

Stock Returns: Nepalese Investors' Reactions to News Coverage

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This study is motivated by the fact that investing in dissimilar financial markets may help risk reduction through global diversification. This study shows that the behavior of the Nepalese and the US stock markets are dissimilar. We analyze the effects of news in Nepal employing the descriptive and causal-comparative research designs and the content analysis (manual) approach. Based on the words and phrases used in newspaper headings, 'news' is classified into 'bad,' 'good' and 'informational.' Regression models are used to find relationship between news and stock returns. The study finds a negative effect of 'bad' news, a positive effect of 'good' news, and an inconsistent effect of 'informational' news on stock returns. 'Bad' news seems to impact market returns more strongly. This study contributes to the existent literature in three ways by providing: a comprehensive overview of the Nepalese stock market; an extensive literature review related to 'news;' and an insight on the behavior of Nepalese investors.

Keywords: behavioral finance, Nepal Stock Exchange (NEPSE), Nepalese investor, news factors, stock returns

INTRODUCTION

Investors tend to look for dissimilar financial markets around the world for risk reduction through global diversification. The history of the stock exchange in developed economies has almost half a century but it is still a novel practice in most of the developing and transitional economics including Nepal. It is the general understanding that the financial market regulators and the majority of the participating investors like to see the upward trend of the market and its sustainability. But, the nature of the market by itself regardless of ongoing FinTech innovations has created even more unpredictable than in the past. In Nepal Stock Exchange (NEPSE), the only stock exchange in Nepal, there are insufficient of scientific studies on the various issues about the market including the behavior of the market and the behavior of the investors. Likewise, the lack of implementation of the innovative financial market technologies and the practices along with awareness and educational programs have positioned the stock market in Nepal as still a new industry. This study shows that there are considerable differences in the behavior of the Nepalese stock market and the US stock market thereby offering such an opportunity for risk reduction for the investors who can invest in Nepal. Thus, this study has been motivated to take a closer look at the Nepalese stock market specially as there appears to be lack of information in the literature about the Nepalese stock market,

regulations and the market participants. Similarly, there appears to be a lack of information about Nepalese investors and their investment behavior.

Stock market movements largely replicate the tangible and intangible market information. Most people tend to overreact to unexpected and dramatic news events (Bondt and Thaler, 1985) and the trades are systematically correlated, that is, individuals buy (sell) stocks in concert (Kumar and Lee, 2006). Prices are influenced by investor overconfidence (Daniel and Titman, 2000) and investors are overly sensitive to intangible information when they need to make more subjective judgments (Sun and Wei, 2011). Market timing is an important aspect of real financing decisions (Baker and Wurgler, 2002) and there is correlation of asset returns with the overreaction of prices to news, price bubbles and expectations (De Long, et.al, 1990), the contribution of behavioral factors in stock returns (Einhorn, 1980) are some of the literatures through lights on the areas of the study that we focused. The very school of thought, the efficient market hypothesis keeps no room for investors to make extra money from the market but the sources, means and timing of transmission of financial information influence the securities prices for its every transaction where both the buyers and the sellers think that they are making their decisions. Further, the market has been suffering from the unforeseen and sudden economic turbulences that directly or indirectly influences the stock market returns in any stock market around the world.

From the fundamental and tangible effects on stock returns, the focus has been shifting into the behavioral effects and its influence on the stock returns since last few decades. Investors' personal profile and behavioral issues, the market movements and its behavior, news coverage and media effects, etc., are some areas of the intangibles those impact on the market prices. For example, Jegadeesh and Titman, (2001) suggest that a market responds only gradually to new information. Stock price reacts more to good news than to bad news (Xu, 2007). Maheu and McCurdy (2004) find that the normal news and unusual news events have different impacts on returns and expected volatility for individual stocks. Rendleman, et.al (1982) find that abnormal returns could have been earned almost any time. High media pessimism predicts downward pressure on market prices (Tetlock, 2007). Greater information uncertainty produces relatively higher expected return following good news and relatively lower expected returns following bad news (Zhang, 2006). With these evidences, events that come into the existence expectedly or unexpectedly have greater impact on the investor's mindset and plays crucial roles in investment decisions process, in sum, on investment performance.

In intangibles, the media coverage and news events influence the securities prices are at the top of the behavioral issues. The media coverage, public relations and other marketing activities could play an important causal role in creating and sustaining speculative bubbles and fads among investors (Merton, 1987). That news event influences the stock returns is recognized in the studies by Campbell and Hentschel (1992), Boyd, et.al (2005), Zhang (2006), and, Hirshleifer, et.al (2009) among others. The media are increasingly recognized as a key player in the financial markets and the media contribute to the efficiency of the stock market by improving the dissemination of information among investors and its incorporation into the stock prices (Peress, 2014).

The study of news coverage and stock returns has an important scope in the financial markets. The behavioral finance literature has paid much attention in intangibles in the recent years. Specially, intangible information as a means to identify market signals in an effort to achieve comparative financial advantages in the market. The insights from the analysis of news coverage and stock returns are useful to make informed investment decisions and to achieve short-run trading objectives in the market especially when the financial market is volatile. The volatility leads to the increase in trading volume and it could be due to various reasons such as; the effect of news coverage, political leadership, the effect of accounting information disclosure, the seasonality effect, the selective biases, etc. Thus, there is a need for extensive studies on news coverage and the stock returns. The study on news coverage and stock returns may be rewarding for both the academicians and for the practitioners. Therefore, in this study we provide an extensive literature review to identify the studies that analyze the effects of news. This literature review show there are many facets for study related to 'news' which would be impossible to cover in one study. Therefore, we focus on analyzing the effects of news coverage and the resulting Nepalese investor's reaction on the stock returns in Nepalese stock market.

As may be from the last sub-section in the 'Overview of the Nepalese stock market and participants' section, earlier studies relating to Nepal have been few and rather limited in scope. Neither the behavior of the Nepalese stock market, nor the behavior of the Nepalese investor has been studied earlier. Thus, this study expects to contribute to the existing literature by filling in this gap and highlighting the unique aspects. The study also provides a detailed introduction of the Nepalese stock market and its participants.

Since this study focuses on the effect of 'news,' We provide an extensive literature review to identify the studies that analyze the effects of news. This literature review show there are many facets for study related to 'news' which would be impossible to cover in one study.

Therefore, we focus on analyzing the effects of news coverage and the resulting Nepalese investor's reaction on stock returns in Nepalese stock market. Thus, the study analyzes whether there are any news effects on stock returns? What are the 'bad' news effects on stock prices? What are the 'good' news effects on stock prices? What are the 'informational' news effects on market prices? This study focuses on the relationship among the news headings, the resulting investors' behavior and the stock returns in the Nepalese stock market.

Thus, this study contributes to the existent literature in 3 ways: one, it provides a comprehensive overview of the Nepalese stock market and its working; two, it provides an extensive literature review as related to 'news;' and, three, it provides an insight into the investment behavior of Nepalese investors.

The rest of the paper is organized as follows: First, we provide a comprehensive overview of the Nepalese stock market and its participants. Second, we provide an extensive review of the major empirical studies as related to 'news' such as 'news and stock returns,' 'news and investor behavior,' etc. Third, we provide a discussion of the research design. Fourth, we discuss the results of the study. Finally, we provide a summary of the findings and conclusions of the study as well as some suggestions for further research.

OVERVIEW OF THE NEPALESE STOCK MARKET AND PARTICIPANTS

Historical Perspective

The inception of the capital market has been provided abundant investment opportunities for individuals and institutional investors in Nepal. The investment being the current sacrifice of spending for the future benefits and the capital formation is an essential macroeconomic parameter that enlarges the economic activities in the economy. The capital market acts as a mechanism that creates investment alternatives for the saving groups and long-term fund for individuals, institutions, and for the government.

The history of the capital market began in as early as seventeenth century with the establishment of Amsterdam Stock Exchange which being considered as the oldest stock exchange in the world starting in 1602 followed by Paris Bourse in 1724. The Bombay Stock Exchange, established in 1875, was a pioneer stock exchange in South Asia.

In 1936, Biratnagar Jute Mills Limited floated its first common stock in the country and is considered a relatively recent phenomenon in comparison to other stock markets in the world. While reviewing the world's capital market history it shows that the oldest existing stock certificate was issued in 1606 for a Dutch company (VOC - Vereenigde Oostindische Compagnie). But in Nepal, in 1937, the then Tejarath, was converted into Nepal Bank Limited which had later issued the first government bonds with 6 percent interest and 5 years of maturity period to collect the developmental expenditures for the government (Shrestha,1981).

The history of securities exchange in Nepal shows that the first amendment in Securities Exchange Act, 1983 in 1993 paved the way for restructuring of stock market which establish Securities Board of Nepal (SEBON) with a mandate to regulate and develop the stock market dynamic, credible, efficient and responsive. The Act also provides for the conversion of the then Securities Exchange Centre (SEC) into Nepal Stock Exchange (NEPSE), an open-outcry trading system with the introduction of stock brokers in January 13, 1994.

Currently, Nepal Stock Exchange is operating its trading floor with the fully-automated online trading system which was formally began on November 06, 2018. With the upgradation of the trading system in the stock exchange, more investors and the traders are now attracted in the area. Such speedy growth has

raised some new issues such as quality of financial services, the timeliness, reliability, educating participants with the new technologies, etc. The adoption of full-fledged online trading system has increased the trading volume along with increase in the number of active traders in the market. These practices would certainly add value on the sustainability of the market growth in Nepal.

