MAIN IDEA
Warren Buffett is one of the most successful stock market investors of the past 30 years. His entire approach is to focus on the value of the business and its market price. Once Buffett finds a business he understands and feels comfortable with, he acts like a business owner rather than a stock market speculator. He studies everything possible about the business, becomes an expert in that field and works with the management rather than against them. In fact, often his first act on buying shares in any company is to grant the managers his proxy vote for his shares to assure them that he has no intention to try and move the company away from its core values.

Buffett champions the value investment strategy, and puts no credence in day to day movements in share prices, the impact of the economic mood overall or any other external factors. He maintains a long-term perspective at all times, and never loses sight of the underlying value of a business.

THE BUFFETT APPROACH TO INVESTMENT
1. Never follow the day to day fluctuations of the stock market.
   The market only exists to make it easier to buy and sell, not to set values. Keep an eye on the market only for someone who is willing to sell a stock at a not-to-be-missed price.
2. Don’t try and analyze or worry about the general economy.
   If you can’t predict what the stock market will do from day to day, how can you reliably predict the fate of the economy?
3. Buy a business, not its stock.
   Treat a stock purchase as if you were buying the entire business, using the following tennets:
   Business Tennets
   1. Is the business simple and understandable from your perspective as an investor?
   2. Does the business have a consistent operating history?
   3. Does the business have favourable long-term prospects.
   Management Tennets
   1. Is management rational?
   2. Is management candid with its shareholders?
   Financial Tennets
   1. Focus on return on equity, not earnings per share.
   2. Calculate “Owner Earnings”.
   3. Search for companies with high profit margins.
   4. For every dollar of retained earnings, has the company created at least one dollar’s extra market value?
   Management Tennets
   1. What is the value of the business?
   2. Can the business currently be purchased at a significant discount to its value?
4. Manage a portfolio of businesses.
   Intelligent investing means having the priorities of a business owner (focused on long-term value) rather than a stock trader (focused on short-term gains and losses).
1. WARREN BUFFETT

In the 1993 Forbes list of America’s richest people, Warren Buffett had an estimated net worth of $8.3 billion. Of all 69 people listed, Buffett is the only one who obtained his wealth from the stock market.

Buffett graduated from the University of Nebraska. While there, he read a book The Intelligent Investor by Benjamin Graham. This book so impressed Buffett that he went to New York to study with Ben Graham at the Columbia Graduate Business School.

At the age of 25 in 1956, Buffett started an investment partnership. He had seven limited partners who contributed $105,000 and Buffett as general partner put in $100. The limited partners received 6-percent interest per year and 75-percent of the profits generated above this level. Buffett was paid the other 25-percent. Over the next 13 years, this partnership compounded investments at an annual rate of 29.5-percent. In 1965, Buffett closed the partnership and cashed out with a personal stake of $25 million.

Warren Buffett used his capital to purchase a controlling interest in Berkshire Cotton Manufacturing, a well established but struggling textile company. This company merged with Hathaway Manufacturing, and also bought interests in two insurance companies in 1967. The combined company was renamed Berkshire Hathaway.

The insurance companies generated steady cash flow, which was invested in stocks and bonds to have the funds available for payment of claims. The company’s stock portfolio in 1967 was $7.2 million, so Buffett assumed control of this. Within two years, the stock portfolio had grown to $42 million, and the insurance company profits far outweighed the return generated by the textile side of the company.

During the 1970s, Bershire bought three more insurance companies and started another five. Buffett also closed the textile side of the company and converted Berkshire Hathaway into a holding company. Berkshire owns a number of other varied companies and started another five. Buffett also closed the textile side of the company.

Berkshire-Hathaway had a corporate net worth of $22 million when Warren Buffett assumed control. Today, it is worth more than $10.2 billion. Buffett's goal is to increase the company's worth by a 15-percent compound rate each year.

Berkshire pays no dividends but reinvests all money earned. Therefore, shareholders look to a capital gain in the value of their stock. Since 1964, Berkshire shares have grown from $19 each to more than $22,000 per share today. Over the past 25-years, Berkshire has grown at an compound rate of 23.2-percent per year - well above Buffett's target of 15-percent per year.

2. TWO MENTORS

Main Idea

Warren Buffett’s investment methodology is a hybrid mix of the strategies put forward by two 1930s style investment advisers, Ben Graham and Philip Fisher.

