



EPRA

EUROPEAN PUBLIC
REAL ESTATE ASSOCIATION

MARKET
RESEARCH

Long-term impact of ETFs on the listed real estate market

December
2017

Research Paper Summary

1. WHY IS THIS AN AREA OF INTEREST TO EPRA MEMBERS?

ETFs are becoming the largest shareholders in listed real estate companies across the globe.

2. WHAT WAS THE FOCUS OF YOUR RESEARCH?

The EPRA study focuses on the long-term impact of ETFs on the listed real estate market.

3. DESCRIBE KEY CONCLUSIONS FOR MARKET PRACTITIONERS.

The growth of ETFs is great for investors, somewhat mixed for corporate REIT managers and negative for active fund managers.

RESEARCH SUMMARY

ETF ownership has reached 11.8% in real estate stocks globally and 23.6% in the US, making ETFs meaningful shareholders of the listed real estate market. Market participants expect ETF ownership to reach 50% in the near-term future, raising questions about the impact of this relatively new type of shareholder. This paper examines the long-term impact of ETFs on the listed real estate market. First, we survey the literature discussing the impact of ETFs on financial markets. Second, we provide a brief overview of the evolution of the passive ownership in real estate stocks. Third, we discuss the long-term impact of ETFs on the listed real estate market. In contrast with research on general equities our empirical results do not indicate that higher ETF ownership has a negative impact on real estate stocks from a market structure perspective; however, we believe this likely due to a limited sample size of available stocks in the listed real estate market. We discuss the long-term impact of ETFs on the listed real estate market, which is positive for investors, negative for fund managers, and somewhat neutral for real estate company executives. We highlight that for active fund managers a path for survival is to become increasingly activist shareholders.

Content table

1. Abstract	4
2. Introduction	4
3. Literature Review	5
4. Status Quo in the Listed Real Estate Market	6
5. Discussion on Real Estate Participants	16
6. Conclusion	20
7. References	21

AUTHORS

Nicolas Rabener

Nicolas Rabener is the Managing Director of FactorResearch, which provides quantitative solutions for factor investing. Previously he founded Jackdaw Capital, a quantitative investment manager. Before that he worked at GIC and Citigroup. He holds an MS in Finance from HHL Leipzig Graduate School of Management and is a CAIA charter holder.

CONTACT

nicolas.rabener@factorresearch.com

DISCLAIMER

Any interpretation and implementation resulting from the data and finding within remain the responsibility of the company concerned. There can be no republishing of this paper without the express permission from EPRA.

Abstract

ETF ownership has reached 11.8% in real estate stocks globally and 23.6% in the US, making ETFs meaningful shareholders of the listed real estate market. Market participants expect ETF ownership to reach 50% in the near-term future, raising questions about the impact of this relatively new type of shareholder.

This paper examines the long-term impact of ETFs on the listed real estate market. First, we survey the literature discussing the impact of ETFs on financial markets. Second, we provide a brief overview of the evolution of the passive ownership in real estate stocks. Third, we discuss the long-term impact of ETFs on the listed real estate market.

In contrast with research on general equities our empirical results do not indicate that higher ETF ownership has a negative impact on real estate stocks from a market structure perspective; however, we believe this likely due to a limited sample size of available stocks in the listed real estate market.

We discuss the long-term impact of ETFs on the listed real estate market, which is positive for investors, negative for fund managers, and somewhat neutral for real estate company executives. We highlight that for active fund managers a path for survival is to become increasingly activist shareholders.

Introduction

Since the 1990s, exchange-traded funds (ETFs) have become a popular investment vehicle due to their low transaction costs, intraday liquidity and tax efficiency. ETFs simply replicate the performance of an index and are available for retail and institutional investors as they are traded on the major stock exchanges. In the listed real estate market passive investors represent 11.8% of the assets under management and have therefore become a significant shareholder in most listed real estate companies, especially in the US.

This article investigates the long-term impact of ETFs on the listed real estate market. First, we survey the literature discussing the impact of ETFs on financial markets. Second, we provide a brief overview of the evolution of the passive ownership in real estate stocks. Third, we discuss the long-term impact of ETFs on the listed real estate market.

In the first part of this article we review the literature discussing the impact of ETFs on financial markets. There is not a significant amount of research that looks specifically at ETFs and real estate stocks, but the conclusion from the general equity markets is relevant for the listed real estate market as real estate stocks are securities like any other from a market structure perspective. We specifically focus on the impact on stock volatility, liquidity, return co-movements, and informational efficiency of financial markets. The literature seems to indicate that there are negative effects for stocks with a higher ETF ownership.

In the second part of this article we analyse how passive investors have increased their ownership in listed real estate companies over time. ETFs have increased their ownership from basically zero percent in the 1990s to 11.8% at the beginning of 2017. This is also reflected in the AUM of passive assets, which is currently at approximately \$179 billion and comprised of sector and equity ETFs.

The third part of this article focuses on the long-term impact of ETFs on the listed real estate market,

whose key participants comprise investors, fund managers, and the executives of listed real estate companies. The long-term impact of ETFs is likely to be different for each of the key participants. Investors have benefited from being able to access listed real estate markets via cheap, tax-efficient, and transparent vehicles and are getting more choices given the growth of the smart beta market. Fund managers have lost significant market share to ETFs as they currently provide little value to investors. Active managers need to reinvent themselves and start generating alpha, where becoming activist shareholders might be the only viable option. Executives of listed real estate companies have likely benefitted from less critical passive investors, however, are increasingly facing difficulties as there is no significant relationship with passive investors, which is important for well-functioning capital markets.

Literature Review

In this section we will review the empirical literature on the impact of ETFs on the general equity markets, which we can use as a proxy for the listed real estate market. As noted by Kizer and Grover (2017) there is no difference between a real estate and any other stock from a market structure perspective. We specifically highlight literature that outlines the impact of ETFs on stock volatility, liquidity, return co-movements, and informational efficiency of financial markets.

Before we review the literature, it is beneficial to explain how ETFs work. An ETF simply replicates the performance of an index and can be traded intraday. A special kind of broker called authorized participant (AP) ensures that the ETF is not trading at a premium or discount to the net asset value (NAV) of the portfolio of underlying stocks. APs have the unique ability to create and redeem ETF shares with the ETF issuer. If an ETF is trading at a premium to the NAV, then the AP will buy the portfolio of stocks on the market, create new ETF units, and sell the new ETF units on the market. This process will increase the price of the stocks and decrease the price of the ETF, which will consequently lead to a decrease of the premium. In the case of an ETF trading at a discount to NAV, the AP will run the inverse process. APs are therefore conducting ETF arbitrage to ensure efficient ETF pricing and have a direct impact on the stocks held by the ETF.

Ben-David, Franzoni and Mousasawi (2014) find that stocks with ETF ownership show significantly higher intraday and daily volatility, which the authors explain by the arbitrage activity between the ETFs and underlying stocks. They also highlight that this effect is stronger with less liquid stocks. The authors conclude that the ETF arbitrage mechanism adds a new layer of non-fundamental trading to the underlying stocks, which might become significant when liquidity shocks occur in the ETF.

Hamm (2014) documents that stocks become less liquid with a rising ETF ownership. Investors with an informational disadvantage seem to move from less liquid stocks to ETFs when the option is available. The author does not find the same effect for mutual funds, indicating that the rise of ETFs has a structural change on the liquidity of stocks. Madhavan and Sobczyk (2015) and Pan and Zeng (2017) identify cases where ETFs are more liquid than the underlying securities.

Da and Shive (2016) provide evidence that turnover in ETFs increases the co-movement of the underlying stocks, which they also explain by the ETF arbitrage and argue is not derived from stock fundamentals. The effect is stronger in small caps. They further suggest that some of the ETF-driven return co-movement is excessive as price reversals frequently occur on stock and ETF level.

Israeli, Lee and Sidharan (2017) show that higher ETF ownership leads to higher transaction costs and lower benefits from information acquisition. Specifically, they provide evidence that higher ETF

ownership is associated with i) higher bid-ask spreads, ii) an increase in stock return synchronicity, iii) a decline in how stocks react to earnings announcements, and iv) a decline in the number of research analysts covering the stock. The authors caution that ETFs may decrease the informational efficiency of financial markets.

