A note on inventories and commercial paper yields

Srinivas Nippani*, Steven S. Shwiff1, Augustine C. Arize2

College of Business and Technology, Texas A&M University–Commerce, PO Box 3011, Commerce, TX 75429–3011, United States

ARTICLE INFO

Article history:
Received 13 March 2007
Received in revised form 12 June 2008
Accepted 28 June 2008
Available online 8 August 2008

JEL classification:
D53
E44

Keywords:
Inventories
Commercial paper outstanding and
Commercial paper yields

ABSTRACT

Winters [Winters, D. B. (October 2002) Commercial paper: A colossal market. The Federal Reserve Bank of St. Louis-National Economic Trends, Cover Page], shows that the amount of non-financial commercial paper outstanding is positively correlated to the amount of total business inventory. In this paper, we extend his work by showing that total business inventory has a significant impact on the non-financial commercial paper yields. We use regression analysis for studying the relationship between inventories and their impact on the spread between commercial paper and Treasury bills. Our results have implications for money market arbitrage, monetary policy, working capital management for corporations and stock valuation.

© 2008 The Board of Trustees of the University of Illinois. Published by Elsevier B.V. All rights reserved.

1. Introduction

The market for non-financial commercial paper is one of the largest in the money market. The non-financial commercial paper is issued by corporations to raise cash, often to finance working capital requirements. It is generally unsecured. Winters (2002), shows that there is a positive correlation between total business inventory outstanding and non-financial commercial paper outstanding over the period January 1998 and June 2002. He argues that this relationship exists because the commercial paper market provides important funds that allow businesses to manage inventories and to adjust to unanticipated changes in inventories. In this paper, we extend Winters’ (2002) study to examine if total business inventories have an impact on the commercial paper yield as represented by

* Corresponding author. Tel.: +1 903 886 5678; fax: +1 903 886 5601.
E-mail addresses: Srinivas.Nippani@tamu-commerce.edu (S. Nippani), Steven.Shwiff@tamu-commerce.edu (S.S. Shwiff), Chuck.Arize@tamu-commerce.edu (A.C. Arize).
1 Tel.: +1 903 886 5679; fax: +1 903 886 5601.
2 Tel.: +1 903 886 5691; fax: +1 903 886 5693.
the spread between commercial paper yield and Treasury bill yield of same maturity, (Spread hereafter). Using regression analysis, we find that total business inventory impacts the spread. Our results have implications for money market arbitrage, monetary policy, stock valuation and working capital financing.

There is very little empirical evidence on what actually impacts the yield rates on commercial paper. Hahn (1993) says “Because commercial paper has default risk, its yield is higher than Treasury bills.” It is obvious from the statement above that the yield rate on Treasury bills of similar maturity and the default risk of the issuing company impact commercial paper yields. Other factors if any, affecting commercial paper yields have not been studied. We feel that it is very essential for us to understand if other factors impact commercial paper yield. Bernanke (1990) reported that the yield spread between the commercial paper rate and the Treasury bill rate is closely related to economic activity and the level of inflation rate. He argues “The best single predictor among interest rate variables has been found to be the spread between the commercial paper rate and the Treasury bill rate.” Friedman and Kuttner (1993a) argued that the difference between the commercial paper rate and the Treasury bill rate has high significant predictive value for real output.

In a more recent study, Ewing, Lynch, and Payne (2003), examine the information content of the paper-bill spread by explicitly taking into account two sources of wider spreads, rises in paper rate and declines in Treasury bill rates. Their conclusion is that changes in the commercial paper rate have greater information content about future business cycles than changes in Treasury bill rate. We would like to examine if the demand in the commercial paper market represented by total business inventories would impact commercial paper rates. In his work on the shrinking of the commercial paper market, Shen (2003) mentions several factors that affected the supply and demand for credit. The first factor mentioned for influencing demand for credit is the reductions in business inventories. Based on the works of Winters (2002) and Shen (2003), it is already established that total business inventories impact the amount of commercial paper outstanding. In this study, we intend to examine if total business inventories impact commercial paper yield. A study of this nature will establish several factors: (1) it shows that demand (inventories) not only impacts supply of short-term credit (commercial paper outstanding) but also the price (commercial paper yield); (2) if total business inventories impact commercial paper yield, it will show one more reason as to why the commercial paper and Treasury bill yield spread is a good indicator for economic activities. As is generally known, business inventories are considered one of the leading indicators by investment analysts in analyzing stock markets. Inventories increase and decrease because of several reasons. For example, manufacturers increase production when they expect demand to increase or vice-versa. The level of inventories also increases when demand unexpectedly decreases because manufacturers produce more than they can sell. If inventories actually impact commercial paper yield, it would tell us that an increase in commercial paper yields resulting from inventory increases (decreases) actually has information content. This will also add up to the opinion of Ewing et al. (2003), that changes in commercial paper rate have greater information content about future business cycles. If total business inventories do impact the yield rates on commercial paper this would increase our understanding on what impacts the commercial paper yields; (3) in addition to the two factors above, it will also tell us that the difference between commercial paper yield and Treasury bill yield is not just the default risk of commercial paper, but also demand related market factors that could change commercial paper yield and thus reflected on the spread. As mentioned by Hahn (1993) the yield spread between commercial paper and Treasury bills is considered only due to default risk of commercial paper. We intend to examine if the commercial paper yields are impacted by total business inventories in addition to default risk. Thus we would be adding another factor to explain the excellent prediction power of commercial paper yields. This will show that commercial paper yields impacted by total business inventories actually are reflecting the information content of total business inventories level in the money market.

5 See for example Hearth and Zaima (2004). The authors indicate that “Manufacturers’ new orders for consumer goods and materials” which indicates inventories.
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات