

*KPAC Turns One, Thank You!*

*Study of Actuarial Assumptions:  
Salary Growth Rate & Discount Rate  
Used by NSE50 Companies*



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## *From the Actuary's Desk*

### Why research Salary Growth Rate assumption?

Salary growth rate and discount rate are the **two most important assumptions** made while performing actuarial valuation of salary based employee benefit schemes such as gratuity, earned leaves, pensions, etc.

The importance of these assumptions is **underscored by sheer sensitivity of the liability to these assumptions** - a 1% change in any of these assumptions e.g. an increase in salary growth rate from 6% p.a. to 7% p.a. can have an impact of around 10% increase in the liability.

Also, salary growth rate assumption is often a point of discussion (perhaps debate) between auditors and the management, with auditors looking at the salary growth rates over the last few years and questioning something which is essentially a long term assumption.

As actuarial consultants providing advice and actuarial valuation services, **we often receive request from our clients and their auditors to provide benchmarks against which they can validate their actuarial assumptions.** It is in this backdrop that we undertook the research of actuarial assumptions, methodologies, practices and reporting adopted by NSE50 companies.

### Why NSE50 Companies?

NSE50 companies are the largest corporate houses in India. They are also amongst the ones which are audited by the biggest audit firms in the country. It is therefore not unreasonable to expect the practices adopted by these companies to be amongst the best in the industry.

Despite the expectation of having adopted the best practices, as you shall notice from the research outcomes, **we find that there are areas of improvements and scope of strengthening the assumptions** even for these premium companies in India.



**I trust you will find the observations and assertions in this paper useful in practical determination of assumptions for your organisation or, in case you are an auditor, in validating the assumption made by your client.**

Further, to give a comprehensive view of the principles and practices underlying salary growth rate assumptions, we will be releasing three more research papers on salary growth rates viz. theoretical approach / principles to be applied in determination of salary growth rates, an analysis of assumptions vis-à-vis actual experience and assumptions employed by listed companies in wider sectoral indices (rather than just NSE50).

I thank you for reading this document and welcome any comments or recommendations or observations you may have on the subject. You can direct those to the email address mentioned below.

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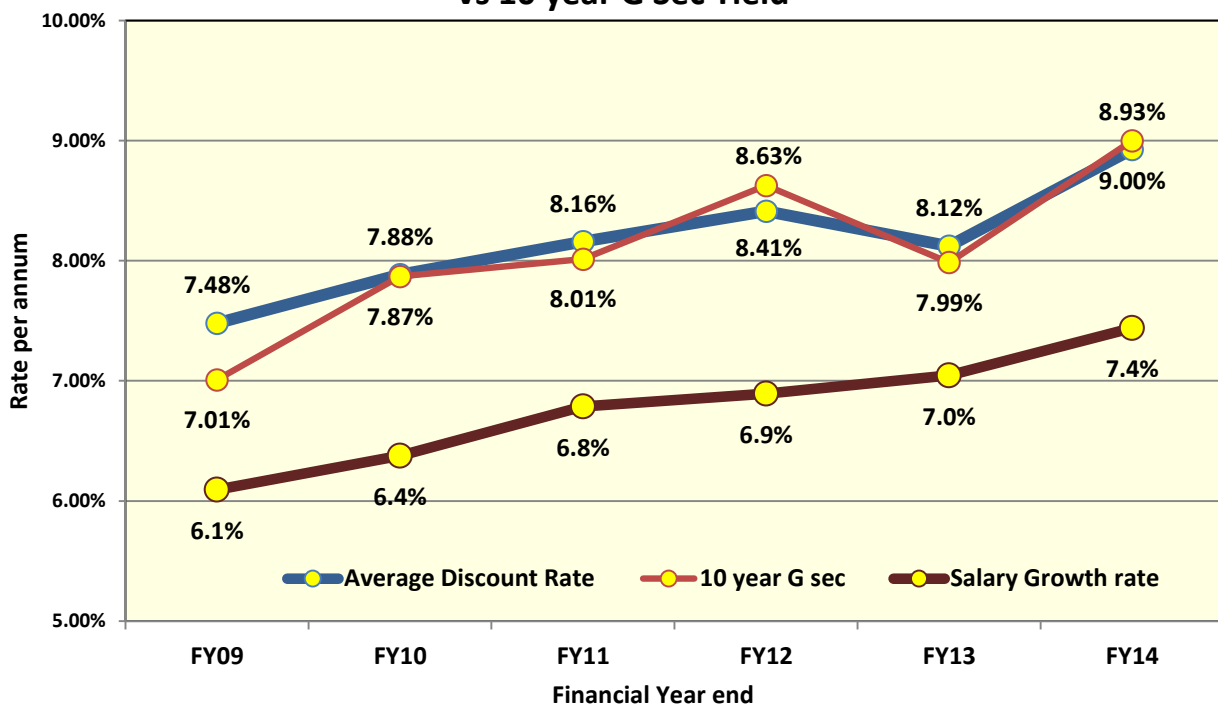
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## Quick Overview of the findings

Following graph represents the average salary growth rate and the average discount rate of the NSE 50 companies and its comparison with 10 year Government bond yields over the last six financial years:

**Chart 1: Average Discount Rate vs Average Salary Growth Rate vs 10 year G Sec Yield**



- Whilst Government bond yields (and thus discount rates) have shown a random movement in the last few years, salary growth rate assumed has seen constantly increasing trends.
- The **absolute level of average salary growth rate assumption** for NSE 50 companies has increased from c 6.1% p.a. at end of FY2008-09 to **c 7.4% p.a. at the end of FY2013-14**.
- The **absolute level of average discount rate** for NSE 50 companies has increased from c 7.5% p.a. at end of FY2008-09 to **c 9% p.a. at the end of FY2013-14** (in line with yields on government bonds).
- As can be noticed from above points, increase in salary growth rate was marginally less than the average discount rate **signifying marginal relative weakening of the salary growth rate assumption**.
- The **average discount rate** used by the NSE 50 companies in **FY 2013-14 was c 8.9% p.a.** which is significantly higher (by a percentage and half) when compared to the average salary growth rate used by the companies.
- **Two Companies have salary growth rate assumption varying for various categories of employees** (rather than a single rate).
- **Two companies have different assumptions for salary growth for different years in future** (rather than a single rate for all future years).
- **Some (not enough) correlation was observed between movements in discount rate and salary growth rate**, despite known positive correlation between the two via inflation rates.
- **About 40% of the NSE 50 companies have strengthened** their salary growth rate assumption in the last financial year. Average salary growth for such companies mounted up to c 7.8% p.a. at the end of FY2013-14.

## *Methodology & Disclaimer*

Working hard to put forward an interesting piece, without compromising with the level of information one would expect to receive, was the sole idea while preparing this research paper. Thus, **we performed an intensive data collation activity by visiting official websites of various NSE 50 companies and collecting data out of their annual reports**, which gave us the basic raw material in the form of salary growth rates and the discount rates used by these companies in carrying out their actuarial valuations.

Whilst in most cases the data was readily available, there were a **few cases / data points**, particularly for the initial financial years, for which the **information relating to assumptions were not available in the annual reports**. We have **captured such data points as “Not Available” and have excluded them from our analysis**.

After collection of this data from the primary source of information, it was put into a proper shape and form for carrying out various statistical analyses like trend analysis of the movement in the salary growth rate assumption, movement in the discount rate, differences in the assumption rates used for valuation etc.

After analysis of the NSE 50 companies as a whole, we were still not very convinced with the level of knowledge we acquired and thus we went a step deeper and divided the companies in various sectors and then carried out our analysis again at sectoral level. Sectoral analysis of the assumptions has also been included in this report.

Please note that in a lot of cases, we found that **Companies have used varying assumptions** (e.g.

different assumptions for different years of projection). **In such cases, we have used averages making certain assumptions. Both the original assumptions and averages used are captured in this document.**

From our analysis, we found that the average discount rate used by NSE 50 companies in the past few years has remained close to yields on 10 years government bonds and thus the same has been considered for further comparison / analysis during our research (data on the government bond yields has been extracted from “investing.com”).

Whilst we place this information for your perusal, we must mention that it is only for your information and we are not soliciting any action based upon it. Also, it does not constitute any recommendation. **We have checked and reviewed this report and in so far as it includes information or facts, it is believed to be reliable though its accuracy or completeness cannot be guaranteed.**

The information contained in the above report should be construed as non-discretionary in nature and the recipient of this material should rely on their own investigations and take their own professional advice. Neither KP Actuaries and Consultants nor any person connected with it accepts any liability arising from the use of this document.

## Detailed results & findings

Most organisations **strengthened the absolute levels of salary growth** rates over the last six financial years, resulting in increase in **average salary growth rate assumption from 6.1% p.a. to 7.4% p.a. (i.e. a net increase of 1.3%)** During financial year 2013-14, the average salary growth rate assumption saw an increase of c 39 bps compared to the previous year.

**At a relative level\* though, we observed marginal weakening of assumed salary growth rate** as the discount rate increased by c 1.5% during the same period, resulting in net marginal weakening of around 20 bps (1.3% increase in salary growth rates compared to 1.5% increase in the discount rate) over the last six financial years.

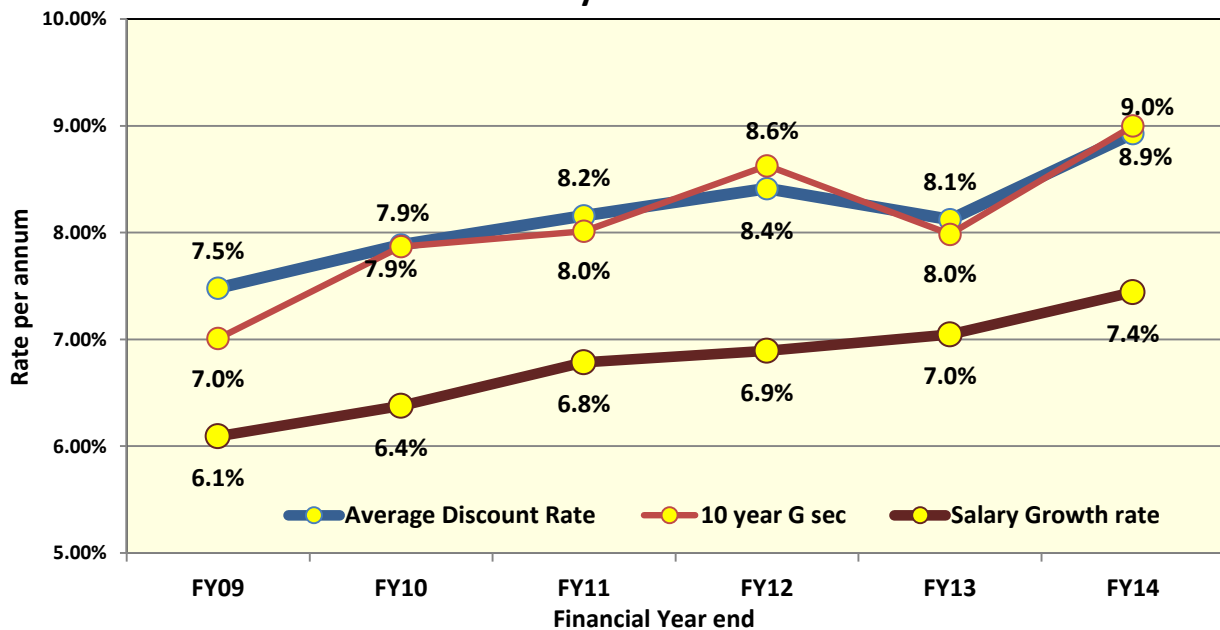
*\* In this entire document, we look at the absolute as well as the relative levels of salary growth rates. By relative, we mean relative to the discount rate. We do so because the salary growth rates are closely related to the inflation rates, which in turn are closely related to the discount rates (via correlation with the prevailing interest rates). In other words, higher interest rates signify higher expectation of inflation and thus higher salary growth rates. Higher interest rates also mean higher discount rates.*

### Relativities of discount rate & salary growth rate

Discount rate, representing yields on government bonds, is closely linked to the market's long term expectation of inflation in the economy. Salary growth rate is also likely to be at least as much as the inflation over the long term (to protect the real level of income). Thus, **salary growth rate and discount rate are expected to be positively correlated with each other.**

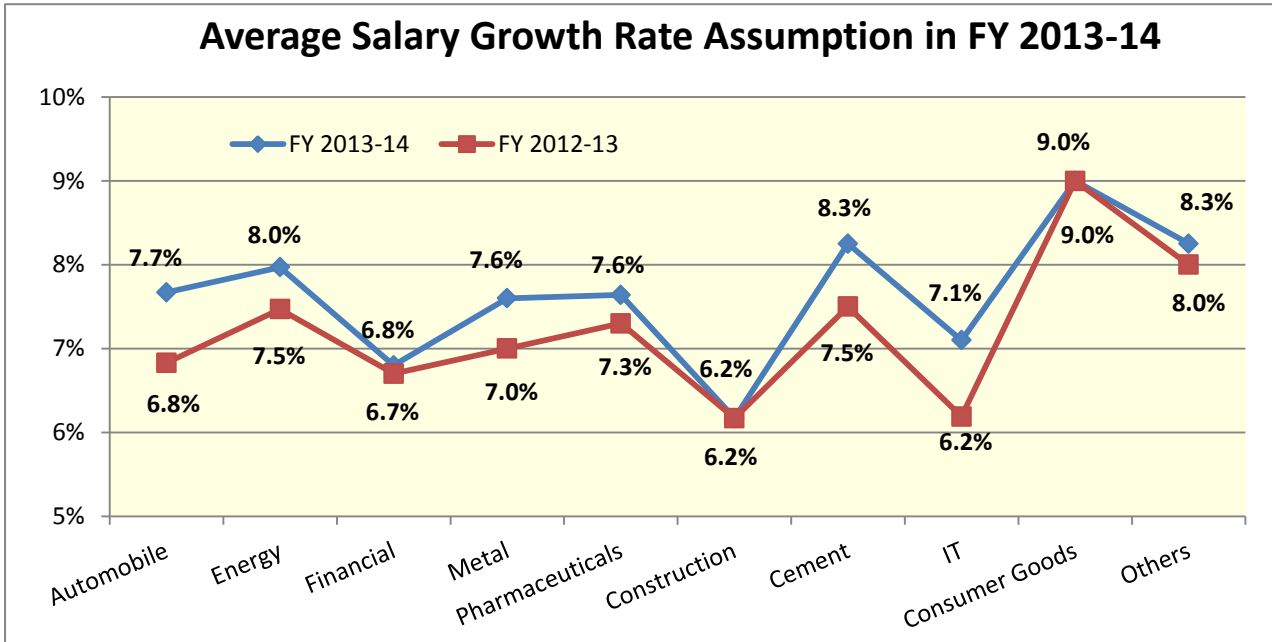
However, the continuous increase in the average salary growth rate assumption and the random movement in the discount rate, as is visible from the chart below, provides some (but not enough) evidence of the said correlation. This may be resulting from strengthening of salary growth rate assumption over the years, which was seen at lower levels compared to actual experience.