ETFs have proven immensely popular amongst retail and institutional investors. There are clear benefits for using ETFs, mainly the low transaction costs, being able to trade ETFs intraday, and tax efficiency. However, the impact of ETFs on stocks outlined above can be considered negative for financial markets. There is a price to pay for efficient capital markets and ETFs might not be considered a free lunch after all.

Status Quo in the Listed Real Estate Market

DATA AND METHODOLOGY

Data was obtained from two main sources that give access to individual company data. FactSet provided prices, volume traded, and market capitalizations for real estate and all other stocks on a daily basis. EPRA provided ownership data for listed real estate companies, which was available on a quarterly frequency from 2004 to 2016 and was analysed for shareholders with a passive investment fund orientation. The passive ownership in real estate stocks was aggregated on a regional and global level.

The empirical study includes correlation and dispersion analysis for real estate and all other stocks on a regional level. Correlations were calculated on a daily basis on individual stock level over a one-year period and then averaged across stocks. Dispersion was calculated on a daily basis on individual stock level, smoothed over a one-month period, and then averaged across stocks.

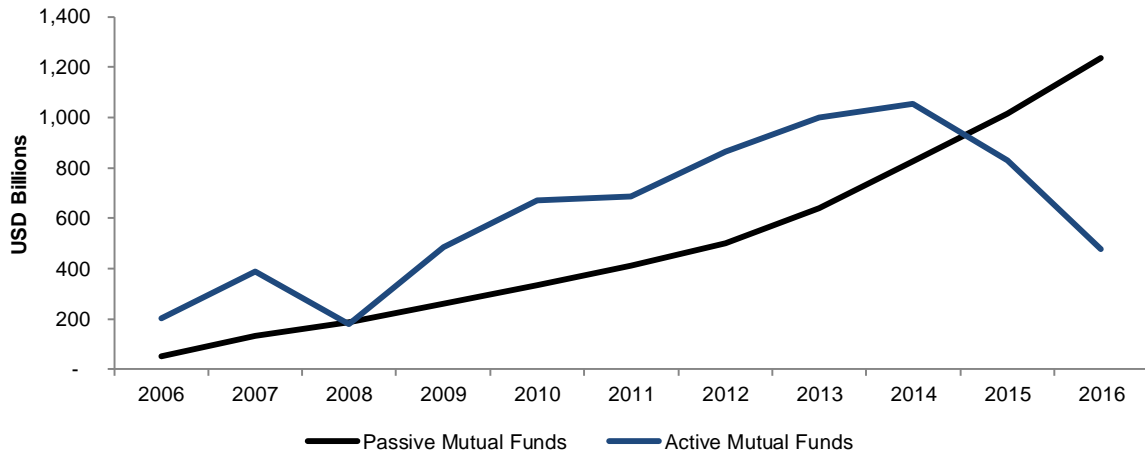
Passive and ETFs are often used as synonyms, but it is worth noting that although nearly every ETF is a passive investment, not all passive investments are ETFs as there are also index mutual funds. For simplicity we use ETFs and passive investors interchangeably. Passive and ETFs both seek to replicate a benchmark while active funds aim to outperform their benchmarks.

ETF OWNERSHIP AND EQUITY MARKETS

Before we review the listed real estate market it is helpful to review the status quo of ETFs in the general equity markets to contrast the trends in real estate stocks.

Data is limited on a global level, but available for the US equity market. Chart 1 shows the cumulative flows in active and passive US mutual funds from 2006 to 2016 and highlights the consistent inflows in passive funds over the last decade and the significant outflows of active funds since 2014.

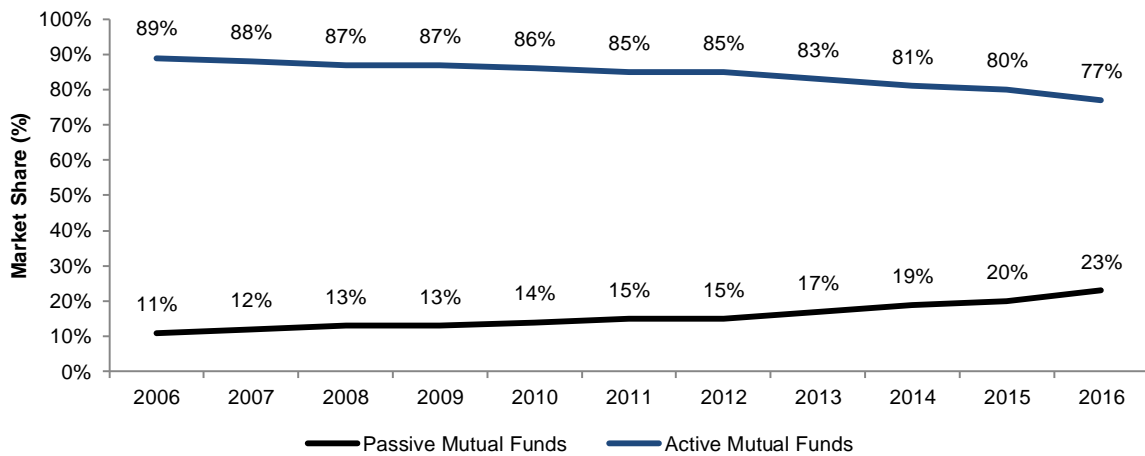
Chart 1: US Mutual Funds: Cumulative Flow of Funds (USD Billions)



Source: Morningstar Direct

Chart 2 shows the steadily rising market share of passive mutual funds in the US, which currently have a 23% market share. Most market participants expect that passive investments will dominate active investments in the future. Moody’s expects that this will occur in the US before 2024, which would imply a dramatic change for the active fund management industry over the next few years.

Chart 2: Mutual Funds US: Market Share

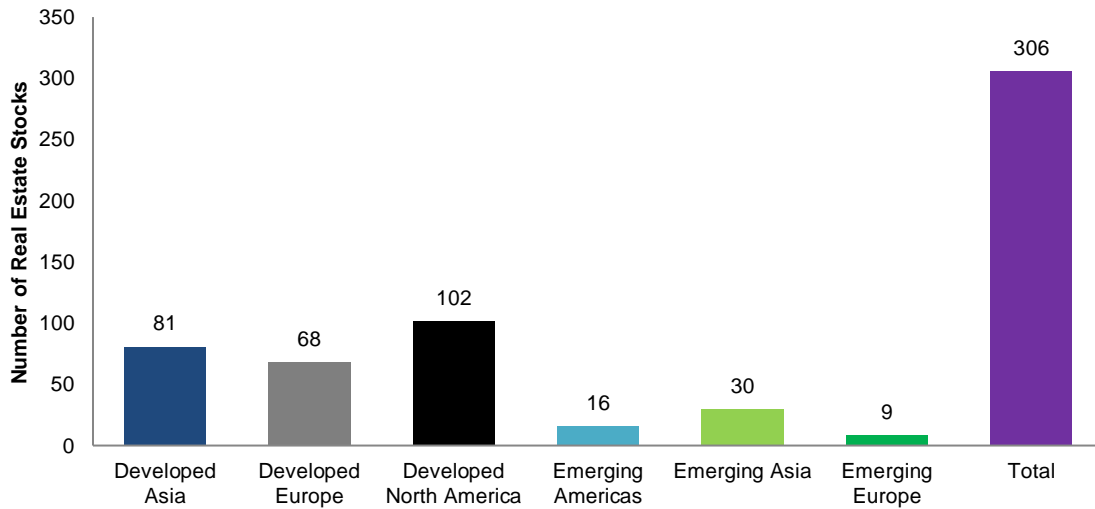


Source: Morningstar Direct

ETF OWNERSHIP AND LISTED REAL ESTATE MARKETS

Our sample of real estate stocks includes 306 companies, which captures nearly all companies that have been a member of at least 5 years in the FTSE EPRA/NAREIT Global Real Estate Index as of end of 2016. This universe is divided into 251 companies from developed and 55 companies from emerging markets. We then further separate the sample into US, European, and Asian universes, which can be observed in Chart 3.

