Safal Niveshak StockTalk #4: Infosys

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Welcome to the fourth issue of the *Safal Niveshak StockTalk*.

This time I delve deeper into Infosys, India's most well-known, well-understood, and well-followed company, at least within the financial analyst community.

The funny part is that, if you see 100 research reports on Infosys from 100 different analysts, while all might be using a different way to arrive at their target prices for the stock, the targets will be just 5-10% of each other.

The reason is because, unlike a majority of other Indian companies, Infosys shares a future 'expected' EPS number with analysts, and what analysts do is use different routes to arrive at their estimated number which is very close to what Infosys has given! 🙂

Anyways, before we dive deeper into Infosys, here is a brief overview of the sections of this report…

1. About Infosys
2. Infosys's Shareholder Value Creation Model
3. Safal Niveshak's 20-Point Checklist
4. Intrinsic Value Assumptions
5. Financial & Market Snapshot
6. "Should I Buy Infosys?" Checklist

1. About Infosys

Infosys is India second largest IT services company and is a well-known name globally when it comes to ethical business practices. It’s also considered a benchmark when it comes to corporate governance and disclosure to investors.

The company has been at the forefront of the offshoring revolution and has seen its sales and profit grow at a strong rate over the past few years. What is more, Infosys has also led the IT pack in terms of profitability, with its operating margins consistently remaining near the mid-30% levels.

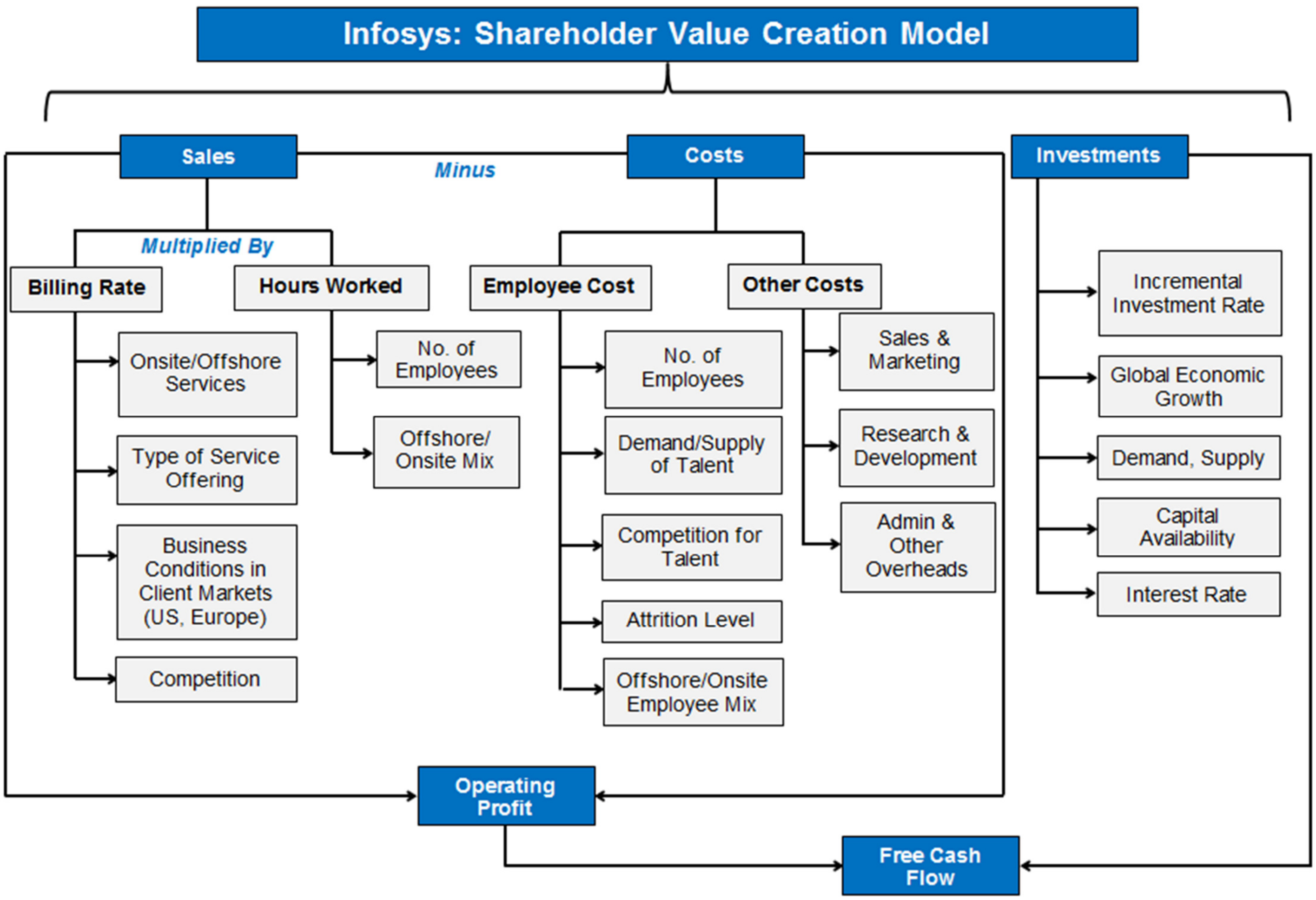
The company has rewarded shareholders brilliantly, with its dividend payout (dividend paid divided by net profit) averaging 30% over the past 10 years. Despite this, and largely due to a huge cash balance that sits in its bank accounts, it has been pestered by the investing community to pay even higher dividends, or spend on acquisitions. Infosys has, till now, bucked these demands…and rightfully so!

