# The Cross-Section of Expected Stock Returns: The Nepali Evidence 

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This study examined the cross-section of expected stock returns in relation to market beta, market capitalization, earning yield, leverage, book-to-market equiț, cash flow yield and dividend yield of non-flnancial enterprises of Nepal. Two easily measured variables, viz.: market beta and market capitalization were combined to capture the cross sectional variation in average stock returns associated with earning yield, leverage, book-to-market equiry, cash flow yield and dividend yield. Further, enterprises with high market beta, market capitalization, and dividend yield have higher average returns. However, enterprises with low book-to-market equity have high average returns. Moreover, investors and brokers believe that share price change is not a random phenomenon in Nepal due to lack of awareness of the long term investors and the excessive speculative behaviors of the limited and voluminous market players.

Keywords: Stock Returns, Market Beta, Market Capitalization, Earning Yield, Leverage, Book-to-Market equity, Cash Flow Yield, Dividend Yield, Non-Financial Enterprises

## INTODUCTION

Investment decision is one of the important functions of modern financial managers. There are many investment alternatives available to financial managers as the horizon of business world is getting diverse and in-depth in scope. Among the many investment alternatives, stock market is one of the popular investment alternatives in the world. It attracts people from different sectors for investment. Investors and financial researchers have been interested to understand the stock market behavior for making a rational investment decision.

[^0]They have paid considerable attention during the last few decades to the new stock markets that have emerged in the global world. The interest has undoubtedly been stimulated by the large, and in some cases extraordinary returns offered by stock markets.

Investment decision ensures the profitability of an organization. Therefore, investors are very keen to understand and evaluate various investment alternatives. To understand capital market behavior, fundamental analysis assumes that share price represents the average market opinion of investors based on the prospect of the company. However, tinancial management literature has documented a number of empirical facts relating to the cross-sectional distribution of stock returns in the past few decades. A number of studies have been conducted on the theory and practice of finance in developed and advanced capital markets (e.g. Sharpe; 1963, Linter; 1965, and Black, 1965, 1972; Ross; 1976, Fama and French, 1992, 1996; Banz, 1981; Basu, 1983; and Bernnan and Chordia, 1998), but their relevance is yet to be seen in the context of small and under-developed capital markets like Nepal.

The cross-section of expected stock returns has a strong theoretical and empirical founding. However in practice, what practitioners and investors perceive about the relationship of the different variables that have stimulating power on stock returns can be the area of interest for researchers and scholars around the globe.

## OBJECTIVES OF THE STUDY

The major objective of this study is to examine the cross section of expected stock returns in Nepal. The specific objectives of the study are as follows:

1. To examine whether market beta, size (ME), leverage, book-to-market equity (BM), cash flow yield (CFY), earning yield (EY) and dividend yield (DY) capture the cross sectional variation of stock returns.
2. To evaluate whether the small sized enterprises have higher stock returns.
3. To analyze whether enterprises having higher market beta, cash flow yield, earning yield, dividend yield and book-to-market equity have higher stock returns.
4. To capture the general perception of the investors and brokers about the issues related to stock market functioning and the role of the government in the development of stock market.

## RESEARCH DESIGN

The research design adopted in this study consists of descriptive, correlation and causal comparative research designs to deal with the various issues raised in this study.

## NATURE AND SOURCE OF DATA

This study has utilized both the primary and secondary sources of data. The major objective of this study is to examine the cross-section of expected stock returns in Nepal which is based on the secondary sources of data. Further, the assessment of the perception of the investors and brokers about the factors related to stock market functioning have investigated with the help of primary data.

The secondary source primarily includes annual reports of Security Exchange Board of Nepal (SEBON) from fiscal year 20002/03 through 2008/ 09. Secondary data has been collected from annual financial statements of listed non-financial companies available in SEBON publications over the period of time. Particularly, this study has considered all the manufacturing and processing companies, trading and hotels listed in NEPSE till 2009/10. However, due to non availability of data, only 27 companies (from the list of manufacturing and processing, trading, hydro and hotel industry) have been considered for the study.

