

Real Options for Managing Uncertainties	
<p>Scott Ernst Gates and Company</p>	<p><i>How often do you have the opportunity to make decisions with perfect information?</i></p> <p>For most executives today, the answer is never. Modeling and analyzing uncertain future business conditions with imperfect information has long been a challenge for business leaders.</p> <p>Real options analysis has been used by major corporations worldwide for over a decade to complement, but not replace, discounted cash flow methodologies. The essence of real options analysis is the application of financial options theory to value a real, physical investment.</p> <p>One major advantage of real options analysis is that it accounts for managerial flexibility. This flexibility can be manifested as an option to expand or abandon a project based on uncertain factors. In a traditional discounted cash flow analysis, a static assumption of the most likely value is used, ignoring the fact that depending on the future economic situation, a project can be strategically delayed, expanded, or abandoned. Real options analysis can also be applied to value projects that require a phased or sequential investment.</p> <p>One application of real options by Gates and Company, for example, involved a product launch. An innovative product technology was identified, but the market size and other key success factors were highly uncertain. Primary and secondary research supported a standard NPV analysis and a sensitivity analysis based on statistical probabilities determined which variables were the most uncertain and how uncertain they were. This data was used to evaluate the values of the various options. Based on this, informed decisions could be made about how to make insightful investments in eliminating uncertainty before making more substantial investments in launching the product.</p> <p>Projects and investments are dynamic and the management of projects requires adapting to the present business environment. Real options analysis is a well accepted methodology that provides complementary analysis for strategic investments that are subject to uncertainty.</p>
<p>For more information, please contact the author at sernst@gatesandcompany.com</p>	