US RESIDENTIAL REAL ESTATE
MARKET BACKGROUND AND OUTLOOK FOR 2017

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EXECUTIVE SUMMARY

- Between July 2006 and mid-2012, the US residential real estate market declined by 34%[1], the deepest nationwide crisis on record. Single family residential ('SFR') market values still have not overtaken their previous heights. The 'multi-family' (or apartment) market, on the other hand, has recovered strongly, and asset values are already 39% above their prior peak[2]
- In 2012, Aalto entered the SFR market, and today, having built up a five year track record, the firm manages over 3,300 core SFR assets on behalf of sophisticated institutional investors
- Aalto attempts to find desirable metropolitan areas with long-term population growth, above national average household incomes and highly rated schools
- Our investment approach has two sub-strategies:
  1. Core rental: Existing houses are acquired, refurbished and rented to tenants. Rental income is the key driver of potential investment returns
  2. Value-add development: Land is acquired, houses are built and then either sold to home owners or rented for potential long-term income

INTRODUCTION

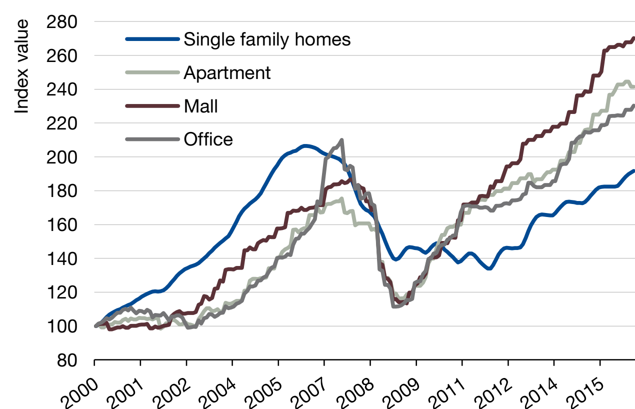
The US housing market represents one of the largest asset classes in the world, with an estimated value of USD28 trillion[3]. Whilst a major part of the market remains 'owner-occupied', there are currently 15.7 million investor owned SFR rentals with total capital value well in excess of USD2 trillion[4]. The SFR category grew substantially in the wake of the Global Financial Crisis ('GFC') as home ownership declined. The total is now not far from the estimated 17.9 million multi-family rentals.

In general, we believe that US SFR could offer investors long-term, stable and diversified income with low price volatility relative to the wider market. We think that current valuations remain attractive relative to other US real estate markets (e.g. offices and multi-family residential). Whilst these other segments have enjoyed notable rebounds since their crisis nadirs, SFR has still not overtaken its pre-crash peak, as demonstrated in figure 1. We believe that SFR now has the potential to enjoy a similar rise, for a variety of reasons which we will later outline. For investors allocating new money to US real estate, therefore, the relative valuation of SFR could be compelling.

We also think that the market composition of US SFR is reaching a very interesting point. The space has traditionally been dominated by small investors and individuals, but in recent years there has been greater involvement from institutional players. We think that this has allowed for best practices to be developed, whilst transparency, cost management, investor returns and liquidity have improved. This is particularly important when dealing with SFR portfolios which, by their nature, involve managing a highly diversified asset base across several metropolitan areas.

In terms of outlook, we think that this trend of institutionalization has a lot further to run. Invitation Homes, a REIT managed by Blackstone, is the biggest investor in US SFR, controlling 50,000 units, which equates to little more than 0.3% of the available stock.[5] This demonstrates to us how fragmented the space still is, and how much headroom remains for further institutionalization. As this happens we believe the sector will become an even more attractive place to invest. In the meantime we view it as being to the advantage of investors such as Aalto to be operating in a fragmented market of smaller competitors.

