

E-business essay

[Business](#), [Accounting](#)



At the ending of the twentieth century, the prospective of electronic business fueled investor hopefulness and helped drive U. S. impartiality assessment to significant heights. Investors understood that efficiency gains of network technology would produce augmented commercial productivity for companies concerned in electronic business. Though the bubble has burst on Internet assessments, the question remains about whether modernism that lower production costs will effect in enlarged productivity. In a determined market, lower costs create lower prices. Pioneering firms may be able to confine abnormal profits before other firms in the business accept the new technology or business form but once the modernization is extensively diffused, continued productivity is probable only if important barricades to entry exist.

The fortunes of discount retailers through a period of technological modernization might be a forerunner of the financial impact that electronic business will have upon retailers. The Internet, Retailers and the Treadmill This work is provoked by the doubt regarding assessments of Internet-based retailers. In 2003 and 2002, financial analysts were dumping traditional price-earnings (P/E) valuation models for other methods in order to justify the high valuations of retailers (Laderman & Smith, 2003). Although numerous Internet companies lost the mass of their market assessment when the NASDAQ corrected sharply in 2002, forecasters continue to disagree about the proper valuation of companies utilizing a new technology (Trueman, Wong & Zhang, 2002; Schwartz & Moon, 2002). One of the influences advanced for high market assessments of Internet retailers is the

enlarged efficiency and the cheap costs that the Internet brings to commerce (Johnson, 2002; Tully, 2002).

Though, the reimbursements of cost economy technology may not accumulate to the firm. Instead, consumers may take pleasure in lower prices or a feature of production, like labor or property-owners, may realize increased reward. The agricultural economics and reserve economics literature documents the ambiguous results that technological transformation can have on producers. Profits that outcome from the acceptance of new technologies fade away as increased competition drives price down. Farmers constantly strive to improve their incomes by adopting new technologies. Lower costs make certain that before time adopters of the technology benefit from above average earnings for at least a brief time of time.

However, as more farmers adopt the technology, production increases and prices decrease. The product price treadmill benefits consumers through lower food prices, but farm profitability remains relatively low. A similar product price treadmill can exist in the retailing industry. Growth in the retail industry is constrained by growth in consumer spending. For a given amount of consumer spending, retailing is a zero sum game. One retailer's gain becomes another retailer's loss.

Technological modernization can benefit the initial innovators, but as more firms adopt the technology, prices, and therefore profits, can decline through increased competition. The Internet has, and will continue to have, a noteworthy impact upon retailing. Retailers use the Internet as an efficient

marketing medium, and for digitized products like software, as a distribution channel.

However, if a treadmill exists in retailing, the Internet may not benefit the industry through sustained increased productivity. In fact, the Internet, through greater price lucidity, may increase the speed of the treadmill by fueling competition (Sinha, 2002). The effect of the Internet upon retail profitability can only be measured with hindsight. Nevertheless, the effect of previous technological modernizations on retailers can be measured by studying historical retail profitability. Modernization and Profitability Retail modernizations can take various forms.

Walters and Laffey (2005) identify four categories of retail modernizations: new delivery systems, new products or services, improvements in existing products, and the development of superior product or service attributes. Process modernizations bestride several of these categories: they allow retailers to modify delivery systems, decrease costs and improve the shopping experience for consumers. The information revolution has generated numerous productivity enhancing processes. Throughout the 2000s and 1990s, retailers have exploited information technology (IT) to decrease costs and improve customer service. Some of these inventivenesses include synchronized consumer reaction, quick response, vendor-managed inventories, and demand-chain management solution (Fioritio, May & Straughn, 2003; Simbarini, 2005). Retailers have implemented improvements in the management of goods and services incessantly over the past 20 years.

Discount Retailers and Modernization In contrast to the Mia (2002) and Devanand et al. (2005) studies, I do not measure the impact of a specific technology on individual firms, but rather the effect of a series of technological modernizations on the entire industry. Discount retailers, formally classified as variety retailers with a SIC number of 5331, provide an ideal segment to study the effects of technological modernization, and hence the potential impact of the Internet, on the retail industry. During this period, the industry has invested belligerently in IT and has had dynamic growth. During the 1990s annual sales growth in the discount retail industry averaged 5.8 percent exceeding the 5. percent growth of general retailers (Sack, 2002). The innovativeness of the discount retail industry leader, Wal-Mart, has even had an effect upon other retail channels by forcing firms to adopt new modernizations for their survival (Kaufman, 2002).