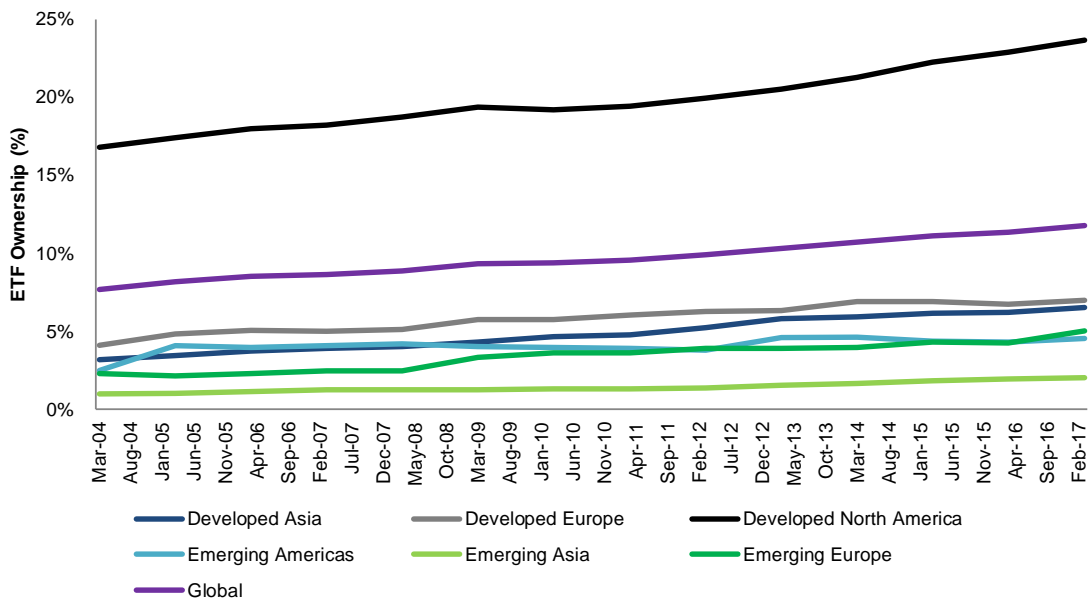
Chart 3: Number of Real Estate Stocks in Sample



Source: EPRA

Analysing the passive ownership data in real estate stocks reveals a consistent upward trend from 2004 to 2017, reflecting the rising market share of passive funds like the trend in the general equity markets, which is shown in Chart 4.

Chart 4: Evolution of ETF Ownership in Real Estate Stocks (2004- 2017)

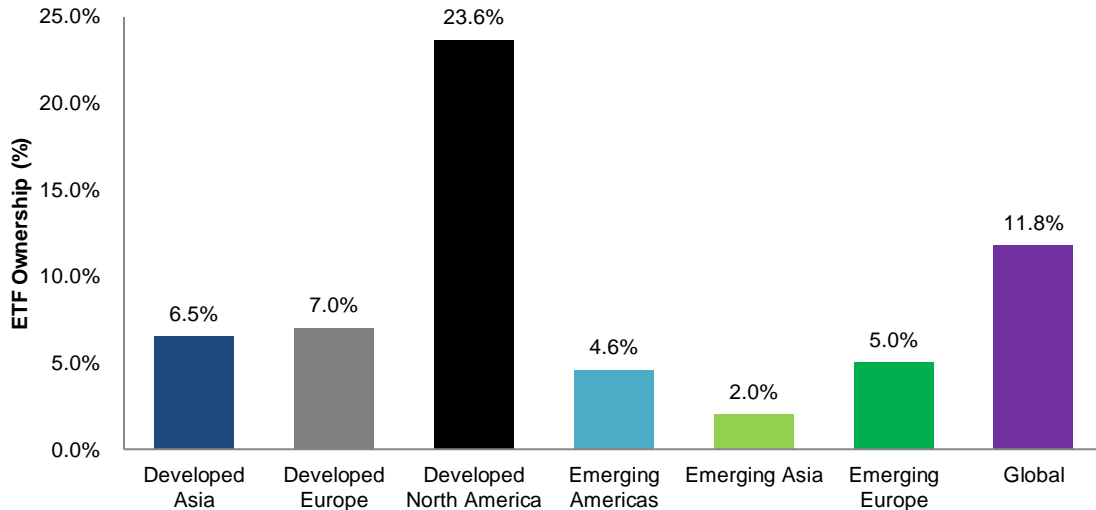


Source: EPRA

Chart 5 shows that as of Q1 2017 the ETF ownership was highest in the US with 23.6%, in line with US general equity markets, while the lowest was in Emerging Asia with 2.0%. ETF ownership is higher on average in developed markets compared to emerging economies, which likely reflects the investment product history and availability. The first passive index fund became available in the US in 1975, but ETFs only become significant in terms of assets under management in the 2000s, especially in Europe

and Asia. The US currently features a much larger universe of ETFs than other regions, which explains the higher ETF ownership rate in the US.

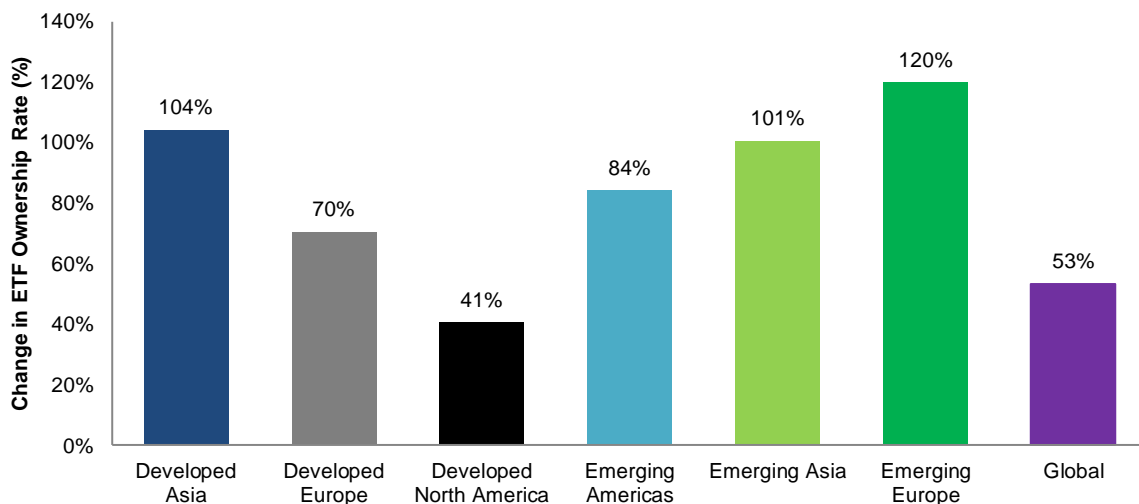
Chart 5: Current ETF Ownership in Real Estate Stocks (2017 Q1)



Source: EPRA

Although US real estate stocks show the highest ETF ownership currently, the growth rates in ETF ownership have been higher in all other regions in the period from 2004 to 2017, which is highlighted in Chart 6. We would expect Europe and Asia to continue to show higher growth rates over the next years given the currently relatively low ETF ownership levels and the significant issuance of ETFs by product providers in these regions.

