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# PREDICTING SHARE VALUE OF PRIVATE SECTOR BANKS USING EQUITY VALUATION MODELS

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## ABSTRACT

*Investment in equity produces attractive returns in the long run irrespective of high volatility in the short term. This is true not only in a developed country but also for a developing country. But the problem is to decide at what rate to buy and what rate to sell. This article has made an attempt to predict the share value of three private sector bank shares by using equity valuation models. The result indicates that at any point of time if the actual value of shares is less than the calculated value (PO) then such shares can be purchased. This is true till 2010. The data on expected future dividend is collected from CRISIL report and company reports.*

## Introduction

Indian stock market is semi-efficient in nature and is considered as one of the most respected stock markets, where information is quickly and widely disseminated, thereby allowing each security's price to adjust rapidly in an

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unbiased manner to new information so that, it reflects the nearest investment value. After the introduction of electronic trading system, the information flow has become much faster. But sometimes, in developing countries like India, sentiments play a major role in price movements. Some of the events affect economy as a whole, while some events are sector specific. Even in a particular sector, some companies or major market players are more sensitive to the event. So, the new investors having exposure in the market should be well aware about the maximum potential loss, i.e. Value at risk. This study tries to find possible value of equity of leading private banks with the help of proven dividend discount models for determining the discounted prices of the bank stocks. The target price and dividend rates are taken from the CRISIL (rating agency) research report and the bank's investors presentation report for the period of fiscal year 2009 and 2010. This study is useful to the banks to know the value of its equity in comparison with its competitors and it is also helpful to the investors for designing their portfolios in an effective manner in order to reduce risk and get good return.

## **1. Review of Literature**

Long horizon historical studies allow researchers to understand how the investor behaviours have changed over time and across economic conditions. The role of dividends in the valuation of equity has changed as equity markets in the U.S. have matured and economic conditions changed. Since firms typically pay dividends as a means of returning profits to their providers of equity capital, the fundamental value of a firm's equity should be related to its expected future dividend payments. Building on this concept, several studies have investigated the ability of changes in dividends to explain changes in asset prices (e.g., Shiller (1979 and 1981) and Cooley and LeRoy (1981)). Because the results of such tests have been mixed, researchers have proposed a wide variety of asset pricing models to try to empirically understand how different factors influence equity prices.

### **Investor Valuation of Dividends**

The most intuitive means for determining the value of the equity of a firm is the DDM (dividend discount model). This model states that the present value of an asset can be measured as the discounted value of all of the future expected dividend payments. Building on this intuition, Gordon and Shapiro (1956) and Gordon (1962) present a special case of the general

model, the GGM, whereby the value of the firm's equity can be represented as a growing perpetuity based on next period's expected dividend. Even though present study focuses on these models, it also recognizes that there are many alternative models such as multistage growth models. Since these models are based on the fundamental idea that an asset is worth the discounted value of all of the future cash flows it can generate, these models are the most commonly used by both academicians and practitioners.

Since these models imply that changes in dividends should explain changes in asset prices, several studies have considered how well changes in dividends can explain changes in the volatility of asset prices (e.g., Shiller (1979 and 1981) and LeRoy and Porter (1981)). These tests build on the intuition that since asset prices are determined by the discounted value of future dividends, prices and dividends should have similar volatility. Because they find that prices are excessively volatile when compared to the implied prices based on dividends, the results of these tests have cast doubt on the role of dividends in explaining the value of equity. However, the results from subsequent studies which have relaxed several of the assumptions used in the original tests have been more favourable and suggest that dividends do play a significant role in determining the value of equity (e.g., Bollerslev and Hodrick (1995)).

Several studies have tried to explain the negative findings of the studies such as those of Shiller and LeRoy and Porter. Poterba and Summers (1988), for example, study the risk premium but find that the magnitudes and variability in the implied risk premiums necessary for prices to be related to dividends are too large to be consistent with any rational, fundamental asset pricing model. On the other side of the debate, Fama and French (1988) find that the variation in dividend yields explains a large proportion of multi-year return predictability. Although many subsequent studies continue to find evidence in support of the predictive ability of dividends for equity returns, studies using longer time series of data bring the generalizability of these results into question – the predictive ability of the dividend ratio appears to be specific to a few time periods (e.g. Goyal and Welch (2003)). As a result, there is uncertainty regarding the importance one should give to dividends in the valuation of equities over time.

Similar to the mixed evidence with regard to predictive power for the dividend yield, researchers have struggled to estimate the growth rate of dividends. Arnott and Bernstein (2002), for example, provide an interesting

historical perspective on the how investors in the early 1900s viewed dividends as compared to how they are viewed today. To handle some of these differences, dividend growth rates have been modelled using a variety of different econometric models. For example, Bollerslev and Hodrick (1995) and Donaldson and Kamstra (1996) use time-series models to predict dividend behaviour and find that a number of models do a reasonable job of explaining both changes in dividends and changes in prices.