The Table below shows an overview of NEPSE in last 10 years where most of the indicators are increasing gradually as the features of the growing market. During the period of last 10 years, Nepalese investors have experienced two peaks and falls in 2014 with index 1036.11 and in 2016 with the index 1718.15 respectively. Likewise, those years had the most trades in comparison with the listed number of stocks in the exchange which represent 14 percent and 13 percent of the listed stocks. Market capitalization doubled to 1057.16 billion in 2014 compare to earlier year similarly, it was nearly doubled in 2016 compare to the year 2015 in local currency. There is no significant growth in number of listed companies in the 10 years period, there were 209 listed companies by the end of fiscal year 2011 and 215 listed companies by the year 2019.

Comparing the major market activities with macro-economic indicator such as Gross Domestic Product (GDP), the ratio of trading amount to GDP constitutes close to 8 percent in high end in 2017, about 7 percent in 2016, similarly 4 percent and lower for the year 2018 and 2019 which indicates the growth of the stock market in Nepal does not equate as the growth of the GDP during these years. Likewise, the market capitalization represents the similar patterns in Nepal.

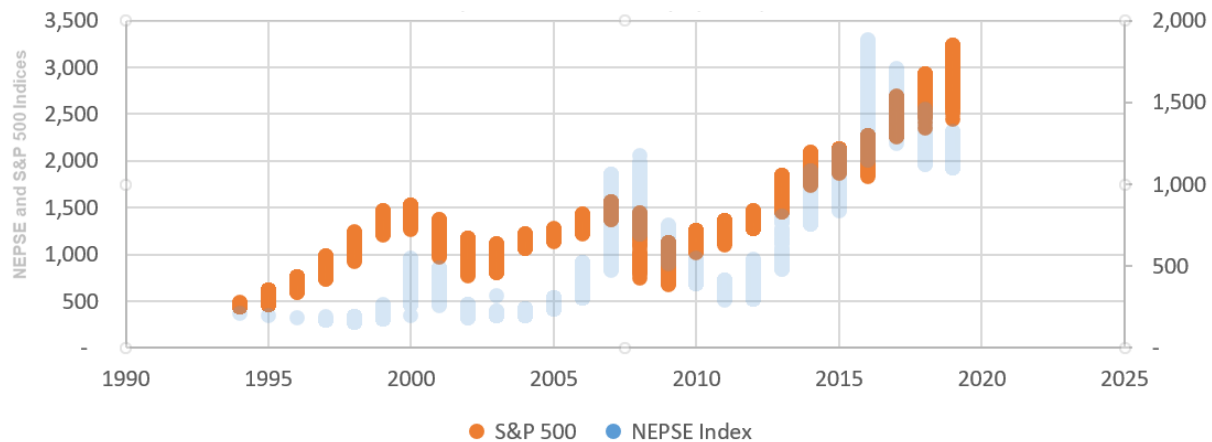
TABLE 1
SECONDARY MARKET TRENDS OF LAST 10 YEARS

Secondary Market Trends of last 10 years (As per Nepali Calendar Year)										
Particulars	2010-11	2011-12	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19
Trading Amount (Rs in billion)	6.67	10.39	21.53	77.29	65.33	65.33	163.96	204.79	121.3	110.07
No of shares traded ('000)	26,240	42,434	78,051	214,144	159,717	159,717	302,021	392,598	293,695	387,507
No of listed shares ('000)	1,033,674	1,291,009	1,530,202	1,614,978	2,553,109	1,631,525	2,105,437	2,965,884	3,598,745	4,206,602
Market capitalization (Rs billion)	323	368	514	1,057	989	989	1,890	1,857	1,435	1,568
Number of listed companies	209	216	230	232	235	232	230	208	196	215
Index	362.85	389.72	518	1036.11	961.23	961.23	1718.15	1582.67	1212.36	1259.02
Traded shares / listed shares (%)	2.54	3.29	5.1	13.25	6.26	9.79	14.34	13.24	8.16	9.21
Trading amount / market cap (%)	2.06	2.82	4.18	7.31	6.6	6.60	8.67	11.03	8.45	7.02
Trading amount / GDP (%)	0.48	0.65	1.3	4	3.07	3.07	7.29	7.88	4.03	3.18
Market capitalization / GDP (%)	23.49	23.41	30.24	54.81	46.57	46.57	84.04	71.44	47.72	45.25

Source: NEPSE Annual Report 2018/19

The graphical presentation below in Figure 1 presents the spread of both market indices for the period 1994 to 2019 for NEPSE where the first three years data are insufficient for the purpose and S&P 500 for the same period 1994 to 2019. The spikes represent the yearly spread of the indices. By observations, years 2007, 2008, and 2016 have the largest index spreads in NEPSE which are positive movements as they are above the previous year's marks. Inversely, the S&P 500 index in 2008 has the largest yearly index spread which was a negative movement corresponding to the financial crisis of 2008 in the US. The downturned pattern was continued during the year 2009 with the significant spread as seen in the graph followed by negative movements in 2001 and 2002. The US market was bottomed in 2009 and had started its bull run until 2019 where the yearly index spread indicates the higher high ended with the largest positive spread in 2019 followed by 2018. The decade starting 2009 has listed it's record as the most beautiful bull market in the US history.

FIGURE 1
GRAPHICAL PRESENTATION OF YEARLY RANGE OF NEPSE AND S&P 500 INDICES
(1994-2019: YEARLY SPREAD)



Source for NEPSE data: NEPSE annual & monthly reports 1994 to 2019
 Source for S&P 500 data: www.cboe.com/.../dailypricehistory.xls

In Nepal, the financial market swung upward and reached to its first the highest level in 2008 which was the time when the S&P 500 index was crashing with its historic free fall. But, starting 2009, NEPSE had also followed the bearish trend until bottomed down in the year 2011. This is the first instance where the global sell-off had not immediately impacted the Nepalese financial market especially Nepali stock investors' sentiments towards the global financial crisis was not reactive. In other words, consistent with the finding, stock price reacts more to good news than to bad news (Xu, 2007). The second instance in 2016 when the global market was in its wild ride towards its decade long bull run, the Nepalese stock market had started to fall out after reaching its peak index 1881.45 and started its bearish movements.

With these analyses, we could claim that the Nepalese stock market could be an alternative investment option for the some of the global investors as its investor's behavior seems different or they react the market information differently compare to the advance financial markets. This difference in behavior of the Nepalese stock market as compared to the S&P 500 can be of considerable interest to investors who look for dissimilar financial markets, especially if the market index exhibits different return patterns, around the world since the same would help in risk reduction through the global diversification. Table 2 shows the basic comparison of NEPSE and S&P 500 for the period 1994 to 2019 with its yearly minimum, maximum, average indices, and its yearly range in terms of the proportion of average yearly index.

TABLE 2
SECONDARY MARKET INDICES COMPARISON WITH VOLATILITY

Year	NEPSE INDEX				S&P 500 Index				Volatility
	Min.Index	Max.Index	Average Index	Range in % on Ave.Index	Min.Index	Max.Index	Average Index	Range in % on Ave.Index	
1994	209.41	209.41	209.41	0%	438.92	482.00	460.10	4%	Ignored, Insufficient Data
1995	195.48	195.48	195.48	0%	459.11	621.69	541.72	13%	Ignored, Insufficient Data
1996	185.61	185.61	185.61	0%	598.48	757.03	670.49	10%	Ignored, Insufficient Data
1997	168.49	192.50	171.25	1%	737.01	983.79	873.43	14%	S&P500>NEPSE
1998	156.43	193.45	170.53	7%	927.69	1241.81	1085.50	13%	S&P500>NEPSE
1999	176.49	262.52	216.28	15%	1212.19	1469.25	1327.33	8%	NEPSE>S&P500
2000	196.98	545.82	374.63	33%	1264.74	1527.46	1427.22	11%	NEPSE>S&P500
2001	261.37	487.26	344.17	17%	965.80	1373.73	1194.18	17%	Equal
2002	186.22	266.28	224.93	15%	776.76	1172.51	993.94	19%	S&P500>NEPSE
2003	198.44	317.39	207.70	3%	800.73	1111.92	965.23	15%	S&P500>NEPSE
2004	195.14	241.63	219.91	10%	1063.23	1213.55	1130.65	6%	NEPSE>S&P500
2005	234.93	308.67	284.72	16%	1137.50	1272.74	1207.23	5%	NEPSE>S&P500
2006	303.26	520.96	382.41	15%	1223.69	1427.09	1310.46	6%	NEPSE>S&P500
2007	476.07	1064.09	672.67	18%	1374.12	1565.15	1477.19	7%	NEPSE>S&P500
2008	695.50	1175.38	866.35	15%	752.44	1447.16	1220.04	32%	S&P500>NEPSE
2009	517.45	749.10	647.16	17%	676.53	1127.78	948.05	24%	S&P500>NEPSE
2010	390.97	546.96	452.05	11%	1022.58	1259.78	1139.97	9%	NEPSE>S&P500
2011	292.31	413.75	352.23	14%	1099.23	1363.61	1267.64	12%	NEPSE>S&P500
2012	298.90	540.91	389.00	17%	1277.06	1465.77	1379.35	7%	NEPSE>S&P500
2013	481.88	806.82	549.11	8%	1457.15	1848.36	1643.80	10%	S&P500>NEPSE
2014	754.37	1083.55	882.12	12%	1741.89	2090.57	1931.38	9%	NEPSE>S&P500
2015	837.83	1205.84	1028.64	16%	1867.61	2130.82	2061.07	9%	NEPSE>S&P500
2016	1146.77	1881.45	1540.36	21%	1829.08	2271.72	2096.89	12%	NEPSE>S&P500
2017	1252.50	1709.82	1531.40	16%	2257.83	2690.16	2449.08	7%	NEPSE>S&P500
2018	1118.13	1456.07	1260.27	10%	2351.10	2930.75	2746.21	13%	S&P500>NEPSE
2019	1100.58	1321.00	1193.53	7%	2447.89	3240.02	2913.36	14%	S&P500>NEPSE