Chart 6: Change in ETF Ownership Rate of Real Estate Stocks (2004 - 2017)

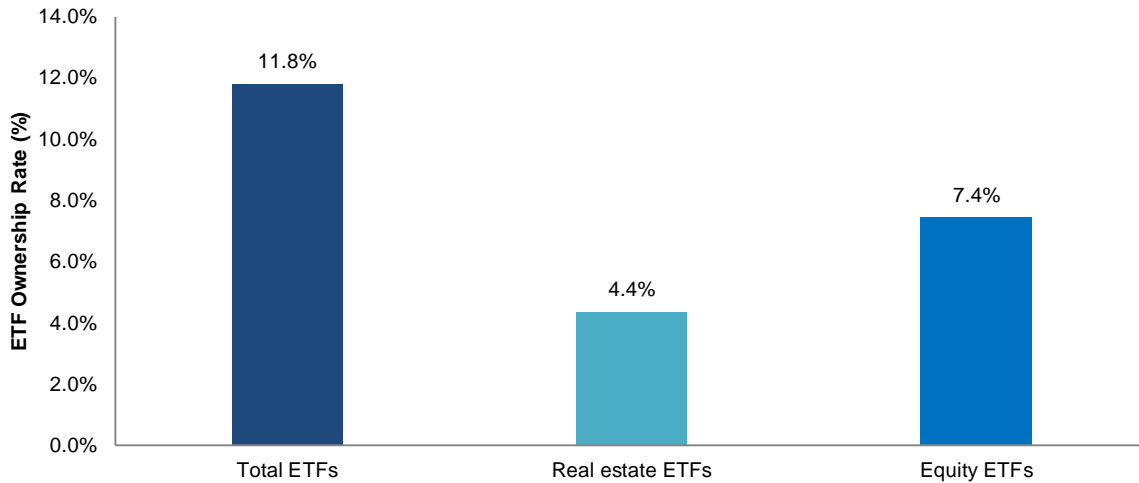


Source: EPRA

It is also interesting to analyse the types of ETFs that hold shares in real estate stocks as highlighted in Chart 7. These can be differentiated between sector ETFs, i.e. ETFs that only hold listed real estate companies, and equity ETFs that hold real estate stocks due to these being included in a broad market

index like the S&P 500. The chart below highlights that the total ETF ownership for real estate companies is 11.8%, of which 4.4% is held by real estate ETFs and 7.4% by equity ETFs.

Chart 7: ETF Ownership in Real Estate Stocks by ETF Type



Source: EPRA, ETFDB.com

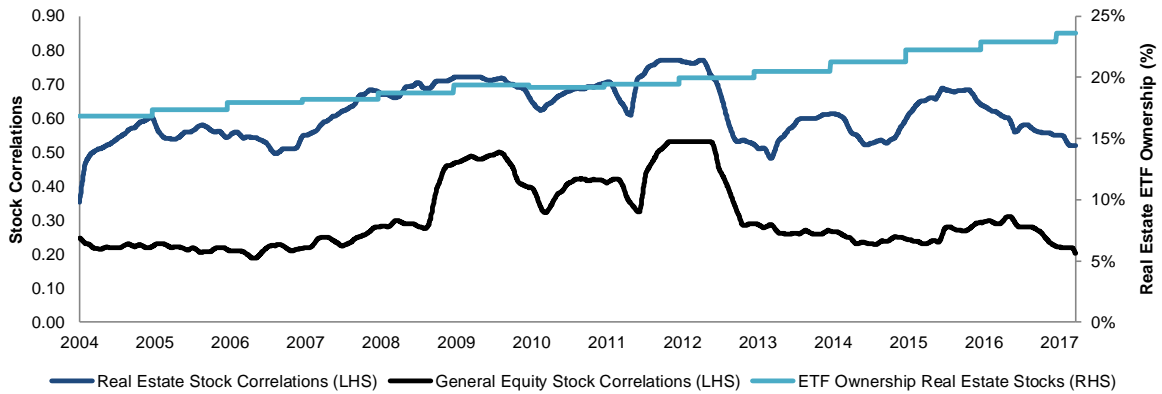
CURRENT IMPACT OF ETFS ON LISTED REAL ESTATE COMPANIES

Given that the ETF ownership has reached a significant level in real estate stocks we will analyse if there is an impact on stock correlations, dispersion, and volume. We will only analyse developed markets as there are too few real estate companies in emerging markets for the analysis to be meaningful. The ETF ownership data is only available on a quarterly basis, which limits the complexity of the analysis.

The Charts 8, 9, and 10 show the stock correlations and ETF ownership for developed North America, Europe, and Asia. The stock correlations highlight that real estate stock correlations are structurally higher than for general equity correlations, which is expected given that real estate companies are relatively homogeneous. We can also observe that the trends in correlations are almost identical, supporting that real estate companies are impacted by the same market forces as all other stocks. The data shows that correlations increased in the Global Financial Crisis in 2008 to 2009 and only significantly reduced in 2012, when the risk sentiment on markets was changed by the comments from the European Central Bank’s President Mario Draghi to support the Euro “whatever it takes”.

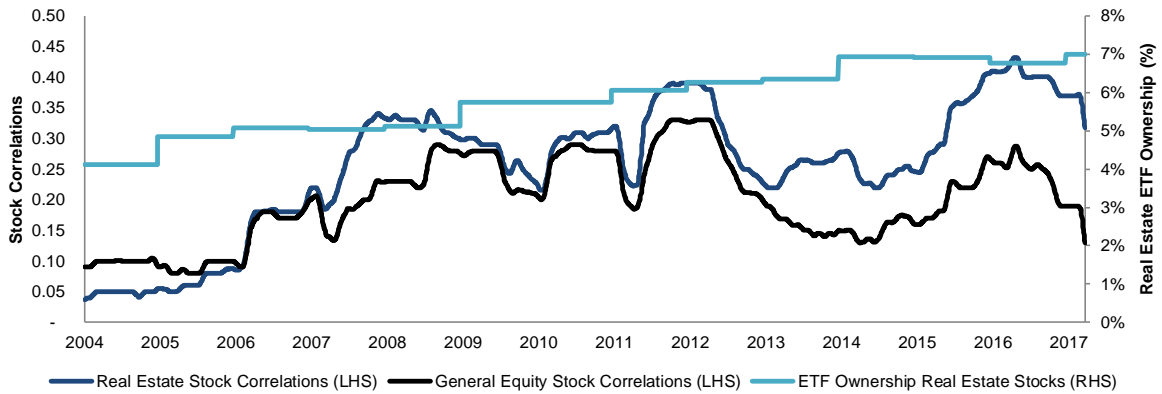
There doesn’t seem to be a relationship with ETF ownership as this is steadily upward trending while correlations are quite volatile over time. Market participants might have expected rising correlations given that investors are now trading more baskets of stocks than individual stocks, so the decreases in stock correlations in 2016 and 2017 are quite surprising given that ETF ownership is at its all-time high.

Chart 8: Stock Correlations & ETF Ownership (2004 - 2017): Developed North America