Figure 1. US housing market recovery lags commercial real estate[6]



We believe that the fundamentals relating to future demand in the US SFR space remain strong due to:

- Mortgage availability for homebuyers remaining constrained, as much as 80% below peak[7] by some estimates. According to one survey, 67% of consumers believe it to be difficult to obtain a mortgage despite low interest rates[8]. We believe that we are nearing a turning point in this trend. Many Americans who had adverse credit history (e.g. foreclosure or a short-sale during the GFC) are slowly reaching the stage where their credit scores are improving and this could feed through into greater demand for

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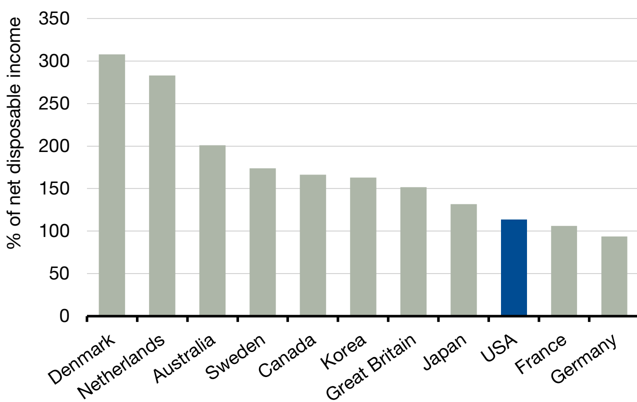
1. Case Schiller 20 city house price index. **2.** Green Street Advisors CPPI Sector Indices. **3.** Zillow year end 2015 for all residential assets (including single family and multi-family). **4.** Calculated as USD183,000 average SFR price (Zillow year end 2015) multiplied by 15.7m number of SFR houses (Green Street Advisors, 6 June 2016). **5.** Company reports as at December 2016. **6.** Green Street Advisors CPPI Sector Indices, Case Schiller. **7.** Mortgage Bankers Association. **8.** New York Federal Reserve's annual SCE Housing Survey.

mortgages and owner-occupied housing units. We doubt that the mortgage market will again reach its heady pre-crisis levels, but even a mild increase may have a significant positive impact, given the lows to which the market has sunk

- US household balance sheets materially deleveraging since they hit peak debt in 2008. Today both household-debt-to-GDP, and household-debt-to-disposable-income are back to the lows of the early 2000s[9]. This has left the US in a position where household leverage is now below most other large economies (see figure 2). This gives potential headroom for re-leveraging which in turn could fuel an increased in demand if mortgage availability expands (see above)
- Affordability (as measured by price-to-household-income) remains attractive in many sub-markets in our view
- The unemployment rate in the US has fallen to 4.6% from the 10% peak it hit in December 2010. Simultaneously job openings are at all-time highs[10]
- Average real wage growth has continued to accelerate, potentially giving consumers a greater ability to absorb higher rents in the future

Figure 2. US household debt has fallen significantly since 2008[9]



BACKGROUND (1): COMPARISON OF MULTI-FAMILY AND SFR ASSETS AND TENANTS

The multi-family market typically caters for singles with a more transitory housing need, as illustrated in the table below. This bracket includes students, young professionals, as well as older people or couples with no children.

There is far less homogeneity amongst SFR occupiers. Aalto limits its focus to 'middle class+' tenants, and to what we feel are higher quality assets. We seek to achieve this goal by choosing what we believe to be the right neighbourhoods with above average income, low unemployment and good school rankings.

	Multi-Family[11]	Single-Family[12]
Unit Size	Typically 1-2 bedrooms, 600-900 sqft (55-80m²)	Typically 3-5 bedrooms, 2,100 sqft (or 195m²)
Tenant Profile	48% singles, 14% single parent with children, 9% families with children	80%+ families with children
Tenant Income	Median renter income of USD34k pa	Median household income of USD80-100k pa
Monthly Rent	USD900-1,300 per month	USD1,500 per month

BACKGROUND (2): EUROPE VS. NORTH AMERICA

There has been significant dispersion in residential real estate market returns, across both North America and Europe, over the past 15 years (see figure 3). Although most markets performed well leading up to the GFC, fortunes have diverged markedly since then. Most notably, the US housing market experienced the deepest nationwide housing crisis on record between July 2006 and mid-2012, with a fall of 34%[13]. Most of the core European markets, on the other hand, had a more benign and shorter price correction during 2008/9, and then recovered the losses, before continuing on a path of asset price inflation.