The primary data required for this study has been collected through structured questionnaires distributed to the individual investors and registered brokers. Two separate sets of questionnaires have been prepared for investors and brokers. In the case of primary data, total 100 questionnaires were collected from investors. Out of total questionnaires, only 90 usable questionnaires have been received from investors. Out of the total respondents of investors, 75 respondents are from Kathmandu and 15 respondents are out of Kathmandu. Out of the total, 90 percent of respondents are male. Only 50 percent brokers have provided their responses by filling the questionnaires. Total 11 usable questionnaires were received from brokers. To analyze the relationships among different variables, the study uses pooled cross section data of 27 enterprises and total 134 observations.

## THE MODEL

The study examines the relationship of stock returns ( R ) with the fundamental variables such as, market beta (MB), size (ME), earning yield (EP), leverage (LV), book-to-market equity (BM), cash flow yield (CFY), and dividend yield (DY). The theoretical statement of the models is that
the stock returns ( R ) may be regarded as subject to the constraints of aforementioned variables. The theoretical statement may be framed as

$$
\begin{equation*}
\mathrm{R}=\mathrm{f}(\mathrm{MB}, \mathrm{ME}, \mathrm{EP}, \mathrm{LV}, \mathrm{BM}, \mathrm{CFY}, \mathrm{DY}) . \tag{I}
\end{equation*}
$$

The prior expected sign between stock return and market beta, earning yield, leverage, cash flow yield and dividend yield is positive. On the other hand, the negative sign is expected between stock return and market capitalization and book-to-market equity based on the various studies conducted in developed capital market.

The basic regression model and procedure developed by Fama and MacBeth (1973) has been used to determine whether the considered variables capture the cross section of expected stock returns.

Regression equation is specified as under:
$\mathrm{R}=\mathrm{a}+\mathrm{bl}(\mathrm{MB})+\mathrm{b} 2(\mathrm{ME})+\mathrm{b} 3(\mathrm{EP})+\mathrm{b} 4(\mathrm{LV})+\mathrm{b} 5(\mathrm{BM})+$
b6 (CFY) + b7 (DY) + (Ui)..............(II)
The simple linear regression is used to model the value of a dependent scale variable based on its linear relationship to one or more predictors assuming that the error term has a normal distribution with a mean of 'zero' and variance of the error term is constant across cases and independent of the variables in the model that is no heteroscedasticity.

Multicollinearity test has been carried out to examine correlation across independent variables. The data is free from multicollinearity as $\mathrm{R}^{2}$ is not very high and some of the regression coefficients are statistically significant on the basis of the conventional 't' test (Gujarati and Sangeetha, 2007). Further, the zero-order or simple correlation coefficient between the two variables has been examined and the correlation is very low which also support that independent variables are free from multicollinearity.

## LITERATURE REVIEW

Markowitz's $(1952,1959)$ study is the initial point of inception to explain the theory of stock price behavior. The investor's objective is to maximize the portfolio's expected returns, subject to an acceptable level of risk (or minimize risk, subject to an acceptable expected return). The premise of a single time period, coupled with assumptions about the investor's attitude toward risk, allows risk to be measured by the variance (or standard deviation) of the portfolio's return. The second foundational study to explain the stock price behavior is Capital Asset Pricing Model (CAPM) to explain the concept of market equilibrium to determine the market price for risk and the appropriate measure of risk for a single asset. The CAPM model explains that the expected
return of any risky asset is a linear function of its tendency to co-vary with the market portfolio. The third important study on the equilibrium pricing model is Arbitrage Pricing Theory (APT). The return on any risky asset is seen to be a linear combination of various common factors that affect asset returns. APT indicates that rate of return on any security is a linear function of the movement of a set of fundamental factors 'Fk', common to all securities. APT proposes that the relationship between risk and return is more complex and it may be due to multiple factors such as GDP growth, expected inflation, tax rate changes, dividend yield etc. mathematically, it can be expressed as under:

$$
R j=E(R j)+b j 1 F 1+b j 2 F 2+\ldots . .+b j k F k+e j
$$

Where: $\mathrm{Rj}=$ stochastic rate of return on the jth asset, $\mathrm{E}(\mathrm{Rj})=$ expected rate of return on the jth asset, bjk = the sensitivity of the jth asset's returns to the kth factor, $\mathrm{Fk}=$ the mean zero kth factor common to the returns of all assets under consideration, ej $=$ a random, mean zero, noise term for the jth asset.

