

# Capital in the new economy: A Schumpeterian perspective

**Jim Stewart\***

School of Business Studies, Trinity College, Dublin, 2, Ireland  
(e-mail: [jstewart@tcd.ie](mailto:jstewart@tcd.ie))

**Abstract.** The “dotcom boom” and subsequent collapse raises issues as to the nature of capital and the relationship between capital and investment. Capital in conventional finance, based on the Fisher-Hirshleifer analysis, is defined as postponed consumption and investment is defined as a trade-off between consumption now and in the future. This paper argues that a more satisfactory explanation of the relationship between investment and capital was developed by the Austrian economist Böhm-Bawerk, who identified capital goods as separate from consumption goods, and where the passage of time is fundamental to the accumulation of capital. Such a process assumes risk rather than uncertainty, and does not capture the essence of Schumpeterian investment.

**Key words:** Capital theory – Investment – Neoclassical – Austrian – Schumpeterian

**JEL Classification:** B41, D21, D81, G31

## 1 Introduction

Developed economies are currently experiencing a Schumpeterian gale of “creative destruction”. The dot.com boom based on the new technology and the subsequent demise of many dot.com firms cannot disguise the profound impact of the new technology upon which e-business is based. Schumpeter (1970, p. 87) focused

---

\* The author is grateful for comments from participants at the International Joseph A. Schumpeter Society, Ninth Conference, in Gainesville, Florida. The author would especially like to thank Bill Kingston of Trinity College, Dublin for helpful comments and discussions. He would also like to thank Paul Coughlan and Colm Kearney of Trinity College, Dublin and David Jacobson of Dublin City University. The author would also like to thank the editors and referee for helpful comments.

on the impact of new technology “*on the existing structure of an industry*” and, because of the failure of many firms dependent on e-technology, there is a danger of dismissing its impact. Schumpeter (1970, p. 90) noted that “*Situations emerge in the process of creative destruction in which many firms may have to perish that nevertheless would be able to go on vigorously and usefully if they could weather a particular storm*”. One of the striking differences between dot.com firms and firms in more traditional sectors of the economy (sometimes referred to as “old economy firms”) is the large difference that exists between the value of assets in the Balance Sheet of many newly-quoted dot.com firms and their stock market value. For example, for seven Irish dot.com firms quoted on NASDAQ, fixed assets amounted to an average of 10% of total balance sheet values and accounted for less than 1% of the value of the firm at the flotation price (Beirne and Stewart, 2002, Table 1). The pendulum has swung so far that a number of dot.com firms now have cash balances net of all liabilities greater than their stock market value. This means that the stock market places a negative value on these firms’ assets other than cash<sup>1</sup>. For example, Energis, a UK-based telecom networking firm, had a stock market value of £ 12 billion in 2001 and had a stock market value of less than 100 million (in 2002). The Balance Sheet for December 2001 shows assets in excess of £ 2 billion, but Energis has been reported as attempting to sell European assets on which it had spent £ 1 billion for £ 1<sup>2</sup>. Such large differences between the stock market value of a firm and the value of balance sheet assets draw our attention to the weakness of commonly-held ideas about the nature of capital and capital values.

This paper describes generally accepted concepts of capital in the finance literature and how these concepts are used to justify the use of investment decision rules such as net present value and internal rate of return. The paper argues that the investment decision process described is unrealistic and misleading in a number of respects. It is argued that the Austrian concept of capital is a more satisfactory alternative, which may also be used to justify investment decision rules. However, the paper also notes that optimal investment decision rules as described in the finance literature are infrequently used in practice. The most likely explanation is that the investment decision process is best thought of as a Schumpeterian process, characterized by uncertainty, and we find that it is difficult if not impossible to model.

The paper is organized as follows. In Sect. 2, we point to a paradigm change in the teaching of investment theory in finance; in Sect. 3, we describe investment and capital in conventional finance theory; in Sect. 4, we provide a critique of

<sup>1</sup> One UK based e-business had 36 million in cash and a market value of £ 29 m. The decision was then made to liquidate all the group’s assets and return the remaining cash to shareholders, Source: Yahoo Finance UK and Ireland 21/8/01. The Financial Times (3/9/01) lists three dot.com firms with cash balances greater than market values, and a further three with market values slightly greater than their cash balances. The Financial Times (31/10/01) discusses a dot.com firm with a stock market value of Stg. £ 137 million and cash balances of nearly Stg. £ 200 million.

<sup>2</sup> Source: Guardian Newspaper, 22/2/02. There are other examples where current asset values are a small fraction of expenditures. For example, in the case of KPNQwest, a 25,000 Km fibre optic network linking 60 cities in Europe on which €5 billion was spent may be practically worthless, Source: Financial Times, 11/6/02.