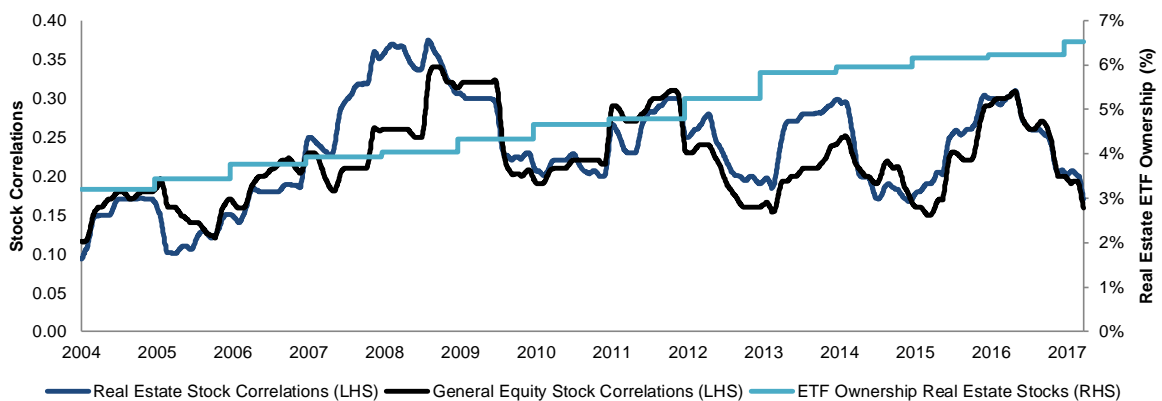
Source: EPRA, FactSet

Chart 9: Stock Correlations & ETF Ownership (2004 - 2017): Developed Europe



Source: EPRA, FactSet

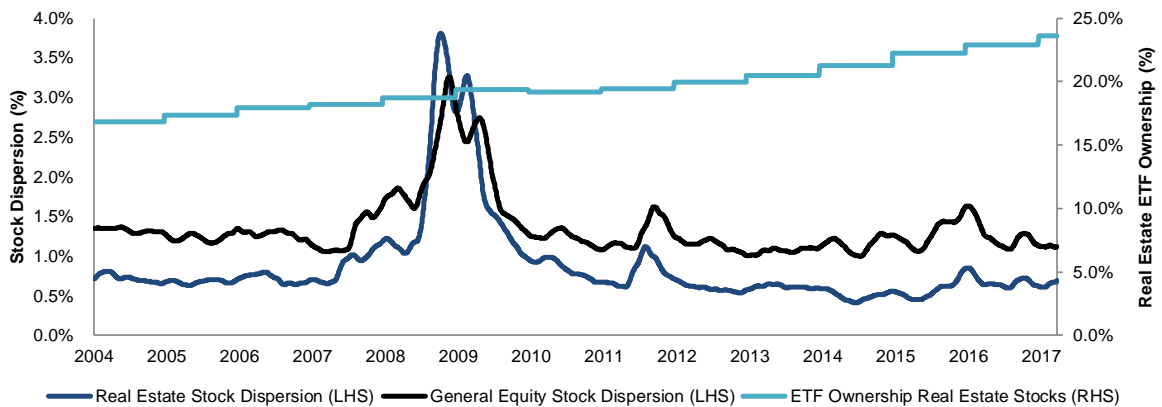
Chart 10: Stock Correlations & ETF Ownership (2004 - 2017): Developed Asia



Source: EPRA, FactSet

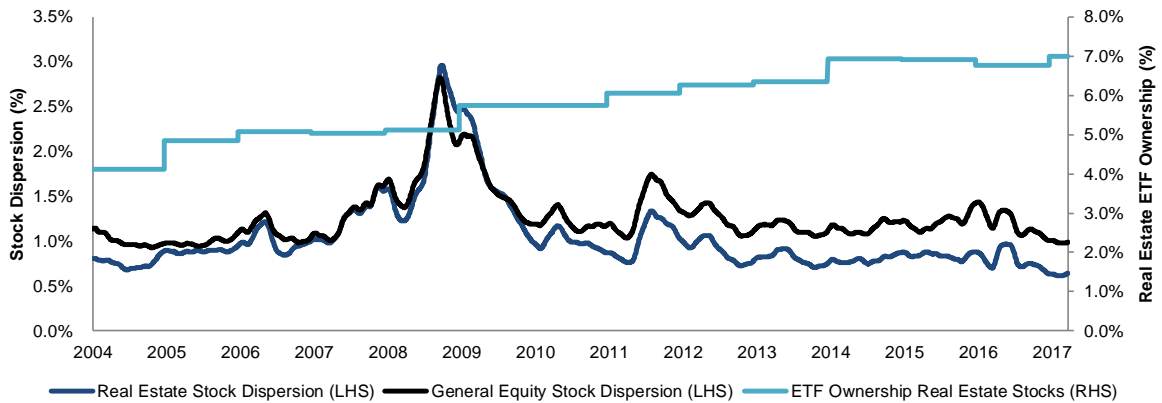
As a next step, we will analyse the impact of ETF ownership on stock dispersion, which is important for investors trying to outperform their benchmark. If dispersion is high, then stocks trade heterogeneously and opportunities to create alpha make themselves available. If dispersion is low, stocks tend to trade like each other and few alpha opportunities exist. The Charts 11, 12, and 13 highlight that stock dispersion in real estate stocks is structurally lower than in equities, which is to be expected given that stocks in a sector tend to be homogeneous, and that the trends of real estate and equities dispersion are highly correlated. Given rising ETF ownership investors might expect lower dispersion as investors trade more baskets than stocks, however, the analysis does not indicate a relationship between stock dispersion and ETF ownership.

Chart 11: Stock Dispersion & ETF Ownership (2004 - 2017): Developed North America



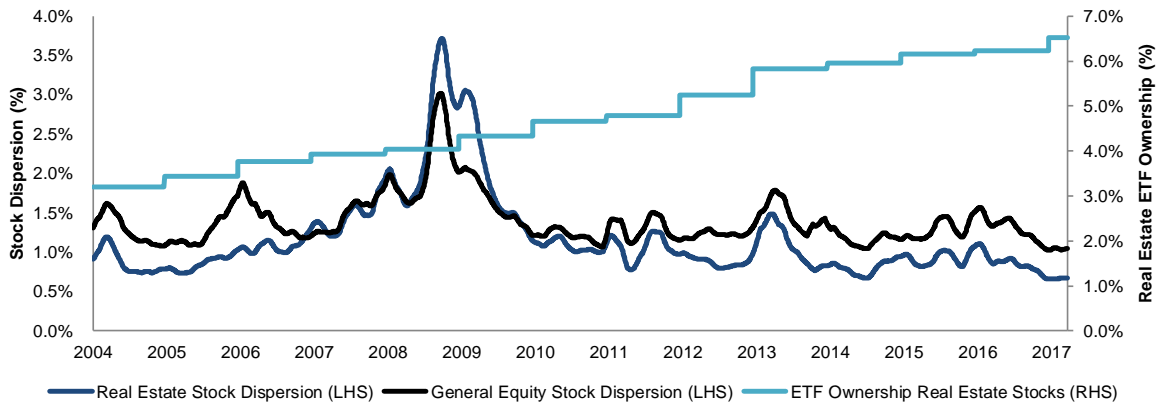
Source: EPRA, FactSet

Chart 12: Stock Dispersion & ETF Ownership (2004 - 2017): Developed Europe



Source: EPRA, FactSet

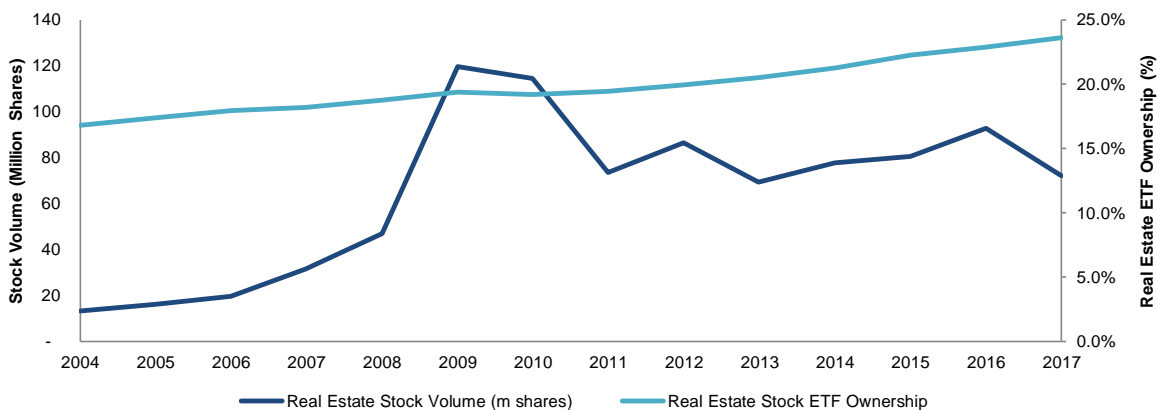
Chart 13: Stock Dispersion & ETF Ownership (2004 - 2017): Developed Asia



