



Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

ScienceDirect

Review of Development Finance xxx (2016) xxx–xxx

Review of  
**DEVELOPMENT  
FINANCE**

[www.elsevier.com/locate/rdf](http://www.elsevier.com/locate/rdf)

# Intra-industry momentum and product market competition around the world<sup>☆</sup>

Ting Li<sup>\*</sup>

*Department of Management & Business, Skidmore College, Saratoga Springs, NY 12866, United States*

## Abstract

This paper examines the relationship between product market competition and intra-industry momentum returns. Based on 12,982 firm observations from 19 developed markets for the period of 1990–2010, I find that buying winners and selling losers in competitive industries generates significantly higher momentum profits than that in concentrated industries. The higher the intensity of product market competition, the larger are the intra-industry momentum returns. The results are robust to sub-samples (periods) of the U.S., non-U.S. countries, the G7 countries, 1990–2000, and 2001–2010. I further employ the nearness of a stock's price to the 52-week high to determine past winners and losers and find stronger results. I also compare intra-industry momentum returns with Jegadeesh and Titman (1993) individual stock momentum and Moskowitz and Grinblatt (1999) inter-industry momentum strategies. My results suggest that intra-industry momentum strategy outperforms the latter two strategies in most cases. The overall results are consistent with the notion that severe product market competition induces managers to improve financial performance. © 2016 Africagrowth Institute. Production and hosting by Elsevier B.V. All rights reserved.

*JEL classification:* F30; G11; G14; G15

*Keywords:* Momentum; Product market competition; Stock returns

## 1. Introduction

Jegadeesh and Titman (1993) have spurred an increasing number of studies on stock return momentum over various investment horizons. Subsequent studies have attempted to explain this return phenomenon. Examples of such explanations include, among others, market's under-reactions to earnings information (Chan et al., 1996), industry momentum (Moskowitz and Grinblatt, 1999), and stock-specific component to returns (Grundy and Martin, 2001).

The nature of product market competition influences firms' operating decisions from all aspects and hence, firms' cash flows

and equilibrium rates of return. The extant literature regarding product market competition documents that the intensity of industry competition affects stock returns. Specifically, firms in more competitive industries earn higher stock returns (Hou and Robinson, 2006), and have lower abnormal stock returns and cash flows following the occurrence of high industry-level financing and stock market valuation (Hoberg and Phillips, 2010). Moskowitz and Grinblatt (1999) claim that industry momentum is a key origin of individual stock momentum, and that stocks within an industry are more likely to associate with each other. Yet the relationship between industry concentration and momentum profits has not been explored. I am interested in investigating whether the competitiveness of an industry has any influence on momentum returns within the industry.

In this paper, I conduct an international analysis to examine whether product market competition matters for momentum profits. In more competitive industries, fundamental structures of firms are similar and comparable. Therefore, negative (positive) shocks can be more fatal (favorable) to firms in a competitive industry, given that firms in competitive industries have high pressures. If a firm makes one simple mistake in

<sup>☆</sup> I am grateful for the insightful comments and suggestions from Lilian Ng, Bohui Zhang, Mike Qinghao Mao, Revansiddha Basavaraj Khanapure, seminar participants at the Lubar School of Business, and participants of 2013 Asian Finance Association Annual Meeting in Nanchang, Jiangxi, China, and 2014 Eastern Finance Association Annual Meeting in Pittsburgh, PA.

<sup>\*</sup> Tel.: +1 518 580 5239.

E-mail address: [tti@skidmore.edu](mailto:tti@skidmore.edu)

Peer review under responsibility of Africagrowth Institute.

a competitive industry, it can be easily excluded from that industry. Thus firms in competitive industries have stronger motivations to thrive. I posit that buying past winners and selling past losers in competitive industries will generate more momentum returns. Product market competition is more convincing than industry itself in explaining momentum returns.

My sample includes firms from 19 countries for the period of 1990–2010. I measure product market competition by using the Herfindahl Index (also known as Herfindahl–Hirschman Index, or HHI), which is computed as the sum of squared market shares in each of the ICBIN industries and measures industry level competition. I focus on the 12-month/3-month strategy, which is regarded as the most successful zero-cost strategy by Jegadeesh and Titman (1993), to determine past performance and the subsequent holding period. To avoid bid-ask bounce, I skip one month between the formation period and holding period. At the beginning of every month  $t$ , within each HHI portfolio, I compute the average returns of the past 12 months for each stock and rank the average returns in a descending order. The top 30% stocks are considered winners, and the bottom 30% stocks are regarded as losers. In month  $t + 1$ , I buy past winners, sell past losers, and hold this position for 3 months. The momentum profits arising from this strategy in every HHI portfolio are intra-industry momentum returns. I find that among the 19 countries in the sample, there are significant intra-industry momentum profits in competitive industries and less or no intra-industry momentum profits in concentrated industries.