However, early studies and theories suggest that the cross-section of average returns is related to firm-level characteristics such as size, earnings yield, cash flow yield, dividend ratio, book-to-market equity, leverage, momentum both in the US and in developed and emerging markets around the world (Hou, et al., 2006). The explanatory power of a firm's market value for the variation in expected stock returns was first documented by Banz and Rolf (1981) and subsequently labeled as the size effect. The conclusion of size effect is that capital asset pricing model is mis-specified and thus fails to give an economic explanation why size is a factor in stock returns or whether it is just a proxy for a risk factor not captured in securities betas. Similarly, an explanation that smaller firms are riskier and therefore deserve higher expected returns is provided by Roll (1981). However, Roll argues that the risk measures in Banz and Rolf (1981) are biased downward due to autocorrelation in the returns of small firms which are infrequently traded. Further, Fama and French (1992) found that firm size (Market Equity) and Book to Market Equity captures the cross sectional variation in average stock returns associated with size, E/P, BE/ME and leverage.

Likewise, Fama and French (1996, 1998), Likonishok, Shleifer and Vishny (1994), and Griffin and Lemmon (2002) showed that value stocks with high book to market, earnings to price or cash flow to price ratios outperform growth stocks with low book to market. earning yield or cash flow ratios. Moreover, Lintner and John (1965) showed that idiosyncratic volatility carries a positive coefficient in cross-sectional regressions.

Similarly, Stattman and Dennis (1980), Rosenberg, Reid and Lanstein (1985) found that average returns on the US stocks are positively related to the ratio of a firm's book value of common equity, book equity to its market value. Further, Chan et. al., (1991) found that book to market equity ( $\mathrm{BE} / \mathrm{ME}$ ) has strong role in explaining the cross section of average returns on Japanese stocks. Moreover, Berk (1995 and 1997) provided a theoretical explanation for the relation of expected retums and size and argued that size is always inversely related to expected returns, since stocks with high expected returns also have high discount rates which, in turn, automatically cause lower market values.

Similarly, Fama and French (1992) found the positive relations between $B / M$ equity and stock returns and concluded that $B / M$ equity is more powerful variable than size in explaining cross section of average stock returns. Likewise, Davis (1994) reported that there is positive cross sectional correlation between $B / M$ equity and cash flow yield and concluded that $B / M$ equity has explanatory power of explaining stock returns. Therefore, the studies conducted over the period of time, in general, have found positive relation of book to market equity with stock returns.

Moreover, Bernard and Stober (1989) and Wilson (1986) found more significant positive relationship of stock returns with cash flow yield than that of earnings yield. Similarly, Chan et. al., (1991) found that book to market value ratio and cash flow yield to be most significant positive impact on expected returns. In the case of dividend yield, positive relationship was found between profitability and dividends (Verma 1994).

Moreover, Pradhan and Balampaki (2004) found that if dividend yield, capital gain yield and total yield are related to earnings yield, size, book to market ratio and cash flow yield. Thus, this study aims to examine the cross section of expected stock returns confined with these variables in the case of Nepali capital market.

## RESULTS

Table 1: Pearson Correlation Matrix among the Variables

|  | $\mathbf{R}$ | MB | ME | EY | IV | BM | CFY | DY |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| R | 1 | $.357^{* *}$ | $.175^{*}$ | .092 | .095 | -.019 | .050 | .071 |
|  | 134 | $(.000)$ | $(.043)$ | $(.292)$ | $(.273)$ | $(.831)$ | $(.568)$ | $(.413)$ |
|  | MB | $.357 * *$ | 1 | 134 | 134 | 134 | 134 | 134 |
|  | $(.000)$ |  | $(.800)$ | $(.669)$ | $(.875)$ | $(.361)$ | $(.623)$ | $(.935)$ |
|  | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 |
|  |  |  |  |  |  |  |  |  |