From Graham, Buffett learned the margin of safety approach - that is, use strict quantitative guidelines to buy shares in companies that are selling for less than their net working capital. Graham also emphasized that following the short-term fluctuations of the stock market is pointless, and that stock positions should be long term.

From Fisher, Buffett added an appreciation for the effect that management can have on the value of any business, and that diversification increases rather than reduces risk as it becomes impossible to closely watch all the eggs in too many different baskets.

Supporting Ideas

1. Benjamin Graham

Author of Security Analysis and The Intelligent Investor, Graham is widely considered as the first professional financial analyst.

Ben Graham grew up in New York and had a science degree from Columbia University. By the age of 25, he was a partner in a brokerage firm earning $600,000 per year. He was financially ruined by the 1929 crash and had to rebuild his fortune.

Graham’s investment philosophy was that a well-chosen, diversified portfolio of common stocks, based on reasonable prices, were the soundest possible long-term investment anyone could make.

To Graham, the distinction between an investment and a speculation was: “An investment operation is one which, upon thorough analysis, promises safety of principal and a satisfactory return. Operations not meeting those requirements are speculative.”

An investment requires safety of principal and a satisfactory return. Safety is a relative term, and can never be determined in an absolute sense. Similarly, the concept of a satisfactory return (whether dividend income or stock price appreciation) is also subjective.

Graham described three approaches to investing in common stocks:

1. The Cross-Section Approach.

The investor buys some shares in companies in every sector of the market. Then, whatever happens in the economy, at least one stock will be performing well.

2. The Anticipation Approach.

a. Short-Term Selectivity.

This is the investment in companies which have the most favourable outlook in the next 6-months to a year. Although this is volatile and superficial, this is the dominant approach used by most sharebrokers.

b. Growth Stocks

These are companies whose sales and earnings are expected to grow at a rate above those of the average business. The trick is to buy stock in any company whose products were at an early stage of their life cycle, when profits and revenues were just about to take off. The difficulty here is in accurately forecasting rates of growth.
3. Margin of Safety Approach
Invest only in companies which have a large margin between earnings and fixed costs. In a downturn, that company is most likely to ride out a recession well. Applying this concept to a stock, buy shares only in a company for which the share price is below its intrinsic value as determined by assets, earnings, dividends and future prospects.

Graham strongly advocated the margin of safety approach with investment in common stock of growth companies. His approach to investment was to purchase growth company shares when the overall market is trading at a low price or when growth company shares are trading below their intrinsic value. However, since buying at market lows is everyone’s objective, there is no competitive advantage in that approach. Therefore, Graham suggested that identifying undervalued stocks, regardless of market sentiment, was the key to stock market investment success.

Intrinsic value is closely linked to a company’s future earning power and fixed costs. It is hard or real assets plus the future value of the earnings those assets will produce.

Graham advocated two approaches to buying shares:
1. Buy for less than two-thirds a company’s net asset value. These stocks will generally be out of favour with market sentiment. The market inefficiency, created by emotions, generates valuable opportunities for the rational investor.
2. Buy low price-to-earnings ratio stocks.

Philip Fisher

Author of *Common Stocks And Uncommon Profits*. Fisher was a stockbroker who set up in business just after the 1929 crash.

Fisher focused on companies with an ability to grow sales and profits over the years at rates greater than the industry average. He classified these types of companies as:

1. Fortunate and able. Companies which work aggressively to create larger markets for their products, and are in a position to benefit from events outside the company’s control.
2. Fortunate because they were able. Companies which continually carried out research and development to produce better products and new markets.

Fisher studied a company’s sales organization in addition to its research and development capabilities. He also looked at profit margins and accounting controls. Fisher believed marginal companies never succeeded over the long run. He looked for companies which were dedicated to maintaining their competitive advantage and strengthening their market position.

He also looked for companies which could grow without requiring additional equity financing. If a company expanded on the strength of its products and services rather than by expanding its capital base, Fisher thought that augured well for the future.

Above-average management capabilities in companies were also keenly sought by Fisher. He saw as a good sign any management who communicated freely with shareholders when the company was experiencing unexpected hard times. The management should also have an ability to develop good working relations throughout the company.

Fisher examined the unique distinguishing characteristics of each company. He looked for clues by interviewing customers, vendors, competitors and consultants. He always tried to garner an accurate picture of relative strengths and weaknesses by his research.