This is largely given that its operating business continues to earn it great returns while its ‘safe’ cash provides it with the necessary ammunition that it can use to acquire companies when the right opportunity comes.

2. Infosys: Shareholder Value Creation Model

Here is a simple model I've created to showcase what all goes into the creation of free cash flow for Infosys. Free cash flow, as you know from our past discussions, is what ultimately creates shareholder value.

This chart will help you understand the working of Infosys and also serve as a helpful tool in analyzing other similar companies.



3. Safal Niveshak's 20-Point Checklist

Keeping in mind the simplicity aspect that is otherwise missing in other company analysis reports you would come across, I've analyzed Infosys by answering 20 important questions that span its:

- Business performance,
- Financial performance,
- Management quality, and
- Competition.

As you must have noticed, I've shortened the checklist from 25 questions earlier to 20 now. Here are the 5 questions I've excluded from this report, along with my rationale for the same:

1. Is it in my circle of competence? *As several readers have pointed out, my answer to this question will always be 'yes' because I will analyze only those companies that fall in my circle of competence. Thus the exclusion.*
2. Is it a low risk business? *The answer to this question is better explained by answers to all other questions that I answer in this report, so this question is redundant.*
3. Is it a good business? *Answer same as above.*
4. Is there room for future growth? *I've clubbed this with question #6.*
5. Is management shareholding > 10%? *I re-thought about the relevance of this question and ultimately realized that management shareholding does not make much of a difference in reducing/enhancing the risk of a business. It's how the management performs that matters, and this is what we get to know by answering other questions around business performance.*

Here is the complete 20-point checklist with my explanations.

Before we move ahead, here are the symbols that I've placed against each checklist point and that will tell you at a glance whether I have a positive or negative view on that particular point.

🟢 **Indicates my positive view**

🔴 **Indicates my negative view**

Let's get started.

A. Business Performance

1. Can I, in one sentence, say exactly what the company does?

Yes. Infosys hires people, and a lot of them, to write software codes at 30-40% cheaper cost than it would take its clients (mostly in US and Europe) to do on their own. It sells these employees' 'man-hours' and earns its revenues.

4. Does the business have high uncertainty?

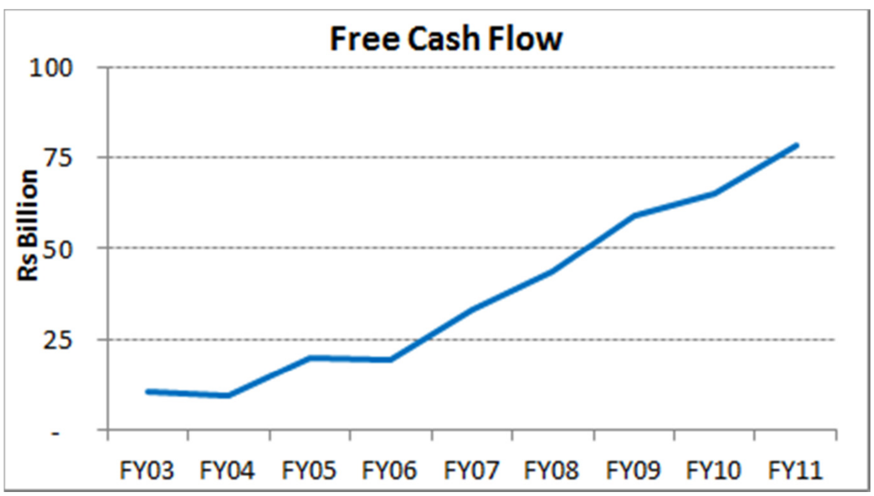
Not really. Yes, Infosys's business is largely dependent on business and political conditions prevailing in the western markets of the US and Europe, but there is a certain move towards more and more companies globally looking at offshoring their IT requirements. This will be beneficial for Infosys over the long term, and provides a good visibility for the future.

