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The New Age of Buy-to-Rent: Institutions are Here to Stay

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Note: FIR = Morgan Stanley Fixed Income Research; ER = Morgan Stanley Equity Research

Institutional buy-to-rent is a sustainable business that could grow from ~$17B to >$100B over the next few years, and we see material upside in high quality single family REITs like ARPI. We also view BTR growth as a tailwind for HPA and housing-sensitive names like STI, BAC, TCB, HD, and LOW.

Not "just a trade" - We believe buy-to-rent (BTR) is a sustainable business with a long runway for growth. While initial net yields (~5-6% after cap ex) may fall short of WACC, we believe BTR must be evaluated on a total return basis. In the near-term, we expect home price appreciation (HPA) to augment cash flow and drive ROIC > 10%. In the long-run, while HPA may be less of a tailwind, we see upside to rents and expect margin expansion to drive sustainable double-digit ROIC.

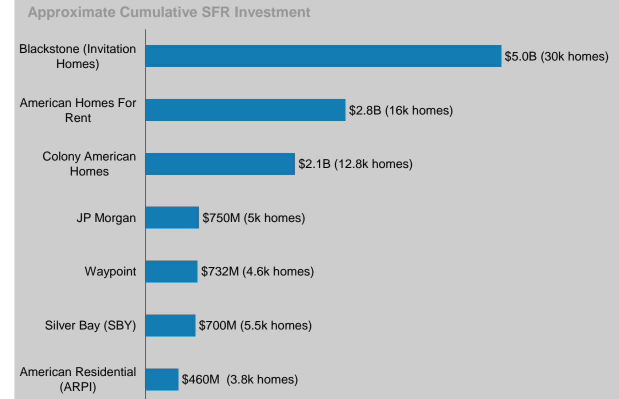
We believe the BTR industry could grow six-fold over the next few years. Our proprietary transaction data analysis shows institutional investment now totals ~$17B, and we think the market opportunity is >$100B.

The landscape of attractive BTR locations is changing. Select MSAs in Florida, the Midwest and the Northeast now constitute a greater proportion of the nation's distressed properties, making them potentially more attractive to institutional buy-to-rent investors.

The most direct way to play BTR is single family (SFR) REITs – we like ARPI. With SFRs trading below the liquidation value of their portfolios, we believe the market under-appreciates the long-term viability of BTR economics. We expect ARPI to emerge as a winner for its industry-leading operational experience / acumen.

BTR should also benefit US Banks STI, BAC & TCB as well as Home Improvement Retailers HD & LOW on increased housing activity and home prices.

Largest Known Institutional BTR Operators



Source: Company Data

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Vishwanath Tirupattur, James Egan and Jose Cambronero are Fixed Income Research Analysts and they are not opining on equity securities. Their views are clearly delineated.

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Investment Takeaways from our Deep Dive on Buy-to-Rent

We believe buy-to-rent (BTR) is a sustainable business with a long runway for growth. Institutional players are buying below replacement cost and realizing material home price appreciation (HPA) today with the prospect for strong cash flow growth over time. While initial net yields (~5-6% after cap ex) may fall short of WACC, we believe BTR must be evaluated on a total return basis. In the near-term, we expect HPA to augment cash flow and drive ROIC > 10%. In the long-run, HPA may be less of a tailwind, but we see upside to rents and expect margin expansion to drive sustainable double-digit ROIC. As such, we believe today's ~$17B institutional BTR industry can continue growing and perhaps reach over $100B over the next several years.

Institutional investors have targeted specific property types within certain states. Over 80% of homes have been purchased for less than $200K, and over 75% measure between 1,000 and 2,500 square feet. Institutional BTR activity has been heavily concentrated within California, Arizona, Florida and Georgia. In general, investors are attracted to locations with (1) sharp price declines that offer steep discounts to peak market values and (2) an overabundance of properties available at distressed prices.

The landscape of attractive BTR locations is changing. Over the past three years, investor activity has removed significant amounts of distressed supply from Southern California, Phoenix and Las Vegas. Consequently, select MSAs in Florida, the Midwest and the Northeast now constitute a greater proportion of the nation's distressed properties, making them potentially more attractive to institutional buy-to-rent investors.