Despite the mixed evidence surrounding the value of the dividend-based valuation models and the estimates of the dividends and their growth rates, empirical asset pricing models continue to include these factors in their set of fundamental economic risk factors. This suggests that researchers continue to believe these factors play a significant role in explaining the risk valued by investors. By studying what influences the level and growth rate of dividends within the context of their relationship to the value of the asset using dividend-based valuation techniques. The present study provides new insights into what economic risk factors should be included in asset pricing models.

### **Target price**

Target price plays a vital role to find out the present value of the share price with the help of predicted dividend. Asquith et al (2005) have examined the reports of analysts who were given the coveted recognition as members of American analyst team over the period 1997-99. Around 73% of reports of all American analyst team members contained target prices. They have reported that 99% contained EPS forecast for the current year, 95% contained EPS forecast for the next year and only 23% contained EPS forecasts for one more year. The studies further states that price target are most often associated with 12 month horizon. They are 33% more than the current market price on the day the report is issued. Approximately 54% of the targets achieved within the year. For the remaining 84% of the target price change is achieved.

As for the analytical models used by analysts; Demirakos (2004) found that 89% use P/E multiples. Asquith (2005) reported that 99% used earnings multiples (Earnings, EBITDA) and only 13% used DCF and DCF.

Gleason (2006) examined target prices of equity shares over the period 1997 to 2003. A total of 223,147 price targets were available from 191

broker houses. He imposed some constraints regarding number of analysts giving target prices and got 34,417 targets for investigation. Target prices provide by 3551 analysts on 2352 companies were analyzed by him in his study.

An interesting finding from Gleason et al. is that if the stock was sold at the highest price it reached in 12 months subsequent to the publication of target price, investors could have made more than 40% return in recommendation fall in each of the five quintiles (most accurate to least accurate).

Quintile	Mean Return (% per annum)
1. Most accurate	46.73
2.	45.59
3.	44.32
4.	43.59
5. Least accurate	42.49

These scientific studies show that target price provides useful information for companies and the investors.

## 2. Sources of Data

Secondary data are collected from the following sources for this study. They are 'CRISIL' India's leading credit agency market research report 2009 and the banks investors' presentation report for the period of fiscal year 2009 and 2010.

## 3. Equity Valuation:

Equity shares can be described more easily than fixed income securities. However, they are more difficult to analyze. Fixed income securities typically have a limited life and a well-defined cash flow stream. Equity shares are perpetual and no defined cash flow. While the basic principles of valuation are the same for fixed income securities as well as equity shares, the factors of growth and risk create greater complexity in the case of equity shares. The investor takes number of decisions in the process of investment. The investor has to decide whether to buy equity (common stock) or bonds or

real estates. With the common stock chosen by the investor, he has to decide which company's stock is to be bought. The stocks are selected on the basis of their return and risk. The analysis of risk and return of holding a particular common stock is known as equity valuation. Equity valuation has different models such as balance sheet valuation models and dividend discount models.

### **3.1 Balance Sheet Valuation**

Balance sheet of the firm gives needed information to make valuation of the firm. The three measures derived from the balance sheet are Book Value, Liquidation Value and Replacement Cost.

### **3.2 Dividend Discount Model**

In Dividend discount model the dividends are paid annually and the first dividend is received one year after the equity share is bought. The different dividend discount models of valuation are

- Single-period Valuation Model
- Expected Rate of Return
- Multi-period Valuation Model
- Zero Growth Model
- Constant Growth Model (Gordon Model)
- Two Stage Growth Model
- Earnings Multiplier Approach
- Earnings-Price Ratio, Expected Return, and Growth.

### **3.3 Data For The Study**

The following data are taken for the market study with the help of CRISIL research report and the banks investors' presentation report for the period of 2009 & 2010.

Table 1 : CRISIL Data

Company	ICICI BANK		HDFC BANK		AXIS BANK	
	FY2009E	FY2010E	FY2009E	FY2010E	FY2009E	FY2010E
Dividend Expected	12	13	10	12.50	7.50	8.50
Target Price	446	477	1360	1570	440	525
Earnings Per Share (EPS)	37.3	39.5	53.7	64.9	47.9	59.4
Earnings Per Share Growth	0.2	6.0	19.7	21.0	42.9	24.1

CRISIL is India's leading ratings, research, risk and policy advisory company. Its integrated range of capabilities includes credit ratings; research on India's economy, industries and companies; investment research outsourcing; fund services; risk management and infrastructure advisory services etc. Many equity research companies use their data to do the research work related to equities.

## 4. Dividend Discount Model

According to the dividend discount model, conceptually a very sound and appealing model, the value of an equity share is equal to the present value of dividends expected from the company plus the present value of the sale price expected when the equity share is sold. For applying the dividend discount model, the following assumptions are made

- i. Dividends are paid annually – this seems to be a common practice for business firms in India; and
- ii. The first dividend is received one year after the equity share is bought.

