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Consideration of the Existence of the Value Effect in Japan in Recent Years

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Abstract

It was widely reported that a strong value effect exists on the Japanese share market, however research suggests that it disappeared from about 2008. Examination of data on the Russell / Nomura Japan Equity Indexes suggests that the value premium reappeared around 2013 and has become significantly strong since 2021, despite structural and regulatory changes increasing market efficiency and the number of international investors.

Keywords: book-to-market, share returns, value premium

1. Introduction

Many studies have documented the existence of a strong value effect on the Japanese share market. Value shares are defined as having a high ratio for book-to-market (B/M), and the share price is relatively low compared to the value of assets listed in the financial statements. Some people view value shares as having low future growth opportunities. Daniel et al. (2001) found that the difference between high book to market shares (value shares) and low book to market shares (growth shares) was 0.994% in Japan. Many other researchers have also documented a strong value effect in Japanese share returns (Chou et al., 2012; Fama & French, 2012; Kubota & Takehara, 2018).

Controversy still surrounds the cause of the value effect and several different theories exist to explain the reason for value shares outperforming growth shares for a long period of time. Some researchers believe that the value effect is compensation for risk (Fama & French, 1995), while others argue that it is due to investors irrational behavior. Galvani (2021) suggests that the cause of the value premium depends on the state of the share market. He argues that it originates from leverage risk for large firms during a flight-from-safety, and from systematic risk for small firms during a flight-to-safety.

Recent studies suggest that the value effect has decreased significantly or disappeared in share markets around the world. Chung et al. (2016) show that the value premium on the Australian and NZ markets has become weak in the recent period. Fama and French (2021) analyzed the American market and found that value premiums are on average much lower in the period 1991-2019, compared to 1963-1991, and large value shares have a large difference between the periods. Studies on Japan suggest that the significance of the value effect decreased from about 2008, and in recent years growth shares have obtained higher returns.

This paper contributes to financial literature by considering the existence of the value effect in Japan in recent years. The remainder of this paper is as follows. Section 2 examines data for the Japanese share market, Section 3 discusses possible causes for the significance of the value effect to change, and Section 4 concludes with a discussion about the existence of the value effect in the Japanese share market.

2. Value and Growth in Japan

Since Daniel et al. (2001) documented that value shares earn higher returns than growth shares, many research papers have provided evidence that a strong value effect exists in Japanese share returns. In order to examine data for the Japanese share market and see if the value effect has decreased in significance in recent years, data for the Russell / Nomura Japan Equity Indexes will be analyzed.

Nomura Fiduciary Research & Consulting Co., Ltd. and Frank Russell Company jointly created the Russell / Nomura Japan Equity Indexes. The indexes broadly cover the Japanese share market as they cover the top 98%

of shares listed on all markets in terms of float-adjusted market value, and are created using shares listed on any of the four stock exchanges in Japan (Nomura Fiduciary Research & Consulting, 2023). The indexes are rebased so that the end of December 1979 is 100 and the specific composition of shares included in the indexes are reviewed annually (Nomura Fiduciary Research & Consulting, 2023). Notably, there are investment style indexes based on size and their adjusted P/B ratios. Indexes based on adjusted P/B ratios are classified as either value or growth, and indexes based on market capitalization are classified as either small, mid or large. There are also some indexes which combine these two groupings. When the composition of the indexes was reviewed in November 2022, the Total Market Value Index was comprised of 1,103 shares and the Total Market Growth Index was comprised of 776 shares (Nomura Fiduciary Research & Consulting, 2023).

Figure 1 graphs the monthly index values (including dividends) for the Total Market Value Index and Total Market Growth Index from the base December 1979 to November 2023. As the graph shows, the value of the Total Market Value Index grows to become over six times larger than the value of the Total Market Growth Index during the 43-year period. We can see two important points from this graph. Firstly, value shares earned a higher return than growth shares in this period, and secondly, that between 2008 and 2013 the value premium appears to decrease or perhaps disappear, however from 2013 the gap between the Total Market Value Index and Total Market Growth Index gradually increases. The data on these indexes indicates that value shares have significantly performed better than growth shares since early 2021. This indicates that the value premium has not disappeared in the Japanese share market in recent years and may perhaps be becoming stronger.