Today, the US housing market stands at a similar price level to 2006. In other words, over the last decade the sector has 'enjoyed' 0% cumulative nominal capital growth, and significant value destruction in inflation adjusted real terms. The US market performance is in stark contrast to Australia, Canada and many European countries, where asset values are at all-time-highs whilst also being more expensive in terms of affordability (see figure 4). Whilst the property bubble fears of some commentators may have some validity in these geographies, such observations have limited applicability to the broader US market, in our view.

Figure 3. Residential real estate values in real terms[14]

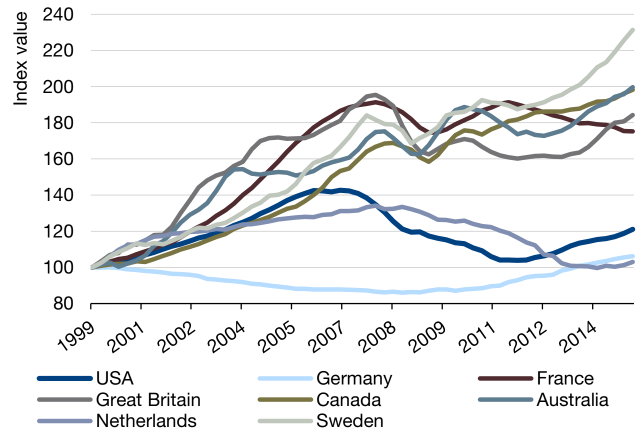
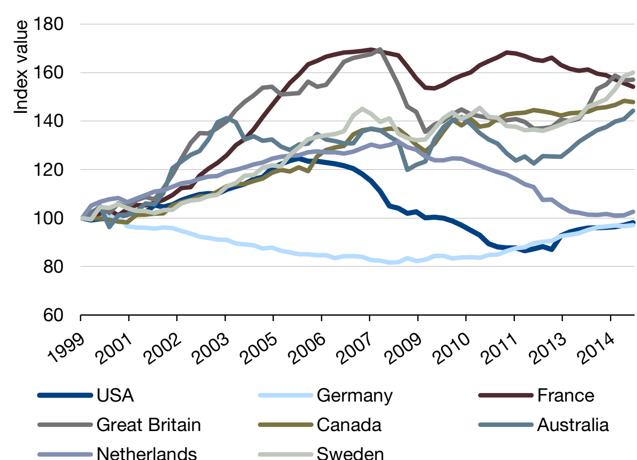


Figure 4. Residential real estate values vs. average income[14]



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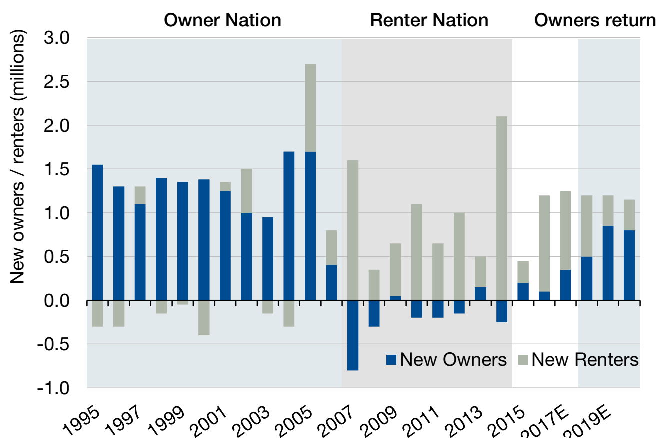
9. OECD. **10.** Bloomberg and Bureau of Labor Statistics, November 2016. **11.** National Multi Family Council, American Community Survey. **12.** Man GPM Aalto estimate for assets managed by Man GPM Aalto. **13.** Case Schiller 20 city house price index. **14.** The Economist and OECD

OUTLOOK (1): MEDIUM TO LONG TERM

The US housing market experienced a significant change in composition between 2007-2015. The number of rental SFR units increased dramatically to 15.7 million today, not far off the 17.9 million multi-family rental housing units. As the SFR units are typically larger (usually around 3-5 bedrooms) than multi-family (1-2 bedrooms), the total population living in SFR rental houses is now larger than the multi-family rental accommodation.