### 4.1 Single Period Valuation Model

This model is used to find out the current price of the equity share with the help of future dividends ( $D_1$ ), future price of the share expected ( $P_1$ ) and the rate of the return( $r$ ) for a period of one year.

$$P_0 = \frac{D_1}{(1+r)} + \frac{P_1}{(1+r)}$$

Where  $P_0$  = Current price of the equity share  
 $D_1$  = Dividend expected a year hence  
 $P_1$  = Price of the share expected a year hence  
 $r$  = rate of return on the equity share.

Single period valuation model is used to find out the discounted price of the equity shares ( $P_0$ ) with the help of an expected dividend rate ( $D_1$ ), target price ( $P_1$ ) and the rate of return ( $r$ ). Here the valuation period is exactly one year.

Table 2 : Single Period Valuation Model

Name of the Company	$D_1$	$P_1$	$r$	$P_0$
ICICI BANK.	12	446	0.08	423
HDFC BANK	10	1360	0.040	1318
AXIS BANK	7.50	440	0.11	403

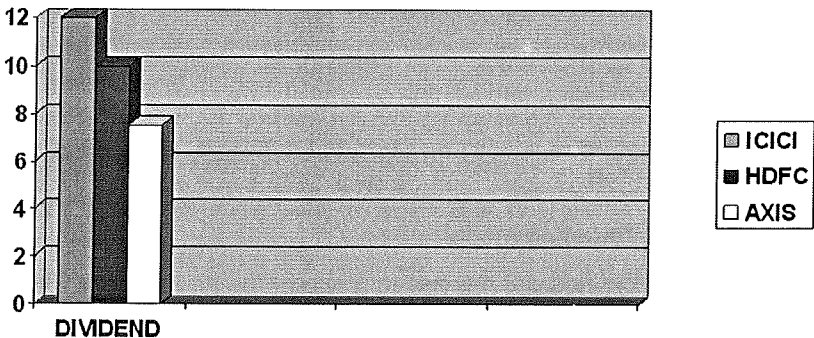


Fig.1: Dividend Chart



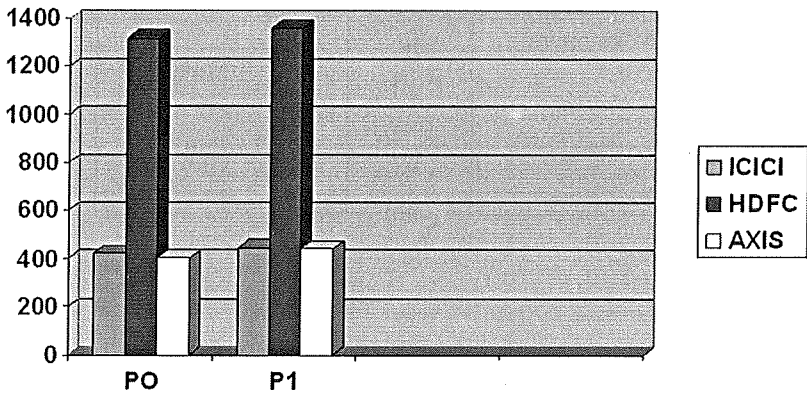


Fig.2: Target Price (P1) & Discounted Price (Po) Chart

The calculated price ( $P_0$ ) for HDFC bank is higher than the AXIS bank and ICICI bank. The rate of return ( $r$ ) given by axis bank and icici bank are comparatively good. It is suggested that the shares of these banks can be bought or hold, if its price is lesser than the calculated value ( $P_0$ ). These shares can be sold if it's price is greater than the target price. The calculated price may vary upside to 15% due to different pay out ratios followed by the banks. (Source: CRISIL research report).

#### 4.2 Expected Rate Of Return

The intrinsic value of an equity share is calculated from the forecast values of dividend and share price, and the required rate of return. Hence the rate of return is calculated by following formula

$$r = D_1 / P_0 + g$$

where  $r$  = rate of return on the equity share.

$D_1$  = Dividend expected a year hence

$P_0$  = Current price of the equity share

$g$  = Expected growth of EPS

Expected rate of return is a return expected by the investors for his/her investments. The intrinsic value of an equity share is determined by using the dividend rate ( $D_1$ ), current ( $P_0$ ), and the growth of the earnings per share ( $G$ ).

