of all, sit down and take an honest look at your entire financial situation and your previous financial plans. It is very important to figure out your goals and risk tolerance. There is no guarantee that your every investment will make you money. But if you consider the facts and follow through an intelligent plan, your financial security is guaranteed over the years and you can enjoy the benefits of managing your money.

2. Comfort Zone in Risk-taking

It is known fact that no investment comes without risk. The potential of getting greater investment return is the reward of taking risk. If you have a financial goal with a long time horizon, you are likely to make more money by carefully investing in asset categories with greater risk, like stocks or bonds, rather than restricting your investments to assets with less risk, like cash equivalents. On the other hand, investing solely in cash investments may be appropriate for short-term financial goals. The principal concern for individuals investing in cash equivalents is inflation risk, which is the risk that inflation will outpace and erode returns over time.

3. Appropriate Mix of Investment

One shall always consider investing in diversified portfolio, whose investment returns move up and down under different market conditions. Market conditions that cause one asset category to do well often cause another asset category to have average or poor returns. By investing in more than one asset category, you'll reduce the risk that you'll lose money and your portfolio's overall investment returns will have a smoother ride. If one asset category's investment return falls, you'll be in a position to counteract your losses in that asset category with better investment returns in another asset category.

4. Emergency Fund

Uncertainty can happen anytime in a volatile market. To be a smart investor you must put or save enough money to cover any kind of emergency. Some of the smart investors make sure to have up to six months of their income to saving in order to use it during emergencies.

5. Pay off High Interest Rate Credit Card Debt

There is no investment strategy anywhere that pays off as well as, or with less risk than, merely paying off all high interest debt you may have. If you owe money on high interest credit cards, the wisest thing you can do under any market conditions is to pay off the balance in full as quickly as possible.

6. Cost Averaging

Cost Averaging is very important investment strategy. You can protect yourself from the risk of investing all of your money at the wrong time by following a consistent pattern of adding new money to your investment over a long period of time. By doing this, you can buy more of an investment when the price is low and less of investment when the price is high.

7. Rebalancing Portfolio

Rebalancing is bringing your portfolio back to your original asset allocation mix. By rebalancing, you'll ensure that your portfolio does not overemphasize one or more asset categories, and you'll return your portfolio to a comfortable level of risk.

8. Avoid frauds

Always take your time and talk to your trusted and experienced friends before making any investment. Some scam artists may use highly publicized news items and make their “opportunity” sound more legitimate. Therefore, it is really important to step back and take your time to make decision.

HYDROPOWER IN NEPAL

Nepal is gifted with a huge hydropower potential which remains untapped. There are 6000 rivers and rivulets, largest among them flow from the Tibetan region of China or originate in the Himalayan region. The steep gradients of the country's topography provide ideal conditions for developing hydroelectric projects. Average water runoff from these rivers is about 220 billion cubic meters annually. The major river basins are Sapta Koshi, Karnali, Sapta Gandaki, Mahakali, and the Southern rivers.

Nepal has nearly 83,000 MW theoretical potential of hydropower and at least 42,000 MW is technically and economically feasible. As of 2019, about 89% of the population has access to electricity but the supply is of poor quality and unreliable. Despite the increase in per capita electricity consumption from 63 kilowatt-hours (kWh) per annum in 2000 to 177 kWh per annum in 2018, it remains among the lowest in the world. Nepal's per capita electricity consumption is one-twentieth on the global average. Although Nepal's hydropower started with 0.5 MW plant in Pharping nearly 103 years ago which is also one of the earliest in Asia, at present it has installed capacity of 1,385 MW of electricity. The country's peak demand stands at 1,350 MW. Around 300 MW of power is currently being imported from India.

Nepal's prosperity is certainly dependent on the utilization of its hydro resources. Hydroelectricity is the only source of energy which has potential to fuel economic growth of the country. It can replace the expensive fossil fuels which the country is forced to import at expensive price. It can be a major green power exporter in the region. Hydropower avoids use of carbon-intensive energy sources such as coal, oil, and gas, and also helps integration of other intermittent renewable energy based power generation sources such as solar and wind power into the main grid, moving the economies toward a low-carbon development path. To explore the full potential of hydro resources, Nepal needs to attract foreign and private investments as well as markets for power sale.

