

603 Views | 135 CrossRef citations to date | 0 Altmetric

VALUATION

Real-Options Valuation for a Biotechnology Company

David Kellogg & John M. Charnes

Pages 76-84 | Published online: 02 Jan 2019

Cite this article <https://doi.org/10.2469/faj.v56.n3.2362>

Sample our
Tourism, Hospitality and
Events Journals

>> [Sign in here](#) to start your access
to the latest two volumes for 14 days

References Citations Metrics Reprints & Permissions

Read this article

Share

We Care About Your Privacy

We and our 880 partners store and access personal data, like browsing data or unique identifiers, on your device. Selecting I Accept enables tracking technologies to support the purposes shown under we and our partners process data to provide. Selecting Reject All or withdrawing your consent will disable them. If trackers are disabled, some content and ads you see may not be as relevant to you. You can resurface this menu to change your choices or withdraw consent at any time by clicking the Show Purposes link on the bottom of the webpage. Your choices will have effect within our Website. For more details, refer to our Privacy Policy. [Here](#)

We and our partners process data to provide:

Use precise geolocation data. Actively scan device

I Accept

Reject All

Show Purpose



development. In the past 10–15 years, investors have bid up the stock prices of companies that show promise of developing a blockbuster drug. This phenomenon is similar to the more recent rise in stock prices of Internet start-up companies, most of which have shown losses throughout their existence.

Methods used in real-options valuation can be used to assess the value investors place on companies with promise but no current revenue. The value of the company is derived from the expected profits of the company's current products and services together with the potential for growth of the company into one with many profitable products and services. Real-options valuation methods can be applied to estimate the value of individual projects, but the problem addressed in our article is how to use real-options valuation models to assess the value of a company when it is viewed as a portfolio of projects.

We explain decision-tree and binomial-lattice methods and use them to compute the value of a biotechnology company, Agouron Pharmaceutical, as the sum of the values of its current projects. We find each project's real-options value by using the two real-options valuation methods. We then compare our computed values of Agouron with the actual market values at selected points in time during the development of the company's Viracept product, a drug used to treat HIV-positive patients.

Our intention is to illustrate how real-options valuation methods can be used for financial studies (from prior studies) on under the assumption of the ways in which Agouron worked best to find the in early stag the later stages of information progress and new a particular stock close security analyst's es can use



the methods to value projects at their companies and compare the projects' relative worth for capital-budgeting purposes. Executive managers of pharmaceutical companies can use these methods to increase their understanding of the value of their projects and convey that value to investors. Finally, for academic readers, this case study provides empirical evidence of the usefulness of real-options valuation methodologies.

Related research

People also read

Recommended articles

Cited by
135



Information for

- Authors
- R&D professionals
- Editors
- Librarians
- Societies

Opportunities

- Reprints and e-prints
- Advertising solutions
- Accelerated publication
- Corporate access solutions

Keep up to date

Register to receive personalised research and resources by email

 Sign me up

- 
- 
- 
- 
- 

Open access

- Overview
- Open journals
- Open Select
- Dove Medical Press
- F1000Research

Help and information

- Help and contact
- Newsroom
- All journals
- Books



Copyright

Accessib

Registered
5 Howick Pl

or & Francis Group
orma business