Source for NEPSE data: NEPSE annual & monthly reports 1994 to 2019

Source for S&P 500 data: www.cboe.com/.../dailypricehistory.xls

Regulations

We have ignored the analysis of year 1994 to 1996 as those are the first 3 years of NEPSE's operation in Nepal and the daily index data are not publicly available, we only have year-end index for those years. If we follow the range analysis which as a method of identify the volatility in the simple terms, NEPSE is considered as more volatile than S&P 500 with 13 years of higher yearly index range percentile over the yearly average index whereas S&P 500 has 9 years and interestingly the year 2001 has the same level of volatility in both markets based on the assumptions of this analysis.

The Muluki Ain 1853 was the first codified law of Nepal which later repealed by the existing Muluki Ain, 1963 whereas the Company Act, 1936 was the first company law came into existence in Nepal under Ranas Regime and the Company Act, 2006 is the prevailing commercial law in Nepal. Table 3 below provides a complete list of prevailing major securities laws, regulations, and bylaws with regards to buying and selling of securities in Nepal.

TABLE 3
PREVAILING NEPALESE LAWS, REGULATIONS, GUIDELINES AND BYLAWS

Title	Type
Asset (Money) Laundering Prevention Act, 2008	Act
Securities Act, 2063 (2006)	Act
Commodities Act, 2074	Act
Securities listing and Trading Regulation, 2075	Regulations
Commodities Exchange Market Rules, 2074	Regulations
Credit Rating Regulation, 2068	Regulations
Central Depository Service Regulation, 2067 (2010)	Regulations
Mutual Fund Regulation, 2067	Regulations
Securities Registration and Issue Regulation, 2073	Regulations
Securities Businessperson (Merchant Banker) Regulation, 2064	Regulations
Securities Businessperson (Stock Broker, Dealer & Market Maker) Regulation, 2064	Regulations
Stock Exchange Operation Regulation, 2064	Regulations
Securities Board Regulation, 2064	Regulations
Specialized Investment Fund Regulation, 2019	Regulations
Securities' Central Depository Services Byelaws, 2012	Bylaws
Secondary Market Trade Operation of Government Debenture Bylaws, 2005	Bylaws
Securities Transaction Clearing and Settlement Bylaws, 2013	Bylaws
Securities Enlistment Bylaws, 2018	Bylaws
Securities Trading Bylaws, 2018	Bylaws

Source: <http://sebon.gov.np/uploads/uploads/UUqlgCkxhAnGbqkZMirCcGEdtFnx4KBmNeQqdicw.pdf>

Source: <http://www.sebon.gov.np/legal>

Nepal's Population and the Sub-Set of Investors

There are 28.609 million (estimated by 2020) as per United Nations projected the total population - both sexes live in Nepal with 0.98 percent (estimated) growth rate as per The World Factbook. There are estimated 20.6 percent urban population with the overall life expectancy of 71.8 years and overall 67.9 percent literacy rate. The country has per capita income of \$2700 (estimated 2017) and 7.9 percent estimated GDP growth in 2017. Agriculture is the main source of income for majority of the people living in the country constitute more than 70 percent of the population depends on agriculture with 25 percent living below the poverty line. Agriculture contributes 27 percent in GDP, industry contribute 13.5% and the service sector's contribution 59.5 percentage. The country has a huge potential for hydropower. In recent years, the financial market has decentralized its services to some of the major cities beyond the capital of the country which is considered a positive indication that more investors will participate in the saving and investment mechanism through the capital market mechanism in Nepal in the day to come. NEPSE had open its trading floor in 1994 with 27 stock brokers and practiced the open-outcry trading system. But the semi-automated trading system was introduced in 2007 by increasing the number of stock brokers to 50 in counts. All brokers had started their operations in the capital city of the country. In 2010, the Central Depository System and Clearing (CDSC) limited was established aiming to launch fully automated online trading (AOT) system which was estimated to go live by 2016 but launched in 2018. Due to the lack of reliable online trading system and the prevailing regulatory provisions, the foreign investors including Non-resident Nepalese are not able to invest sufficiently into the Nepalese capital market. But, out of the existing

232 listed companies 15 banking institutions are joint ventured with foreign companies. As, if and when the Nepalese stock market is opened up, this could lead to many more opportunities for investors, domestic and foreign, as it was in the case of neighboring India (see Shollapur et al, 2012).

Nepal's Financial Services

The Banking and Financial Institutions (BFI) sector has played a key role in increasing the growth of Nepal's services sector. The BFI sector has rapidly expanded due to the gradual liberalization policies since the mid-1980s, continuing during the 1990s and thereafter in the financial sector as well as inflow of remittances. There are 28 commercial banks with 7 being joint venture banks which shows the trust among foreign investors on Nepal's institutional and policy framework. There are also 36 development banks, 25 finance companies and 63 micro-credit institutions. BFIs are licensed and regulated by Nepal Rastra Bank, the central bank of Nepal. The current government has put a heavy emphasis on achieving double-digit growth which will need increased investments in large infrastructure and energy projects. However, the domestic BFI sector is limited to medium and small projects and not in a position to marshal the financial resources required to develop the infrastructure sector. Moreover, the Banks and Financial Institutions Act (BAFIA), 2017 has provisioned for and encouraged establishment of Infrastructure Development Banks (IDB) that have minimum paid up capital of 20 billion rupees and foreign ownership of up to 85%. This presents a massive opportunity for the investors in the BFI sector who can use their technical expertise and know-how to tap the Nepali financial market. Furthermore, increasing disposable income of people, high saving and investment gap in the country, low insurance penetration rate and the need to catch up with respect to access to modern financial system provides a lucrative base for investment in the BFI sector. (Source: <https://ibn.gov.np/opportunities/sectors/banking-and-finance/>)

There were 32 licensed stock brokers issued in the beginning but only 27 brokers were in operation. Later 23 additional stock brokers were licensed to make total of 50 active stock brokers in the capital market in Nepal. Table 4 below shows the location-wise distribution of brokers' offices. Half of the brokers' offices are located in Kathmandu valley and these are the main broker offices. The second biggest city, Biratnagar, has 5 broker's branch offices similarly Birgunj and Butwal have 5 brokers' offices as well. The third major city, Pokhara, has 7 branch offices are operating. The distribution of the broker offices gives some indications that Nepalese investors are no more concentrated in the capital city of the country but they are diversified and new investors are also investing in the stock market.

TABLE 4
STOCKBROKER OFFICE LOCATIONS IN NEPAL

Location	No of Broker's Offices	Percent
Baglung	1	1.1%
Banepa	3	3.2%
Besisahar	1	1.1%
Bhairawa	1	1.1%
Biratnagar	5	5.3%
Birgunj	5	5.3%
Butwal	5	5.3%
Dhangadi	1	1.1%
Dharan	3	3.2%
Hetauda	2	2.1%

Location	No of Broker's Offices	Percent
Itahari	3	3.2%
Janakpuar	1	1.1%
Jhapa	3	3.2%
Lalitpur	1	1.1%
Narayanghat	2	2.1%
Nepalganj	2	2.1%
Pokhara	7	7.4%
Surkhet	1	1.1%
Kathmandu	47	50.0%
Grand Total	94	100.0%

Source: <https://www.sharesansar.com/broker-list>

Currently, there are 31 licensed merchant bankers in Nepal. Like as the centralization of stock brokers in Kathmandu, all merchant bankers are also located in the Kathmandu valley. The license of the merchant bankers is evaluated based on their scope time and again.

