Cost of capital - India survey

2017

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Foreword

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The inaugural edition of the India Cost of Capital Survey was rolled out in early 2014. The survey was the first-of-its-kind attempt to understand the threshold cost of equity that India Inc. used for its capital allocation and investment decisions and the process by which practicing finance professionals in the industry make capital costing decisions. The survey elicited an overwhelming response and helped companies benchmark themselves.

Since our first survey, there have been many changes in the Indian economy. Among the most significant of these changes is the reduction of over 200 basis points in interest rates, driven by falling inflation on the back of declining commodity prices and fiscal and monetary prudence.

Given the overwhelming response we received to the first edition, we are pleased to present the second edition of the India Cost of capital, India survey. The survey encapsulates the responses of 135 respondents from corporate India, spread across different sectors and sizes. The survey inter alia concludes that, despite falling interest rates, the cost of equity in India has remained constant since the last survey. As the cost of equity is a combination of a risk-free rate and a risk premium (further comprising of a market risk premium, a beta factor and an alpha factor), and as the risk-free rate has declined over this period, it would imply that companies perceive the risk premium to be higher than three years ago.

We cannot thank our clients enough for their valuable time and inclination to provide us their thoughts on this matter, which is of great significance and interest to the business and investor community as well as students and market enthusiasts.

We hope that this study benefits industry and practitioners in their analysis and decision-making processes to strengthen their investment evaluation and value-creation activities. This is a small step in our quest to deliver exceptional client service.

Executive summary

The India Cost of capital, India survey, 2017, aims to understand the cost of capital that companies use for capital allocation and strategic decision-making. It also attempts to find out how views have changes over the last three years and what companies are doing differently to sharpen their estimation of cost of capital and investment evaluation processes vis-à-vis our findings in the 2014 edition of the survey.

This study is based on the views of 135 respondents, comprised primarily of finance professionals from a mix of Indian and multinational as well as listed and unlisted companies, collected during the period of November 2016 and February 2017.

Some of the key findings of the survey are enlisted below:

- India's average cost of equity is around 15%. This has remained constant since our last cost of capital survey, over a period in which the interest rates have declined by 200 basis points.
- Real estate and engineering, procurement and construction (EPC) command the highest cost of equity, whereas FMCG and capital goods are at the lowest.
- The results confirm that the Discounted Cash Flow (DCF) methodology is one of the key approaches for valuation analysis used by corporates, usually in combination with other methods such as peer company multiples or transaction multiples.
- It was observed that most companies that use the DCF approach typically consider a horizon of 5 years.
- The survey emphasizes our learning from the previous survey that the "rule of thumb" or an organizational hurdle rate is preferred over objective models such as the Capital Asset Pricing Model (CAPM) to estimate the cost of capital.
- The quantum of subjective company-specific adjustments made to arrive at the cost of capital has gone up since 2014. The top two factors necessitating such adjustments as suggested by respondents are company/project-specific risk factors and the size of the company.
- Most respondents acknowledged that an additional risk premium is justifiable when considering strategic investments in start-ups, and provided their views on the quantum. The quantum of premium varied across industries, with most sectors capping it at a maximum of 10%.
- In using the DCF method for non-finite projects, another key area apart from cost of capital is the terminal value. Respondents were equally divided between using the Gordon Growth Model vs. an Exit Multiple to arrive at terminal value, and the popular long-term stable growth rate used was ~4.5%.

The detailed findings have been elaborated in the following pages. Happy reading!

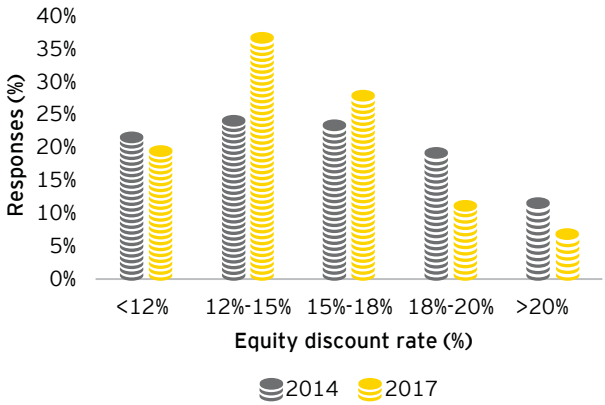
Findings

1. Cost of Equity in India

Current cost of equity in India

The average equity discount rate suggested by the respondents is approximately 15%. Nearly one-third of the respondents considered their equity cost in the 12%–15% range and another quarter of the respondents considered it in the 15%–18% range. Only 10% of the respondents felt that the cost of equity is over 18%, while almost 20% of the respondents considered the cost of equity to be less than 12%. It can been seen from chart 1 that between February 2014 and March 2017, the overall cost of equity shifted more toward the 12%–15% range.

Chart 1 - Cost of equity in India

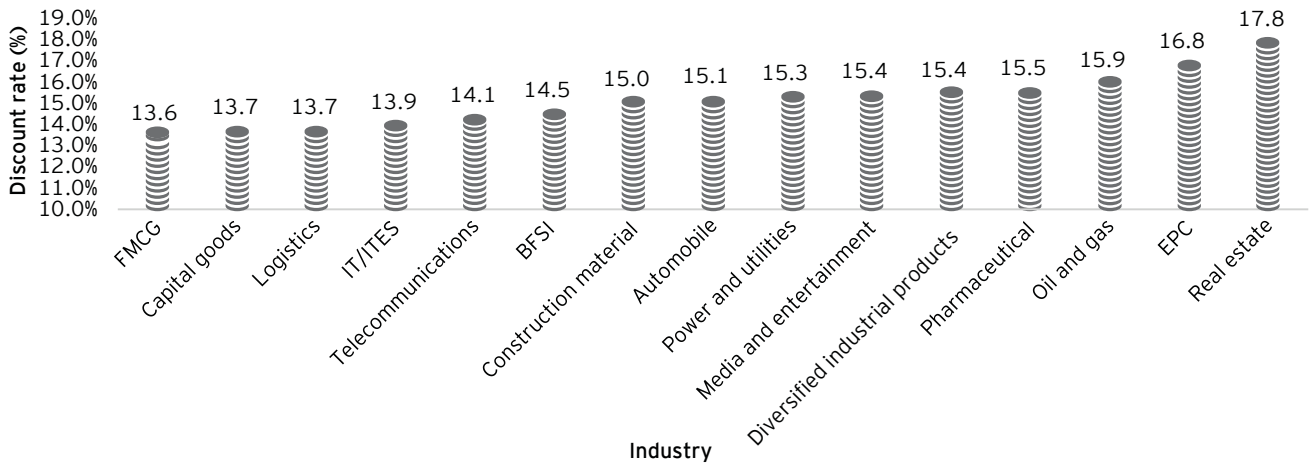


The average cost of equity is broadly in line with 2014 levels. This may seem surprising if the trend of interest rates during the past three years is considered. Between February 2014 and March 2017, the risk-free rate (i.e., the 10-year government bond yield) decreased from 8.7% to 6.9%. This implies that people are expecting relatively higher premiums for equity investments over and above the risk free rate/government bonds vis-à-vis what was expected in 2014. The survey also found that the average adjustment for unsystematic risk (represented by the "alpha" factor) has gone up during the same period thereby indicating that participants are perhaps retaining the equity market risk premium at similar levels but making bigger company-specific adjustments.

Interestingly, the cost of equity across sectors appears to have converged – sectors that had a relatively lower return expectation have seen an increase in the cost of capital, while sectors that had a relatively higher return expectation have seen a decline. This again implies a larger impact of political, regulatory and macroeconomic factors on overall business risks with lesser impact of sector specific risks. For instance, telecom was among the highest and IT/ITES was toward the lower end in the cost of equity chart during the previous survey, but both these shifted have shifted more toward the middle of the range in the current study.

The highest cost of equity is in the real estate sector, followed by EPC and oil and gas. The lowest cost of equity is noted in the FMCG and capital goods sectors. The trend in cost of equity across sectors is shown in Chart 2 below.