Non-Agency MBS – Vishwanath Tirupattur & Jim Egan

We prefer Non-Agency RMBS with outsized exposure to Florida and other MSAs with strong buy-to-rent prospects. Legacy non-agency RMBS, particularly front-pay tranches, will likely benefit from institutional investors providing a backstop to liquidation recoveries, thus putting downward pressure on loss severities.

Single Family Rental REITs (SFRs) – Haendel St. Juste

We believe SFRs are among the most compelling investments in the REIT space. SFRs have been buying homes below replacement cost in markets where home prices have increased ~10-20% in the last year and will likely continue rising rapidly from here. While operating risk exists as this is an untested business, we think the HPA contribution to total return (and the fact that there is an active transaction market in which HPA can be monetized) would still make SFRs an attractive trade even if our bear case were to play out for margins and NOI growth. That said, we do expect margins and NOI growth to result in solid yields once portfolios stabilize, giving SFRs an attractive long-term return profile on both capital appreciation and cash flow. Said differently, we think that at valuations below book value today, SFRs are a good investment even if net yields disappoint, but we think net yields will work and make SFRs an attractive investment.

We expect ARPI to be a long-term winner in the space, and valuation is attractive. We think SFRs are differentiated on four key areas: 1) Management structure (internal vs. external); 2) Operational acumen; 3) Acquisition discipline; and 4) Scale. While no single SFR excels in all, we think ARPI stacks up well in each category except for scale (which will be an opportunity going forward). We also think valuation is attractive, with ARPI trading ~11% below the liquidation value of its portfolio.

Hardlines Retail – David Gober

BTR is a home improvement stimulant. We believe that BTR both accelerates home rehab spending directly and helps to stabilize/accelerate home prices, which further improves consumers' willingness to spend on their homes. Activity in the buy-to-rent market could benefit the home improvement industry directly by $20-30bn over the next 4 years as well as providing an indirect benefit from home prices.

HD will likely see a greater share of direct activity given that it has a ~20% share of the pro market vs. ~10% for LOW and we remain constructive on HD as it continues to execute at a very high level. Nonetheless, we continue to favor LOW as our preferred way to play buy-to-rent and improving home improvement activity given higher relative margin upside, stronger return of capital, and a more attractive valuation.

US Banks – Betsy Graseck & Ken Zerbe

Stronger buy to rent trends are a positive for several of the large and midcap banks, as BTR drives up HPA and increases housing transactions. This raises the value of bank assets and enables banks to clear out of delinquent and foreclosed properties more quickly. It also pulls more buyers into the market. We rank the banks based on two factors (lower NCOs and lower credit costs) to assess which banks benefit most from BTR trends.

Our top housing picks in the bank space include BAC, STI, TCB, and to a lesser extent, FRC. All four banks will benefit from geographies where BTR has driven up prices as the benefits to credit and transaction activity are just beginning to benefit bank asset quality and EPS. BAC, STI and TCB benefit from the better credit that comes from higher home prices and rising residential housing transactions; a 10% lower net charge-off (NCO) ratio and faster disposition of nonperforming loans lowers credit related expenses, both of which drive up EPS.

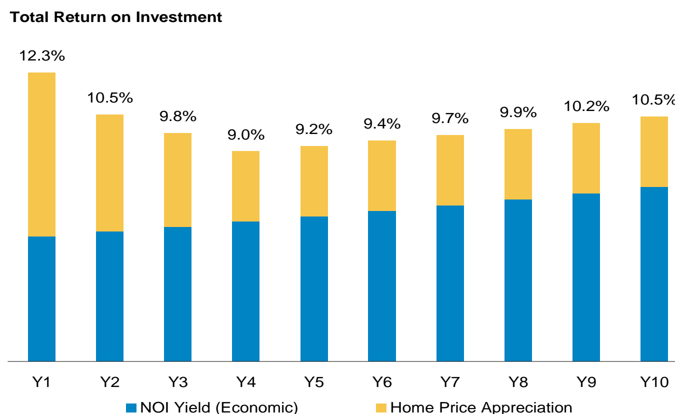
FRC, on the other hand, benefits more from stronger housing-related loan growth, rather than credit, with resi mortgage accounting for 64% of its total loans and our expectation for 20% Y/Y growth in 2013 due to slowing refis and greater demand for shorter-duration adjustable rate mortgages. All four banks are also well positioned for the markets where BTR is likely to accelerate, with more than 20% of total bank deposits in these top 10 BTR MSAs.