6. Has the business got an enormous moat?

Not enormous, but Infosys commands a good competitive advantage in the Indian IT services industry on the back of its superior brand name, execution skills, and an ability to maintain high profitability.

8. Does the business generate strong free cash flow?

Yes. In fact, Infosys has been a free cash machine in the past helped by its high profitability and a safe balance sheet.



Data Source: Ace Equity, Safal Niveshak Research

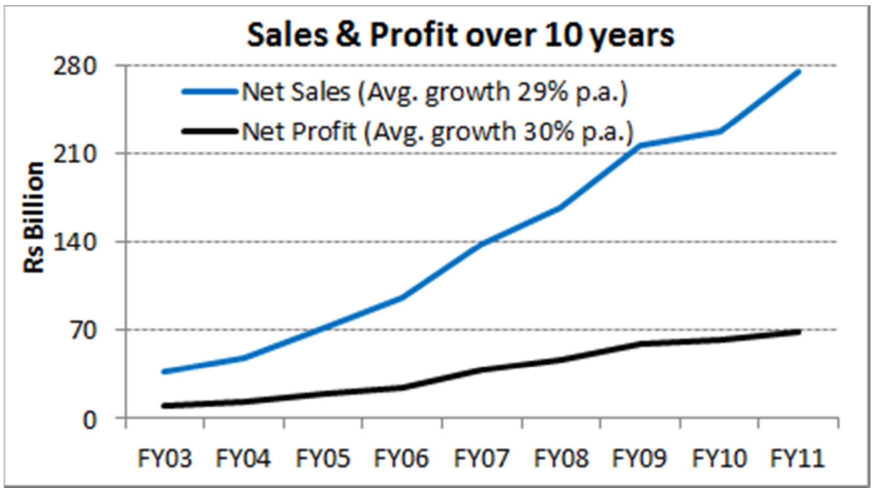
9. What is the bargaining power of suppliers and buyers?

High for buyers i.e., Infosys's clients, who now have a lot of options (IT companies) to choose from. Low, for suppliers, i.e., employees who consider Infosys a brand name and thus prefer to have the Infosys tag on their resumes.

B. Financial Performance

10. Does the business have consistent sales and profit growth history and is there room for future growth?

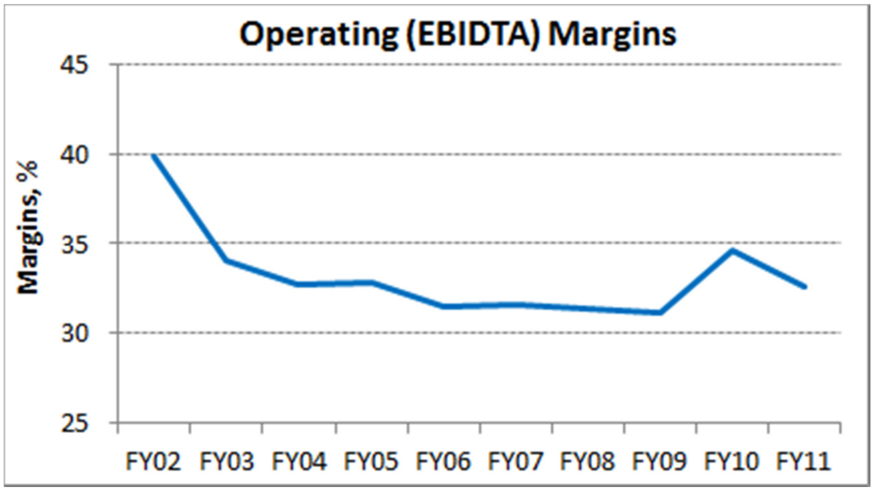
Yes. Infosys has grown its consolidated sales and net profits at an average annual rate of 29% and 30% over the past 9 years, which is a good pace of growth. What is more, this growth has come without much volatility. As for the future, I see the company maintaining a healthy growth rate – largely led by rising offshoring activities globally and Infosys's gradual rise up the value chain where it offers high-end services (like IT consulting) that are much profitable than plain software development work.