Another medium term trend is that, as the US economy and housing markets recover from the fallout of the GFC, the market is starting to become more balanced with more owners forecast to return over the coming years (See figure 5, below).

Figure 5. 'Renter Nation' starting to see slow return of 'Home Owners'[15]



Interestingly, our research indicates that prospective homebuyers are not assessing potential purchases on the basis of rental yield, but instead based on factors such as location, condition and comparable sales in the relevant neighbourhood. We believe that the greater permanence of these factors will mean that the 'return of the homeowner' can become a more persistent trend, and that capital values can find more lasting support.

Also at the forefront of our considerations are the unique demographic trends in the US, which could impact the market significantly over the medium to long term. Not only does US population growth continue to exceed most developed nations, but the nation has a comparatively large 15-34 age bracket. Census data indicates that around 27% of the population is within this age range, comparing favourably to other Western economies such as the UK (26%), France (24%), Germany (23%) and Italy (21%)[16]. This is important as this specific segment is typically characterized as producing the most rapid household formation. Research by Morgan Stanley suggests that the 15-34 age cohort in the US could generate 10 million additional households in the next five years.

In many sub-markets, so far this particular age cohort has been driving the apartment rental demand (and thus multi-family construction) in recent years. Concurrently, the "millennials" have over USD1.2trillion in student loans[15]. This has curtailed their ability to access financing given that mortgage providers are wary of seeing significant debt in another part of the applicant's balance sheet. This increases the preponderance of this age group to rent rather than to buy. It is important to note, however, that this trend may not necessarily remain consistent. As discussed in the first background section, there tends to be a fairly binary division between the occupants of multi-family versus SFR, with the former tending to be singles, and the latter families. As the 15-34 age segment begin starting families of their own, they may well migrate from the former to the latter, potentially lending SFR further momentum over the medium to long term.

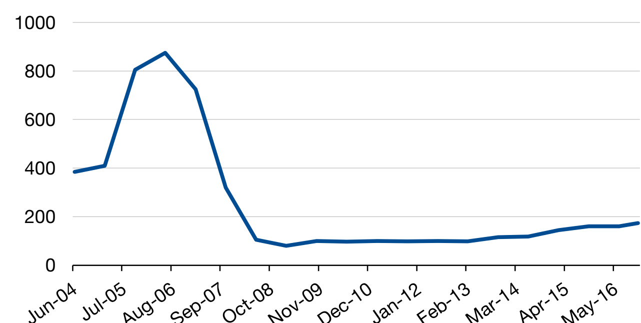
In our view, these trends create a medium to long term investment opportunity at the intersection of the rental and homeowner segments of the US housing market. To extract this value, however, we believe investors need to maintain a dedicated and diligent focus on asset location and quality.

OUTLOOK (2): SHORT TERM

We believe that the shorter term market dynamics are driven by the health of the US consumer, interest rates, mortgage availability and supply of new homes. In the paragraphs that follow we briefly give our views on each of these.