Key Debates

1. Is buy-to-rent on an institutional scale a sustainable business or a "trade"?

We believe the BTR business will work in the long-run. While initial net yields (~5-6% after cap ex) may fall short of WACC for public SFR REITs, we believe BTR investments must be evaluated on a total return basis. In the near-term, we expect HPA to augment cash flow yields and drive ROIC > 10%. While HPA will likely be less of a tailwind in the long-run, we expect margin expansion (on 3-4% annual rent growth and only ~2% expense growth) to drive ROIC comfortably above WACC. We also expect debt capital to become increasingly more available as lenders and ratings agencies see successful track records in the industry (securitization will be key). Finally, while we believe BTR is here to stay, we think it is likely the space will "over-grow" at first and then consolidate as some players cash in on HPA rather than operate the assets.

Long-run Unlevered Total Returns in the Double-digits

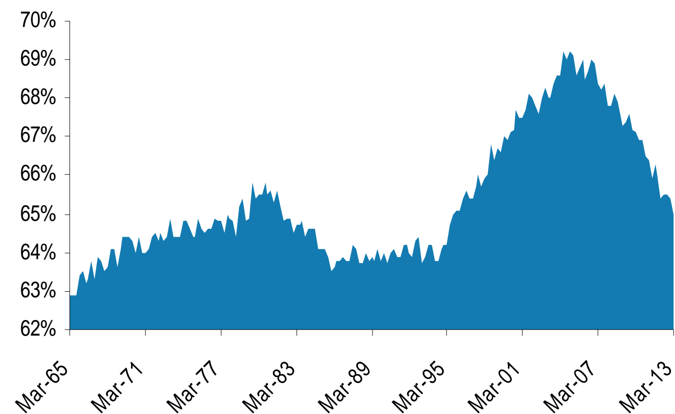


Source: Company data, Morgan Stanley Research

2. How big can the buy-to-rent industry become, and which markets will it head to from here?

We expect homeownership to continue to decline for the next few years; consequently the rise of rentership remains a secular phenomenon. While the stock of distressed housing has declined noticeably, it is still sizable enough to meet this growing demand for rentals. The Home Price Index remains below its peak. Thus, in our view, the case for strong investor appetite remains, both individual and institutional, to take advantage of the declines in distressed home prices and convert the shadow inventory to rental homes. We estimate that about $17 billion of institutional investments have been made since 2011 in the single-family BTR sector. We see $90 billion of incremental market opportunity using fairly conservative assumptions. While the investor activity has been thus far concentrated in California, Florida, Arizona and Georgia, we expect select MSAs in Florida, the Northeast and the Midwest are emerging as attractive areas for institutional investors.

Homeownership on a Steady Decline

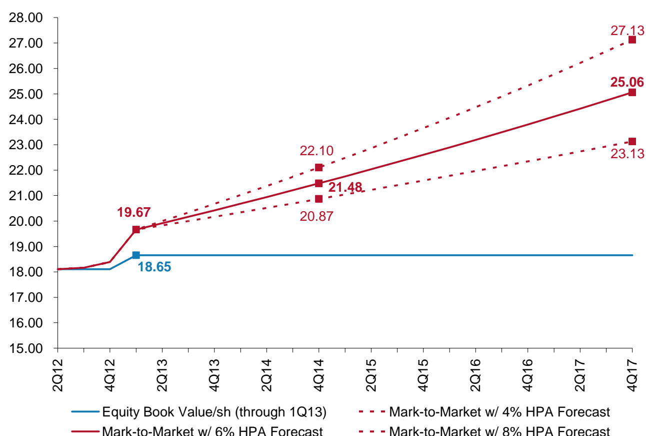


Source: Bloomberg, Morgan Stanley Research

3. How can investors play the buy-to-rent theme?

1) The most direct way to play is **single family REITs (SFRs).** With SFRs trading below liquidation value of their portfolios, we believe the market under-appreciates the long-term viability of BTR economics. We expect **ARPI** to emerge as a winner on its industry-leading operational experience and structure.
2) BTR accelerates home rehab spending. **HD** will likely see greater share of the BTR market, but we favor **LOW** to play BTR given higher relative margin upside, stronger return of capital, and more attractive valuation.
3) BTR lifts home prices and increases resi transaction activity. That cleans out delinquent loans, drives down expenses and boost home prices; positive for **BAC, STI, and TCB**.
4) Legacy non-agency RMBS with outsized exposure to BTR MSAs, particularly front-pay tranches, will likely benefit from institutional investors providing a backstop to liquidation recoveries and put downward pressure on loss severities.