Table 3 : Expected Rate Of Return

Name of the Company	$D_1$	$P_0$	$g$	$r$
ICICI BANK.	12	423	0.20	0.028 %
HDFC BANK	10	1318	19.1	0.007 %
AXIS BANK	7.50	403	42.9	0.017 %

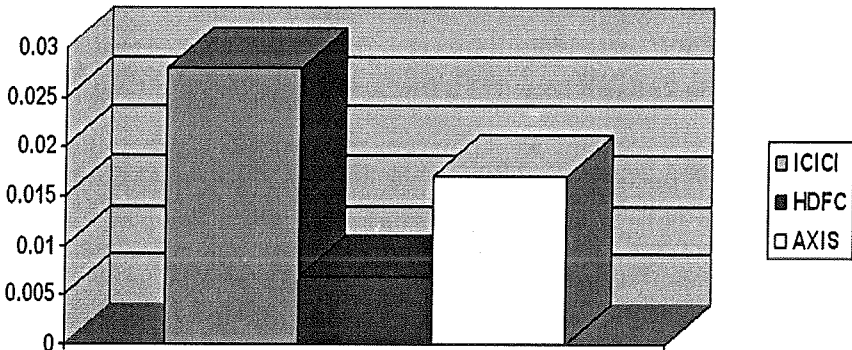


Fig. 3 : Expected Rate of Return Chart

It is interpreted that the growth of Earning per share (EPS) of Axis bank is higher. ICICI bank has lower Earning per share (EPS) for the period 2009-2010, because their global investment loss is high when compared to other Indian banks. The expected rate of return for ICICI bank is comparatively higher than the other banking stocks. ICICI banks provide good returns, but has high risk involved in it. This may be good investment option for speculators.

### 4.3 Multi Period Valuation

The basics of equity share valuation in a single-period framework, we now discuss the more realistic, and also the more complex, case of multi period valuation.

Since equity shares have no maturity period, they may be expected to bring a dividend stream of infinite duration. Hence, the value of an equity share may be put as:

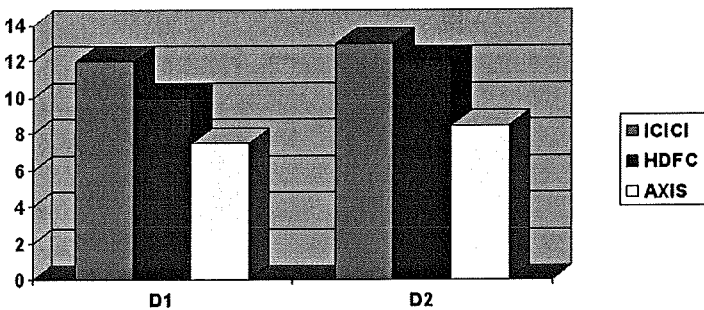
$$P_0 = \frac{D_1}{(1+r)} + \frac{D_1}{(1+r)^2} + \dots + \frac{D_1}{(1+r)^t} = \sum_{t=1}^{\infty} \frac{D_1}{(1+r)^t}$$

- where  $P_0$  = Price of the equity share today  
 $D_1$  = Dividend expected a year hence  
 $D_2$  = Dividend expected a two years hence  
 $D$  = Dividend expected at the end of infinity'  
 $r$  = expected return

The multi period valuation is defined as the valuation of the equities for a period of at least two years and more. The discounted price ( $P_0$ ) of the equities is calculated from the discounted value of the dividends ( $D_1$  &  $D_2$ ) and the liquidating price or the target price ( $P_1$ ) of the second year.

**Table 4 : Multi Period Valuation**

Name of the Company	$D_1$	$D_2$	R	$P_0$
ICICI BANK.	12	13	0.08	431.21
HDFC BANK	10	12	0.040	1475.06
AXIS BANK	7.50	8.50	0.17	439.80



**Fig. 4 : Multi Period Dividend Chart**

Dividend rates of the banks are at the order of ICICI, HDFC and AXIS bank, with ICICI leading the table followed by HDFC and AXIS bank. This shows that all the banks have a good dividend payout ratio. The rate of return ( $r$ ) by Axis bank is comparatively good for multi period valuation. It is suggested that the shares of these banks can be bought or hold if its price is lesser than the calculated value ( $P_0$ ). These shares can be sold if their price is greater than the target price. The calculated price may vary upside to 15% due to different pay out ratios followed by the banks. (Source: CRISIL research report).

#### 4.4 Zero Growth Model

This model assumes that the dividend per share remains constant year after year at a value of  $D$ ,

$$P_0 = \frac{D_1}{(1+r)} + \frac{D}{(1+r)^2} + \dots + \frac{D}{(1+r)} + \dots = \frac{D}{(1+r)^\infty}$$

on simplification it becomes

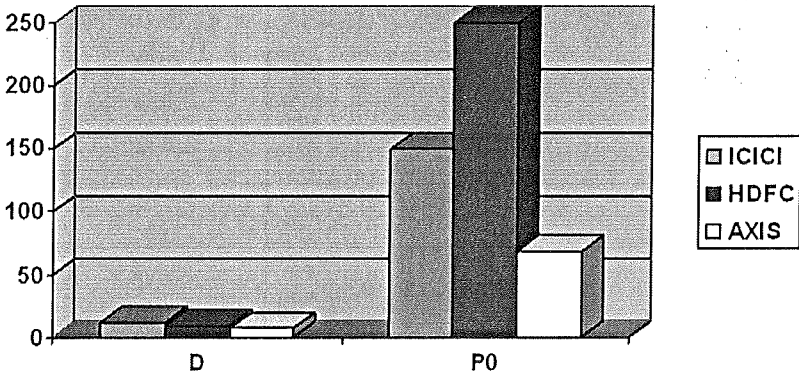
$$P_0 = \frac{D}{r}$$

This model is used to find out the discounted price of an equity share under the assumption that the growth of dividend is zero .i.e the dividend are paid at the constant rate.