**Chart 1: Average Discount Rate vs Average Salary Growth Rate vs 10 year G Sec Yield**



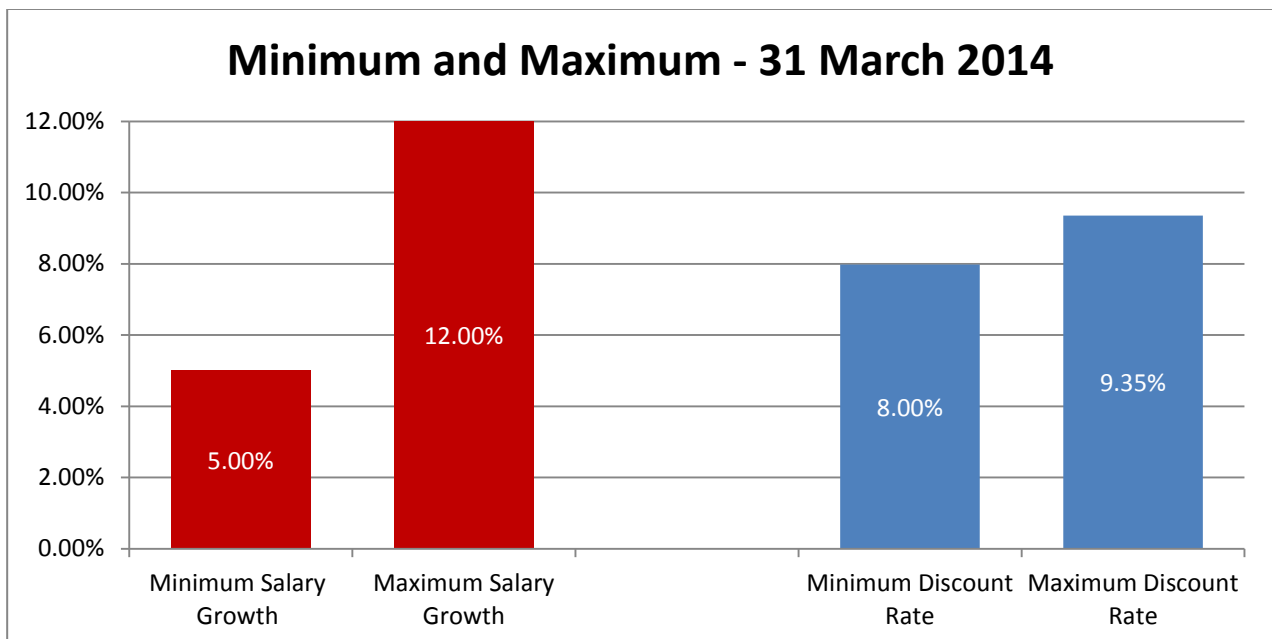
## Sectoral Overview

As can be seen from the chart below, during FY 2013-14, there was an overall marginal increase in the salary growth rate assumption for all the sectors. The average assumption made by companies in the last financial year marks **construction and IT sector as the sectors with the lowest salary growth rate assumption** and **consumer goods sector with the highest salary growth rate**.



## Overall Minimum and Maximum

The chart below depicts the maximum and minimum salary growth rates and discount rate assumptions observed as at 31 March 2014 for companies in the NSE 50 index:



## Overall Conclusions and One Year Guidance

We observed that the average salary growth rate assumption has increased year on year over the last few years, reflecting perhaps a correction necessitated by the significant differences in the actual and the assumed salary growth rates.

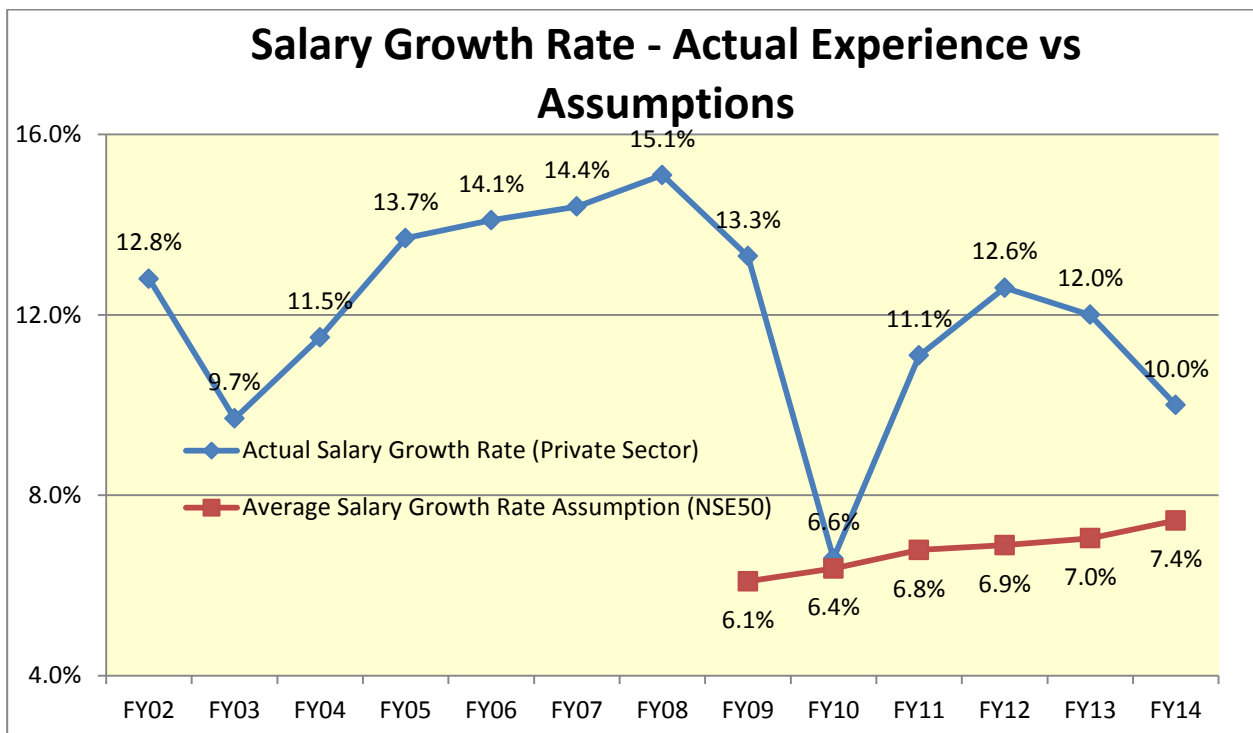
We, however, believe that the **salary growth rate assumption adopted by the organisations is still lower than the actual salary growth rates being experienced by them**. We share our thoughts in detail in another article but the chart below, highlighting significant gap between actual salary growth rates and assumptions used, does provide some insights of the extent of difference between the two.

Given this, we expect the strengthening (absolute or relative – salary growth rate vis-à-vis discount rate) to continue into the near future.

As for discount rates, though it is difficult to comment over long term, we certainly **expect the yields on government bonds as at 31 March 2015 to be lower than yields as at 31 March 2014**, driven primarily by the softening of inflation and growth becoming the primary agenda for the RBI. This would **result in lowering of discount rates**, leading to actuarial losses arising in valuation of employee benefits.

Consequently, **we do not expect the market to strengthen the absolute levels of salary growth rate** (even though the gap still exists between the actual salary growth rates and the assumption). At the same time, we do expect the absolute levels to fall either.

Hence, **relative strengthening will by default happen** as the gap between discount rate (reflecting long term expectation of inflation, which is expected to fall) and salary growth rate assumption (expected to not fall below the current levels) will get reduced.



Source: Actual salary growth rate figures till FY2013 have been picked from Institute of Actuaries of India’s research paper on salary growth rates. For FY2014, the number reflects the suggestions of various salary growth rate analysis / reports published in newspapers.



## Salary Growth Rate varying by year of projection

Most of the Companies stick to a single assumption for salary growth rate in their valuation (e.g. assumption of 6% per annum for all future projection years).

Varying by year or projection, however, means assuming salary growth rate to be different in different years of projection. For example, the salary growth can be assumed to be 10% p.a. for next 3 years of projection and 6% p.a. thereafter.

Assuming a salary growth rate varying by year of projection gives the company an advantage that it could **reflect the currently higher (or lower) salary growth rates expected over the next few years whilst sticking to its structural view over the long term.**

Given the high sensitivity of the liability to salary growth rate, such an approach helps to reach a common ground between the current realities of salary growth rates (which are often in excess of the discount rates) and the long term view (which could be significantly different, depending upon myriad factors such as company policies, seniority, industry factors, consistency of financial assumptions etc). It may **also help build a consensus with the auditors** who may be questioning the salary growth rate assumption based on the actual salary growth rates seen over the last 2 to 3 years.

In fact, in studying salary growth rates assumed by NSE 50 companies, we observed that, at the end of FY 2013-14, two companies have salary growth rate assumptions that vary by year of projection. Salary growth rate assumptions of these companies are as under:

Company Name	Salary Growth rate assumption for actuarial valuation at the end of FY 2013-14
Dr. Reddy's Laboratories td.	11% p.a. for first two years & 10% p.a. thereafter
Asian Paints Ltd.	<b>Management:</b> 1 <sup>st</sup> Year: 13% p.a., next 2 years: 12% p.a., next 3 years: 10% p.a. and thereafter: 8% p.a. <b>Non-Management:</b> 1 <sup>st</sup> Year: 13% p.a., next 5 years: 12% p.a. and thereafter 8% p.a.

### Implication of salary growth rate varying by year of projection - a simple worked example

Consider an example wherein the salary growth was assumed to be 10% p.a. for next 3 years of projection and 6% p.a. thereafter.

In such a case, the weighted average implied salary growth for employees of various ages is given below:

Age	Retirement Age	Assumed salary growth	Implied salary growth
20 years	60 years	10% p.a. next 3 years of projection and 6% p.a. thereafter	6.3% p.a.
30 years	60 years		6.4% p.a.
40 years	60 years		6.6% p.a.
50 years	60 years		7.2% p.a.

*Note: The implied salary growth rates have been calculated excluding the impact of attrition and mortality and are thus indicative only.*

## *Salary Growth Rate varying by category of employees*

The other way to look at salary growth rate assumption is to vary it on the basis of employee classification. For example, **employees can be classified as management employees and non-management employees and different rate of salary growth can be assumed for both the groups.**

Doing so helps the organisation in setting a more realistic liability as generally it is seen that the hike in the salary varies over class of employees within an organisation and thus assuming the same rate of increment for all the employees may prove to be biased.

However, very few companies have adopted this strategy in the past. In our research of NSE 50 companies, we found only two companies using different rate of assumption for different class of employees for the financial year ending 2013-14. The salary growth rates assumed by such companies are:

Company Name	Salary Growth rate assumption for actuarial valuation at the end of FY 2013-14
Tata Power Co. Ltd.	<b>Management:</b> 7.5% p.a. <b>Non-Management:</b> 6% p.a.
Asian Paints Ltd.	<b>Management:</b> 1 <sup>st</sup> Year: 13% p.a., next 2 years: 12% p.a., next 3 years: 10% p.a. and thereafter: 8% p.a.
	<b>Non-Management:</b> 1 <sup>st</sup> Year: 13% p.a., next 5 years: 12% p.a. and thereafter 8% p.a.