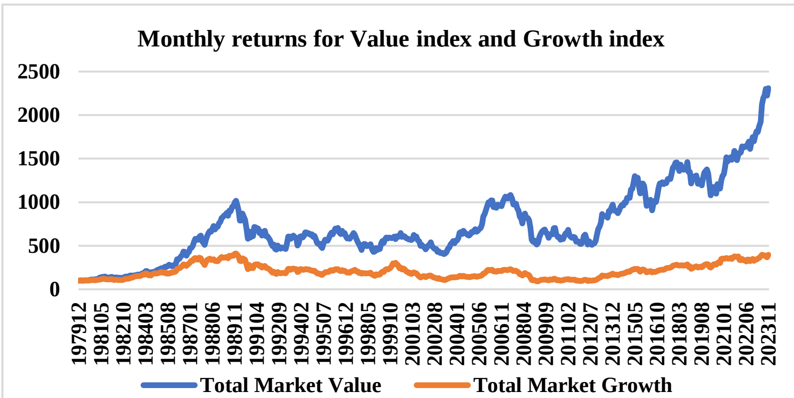

Figure 1. Monthly returns for the Value index and Growth index (December 1979 – November 2023, including dividends), created using Russell / Nomura Japan Equity Index data with permission

Figure 2 graphs the monthly index values (including dividends) for the Large Value Index and the Small Value Index for the same period. This graph shows that small value shares have had higher returns than large value shares since 2013 and is consistent with the data in Figure 1. Analysis of the size-based indexes suggests that small size value shares are contributing to the higher performance of the Total Market Value Index since 2013 and supports the belief that the value effect still exists in Japan and has been becoming stronger in recent years.

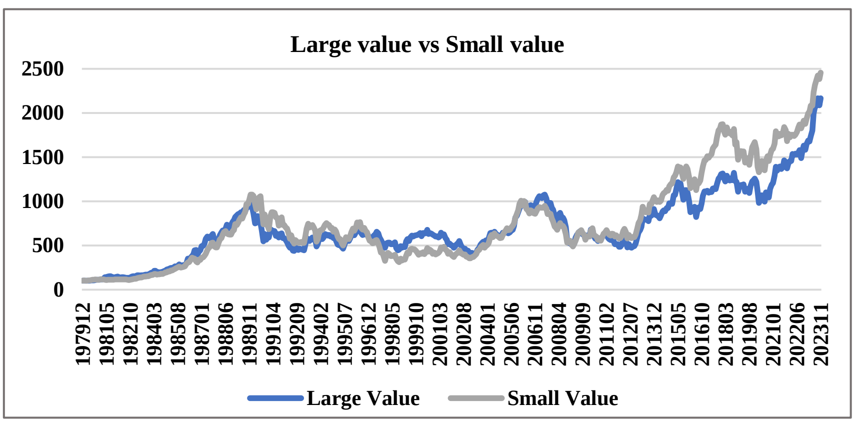

Figure 2. Monthly returns for the Large Value index and Small Value index (December 1979 – November 2023, including dividends), created using Russell / Nomura Japan Equity Index data with permission

3. Changing Significance of the Value Effect

It has been reported that the value effect has decreased in significance in Japan since about 2008. Analysis of the Russell / Nomura Japan Equity Indexes suggests that between 2008 and 2013 the value premium does appear to disappear, and then reappears and gains in strength from 2021. As controversy still surrounds the exact cause of the value effect, several theories exist to explain the possible reason for the change in significance in recent years.

One theory relates to investors awareness. Previous research has found that returns tend to decrease after the existence of a high return anomaly becomes common knowledge. McLean and Pontiff (2016) analyzed the post-publication returns for 97 characteristics and found that the average return declines by 58% post-publication. It has been widely documented that the size effect disappeared during the 1980`s and small firms no longer outperform big companies (Hou, van Dijk, 2019). It is highly possible that investors awareness about the value effect worldwide has led to the decline in returns for value shares. Chung et al. (2016) suggest that investors have become aware of the anomaly, leading them to buy shares with a high B/M ratio, which causes the share price to increase and subsequent returns to decrease. Researchers have documented a decreasing value effect in many global share markets; hence this theory is highly plausible as investors strive to receive a high return.

Another theory is based on the idea of increasing international investors causing share markets to become more efficient. From 1996 to 2001, the Japanese government introduced various liberalization measures under the Financial Big Bang Program, with the aim of globalizing the Japanese share market (Jiang & Yamada, 2011). As a result of this, international investors significantly increased their holdings of Japanese shares, particularly large shares, from the mid-1990`s (Jiang & Yamada, 2011). Jiang and Yamada (2011) studied the impact of international investors on Japanese share prices and found that the increase in investment flows led to a reversal of the size premium. It is difficult to conclude whether the reversal was due to an increase in the number of investors, or the combined result of increasing investors and increasing market efficiency stemming from liberalization measures. However, Chung et al. (2016) suggest that deregulation of financial markets could be the cause of the weakening value premium in Australia and New Zealand in recent years.