| ME | $.175^{*}$ | .022 | 1 | .164 | .005 | -.138 | $-.367^{* *}$ | $.206^{*}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $(.043)$ | $(.800)$ |  | $(.058)$ | $(.957)$ | $(.113)$ | $(.000)$ | $(.017)$ |
|  | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 |
| EY | .092 | .037 | .164 | 1 | $-.194^{*}$ | .129 | $.374^{* *}$ | $.214^{*}$ |
|  | $(.292)$ | $(.669)$ | $(.058)$ | . | $(.025)$ | $(.137)$ | $(.000)$ | $(.013)$ |
|  | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 |
| LV | .095 | .014 | .005 | $-.194^{*}$ | 1 | .045 | .164 | -.162 |
|  | $(.273)$ | $(.875)$ | $(.957)$ | $(.025)$ |  | $(.602)$ | $(.058)$ | $(.062)$ |
|  | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 |
|  | -.019 | .080 | -.138 | .129 | .045 | 1 | $.260^{* *}$ | $.176^{*}$ |
| BM | $(.831)$ | $(.361)$ | $(.113)$ | $(.137)$ | $(.602)$ |  | $(.002)$ | $(.042)$ |
|  | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 |
|  | .050 | .043 | $-.367^{* *}$ | $.374^{* *}$ | .164 | $.260^{* *}$ | 1 | .018 |
| CFY | $(.568)$ | $(.623)$ | $(.000)$ | $(.000)$ | $(.058)$ | $(.002)$ |  | $(.839)$ |
|  | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 |
|  |  |  |  |  |  |  |  |  |
| DY | $(.413)$ | $(.935)$ | $(.017)$ | $(.013)$ | $(.062)$ | $(.042)$ | $(.839)$ |  |
|  | 134 | 134 | 134 | 134 | 134 | 134 | 134 | 134 |

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Sample size $=134, P$ value is in parenthesis

Table 1 shows the correlations among the variables considered under the study. It is revealed that stock return has significant positive correlations with market beta at I \% confidence interval and market capitalization at $5 \%$ confidence interval and positive correlations with earning yield, cash flow yield, and dividend yield. However, stock return has negative correlations with book-to-market equity.

Table 2: Result of Regression Equation $\mathbf{R}=\mathbf{a}+\mathbf{b l} \mathbf{( M B})+(\mathbf{U i})$

|  | Regression Coefficients |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Variables | $\beta$ | Std. Error | t | Sig. |
| Constant | 7.6 | 2.4 | 3.18 | 0.002 |
| MB | 7.65 | 1.74 | 4.38 | 0.00 |
| Adj. $R^{2}$ | 0.12 |  |  |  |
| No of Observations | 134 |  |  |  |

(Note: R denotes stock returns and MB denotes market beta)
Table 2 shows the result of regression equation that signifies the relationship between stock returns and market beta. There is significant positive
relationship between stock return and market beta as't' value is 4.38. Thus, market beta influences stock returns in non-financial stock market of Nepal. Adjusted $\mathrm{R}^{2}$ is 0.12 .

Table 3: Result of Regression Equation R=a +b1 (MB) + b2 (ME) + (Ui)

|  | Regression Coefficients |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Variables | $\beta$ | Std. Error | t | Sig. |
| (Constant) | -4.85 | 6.43 | -.755 | 0.45 |
| MB | 7.566 | 1.72 | 4.39 | 0.00 |
| MEAdj. R |  | 5.3610 .14 | 2.57 | 2.09 |
| No of Observations | $\mathbf{1 3 4}$ |  |  |  |

(Note: MB denotes market beta and ME denotes market capitalization)

Table 3 shows the result of regression equation. It shows that market beta and market capitalization have significant positive relations with stock returns as $t$ value is 4.39 and 2.09 respectively. Thus, these two variables do have influencing power on stock returns of non-financial enterprises of Nepali stocks. Adjusted $\mathrm{R}^{2}$ is 0.14 .

Similarly, table 4 shows the result of regression equation (II) which signifies the relationships of stock returns and all the independent variables. It is revealed that market beta, market capitalization, eaming yield, leverage, cash flow yield and dividend yield has positive relationships with stock returns of non-financial enterprises of Nepal. On the other hand, book-tomarket equity has negative relationship with stock returns of non-financial enterprises of Nepal. This relationship is consistent in all the regression equations regressed separately. Thus, these variables have influencing power on stock returns of non-financial enterprises of Nepal. Moreover, there is significant positive relation of stock returns with market beta and market equity. Adjusted $\mathrm{R}^{2}$ is 0.13 .