Data Source: Ace Equity, Safal Niveshak Research

11. Are EBIDTA margins higher than 15%?

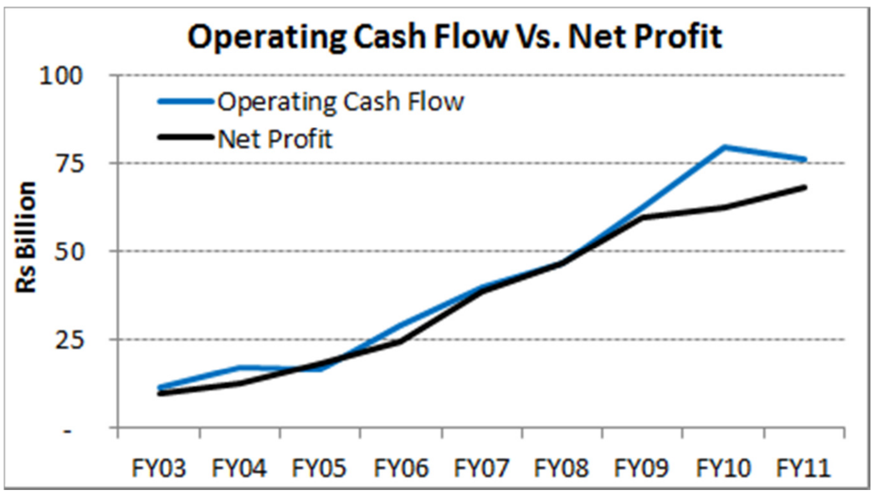
Yes. Infosys is a leader in India (and also among its global IT services peers) in terms of operating margins. Over the past 10 years, the company has done well to average margins of around 33%. This gives the company a lot of leverage to spend greater money on sales and marketing and research to grow its business over the long term.



Data Source: Ace Equity, Safal Niveshak Research

12. Is its operating cash flow higher than net profits?

Yes. Infosys's consolidated OCF has been higher than net profits for 9 of the past 10 years thereby indicating a good management of its working capital.



Data Source: Ace Equity, Safal Niveshak Research

13. Is the debt to equity below 0.5 times?

Yes. Infosys has had an absolutely clean balance sheet in the past, with zero debt.

14. Is the current ratio greater than 1.5?

Yes. Infosys's average current ratio has been 3.5x over the past 10 years, which is a comfortable number and shows a good working capital management. As a general rule, a current ratio of 1.5 or greater suggests that a company can meet its short-term operating needs sufficiently. However, a higher current ratio can also suggest that a company is hoarding assets instead of using them to grow the business. While this is not the worst thing in the world to do, it is something that could affect long-term returns.

15. Does the company have a good dividend history?

Yes. In terms of dividend payout (amount of dividend paid as percentage of net profit), Infosys has averaged around 30% over the past 10 years (including special dividends). This is a comfortable level from a shareholder's point of view.

16. Is the Altman Z score > 3?

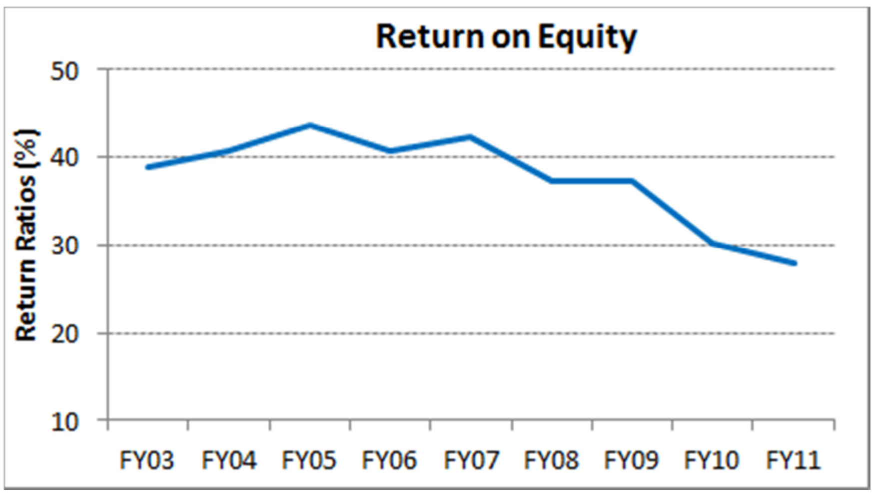
Yes. It's at 7.9, which makes Infosys far-far away from any possible bankruptcy.