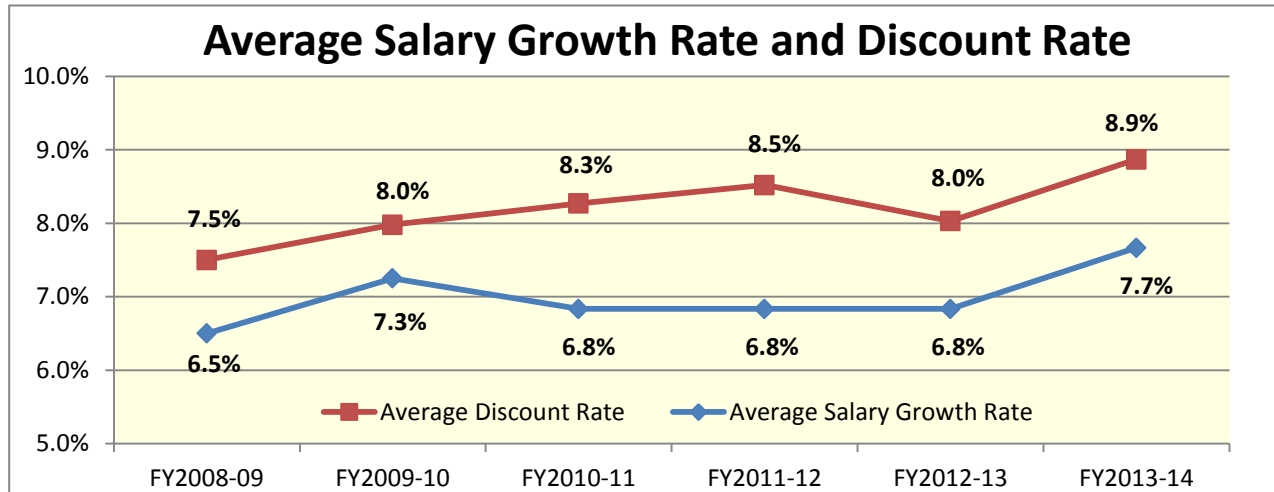
There are various factors that may influence salary growth rate of various categories of employees, such as:

- **Retention aspect:** Key employees, typically seen at middle and higher levels of management, may be given higher salary increments compared to other pockets of employees.
- **Base effect:** Higher salary increases may be given at lower levels, where the salary levels are low (but perhaps the number of employees is large) compared to employees at higher levels.

## Sectoral Analysis

### Automobile Sector

Following chart depicts the average salary growth rate and discount rate assumption adopted by companies in the automobile sector in the NSE50 index over the past six financial years:

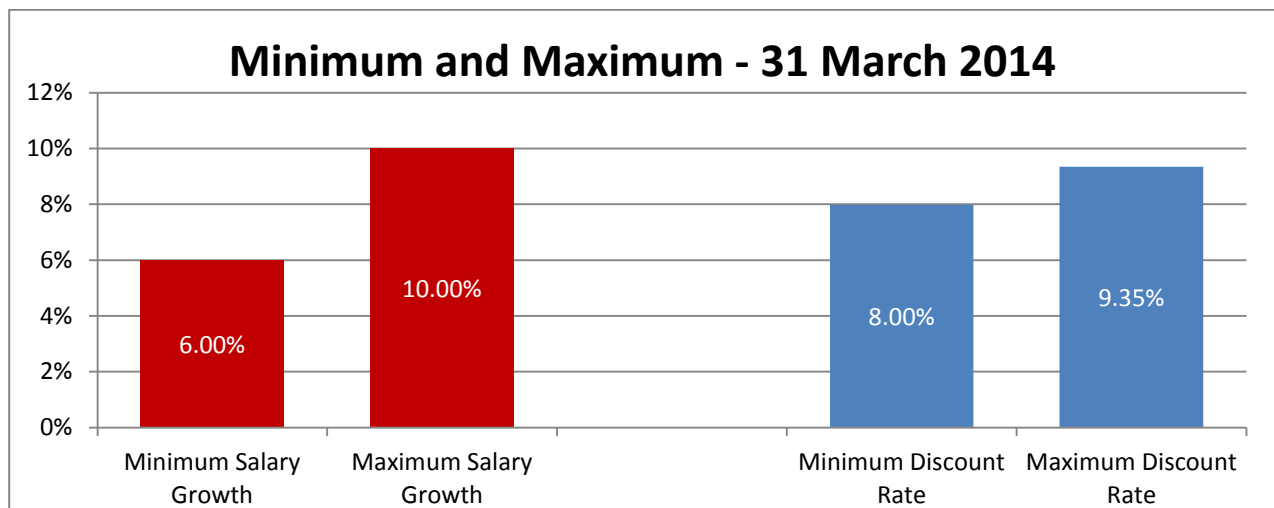


Note: Fall in salary growth rate assumption from FY10 to FY11 is happening because the average was calculated for two companies which disclosed salary growth rate assumption in FY10 whilst it has been calculated for 3 companies in FY11. It does not represent weakening of the assumption (with the third company now being included in the average having a low salary growth rate assumption compared to the last year's overall average). Please refer next page for company wise details.

As can be seen from the above chart, the **absolute level of the salary growth rate and discount rate saw an increase of 1.2% and 1.4% respectively over the period of last six financial years**, resulting in a marginal **relative weakening of salary growth rate assumption**.

Also, consistent with past trends, the companies in the automobile sector generally adopted a lower salary growth rate assumption as compared to discount rate in FY2013-14.

The following chart depicts the **minimum and maximum salary growth rate and discount rate assumption as at 31 March 2014** for companies in the automobile sector in NSE 50 index:



The data collated from the annual reports is given below for reference:

### **Discount Rate (per annum)**

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Bajaj Auto Ltd.	7.00%	8.20%	8.30%	8.65%	8.05%	9.35%
Hero MotoCorp Ltd.	7.00%	7.00%	8.10%	8.40%	8.00%	8.00%
Mahindra & Mahindra Ltd.	7.75%	8.45%	8.20%	8.30%	8.00%	9.05%
Maruti Suzuki India Ltd.	N/A	8.00%	8.50%	9.00%	8.00%	9.00%
Tata Motors Ltd.(*)	8.25%	8.25%	8.25%	8.25%	8.10%	8.95%
<b>Average Discount Rate</b>	<b>7.50%</b>	<b>7.98%</b>	<b>8.27%</b>	<b>8.52%</b>	<b>8.03%</b>	<b>8.87%</b>
<b>Minimum Discount Rate</b>	<b>7.00%</b>	<b>7.00%</b>	<b>8.10%</b>	<b>8.25%</b>	<b>8.00%</b>	<b>8.00%</b>
<b>Maximum Discount Rate</b>	<b>8.25%</b>	<b>8.45%</b>	<b>8.50%</b>	<b>9.00%</b>	<b>8.10%</b>	<b>9.35%</b>

\* **Discount rate assumed to be:** 6.75% - 8.5% p.a. for 2008-09 to 2011-12, 6.75% - 8.35% for 2012-13, 6.75%-9.20%p.a. for FY 2013-14 respectively. For the purpose of our analysis, we have taken, considering the yields on government bonds as at respective dates, the overall discount rate to be the upper limit of the range less 25 bps.  
N/A means not available.

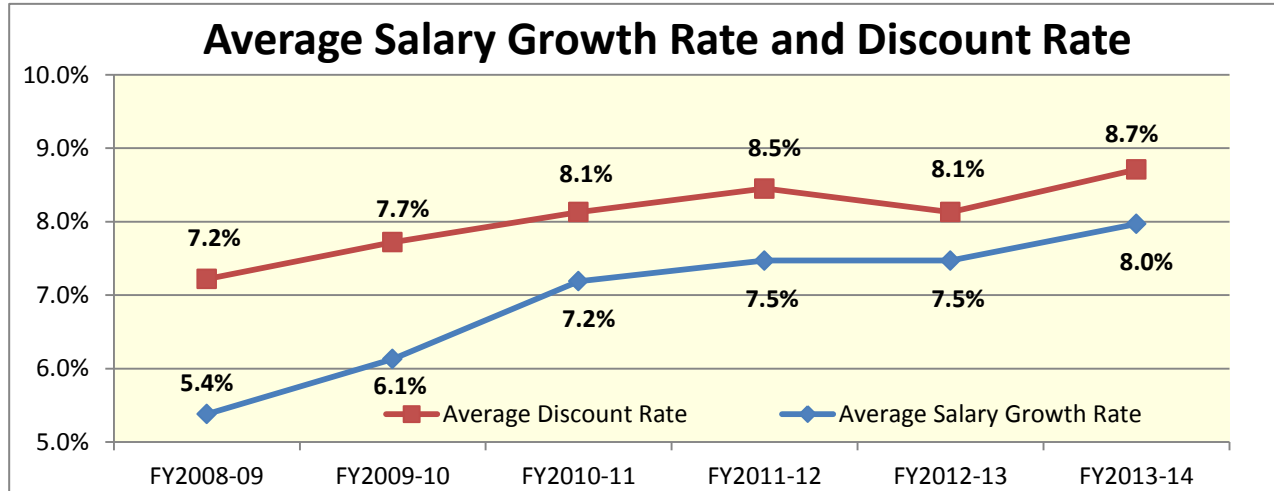
### **Salary Growth Rate (per annum)**

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Bajaj Auto Ltd.(*)	6.50%	8.50%	8.50%	8.50%	8.50%	10.00%
Hero MotoCorp Ltd.	N/A	N/A	6.00%	6.00%	6.00%	6.00%
Mahindra & Mahindra Ltd.	N/A	N/A	N/A	N/A	N/A	N/A
Maruti Suzuki India Ltd.	N/A	6.00%	6.00%	6.00%	6.00%	7.00%
Tata Motors Ltd.	N/A	N/A	N/A	N/A	N/A	N/A
<b>Average Salary Growth Rate</b>	<b>6.50%</b>	<b>7.25%</b>	<b>6.83%</b>	<b>6.83%</b>	<b>6.83%</b>	<b>7.67%</b>
<b>Minimum Salary Growth</b>	<b>6.50%</b>	<b>6.00%</b>	<b>6.00%</b>	<b>6.00%</b>	<b>6.00%</b>	<b>6.00%</b>
<b>Maximum Salary Growth</b>	<b>6.50%</b>	<b>8.50%</b>	<b>8.50%</b>	<b>8.50%</b>	<b>8.50%</b>	<b>10.00%</b>

\* **Salary growth rate assumed to be:** Senior staff - 7% p.a., junior staff - 6% p.a. for 2008-09, Senior staff - 8% p.a., Junior staff - 9% p.a. for FY 2009-10 to 2012-13 respectively. For the purpose of our analysis, we have taken the overall salary growth rate to be average of the given range.  
N/A means not available.

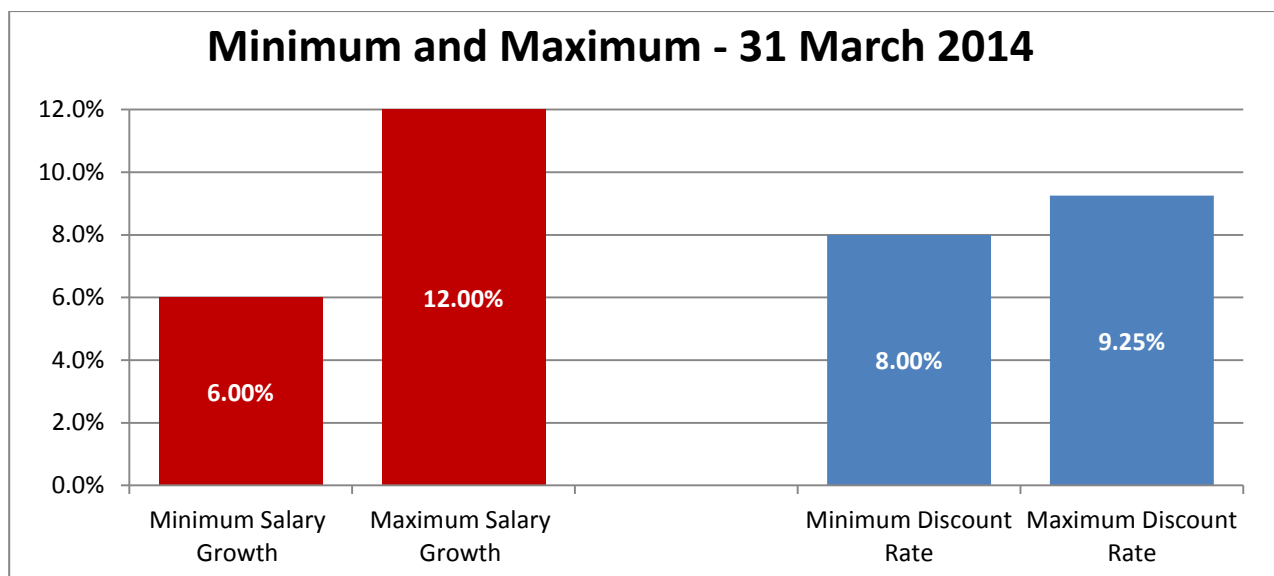
## Energy Sector

Following chart depicts the average salary growth rate and discount rate assumption adopted by companies in the energy sector in the NSE50 index over the past six financial years:



As can be seen from the above chart, over the last six financial years, the **absolute level of salary growth rate assumed increased by c 2.6% compared to an increase of c 1.5% in the discount rate**. This resulted in a significant reduction in the gap between the discount rate and assumed salary growth rate, resulting in a **significant relative strengthening of salary growth rate assumption**. Despite the strengthening, the average salary growth rate assumption continues to be lower than discount rate even in FY2013-14.