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Table 4: Result of regression equation \(\mathrm{R}=\mathrm{a}+\mathrm{b} 1(\mathbf{M B})+\mathrm{b} 2(\mathrm{ME})+\mathrm{b} 3(\mathbf{E} / \mathbf{P})+\)
    b4 (LV) \(+\mathrm{b5}\) (B/M) + b6 (CFY) + b7 (DY) + (Ui) ....................... (II)
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|  | Regression Coefficients |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Variables | $\boldsymbol{\beta}$ | Std. Error | t | Sig. |
| (Constant) | -9.65 | 8.25 | -1.16 | 0.24 |
| MB | 7.52 | 1.74 | 4.32 | 0.00 |
| ME | 5.58 | 3.09 | 1.80 | 0.07 |
| EP | 2.46 | 7.41 | 0.33 | 0.74 |


| LV | 1.86 | 1.76 | 1.05 | 0.29 |
| :--- | :---: | :---: | :---: | :---: |
| BM | -0.51 | 0.69 | -0.72 | 0.46 |
| CFY | 3.17 | 3.86 | 0.82 | 0.41 |
| DYAdj. R- | 30.640 .13 | 52.92 | 0.57 | 0.56 |
| No of Observations |  | $\mathbf{1 3 4}$ |  |  |

(Note: MB denotes market beta, ME denotes market capitalization, EP denotes earning yield, LV denotes leverage, BM denotes book-to-market equity. CFY denotes cash flow yield and DY denotes dividend yield)

Table 5 shows that high market beta group of enterprises have higher average return ( $20.86 \%$ ), in the case of portfolio sorted by cash flow yield, medium cash flow yield group of enterprises have high average return ( $11.65 \%$ ), whereas high cash flow yield group of enterprises have only (7.16\%) average returns

Furthermore, in the case of portfolio sorted by dividend yield, high dividend yield group of enterprises have high average returns ( $15.36 \%$ ), medium dividend yield group of enterprises have medium average returns ( $11.05 \%$ ), and low dividend yield enterprises have low average returns ( -1.2 )

Table 5: Relationship between Stock Returns and Variables

|  | Average Return of (\%) |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Portfolios based on | High Value | Medium Value | Low Value |  |
| Market Beta | 20.86 | 1.86 | 1.76 |  |
| Market Capitalization | 24.94 | 1.45 | -0.86 |  |
| Cash Flow Yield | 7.16 | 11.65 | 4.15 |  |
| Book -to-Market equity | 5.94 | 4.13 | 10.81 |  |
| Earning Yield | 11.13 | 15.00 | -1.17 |  |
| Dividend Yield | 15.36 | 11.05 | -1.23 |  |

(Note: The average returns as per the portfolios sorted by market beta, market capitalization, cash flow yield, book-to-market equity, earning yield and dividend yield into three groups of enterprises with high, medium, and low values (largest to smallest)).

Table 6: Reasons of the Share Price Change is not a Random Phenomenon

| S.N. | Particulars | Average Ranking |
| :--- | :--- | :---: |
| a | Stock market is in an early stage of development | 3.40 |
| b | Poor performance of market intermediaries | 3.33 |
| c | Excessively speculative behavior of the market players | 3.15 |
| d | Unawareness of the long term investors about the stock market | 2.98 |
| e | Inefficient stock market (hidden information) | 3.86 |
| f | Lack of government policy to develop the stock market | 4.01 |

The respondents (investors) were asked to rank ( 1 as most important one and so on) the reasons that they think behind the share price change is not a random phenomenon in Nepal. Table 6 presents the importance of the various reasons behind the share price change that is not a random phenomenon in Nepal. The most important reason is unawareness of the long term investors about the stock market which averaged least 2.98 in ranking, the second important reason is excessively speculative behavior of the market players which averaged 3.15 in ranking and so on. Thus, it is observed that price determination should not be linked with early stage of stock market most.

Table 7: Share Price Change is not a Random Phenomenon in Nepal.

| S.N. | Particulars | Average Ranking |
| :--- | :--- | :---: |
| a | Stock market is in an early stage of development | 4.50 |
| b | Poor performance of the market intermediaries | 3.33 |
| c | Excessively speculative behavior of the market players | 1.66 |
| d | Lack of awareness of long term investors regarding |  |
|  | the stock market | 3.83 |
| e | Inefficient stock market (hidden information) | 4.00 |
| f | Lack of government policy to develop the stock market | 3.66 |

The respondents (brokers) were asked to rank ( 1 to 6 Scales, I being 'very important' and so on) the reasons that the share price change is not a random phenomenon. Table 7 presents the perceived importance of the various reasons behind the share price change is not a random phenomenon in Nepal by the brokers. The most important reason is excessively speculative behavior of the market players which averaged least 1.66 in ranking, the second most important reason is poor performance of the market intermediaries which averaged 3.33 in ranking and so on. Thus, it is observed that price determination should not be linked up to early stage of stock market most.