Fisher suggested it was better to hold stock in a few outstanding companies than a large number of average companies. He always invested within his own circle of competence - that is, with companies he understood and felt comfortable with.

### 3. FOUNDATIONS OF THE BUFFETT APPROACH

**Main Idea**

Warren Buffett lets companies inform him by their operating results, not by short-term stock market fluctuations. His is a very patient investment strategy based on the value of the business.

Buffett’s whole approach is to look at a share purchase from the perspective of a business owner rather than as a stock market dabbler.

**Supporting Ideas**

1. There is a large difference between investing in a particular stock and trying to predict the direction of the general market.

   In spite of technology, it is still people that make markets. Investor sentiment has the largest influence over short-term market direction and stability. However, the long-term value of a stock is ultimately determined by the economic progress of the business, not the day-to-day market fluctuations.

2. The Mr. Market Allegory.

   Imagine you are the owner of a small business in partnership with Mr. Market. Every day, Mr. Market quotes you a price at which he is willing to buy your half of the business or sell you his half. While the business is sound and makes good progress, Mr. Market’s quotes vary widely according to the mood he is in.

   When he is in an upbeat mood, his price is exceptionally high. Conversely, strike him on a bad day and he is very pessimistic and quotes an unusually low price.

   If you were in business with Mr. Market and you tried to take advantage of his wisdom, you would be on an emotional roller coaster ride. Rather, it is Mr. Market’s pocketbook you should take advantage of, not his wisdom. It is disastrous if you fall under his influence.

   A successful stock market investor should put aside the emotional whirlwind Mr. Market unleashes on the general market every day and exercise sound business judgement.

3. Investors must be financially and psychologically prepared to deal with the everyday market fluctuations. Unless you can watch the value of your stock holdings decline by 50-percent or more without becoming panic striken, you will never succeed.

4. Price declines are a welcome way to add more shares to your portfolio at a lower price. As long as your are investing in a soundly run business with good fundamentals, management and prices, the market will eventually acknowledge success.

5. The ability to say “no” unless all the facts are in your favour is a significant advantage for any stock market investor. Rather than constantly buying and selling shares in mediocre businesses on the strength of a rumour, Buffett buys and holds shares permanently in just a few outstanding, well-managed businesses. His approach is always to wait patiently until a truly great investment opportunity surfaces and then go to it.
6. Investment success is not the same as infallibility. Instead, success comes about by doing more things right than wrong. To do that, reduce the number of things you can get wrong and focus on the things you expect to get right.

7. The Market Rumour Parable

An oil prospector was met at the gates of heaven by St. Peter who told him there was no room for him to come in. The prospector asked if he might say just four words to the oil prospectors present. He yelled, “Oil discovered in Hell!” With that, all the oil men marched out of heaven headed for hell. St. Peter was impressed and invited the man in now there was plenty of room. “No thanks,” said the newcomer. “I think I’ll just go along with the rest of the boys. There just might be some truth to that rumour after all.”

Despite all the experience and educational qualifications found in stock market investors (including institutions), it still acts irrationally and with a “follow the mob” mentality. Buffett takes no comfort from having “important” people agree with him, and does not lose confidence when they disagree.

8. An investor and a businessperson should look at a company in the same way. The businessperson wants to buy the entire company while an investor wants a part.

The first question any businessperson will ask is, “What is the cash generating potential of this company?” Over time, there will always be a direct correlation between the value of a company and its cash generating capacity. The investor would benefit by using the same business purchase criteria as the businessperson.

Change your thinking from buying and selling shares in a company to buying and selling a business you want to own and you’ll have a much improved perspective.

8. Short term price fluctuations are an unwise criteria by which to judge a company’s success. Instead, look at:
   - Return on beginning shareholder’s equity.
   - Operating margin changes.
   - Debt level changes.
   - The company’s cash generating ability.

That is, use economic criteria rather than price changes.

9. Relationship investing is critically important. With this approach, investors act like owners of the companies they own shares in. They provide patient capital allowing management to pursue long-term growth opportunities. Stock is held long-term and investors work with management to improve corporate performance.

10. Warren Buffett usually assigns voting rights for shares he purchases to the management of the company. That sends the clear signal that he is not seeking changes. He avoids companies in need of major overhauls. He also avoids confronting management to improve shareholder returns. Buffett simply will not invest in any company which he considers requires a change in officers before true value can be realized. He does not look for a company which is undergoing a turnaround or restructuring exercise, as this creates a situation in which there are too many variables.