The following chart depicts the **minimum and maximum salary growth rate and discount rate assumption as at 31 March 2014** for companies in the energy sector in NSE 50 index:



The data collated from the annual reports is given below for reference:

**Discount Rate (per annum)**

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Cairn India Ltd.	7.00%	8.00%	8.00%	8.00%	8.00%	9.00%
GAIL (India) Ltd.	7.00%	7.50%	8.50%	8.50%	8.50%	8.50%
NTPC Ltd.	7.00%	7.50%	8.00%	8.50%	8.00%	8.50%
Oil & Natural Gas Corporation Ltd.	7.00%	7.50%	8.00%	8.50%	8.50%	8.75%
Power Grid Corporation of India Ltd.	7.00%	7.50%	8.00%	8.50%	8.00%	8.50%
Reliance Industries Ltd.	8.00%	7.50%	8.25%	8.50%	8.00%	8.00%
Tata Power Co. Ltd.	7.01%	8.00%	8.00%	8.60%	8.00%	9.20%
Bharat Petroleum Corporation Ltd.	7.75%	8.25%	8.25%	8.50%	8.00%	9.25%
<b>Average Discount Rate</b>	<b>7.22%</b>	<b>7.72%</b>	<b>8.13%</b>	<b>8.45%</b>	<b>8.13%</b>	<b>8.71%</b>
<b>Minimum Discount Rate</b>	<b>7.00%</b>	<b>7.50%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.00%</b>
<b>Maximum Discount Rate</b>	<b>8.00%</b>	<b>8.25%</b>	<b>8.50%</b>	<b>8.60%</b>	<b>8.50%</b>	<b>9.25%</b>

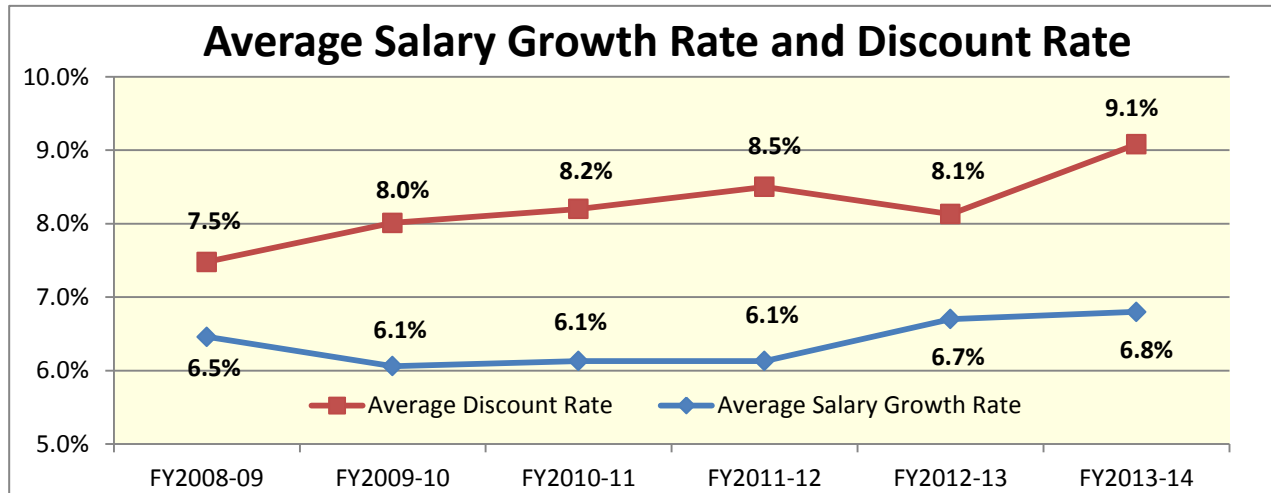
**Salary Growth Rate (per annum)**

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Cairn India Ltd.	10.00%	10.00%	10.00%	10.00%	10.00%	12.00%
GAIL (India) Ltd.	5.00%	5.00%	12.00%	12.00%	12.00%	12.00%
NTPC Ltd.	4.50%	5.00%	5.50%	6.00%	6.00%	6.50%
Oil & Natural Gas Corporation Ltd.	5.00%	5.00%	5.50%	6.00%	6.00%	6.00%
Power Grid Corporation of India Ltd.	4.50%	5.00%	5.50%	6.00%	6.00%	6.50%
Reliance Industries Ltd.	4.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Tata Power Co. Ltd. (*)	6.00%	6.00%	6.00%	6.75%	6.75%	6.75%
Bharat Petroleum Corporation Ltd.	4.00%	7.00%	7.00%	7.00%	7.00%	8.00%
<b>Average Salary Growth Rate</b>	<b>5.38%</b>	<b>6.13%</b>	<b>7.19%</b>	<b>7.47%</b>	<b>7.47%</b>	<b>7.97%</b>
<b>Minimum Salary Growth</b>	<b>4.00%</b>	<b>5.00%</b>	<b>5.50%</b>	<b>6.00%</b>	<b>6.00%</b>	<b>6.00%</b>
<b>Maximum Salary Growth</b>	<b>10.00%</b>	<b>10.00%</b>	<b>12.00%</b>	<b>12.00%</b>	<b>12.00%</b>	<b>12.00%</b>

\* Salary growth rate assumed to be: Non-management employees - 6% p.a., Management employees – 7.5% p.a. for FY 2011-12 to 2013-14. For the purpose of analysis, we have taken the overall salary growth rate to be average of the given range.

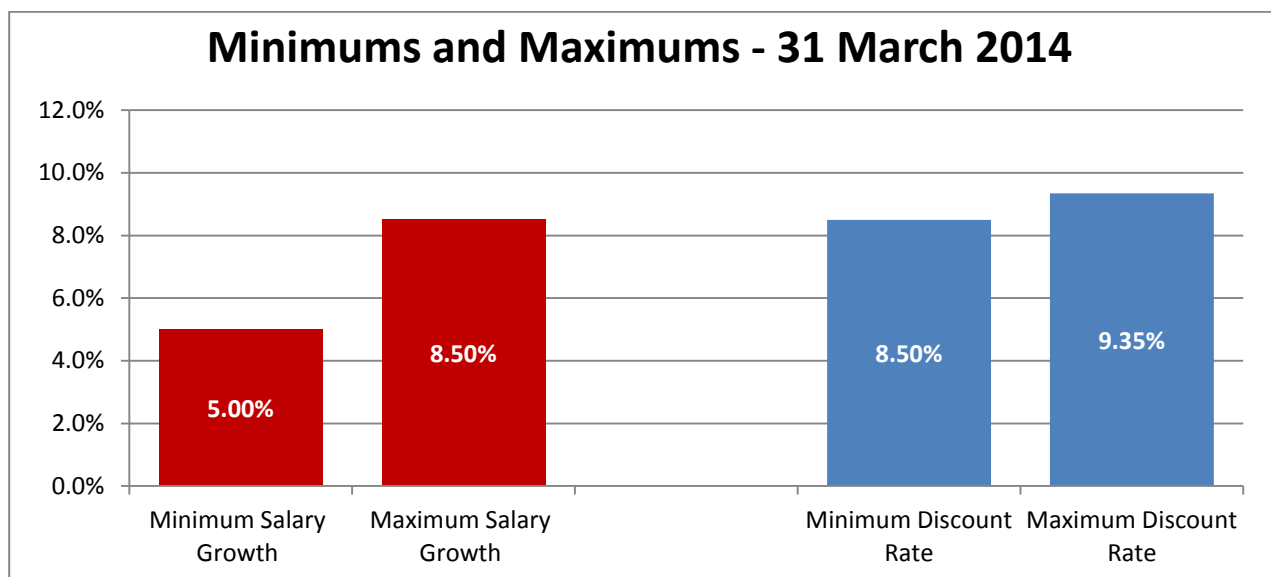
## Financial Services Sector

Following chart depicts the average salary growth rate and discount rate assumption adopted by the companies in financial services sector in NSE50 index over the past six financial years:



As can be seen from the above chart, over the last six financial years, the absolute level of salary growth rate assumed increased marginally by c 0.3% compared to an increase of c 1.6% in the discount rate. **Driven primarily by low salary growth rate assumption adopted by PSU banks** (refer next page for company wise details), **a significant increase in the gap between the discount rate and assumed salary growth rate was observed, resulting in a relative weakening of salary growth rate assumption.**

The following chart depicts the **minimum and maximum salary growth rate and discount rate assumption as at 31 March 2014** for companies in the financial services sector in NSE 50 index:



The data collated from the annual reports is given below for reference:

### **Discount Rate (per annum)**

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Axis Bank Ltd.	6.70%	7.90%	8.05%	8.35%	7.90%	9.15%
Bank of Baroda	7.50%	8.00%	8.50%	8.50%	8.25%	8.50%
HDFC Bank Ltd.	8.00%	8.40%	8.20%	8.80%	8.10%	9.00%
HDFC Ltd.(*)	7.50%	8.13%	7.88%	8.63%	8.13%	9.18%
Kotak Mahindra Bank Ltd.	7.18%	8.01%	8.26%	8.94%	8.24%	9.34%
IDFC Ltd.(**)	7.50%	8.05%	8.30%	8.38%	8.05%	9.03%
IndusInd Bank Ltd.(***)	8.00%	8.00%	8.00%	8.00%	8.08%	9.14%
ICICI Bank Ltd.	6.85%	7.75%	8.10%	8.30%	7.95%	9.00%
Punjab National Bank(****)	7.67%	7.87%	8.17%	8.60%	8.38%	9.10%
State Bank of India	7.85%	8.00%	8.50%	8.50%	8.25%	9.35%
<b>Average Discount Rate</b>	<b>7.48%</b>	<b>8.01%</b>	<b>8.20%</b>	<b>8.50%</b>	<b>8.13%</b>	<b>9.08%</b>
<b>Minimum Discount Rate</b>	<b>6.70%</b>	<b>7.75%</b>	<b>7.88%</b>	<b>8.00%</b>	<b>7.90%</b>	<b>8.50%</b>
<b>Maximum Discount Rate</b>	<b>8.00%</b>	<b>8.40%</b>	<b>8.50%</b>	<b>8.94%</b>	<b>8.38%</b>	<b>9.35%</b>

\* Discount rate assumed to be: 7% - 8% p.a., 8% - 8.25% p.a., 7.5% - 8.5% p.a., 8.5 - 8.75% p.a., 8 - 8.25% p.a. for the FY 2008-09 to 2012-13 respectively and 9%-9.36% p.a. for FY 2013-14.

\*\* Discount rate assumed to be: 7-8% p.a., 8-8.10% p.a., 8.85-9.20% p.a. for FY 2008-09, 2010-11 & 2013-14 respectively.

\*\*\* Discount rate assumed to be: 8.00-8.15% p.a. FY 2012-13.

\*\*\*\* Discount rate assumed to be: 7.34-8.00% p.a. FY 2008-09.

For the purpose of analysis, we have taken the overall discount rate to be average of the given range.

### **Salary Growth Rate (per annum)**

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Axis Bank Ltd.	6.00%	6.00%	6.00%	6.00%	7.00%	7.00%
Bank of Baroda	8.00%	4.00%	4.00%	4.00%	6.00%	6.00%
HDFC Bank Ltd.	7.50%	8.50%	8.50%	9.00%	8.50%	8.50%
HDFC Ltd.(*)	5.13%	5.13%	6.00%	6.00%	7.50%	7.50%
Kotak Mahindra Bank Ltd. (**)	6.50%	6.50%	6.50%	6.50%	8.50%	8.50%
IDFC Ltd. (***)	8.50%	7.00%	8.00%	8.00%	8.00%	8.00%
IndusInd Bank Ltd. (****)	4.50%	5.00%	5.25%	4.75%	4.50%	5.00%
ICICI Bank Ltd.	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Punjab National Bank	6.50%	6.50%	5.00%	5.00%	5.00%	5.50%
State Bank of India	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
<b>Average Salary Growth Rate</b>	<b>6.46%</b>	<b>6.06%</b>	<b>6.13%</b>	<b>6.13%</b>	<b>6.70%</b>	<b>6.80%</b>
<b>Minimum Salary Growth</b>	<b>4.50%</b>	<b>4.00%</b>	<b>4.00%</b>	<b>4.00%</b>	<b>4.50%</b>	<b>5.00%</b>
<b>Maximum Salary Growth</b>	<b>8.50%</b>	<b>8.50%</b>	<b>8.50%</b>	<b>9.00%</b>	<b>8.50%</b>	<b>8.50%</b>

\* Salary growth rate assumed to be the following in the consolidated financial statements: 4-6.25% p.a., 4-6.25% p.a., 5-20% p.a., 5-7% p.a., 5-10% p.a. for the FY 2008-09 to 2012-13 respectively and 5-10% p.a. for FY 2013-14. In the stand alone financial statements of HDFC Ltd., the salary growth rate assumption was 5% p.a. for both FY2012-13 and FY2013-14.

\*\* Salary growth rate assumed to be: For FY 2008-09: 0% p.a. for 1st year, 10% p.a. for next 2 years & 6% p.a. thereafter. For FY 2009-10: 15% p.a. for first 2 years, 10% p.a. for next 2 years & 6% p.a. thereafter. For FY 2010-11: 15% p.a. for first 2 years, 10% p.a. for next 2 years & 6% p.a. thereafter. For FY 2011-12: 15% p.a. for first 2 years, 10% p.a. for next 2 years & 6% p.a. thereafter. For the purpose of analysis, we have considered the long term rate with a mark-up of 50 bps to represent the impact of higher salary growth rate of first few years.