Chart 2 - Cost of equity - industry-wise

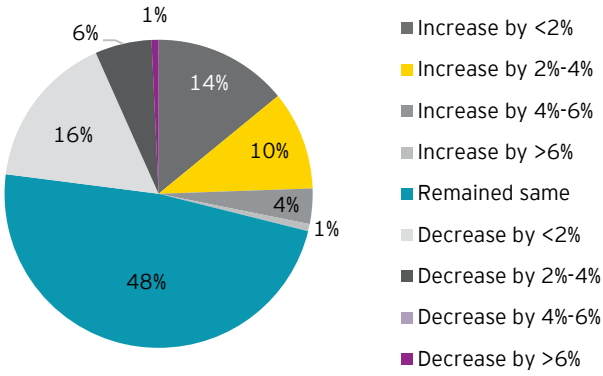


Trends in cost of equity

About half of the respondents believed that their cost of equity has remained the same in the past 18-24 months. About 15% of the respondents noted an increase of <2% in their cost of equity and nearly an equal proportion felt it has decreased by <2% (refer chart 3). It is interesting to note that the majority of the respondents considered their cost of equity to have either remained the same or increased despite policy changes that have resulted in a reduction in interest rates.

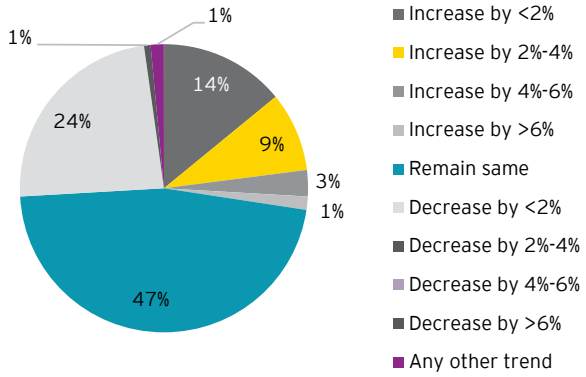
As discussed earlier, this indicates that companies adjusted their market risk premium or company-specific risk premium so that their overall cost of capital captures their assessment of risk. This also emphasizes companies' affinity to an organizational hurdle rate as opposed to rates that are formula-based.

Chart 3 - Movement in cost of equity over the past three years



Based on the responses as shown in chart 4, the view for the next 18-24 months also seems to follow a similar trend, with the cost of capital largely expected to remain the same. About a quarter of the respondents expected it to decrease by <2% and about 14% expected the rate to go up by <2%.

Chart 4 - Movement in cost of equity over the next 18-24 months

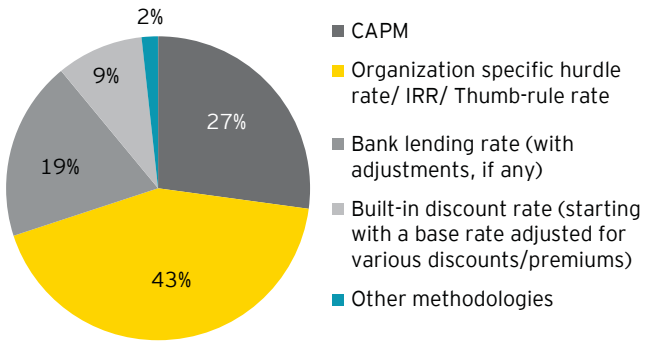


2. Basis of estimating cost of equity

How does India Inc. decide its cost of capital?

The survey establishes the trend that emerged in the first edition of the survey – that the majority of companies (around 42%) continue to prefer using an organization-specific hurdle rate as their cost of capital (Refer chart 5). The proportion of respondents that use the CAPM approach has increased from 20% in the earlier edition to about 27% now. A surprising revelation is the use of bank lending rate, with necessary adjustments, as a guidance to determining the cost of capital by almost 20% of the respondents .

Chart 5 - Methods for arriving at discount rate



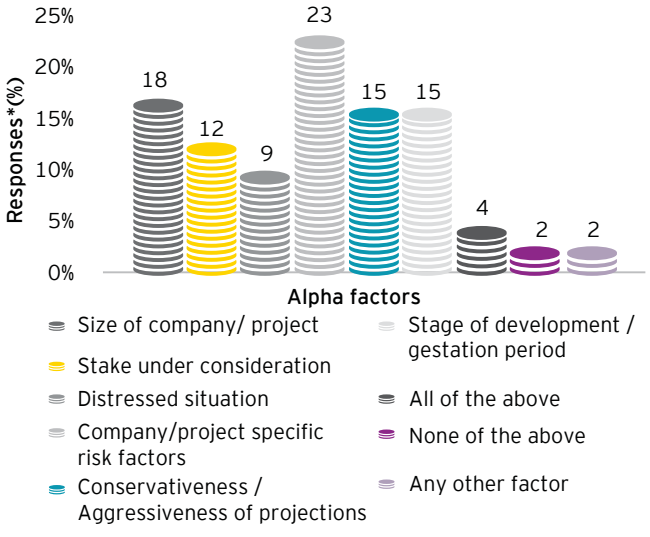
What company-specific factors are used to adjust cost of equity?

As per the CAPM theory of discount rate estimation, the risks that companies are faced with can broadly be put into two buckets – systematic risks and unsystematic risks. Systematic risks of a company are dependent on the risk of the overall market/industry and can be eliminated by diversification of investment. However, unsystematic risks are specific to the company and not based on factors that affect the overall market or even the industry. Therefore, unsystematic risks cannot be eliminated by diversification.

While systematic risks are represented by beta, which is part of discount rate estimation as per CAPM, unsystematic risks are represented by alpha. There are various factors that could necessitate an alpha adjustment to the cost of capital. The respondents identified company-specific risks represented by known or anticipated conditions at the time of evaluation as the biggest factor, followed by the size of the company (Refer chart 6).

Some of the respondents indicated that forex volatility, market size, growth opportunity linked to market growth and liquidity are some other factors that are adjusted while determining the cost of equity.

Chart 6 - Factors (alpha) responsible for adjustment in discount rate

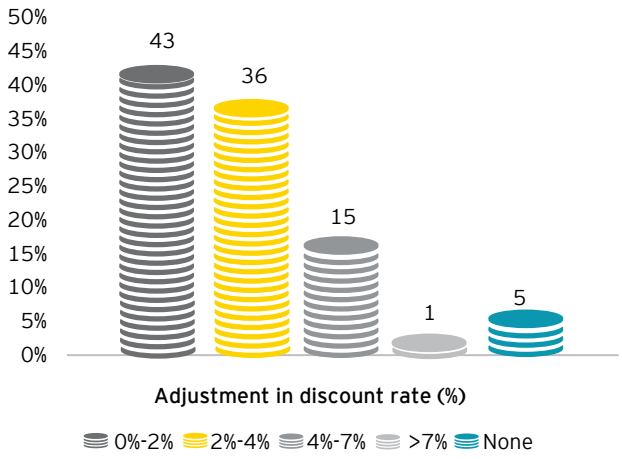


*Multiple answer options could be selected

How much is this alpha adjustment?

More than three-fourths of the respondents considered an alpha adjustment up to 4%, with about 43% in the 0%–2% range and ~35% in the 2%–4% range. About 16% respondents considered an adjustment of more than 4% (refer chart 7).

Chart 7 - Quantum of alpha adjustment



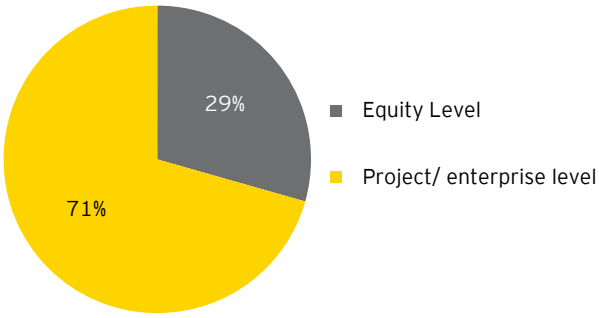
3. Other DCF parameters

Enterprise vs. equity level discounting

A little over 70% of the respondents surveyed discount the cash flows at the entity level (refer chart 8).

In sectors such as FMCG, automobile, construction material and diversified industrial products, 80% or more respondents surveyed discount the cash flows at the enterprise level. In sectors such as BFSI and insurance, logistics, and power and utilities, at least 55% respondents discount the cash flows at the equity level.