17. How capital intensive is the business?

While Infosys's business is more labour intensive than capital intensive, the company still needs to spend a lot every year for setting up development centers and associated facilities for its employees.

18. Has it got a high and consistent return on equity?

Yes. Infosys has average a high return on equity of around 38% over the past 10 years. While this number has gradually fallen over the last few years, it hasn't yet rung any alarm bells. In fact, Infosys's ROE remains among the best in the Indian IT services industry.



Data Source: Ace Equity, Safal Niveshak Research

C. Management Quality

19. Is the management known for its capital allocation skill and integrity?

Yes to both integrity and capital allocation skill. As far as its operating business is concerned, Infosys has a history of earning high return on capital (average in excess of 38%), which is a strong indicator of the management's capital allocation skill. As far as the integrity part is concerned, there's no doubt that the company is among the best in India (and globally) when it comes to following best practices and business integrity.

21. Has there been any substantial equity dilution in the past?

No.

22. Are management's salaries too high?

No. Infosys's employees (including the top management) get a large part of their compensation in the form of ESOPs. The monetary compensation isn't that high, with the top two men in the company – the CEO and COO – together commanding compensation of Rs 220 million (or Rs 22 crore).

23. What has management done with the free cash in the past?

Infosys has reinvested a lot of free cash back into the business, and at high returns. A large part also remains in the safe custody of PSU banks.

D. Competition

24. Does the business face high competition?

Yes. Despite the fact that Infosys commands a great brand name for its experience and execution skills, it faces tight competition from other leading players like TCS, Cognizant, Wipro, and HCL Tech.

25. Has the management focused on mrkt share or profitability in the past?

Pure profitability! The consistently superior operating margins justify the same.

* * *

4. Intrinsic Value Assumptions

Before I move into calculating the intrinsic or fair value range for Infosys, let me make one thing very clear. Intrinsic value isn't a definite figure but just a 'calculated' value. In fact, the calculation of intrinsic value of a business mostly throws up a highly subjective figure. And this figure changes as estimates of variable like future cash flows are revised (given that the future is unknown).

Anyways, what I have done here is rather than arrive at a single intrinsic value figure for Infosys, I have calculated the value using 3 different methods and then arrived at a 'fair value range' for the stock.

1. Net present value based on a 2-stage 10-year DCF

The discussion about the calculation of net present value using a discounted cash flow model (DCF) can be found in the 7th lesson of my free course on investing – Value Investing for Smart People.

I have done a 2-stage DCF analysis for arriving at the intrinsic value for Infosys.

But as a reference, here is the formula for calculating the NPV:

$$\mathbf{NPV = CFi / (1+k) + CF2 / (1+k)2 + \ldots [TCF / (k - g)] / (1+k)n\text{-}1}$$

Where:
PV = present value
CFi = cash flow in year i
k = discount rate
g = growth rate assumption in perpetuity beyond terminal year
TCF = the terminal year cash flow
n = the number of periods in the valuation model including the terminal year

I have calculated Infosys's future cash flow for the next 10 years, assuming 2 different rates of growth in cash flows of 15% (years 1-5), and 12% (years 6-10). As for the discount rate, I've assumed it at 11.5%, which is nearly what the management disclosed in its FY11 annual report. My expected terminal growth rate for the company's cash flows – expected growth in cash flow after 10 years and till eternity – is 2%.

Rs 3,560

Based on these numbers and after reducing the net debt (debt minus cash), the present or discounted value of future cash flows for Infosys is coming at around Rs 3,560 per share, which is also the stock's intrinsic value using this method.

2. Earnings Power Value (EPV)

After DCF, the second most reliable measure of a firm's intrinsic value is the value of its current earnings. This method is known as 'Earning Power Value' or EPV. This value can be estimated with more certainty than future earnings or cash flows, and it is more relevant to today's values than are earnings in the past.

The formula for EPV of a company is:

EPV = Adjusted Earnings x 1/R

Here, 'R' is the cost of capital.

Infosys posted an adjusted EPS (earnings per share) of Rs 136 in the latest completed four quarters. Now, if Infosys's profits were to stagnate and remain at Rs 136 per share going forward, and applying the EPV formula here, I multiply Rs 136 with 1/11.5% (11.5% is the cost of capital for the company). What I also do additionally for Infosys, given the high certainty of growth in earnings in the future (a safe assumption to make in case of Infosys), I double this EPV value to add the growth element to it. This gives me a value of Rs 2,370 per share, which is Infosys's intrinsic value as per the EPV calculation.