Nepal is located between two largest countries in Asia: India and the People's Republic of China (PRC). These two countries are facing annual demand for electricity of about 5 million GWh. Bangladesh is facing growing energy demand and it is also energy-deficient. India, the PRC, and other neighboring Asian countries like Bangladesh could easily absorb any additional supply of electricity over and above the needs of Nepal, provided that appropriate transmission infrastructure is in place. Alongside, analysis of whether to export or consider environmental cost and risks of generating excess hydro power than required should be done.

Types of Hydroelectric Energy Plants

There are three different types of hydroelectric energy plants, the most common being an impoundment facility. In an impoundment facility, a dam is used to control the flow of water stored in a pool or reservoir. Water is collected or stored in dam at a higher elevation and led downward through large pipes or tunnels (penstocks) to a lower elevation, the difference in these two elevations is known as the head. When more energy is needed, water is released from the dam. As the water flows down through a pipe, or penstock, its kinetic energy turns the blades in a turbine to spin a generator to produce electricity. The generator converts the turbine's mechanical energy into electricity.

Another type of hydroelectric energy plant is a diversion facility. This type of plant is unique because it does not use a dam. Instead, it uses a series of canals to channel flowing river water toward the generator-powering turbines.

The third type of plant is called a pumped-storage facility. This plant collects the energy produced from solar, wind, and nuclear power and stores it for future use. The plant stores energy by pumping water uphill from a pool at a lower elevation to a reservoir located at a higher elevation. When there is high demand for electricity, water located in the higher pool is released. As this water flows back down to the lower reservoir, it turns a turbine to generate more electricity.

Hydropower Project Development in Nepal

Hydropower projects are developed on Build Own Operate and Transfer Model ("BOOT"). There are three modes of development of hydropower projects in Nepal.

- Mode 1 :Obtaining license pursuant to Section 3 of Electricity Act
- Mode 2 :Directly enter into an agreement with GON
- Mode 3 :Competitive bidding process

Generally, licensing regime in Nepal for hydropower follows two stage licensing process:

- investors need to obtain survey license for generation/ transmission/distribution of electricity (Survey license is issued to conduct the feasibility and environmental study of the hydropower project),

- if the project is found to be feasible technically, environmentally and financially, then relevant generation/ transmission/ distribution license is issued.

Separate licenses are required for- generation of electricity, transmission of electricity, and distribution/sale of electricity.

One may also generate, transmit or distribute the electricity upon conclusion of an agreement with the Government of Nepal pursuant to section 35 of Electricity Act. Section 35 grants government to develop hydropower project by concluding agreement. However, Electricity Act is not clear regarding its scope and use of rights guaranteed by the Section 35. In practice, the Government of Nepal calls for competitive bidding project and then approves the company, which operates the project subject to the terms and conditions of the agreement.

A company can acquire project through the competitive bidding process. Competitive bidding is applicable on following projects:

- Project studied by GON or institution owned by an entity of the Government of Nepal; and
- Projects which license are cancelled due to various reasons (a) non-completion of financial closure, (b) non-fulfillment of terms and condition prescribed by the license etc.

The government may call for those projects. Based on the notice application has to be submitted to the MoE via DOED. After review of the application, approval for the project is granted based on the competitive bidding.

The maximum license period for a hydropower project is 50 years. However, as matter of practice, the DOED grants generation license for only 35 years. Extension of the generation license is upon the discretion of the DOED. The Government of Nepal cannot nationalize the land, building, equipment and structure related to hydropower project during the licensing period.

Power generated from a project can be sold locally, or exported to a foreign country. Electricity can be sold by connecting to the national grid or independently without using the national grid.

In practice, NEA is the sole buyer of electricity since its inception. Electricity can be exported to a foreign country after entering into an export agreement with the Government of Nepal. Further, 100% foreign investment is allowed in the hydropower sector. However, as a matter of practice, hydropower projects have started to issue shares to local community and other general public.

After the expiry of license all the ownership of the project need to be transferred to Government of Nepal (GON). After the transfer developer may also operate the project by executing the agreement with GON.

Reference:

<https://www.adb.org/sites/default/files/publication/612641/hydropower-development-economic-growth-nepal.pdf>

<https://www.lawimperial.com/hydropower-project-development-in-nepal/>