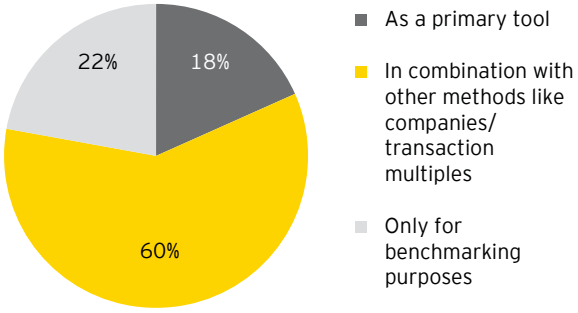
Chart 8 - Equity level vs. enterprise level



How are DCF techniques used to evaluate investment opportunities?

About 80% of the respondents considered the DCF method in combination with the other methods such as companies/ transaction multiples or used it only for benchmarking purposes (Refer Chart 9). Only about 18% of the respondents used DCF analysis as the primary basis for making investment decisions. This is not surprising because while DCF is widely considered as the most scientific of the valuation methods, market-based methods that consider actual trading multiples and metrics at which real transactions have taken place are empirical methods. A combination of methods seems to work best with finance professionals.

Chart 9 - Use of DCF for valuation analysis



Typical forecast period and terminal value

Valuation using the DCF approach involves two components – the value of cash flows for the explicit forecast period and the terminal value of cash flows.

The explicit period is the period for which reasonably detailed forecasts can be prepared. More than half of the respondents showed a clear preference for considering an explicit forecast period of five years for the DCF analysis before applying the terminal value (refer chart 10). The remaining responses are evenly split between 3 years, 10 years and "others." Companies that make up the "others' category would primarily be those that evaluate finite-lived projects and used the actual remaining project life as the forecast horizon.

Preference for a five year forecast period by the majority of the respondents indicates that they typically consider this to be the period for which reliable estimates can be prepared with a reasonable basis.

Chart 10 - Forecast period

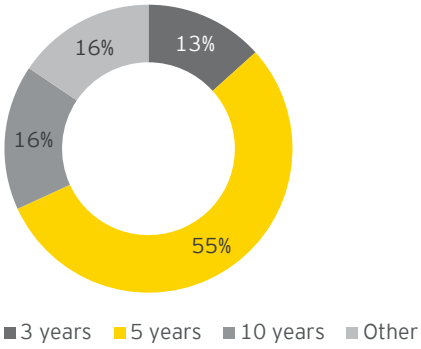
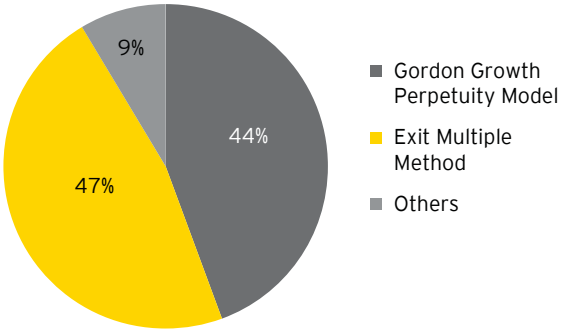


Chart 11 - Terminal value methodology

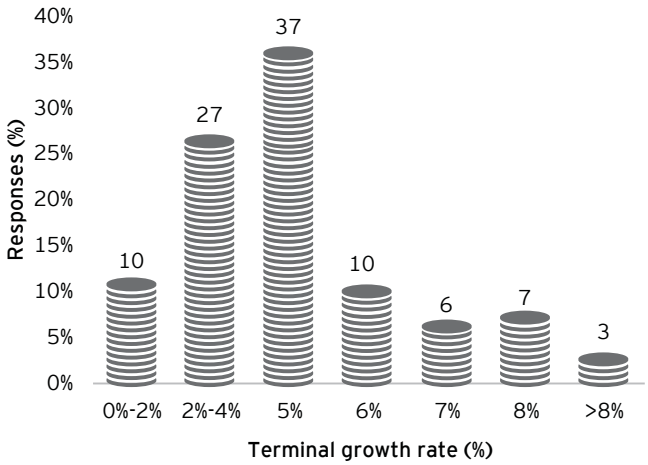


Terminal value is an estimate of the potential value that can be generated by the company/project once it operates at stable levels perpetually. In most companies, the terminal or perpetuity value accounts for a large part of the overall company value. The survey respondents were evenly divided on the two most-widely adopted approaches to estimating the terminal value – Gordon Growth Perpetuity Model and the Exit Multiple Method (refer chart 11).