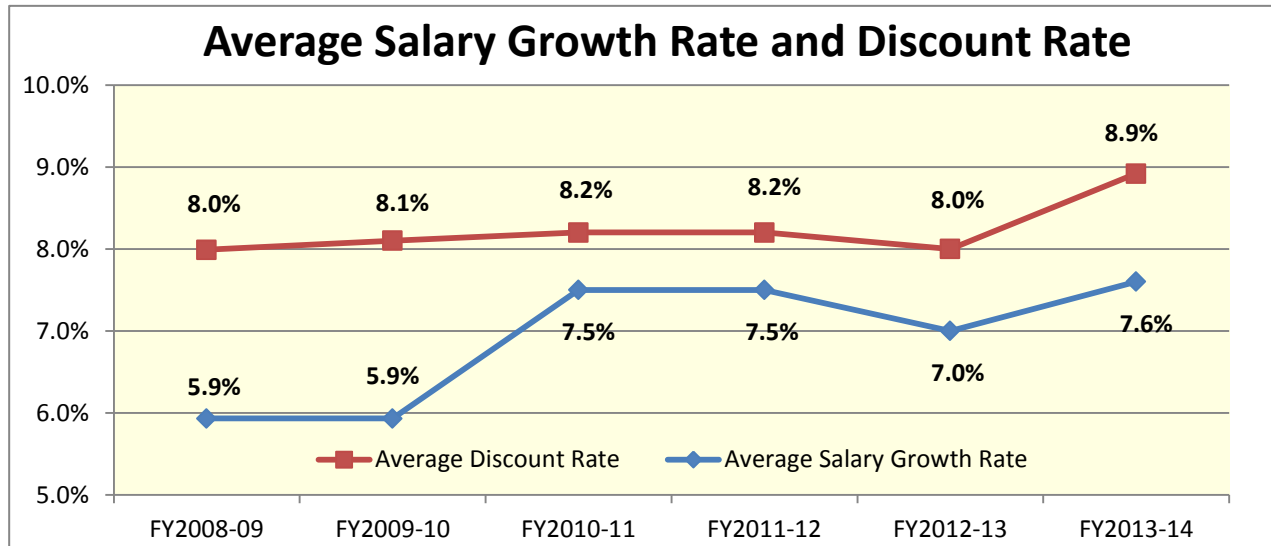
\*\*\* Salary growth rate assumed to be: 7-10% p.a. and 5-9% p.a. for FY 2008-09 & 2009-10 respectively.

\*\*\*\* Salary growth rate assumed to be: 4-5% p.a., 4-6% p.a., 4.5-6% p.a., 4.5-5% p.a., 4-5% p.a. for FY 2008-09 to 2012-13.



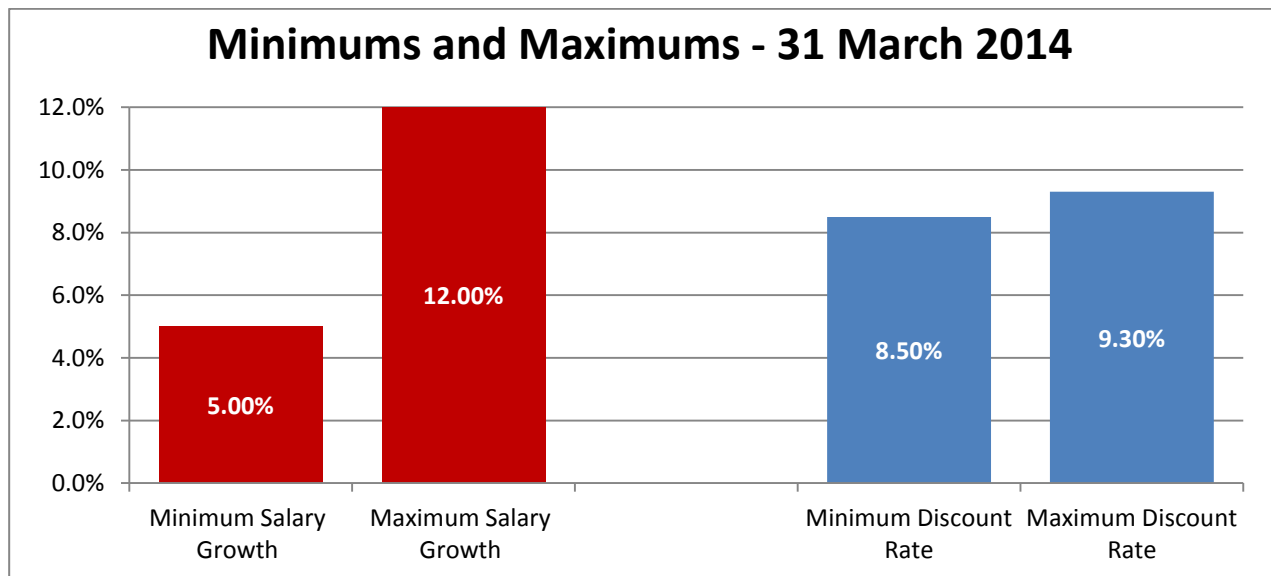
## Metal Sector

Following chart depicts the average salary growth rate and discount rate assumption adopted by companies in the metal sector in the NSE50 index over the past six financial years:



As can be seen from the above chart, over the last six financial years, the **absolute level of assumed salary growth rate increased by c 1.7% compared to an increase of c 0.9% in the discount rate**, resulting in **relative strengthening of the salary growth rate assumption**.

The following chart depicts the **minimum and maximum salary growth rate and discount rate assumption as at 31 March 2014** for companies in the metal sector in NSE 50 index:



The data collated from the annual reports is given below for reference:

### **Discount Rate (per annum)**

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Coal India Ltd.	8.00%	8.00%	8.50%	8.00%	8.00%	8.50%
Hindalco Industries Ltd.	8.00%	8.00%	8.00%	8.00%	8.00%	9.00%
Jindal Steel & Power Ltd.	8.20%	8.50%	8.50%	8.50%	8.00%	9.30%
NMDC Ltd.	8.00%	8.00%	8.00%	8.00%	8.00%	9.00%
Sesa Sterlite Ltd.	N/A	N/A	N/A	N/A	N/A	9.00%
Tata Steel Ltd. (*)	7.75%	8.00%	8.00%	8.50%	8.00%	8.73%
<b>Average Discount Rate</b>	<b>7.99%</b>	<b>8.10%</b>	<b>8.20%</b>	<b>8.20%</b>	<b>8.00%</b>	<b>8.92%</b>
<b>Minimum Discount Rate</b>	<b>7.75%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.50%</b>
<b>Maximum Discount Rate</b>	<b>8.20%</b>	<b>8.50%</b>	<b>8.50%</b>	<b>8.50%</b>	<b>8.00%</b>	<b>9.30%</b>

\* Discount rate assumed to be: 1.65% - 8.5% p.a. for FY 2008-09 & 2009-10, 4.25% - 8.5% for FY 2010-11, 0.45% - 8.90% for FY 2011-12, 0.3% - 8.20% for FY 2012-13, 0.51%-9.25%p.a. for FY 2013-14 respectively.  
N/A means not available.

### **Salary Growth Rate (per annum)**

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Coal India Ltd.	N/A	N/A	N/A	N/A	N/A	N/A
Hindalco Industries Ltd.	6.00%	6.00%	6.00%	6.00%	6.00%	7.00%
Jindal Steel & Power Ltd.	N/A	N/A	12.00%	12.00%	10.00%	12.00%
NMDC Ltd.	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Sesa Sterlite Ltd. (*)	N/A	N/A	N/A	N/A	N/A	6.50%
Tata Steel Ltd. (**)	6.80%	6.80%	7.00%	7.00%	7.00%	7.50%
<b>Average Salary Growth Rate</b>	<b>5.93%</b>	<b>5.93%</b>	<b>7.50%</b>	<b>7.50%</b>	<b>7.00%</b>	<b>7.60%</b>
<b>Minimum Salary Growth</b>	<b>5.00%</b>	<b>5.00%</b>	<b>5.00%</b>	<b>5.00%</b>	<b>5.00%</b>	<b>5.00%</b>
<b>Maximum Salary Growth</b>	<b>6.80%</b>	<b>6.80%</b>	<b>12.00%</b>	<b>12.00%</b>	<b>10.00%</b>	<b>12.00%</b>

\* Salary growth rate assumed to be: 6-7% p.a. for FY 2013-14.

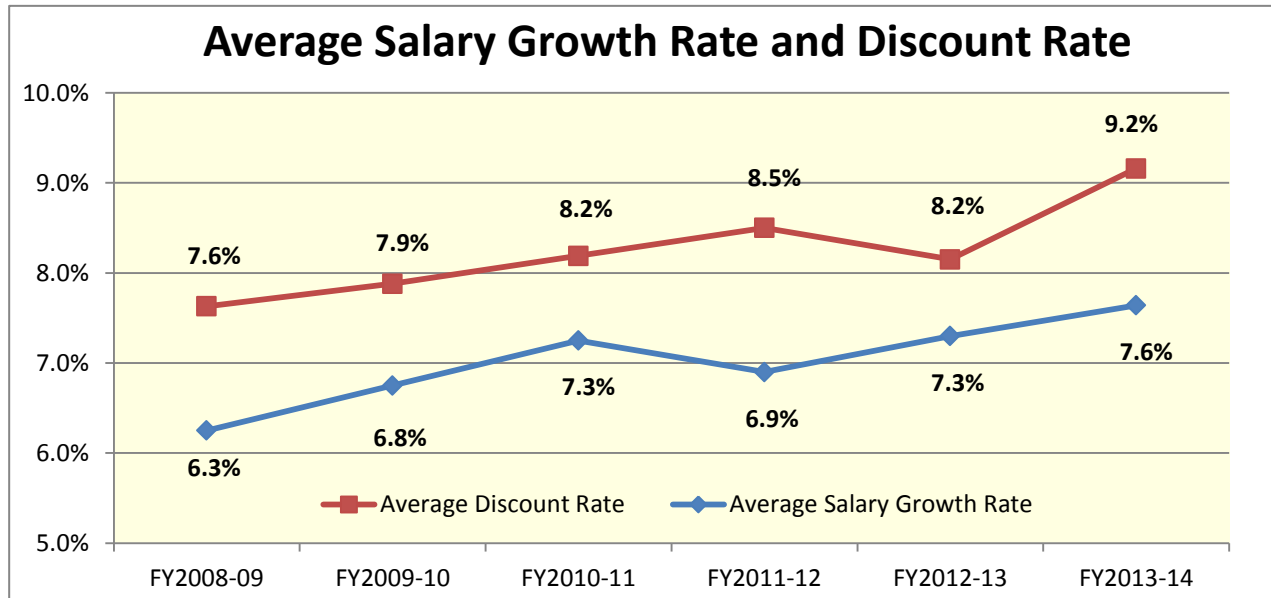
\*\* Salary growth rate assumed to be the following in the consolidated financial statements: 3.6-10% p.a. for FY 2008-09 & 2009-10, 4-10% p.a. for FY 2010-11 to 2012-13 and 5-10% p.a. for FY 2013-14.

For the purpose of analysis, we have taken the overall salary growth rate to be average of the given range.

N/A means not available.

## Pharmaceuticals Sector

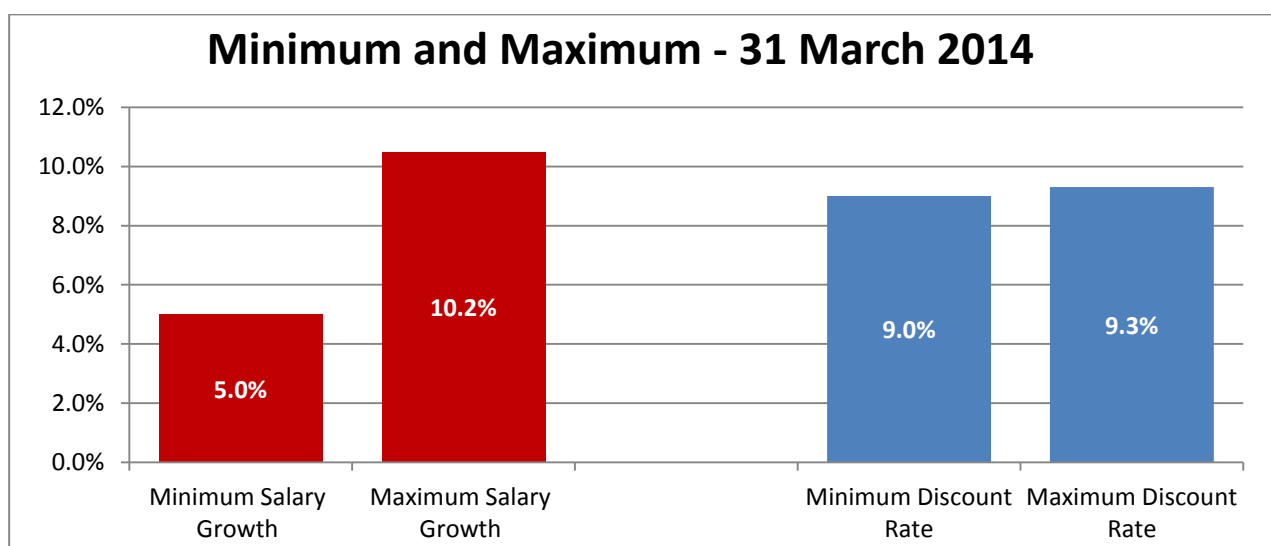
Following chart depicts the average salary growth rate and discount rate assumption adopted by companies in the pharmaceuticals sector in the NSE50 index over the past six financial years:



Note: Fall in salary growth rate assumption from FY11 to FY12 is happening because the average was calculated for four companies which disclosed salary growth rate assumption in FY11 whilst it has been calculated for five companies in FY12 (with the fifth company now being included in the average having a low salary growth rate assumption compared to the last year's overall average). It does not represent weakening of the assumption. Please refer next page for company wise details.