11. Buffett is quite content to hold any security indefinitely, so long as the prospective returns on equity capital of the business is satisfactory, management is shareholder-oriented and competent and the market does not overvalue the business. Generally speaking, Buffett sells only when the stock price shows the market is appreciably overvaluing the business by his reckoning.

---

Key Thoughts

“"The farther one gets from Wall Street, the more skepticism one will find as to the pretensions of stock-market forecasting or timing.""

-- Ben Graham

“"I have long felt that the only value of stock forecasters is to make fortune tellers look good.""

-- Warren Buffett

“"The most common cause of low prices is pessimism - sometimes pervasive, sometimes specific to a company or industry. We want to do business in such an environment, not because we like pessimism but because we like the prices it produces. It's optimism that is the enemy of rational buyers.""

-- Warren Buffett

“An investor should act as though he had a lifetime decision card with just twenty punches in it. With every investment decision his card is punched, and he has one fewer for the rest of his life.""

-- Warren Buffett

“"As time goes on, I get more and more convinced that the right method in investments is to put fairly large sums into enterprises which one thinks one knows something about and in management of which one thoroughly believes. It is a mistake to think that one limits one's risks by spreading too much between enterprises about which one knows little and has no special reason for special confidence. One's knowledge and experience is definitely limited and there are seldom more than two or three enterprises at any given time which I personally feel myself entitled to put full confidence.""

-- John Maynard Keynes

“"The reasonable man adapts himself to the world. The unreasonable one persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man.""

-- George Bernard Shaw

“"Can you really explain to a fish what it's like to walk on land? One day on land is worth a thousand years of talking about it and one day running a business has exactly the same kind of value.""

-- Warren Buffett

“"Invest within your circle of competence. It's not how big the circle is that counts, it's how well you define the parameters.""

-- Warren Buffett

“"Rationality is the quality that Buffett thinks distinguishes his style with which he runs Berkshire - and the quality he often finds lacking in other corporations.""

-- Carol Loomis, Fortune Magazine

“"Beware of past performance proofs in finance. If history books were the key to riches, the Forbes 400 would consist of librarians.""

-- Warren Buffett

“"After we buy a stock, consequently, we would not be disturbed if markets closed for a year or two. We don’t need a daily quote on our 100 percent position in See’s or H.H. Brown to validate our well being. Why, then, should we need a quote on our 7 percent interest in Coke?""

-- Warren Buffett
Rational allocation of capital is the key to any investment success.

The Buffett approach to investment is:
1. Never follow the day to day fluctuations of the stock market.
2. Don’t try and analyze or worry about the general economy.
3. Buy a business, not its stock.
4. Manage a portfolio of businesses you want to own.

Supporting Ideas

1. **Never follow the day to day fluctuations of the stock market.**
   
   In essence, a stock market exists simply to facilitate the buying and selling of shares. Anytime an investor tries to turn the market into a predictor of future prices, they run into problems. The essential question is whether you’ve done your homework or not. If you know more about a company than the market does, then why give any attention to what the market says?
   
   Secondly, if you buy a share because you believe a company has sound financial prospects and you intend owning it for a number of years, what happens in the market on a day to day basis is totally inconsequential.
   
   An investor does not need the market’s validation for any share purchase they have completed.
   
   The only use for a regular glance at the market is to check whether anyone is foolish enough to sell a good business at a great price.

2. **Don’t try and analyze or worry about the general economy.**
   
   If it is impossible to predict what the stock market will do from day to day, how can it be even remotely achievable to forecast what the economy as a whole will do in the next few years?
   
   The problem is some investors begin with an economic assumption about the direction of the economy and select only stocks which fit their model. In this way, the predictions become both self-fulfilling and limiting.
   
   A superior approach is to buy a business which has a realistic opportunity to progress regardless of whether the overall economy is expanding or contracting. A business which has the ability to profit in any economic environment is very valuable.

3. **Buy a business, not its stock.**
   
   An investor should only buy shares in a company which he would be willing to purchase outright if he had sufficient capital. From this perspective, an investor should look for a company with business operations that are understood, has favourable long-term prospects, is operated by honest and competent people and is available at an attractive price.
   
   The decision to buy a business is based on:
   - Business tenets
   - Management tenets
   - Financial tenets
   - Market tenets
2. Management Tennets

Management Tennet 1.
Is management rational?