Sources of News for the Investors

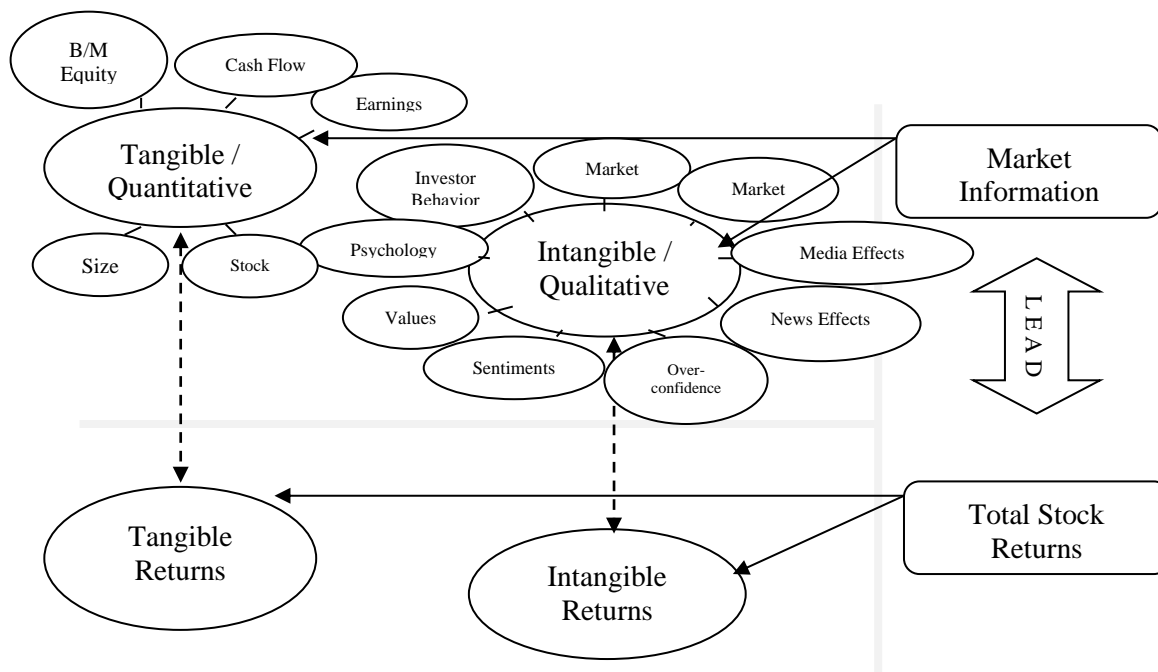
As per Ministry of Information and Communication Technology of Nepal, there are 116 television broadcasting licenses issued and 740 FM radios are operating in Nepal. Total 12 telecommunication licenses are issued, similarly, 12 internet service providers are licenses for the business. Accordingly, to Wikipedia, as of 2003, 251 daily newspapers including local and national level out of 3741 registered newspapers were in Nepal and most of the major media are operating their business as of today. Moreover, there are numerous online news providers are doing their business as well.

We picked the most reliable media house, Kantipur, which is considered the most reliable media in Nepal from its inception. This could be because the Kantipur Group has solely focused on media industry since long. They own Kantipur TV, FM and have been publishing the newspaper for a long time. The specific reason for selecting the Kantipur newspaper as the main source for “news” for this study is based on the news published in the physical newspapers which were available in Kantipur Publication’s library and all the news headings for the study were collected from there. Secondly, the “Kantipur” daily newspaper had started its publication on Thursday, February 18, 1993 which prior to the establishment of NEPSE which was on Thursday, January 13, 1994.

Conceptual Framework for the Investors

Market information influences the valuations models significantly time and again. The market information is then considered as one of the important factors that incorporates many things at the same time and influences the securities prices regularly. The figure 2 exhibit the conceptual framework of the market information and the stock returns. The relationship of the tangibles and intangibles variables with returns is presented along with its interacting components.

FIGURE 2
CONCEPTUAL FRAMEWORKS OF MARKET INFORMATION AND STOCK RETURNS
(THE SPECIFIC PERSPECTIVES)



The tangibles are the quantifiable variables such as book-to-market equity, cash flow, earnings, size or the number of common stock outstanding, lagged stock returns, etc. and contribute for the tangible stock returns. Secondly, the qualitative, the intangible variables generate the intangible information which contributes for intangible returns. The aggregate of tangible returns and the intangible returns constitutes the overall market returns. The components of intangible include behavioral issues such as social and individual values, individual and group psychology, sentiments, overconfidence, overreactions and underreactions, news effects (events), media effects, market reactions, market behaviors, investors behavior, etc. These components contribute for the part of the market information that is uncovered by the tangible components. The direct relationship between the tangible information and tangible returns and the intangible information and intangible returns is conceptualized within a closed system.

**FIGURE 3
CONCEPTUAL FRAMEWORKS OF MARKET NEWS AND STOCK RETURNS**

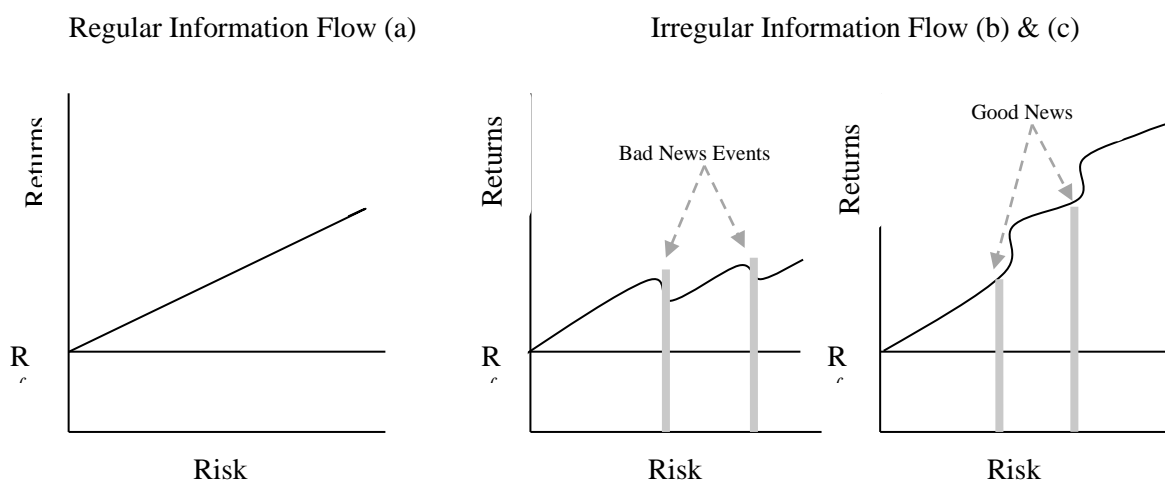


FIGURE 3.1 NORMAL

FIGURE 3.2 BAD

FIGURE 3.3 GOOD

Earlier Studies of the Risk-Return Relationship and News Related to the Nepalese Stock Market

Further, the most popular traditional relationship between risk and returns can be explained by the risk-return trade-off principles. With the same notion, when the news effect is incorporated with this primitive approach, it can be described as: regular information flow in Figure 3.1 and its effect on risk and returns, and irregular information flow and its effect on risk and returns is presented in Figure 3.2 and Figure 3.3 respectively. The relationship between news events, risk and returns are presented above. The traditional risk-returns trade-off describes the positive relation between risk and return i.e., as risk increases, returns also increases and vis-à-vis. When introducing the news effects, assuming that risk is constant, bad news serve as a negative stimulus to the market so as the market perceive it negatively whereas good news contributes as a positive stimulus to the market so as the market takes it as positively. Therefore, the conceptual relationship between risk and returns with news events determine that bad news leads the negative movements in the market and inversely - the good news leads the market growth.

The contributions of the major studies on the market information and stock returns in the Nepalese financial market are: Pradhan (1993) finds that there is a positive relation between stock returns and the size of the company whereas there is an inverse relation between the stock returns and market-to-book value. Pradhan and Balampaki (2004) suggest that stock returns are positively related with earning yield and size, whereas negatively related to book-to-market ratio and cash flow yields. Book-to-market value was found to be more informative. Baskota (2007) found that there is no persistence of volatility in Nepalese stock market and the stock price movements are not explained by the macro-economic variables. Prasai

(2010) study documented a significant positive relationship between size and stock returns and a significant negative relationship between book to market equity and stock returns. Kadariya (2012) has suggested that the capital structure and average pricing method is one factor that influence the investment decisions, the next is political and media coverage, the third factor is belief on luck and the financial education, and finally the fourth component for stock market movement is trend analysis in Nepal. Kadariya, et.al. (2012) in the study of investors awareness has depicted that equity investors are relatively aware in Nepalese stock market, there is a positive relationship between awareness level and the level of assets holding, but there are problems in accessing market information for equity investors in secondary market.

As can be seen from the above, earlier studies relating to Nepal have been few and rather limited in scope. Neither the behavior of the Nepalese stock market, nor the behavior of the Nepalese investor has been studied earlier.

LITERATURE REVIEW: REVIEW OF MAJOR EMPIRICAL STUDIES

This section provides a review of major empirical studies which relate to the news effect and stock returns. The studies are categorized based on their qualitative and quantitative nature and based on their similarities.

Review of Major Studies on Stock Returns and News

A review of some of the major studies on stock returns and news suggests that market prices move up and down based on information which in turn may impact on the stock returns. Merton (1987) suggests that media coverage, public relations and other investor marketing activities could play an important causal role in creating and sustaining speculative bubbles and fads among investors. However, Gutierrez and Kelley (2008) find that there is no relation between news uncertainty and the momentum in 1-week returns.