As can be seen from the above chart, the absolute level of salary growth rate assumed increased by a c 1.3% compared to an increase of c 1.6% in the discount rate over the last six financial years. Overall, **this resulted in an increase in the gap between the discount rate and assumed salary growth rate, resulting in a relative weakening of salary growth rate assumption.**

The following chart depicts the **minimum and maximum salary growth rate and discount rate assumption as at 31 March 2014** for companies in the pharmaceutical sector in NSE 50 index:



The data collated from the annual reports is given below for reference:

**Discount Rate (per annum)**

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Cipla Ltd.	7.75%	8.00%	8.25%	8.50%	8.25%	9.30%
Dr. Reddy's Laboratories Ltd.	7.15%	7.50%	7.95%	8.60%	7.95%	9.00%
Lupin Ltd.	8.00%	8.00%	8.00%	8.70%	8.10%	9.20%
Ranbaxy Laboratories Ltd.	7.50%	7.90%	8.50%	8.20%	8.20%	9.00%
Sun Pharmaceutical Industries Ltd.	7.75%	8.00%	8.25%	8.50%	8.25%	9.31%
<b>Average Discount Rate</b>	<b>7.63%</b>	<b>7.88%</b>	<b>8.19%</b>	<b>8.50%</b>	<b>8.15%</b>	<b>9.16%</b>
<b>Minimum Discount Rate</b>	<b>7.15%</b>	<b>7.50%</b>	<b>7.95%</b>	<b>8.20%</b>	<b>7.95%</b>	<b>9.00%</b>
<b>Maximum Discount Rate</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.50%</b>	<b>8.70%</b>	<b>8.25%</b>	<b>9.31%</b>

**Salary Growth Rate (per annum)**

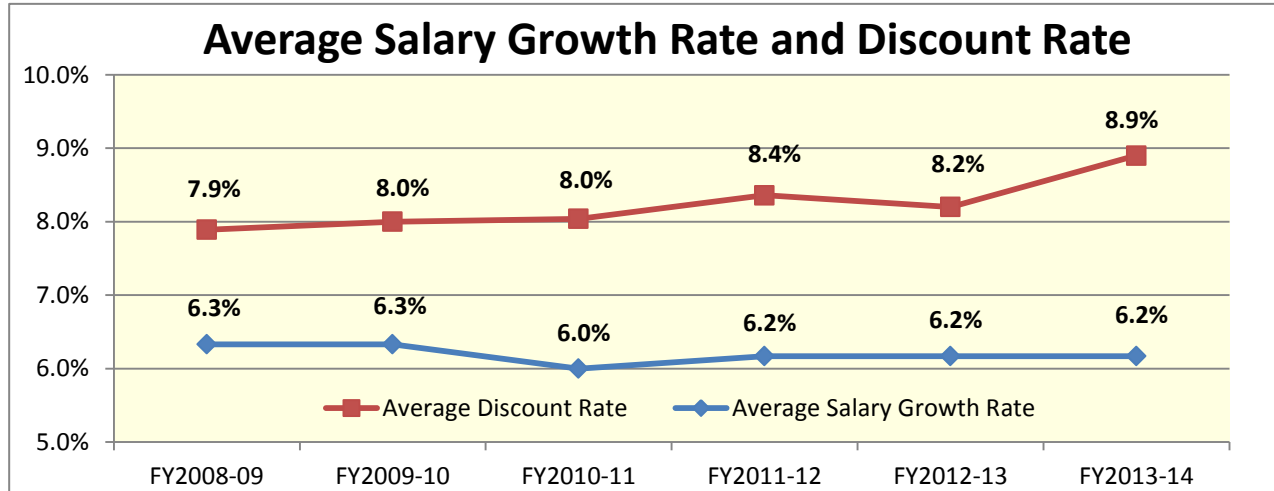
Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Cipla Ltd.	N/A	N/A	N/A	4.00%	4.00%	5.00%
Dr. Reddy's Laboratories Ltd. (*)	6.50%	6.50%	8.50%	8.50%	9.50%	10.20%
Lupin Ltd.	5.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Ranbaxy Laboratories Ltd. (**)	7.50%	8.50%	8.50%	10.00%	10.00%	10.00%
Sun Pharmaceutical Industries Ltd.	6.00%	6.00%	6.00%	6.00%	7.00%	7.00%
<b>Average Salary Growth Rate</b>	<b>6.25%</b>	<b>6.75%</b>	<b>7.25%</b>	<b>6.90%</b>	<b>7.30%</b>	<b>7.64%</b>
<b>Minimum Salary Growth</b>	<b>5.00%</b>	<b>6.00%</b>	<b>6.00%</b>	<b>4.00%</b>	<b>4.00%</b>	<b>5.00%</b>
<b>Maximum Salary Growth</b>	<b>7.50%</b>	<b>8.50%</b>	<b>8.50%</b>	<b>10.00%</b>	<b>10.00%</b>	<b>10.20%</b>

\* **Salary growth rate assumed to be:** For FY2008-09: 8% p.a. for next three years & 6% p.a. thereafter; For FY 2009-10: 8% p.a. for next two years & 6% p.a. thereafter; FY 2010-11: 9% p.a. for next two years & 8% p.a. thereafter; For FY2011-12: 9% p.a. for first year & 8% p.a. thereafter for FY2012-13: 10% p.a. for first two years & 9% p.a. thereafter and For FY2013-14 ;11% for first two years and 10% thereafter. For the purpose of analysis, we have considered the long term rate with a mark-up of 20 bps to represent the impact of higher salary growth rate of first few years.

\*\* **Salary growth rate assumed to be:** 5-10% p.a., 7-10% p.a. and 7-10% p.a. for FY 2008-09 to 2010-11 respectively. For the purpose of analysis, we have taken the overall salary growth rate to be average of the given range. N/A means not available.

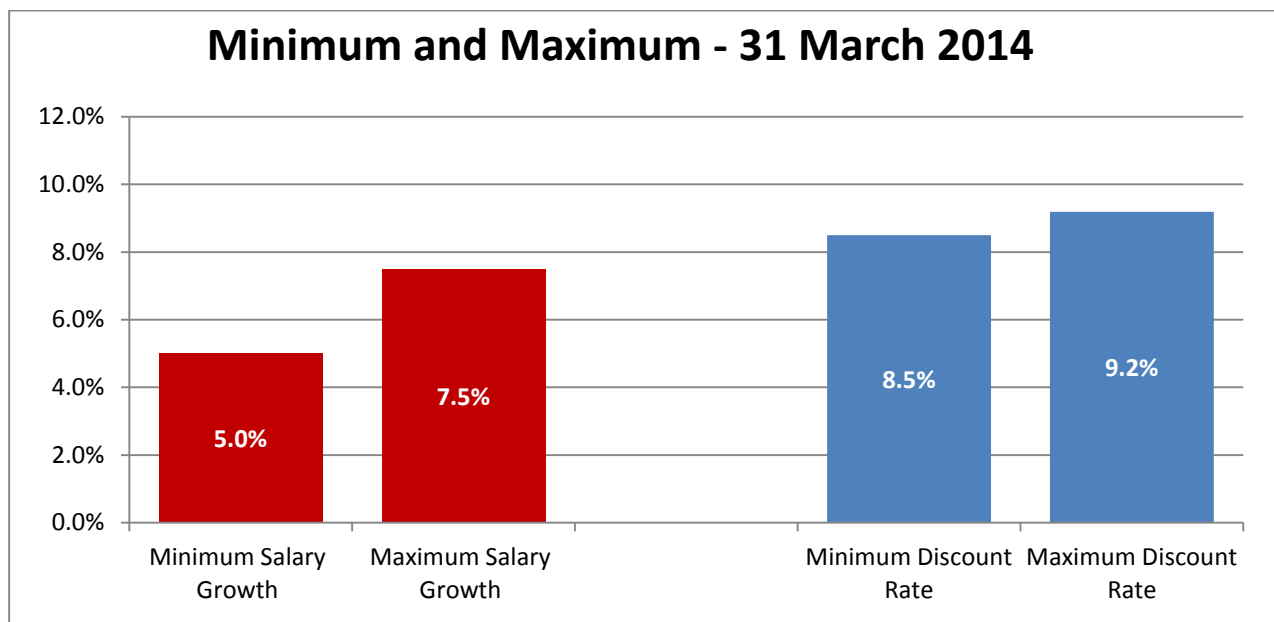
## Construction Sector

Following chart depicts the average salary growth rate and discount rate assumption adopted by the companies in the construction sector in the NSE50 index over the past six financial years:



As can be seen from the above chart, the absolute level of salary growth rate assumed marginally fell by a c 0.1% compared to an increase of c 1.0% in the discount rate over the last six financial years. Overall, **this resulted in an increase in the gap between the discount rate and assumed salary growth rate, resulting in a significant relative weakening of salary growth rate assumption.**

The following chart depicts the **minimum and maximum salary growth rate and discount rate assumption as at 31 March 2014** for the companies in the construction sector in NSE 50 index:



The data collated from the annual reports is given below for reference:

***Discount Rate (per annum)***

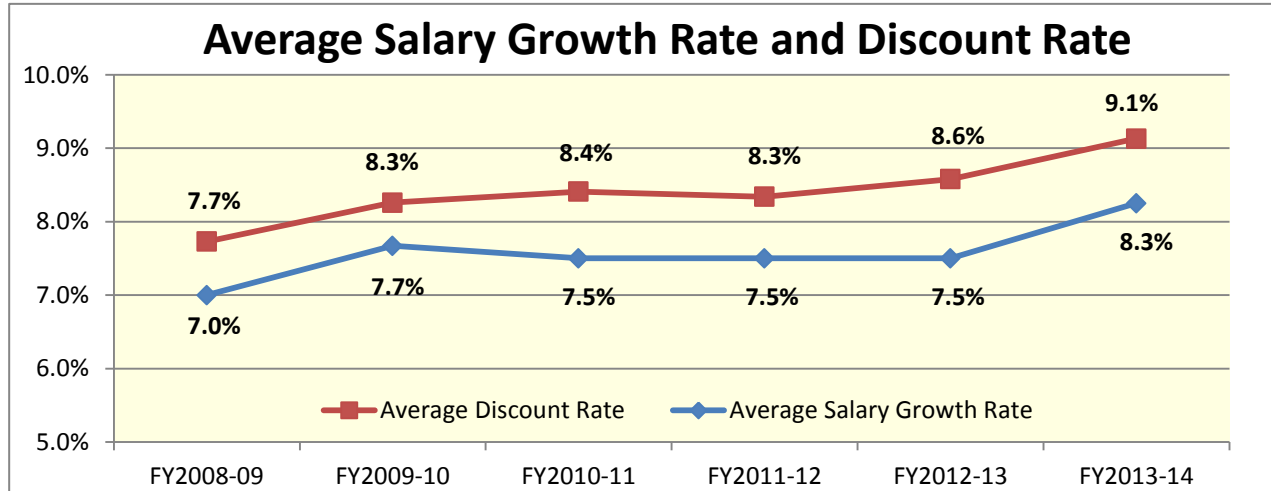
Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
DLF Ltd.	8.00%	8.00%	8.00%	8.00%	8.00%	9.00%
Jaiprakash Associates Ltd.	8.00%	8.00%	8.00%	8.50%	8.50%	8.50%
Larsen & Toubro Ltd.	7.67%	8.01%	8.11%	8.59%	8.09%	9.19%
<b>Average Discount Rate</b>	<b>7.89%</b>	<b>8.00%</b>	<b>8.04%</b>	<b>8.36%</b>	<b>8.20%</b>	<b>8.90%</b>
<b>Minimum Discount Rate</b>	<b>7.67%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.50%</b>
<b>Maximum Discount Rate</b>	<b>8.00%</b>	<b>8.01%</b>	<b>8.11%</b>	<b>8.59%</b>	<b>8.50%</b>	<b>9.19%</b>

***Salary Growth Rate (per annum)***

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
DLF Ltd.	7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
Jaiprakash Associates Ltd.	5.50%	5.50%	5.50%	6.00%	6.00%	6.00%
Larsen & Toubro Ltd.	6.00%	6.00%	5.00%	5.00%	5.00%	5.00%
<b>Average Salary Growth Rate</b>	<b>6.33%</b>	<b>6.33%</b>	<b>6.00%</b>	<b>6.17%</b>	<b>6.17%</b>	<b>6.17%</b>
<b>Minimum Salary Growth</b>	<b>5.50%</b>	<b>5.50%</b>	<b>5.00%</b>	<b>5.00%</b>	<b>5.00%</b>	<b>5.00%</b>
<b>Maximum Salary Growth</b>	<b>7.50%</b>	<b>7.50%</b>	<b>7.50%</b>	<b>7.50%</b>	<b>7.50%</b>	<b>7.50%</b>