Rs 2,370

3. Pricing relative to 10 year average P/E ratio

True value investors, as Graham has prescribed, won't pay a price based on the stock's latest P/E or the company's latest earnings. They will take a much longer term view…as long as 10 years. Here, I have attempted to estimate the intrinsic value of Infosys using the company's last 3 years average earnings, and last 10 years average P/E ratio. So the formula is:

Last 3 Years Average EPS x Last 10 Years Average P/E Ratio

Infosys's average P/E ratio for the past 10 years has been around 28 times, while its last 3 years' average EPS has been Rs 115 per share. Based on the formula, the intrinsic value is coming to around Rs 3,220 per share.

Rs 3,220

4. Graham number

Graham number is the formula Ben Graham used to calculate the maximum price one should pay for a stock. As per this rule, the product of a stock's price to earnings (P/E) and price to book value (P/BV) should not be more than 22.5 i.e., P/E of 15 multiplied by P/BV of 1.5.

But why did Graham specifically used a P/E of 15 and P/BV of 1.5? Why didn't he use some other numbers?

Well, he thought that nobody should be willing to pay more than the AAA bond yield at that time. AAA bond yield at that time was 7.5%. Therefore, AAA P/E was arrived at 1/7.5 or 13.3, which was rounded up to 15. Similarly he thought that nobody should pay more than 1.5 P/BV for a stock.

Graham insisted that the product of the two shouldn't be more than 22.5. In other words,

(P/E of 15) x (P/BV of 1.5) = 22.5

Put another way:

(P/E) x (P/BV) = 22.5
Price(sqr)/(EPS x BVPS) = 22.5

Price(sqr) = 22.5 x EPS x BVPS

Take the square root of both sides, and you get the equation for the Graham Number.

Fair Value Price = Square Root of (22.5 x EPS x BVPS)

Now the thing is that, we cannot apply this formula to Infosys. The reason is – unlike other companies from other sectors where the book value captures a large part of their productive assets, Infosys's assets are its people that are not shown on the balance sheet. Thus, the book value is quite depressed and will result in an unusually depressed intrinsic value for the stock using Graham's formula.

5. Dividend discount model

As we have discussed in the DCF method above, the value of a stock is worth all of the future cash flows expected to be generated by the firm, discounted by an appropriate risk-adjusted rate or discount rate. Now, as per the Dividend Discount Model or DDM, dividends are the cash flows that are returned to the shareholders.

Hence, to value a company using the DDM, you calculate the value of dividend payments that you think a stock will throw-off in the years ahead. Here is what the formula is:

Intrinsic value = Dividend per share/Discount rate

The modified formula for valuing a company with a constantly growing dividend is…

Intrinsic value = Dividend per share/(Discount rate – Dividend Growth Rate)

Given that Infosys has paid higher dividends over the years, we use this 'dividend growth' formula for calculating the stock's intrinsic value.

However, since Infosys's dividend is expected to grow at a much faster rate than the discount rate, the denominator in the above formula will be a negative number, which would lead to a negative intrinsic value for Infosys. Since this can't be true, we can't use the DDM to calculate Infosys's intrinsic value.

Fair Value Range

Based on the above calculated intrinsic values for Infosys, I have arrived at a 'fair value range' for the stock. Here is how I calculate it:

High End of the Fair Value Range = [Average of above four intrinsic values]
Low End = [(Average of above four intrinsic values) – (0.5) x (Std Dev)]

Based on this, the fair value range for Infosys's stock is Rs 2,740 to Rs 3,050.

Rs 2,740
to
Rs 3,050

Assuming a margin of safety of around 20%, I would be comfortable buying Infosys's stock at any price less than Rs 2,450…but not more than that.

Given that the stock's current price of around Rs 2,940, I would wait for it to fall by around 15% before buying into the same.

That's a good case of a great company, but not a great investment (at the current price).

In terms of the biggest risks that I see the company facing in the future, they are the rupee's extreme volatility and talent retention.

The irony is that both these issues are not in control of Infosys. So it is important that you consider the magnitude and relevance of these risks before buying Infosys's stock.