Table 5 : Zero Growth Model Valuation

Name of the Company	$D_1$	R	$P_0$
ICICI BANK.	12	0.08	150
HDFC BANK	10	0.040	250
AXIS BANK	7.50	0.17	68.18

Fig. 5 : Dividend Rate & Discounted Price Chart



If it is assumed that the dividend growth rate of these stocks be zero, then it is suggested that the shares of these banks can be bought or hold if its price is lesser than the calculated value ( $P_0$ ). These shares can be sold if it's price is greater than target price. The calculated price may vary upside to 15% due to different pay out ratios followed by the banks. (Source: CRISIL research report).

#### 4.5 Constant Growth Model (Gordon Model)

One of the most popular dividend discount models is Gordon model as it was originally proposed by Myron J. Gordon which assumes that the dividend per share grows at a constant rate ( $g$ ). The value of a share, under this model is

$$P_0 = \frac{D_1}{(1+r)} + \frac{D_1(1+g)}{(1+r)^2} + \dots + \frac{D_1(1+g)^n}{(1+r)^{n+1}} + \dots$$

Applying the formula for the sum of a geometric progression, the above expression simplifies to

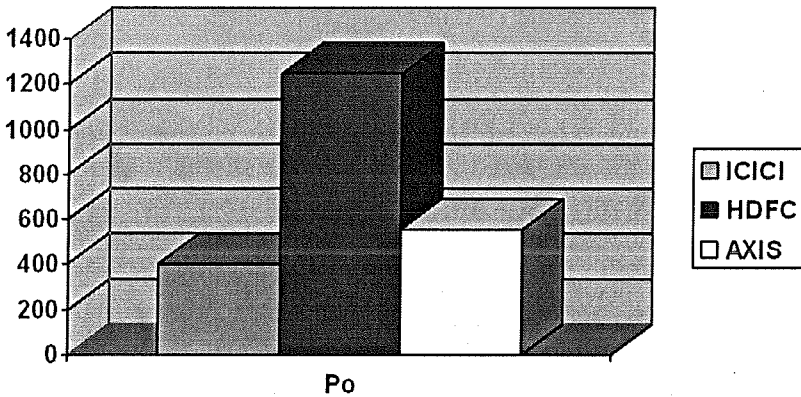
$$P_0 = \frac{D}{r-g}$$

The constant growth model is a financial model used to determine the intrinsic value of a stock, based on future dividends, which are assumed to grow at a constant rate. It also assumes that the investor's required rate of return is constant and is equal to the cost of equity for the company.

Table 6 : Constant Growth Model

Name of the Company	$D_1$	$r$	$g$	$P_0$
ICICI BANK	12	0.08	0.05	400
HDFC BANK	13	0.040	0.032	1250
AXIS BANK	7.50	0.11	0.092	555

Fig. 6: Discounted Price Chart



It is inferred that Axis bank does not fluctuate much at all times because it has constant growth rate. This shows that this is a better investment option for risk averse individuals who expect a moderate return on their investment.

#### 4.6 Two Stage Growth Model:

The simplest extension of the constant growth model assumes that the extraordinary growth (good or bad) will continue for a finite number of years and thereafter the normal growth rate will prevail indefinitely.

Assuming that the dividends move in line with the growth rate, the price of the equity share will be:

$$P_0 = \left[ \frac{D_1}{(1+r)} + \frac{D_1(1+g)^2}{(1+r)^2} + \frac{D_1(1+g)^3}{(1+r)^3} \dots + \frac{D_1(1+g)^{n-1}}{(1+r)^n} \right] \frac{P_n}{(1+r)^n}$$

where  $P_0$  = Current price of the equity share

$D_1$  = dividend expected in a year

$g_1$  = extraordinary growth rate applicable for  $n$  years.

$P_n$  = Price of the equity share at the end of year  $n$ .

The first term on the right hand side is the present value of a growing annuity. Its value is equal to

$$D_1 \left[ 1 - \frac{\left[ \frac{1+g_1}{1+r} \right]^n}{r-g_1} \right]$$

$$P_0 = D_1 \left[ 1 - \frac{\left[ \frac{1+g_1}{1+r} \right]^n}{r-g_1} \right] + \frac{P_n}{(1+r)^n}$$

Since the two-stage growth model assumes that the growth rate after  $n$  years remains constant,  $P_n$  will be equal to

$$\frac{D_{n+1}}{r-g_2}$$

where  $D_{n+1}$  = dividend for year  $n+1$

$g_2$  = growth rate in the second period.