1. **The health of the US consumer:** US consumer leverage is at early 2000's levels (based on debt-to-income ratios), and wage growth has recently started to accelerate as unemployment falls (now under 5%). These factors are also contributing to the higher than expected GDP growth as has been recently reported[17].
2. **Interest rates:** US rates have recently started rising off the back of expectations of improving economic growth and expansionary policies from president-elect Trump. Generally speaking, rising interest rates have a negative impact on housing affordability due to increased mortgage costs to homeowners. In this instance, however, when rising rates are being fuelled by a bullish macro outlook, then the adverse impact on mortgage affordability could, in our view, be outweighed by economic optimism. This would mean that the net effect would be moderately positive for housing over the short term, driven by stronger employment and wage growth which in turn could cause a moderate rise in interest rates
3. **Mortgage availability:** Mortgage availability has been constrained since the financial crisis, as is illustrated in figure 6. Despite suppressed interest rates leading to historically low debt costs, the credit underwriting pendulum has swung a long way from the laissez-faire standards of the 2000's to a point of extreme strictness. We believe that we are now past the high watermark of this parabola, and that mortgage underwriting standards are now on a trajectory towards becoming more accommodative, as evidenced by the incoming administration's clear intentions to unwind many consumer protections put in place after the GFC, such as all or part of the CFPB. Complementing this, many credit records tainted by defaults around the GFC are coming to the point where the adverse history will be erased (this usually happens 7-9 years after the event). For those prospective buyers who defaulted between 2008-2010, but have had a clean credit history since then, they could soon have their credit scores restored. This may make it easier for them to access mortgage financing. We believe that this can act as a tailwind to demand in the near term.

Figure 6. US mortgage availability index[18]



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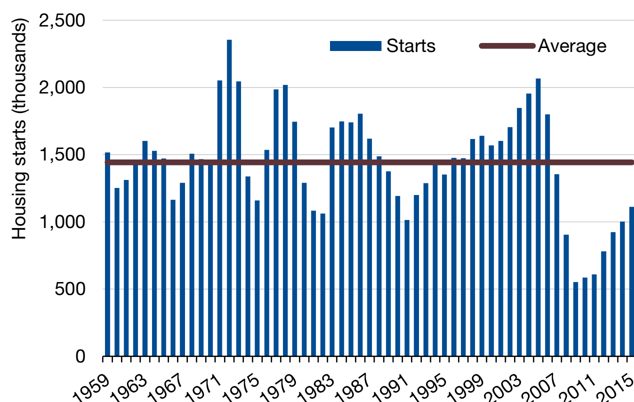
15. Green Street Advisors, 6 June 2016. **16.** United Nations Department of Economic and Social Affairs, July 2015 **17.** Bloomberg **18.** Mortgage Bankers Association.

4. **Supply of new homes:** The inventory of new homes for sale has rarely been at such a low level since records began in the early 1980's. Generally tight credit conditions have meant that builders of single-family homes have been struggling to access capital, and this has suppressed the availability of developed lots. It is important to note that this limited supply situation in the SFR market differs from multi-family where recent supply has been well above historical averages. This has been chiefly driven by large scale speculative development, aided by government sponsored entities' (e.g. Fannie and Freddie) supply of cheap debt financing to the sector. We expect the multi-family sector to start cooling down in terms of new supply whereas we feel that the single-family housing sector is likely to continue modestly recovering.

Figure 7. Supply of housing units well behind economic recovery[19]



AALTO'S INVESTMENT APPROACH

Following extensive market research, we started acquiring SFR assets in 2012, as the market reached the long-term cyclical bottom. Since then, we have, on behalf of investors, acquired or built over 3,300 properties across 14 different metropolitan areas.

Most of our investor capital has been contributed by pension funds with a long-term, income-oriented investment objective. We have therefore focused on markets where we think that the favourable long-term demographic trends are most in our favour. This means that we focus on geographies with low unemployment, growing populations and with diverse employment opportunities across different industries. In addition to favourable demographic trends, we concentrate on markets that we perceive to be offering attractive net rent/price relationship. Within a particular geography, we focus on micro-locations with above average household income, low crime and, in particular, good schools.

