European Accounting Review ›
Volume 12, 2003 - Issue 4: Intangibles and Intellectual Capital

1,905 Views | 74 CrossRef citations to date | 0 Altmetric

Original Articles

The economic value of the R&D intangible asset

Marta Ballester, Manuel Garcia-Ayuso & Joshua Livnat

Pages 605-633 | Published online: 17 May 2010

Cite this article https://doi.org/10.1080/09638180310001628437

Sample our Economics, Finance, Business & Industry Journals
>> Sign in here to start your access to the latest two volumes for 14 days

Full Article | Figures & data | References | Citations | Metrics
Reprints & Permissions | Read this article

Abstract

This study utilizes firm-specific time-series data to estimate the economic value of the research and development (R&D) expenditures that investors consider an asset to the firm. The study uses a modification of the Ohlson (1995) model to estimate the persistence of abnormal earnings, the proportion of current R&D expenditures that represents a source of future benefits to the firm and the amortization rate of that asset. The parameters are estimated from time-series data of market and book values of equity firm-specific estimate nation procedu cific sub- samp o-digit SIC code of the paramet pitalization paramet m, R&D intensity ce of

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our Privacy Policy

Accept All
Essential Only
Settings

earnings are related to the concentration ratio. Finally, differences in the estimated economic value of the R&D asset are associated with the profitability of the company as measured by its return on assets. We further compare the associations between the three different estimates of the R&D asset and subsequent stock returns, as well as the contemporaneous difference between the market and book value of companies. Results indicate that the time-series estimates of the R&D asset show stronger associations with both variables, followed by the intra-industry and the cross-industry cross-sectional estimates. Overall, our results provide evidence that market participants behave as if R&D expenditures have significant future economic benefits to the firm, and show that the cross-sectional and time-series approaches followed when assessing its economic value provide significantly different estimates.

ACKNOWLEDGEMENTS

The authors thank Factset Information Services, Inc., for data and retrieval programs used in this study. The authors also thank seminar participants at New York University and University of Lancaster for their comments. Manuel Garcia-Ayuso acknowledges the funding provided by AECA to the Carlos Cubillo Chair, as well as funds received from the Spanish Ministry of Economy (Project No. PB98-0415).

Notes

[1]The only exception in the US is software development costs.

[2]An exce
stocks a
expendit
R&D out

[3]The
estimati
cycle of
series as

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our Privacy Policy

Accept All

Essential Only

Settings

[4]We thank an anonymous reviewer for drawing our attention to capital expenditures besides drilling expenses.

[5]The model in this paper assumes a world without taxes, just like the Ohlson (1995) model.

[6]In a prior version of this paper, we repeated the analysis with quarterly data. Parameter estimates and further analyses were very similar to those reported for the annual results.

[7]We also used market values three months after the fiscal year-end with very similar results to those reported in the text.

[8]One must bear in mind that the companies in Panel C are not representative of the entire Compustat population; they are selected to the sample if they disclose R&D expenditures for at least ten years between 1985 and 2001. Thus, R&D is likely to be an important concern for these firms which have also survived for a long time. Our sample selection criteria may have different implications for size and growth opportunities in these companies than in the rest of the population.

[9]A note of caution should be interjected here. The comparison above is necessarily based only on firms that have sufficient history data to estimate the time-series model. These firms may have been more successful at deploying their R&D expenditures, and more reliant on it. Thus, the impact of R&D on the difference between market and book value and future returns may be more closely estimated from the time-series model.

Related research

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our Privacy Policy

Accept All

Essential Only

Settings

The negative impact of R&D capitalization: A value relevance approach

Anne Cazavan-Jeny et al.
European Accounting Review
Published online: 17 Feb 2007

Capitalization of R&D and the Informativeness of Stock Prices >

Dennis R. Oswald et al.
European Accounting Review
Published online: 8 Apr 2008

View more

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our Privacy Policy

Accept All

Essential Only

Settings

Copyright © 2024 Informa UK Limited Privacy policy Cookies Terms & conditions Accessibility

Taylor & Francis Group an informa business

Registered in England & Wales No. 3099067
5 Howick Place | London | SW1P 1WG

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click “Settings”. For further information about the data we collect from you, please see our Privacy Policy

Accept All

Essential Only

Settings