Review of Major Studies on Investor Behavior and News

A heated issue in financial literature is the behavioral effects of news on stock returns. As can be seen, financial literature suggests that there are numerous qualitative factors that contribute for stock market movements. While quantitative factors that can be measured, their significance is questionable because of historic nature. Behavioral factors, on the other hand, may significantly influence the stock movements, although it is very difficult to articulate the level of their influences. Bondt and Thaler (1985) suggest that most people tend to 'overreact' to unexpected and dramatic news events. Klibanoff, et.al (1998) find that in weeks with news appearing on the front page of The New York Times, prices react much more thus concludes news events lead some investors to react more quickly. However, Hong, et.al (2000) found that firm-specific information, especially negative information, diffuses only gradually across the investing public. Chan (2003) suggest that Investors are appeared to underreact to public signals and overreact to perceived private signals. For instance, Investors tend to react slowly to the bad news information. Huang and Liu (2007) find that rational inattention to important news may make investors over- or underinvest. An investor with a higher risk aversion or a longer investment horizon chooses less frequent but more accurate periodic news updates. The Barber and Odean (2008) study suggest that individual investors display attention-driven buying behavior, they are net buyers on high-volume days, following both extremely negative and extremely positive one-day returns, and when stocks are in the news. On the other hand, the institutional investors - especially the value-strategy investors - do not display attention-driven buying. Sun and Wei (2011) find that investors are overly sensitive to intangible information when they need to make more subjective judgments.

Review of Major Studies on Market Behavior and News

Market behavior comprises of topics such as market predictability, investing in a certain day in a week or the weekly cycle, the seasonal patterns, market reversal, etc. Long, et.al (1989) find that there is a significant amount of volatility in stock prices that cannot easily be explained by changes in fundamentals. One interpretation is that asset prices respond not only to news but also to irrational noise trading. De Long,

et al (1990) find a correlation of asset returns with the overreaction of prices to news, price bubbles, and expectations. Ikenberry, et al. (1995) suggest that the market responds mistakenly in initial phase of information and appeared to ignore much of the information conveyed through repurchase announcement. Conrad, et.al (2002) find that stock price response to negative earnings surprises increases as the relative level of the market rises. Furthermore, the difference between bad news and good news earnings response coefficients rises with the market. Xu (2007) find that stock prices react more to good news than to bad news. Foucault, et.al (2015) suggest that stocks with more informative news are more liquid even though they attract more activity from informed high frequency traders.

Review of Major Studies Related to Media Effects

Media coverage has a number of aspects such as public relations, media optimism and pessimism, high and low media coverage and stock returns, etc. The number of news stories and market activities might not be associated even though news events like: dividends disclosure, bonus and right announcements, financial disclosure, etc. have an effect on stock returns. The Peress (2014) study suggests that the media are increasingly recognized as key players in financial markets. Analysis of return predictability indicates that newspapers propagate news from the previous day. The media contribute to the efficiency of the stock market by improving the dissemination of information among investors and its incorporation into stock prices. Fang and Peress (2009) find that high-media coverage stocks earn lower returns. Solomon (2012) suggests that investor relations firms 'spin' their clients' news, generating more media coverage of positive press releases than negative press releases. Tetlock (2007) find that high media pessimism predicts downward pressure on market prices. The Bagnoli and Khanna (1992) study finds that in contrast to standard signaling models, an action is good news for some firms and bad news for others, depending on observable characteristics of the firm, its managers, and their compensation plans. Campbell and Hentschel (1992) suggest that much of the variance of stock is in fact due to other changes in expected excess returns, and not to news about future dividends. Hirshleifer, et.al (2009) find industry-unrelated news and large earnings surprises have a stronger distracting effect. Ammer and Mei (1996) find news about future dividend growth to be more highly correlated between countries than contemporaneous output measures. This suggests that there are lags in the international transmission of economic shocks. Boyd, et.al (2005) find that an announcement of rising unemployment is good news for stocks during economic expansions and bad news during economic contractions.

The study by Jegadeesh and Titman (2001) finds that a market responds only gradually to new information. Maheu and McCurdy (2004) find that normal news and unusual news events have different impacts on returns and expected volatility for individual stocks. (Daley and Green (2015) suggest that in normal times, the market is fully liquid and gains from trade are realized immediately. However, the equilibrium also involves periods during which liquidity dries up that reduces investors' willingness to pay. Also, the study predicts that contagious sell-offs can occur after sufficiently bad news.

Tetlock, et.al (2008) find the fraction of negative words in firm-specific news stories forecasts low firm earnings; firms' stock prices briefly underreact to the information embedded in negative words; and the earnings and return predictability from negative words is largest for the stories that focus on fundamentals. The Epstein and Schneider (2008) study suggests that when ambiguity-averse investors process news of uncertain quality, they act as if they take a worst-case assessment of quality. As a result, they react more strongly to bad news than to good news. Moreover, shocks to information quality can have persistent negative effects on prices even if fundamentals do not change.

The observed relation between news and market activity is not particularly strong and the patterns in news announcements do not explain the day-of-the-week seasonalities in market activity and confirms the difficulty of linking volume and volatility to observed measures of information (Mitchell and Mulherin, 1994). Positive-feedback strategies increase the volatility of stock returns, and the response of stock prices to dividend news. Conversely, the presence of negative-feedback traders makes stock returns less volatile, and prices less responsive to dividends news (Balduzzi, et.al, 1995). Goh and Ederington (1993) find that downgrades associated with deteriorating financial prospects convey new negative information to the capital market, but that downgrades due to changes in firms' leverage do not.

Zhang (2006) finds greater information uncertainty produce relatively higher expected returns following good news and relatively lower expected returns following bad news. McQueen, et.al (1996) find a slow response by some small stocks to good, but not to bad, common news.

At the local level, Ivković and Weisbenner (2005) suggest that households exhibit a strong preference for local investments. Engelberg and Parsons (2011) find that the presence or absence of local media coverage is strongly related to the probability and magnitude of local trading. Gurun and Butler (2012) find that when local media report news about local companies, they use fewer negative words compared to the same media reporting about nonlocal companies.

Studies Related to Investors Overconfidence and News

During 1987 to 2004, the significant numbers of studies related to investor overconfidence and suggested various hypotheses such as the overreaction hypothesis, earnings hypothesis, overreaction and decision making, overreaction and trading volume, etc.

A few are news related such as the Hong and Stein (1999) which suggests that each news watcher observes some private information, but failed to extract other news watchers' information from prices. If information diffuses gradually across the population, prices underreact in the short run but they can only implement simple strategies, their attempts at arbitrage must inevitably lead to overreaction at long horizons. Jiang, et.al. (2004) find that high information uncertainty exacerbates investor overconfidence and limits rational arbitrage.

Studies Related to Market Predictions

A few studies relate news and market prediction. For example, short-term momentum and long-term reversals are largely separate phenomena, which presents a challenge to current theory that models these aspects of security returns as integrated components of the market's response to news (George and Hwang, 2004). Garcia (2013) find that controlling for other well-known time-series patterns, the predictability of stock returns using news' content is concentrated in recessions. Cohen and Frazzini (2008) suggest that stock prices do not incorporate news involving related firms, generating predictable subsequent price moves.

Major Studies Related to News and Events

Events may be macro or micro in nature but both can generate news that may impact stock returns. For example, at the macro level, Edrington and Lee (1993) find that scheduled macroeconomic news announcements are responsible for most of the observed time-of-day and day-of-the-week volatility patterns in these markets. While the bulk of the price adjustment to a major announcement occurs within the first minute, volatility remains substantially higher than normal for roughly fifteen minutes and slightly elevated for several hours. Lee, et.al (1994) find that the extent of media coverage is a partial determinant of volume and volatility following both halts and pseudo-halts, but a separate halt effect remains after controlling for the media effect. Christie, et.al (2002) suggest that increased information transmission during the halt results in reduced post-halt uncertainty.

Bomfim (2003) find that stock market tends to be relatively quiet on days preceding regularly scheduled policy announcements. The study by Green (2004) suggests that a significant increase in the informational role of trading following economic announcements, which further suggests the release of public information increases the level of information asymmetry in the government bond market. Interestingly, bond price reaction to announcements of large dividend changes is opposite to the stock price reaction (Dhillon and Johnson, 1994).

At the micro level, Fidrmuc, et.al (2006) find that it is important to adjust for news released before directors' trades. In particular, trades preceded by news on mergers and acquisitions and CEO replacements contain significantly less information. Sarkar and Schwartz (2009) find that consistent with asymmetric information, trading is more one-sided before merger news. Consistent with belief heterogeneity, trading is more two-sided before earnings and macro announcements with greater dispersion in analyst forecasts, and after news with larger announcement surprises. The Ahern, et.al. (2014) study suggests bidders in stock

mergers originate substantially more news stories after the start of merger negotiations, but before the public announcement. This strategy generates a short-lived run-up in bidders' stock prices during the period when the stock exchange ratio is determined, which substantially impacts the takeover price. The timing and content of financial media coverage may be biased by firms seeking to manipulate their stock price.

There are several other macro level events and news thereof studies which are of note. For example, Nanda (1991) finds that the announcement of the sale of equity in a wholly owned subsidiary of a corporation is received by the market as good news about the value of the existing equity in the parent corporation. Grullon and Michaely (2004) find that announcements of open-market share repurchase programs are not followed by an increase in operating performance. However, investors underreact to repurchase announcements because they initially underestimate the decline in cost of capital. Frazzini, A. (2006) suggest that post-announcement price drift is most severe whenever capital gains and the news event have the same sign. The magnitude of the drift depends on the capital gains (losses) experienced by the stock holders on the event date. Dawkins and Bamber (1998) find that most of the market reaction does not occur on the bankruptcy petition filing date when the information becomes publicly available. Rather, most of the reaction occurs when news of the bankruptcy filing is more widely disseminated via the Broadtape, called 'broadtape announcement effect'. Hotchkiss and Strickland (2003) suggest that the composition of institutional shareholders effects stock price behavior around the release of corporate information. Yermack (1997) find that the timing of awards coincides with favorable movements in company stock prices.

Beyond the numerous studies in the Western economy, limited studies have been conducted in Nepalese stock market as discussed earlier. Thus, specially, in Nepalese context, this study on news coverage and stock returns is a new area of research.

RESEARCH DESIGN

This study uses the descriptive research design in a fact-finding operation to search for adequate information, and to ascertain and be able to describe the characteristics of the variables of interest. The causal-comparative research is employed to analyze the relationship between the variables in the study. Secondary data is used to validate the relationship between news coverage and stock returns.

The analysis is carried out on daily file of NEPSE for the period 1994 to 2010. The annual database constitutes the period July 16th to July 15th as per the Nepali fiscal year. The secondary data are collected from the NEPSE database. Total 1683 news headings related to Nepalese stock exchange are collected for the period January 13, 1994 to July 15, 2010 equivalent to 6029 days. The news headings are collected from the newspapers (manually) from the library of Kantipur Publications, publisher of national daily "Kantipur" newspaper. The selection of the "Kantipur" daily newspaper is because of its publication started (Thursday, February 18, 1993) prior to the establishment of NEPSE (Thursday, January 13, 1994).

The approaches used to analyze the total news headings are similar to Lee, et.al (1994) and Tetlock (2007). The news headings are categorized into (i) bad news, (ii) good news and (iii) informational (only) news without using any software, all news classifications are done manually. The categorization of news heading is based on the content analysis approach as suggested by Dorner (2005). Based on the words and phrases used in the news heading, the news is categorized.

With regards to market data - annual, monthly and daily NEPSE indices are collected from NEPSE and SEBON publications for the period July 15, 1994 to July 15, 2010 based on the availability of the published materials. The annual average index starting from July 16th and ending at July 15th each year from 1994 to 2010 is used to measure the market rate of returns.

To analyze the relationship between news coverage and market returns, 'News' effects, one of the intangible information, are classified into bad news, good news and informational news. These three news categories and stock returns are the variables used in the study.

Descriptive statistics, regression analysis, Kolmogorov-Smirnov test, the test of significance of econometric models using t-tests, and f-tests are the major analysis tools for the secondary data analysis.

Regression equations are designed to analyze the relationship between stock returns and the news coverage. The description of the dependent and independent variables in regression equations are presented

below. Regression models (1.1 and 1.2) are formulated to analyze the independent effect of news coverage on stock returns.

Model 1:

$$r_{m_ave} = \alpha + b_0 bX_t + b_1 gX_t + b_2 iX_t + u_i \quad (1.1)$$

$$r_{m_midJul} = \alpha + b_0 bX_t + b_1 gX_t + b_2 iX_t + u_i \quad (1.2)$$

Expected sign (-) (+) (+)

here,

r_{m_ave} = average market returns

bX_t = bad news counts

gX_t = good news counts

iX_t = informational news counts

r_{m_midJul} = end period market returns

u_t = random terms

The dependent variable in equation 1.1 is the average market rate of returns which is calculated based on the annual, monthly and daily NEPSE indices. The mid-July market rate of returns is the dependent variable in equation 1.2. The news effects are also analyzed by annually, monthly and daily basis on market returns. The priori sign for both equations are: negative, positive, and positive for bad news, good news, and informational news respectively.

In the analysis of the study the news effects on stock returns, the published news headings in a daily newspaper (Kantipur) are assumed as the representative of all sources similar to the idea suggested by Klibanoff, et.al (1998) and Chan (2003). It does not consider the news, if any, in other newspapers. Total news headings for the study periods are classified into three categories i.e., bad news, good news, and informational news based on the news heading's content analysis approach but excludes the reading of whole article. Thus, the dual interpretable news headings might mislead the categorization so that such kinds of limitations are essential to consider while interpreting the results.

RESULTS

The results of the secondary data analysis are presented in a specific order: the profile analysis, descriptive statistics, regression analysis, news effect analysis for market returns, and, an extended analysis of news and stock returns: the graphical presentation.

As mentioned earlier, the news for the study is obtained based on the newspaper headings of the national daily "Kantipur." A classification of the news is made as 'bad' news, 'good' news and 'informational' news as per the content analysis approach. Over the study period covering 6029 days, i.e., during 16 years, news headings related to the stock market result in 1683 headings. A classification of these news items results in 536 'bad' news, 734 'good' news and 413 'informational' news items.

The Table 5 presents the number of observations of NEPSE Index per year (N), the minimum, average and maximum index value of the year during the period 1994-2015.

TABLE 5
NEPSE INDEX – DESCRIPTIVE STATISTICS

Year	N	Min	Average	Max	Year	N	Min	Average	Max
1994	1	209.41	209.41	209.41	2005	235	234.93	284.64	308.67
1995	1	195.48	195.48	195.48	2006	224	303.26	382.41	520.96
1996	1	185.61	185.61	185.61	2007	233	476.07	672.14	1064.09
1997	108	168.49	171.25	192.50	2008	226	695.50	866.35	1175.38
1998	193	156.43	170.53	193.45	2009	234	517.45	647.16	749.10
1999	235	176.49	216.28	262.52	2010	229	390.97	451.79	546.96
2000	238	196.98	374.63	545.82	2011	229	292.31	352.23	413.75
2001	237	261.37	344.17	487.26	2012	251	298.90	387.83	540.91
2002	238	186.22	224.93	266.28	2013	231	481.88	549.11	806.82
2003	243	198.44	207.73	317.39	2014	229	754.37	882.12	1083.55
2004	238	195.14	219.91	241.63	2015	113	837.83	947.67	991.44

Table 6 table presents the descriptive statistics of periodic news counts of each year starting 1994 to 2010.

TABLE 6
NEWS – DESCRIPTIVE STATISTICS

Date	Year	TTL News	Bad News	Good News	Info. News	Avg. Index	Mid. July Index
Friday, July 15, 1994	1994	30	1	6	23	209.41	209.41
Saturday, July 15, 1995	1995	33	8	3	22	195.48	195.48
Monday, July 15, 1996	1996	50	14	14	22	185.61	185.61
Tuesday, July 15, 1997	1997	51	26	10	15	192.50	192.50
Wednesday, July 15, 1998	1998	50	12	12	26	177.93	163.35
Friday, July 16, 1999	1999	62	9	22	31	190.14	216.92
Saturday, July 15, 2000	2000	75	16	38	21	288.81	360.70
Sunday, July 15, 2001	2001	84	25	39	20	354.57	348.43
Tuesday, July 16, 2002	2002	107	39	40	28	287.99	227.54
Wednesday, July 16, 2003	2003	97	34	44	19	216.20	204.86
Thursday, July 15, 2004	2004	74	30	32	12	213.45	222.04
Friday, July 15, 2005	2005	70	17	40	13	254.36	286.67
Sunday, July 16, 2006	2006	93	19	48	26	336.75	386.83
Monday, July 16, 2007	2007	172	48	105	19	535.39	683.95
Tuesday, July 15, 2008	2008	260	83	129	48	823.66	963.36
Wednesday, July 15, 2009	2009	182	73	76	33	856.23	749.10
Friday, July 16, 2010	2010	193	82	76	35	613.41	477.73
Total		1683	536	734	413		
Percent			32%	44%	25%		

News are classified into total news, bad news, good news and informational news by year based on manual content analysis through the meaning of the words and phrases used in the news headings published in the newspaper selected for this study. Also, presented the average index which seems flatten the short-term ups and downs in the market keeping the pace of the stocks market unchanged and mid-July NEPSE index due to the Nepali Fiscal years ends on Mid-July. The study period covers 1994:07 to 2010:07. In the table, total news count and its categorical proportion are also presented. As can be seen from the Table, the number of news items has been steadily over the earlier years with a substantial jump starting in the year 2007. Out of the total, 32% relate to 'bad' news, 44% relate to 'good' news and the balance 25% to 'informational' news. As may be expected, the number of 'good' news are much more than the number of 'bad' news and both are greater than the number of 'informational' news.

Table 7 shows twelve regression models where the regression model 2 is significant at 9 percent and the remaining models are significant at two standard deviations. The yearly database in Panel A proves the negative effect of bad news for average market returns similarly, the informational news contents have also inconsistent and minimal effect for stock returns. The coefficients of bad news and good news are significant at 5 percent but insignificant for informational news contents. On the other hands, good news has positive and significant explanatory power for average market returns during the study periods. The average coefficient of determination in Panel A is 0.58 whereas 0.26 for Panel B and 0.12 for Panel C which indicates that the explanatory power of the yearly database is higher than monthly and daily.

In Panel B, various regression models are formed and analyzed. Model 4 independently shows the negative relationship of bad news with average market returns. While adding good news in the model, the value of coefficient again increases and reaches to -0.010 from -0.008. Similarly, the R-square value also increases from 21.5 percent to 33.1 percent.

Thus, Table 7 presents the regression results between average market returns as dependent variable and the newspaper contents are classified into bad news, good news and information only as independent variables. Panel A shows the yearly effects, Panel B indicates monthly effect and Panel C exhibit the daily news effect on average market returns. The study period covers 1994:07 to 2010:07. In the table, Sig. column indicates the p-values of ANOVA test, R-square is the coefficient of determination; N is the number of observations and K-S test column indicates the test of normality of the series. The t-statistics are presented in parenthesis.

Under Panel B, number of months varies from 134 to 151 and the p-values for K-S test shows the series are normally distributed. This panel also proves the similar findings as Panel A i.e. the negative effect of bad news, the positive effect of good news and the inconsistent effect of informational news for the variation of average market returns during the study periods.

TABLE 7
NEWS EFFECT ON AVERAGE MARKET RETURNS

$$r_{m_avr} = \alpha + b_0 bXt + b_1 gXt + b_2 iXt + ui$$

Model		Constant	bXt	gXt	iXt	Sig.	R ²	K-S	N
<i>Panel A: Yearly database</i>									
1	bi t	0.001 (0.015)	-0.014 (-4.576)	0.012 (5.674)		0.00	0.710	0.200	16
2	bi t	0.076 (0.424)		0.005 (2.381)	-0.009 (-1.050)	0.09	0.310	0.190	16
3	bi t	0.004 (0.035)	-0.014 (-4.109)	0.012 (5.429)	0.000 (-0.032)	0.00	0.710	0.200	16

Panel B: Monthly database

4	bi	0.026	-0.008		0.00	0.215	0.200	146	
	t	(5.115)	(-6.284)						
5	bi	0.008	-0.010	0.007	0.00	0.331	0.200	151	
	t	(1.447)	(-7.746)	(6.741)					
6	bi	0.001		0.003	-0.002	0.00	0.092	0.063	141
	t	(0.155)		(3.748)	(-1.036)				
7	bi	0.026	-0.007		0.000	0.00	0.239	0.200	134
	t	(4.822)	(-6.118)		(-0.051)				
8	bi	0.011	-0.011	0.008	-0.001	0.00	0.424	0.200	145
	t	(1.853)	(-9.135)	(7.821)	(-0.301)				

Panel C: Daily database

9	bi	0.001	-0.006		0.00	0.116	0.200	1,331	
	t	(5.592)	(-13.174)						
10	bi	0.000	-0.004	0.003	0.00	0.134	0.126	1,253	
	t	(3.042)	(-10.473)	(8.635)					
11	bi	0.000	-0.005		0.001	0.00	0.108	0.064	1,259
	t	(4.582)	(-12.097)		(2.438)				
12	bi	0.000	-0.004	0.002	0.001	0.00	0.125	0.068	1,209
	t	(3.351)	(-9.743)	(8.078)	(2.152)				

The daily database in Panel C also proves the similar conclusion that the daily bad news adversely affects for the stock returns while daily good news has positive effect for the market movements and when taking the daily informational news, its contribution seems marginal and positive. In contrast to the findings in Panel A and Panel B, the daily informational news effect has significant effect for average market returns even if the strength is marginal.

Thus, the overall conclusion of table 7 is that there is negative effect of bad news contents for the stock market movements where as positive impact of good news contents and the inconsistent effect of informational news for the market returns during the whole periods.

Table 8 shows the results of news effects using mid-July returns. This table presents the regression results between average market returns as dependent variable and the newspaper contents are classified into bad news, good news and information only as independent variables. Panel A shows the yearly effects, Panel B indicates monthly effect and Panel C exhibit the daily news effect on average market returns. The study period covers 1994:07 to 2010:07. In the table, Sig. column indicates the p-values of ANOVA test, R-square is the coefficient of determination; N is the number of observations and K-S test column indicates the test of normality of the series. The t-statistics are presented in parenthesis. The average market index is calculated as the mean of beginning stock market index plus the closing stock market index and the average market return is calculated similar to the holding period returns. On the other hands, the mid-July market returns is also calculated similar to the holding period returns calculations. The analysis in Table 8 is classified into three panels. Panel A shows the analysis of yearly database, Panel B for monthly database and Panel C describe the relationship between news contents and the market returns respectively.

Regression model 2 among others is insignificant out of twelve regression models. The average coefficient of determination in Panel A is 0.58 which is similar to the average stock returns in Panel A of Table 5. The overall findings of this section are as expected: the negative effect of bad news and informational news whereas positive effect of good news for the stock return movements.

In Panel B, the relationships are almost significant at 5 percent risk level. In most cases, the bad news pushes more than 1 percent negative changes in stock returns whereas less than 1 percent returns changes and marginal unit changes (negative) when the newspaper covers informational news. The number of

monthly databases in Panel B ranges between 127 months and 149 months and the average coefficient of determination is 44 percent and the K-S test values indicates that the series are normally distributed.

TABLE 8
NEWS EFFECT ON MID-JULY MARKET RETURNS

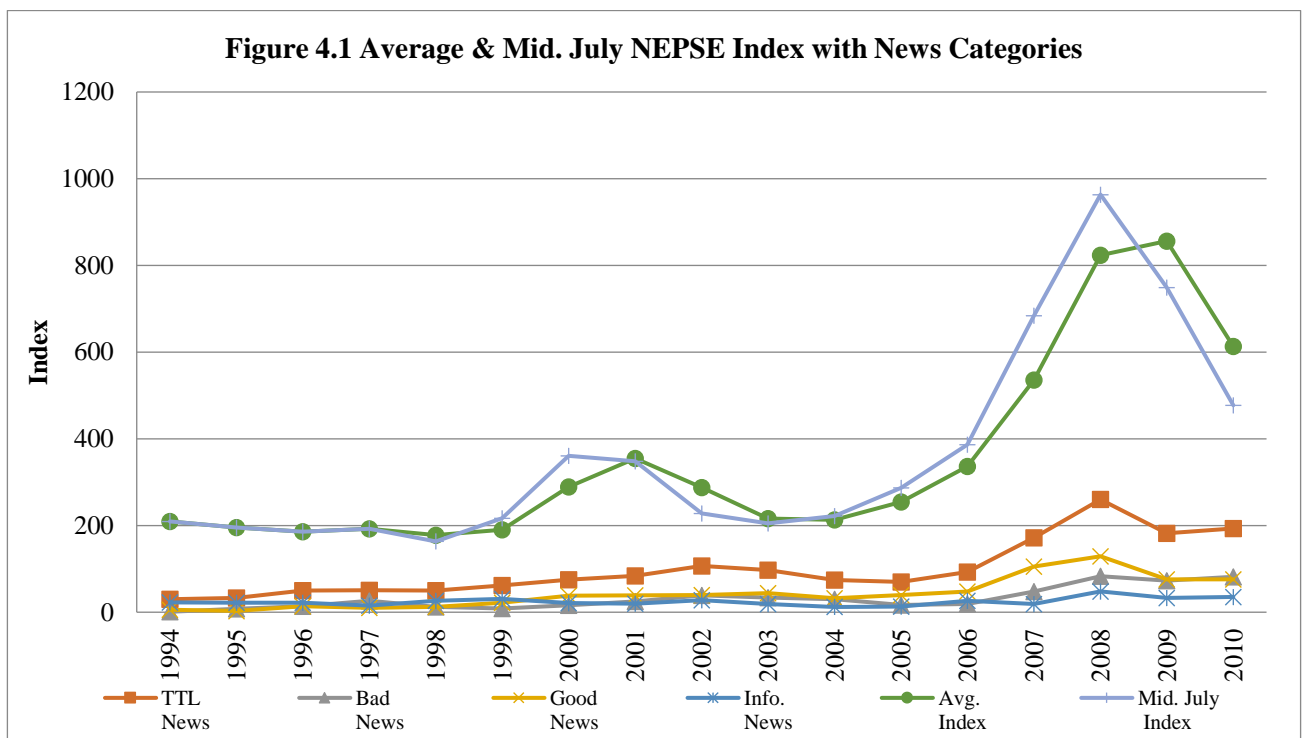
$$rm_midjuly = \alpha + b_0 bXt + b_1 gXt + b_2 iXt + ui$$