Our current investment approach focuses on two sub-strategies:

	Core Rental Strategy	Value Add Development Strategy
Investment universe	Macro locations: affordable housing with attractive rental yields in metropolitan areas with thriving economies Micro-locations: above average income neighbourhoods with good school rankings and low unemployment	
Objectives	Immediate rental income generation and moderate capital gains	Long-term capital growth through development of SFR assets
Cashflows	Semi-annual	Medium-term
Liquidity	Widely available via: ▪ Sale to homeowners ▪ Portfolio sale to large REITS ▪ Small portfolio sales to local investors	Widely available via ▪ Sale to homeowners or larger investors ▪ Build to rental with phased exit to other rental investors and or homeowners

CONCLUSIONS

The US SFR market is recovering from the deepest housing crisis on record. This recovery has involved significant change, not least of which has been the shift from owner-occupied assets to rental assets, which now number 15.7 million individual homes. The rental market has also been buoyed by stronger demand from institutional investors, who have been able to build more efficient platforms to manage this highly granular asset base. We believe that demand from individual buyers is also likely to receive a fillip from the mortgage debt markets which appear to be at an early stage of recovery.

We believe that this changing environment presents potential opportunities for those investors with the expertise and dedication to take advantage of them. We think that our investment approach – which focuses on large regional growth centres in markets that offer affordable homes, and where economic activity and demographic considerations are favourable – is well placed to capitalise on these trends. We concentrate on what our team believes to be good quality micro-markets where we build the portfolio through handpicking the right assets. We believe that this approach, which prioritises high average tenant household income, supports rental yields and is a potentially long-term profitable strategy.

We prefer SFR assets to multi-family. We see it as being at a different point in the cycle, with valuations remaining affordable both in relative and absolute terms. Within this space, we believe that investors currently have a compelling opportunity, either to (i) own long-term residential rental portfolios with potentially attractive net unlevered yields and long-term capital value growth potential, or (ii) to participate in diversified value-add development strategies in the same market or (iii) a balanced combination of the two strategies.

Mikko Syrjänen

Co-Head Real Assets

Mikko is Co-Head of Real Assets at Man GPM and a member of the Man Group Executive Committee. He is one of the founders of Aalto Invest and was previously their Chief Executive Officer and responsible for the real estate debt strategy with a particular focus on loan sourcing, underwriting and portfolio construction. Previously, Mikko co-headed Cheyne Capital's team responsible for real estate debt investments and illiquid alternative strategies. Prior to that, he was a vice president at Morgan Stanley's Investment Banking Division in London. He graduated from Helsinki School of Economics with a MSc in Finance.

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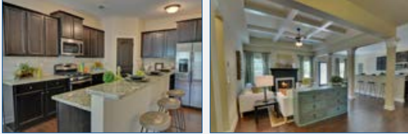
19. US Census Bureau.

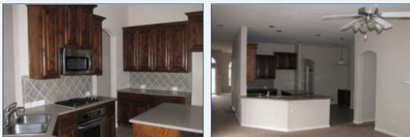
APPENDIX: CASE STUDIES



1560 Campbell Ridge Lane, Lawrenceville, Georgia

Value Add Development case study: Atlanta

- We illustrate a recent new-build example, constructed with a local builder in North-East of Atlanta
- Desirable suburb in Gwinnett County with good school ratings (9/10 for elementary school, 7/10 for middle school and 7/10 high school vs. national average of 5/10)
- Land lot was acquired as a part of a portfolio in January 2015, new home constructed and then sold in October 2015
- The subject property has 2,635 sqft (245m^2) with 5 bedrooms, 3 bathrooms



4401 Winding Glen Lane, 76063 Mansfield, Texas

Core Rental case study: Dallas

- We illustrate an example of an existing property purchased in South Dallas-Fort Worth, Texas
- Desirable suburb in Tarrant County with good school ratings (10/10 for elementary school, 8/10 for middle school and 8/10 high school vs. national average of 5/10)
- The existing home was built in 2007, and the lot and home were purchased in July 2013
- The subject property has 2,360 sqft (219m2) with 4 bedrooms, 2 bathrooms
- Total Aalto acquisition cost of USD213k (incl. refurbishment) or (USD 90/sqft) and latest rent of USD2,120 per month
- Property has been unoccupied for 62 days in the 3.4 years of ownership (including 30 day rehab period)

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