We like Single Family REITs and prefer OW-rated ARPI



Source: Company Data, Morgan Stanley Research Estimates

Debate #1 represents the views of Morgan Stanley Equity Research. Debate #2 represents the views of Morgan Stanley Fixed Income Research. Debate #3 represents the views of Morgan Stanley Equity Research (1-3) and Fixed Income Research (4).

Economics of Buy-to-Rent are Attractive Over Time

Total Returns are Attractive

While bears point to initial net yields below WACC and argue that institutions are destroying value through buy-to-rent, we believe BTR investments must be evaluated on a total return basis as HPA and rent growth are key to the story. On a total return basis, we estimate an unlevered IRR of ~9% on a typical BTR investment over a ten-year hold period (see *Exhibit 5*).

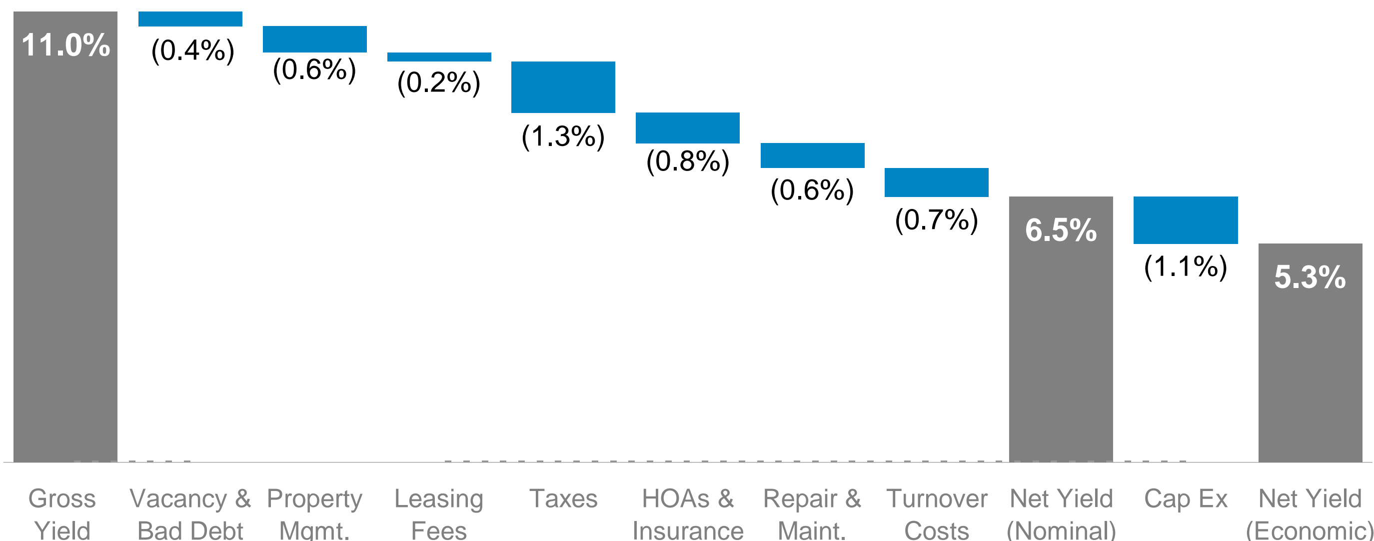
Net yields alone are not enough…
We do not dispute that BTR is a near-term value destroying proposition in the absence of HPA and margin expansion. BTR operators are reporting ~9-13% initial gross yields today, which we believe translates to net yields of ~5-6% (compared to WACC's for public single family REITs in the 6-9% range).

… But HPA will drive returns > WACC in the near-term.
We believe that HPA could comprise over half of the total return offered by BTR investments today. Home prices fell ~35% nationally from July '06 to March '12, and while prices have since recovered ~14%, they are still ~26% below peak and replacement cost. We forecast 6-8% HPA in '13, 4-6% in '14, and 3-5 % in '15 (see "Home Improvement", March 10, 2013 for details). After 2015, we expect home prices to revert to a long term trend of 1-2% above CPI. We believe this is a key reason behind institutional BTR operators acquiring at a very rapid pace today rather than at a more moderate pace over a longer time frame.