I further find consistent support in sub-samples of the U.S., non-U.S. countries, the G7 countries, sub-period 1990–2000, and sub-period 2001–2010 that intra-industry momentum profits are decreasing or disappearing with industry concentration. The Fama–MacBeth regressions of intra-industry momentum returns on measures of competitiveness imply a negative association between industry concentration and momentum returns. In addition, following George and Hwang (2004), I employ the nearness of a stock's price to the 52-week high to determine winners and losers, and the results are consistent and more economically significant.

Lastly, I compare intra-industry momentum with individual stock momentum (Jegadeesh and Titman, 1993) and inter-industry momentum (Moskowitz and Grinblatt, 1999). I compute annualized momentum profits of these three strategies, employ univariate analysis in different samples, and conduct OLS regressions with Jegadeesh and Titman momentum profits as dependent variables. The results imply that in non-U.S. countries and sub-period 2001–2010 intra-industry momentum strategies outperform the other two strategies, and intra-industry momentum profits are more closely associated with Jegadeesh and Titman momentum profits.

This study contributes to the momentum literature in several significant ways. First, to the best of my knowledge, this is the first study that examines the relationship between intra-industry momentum and product market competition. Moskowitz and Grinblatt (1999) present a strong and persistent industry momentum phenomenon, while Hou and Robinson (2006) and Lyandres and Watanabe (2012) report the association between stock returns and competition. I expand these studies

by classifying industries by their product market competition levels, and showing that the degree of competitiveness positively affects momentum.

Second, I extend the literature by examining how the intensity of competition influences momentum profits in 19 developed countries. Rouwenhorst (1998) extends Jegadeesh and Titman (1993) in an international context and shows that stock momentum exists in 12 European countries in the sample. Griffin et al. (2003) argue that macroeconomic risk variables are not able to explain stock return continuation. Chui et al. (2000, 2010) focus on the effects of culture, the legal system, and the ownership structure on momentum. No international study has shed light on the relationship between competitiveness and momentum strategy. I explore the stock momentum of developed countries from the perspective of competition intensity.

The remainder of this paper is organized as follows. Section 2 discusses related literature. Section 3 describes the data and methodology. Section 4 provides univariate and multivariate tests to compare momentum returns in competitive industries and concentrated industries. Section 5 concludes the paper.

## 2. Literature review

### 2.1. Momentum

Momentum, referred to as relative strength strategies, has received great attention from recent finance literature. Jegadeesh and Titman (1993) mention that practitioners who use momentum strategies form the portfolios based on price movements over the 3- to 12-month horizons. They find that firms with high returns over the past 3–12 months continue to outperform firms with low past returns over the same horizons, while firms with low returns continue to underperform firms with high past returns.

After the momentum strategy was documented, substantial studies have been trying to identify the sources of abnormal returns from momentum. Chan et al. (1996) state that the market acts in response to new information gradually, and the market's under-reaction to earnings information can partly explain the predictability of future returns from past returns. Moskowitz and Grinblatt (1999) claim that industry momentum explains much of the individual stock momentum profits at intermediate investment horizons. Once industry effects are taken into consideration, momentum in individual equities virtually do not exist. Much of the individual stock momentum anomaly can be justified by industry momentum profits. They point out that stocks within an industry tend to be highly correlated, and the past winners and losers are likely to come from the same industry. Therefore, the relative strength strategies are not well diversified.

Moreover, Grundy and Martin (2001) show that the profitability of relative strength strategy reflects momentum in the stock-specific component of returns. It cannot be explained as a reward for bearing the dynamic exposure to cross-sectional variability in stocks' average returns or exposure to industry factors. Momentum strategies that determine winner or loser status by stock-specific return components are more profitable in contrast to those determined by total returns.

Download English Version:

<https://daneshyari.com/en/article/5104281>

Download Persian Version:

<https://daneshyari.com/article/5104281>

[Daneshyari.com](https://daneshyari.com)