Terminal growth rate

Terminal growth is the long-term stable growth at which a company estimates to grow beyond the explicit forecast period. The average long-term stable growth rate for Indian businesses as suggested by the respondents is approximately 4.5% (Refer chart 12). This is broadly in line with the expected long-term inflation rate in India. About one-third of the respondents surveyed believed that the long-term stable growth in India is 5%, while a quarter of the respondents estimated it to be in the range of 2%-4%. Almost 15% of the respondents estimated the long-term growth to be 7% or more. This approach may be due to industry or company-specific factors.

Chart 12 - Long-term stable growth rate applied to compute terminal value

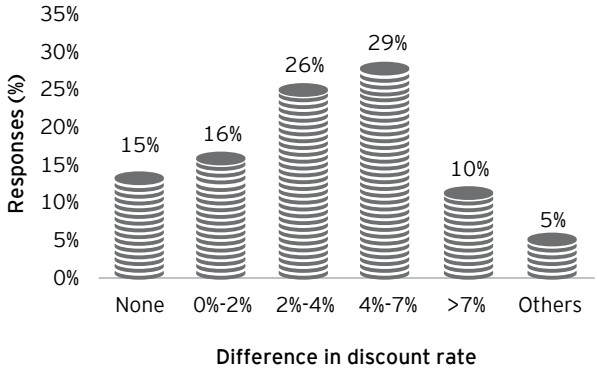


4. Cost of capital in an international context

How does India's cost of capital compare with that of developed countries?

The respondents were asked about the difference in discount rate, measured in dollar terms, for investing in India vis-a-vis investing in developed countries such as the US, the UK and Germany – i.e., the incremental rate for India as compared to such countries without considering the inflation differential. About one-third of the respondents considered this difference to be between 4% and 7%, while about one-fourth pegged it in the 2%–4% range. The overall average differential in the cost of capital for investing in India vs. other developed countries is ~4% (refer chart 13).

Chart 13 - Difference in discount rate, for investing in India vis-a-vis investment in developed countries



Mr. Aswath Damodaran is a professor of corporate finance and valuation at the Stern School of Business, New York University and is a renowned authority on valuation theory.

His model of estimating country risk premium is based on first estimating the default spread of the country based on either of the following methods:

a) Local currency sovereign rating for the country from Moody's

b) CDS spread for the country

Thereafter, the default spread is converted into a country risk premium by scaling it to reflect higher risk of equity in the underlying market relative to the default spread, i.e., comparing the equity return vs. return on government bonds in the country.

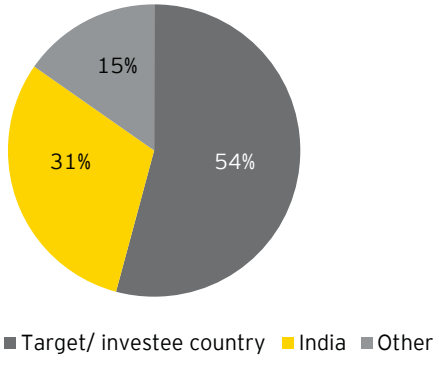
Based on this model, the country risk premium of India compared to that of the US, as suggested by Mr. Damodaran.

Source: www.stern.nyu.edu/~adamodar/pc/datasets/ctryprem.xls (updated as at 05 January 2017)

Country parameters used when investing outside India

When considering investments outside India, more than half of the respondents used the target country's risk-free rate and market risk premium for estimating the cost of equity. About 30% of the respondents preferred to use India-specific discount rate parameters (refer chart 14). Some of the respondents preferred to use discount rate parameters of the US or the country from where the funding is done.