Does the management act and think like an owner of the company unfailingly? In particular, how is capital allocated by the company? Rational managers will invest any excess cash generated by the company in projects that produce earnings at rates higher than the cost of capital. Over the long-term, allocation of capital determines the value of the company.

All companies move through an economic life cycle. In the development stage, the company loses money while establishing markets and improving its products. During the next stage of rapid growth, the company requires cash to grow and retains earnings and borrows or issues more equity. In the third stage (maturity), the company generates more cash than it needs as sales expand. In the last stage, excess cash tapers off as sales decline.

The key question is what managers do with the excess cash in the maturity and decline stages. A rational management will invest this cash in projects that earn a higher rate of return than the cost of capital on the open market - otherwise the funds should be returned to shareholders as dividends or by buying back the company's own shares.

By contrast, irrational managers are often overcome by their own prowess and continue to reinvest in projects with diminishing returns.

Management Tennet 2.
Is management candid with its shareholders?

The ideal business manager reports financial performance openly and genuinely, with an ability to admit mistakes and report the progress of all aspects of the company. The management should also be able to reaffirm that the company's prime objective is to maximize the return on shareholder's investment. This concept should colour every action taken.

The tendency to include every piece of information that owners would deem valuable when judging the company's economic performance is a characteristic of a strong management team.

Management Tennet 3.
Does management resist the institutional imperative?

The institutional imperative is the tendency of corporate managers to mimic the actions of other companies, even when those actions are destructive or irrational. Most managers are so influenced by what other companies are doing that they are unwilling to do anything which results in short-term pain in exchange for long-term profit.

A measure of any company's management skill is how effectively they think for themselves rather than settle for mindless imitation of what everyone else is doing. In essence, successful companies have managers who refuse to follow the herd into mediocrity.

3. Financial Tennets

Financial Tennet 1.
Focus on return on equity, not earnings per share.

Companies are continually adding to their capital base by retained earnings in particular. Therefore, you expect earnings per share to increase year by year.

A better measure of a company's performance is return on equity - the ratio of operating earnings to shareholder equity. This measures the management's ability to generate a return on the operations of the business given the capital employed.

When calculating return on equity, value marketable securities at cost - not market value (as market value is beyond management's control). Exclude all non-recurring extraordinary items which are unrelated to the business.

A good management team will consistently achieve good returns on equity while employing little or no debt, or at least employing a manageable debt level for the nature of the business.

Financial Tennet 2.
Calculate “Owner Earnings.”

The ultimate value of any company is its ability to generate a surplus of cash. However, a company with a high fixed asset to profit ratio will require a larger share of retained earnings to stay profitable than a company with a low fixed assets to profit ratio.

“Owner earnings” is calculated by adding depreciation, depletion and amortization charges to net income and subtracting the capital expenditure required to maintain economic position and unit volume.

“Owner earnings” reflects the true cash flow position of a company. Some enterprises (like a real estate development for example) require heavy expenditure at the start and very little later on. Others, like manufacturing, require regular expenditure on plant upgrades or the business slips. “Owner earnings” is an attempt to provide a cross industry analysis measure.

Financial Tennet 3.
Search for companies with high profit margins.

Paradoxically, managers of high-cost companies tend to find ways to continually add to their overheads whereas the managers of low-cost operations take pride in lowering their expenses.

Any money spent on unnecessary costs deprives shareholders of extra profits. The culling of unnecessary expenses is a consistent theme of effective managers.

Financial Tennet 4.
For every dollar of retained earnings, has the company created at least one dollar's worth of extra market value?

Over the longer term, stock market value will accurately reflect the economic value of the company. The same is true for increased market value created by retained earnings. A well managed company will add at least one dollar of market value for every dollar of retained earnings.

To estimate this factor, subtract all dividends from a company's net income over the last ten years. This is the total retained earnings. Add that figure to the company's market value at the beginning of the ten year period to get Total A. If the company has employed retained earnings effectively, the market value at the end of the ten year period will exceed Total A. If it doesn't, beware.
4. Market Tennets

**Market Tennet 1. What is the value of the business?**

Buffett calculates the value of a business as the net cash flows expected to occur over the life of the business discounted at an appropriate interest rate. Net cash flows are the company’s owner earnings over a long period. Something like the thirty-year U.S. treasury bond rate can be used as a measure of the interest rate for this calculation.

