A Victim of the Business Cycle? Speculation in the British Bicycle Industry, 1895-1900.

William Quinn, Queen's University Management School

This paper investigates the possible causes and consequences of a financial bubble in the British bicycle industry at the end of the nineteenth century. In 1896, bicycle offerings accounted for over one eighth of the total value of new issues of British companies (Lloyd-Jones and Lewis, 2000). By the turn of the century, however, the industry experienced a significant reduction in demand: 54% of Birmingham-based cycle firms in existence in 1896 had disappeared by 1900 (Millward, 1989). Harrison (1969, 1977, 1981, 1985) has investigated the origins and growth of the early British bicycle industry, the underlying causes of this episode have not yet been assessed.

This paper makes three main contributions. Firstly, it contributes a daily index of cycle share prices from an era in which the industry rapidly expanded. Secondly, it provides a unique source of evidence on various theories about what causes bubbles, particularly those following technological advances. Finally, it contributes to the historical debate surrounding entrepreneurial failure by providing an example of substantial investment in domestic companies, in a period thought to have been characterised by too much finance going overseas (Chabot and Kurz, 2010).

The first section of the paper develops a hand-collected dataset consisting of the daily share prices, par values, and nominal share capital of 160 publicly-listed British cycle, tyre, tube and motor companies during the period 1895-1898. This data is used to construct an equally-weighted index of cycle stock prices, which exhibits a clear boom-and-bust trend typical of a speculative bubble. The second section compares this index to the aggregated dividends of these companies, in order to determine whether share prices deviated from fundamental values at any stage during the asset price reversal. The dividend yield of the overall market is remarkably constant after the initial run-up in prices, supporting the theory of Campbell (2012) that investors are rational, but myopic. However, individual stocks appear to have frequently been priced inconsistently with subsequent dividends.

The third section of the paper discusses the implications of the bicycle stock bubble for various theories of speculative bubbles. Firstly, investors appear to have been constrained in their ability to short-sell by the threat of market "corners" (Allen, Litov and Mei, 2006). These typically involved company directors responding to a short-sell by buying all shares on the market, forcing the short-seller to pay extremely high prices to fulfil the terms of their contract. Secondly, quasifraudulent activity may have played an important role in the inflation of the bubble, largely in the form of promoters issuing dishonest prospectuses at IPO. A case study of the investor records of one such firm suggests that company insiders made considerable profits by selling their own stock before its price crashed. Finally, future work will use records of investors to test the Abreu and Brunnermeier (2003) theory that rational investors "ride" the bubble, and investigate the relationship between the cycle share market and the overall share market in order to test the dynamics linking new technology to asset price reversals (Pastor and Veronesi, 2009).