… And margin expansion will drive returns in the long-run.
As HPA normalizes in the long-run, cash flow yield will become an increasingly more important piece of the total return puzzle, and we believe that returns will remain comfortably above WACC in the long-run as we see upside to margins. With 3% annual revenue growth and 2% annual expense growth (which we believe is conservative), we see ~38 bps of margin expansion per year, which would drive economic NOI yields from 5.3% to 7.5% over the next ten years (see *Exhibit 5*).

Maintenance and cap ex intensity is a risk.
While we see upside to net yields on margin expansion, we also note the risk that BTR institutions are underestimating maintenance and cap ex levels. BTR investment on an institutional scale is still a relatively untested business model. While yields may look solid in spreadsheets and in the limited year or two of experience BTR operators have had, we may not know the true level of maintenance & cap ex required until year three or four (note that a lot of cap ex is likely being pulled forward through initial renovations after acquisition).

Exhibit 1
Initially, ~9-13% gross yields result in ~6-7% nominal net yields and ~5-6% economic net yields



Source: Company Data, Morgan Stanley Research

Exhibit 2

Walking Through a Typical SFR Investment

Invested Capital			
Purchase			
Purchase Price		**$120,000**	**$75.00 PSF**
Renovation			
Paint		$1,920	$1.20 PSF
Floor		$2,240	$1.40 PSF
Appliances		$1,600	
Landscaping		$1,200	
Cleaning		$400	$0.25 PSF
General Repairs		$3,200	$2.00 PSF
Total Renovation		**$10,560**	**8.8% of purchase price**
Total Investment		**$130,560**	
Income / Cash Flow			
	per month	*per year*	
Revenue			
Gross Rent	**$1,197**	**$14,362**	**11.0% gross yield**
Vacancy	($30)	($359)	2.5% of gross rent
Credit Loss	($9)	($105)	0.7% of gross rent
Effective Gross Rent	**$1,158**	**$13,897**	**96.8% of gross rent**
Expenses			
Property Management	($71)	($847)	5.9% of gross rent
Leasing Fees	($23)	($273)	1.9% of gross rent
Property Taxes	($136)	($1,632)	1.3% of investment
HOA Fees	($41)	($490)	0.4% of investment
Insurance	($41)	($490)	0.4% of investment
Repairs & Maintenance	($65)	($783)	0.6% of investment
Turnover Costs	($76)	($914)	0.7% of investment
Total Expenses	**($452)**	**($5,429)**	**4.2% of investment**
NOI (Nominal)		**$8,468**	**6.5% net yield (nom)** **59.0% margin (nom)**
Cap Ex		($1,500)	
NOI (Economic)		**$6,968**	**5.3% net yield (econ)** **48.5% margin (econ)**

Based on 1600 sq ft home (3Br / 2Ba)

Source: Company Data, Morgan Stanley Research

$100k - 250k purchase price is the buy-to-rent sweet spot. Most of the buy-to-rent activity to date has been in this “starter home” price range, as this is where yields are the highest. Rents do not keep pace as home prices move higher (perhaps because at some point consumers think buying makes more sense), and in general, we believe that lower price points result in higher gross yields and higher price points result in lower gross yields. However, we believe tenant quality improves at higher price points, and lower repair & maintenance costs result in a narrower spread between gross and net yield at higher price points. For example, SFR investors purchasing around $125k are seeing gross yields of ~11% and those purchasing around $175k are seeing gross yields of ~10%, but both are seeing net yields of ~6.5%. The caveat is that as prices move much higher than $250k, the margin benefit no longer compensates for the gross yield detriment, and as prices move below $100k, the gross yield benefit no longer compensates for the margin detriment. Said differently, we believe there are diminishing returns on the gross yield / NOI margin trade-off below $100k and above $250k that make investments outside of this range unattractive.

