Cost of equity and corporate profitability in France

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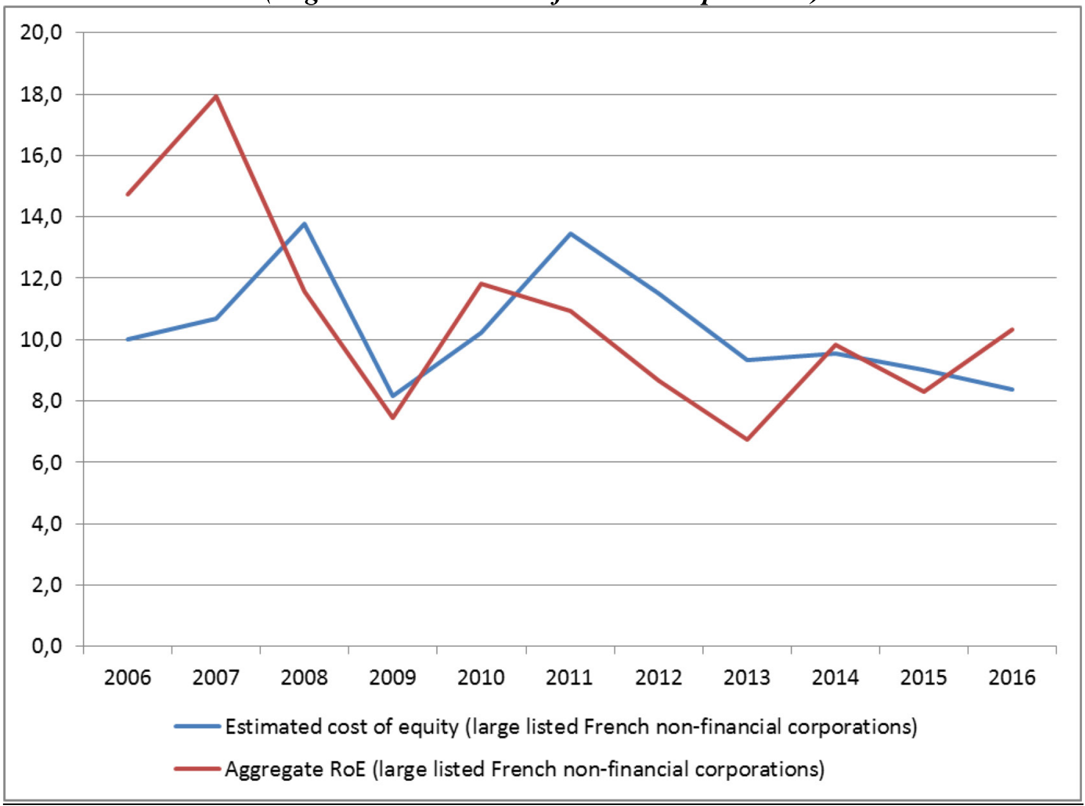
In France, the cost of equity (CoE) faced by non-financial corporations increased sharply during the 2007-2009 and 2011-2012 crises, driven by a surge in the equity risk premium. The COE indeed measures the return required by an investor to acquire or retain a share given its risk. It has often exceeded the return on equity (RoE) since 2007. Since 2016, the CoE has been lower than the RoE for the large listed French non-financial corporations; this encourages productive investment.

Chart 1: Cost of equity lower than return on equity in 2016
(large listed French non-financial corporations)



Sources: Banque de France and Datastream

A company invests in a project if its expected return exceeds the cost of its financing. In the case of innovative projects, the profitability horizon is more uncertain. Debt financing, with a rigid timetable and repayment amounts, is often less recommended than equity financing. The latter may take the form of a reinvestment of the net profits of the previous financial year or, more rarely, of the issue of new shares (either listed or not). A company that seeks to maximise shareholder value will then compare the expected return on an innovative investment with its cost of equity. The CoE can be defined as the return required by an investor to acquire or retain the shares of a company given their risk. If it is higher than the rate of return of the project, the company will then prefer to abstain from investing and pay more to its shareholders through increased dividends or share buybacks.

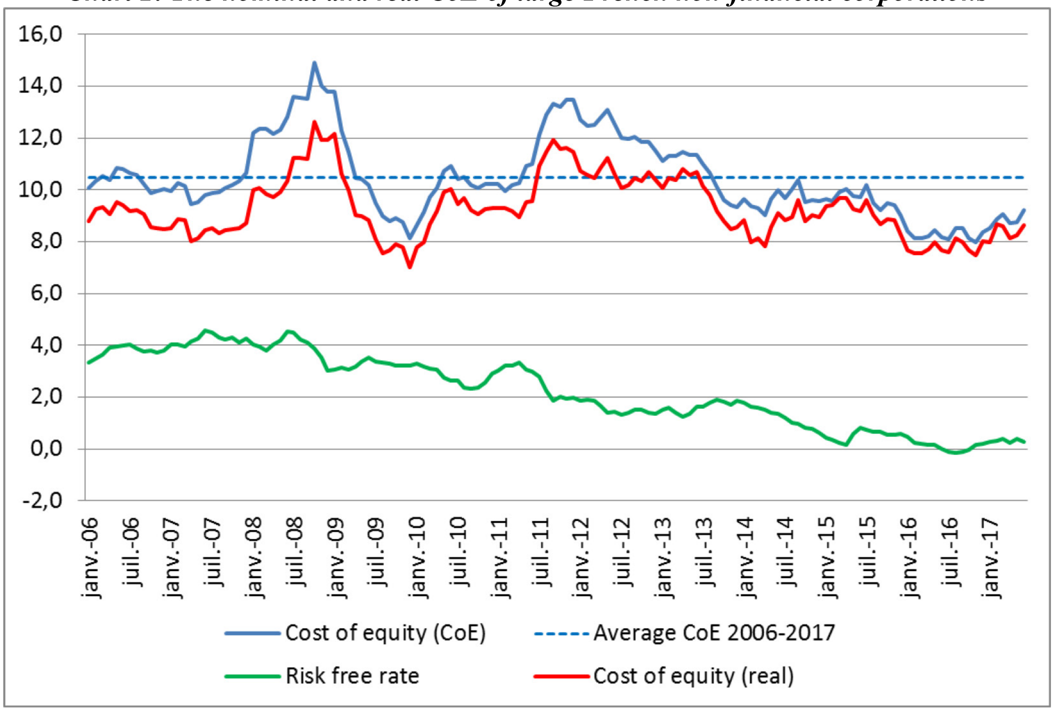
The CoE: a key factor for boosting investment

The CoE is a key variable for private companies' capacity to invest and innovate. At the macroeconomic level, a high average level of CoE therefore has a negative impact on medium-term growth prospects. However, the CoE is not directly observable. For a company, as well as at the aggregate level, it can only be measured by estimating it from stock data in the framework of a stock valuation model. In this article we look at the CoE of the large listed French non-financial corporations and use the methodology presented in detail in [Mazet-Sonilhac and Mésonnier (2016)](). Our approach combines two standard approaches, often used in various forms by financial analysts (see [Mukhlynina and Nyborg, 2016](), for a review): the model for discounting expected future shareholder income (defined here as the sum of dividends paid and share buybacks) and the CAPM.

Nominal CoE: lower at mid-2017 than before the last crises

Chart 2 below presents our estimate of the average cost of equity for large listed French non-financial corporations in the broad European index (Eurostoxx 600). At the end of June 2017, it stood at 9.2%. This level is high compared to the usual estimates of the average cost of large companies' bank debt (1.4%) and bond debt (0.7%) at that date. It is also high compared to the risk-free interest rate, which remains close to 0% as a result of the ECB's very accommodative monetary policy. This additional cost is thus explained by the risk premium on the shares of French companies, which seems to have trended up since 2007 in France as in the USA (see for instance [Caballero, Fahri et Gourinchas, 2017]()).

Chart 2: The nominal and real CoE of large French non-financial corporations



Sources: Banque de France and Datastream

However, the level of the CoE at mid-2017 is clearly lower than the peaks recorded during the financial crisis of 2007-2009 and the sovereign debt crisis in the euro area in 2011-2013. These had prompted several observers to issue warnings about an excessive level of cost of equity in France and in Europe following the crisis (see, for example, the [Villeroy de Galhau report, 2015]()). The current level also remains below its average over the 2006-2017 period (10.5%). This average corresponds more or less to the level of the CoE in 2006, before the subprime crisis. In addition, our estimate of the CoE is within the upper range of estimates for this indicator. In fact, it is higher because share buybacks are taken into account, which can represent a significant share of the compensation of large company shareholders. Without these buybacks, our estimate of the equity risk premium in Europe would on average be lower by two percentage points over the last decade. However, this gap narrowed in 2017 and is now below 1%. This reflects a slowdown in buybacks in a context of relatively high stock prices.