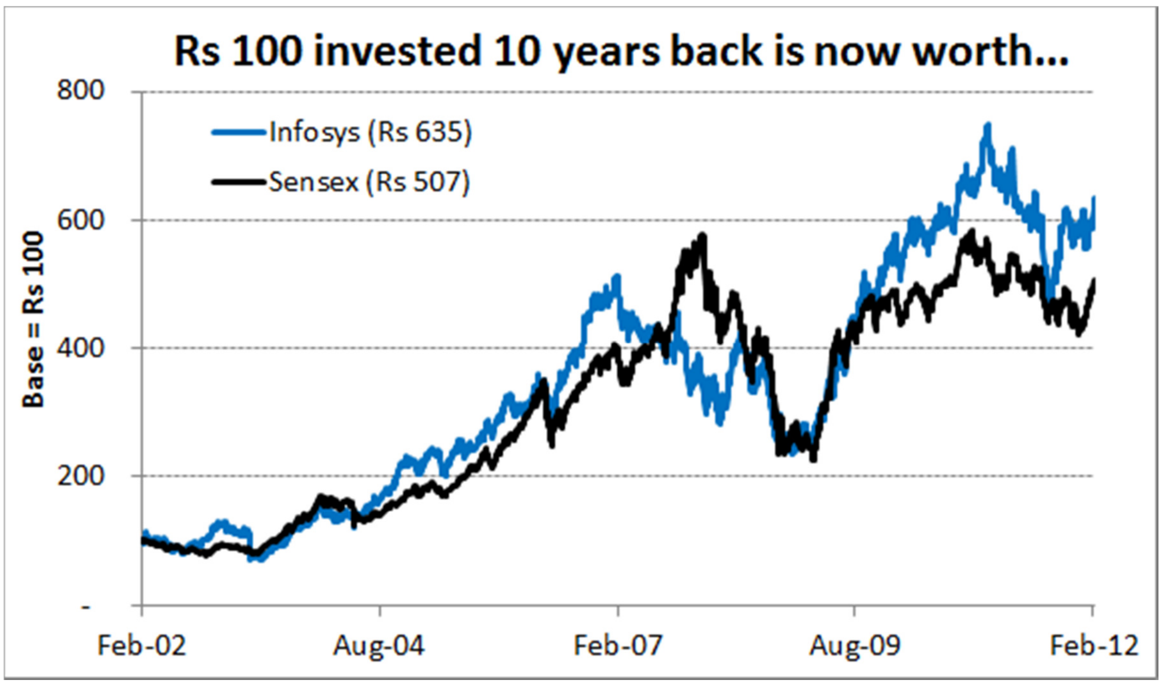
The 20% margin of safety I have assumed safely provides for this risk. The margin of safety you might be willing to assume can be even higher, based on how risky you assume Infosys's business to be.

* * *

5. Financial & Market Snapshot

10-Year Financial Performance (Consolidated)											
Description	Unit	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Net Sales	Rs m	26,036	36,400	48,530	71,300	95,210	138,930	166,920	216,930	227,420	275,010
Operating profit/EBIDTA	Rs m	10,383	12,404	15,853	23,360	29,980	43,900	52,370	67,570	78,610	89,700
EBIDTA margin	%	39.9%	34.1%	32.7%	32.8%	31.5%	31.6%	31.4%	31.1%	34.6%	32.6%
Net profit (after tax)	Rs m	8,080	9,548	12,436	18,910	24,580	38,560	46,590	59,880	62,660	68,350
Net profit margin	%	31.0%	26.2%	25.6%	26.5%	25.8%	27.8%	27.9%	27.6%	27.6%	24.9%
Adjusted EPS	Rs	14.1	16.6	21.7	32.9	42.8	67.2	81.1	104.3	109.1	119.0
Return on equity	%	46.6%	38.8%	40.7%	43.6%	40.7%	42.4%	37.2%	37.4%	30.1%	27.9%
Average P/E	Times	35.5	28.0	29.5	36.7	36.1	34.4	24.0	17.9	19.3	27.2