The Japanese share market has had several structural changes occur following the implementation of the Financial Big Bang Program. In January 2013 the Tokyo Stock Exchange Group merged with Osaka Securities Exchange to form the Japan Exchange Group. The Japan Exchange Group, otherwise known as JPX, aims to promote sustainable development of the market and contribute to the realization of an affluent society (Japan Exchange Group, 2015). The first Medium-term management plan (2013-2015) focused on improving the appeal of Japanese shares and expanding the derivatives market and new business fields to become the most preferred exchange in Asia (Japan Exchange Group, 2015). The second Medium-term plan (2016-2018) aimed to satisfy investor needs and encourage mid-term to long-term asset building, while also improving corporate governance and market infrastructure (Japan Exchange Group, 2016). The third Medium-term management plan (2019-2021) focused on raising competitive awareness and appeal of the Japanese market, while developing into a comprehensive exchange (Japan Exchange Group, 2019).

Following completion of these three plans, a new long-term goal was announced, together with the Medium-term management plan 2024 (2022-2024). The current management plan aims to facilitate corporate growth and asset formation and promote sustainability that connects society and the economy (Japan Exchange Group, 2023). One major change which occurred in April 2022 was the restructuring of the Tokyo Stock Exchange into three new market segments: Prime, Standard and Growth. Currently, many listed companies are more focused on improving corporate value, creating new growth strategies, and enhancing corporate governance (Japan Exchange Group, 2023). The underlying motivation for changes in recent years has been to revitalize the Japanese share market by “enhancing the appeal of the Japanese market by boosting the corporate value of listed companies” and contribute to sustainable growth of the Japanese economy (Japan Exchange Group, 2023, p. 33). Since 2013 significant changes have gradually been made under the four management plans, and international investors now account for more than 60% of trading value of JPX Group`s markets (Japan Exchange Group, 2023). Hence, the theory that an increase in international investors causes share markets to become more efficient cannot be rejected, although it is highly possible that the numerous regulatory changes have led to increased efficiency and increasing international investors.

4. Discussion

The analysis of the Russell / Nomura Japan Equity Indexes suggests that between 2008 and 2013 the value premium does appear to disappear, and then reappears, becoming significantly stronger since early 2021. The data on these indexes indicates that value shares have performed significantly better than growth shares since

2013, suggesting that the value premium has reappeared in the Japanese share market in recent years and may perhaps even be becoming stronger. It is possible that the disappearance of the value effect between 2008 and 2013 may be due to investors increasing awareness, however it can not be logically argued that awareness caused the value effect to reappear after 2013. As stated in the previous section, structural changes have occurred in Japan since the formation of JPX in 2013, with the aim of increasing corporate growth and the appeal of the Japanese share market. It can be argued that the reappearance and increasing strength of the value effect may be due to these regulatory changes, which have increased efficiency and the number of international investors.

It should be reiterated that the exact cause of the value premium is still unknown, and many researchers believe that it is a compensation for risk. Furthermore, many global share markets have seen the value premium weaken in recent years. It is interesting that the Russell / Nomura Japan Equity Indexes suggest that the value premium has strengthened on the Japanese share market in recent years, while there is evidence documenting it weakening in other countries. Furthermore, it appears to be gradually strengthening, despite an increase in the number of people investing in Japan and various structural and regulatory changes improving market efficiency. This leads us to question whether the value premium is a compensation for risk, as many researchers believe.

The indexes based on both P/B ratios and size suggests that small value shares have had higher returns than large value shares since 2013. Again, this is interesting because many researchers have documented a reversal of the size effect in share markets globally. Jiang and Yamada (2011) documented that an increase in investment flows and a preference for large shares by international investors, led to a reversal of the size premium in Japan during the period 1995 to 2008. More recently, Kubota and Takehara (2018) test the Fama and French five factor model on the Japanese share market and find evidence of an insignificant size premium in Japan, and that the value factor HML is highly significant. This leads us to consider the possibility that the size effect only appears when a shares P/B ratio is taken into consideration.

5. Conclusion

This paper considers the existence of the value premium in Japan in recent years, as it has been reported that the value effect has decreased in significance since about 2008. However, analysis of the Russell / Nomura Japan Equity Indexes suggests the value premium has reappeared since 2013 and is becoming stronger. The gap between the Total Market Value Index and Total Market Growth Index has doubled since 2021. The Japanese share market has had numerous structural and regulatory changes occur since 2013 to enhance the appeal of the Japanese market, and these changes are improving market efficiency. Due to the value effect getting stronger despite these changes, it leads us to question whether the value premium is a compensation for risk as many researchers believe. Chung et al. (2016) suggested that the value premium may not be prevalent as markets become more efficient, however our analysis does not support this claim. Further research needs to be undertaken to understand the cause of the value effect.

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