## IMPLICATIONS OF THE STUDY

1. The investors should consider the systematic risk as an important factor since market beta significantly influences the stock returns. Only the firm specific variables do not determine the stock returns. Market risk has got significant impact on the stock returns. Enterprises should accommodate market related variables while formulating policy.
2. The enterprises willing to increase stock returns should attract to increase market capitalization rate as it is positively related to stock returns. Investors believe that the enterprises having higher market capitalization
tend perform better as they have got capacity to make capital investment and can bear the risk in an inefficient capital market like Nepal.
3. The enterprises willing to increase stock returns should attract to increase earning yield, leverage, cash flow yield, and dividend yield as these variables are positively related to stock returns but the relationship is weaker. The enterprises can take advantage of employing financial leverage to increase the performance as cheap source of financing.
4. The enterprises willing to increase earning yield should decrease leverage as earning yield has significant negative correlations with leverage. However, stock returns has positive relationship with leverage consequently enterprises can trade off between them. Thus, there should be a certain limit on the amount of leverage.
5. The size and scope of secondary market should be broadened for the development of capital market. The Government should formulate policies to curb the excessive speculative behaviors of the limited and voluminous market players and it should facilitate the smooth functioning of the stock market. It should also attract more number of enterprises to get listed in the stock market.

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## Appendix : II

Pro-forma of Structural Questionnaire: for Investors

## A SURVEY OF THE CROSS-SECTION OF EXPECTED RETURNS: The Nepali Evidence

Dear Sir/Madam,
1 kindly request you to complete this questionnaire. I shall be obliged to you for your valuable, spontaneous and frank opinion, which is to be considered as the basic source of information to meet the objective of this study. Your responses will be treated confidentially and will be used at aggregate level only.

Surendra Kumar Jha
M.Phil in Management.

Name (Optional): $\qquad$ Profession: $\qquad$
Organization: $\qquad$ Contact No.: $\qquad$

1. Please make a tick-mark in each of the following that explains you

A: Years of stock trading

## B: Your average Income annually:

a) Less than 3 years
( ) a) less than 2 lakhs
( )
b) $3-5$ years
( ) b) 2 lakhs to 5 lakhs
c) 5-10 years
c) 5 lakhs to 10 lakhs
( )
d) More than 10 years
( ) d) More than 10 lakhs
( )
C: How many enterprises's stock you own?

## D: Your investment amount in stocks:

a) Less than 4 enterprises
a) less than 3 lakhs
b) 4 to 8 enterprises
b) 3 to 7 lakhs
( )
c) 8 to 12 enterprises
c) 7 to 12 lakhs
( )
d) More than 12 enterprises (
d) More than 12 lakhs
( )
2. In Nepal, the current market price of shares can be used: (Please rank in order of their importance by assigning 1 to the most important one and so on)
a) To predict the future prices of stocks
b) To predict the future average return of stocks
c) To differentiate between good and bad performing stocks
d) To make buy and sell decisions.
( )
e) Others (Please specify)
3. In general, what do you think about current trading price of shares in the market? (Please make a tick mark)
a) High ( )
b) Moderate
c) Low
d) Do not know
4. What do you expect from investment in stocks? (Please rank in order of their perceived importance by assigning 1 to the most important and so on)
a) Cash dividend
b) Capital gain
c) Bonus shares
d) Right shares
e) Growth of the company
f) Others (Please specify) $\qquad$
5. From where do you usually buy stocks:
a) Primary Market
b) Secondary Market
c) Both
d)
6. In your opinion, does the publication of financial reports change the price of a company's stocks?
a) Yes
b) No
c) Do not know
7. Please rank the following factors that influence your decision to purchase stocks in a company. (Assign 1 to the most important and so on)
a) Dividend pay-out ratio
b) Market price of the stocks
c) Image of the company
d) Growth of the company
e) Financial position of the company
8. In Nepal, share price change is not a random phenomenon. What do you think are the reasons? (Please rank the following in order of their importance by assigning 1 to most important one and so on)
a) Stock market is in an early stage of development
b) Poor performance of the market intermediaries
c) Excessively speculative behavior of the market players
d) Lack of awareness of long term investors regarding the stock market
e) Inefficient stock market (hidden information)
f) Lack of government policy to develop the stock market
. To what extent, do the stock prices of listed companies in the stock exchange reflect market risk? (Please make tick mark the option)
I......... 2
2......... 3 $\qquad$ 4.
5.
6. $\qquad$