This study examines operating performance variables to decide whether the industry has had a noteworthy increase in efficiency and profitability from 1981-2003. Inventory turnover, total asset turnover, sales per employee, operating profit margin, basic earning power and cost of goods sold as a percentage of sales are each analyzed for significant changes. As priority, the following results are expected for each of the variables: ? Inventory turnover: Positive trend coefficient. Investment in IT and improved distribution and inventory management procedures should translate into higher inventory turnover.

? Total asset turnover: Positive trend coefficient. A reduction in inventory should result in higher total asset turnover. ? Sales per employee: Positive

trend coefficient. Increased productivity should result in higher sales per employee. Operating profit margin. Indeterminate trend coefficient.

The change in operating profit margin depends upon the industry structure. In a price-competitive industry, return on investment will trend toward an equilibrium, or normal, level. Competition would ensure that modernizations leading to increased total asset turnover would not increase return on investment. An increase in total asset turnover would be accompanied by a decrease in operating margin.

In a less competitive industry, operating profit margin could increase as costs decrease in response to improved productivity. Firms capture the gains of cost decreases through higher investment returns. If retailing is competitive, and a product price treadmill exists, operating profit margin would be expected to fall if total asset turnover increased. Basic earning power: Non-negative trend coefficient.

Operating returns should remain constant if retailing is competitive and there are no economy-wide trends in operating returns. If retailing has barriers to entry or other non-competitive characteristics, productivity improvements can translate into enhanced BEP. Cost of goods sold as percentage of sales: Non-negative drift coefficient. In a competitive industry, consumers should understand the gains in retail efficiency through decreased retail mark-ups. Cost of goods sold as a percentage of sales should increase. If the industry is not competitive, firms can capture increases in productivity for themselves, in which case, cost of goods sold as percentage of sales would be unchanged. Implications for Retailers and

Electronic business Discount retailers experienced a tremendous increase in efficiency in the 1981-2003 period. Inventory turnover increased 37 percent and sales per employee increased 115 percent.

Unfortunately for the retailers, these gains did not translate into higher operating profits. Operating profit margins remained trendless; margins fluctuated between four and five percent during the period. Likewise, basic earning power was relatively flat, fluctuating between 11 percent and 15.5 percent. Productivity gains translated into lower prices for consumers. Cost of goods sold as a percentage of price increased steadily throughout the period. The effects of the Internet upon retailing may be similar to the process efficiencies realized by discount retailers; customers may benefit but at the expense of firm profitability. The Internet increases price transparency, which results in more competition.

As Sinha (2002) states, “ the Internet represents the biggest threat thus far to a company’s ability to brand its products, extract price premiums from buyers, and generate high profit margins. ” The extent to which the Internet benefits firms or consumers depends upon the nature of the product and the existing market structure of the industry. Efficiencies will be generated in product categories in which the Internet can increase inventory turnover and reduce product management expense. The cost-saving benefits of the Internet will accrue largely to consumers unless a non-competitive market structure or substantial barrier to entry exists. Conclusion The discount retail industry achieved significant increases in productivity from 1981-2003. The productivity increases did not improve industry profitability. Instead,

consumers benefited through lower gains. Like agriculture, the retail industry may be on a product price treadmill.

Productivity gains due to modernization lead to lower costs and lower prices, but profitability remains unchanged. Modernizations raise the standards that firms must meet. Firms either adopt the new technology or are forced out of the market. The Internet has the potential to increase retail competence but firms can capture the gains only if the market lacks price competition.

Although this study examined on the whole productivity changes in the discount retail industry, other factors besides technological modernization can be accountable for changes in costs and profitability. In this study, modernizations due to IT are commingled with other effects, such as changes in consumer demand and changes in product and input costs.

Future studies may seek to measure the efficiency changes due to the implementation of specific technologies. Such studies would need firm-specific data, including capital expenditures on IT. References Devanand, R. , Linsmeier, T. J. & Venkatachalam, M. (2005).

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