

# **CORPORATE GOVERNANCE AND R&D INVESTMENT IN TURKEY**

## **SUMMARY**

Research and Development (R&D) has been considered one of the main determinants of a company's productivity and of a country's economic welfare in the long run. There is extensive literature on the motivation for R&D in finance and macroeconomics literature. The seminal paper by Modigliani and Miller (1958) states that under perfect capital markets financing decisions and investment decisions are independent of each other. Therefore, a firm's investment policy depends only on the availability of investment projects with positive net present values (NPV). However, a vast body of empirical research suggests that capital markets are imperfect, as they suffer from asymmetric information or from agency problems. Therefore, investments in physical capital and more particularly in Research and Development must be primarily funded by internal resources of firms.

Asymmetric information will cause firms to underinvest. As investors are unable to determine a firm's quality, they will invariably charge each firm, given its risk, the same rate for finance. In firms where the interests of the management are badly misaligned with those of the shareholders, managers may be tempted to invest internal funds — even into projects with a negative NPV — rather than to pay these internal funds out as dividends.

In this study, we investigated whether there is a relationship between cash flow and R&D investments or not for Turkish firms. It is also investigated is there a relationship between R&D and expected growth and some firm characteristics.

As a developing country Turkey lags behind developed countries in its R&D intensity. R&D expenditures in Turkey, as percent of GDP are increased by a factor of two from 0.32% in 1990 to 0.64 in 2000. However, this is almost one-third of the EU average, which is 1.9%.

Corporate governance which is also a concern of this study is an important determinant on companies' investment decision. Turkish companies exhibit highly concentrated and centralized ownership structures. Families, directly or indirectly, own about 80 percent of all companies and keep the majority control. The separation of ownership and control is mainly achieved through pyramidal or complex ownership structures and by using dual-class shares. Finally we investigated the effect of corporate governance on R&D investment in Turkey.