Strongly Agree
Strongly Disagree
10. To what extent do you think that large sized stocks (in terms of market equity) in Nepal tend to have higher average retums than small sized stocks? (Please make a tick mark)
$\qquad$
Strongly Agree

## Strongly Disagree

11. To what extent the Nepalese enterprises are paying dividends as per the expectations of investors?

All the times
Never
12. Dividend payout ratio depends upon earning yield of the company.
13. $\qquad$ 3.
14. $\qquad$
$\qquad$
$\qquad$

Strongly Agree
Strongly Disagree
13. Please the rank ( $1=$ very important and so on) the following determinants of dividend policy of Nepalese enterprises.
a) Profitability of the enterprise
b) Investment opportunities available to the enterprises
c) Past dividend pay out trend of the enterprise ( )
d) Competitor's dividend policy
e) Expectations of the investors
f) Risk of the enterprise
g) Others
14. Rank the ( $1=$ very important and so on) following reasons that investors consider for their selling decisions of stocks.
a) When cash/stock dividends are not paid regularly
b) When capital gains are not up to their expectation
c) When market price is at the highest point
d) When they need cash
e) When market becomes more volatile
f) Others $\qquad$
15. What is your average rate of return from your investment portfolio?
a) Less than 8 percent
b) 8 to 12 percent
c) 12 to 20 percent
d) 20 to 30 percent
e) 30 to 40 percent
f) More than 40 percent
16. To what extent you are satisfied by making investment in stocks?
1.........
2......... 3
......... 4 $\qquad$
$\qquad$
$\qquad$

Very Satisfied
Not satisfied
17. To what extent you are satisfied with the current practices of information disclosure of the NEPSE listed companies?
$\qquad$
Very Satisfied
Not satisfied
18. In your opinion, transaction cost in buying and selling of stocks are: (Please make a tick mark)
a) High
b) Moderate
( )
c) Low
( )
19. Please specify to what extent do you agree or disagree with following statements. (Make a tick mark on an appropriate box where $1=$ Strongly Agree, $2=$ Agree, $3=$ Neither Agree nor Disagree, $4=$ Disagree, and $5=$ Strongly Disagree)

| S.No. | Statements | I | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a. | The higher the market risk, the higher will be the <br> stock returns |  |  |  |  |  |
| b. | Size (Total Asset) has a negative relationship with <br> stocks returns |  |  |  |  |  |
| c. | The earning yield has positive relationship with <br> stock returns |  |  |  |  |  |
| d. | The book-to-market ratio has a positive relationship <br> with stock returns |  |  |  |  |  |
| e. | The Dividend payout ratio has a positive relationship <br> with stock returns |  |  |  |  |  |
| f. | The leverage (Total Deb/Total Assets) has negative <br> relationship with stock returns |  |  |  |  |  |
| g. | Investors in low income group are attracted to <br> high dividend stocks |  |  |  |  |  |
| h. | Tax on capital gains actually does not effect <br> the returns |  |  |  |  |  |

20. Please, give your opinion on the statements below regarding the determination of stock prices of these NEPSE listed firms. (Make a tick mark.)

| S.No. | Statements | True | False |
| :--- | :--- | :--- | :--- |
| a. | Stock Prices are fairly determined by the NEPSE |  |  |
| b. | Share prices are unduly influenced by very limited <br> and voluminous market players. |  |  |
| c. | Brokers can very easily manipulate stock prices <br> in NEPSE in their own interest |  |  |
| d. | Investors do not analyze the financial reports <br> of firms to make stock purchase decisions |  |  |
| e. | Tax on capital gains greatly influence stock returns |  |  |
| f. | Stock prices are not random but controlled |  |  |
| g. | Price movement in the NEPSE is influenced <br> by speculation motive rather than the real <br> performance of the firms. |  |  |

Thank You!


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