$D_{n+1}$ , the dividend for year  $n+1$  may be expected in terms of the dividend in the first stage.

$$D_{n+1} = D_1 (1+g_1)^{n-1} (1+g_2)$$

Substituting the above expression,

$$P_0 = D_1 \left[ 1 - \frac{\left[ \frac{1+g_1}{1+r} \right]^n}{r-g_1} \right] + \left[ \frac{D_1(1+g_1)^{n-1}(1-g_2)}{r-g_2} \right] \left[ \frac{1}{(1+r)^n} \right]$$

This model is the simplest extension of the constant growth model, which assumes that the extraordinary growth (good or bad) will continue for a finite number of years and thereafter the normal growth rate will prevail indefinitely. First the present value of constantly growing dividend annuity for a definite supernormal growth period should be found out. Second the present value of constantly growing dividend indefinitely after the super normal growth should be calculated.

Table 7 : Two Stage Growth Model

Name of the Company	D <sub>1</sub>	g <sub>1</sub>	g <sub>2</sub>	R	n	P <sub>0</sub>
ICICI BANK.	12	0.09	0.18	0.08	2	439
HDFC BANK	10	0.17	0.41	0.040	2	1484
AXIS BANK	7.50	0.25	0.42	0.11	2	448

Fig. 7 : Growth Chart For Two Stage Growth

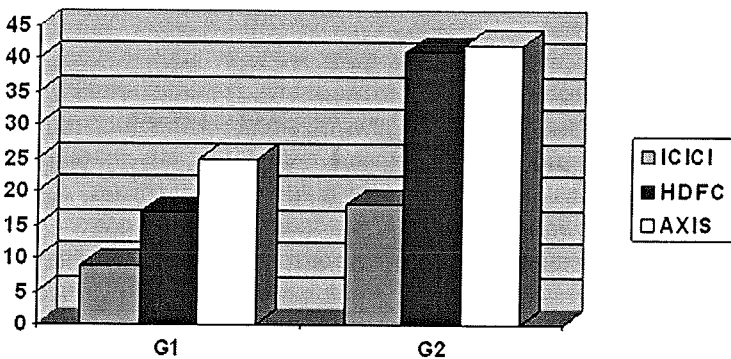
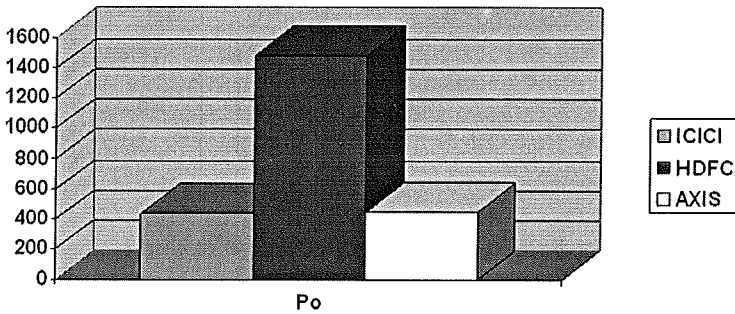




Fig. 8 : Discounted Price Chart Two Stage Growth



It is interpreted that the growth rate varies largely between two different periods. (2009 & 2010). It is suggested that the shares of these banks can be bought if its price is lesser than the calculated value ( $P_0$ ). These shares can be sold if their price is greater than target price. The calculated price may vary upside to 15% due to different pay out ratios followed by the banks. (Source: CRISIL research report). It is suggested that for long term investment, Axis banks and HDFC banks are a good investment option.

#### 4.7 Earnings Multiplier Approach

Earnings multiplier approach is the most widely practiced equity valuation model by the investors. The value of a stock, under this approach, is estimated as follows:

$$P_0 = E_1 \times P_0 / E_1$$

where  $P_0$  = estimated price

$E_1$  = estimated earning per share

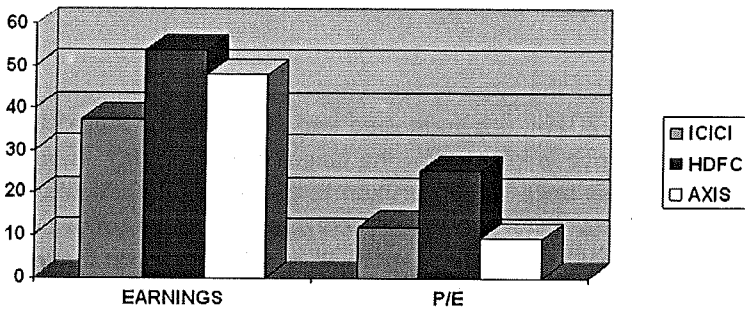
$P_0 / E_1$  = justified price-earning ratio

In this approach the intrinsic value of an equity share can be calculated with the help of earnings of the share and the target price of the share. This approach is more popular for evaluating the company performance with the help of its earnings.