The real CoE is also below its long-term average at mid-2017

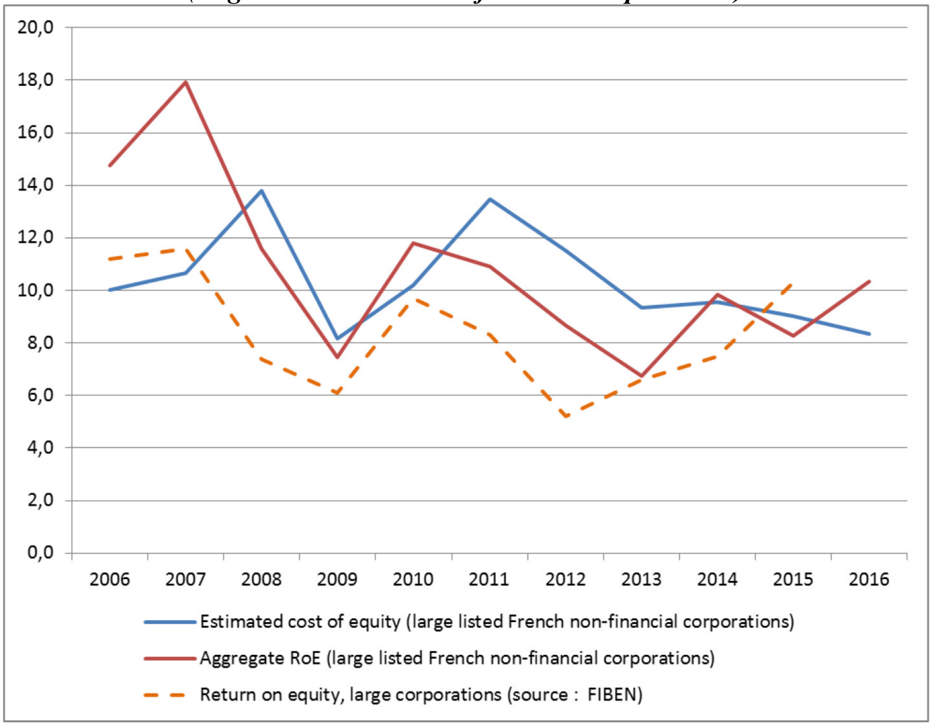
While the moderate level of the nominal COE is good news, the decision to invest depends, in theory, on the real cost of capital, i.e. the nominal cost adjusted for changes in expected prices over the financing period of the investment. Chart 2 also shows a measure of the real cost of equity for large non-financial corporations. We deflate the nominal CoE by the current total inflation, excluding energy and unprocessed food (known as supercore inflation), which is less volatile than headline inflation and therefore more likely to represent a short to medium term expectation of inflation. According to this measure, at 8.6% at the end of June 2017, companies' real CoE remains well below its long-term average (9.3%), despite a slight increase since the start of the year.

Increased profitability of large companies

Is the cost of equity faced by large French companies too high? To answer this question it is necessary to compare this cost with the profitability of business projects for shareholders. The internal rate of return for shareholders of investment projects planned by a large firm is hardly accessible for an outside observer. Nevertheless, the company's return on equity over the last financial year provides a useful approximation. We therefore calculate a measure of the aggregate RoE for the same sample of large listed French non-financial corporations on the basis of the annual net income data and the amounts of book value equity collected by Datastream.

Chart 1 at the top of this post, in annual frequency, compares the cost of equity with this measure of RoE of large French non-financial corporations listed in the Eurostoxx. At end-2016, the RoE exceeded the CoE (10% vs. 8.4%). According to our calculations, the RoE of large non-financial corporations has increased since 2013. This is consistent with the rise in the margin rates of non-financial corporations observed at the macroeconomic level over the same period (32% in 2016, compared with 30% in 2013 according to INSEE). We also present (see Chart 3 below, dotted line) the return on equity of all large non-financial corporations, calculated in annual frequency by the Banque de France using FIBEN balance sheet data. In spite of methodological differences between these sources, the return on equity of large non-financial corporations also appears to be on an upward trend since 2012, reaching 10.3% in 2015 (last available year), i.e. more than one percentage point above our CoE estimate at that time. It should be noted here that the situation is very different for large banks, with a significantly higher estimated CoE (about 14%) and a much lower RoE (around 6.5% in 2016, see this ACPR press release) than what we get for non-financial corporations.

Chart 3: Cost of equity lower than return on equity in 2016
(large listed French non-financial corporations)



Sources: Banque de France and Datastream

In conclusion, a now more moderate CoE, combined with restored corporate profitability, is helping to create a more favorable situation for productive investment by non-financial corporations. In fact, it has accelerated considerably over the past two years. In a context of potential growth that is still too low (see this recent post on the blog), this is good news for the French economy.