## Cement Sector

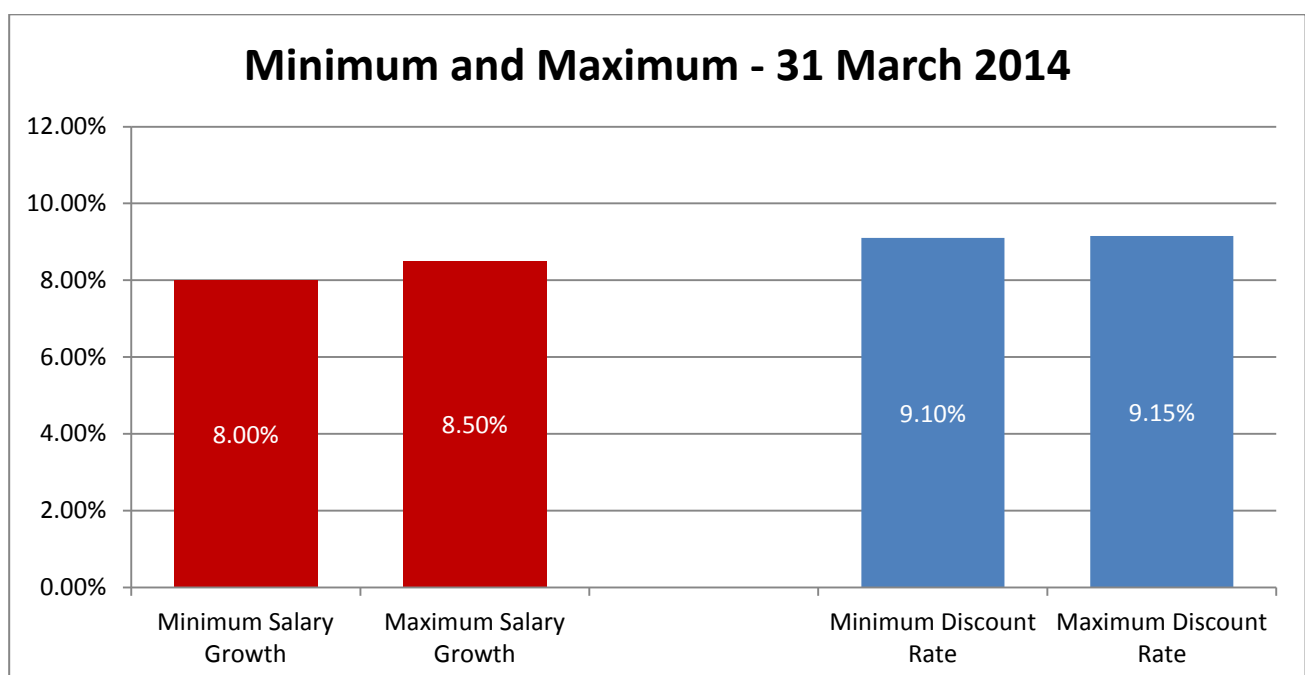
Following chart depicts the average salary growth rate and discount rate assumption adopted by the companies in the cement sector in the NSE50 index over the past six financial years:



Note: Fall in salary growth rate assumption from FY10 to FY11 is happening because the average was calculated for three companies which disclosed salary growth rate assumption in FY10 whilst it has been calculated for four companies in FY11 (with the fourth company now being included in the average having a low salary growth rate assumption compared to the last year's overall average). It does not represent weakening of the assumption. Please refer next page for company wise details.

As can be seen from the above chart, over the last six financial years, whilst the **absolute level of both the salary growth rate and discount rate saw an increase of about 1.3% to 1.4%**, at a relative level the gap between the discount rate and assumed salary growth rate has remained stable **suggesting no relative strengthening of salary growth rate assumption**.

The following chart depicts the **minimum and maximum salary growth rate and discount rate assumption as at 31 March 2014** for companies in the cement sector in NSE 50 index:



The data collated from the annual reports is given below for reference:

### **Discount Rate (per annum)**

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
ACC Ltd.(*)	7.25%	8.00%	8.50%	8.15%	8.85%	N/A
Ambuja Cements Ltd.(*)	8.25%	8.30%	8.60%	8.25%	9.30%	N/A
Grasim Industries Ltd.	7.95%	8.27%	8.28%	8.51%	8.15%	9.10%
UltraTech Cement Ltd.(**)	7.45%	8.45%	8.25%	8.45%	8.00%	9.15%
<b>Average Discount Rate</b>	<b>7.73%</b>	<b>8.26%</b>	<b>8.41%</b>	<b>8.34%</b>	<b>8.58%</b>	<b>9.13%</b>
<b>Minimum Discount Rate</b>	<b>7.25%</b>	<b>8.00%</b>	<b>8.25%</b>	<b>8.15%</b>	<b>8.00%</b>	<b>9.10%</b>
<b>Maximum Discount Rate</b>	<b>8.25%</b>	<b>8.45%</b>	<b>8.60%</b>	<b>8.51%</b>	<b>9.30%</b>	<b>9.15%</b>

\* Figures of ACC Ltd. and Ambuja Cements Ltd. are as on 31<sup>st</sup> December each year.

\*\* **Discount rate assumed to be: Gratuity funded: 8.45% p.a., Gratuity others: 12% p.a. for FY 2009-10, Gratuity funded: 8.25% p.a., Gratuity others: 11% p.a. for FY 2010-11, Gratuity funded: 8.45% p.a., Gratuity others: 10.5% p.a. for FY 2011-12, Gratuity funded: 8% p.a., Gratuity others: 11.5% p.a. for FY 2012-13 and Gratuity funded: 9.15% p.a., Gratuity others: 10% p.a. for FY 2013-14.** For the purpose of analysis, we have considered the discount rate for funded liability, which constituted the major component.

### **Salary Growth Rate (per annum)**

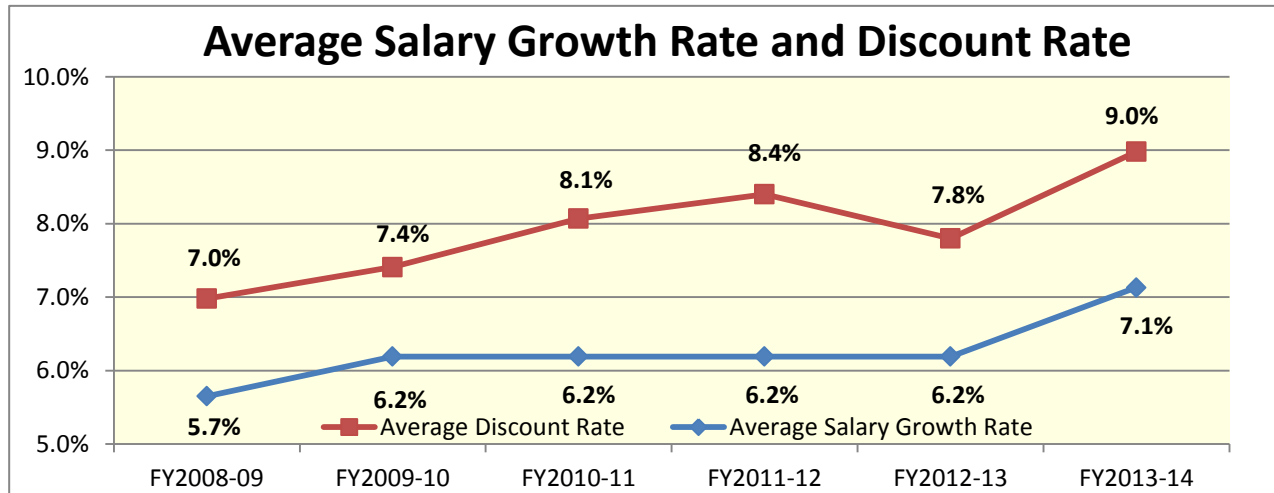
Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
ACC Ltd.	N/A	N/A	7.00%	7.00%	7.00%	N/A
Ambuja Cements Ltd.	7.00%	7.00%	7.00%	7.00%	7.00%	N/A
Grasim Industries Ltd.	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
UltraTech Cement Ltd.(*)	6.00%	8.00%	8.00%	8.00%	8.00%	8.50%
<b>Average Salary Growth Rate</b>	<b>7.00%</b>	<b>7.67%</b>	<b>7.50%</b>	<b>7.50%</b>	<b>7.50%</b>	<b>8.25%</b>
<b>Minimum Salary Growth</b>	<b>6.00%</b>	<b>7.00%</b>	<b>7.00%</b>	<b>7.00%</b>	<b>7.00%</b>	<b>8.00%</b>
<b>Maximum Salary Growth</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.50%</b>

\* **Salary growth rate assumed to be: Gratuity funded: 8% p.a., Gratuity others: 15% p.a. for FY 2009-10, Gratuity funded: 8% p.a., Gratuity others: 10% p.a. for FY 2010-11 to 2012-13 and Gratuity funded: 8.50% p.a., Gratuity others: 10% p.a. for FY 2013-14.** For the purpose of analysis, we have taken the salary growth rate of funded liability (as that constituted the major component).



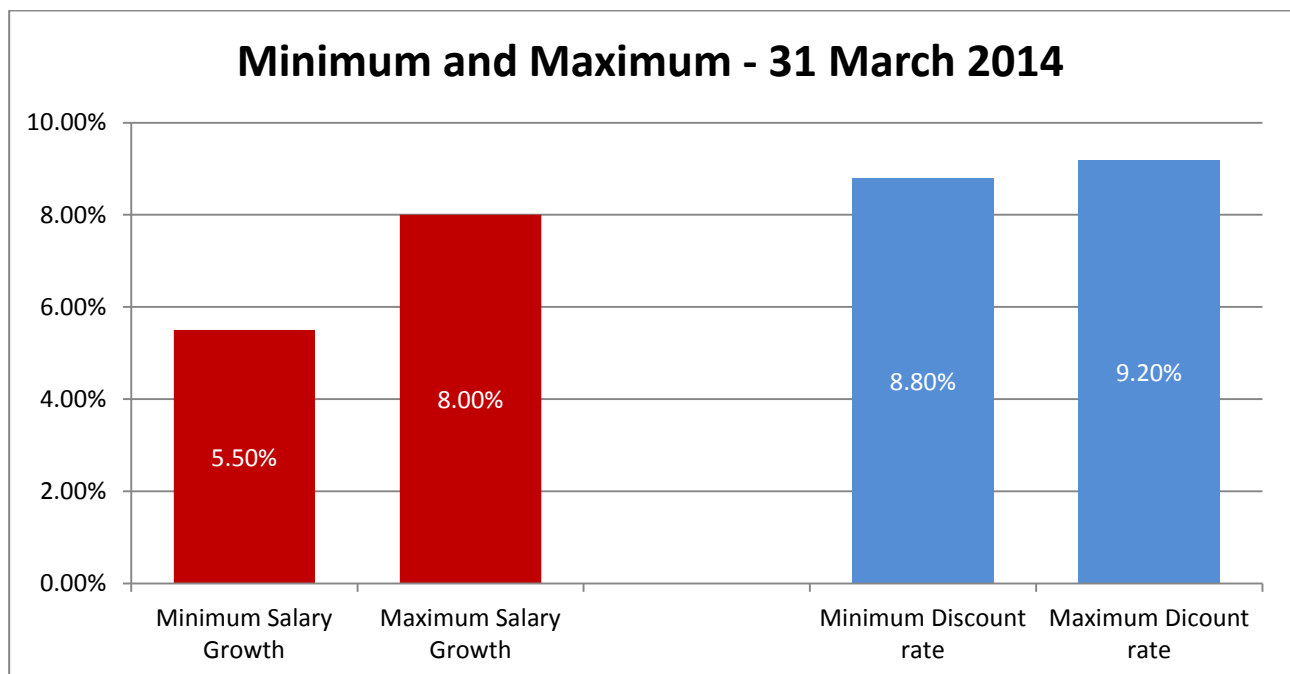
## Information Technology (IT) Sector

Following chart depicts the average salary growth rate and discount rate assumption adopted by the companies in the IT sector in the NSE50 index over the past six financial years:



As can be seen from the above chart, over the last six financial years, the **absolute level of the salary growth rate assumption increased by 1.4%** and the **average discount rate assumption increased by about 2%**. Thus, at a relative level, the gap between the discount rate and assumed salary growth rate increased **suggesting no weakening of salary growth rate assumption**.

The following chart depicts the **minimum and maximum salary growth rate and discount rate assumption as at 31 March 2014** for companies in the IT sector in NSE 50 index:



The data collated from the annual reports is given below for reference:

### **Discount Rate (per annum)**

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
HCL Technologies Ltd. (*)	6.40%	7.15%	8.35%	8.10%	7.45%	8.80%
Infosys Ltd.	7.01%	7.82%	7.98%	8.75%	7.95%	9.20%
Tata Consultancy Services Ltd. (**)	7.75%	7.50%	8.00%	8.38%	8.00%	9.00%
Wipro Ltd.	6.75%	7.15%	7.95%	8.35%	7.80%	8.90%
<b>Average Discount Rate</b>	<b>6.98%</b>	<b>7.41%</b>	<b>8.07%</b>	<b>8.40%</b>	<b>7.80%</b>	<b>8.98%</b>
<b>Minimum Discount Rate</b>	<b>6.40%</b>	<b>7.15%</b>	<b>7.95%</b>	<b>8.10%</b>	<b>7.45%</b>	<b>8.80%</b>
<b>Maximum Discount Rate</b>	<b>7.75%</b>	<b>7.82%</b>	<b>8.35%</b>	<b>8.75%</b>	<b>8.00%</b>	<b>9.20%</b>

\* Figures of HCL Technologies Ltd. are as on 30th June each year.