Chart 14 - Discount rate parameters considered while investing outside India



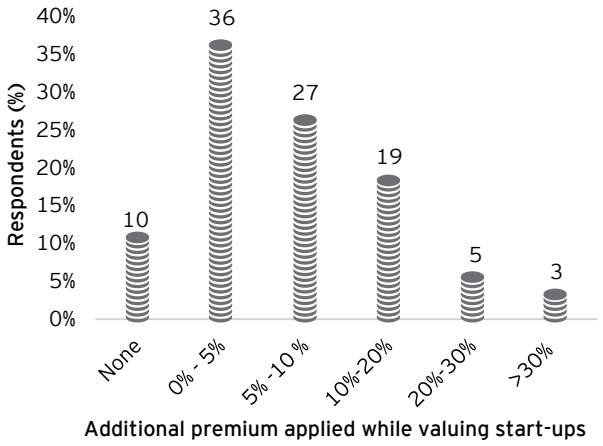
5. Start-ups

What additional premium would you consider applying to the discount rate while investing in a start-up?

Many corporates in India have evaluating the prospect of investing in start-ups to kick-start growth or as a hedging strategy. However, investments in start-ups are riskier as most of them are early-stage companies with little revenues, no profitability and higher mortality rates. Hence, investors can be expected to demand a premium to invest in them.

The average additional risk premium suggested by the respondents is approximately 8%. About 36% of respondents surveyed felt that an additional risk premium in the 0% to 5% range should be considered for start-ups (refer chart 15), while a quarter of the respondents considered it in the 5%–10% range. About 18% respondents felt that a 10%–20% additional risk premium should be applied to start-ups. Only 8% respondents felt that the additional risk premium for start-ups should be over 20%. What is surprising to note is that almost 10% of the respondents felt that no additional risk premium should be considered for start-ups.

Chart 15 - Additonal premium applied while valuing start-ups in India



"Technology is creating unprecedented business disruptions to the traditional businesses leading to increased M&A deals specifically focused on acquiring capabilities to help grow core businesses. Strategic acquisition of start-ups calls for thorough evaluation of the potential synergies against risks associated with technology and business integration."

–Ashish Basil
Partner, Transaction Advisory Services,
Ernst & Young LLP

About the survey

Objective

There are several theories and extensive write-ups on how cost of capital is generally computed as per the DCF method. However, it is interesting to find out if and how these theories are actually applied in the real world. This survey was undertaken with that primary objective and also to see how cost of capital estimation gets impacted by India-specific factors.

This survey is an exhaustive study on the prevailing industry practices of estimating cost of capital for valuing companies and/or projects when making crucial business decisions such as acquiring/divesting, conducting internal restructuring exercises, launching new projects and assessing project progress. The purpose was to identify the practical aspects/considerations that determine the cost of capital in India and to quantify some of these aspects. Further, the current survey is a follow-up to the 2014 study to assess changes, if any, in these methodologies and industry practices over the last three years.

Profile of respondents

The principal respondents belonged to functions such as finance, business planning and corporate strategy and mergers and acquisitions. They represented a mix of Indian enterprises and multinational companies, including listed companies and private companies. We tried to contact the respondents from the previous edition and also approached new respondents for their views.

Questionnaire

The questions were prepared with a choice of answers in a multiple-choice format. For questions where the answer options were not comprehensive, respondents were provided with a comment box for their views.

Most of the questions were retained from the previous edition of the survey. We also added a few questions based on input/feedback received from the respondents of the previous survey and a few new ones to provide additional insights into the mind-set of decision-makers at organizations when estimating their cost of capital/equity. As an improvement over the 2014 edition of the survey, we added some industry-specific questions for sectors such as automobiles, pharmaceuticals, real estate and telecommunications.

Mode of survey

The questionnaire was sent out to the respondents in electronic format through a survey link.

In the electronic format, we could automate selections from drop-down boxes so that only one answer could be selected (unless multiple choices were consciously allowed) and no question is skipped. Hence, all the percentage figures represent responses to a particular question and a proportion of the overall respondents.

Coverage

The EY Valuation & Business Modelling (V&BM) team reached out to various companies across industries for this survey between November 2016 and February 2017. We sent a survey link to collect inputs from 135 CFOs and/or senior members of CFOs' teams across sectors such as automotive, diversified industrial products, banking and financial services, FMCG, EPC, IT/ITES, media and entertainment, logistics, oil and gas, pharmaceuticals, power and utilities, real estate and telecom.

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