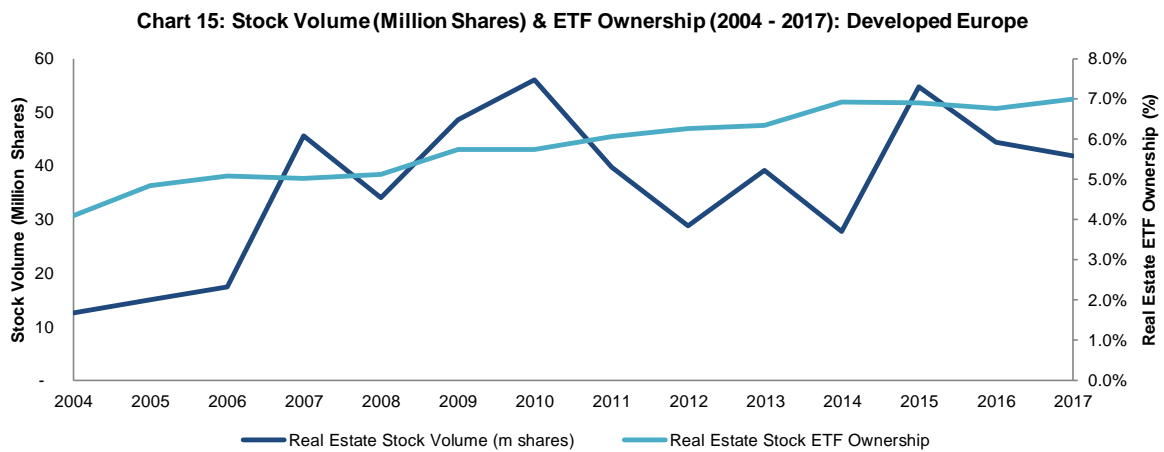
Source: EPRA, FactSet

As a final piece of the analysis, we will analyse the volume of real estate stocks traded and ETF ownership. When an investor buys (sells) an ETF, then typically this does not mean the ETF provider is buying (selling) shares of the underlying securities, but that the investor is matched with another investor that wants to sell (buy) his ETF. The rise of ETFs therefore shifts liquidity from the underlying securities to the ETFs. The Charts 14, 15, and 16 do not indicate a clear relationship between volume and ETF ownership. Volume peaked in the Global Financial Crisis, so is likely more related to volatility than to ETF ownership.

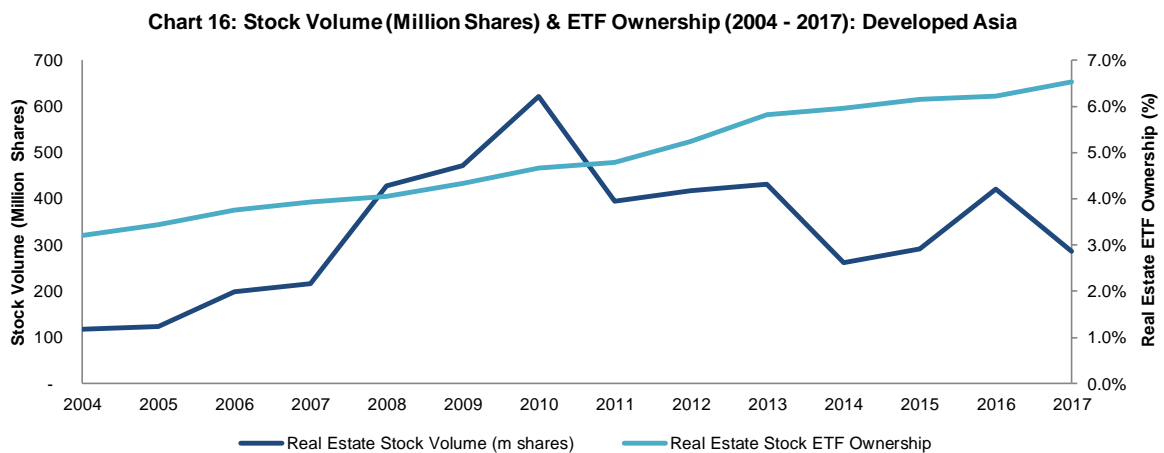
Chart 14: Stock Volume (Million Shares) & ETF Ownership (2004 - 2017): Developed Americas



Source: EPRA, FactSet



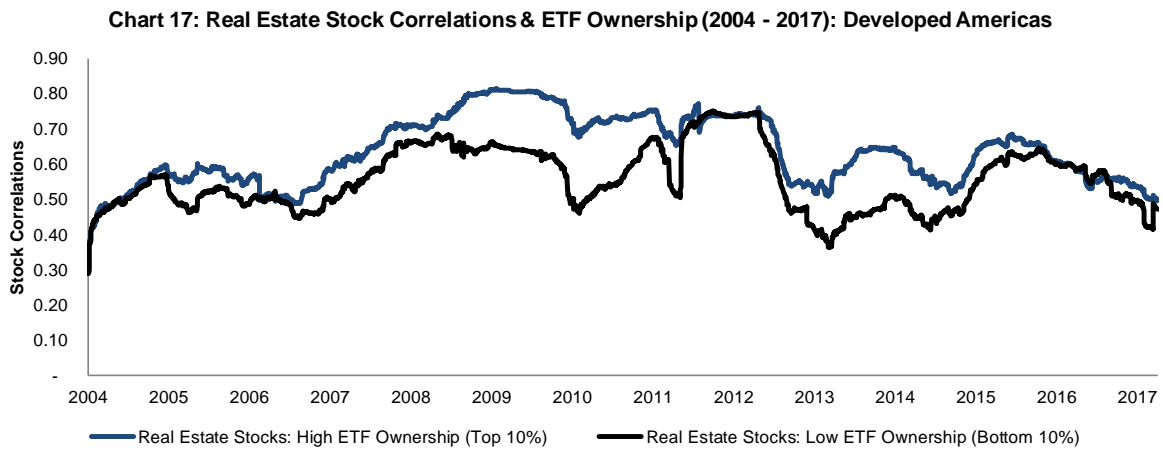
Source: EPRA, FactSet



Source: EPRA, FactSet

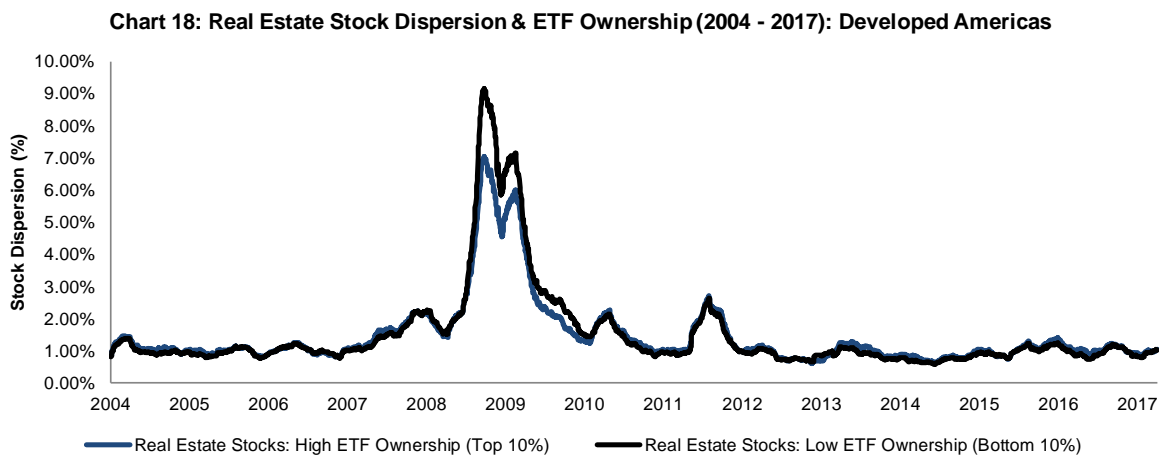
The analysis so far focused on the absolute levels of correlation, dispersion, and volume and ETF ownership, where no clear relationships crystallized. As a next step, we will look at the same variables, however, use the top and bottom 10% of real estate stocks ranked by their ETF ownership. We conduct this only for the US as there are not sufficient real estate stocks available in other regions for this to be meaningful, especially in the early years.

Chart 17 shows the stock correlations for the real estate stocks with the highest and lowest ETF ownership. We can observe that stocks with higher ETF ownership exhibit slightly higher correlation on average, which is expected given that these are more traded in as a basket of stocks. However, the difference is minor, and it is questionable if this is a structural difference.



