Valuing Growth Opportunities

In April 2004 Google, the Internet search-engine provider, announced its plans to go public. Rather than selling shares at a fixed price, Google proposed to auction them to investors. Stock would be allotted to investors who were prepared to pay the most, but all those receiving stock would pay the same price.

The popularity of Google's sophisticated search technology created enormous interest in the issue, and investment managers and their advisers began to debate how much the stock was worth. Google's preliminary prospectus suggested a value of between $108 and $135 a share, which would have valued the equity at $29 billion to $36 billion.

If Google stock was sold at these prices, its share price would be more than 100 times its earnings. Clearly a stock price of $108 or more could not be justified by the stream of earnings generated by existing assets; it would make sense only if investors believed that Google had very valuable growth opportunities that would allow it to earn high returns on future investments. As *The Wall Street Journal* commented, "Sure, the company is making money hand over fist, and it has juicy margins and profits that are expanding rapidly. But . . . in the long run, Google likely will have to prove that it can continue to come up with new ways to profit from its dominant position in the Web-search business for its shares to be big winners."

It is notoriously difficult to guess what future opportunities may become available to a high-tech company. Rather than attempting to make detailed growth forecasts, many investors simply compared Google with rival companies such as Yahoo, whose stock was also trading at a price of around 100 times recent earnings.

As the date of the issue approached, a number of financial analysts expressed reservations about Google's suggested price range, and the company announced that it was reducing the number of shares on offer and cutting its estimate of the issue price to $85 from $95 a share. The auction took place in August, and after investors had submitted their bids, Google announced a sale price of $85, somewhat below the point at which the supply of shares equaled demand. It seemed that the pessimists had been right in their criticisms of the price range that Google had originally suggested. However, once trading started, investors rushed to buy. Google stock opened for trading at $100, within five months the price

had doubled to just over $200, and in 2012 it was $700 a share. At that price, its total market capitalization was nearly identical to that of giants such as Procter & Gamble, whose earnings were more than double those of Google. Pessimists argued that such valuations were crazy, but optimists responded that Google was growing far faster than P&G and would continue to do so. It seems that valuing growth stocks is far from an exact science.