We believe repairs/maintenance, turnover cost, and cap ex will be the key drivers of initial net margins and yields. We believe these expense buckets will comprise ~40-50% of total expenses + cap ex, and are the biggest unknowns today (expenses like taxes, HOAs, insurance, etc can be forecast with somewhat more conviction). As noted above, we may not know the true level of these costs until year three or four because initial renovations could result in below-sustainable expenses/cap ex in the initial years. Furthermore, we believe turnover rates will be important, not only on the revenue side, but also on the cost side with large spaces potentially requiring re-painting, re-carpeting, etc. We expect single family tenancies of ~3 years on average, versus ~2 years for multifamily, largely due to differences in residence size/quality and tenant demographics (e.g., families with children).

Exhibit 3

Initial net margin (post-cap ex) sensitivity to gross yields and maintenance/turnover/cap ex

		Repairs & Maintenance, Cap Ex, & Turnover Expense								
		$2,000	**$2,250**	**$2,500**	**$2,750**	**$3,000**	**$3,250**	**$3,500**	**$3,750**	**$4,000**
	9.00%	49.7%	47.6%	45.5%	43.3%	41.2%	39.1%	37.0%	34.8%	32.7%
	9.25%	50.8%	48.7%	46.6%	44.6%	42.5%	40.4%	38.4%	36.3%	34.2%
	9.50%	51.8%	49.8%	47.8%	45.7%	43.7%	41.7%	39.7%	37.7%	35.7%
	9.75%	52.7%	50.8%	48.8%	46.8%	44.9%	42.9%	41.0%	39.0%	37.0%
	10.00%	53.6%	51.7%	49.8%	47.9%	46.0%	44.1%	42.2%	40.2%	38.3%
	10.25%	54.5%	52.6%	50.8%	48.9%	47.0%	45.2%	43.3%	41.4%	39.6%
	10.50%	55.3%	53.5%	51.7%	49.9%	48.0%	46.2%	44.4%	42.6%	40.7%
Gross	**10.75%**	56.1%	54.3%	52.5%	50.8%	49.0%	47.2%	45.4%	43.6%	41.9%
Yield	**11.00%**	56.9%	55.1%	53.4%	51.6%	49.9%	48.2%	46.4%	44.7%	42.9%
	11.25%	57.6%	55.9%	54.2%	52.5%	50.8%	49.1%	47.4%	45.7%	44.0%
	11.50%	58.3%	56.6%	54.9%	53.3%	51.6%	49.9%	48.3%	46.6%	44.9%
	11.75%	58.9%	57.3%	55.6%	54.0%	52.4%	50.8%	49.1%	47.5%	45.9%
	12.00%	59.5%	57.9%	56.3%	54.7%	53.1%	51.6%	50.0%	48.4%	46.8%
	12.25%	60.1%	58.6%	57.0%	55.4%	53.9%	52.3%	50.8%	49.2%	47.6%
	12.50%	60.7%	59.2%	57.6%	56.1%	54.6%	53.0%	51.5%	50.0%	48.5%
	12.75%	61.3%	59.8%	58.3%	56.8%	55.3%	53.8%	52.3%	50.7%	49.2%
	13.00%	61.8%	60.3%	58.8%	57.4%	55.9%	54.4%	53.0%	51.5%	50.0%

Source: Company Data, Morgan Stanley Research

Exhibit 4

Initial net yield (post-cap ex) sensitivity to gross yields and maintenance/turnover/cap ex