By calculating the business value this way, vastly different business enterprises can realistically be compared. If the business is growing rapidly but has unpredictable future revenues, then the company is not classified as simple and understandable and this formula cannot be applied. The discounted cash-flow approach described is very conservative as long as an appropriate discount rate is applied.

“In our view, what makes sense in business also makes sense in stocks. An investor should ordinarily hold a small piece of an outstanding business with the same tenacity that an owner would exhibit if he owned all the business.”

— Warren Buffett

**Market Tennet 2. Can the business currently be purchased at a significant discount to its value?**

Armed with an accurate calculation of the value of the business, you should now look at the asking price. The rule for market success is purchase only when the current market price is at a significant discount to value.

The intention of any investor is to earn above-average returns. The difference between business value and price is the investor’s margin of safety. Most investors set their own margin of safety. Buffet generally aims for a 25-percent discount as his margin of safety.

Additionally, a well chosen stock will have sound fundamentals, which over the longer term will lead to an above average growth in the company’s share price. This, in effect, becomes an additional reward for the intelligent investor who purchases at a discount.

4. Manage a portfolio of businesses.

The concept of intelligent investing is that by buying shares in a company, you should act like the owner of the business, not the owner of a piece of paper. That means you need to understand the company’s operating fundamentals.

Diversification is only required when an investor does not know what they are doing. Very few business owners are comfortable and experienced enough to operate a number of companies at the same time. So too, an investor should act like an owner and buy shares only in companies which are thoroughly understood.

Key Thoughts

“I would rather be vaguely right than precisely wrong.”
— Keynes

“The market, like the Lord, helps those who help themselves. But unlike the Lord, the market does not forgive those who know not what they do.”

— Warren Buffett

“Investing is most intelligent when it is most businesslike.”
— Benjamin Graham

“I put a heavy weight on certainty. If you do that, the whole idea of a risk factor doesn’t make any sense to me. Risk comes from not knowing what you’re doing.”
— Warren Buffett

“You are neither right nor wrong because the crowd disagrees with you. You are right because your data and reasoning are right.”
— Benjamin Graham

“It is not good enough to have good intelligence. The principle thing is to apply it well.”
— Descartes

“As far as I am concerned, the stock market doesn’t exist. It is there only as a reference to see if anybody is offering to do anything foolish.”
— Warren Buffett

“Most managers have very little incentive to make the intelligent-but-with-some-chance-of-looking-like-an-idiot decision. Their personal gain/loss ratio is all to obvious; if an unconventional decision works out well, they get a pat on the back, and if it works out poorly, they get a pink slip. Failing conventionally is the route to go; as a group, lemmings may have a rotten image, but no individual lemming has ever received bad press.”
— Warren Buffett

“It has been helpful to me to have tens of thousands students turned out of business schools taught that it didn’t do any good to think. What we do is not beyond anybody else’s competence. It is just not necessary to do extraordinary things to get extraordinary results.”
— Warren Buffett
**SAMPLE CALCULATION**

**CALCULATING THE VALUE OF A BUSINESS**

Assumptions:
1. The company’s cash flow will grow at a compound rate of 15% per year consistently for the next 10 years.
2. A discount rate of 9.0% per year is used to allow for the effect of inflation.
3. Assume in year 11 that the company’s cash flow will again increase by 5%.
4. All dollar amounts are in millions.

<table>
<thead>
<tr>
<th>Year</th>
<th>Present Value of Future Cash Flows</th>
<th>Present Value of Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Prior Year Cash Flow</td>
<td>$275</td>
<td>$316</td>
</tr>
<tr>
<td>Growth Rate</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Cash Flow</td>
<td>$316</td>
<td>$363</td>
</tr>
<tr>
<td>Discount Factor</td>
<td>.9174</td>
<td>.8417</td>
</tr>
<tr>
<td>Discounted Value Per Annum</td>
<td>$290</td>
<td>$306</td>
</tr>
</tbody>
</table>

**CALCULATION OF RESIDUAL VALUE**

- Cash Flow in Year 10: $1,111
- Growth Rate: 5%
- Cash Flow in Year 11: $1,167
- Capitalization Rate: 4%
- Value at End of Year 10: $29,175
- Discount Factor at End of Year 10: .4224
- Present Value of Residual: $12,324

**BUSINESS VALUE OF A COMPANY**

Business Value = Present Value of Future Cash Flows + Present Value of Residual
= $3,731 + $12,324
= $16,055