**Table 8 : Earning Multiplier Model**

Name of the Company	$E_1$	$P_0/ E_1$	$P_0$
ICICI BANK	37.3	11.95	446
HDFC BANK	53.7	25.32	1360
AXIS BANK	47.9	9.2	440

**Fig.9 : Earnings (E) & Price Earnings (P/E) Chart**



It is interpreted that HDFC bank has higher earnings than ICICI and AXIS banks. AXIS and ICICI banks are a good investment option for dividend investors. If the investors prefer constant growth, moderate return and lesser risk, they can opt for AXIS bank stocks, and if they prefer for high growth, high return and high risk, investors can opt for ICICI bank stocks. HDFC bank might be a good option for long term investors who prefer to have moderate growth, less risk and good return.

#### 4.8 Determinants of P/E Ratio

The determinants of the P/E ratio can be derived from the dividend discount model, which is the foundation for valuing equity stocks.

According to constant growth dividend discount model the price of the security is determined by

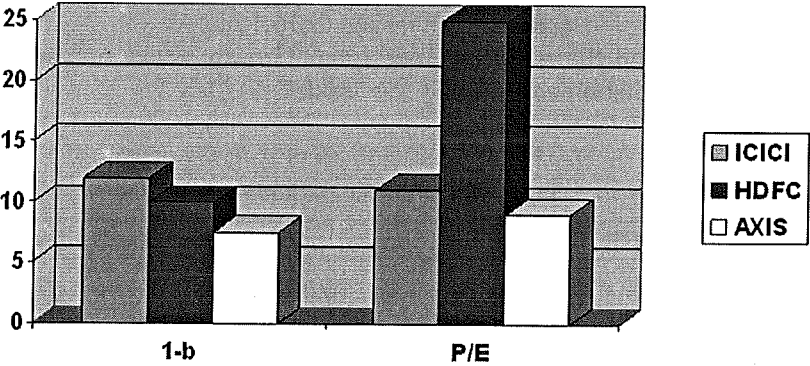
$$P_0 = \frac{D_1}{r-g}$$

In this model  $D_1 = E_1 (1-b)$ ,  $b$  stands for the plough back ratio, and  $g = ROE \times b$  and  $ROE$  is return on equity. Making these substitutions it can be found that. The price earning ratio is widely used by the analyst and the investors to evaluate the equity shares. It is calculated as the price of a share divided by earning per share. The reciprocal of P/E is called earnings-price ratio or earning yield.

**Table 9 : P/E Ratio Determinants**

Bank	1-b	r	g	P/E
ICICI BANK	12	0.08	0.05	11
HDFC BANK	10	0.040	0.032	5
AXIS BANK	7.50	0.11	0.092	9

**Fig.10 : Dividend Pay Out & P/E Ratio Chart**



From the table it can be interpreted that the price earning ratio (P/E) of HDFC bank is comparatively higher than AXIS bank and also has lower dividend rate than ICICI. It shows that HDFC is a consistent growth stocks. It is also found that the price earning ratio (P/E) of ICICI bank is lower, and it has higher dividend rate. Hence the growth rate of ICICI is limited in nature.

#### 4.9 Earnings-price, Expected Return, Growth Model

There are two common forms of stocks such as growth stocks and income stocks. Growth stocks are supposed to provide return primarily in the form of capital appreciation whereas income stocks are expected to provide returns mainly in the form of cash dividends.

$$\begin{aligned} \text{Expected return} &= \text{Dividend yield} = \text{Earnings-price ratio} \\ &= \frac{D_1}{P_0} = \frac{E_1}{P_0} \end{aligned}$$

The Price is equal to:

$$P_0 = \frac{D_1}{r} = \frac{E_1}{r}$$

where  $r$  = Expected return.

$D_1$  = Dividend yield

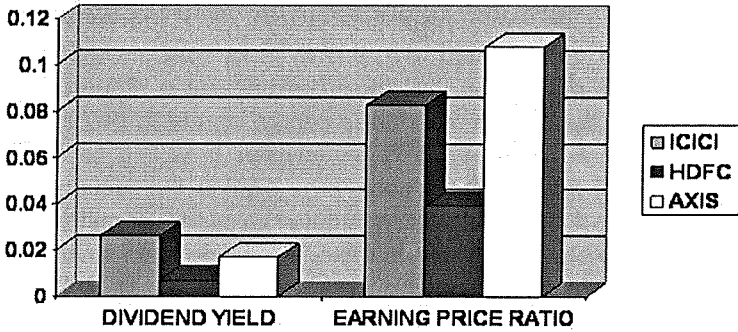
$E_1$  = Earnings per share

In this approach the expected return can be calculated with the help of dividend yield and the earnings price ratio. Growth stocks and Income stocks can be determined by using this model.

Table 10 : D/P And P/E Ratio

BANK	Earning price ratio	Dividend yield
ICICI BANK	0.083	0.026
HDFC BANK	0.039	0.007
AXIS BANK	0.108	0.017

Fig 11: Earning Price Ratio



It has been found that AXIS bank and ICICI bank have given higher earning price ratio and moderate dividend yield, when compared to HDFC bank. This shows that investors who want good dividend yield can consider ICICI and AXIS bank stocks for their investment for a period of less than one year. People who want to have moderate growth in medium term and good return in the long term basis can choose HDFC bank stocks.