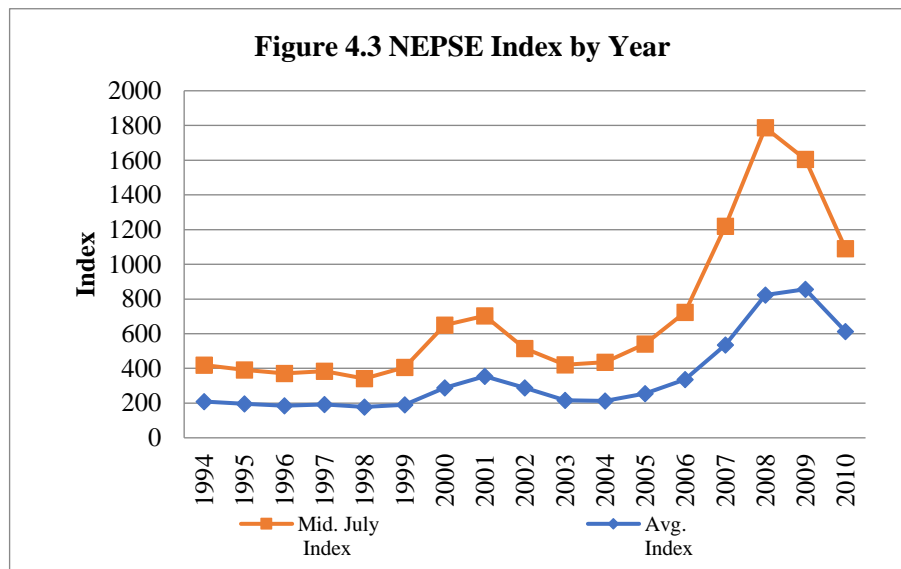
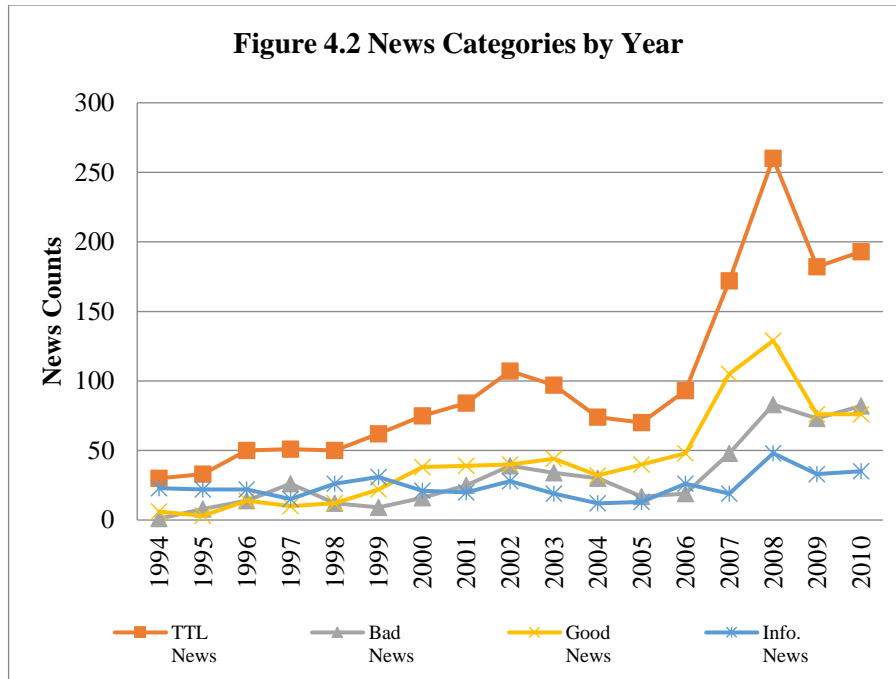
Model		Constant	bXt	gXt	iXt	Sig.	R ²	K-S	N
<i>Panel A: Yearly database</i>									
1	Bi	0.072	-0.020	0.015		0.00	0.750	0.200	16
	T	(-0.926)	(-5.837)	(6.190)					
2	Bi	0.241		0.006	-0.016	0.17	0.240	0.200	16
	T	(1.044)		(1.970)	(-1.501)				
3	Bi	0.141	-0.019	0.015	-0.004	0.00	0.760	0.200	16
	T	(1.036)	(-5.122)	(6.075)	(-0.625)				
<i>Panel B: Monthly database</i>									
4	Bi	0.031	-0.011			0.004	0.459	0.200	127
	T	(7.308)	(-10.294)						
5	Bi	0.006	-0.013	0.010		0.00	0.595	0.200	137
	T	(1.196)	(-12.212)	(11.590)					
6	Bi	-0.001		0.007	-0.006	0.00	0.228	0.200	141
	T	(-0.094)		(6.289)	(-2.581)				
7	Bi	0.037	-0.009		-0.004	0.00	0.409	0.054	131
	T	(6.822)	(-7.930)		(-2.118)				
8	Bi	0.019	-0.013	0.009	-0.004	0.00	0.489	0.200	149
	T	(2.995)	(-10.241)	(8.906)	(-1.818)				
<i>Panel C: Daily database</i>									
9	Bi	0.001	-0.002			0.00	0.026	0.142	1,674
	T	(5.579)	(-6.738)						
10	Bi	0.000	-0.002	0.001		0.00	0.035	0.200	1,687
	T	(4.534)	(-6.297)	(4.447)					
11	Bi	0.001	-0.002		-0.001	0.00	0.029	0.128	1,673
	T	(5.981)	(-6.746)		(-2.220)				
12	Bi	0.000	-0.002	0.001	-0.001	0.00	0.036	0.149	1,689
	T	(4.722)	(-5.880)	(4.708)	(-2.211)				

The coefficients in Panel C indicate that the given series are normally distributed. All the regression coefficients are significant at 5 percent risk level. The maximum number of observations is 1689 in model 12. The given regression models are significant and the coefficient of determination in this panel are relatively small. The average R-square in this Panel is 3 percent which is very lower than the similar panel in Table 7 (i.e., 12 percent). Thus, the major conclusion of news effect for stock returns is: there is negative effect of bad news for stock returns. In most cases one unit of bad news headline leads 0.01-unit negative change in market returns. The strength of relationship between stock returns and good news is relatively weaker than bad news but the direction of relationship is consistently positive i.e. good news leads less than 0.01-unit positive changes in market returns. Thus, in contrast to an earlier study (Xu, 2007) in Nepal 'bad'

news seems to have a slightly stronger impact on market returns as compared to ‘good’ news. The informational news on the other hands has inconsistent and marginal effect for the stock market movements in Nepalese capital market. The figure 4 below presents the graphical presentation of the variables: end of the year market returns, average market returns, total news count and its classification as: bad news count, good news count and informational news counts. Further, the graphs in the second row shows the pattern of average market return (yearly) and the mid-July market returns, and the last table shows the graph of the news categories: bad news, good news and informational news and its total counts. These figures are based on the news headings counts from 1994:07 to 2010:07 and the market returns also based on the same time frame.

FIGURE 4
GRAPHICAL PRESENTATION





In Figure 4.1, the pattern of total news along with its categories for the period 1994 to 2010 is presented, moreover, the market returns series are also seen in the upper part of the graph. Even though the trend line of all the series is upward sloping but the slope of the market returns is steeper than the news counts. Except the period 1999 to 2002, the counts of news headings follow the market returns patterns. During the whole period, two peaks are seen where the highest is the corresponding of the fiscal year 2008. The end of the period market returns patterns shows less smooth movement than that of average market returns patterns. Among the news categories, in general, the numbers of good news counts are greater than bad news and the bad news categories are always higher than the informational news headings in the selected newspaper for the study as presented in Figure 4.2. From the graphical presentation in Figure 4.1, it is proved that there is linear (positive) relationship between news headings and the stock market returns, and, good news headings dictate the other categories of news headings in most of the time during the study period. Figure

4.3 explained that talking annual average of market index flattened or smoothened the presentations keeping the movements feature intact.

The spread of the stock market returns is presented in Figure 1 (Panel B). As may be recalled, the figure is drawn based on the daily database of stock market, the initial three years (1994 to 1996) has limited database due to the unavailability of needful secondary data source representing the year end index. From 1997 to 2010, the graph is based on the daily database. By the inspection, the year 2007 experienced the most fluctuation followed by the year 2008. The graph presents clear two cycles during the study period (i.e., from 1997 to 2002 and from 2006 to 2010) with clear growth, peak, contraction and trough. Similarly, more or less the same pattern is followed by the financial news counts.

The insight from the Figures 4 and Figure 1 (Panel B) graphical presentations poses that when the market parameter tends to move on the upward basis, the number of financial news count on the national daily also increases and vis-à-vis but the patterns are not reliable where the number of news count does not follow the market pattern during 1997 to 2002 but it is from 2006 to 2010. With the same fashion, when the stock market reached to the peak its spread also poses the highest ranges for the year 2000 but the similar inference does not retain for the next cycle. For the period 2006 to 2010, the market peak is seen in 2008 but the highest spread is seen in 2007. Thus, the inference from the above graphical presentation is that there is no reliable pattern of the variables measured; there is no guarantee of the linear movement of the stock market returns and correspondingly the market spread; moreover, the analysis of news and the market returns also does not clarify whether the news leads to market returns or market leads to the news counts.

SUMMARY OF FINDINGS AND CONCLUSIONS

As can be seen from the above, the financial market in Nepal is in the path of its improvisation and grow so as the regulators are now working with new laws regularly as and when necessary to regulate, automate, and attract more and more domestic investors, Non-Resident Nepalese, and other local and multinational corporations to do their business in Nepal.

The major findings of the study are the negative effect of bad news contents for the stock market movements whereas the positive impact of good news contents and the inconsistent effect of informational news for the market return. In most cases one unit of bad news headline leads 0.01-unit negative change in market returns. The strength of relationship between stock returns and good news is relatively weaker than bad news but the direction of relationship between good news and returns is consistently positive i.e., good news leads less than 0.01-unit positive changes in market returns. The informational news on the other hands has inconsistent and marginal effect for the stock market movements in Nepalese capital market.

The study concludes that there is negative effect of bad news, positive effect of good news, and the inconsistent effect of informational news on stock returns based on the relationship establish between news effects on stock return for the period mid-July 1994 to mid-July 2010.

In further research, the biasing effects by local companies and media in Nepal can be examined along the lines of the Gurun and Butter (2012) study, Gurun and Butter (2012) documented that, on average and holding other factors constant, when the media report news about companies headquartered nearby - that is, local companies - they use fewer negative words compared to their reports about non-local companies.

Similarly, further study can be made of the effects of private information on stock returns since such information is not available to 'outsider' investors. In a future study, the private information effect and the local companies' effects on media reports could be examined. The findings of such a study might shed further light on the differences in the behaviors of 'insider' investors and 'outsider' investors.

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