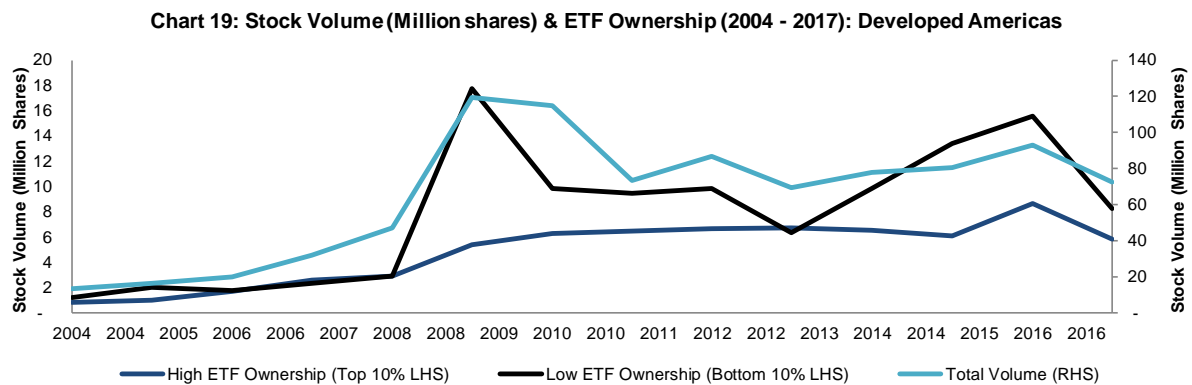
Source: EPRA, FactSet

Chart 18 highlights the stock dispersion for the real estate stocks with the highest and lowest ETF ownership. We would have expected that stocks with higher ETF ownership show lower dispersion as these are more likely to be traded as baskets, but the results do not reflect this.



Source: EPRA, FactSet

Chart 19 shows the stock volume for the real estate stocks with the highest and lowest ETF ownership. Volume is not relevant in terms of absolute levels, but the trends might be of interest. Market participants might expect stocks with higher ETF ownership to show a decrease in volume as liquidity migrates from stock level to the ETF. We can observe a difference between the two portfolios, but it is not clear if it is related to the ETF ownership.



Source: EPRA, FactSet

Discussion on Real Estate Market Participants

The long-term impact of ETFs on the listed real estate market will likely be different for the key market participants, which are investors, fund managers, and real estate company executives.

INVESTORS

Investors have been the key beneficiaries of the growth in ETFs in the listed real estate sector. ETFs, compared to mutual funds and other investible products, are tax-efficient, low cost, transparent, and tradeable throughout the day.

Investors can access the Vanguard VNQ ETF, which tracks the MSCI US REIT Index, at a total expense ratio of 0.12%, which makes the ETF compelling for any investor seeking exposure to the listed real estate market in the US.

Most real estate ETFs are country or sector focused while there are few smart beta ETFs, which provide single or multi-factor exposure for real estate stocks. Smart beta products have been growing faster than country or sector ETFs outside of real estate and more product launches in real estate are to be expected, which will give investors even more choice in terms of investible products. Blackrock, a provider of active and passive products, expects smart beta products to reach \$1.0 trillion by 2020 and \$2.4 trillion by 2025.

FUND MANAGERS

Fund managers in listed real estate have been negatively impacted by the growth of ETFs as they have been losing market share. The decision for choosing passive over active is rational given the low alpha generation by fund managers. Hartzell, Muehlhofer and Titman (2008) find that only 6.16% of US REIT fund managers outperformed their benchmark between 1994 and 2005. We are not aware of any more recent studies available for listed real estate fund managers, but we can use newer research from general equities as a proxy. According to the latest US fund manager scorecard by S&P 500 over the 15-year period ending December 2016, 92.15% of large-cap, 95.4% of mid-cap, and 93.21% of small-cap fund managers failed to outperform their respective benchmarks. For investors to regain interest

in active managers these need to either to decrease their fees or increase their alpha generation.

Cremer's et al (2015) highlight that fees of fund managers are lower in countries with higher ETF ownership compared to countries with lower ETF ownership, which highlights the fee pressure on active managers from the passive industry. The average fee for an actively managed US equity fund is 82 basis points compared to 9 basis points for a passively managed US equity fund according to the Investment Company Institute (2016). Fund managers will likely continue to decrease their fees over time, but cannot compete with ETFs purely on fees as their businesses have higher cost bases.

In terms of increasing the alpha generation real estate fund managers could try exploit the characteristics of ETFs. Passive country or sector products simply replicate indices, which are usually market capitalization weighted, and don't discriminate between stocks based on fundamentals. If ETFs continue to grow and would reach a level where they would be dominant shareholders in all listed companies, then the pricing mechanism of capital markets is likely to become impaired as stocks would move together with fundamentals not being very relevant anymore. However, companies that have positive fundamentals could simply distribute more dividends to their shareholders. Although the active manager would not be able to generate much alpha from prices, he could overweight stocks that are increasing their dividends and therefore generate a higher total return. However, ETF ownership is currently still far away from being at such extremes and investors couple replicate the strategy by buying ETFs with a focus on dividend yields.

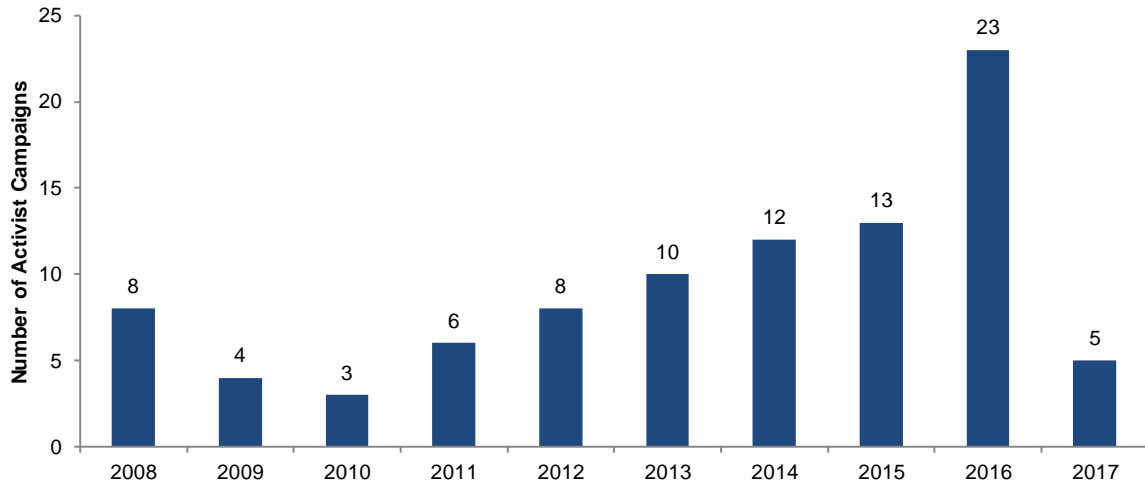
Fund managers could attempt index front-running, which implies buying or selling real estate stocks before they are included in or excluded from an index, at which point ETFs are forced to buy or sell these. Although real estate fund managers might attempt the strategy, it is worth highlighting that there are quantitative fund managers that specialise in this strategy and any alpha is likely arbitrated away or would require substantial investment in quantitative personnel and infrastructure to be competitive.

Another opportunity would be too focus explicitly on factors like Value or Momentum, which have proven to show consistent positive performance across countries, sectors, and time. However, these factor exposures are rapidly becoming available in very cost competitive smart beta solutions, which are already popular with investors and will also further erode any structural alpha.

We believe that one path for survival for fund managers is to become increasingly activist shareholders. Fund managers might not be accurate at forecasting stock prices, but should have an excellent understanding of company fundamentals and possibilities of improving these. They can pursue different strategies to improve companies, either in the full view and potentially support of the public or in private. Common strategies include improving the corporate governance, changing the strategy, pushing for cost cutting, or enabling a merger and acquisition activity.

Downs, Straska and Waller (2016) highlight that only 114 out of 4,119 activist campaigns between 2006 and 2014 were launched against real estate stocks. They also note that the short-term price reaction to activism is positive, which is also observed in activist campaigns in general equities. Recent FactSet data shows that 9.8% of all campaigns in 2016 involved listed real estate companies, which is a significant increase compared to previous years. This increase can be explained by more interest in real estate from general activists like Corvex Capital and by the emergence of dedicated sector activists like Land & Buildings. Chart 20 shows the steady upward trend of activist campaigns in the US real estate sector, which for 2017 only includes data until June.