Data Source: Ace Equity, Safal Niveshak Research



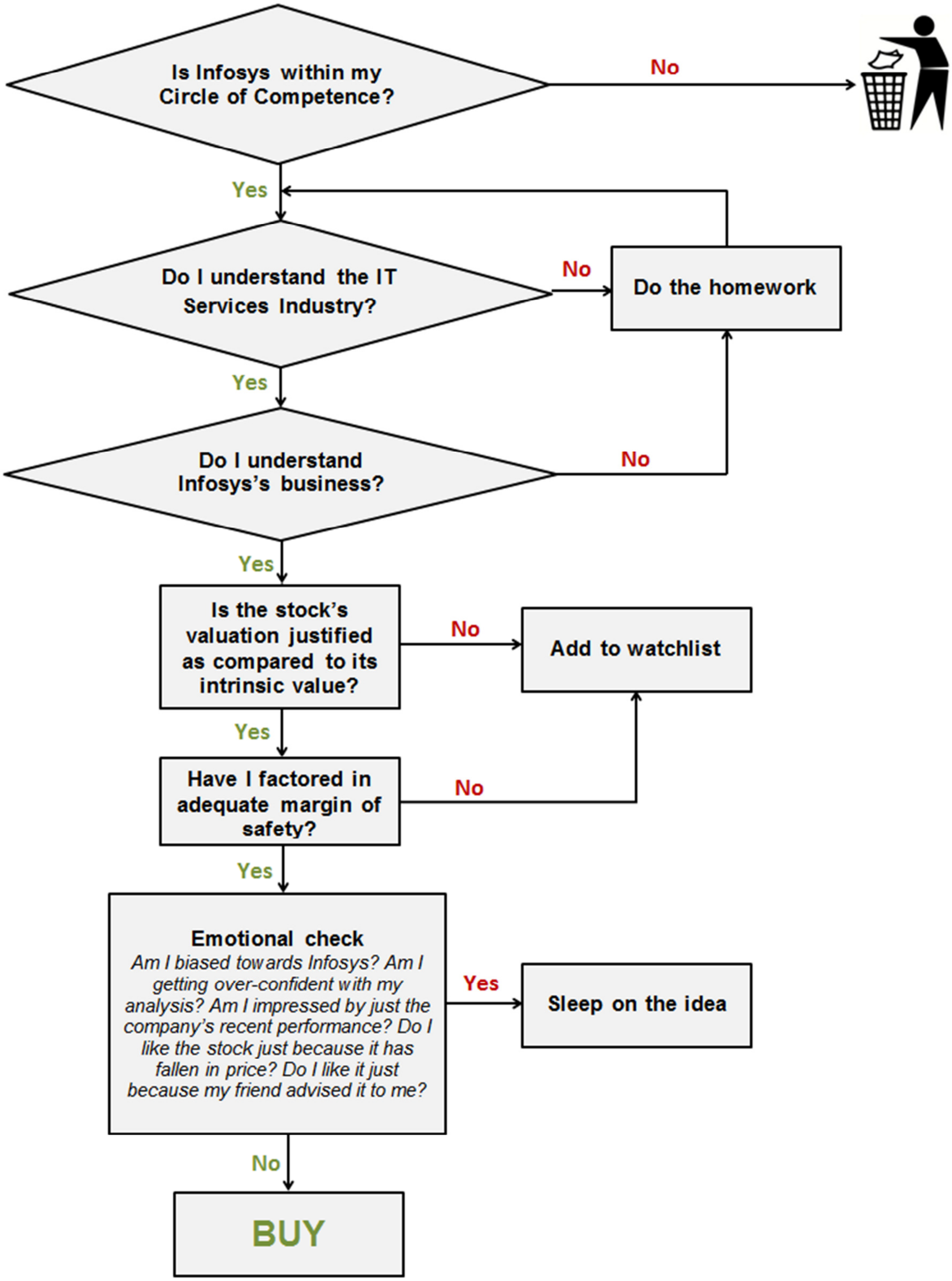
Data Source: Ace Equity, Safal Niveshak Research

Latest Stock Summary	
Latest Price (Rs)	2,940
52 Week High/Low (Rs)	3317 / 2170
Face Value (Re)	5.0
Market Cap. (Rs m)	1,688,204
Latest P/E (TTM, x)	21.6
Latest P/BV (x)	5.8

Shareholding Pattern (Dec-11)	
Category	% Stake
Promoter	16.0
Mutual Funds & Fin. Insti.	17.5
FIIs	37.4
Individuals	13.1
Others	16.0

Data Source: Ace Equity, Safal Niveshak Research

6. "Should I Buy Infosys" Checklist



Your Feedback is Important!

So that was my take on Infosys as part of the Safal Niveshak StockTalk initiative. I've tried to be as comprehensive in my analysis, while trying to keep the report very simple. Let me know what you think of this report and the improvements therein.

Do you think I've missed mentioning something specific here? Can the Safal Niveshak 20-Point Checklist be modified or expanded any further? Do you find this report simple enough for your understanding?

Your answers would help me in making the Safal Niveshak StockTalk report, and the entire initiative, more beneficial for you.

Also, if you want to see your choice of stock covered here, just send me your request using the request form.

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With respect,
Vishal Khandelwal
Editor, Safal Niveshak StockTalk