\*\* **Discount rate assumed to be:** 7.5-8% p.a. and 8.25-8.5% p.a. for FY 2008-09 and 2011-12 respectively. For the purpose of analysis, we have taken the overall discount rate to be average of the given range.

### **Salary Growth Rate (per annum)**

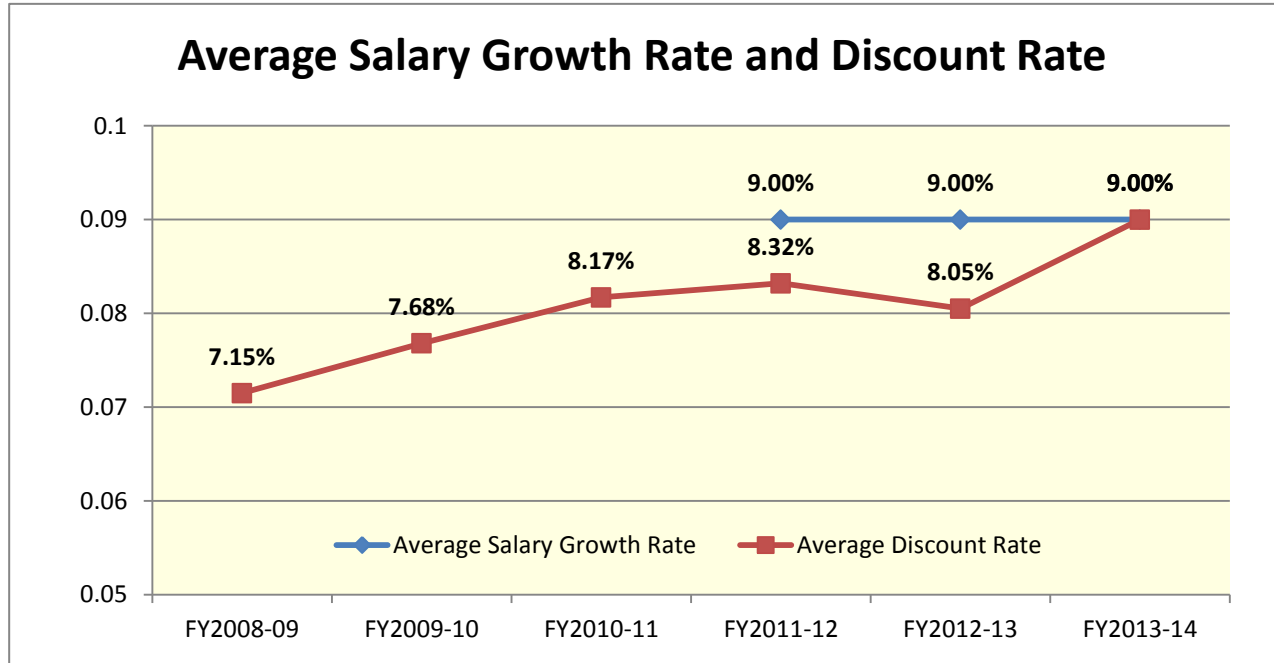
Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
HCL Technologies Ltd. (*)	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Infosys Ltd.	5.10%	7.27%	7.27%	7.27%	7.27%	8.00%
Tata Consultancy Services Ltd. (**)	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
Wipro Ltd.	5.00%	5.00%	5.00%	5.00%	5.00%	8.00%
<b>Average Salary Growth Rate</b>	<b>5.65%</b>	<b>6.19%</b>	<b>6.19%</b>	<b>6.19%</b>	<b>6.19%</b>	<b>7.13%</b>
<b>Minimum Salary Growth</b>	<b>5.00%</b>	<b>5.00%</b>	<b>5.00%</b>	<b>5.00%</b>	<b>5.00%</b>	<b>5.50%</b>
<b>Maximum Salary Growth</b>	<b>7.00%</b>	<b>7.27%</b>	<b>7.27%</b>	<b>7.27%</b>	<b>7.27%</b>	<b>8.00%</b>

\* **Salary growth rate assumed to be:** 6-10% p.a. for FY 2008-09, 2009-10 & 2010-11. For the purpose of analysis, we have, after considering the single salary growth rate provided for latest years, taken the salary growth rate for FY 2008-09, 2009-10 & 2010-11 to be 7% p.a.

\*\* **Salary growth rate assumed to be:** 4-15% p.a., 4-12% p.a., 4-12% p.a., 4-9% p.a., 4-7% p.a. & 4-7% p.a. for FY 2008-09 to 2013-14 respectively. For the purpose of analysis, we have taken salary growth rate to be assumed at 5.5% p.a. for all financial years.

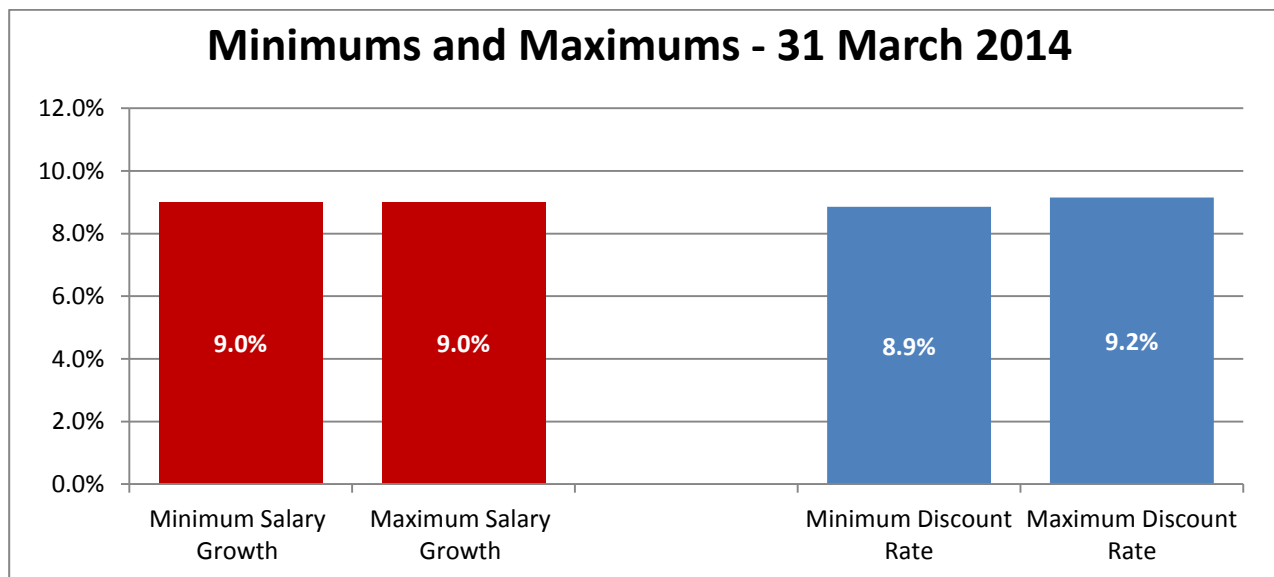
## Consumer Goods Sector

Following chart depicts the average salary growth rate and discount rate assumption adopted by the companies in the consumer goods sector in NSE50 index over the past six financial years:



Please note that the non-disclosure of the salary growth rate assumption by majority of companies within the sector inhibits us from commenting on the salary growth rate assumption at a sectoral level. Refer next page for further details.

The following chart depicts the **minimum and maximum salary growth rate and discount rate assumption as at 31 March 2014** for consumer goods sector in NSE 50 index:



As can be seen, the minimum and maximum for salary growth rate assumption is the same on account of fact that disclosures regarding the salary growth rate assumption was made by only one company with the sector (NSE50 index).

The data collated from the annual reports is given below for reference:

**Discount Rate (per annum)**

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Asian Paints Ltd.	7.95%	8.30%	8.35%	8.50%	8.20%	9.15%
Hindustan Unilever Ltd.	6.50%	7.75%	8.15%	8.20%	7.95%	8.85%
I T C Ltd.	7.00%	7.00%	8.00%	8.25%	8.00%	9.00%
<b>Average Discount Rate</b>	<b>7.15%</b>	<b>7.68%</b>	<b>8.17%</b>	<b>8.32%</b>	<b>8.05%</b>	<b>9.00%</b>
<b>Minimum Discount Rate</b>	<b>6.50%</b>	<b>7.00%</b>	<b>8.00%</b>	<b>8.20%</b>	<b>7.95%</b>	<b>8.85%</b>
<b>Maximum Discount Rate</b>	<b>7.95%</b>	<b>8.30%</b>	<b>8.35%</b>	<b>8.50%</b>	<b>8.20%</b>	<b>9.15%</b>

**Salary Growth Rate (per annum)**

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Asian Paints Ltd. (*)	N/A	N/A	N/A	9.00%	9.00%	9.00%
Hindustan Unilever Ltd.	N/A	N/A	N/A	N/A	N/A	N/A
I T C Ltd.	N/A	N/A	N/A	N/A	N/A	N/A
<b>Average Salary Growth Rate</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.00%</b>	<b>9.00%</b>	<b>9.00%</b>
<b>Minimum Salary Growth</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.00%</b>	<b>9.00%</b>	<b>9.00%</b>
<b>Maximum Salary Growth</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.00%</b>	<b>9.00%</b>	<b>9.00%</b>

\* Salary growth rate assumed to be:

**FY2011-12: Management:** 1<sup>st</sup> Year: 15% p.a., next 2 years: 12% p.a., next 3 years: 10% p.a. and thereafter: 8% p.a. **Non Management:** 1st Year 13% p.a., next 5 years 12% and 8% thereafter.

**FY2012-13 and FY2013-14: Management:** 1<sup>st</sup> Year: 13% p.a., next 2 years: 12% p.a., next 3 years 10% and thereafter 8% p.a. for both 2012-13 and 2013-14. **Non Management:** 1st Year 13% p.a., next 5 years 12% and 8% thereafter.

For the purpose of analysis, we have considered the long term rate with a mark-up of 100 bps to represent the impact of higher salary growth rate of first few years.

## Others

Apart from the sectors covered above, there were two companies in the NSE50 index which could not be categorised into any of the above sectors. The data collated from the annual reports of these companies is given below for reference and completeness:

### *Discount Rate (per annum)*

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Bharat Heavy Electricals Ltd.	7.00%	7.50%	7.50%	8.50%	8.00%	8.50%
Bharti Airtel Ltd.	7.50%	7.50%	7.50%	8.00%	8.50%	8.00%
<b>Average Discount Rate</b>	<b>7.25%</b>	<b>7.50%</b>	<b>7.50%</b>	<b>8.25%</b>	<b>8.25%</b>	<b>8.25%</b>
<b>Minimum Discount Rate</b>	<b>7.00%</b>	<b>7.50%</b>	<b>7.50%</b>	<b>8.00%</b>	<b>8.00%</b>	<b>8.00%</b>
<b>Maximum Discount Rate</b>	<b>7.50%</b>	<b>7.50%</b>	<b>7.50%</b>	<b>8.50%</b>	<b>8.50%</b>	<b>8.50%</b>

### *Salary Growth Rate (per annum)*

Company Name	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14
Bharat Heavy Electricals Ltd.	4.50%	5.00%	5.00%	6.00%	6.00%	6.50%
Bharti Airtel Ltd. (*)	7.50%	8.00%	9.00%	9.00%	10.00%	10.00%
<b>Average Salary Growth Rate</b>	<b>6.00%</b>	<b>6.50%</b>	<b>7.00%</b>	<b>7.50%</b>	<b>8.00%</b>	<b>8.25%</b>
<b>Minimum Salary Growth</b>	<b>4.50%</b>	<b>5.00%</b>	<b>5.00%</b>	<b>6.00%</b>	<b>6.00%</b>	<b>6.50%</b>
<b>Maximum Salary Growth</b>	<b>7.50%</b>	<b>8.00%</b>	<b>9.00%</b>	<b>9.00%</b>	<b>10.00%</b>	<b>10.00%</b>

\* Salary growth rate assumed to be: 15% for first three years & 7% thereafter for FY 2008-09. For the purpose of analysis, we have considered the long term rate with a mark-up of 50 bps to represent the impact of higher salary growth rate of first few years.




## Concluding Remarks

### A look at the past

- We can see that the **average salary growth rate assumption has increased year on year over the last few years, reflecting perhaps a correction** necessitated by significant difference in the actual and the assumed salary growth rates.
- We believe that the salary growth rate assumption adopted by the organisations is **still lower than the actual salary growth rates being experienced by them** (we share our thoughts on this in another article).
- The discount rate assumption, which is expected to consider the term of the liability, has been largely in line with the benchmark 10 years Government sector bond yields (reflecting a rather flat yield curve) and thus increase in the discount rate assumption by almost all the companies depicts the point that the yields on government bonds have seen an increase over the last few years.

### A peep into the future

- It is difficult to comment over long term. However, we certainly **expect the yields on government bonds as at 31 March 2015 to be lower than yields as at 31 March 2014**, driven primarily by softening of inflation, and growth becoming the primary agenda again for the RBI. This would **result in lowering of discount rates**, leading to actuarial losses arising in valuation of employee benefits.
- Consequently, **we do not expect the market to strengthen the absolute levels of salary growth rate** (even though the gap still exists between the actual salary growth rates and the assumption). At the same time, we do expect the absolute levels to fall either.
- Hence, relative strengthening will by default happen as the gap between discount rate (reflecting long term expectation of inflation, which is expected to fall) and salary growth rate assumption (expected to not fall below the current levels) will get reduced.

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