Chart 20: Number of Activist Campaigns Against US Real Estate Stocks



Source: S&P Global Market Intelligence. Data as of June 2017.

Table 1 exhibits selected activist campaigns against real estate stocks, all of which are North American. There are many companies in Europe and Asia that have potential for significant shareholder value creation, but activists do require shareholder-friendly laws to engage with a company. The lack of adequate tools for activists outside of the US is likely the reason for fewer campaigns in these regions. There have been cases in Europe, e.g. when the Dutch pension fund PGGM successfully campaigned for the removal of the chairman and chief executive of the German residential real estate company GSW in 2013, and Asia, e.g. when disgruntled shareholders of Singaporean Sabana REIT campaigned for the removal of the manager in 2017, however, most of these are opportunistic campaigns from existing shareholders. There are dedicated real estate activist funds in Europe like the Terra Catalyst Fund and ICAMAP Advisory, but these tend to act much less confrontational and less in the public view than the US activist funds.

Table 1: Selected Campaigns Against US Real Estate Stocks

Activist Fund	Activist Focus	Real Estate Company	Ticker	Campaign Start	Relative to FTSE NAREIT/EPRA US		
					1-Month	3-Month	12-Month
Corvex	Equities	CommonWealth REIT	CWH	26-02-13	11.17%	26.65%	(5.11%)
Land & Buildings	Real Estate	BRE Properties	BRE	31-07-13	2.44%	(3.28%)	(16.81%)
Land & Buildings	Real Estate	Associates Estates	AEC	03-06-14	(1.10%)	1.50%	10.00%
Corvex	Equities	Crown Castle	CCI	14-10-14	5.24%	12.59%	4.92%
Land & Buildings	Real Estate	Pennsylvania REIT	PEI	20-10-14	(7.29%)	(4.69%)	(0.41%)
Corvex	Equities	American Realty Capital	ARCP	29-12-14	(3.42%)	(10.30%)	4.30%
Land & Buildings	Real Estate	MGM Resorts	MGM	17-03-15	0.18%	6.46%	8.08%
Land & Buildings	Real Estate	Macerich	MAC	02-04-15	(7.99%)	(6.59%)	(3.41%)
Sorin Capital	Equities	New York REIT	NYRT	16-06-15	(6.13%)	(9.66%)	8.63%
Land & Buildings	Real Estate	American Residential	APRI	30-11-15	(4.75%)	7.22%	7.22%
Land & Buildings	Real Estate	NorthStar AM	NSAM	11-01-16	52.85%	17.15%	(10.92%)
Land & Buildings	Real Estate	Felcor Lodging	FCH	28-01-16	(7.88%)	(0.06%)	(6.10%)
Land & Buildings	Real Estate	Taubman	TCO	18-10-16	(6.77%)	(1.24%)	19.89%
Land & Buildings	Real Estate	Brookdale Senior Living	BKD	20-12-16	(15.38%)	7.58%	(6.69%)
Land & Buildings	Real Estate	Forest City	FCEA	30-01-17	1.78%	(0.87%)	(4.48%)
Average					0.86%	2.83%	0.61%

Source: FactSet, EPRA, Company Websites.

Most activist shareholders today own only small percentages of the target companies, which is different to the past where activists tended to have large stakes. This new development empowers smaller fund managers to articulate ideas about creating shareholder value and execute activist campaigns similar to larger fund managers.

Pension funds, who also invest in ETFs, have started to recognize the critical role that activist shareholders play for capital markets, especially as ETF ownership is increasing, and started to allocate more capital to these managers, which makes shareholder activism more attractive for fund management companies from a business perspective.

Naturally it will be challenging for fund managers to reinvent themselves as activist investors as it will require new skillsets. However, they are likely in the best position to identify which real estate companies can be improved and can position themselves in the stocks before they start campaigning. Medium- to long-term this is likely the most promising path to holding or even regaining market share from ETFs.

LISTED REAL ESTATE COMPANY EXECUTIVES

The executives of listed real estate companies are likely less negatively affected by the growth of ETFs than fund managers, however, it is not clear that ETFs on their shareholder registry is a positive evolution. ETFs comprise now 11.8% of the average listed real estate company, therefore have become a meaningful shareholder.

Real estate executives typically know their largest investors and tend to meet them on a regular basis, usually after an earnings release. The close relationship is important as fund managers do not only buy and sell shares, but often provide valuable feedback to corporate management. The relationship becomes especially critical when listed real estate companies access capital markets as fund managers need to be supportive for a successful capital raising.

The increase in ETF ownership is diluting these relationships as fund managers have less economic interests in the companies. Real estate executives might receive less critical feedback from passive investors than from active investors, but also less support when they require it. If passive investors become dominant investors, which is likely to occur in the near future, then this might impair the efficiency of capital markets.

Conclusion

In this paper we examine the long-term impact of ETFs on the listed real estate market. We survey the literature discussing the impact of ETFs on general equity markets and find that rising ETF ownership likely has a negative impact of capital market efficiency. We provide a brief overview of the evolution of the passive ownership in the listed real estate market. Our empirical results do not highlight a clear relationship between ETF ownership and real estate correlations, dispersion, or volume. However, the sample of real estate stocks available for analysis is also limited, which might obscure any relationships. We discuss the long-term impact of ETFs on the listed real estate market, which is positive for investors, negative for fund managers, and somewhat neutral for real estate company executives. We highlight that for active fund managers a path for survival is to become increasingly activist shareholders.

References

- Ben-David, I., Franzoni, F. and Moussawi, R. (2014)** Do ETFs Increase Volatility? Working Paper. National Bureau of Economic Research.
- Birstingl, A. and Coronato, M. (2017)** 2016 Shareholder Activism Review. FactSet.
- BlackRock (2016)** BlackRock Projects Smart Beta Assets Will Reach \$1 Trillion Globally by 2020, and \$2.4 Trillion by 2025.
- Cremers, M., Ferreira, M., Matos, P., Starks, L. (2015)** Indexing and Active Fund Management: International Evidence. Working Paper. SSRN.
- Da, Z. and Shive, S. (2016)** Exchange Traded Funds and Asset Correlations. Working Paper. SSRN.
- Draghi, M. (2012)** Speech by Mario Draghi, President of the European Central Bank at the Global Investment Conference in London 26 July 2012. European Central Bank.
- Downs, D., Straska, M. and Waller, G. (2016)** Shareholder Activism in REITs. European Financial Management Association.
- Hamm, S. (2014)** The Effect of ETFs on Stock Liquidity. Working Paper. SSRN.
- Hartzell, J., Muehlhofer, T. and Titman, S. (2008)** Alternative Benchmarks for Evaluating REIT Mutual Performance. Working Paper. SSRN.
- ICI (2016)** Trends in the Expenses and Fees of Funds. ICI Research Perspective.
- Israeli, D., Lee, C. and Sidharan, S. (2017)** Is there a Dark Side to Exchange Traded Funds? An Information Perspective. Working Paper. SSRN.
- Kizer, J. And Grover, S. (2017)** Are REITs a Distinct Asset Class? Working Paper. SSRN.
- Madhavan, A. and Sobczyk, A. (2015)** Price Dynamics and Liquidity of Exchange-Traded Funds. Working Paper. SSRN.
- Moody's Investor Service (2017)** Passive Market Share to Overtake Active in the US No Later than 2024
- Pan, K. and Zeg, Y. (2017)** ETF Arbitrage under Liquidity Mismatch. Working Paper. SSRN.
- Soe, A. and Poirier, R. (2017)** SPIVA U.S. Scorecard. Research SPIVA. S&P 500 Dow Jones Indices.
- Vanguard (2017)** Vanguard REIT ETF Factsheet December 31, 2016.
- Yeatts, T. and Yanushevsky, C. (2017)** Activists Upping the Ante in Real Estate, S&P Global Market Intelligence.