## 5. Recommendations

It is recommended that the investors can buy the shares of these banks, if its price is less than the discounted price or calculated value ( $P_0$ ). These shares can be sold if its price is greater than target price. The calculated price may vary upside to 15% due to different pay out ratios followed by the banks. (Source: CRISIL research report). It is also recommended that the investors who want to have good dividend yield, constant growth, moderate return and less risk can opt for AXIS bank shares. Investors can opt for ICICI bank shares, if they prefer high growth, high return and high risk. Generally this stock is helpful for speculators. Investors who prefer less risk, good return and moderate growth can opt for the HDFC bank shares. It is suggested that the banks should identify their weak areas like earnings per share and its growth prospects, dividend pay out policies so as to take appropriate measures to improve its equity valuations.

## Conclusion

In an industry plagued with skepticism and a stock market increasingly difficult to predict and contend with, if one looks hard enough there may still be a genuine aid for the investors. The price of a security represents a consensus. It is the price at which one person agrees to buy and another agrees to sell. The price at which an investor is willing to buy or sell depends primarily on his expectations. If he expects the security's price to rise, he will buy it; if the investor expects the price to fall, he will sell it. These simple statements are the cause of a major challenge in forecasting security prices, because they refer to human expectations. In this study the value of equity is predicted based on the data collected from a reliable agency called CRISIL. The study has attempted to compare the equity value ICICI, HDFC and AXIS bank by using a dividend discount model. Based on this study, recommendation is made to the investors to buy/hold or sell the stocks and also helpful for the banks to identify their weak points which hinders the growth of its equities .i.e. earning per share, dividend policies, dividend pay outs etc.

## Reference

- Arnott, Robert D. and Bernstein, Peter L. (2002), What Risk Premium is 'Normal'?. Financial Analysts Journal, Vol. 58, No. 2, March/April 2002.*
- Asquith, Paul and David W. Mullins, Jr., (1983), The Impact Of Initiating Dividend Payments on Shareholders' Wealth, Journal of Business, 56 (1), 77-96.*
- Asquith P., M. Mikhail and A. Au, (2005), Information Content of Equity Analyst Reports, Journal of Financial Economics, 75:245-282.*
- Bollerslev, T. and R. Hodrick, (1995), Financial Market Efficiency Tests, The Handbook of Applied Econometrics I – Macroeconomics, edited by M. Pesaran and M. Wickins.*
- Demirakos, E., N. Strong and M. Walker (2004), What Valuation Models Do Analysts Use?" Accounting Horizons, 18:221-240.*
- Donaldson, R.G. & Kamstra, M., (1996), Forecasting Fundamental Asset Return Distributions and Tests for Excess Volatility and Bubbles, Discussion Papers dp96-02, Department of Economics, Simon Fraser University.*
- Fama, Eugene and Harvey Babiak, (1968), Dividend Policy: An Empirical Analysis, Journal of the American Statistical Association 63, 1132-1161.*

- Fama, E. and K. French, (1988), Dividend Yields and Expected Stock Returns, *Journal of Financial Economics* 22, 3-25.
- Fama, Eugene, and Kenneth French, (2001), Disappearing dividends: Changing firm characteristics or lower propensity to pay?, *Journal of Financial Economics* 60, 3-43.
- Gleason, Cristi A., Johnson, W. Bruce Bruce and Li, Haidan (2006), The Earnings Forecast Accuracy, Valuation Model Use, and Price Target Performance of Sell-Side Equity Analysts.
- Gordon, M. J., 1962, *The Investment, Financing and Valuation of the Corporation*, R. Irwin, Homewood..
- Gordon, M.J. and E. Shapiro, 1956, Capital equipment analysis: the required rate of profit, *Management Science* 3, 102-110.
- Goyal, A and Welch Ivo(2003), A note on Predicting Returns with Financial Ratio's, Working Paper, Emory University.
- Gretchen Morgenson, (2001), Price Targets Are Hazardous to Investors' Wealth, *New York Times*, August 5.
- LeRoy, S. and R. Porter, (1981), The Present-Value Relation: Tests Based on Implied Variance Bounds, *Econometrica* 49, 555-574.
- Poterba, James M. & Summers, Lawrence H., (1988), Mean reversion in stock prices : Evidence and Implications, *Journal of Financial Economics*, Elsevier, vol. 22(1), pages 27-59, October.
- Robert J. Shiller, (1981), *The Use of Volatility Measures in Assessing Market Efficiency*, NBER Working Papers 0565, National Bureau of Economic Research, Inc
- Shiller, Robert J, (1981), Do Stock Prices Move Too Much to be Justified by Subsequent Changes in Dividends?, *American Economic Review*, American Economic Association, vol. 71(3), pages 421-36, June.