		Repairs & Maintenance, Cap Ex, & Turnover Expense								
		$2,000	**$2,250**	**$2,500**	**$2,750**	**$3,000**	**$3,250**	**$3,500**	**$3,750**	**$4,000**
	9.00%	4.5%	4.3%	4.1%	3.9%	3.7%	3.5%	3.3%	3.1%	2.9%
	9.25%	4.7%	4.5%	4.3%	4.1%	3.9%	3.7%	3.5%	3.4%	3.2%
	9.50%	4.9%	4.7%	4.5%	4.3%	4.2%	4.0%	3.8%	3.6%	3.4%
	9.75%	5.1%	5.0%	4.8%	4.6%	4.4%	4.2%	4.0%	3.8%	3.6%
	10.00%	5.4%	5.2%	5.0%	4.8%	4.6%	4.4%	4.2%	4.0%	3.8%
	10.25%	5.6%	5.4%	5.2%	5.0%	4.8%	4.6%	4.4%	4.2%	4.1%
	10.50%	5.8%	5.6%	5.4%	5.2%	5.0%	4.9%	4.7%	4.5%	4.3%
Gross	**10.75%**	6.0%	5.8%	5.6%	5.5%	5.3%	5.1%	4.9%	4.7%	4.5%
Yield	**11.00%**	6.3%	6.1%	5.9%	5.7%	5.5%	5.3%	5.1%	4.9%	4.7%
	11.25%	6.5%	6.3%	6.1%	5.9%	5.7%	5.5%	5.3%	5.1%	4.9%
	11.50%	6.7%	6.5%	6.3%	6.1%	5.9%	5.7%	5.6%	5.4%	5.2%
	11.75%	6.9%	6.7%	6.5%	6.3%	6.2%	6.0%	5.8%	5.6%	5.4%
	12.00%	7.1%	7.0%	6.8%	6.6%	6.4%	6.2%	6.0%	5.8%	5.6%
	12.25%	7.4%	7.2%	7.0%	6.8%	6.6%	6.4%	6.2%	6.0%	5.8%
	12.50%	7.6%	7.4%	7.2%	7.0%	6.8%	6.6%	6.4%	6.2%	6.1%
	12.75%	7.8%	7.6%	7.4%	7.2%	7.0%	6.9%	6.7%	6.5%	6.3%
	13.00%	8.0%	7.8%	7.7%	7.5%	7.3%	7.1%	6.9%	6.7%	6.5%

Source: Company Data, Morgan Stanley Research

Exhibit 5

We estimate a ~9% unlevered IRR over a 10-year hold period

	Y_0	Y_1	Y_2	Y_3	Y_4	Y_5	Y_6	Y_7	Y_8	Y_9	Y_{10}	
Capital Invested	**$130,560**	**$130,560**	**$130,560**	**$130,560**	**$130,560**	**$130,560**	**$130,560**	**$130,560**	**$130,560**	**$130,560**	**$130,560**	
Revenue												
Gross Rent		$14,362	$14,792	$15,236	$15,693	$16,164	$16,649	$17,149	$17,663	$18,193	$18,739	*3.0% CAGR*
Gross Yield		11.0%	11.3%	11.7%	12.0%	12.4%	12.8%	13.1%	13.5%	13.9%	14.4%	
Vacancy & Credit Loss		($465)	($479)	($493)	($508)	($523)	($539)	($555)	($572)	($589)	($606)	*3.2% of gross rent*
Effective Gross Rent		**$13,897**	**$14,314**	**$14,743**	**$15,185**	**$15,641**	**$16,110**	**$16,594**	**$17,091**	**$17,604**	**$18,132**	
Expenses												
Property Mgmt. & Leasing		($1,120)	($1,154)	($1,188)	($1,224)	($1,261)	($1,299)	($1,338)	($1,378)	($1,419)	($1,462)	*7.8% of gross rent*
Non-Revenue Linked Expenses		($4,308)	($4,395)	($4,483)	($4,572)	($4,664)	($4,757)	($4,852)	($4,949)	($5,048)	($5,149)	*2.0% CAGR*
Total Expenses		**($5,429)**	**($5,548)**	**($5,671)**	**($5,796)**	**($5,924)**	**($6,056)**	**($6,190)**	**($6,327)**	**($6,467)**	**($6,611)**	
NOI (Nominal)		**$8,468**	**$8,765**	**$9,072**	**$9,389**	**$9,717**	**$10,055**	**$10,404**	**$10,765**	**$11,137**	**$11,522**	
NOI Yield (Nominal)		**6.5%**	**6.7%**	**6.9%**	**7.2%**	**7.4%**	**7.7%**	**8.0%**	**8.2%**	**8.5%**	**8.8%**	
NOI Margin (Nominal)		59.0%	59.3%	59.5%	59.8%	60.1%	60.4%	60.7%	60.9%	61.2%	61.5%	
Cap Ex		($1,500)	($1,530)	($1,561)	($1,592)	($1,624)	($1,656)	($1,689)	($1,723)	($1,757)	($1,793)	*2.0% CAGR*
NOI (Economic)		**$6,968**	**$7,235**	**$7,512**	**$7,797**	**$8,093**	**$8,399**	**$8,715**	**$9,041**	**$9,379**	**$9,729**	
NOI Yield (Economic)		**5.3%**	**5.5%**	**5.8%**	**6.0%**	**6.2%**	**6.4%**	**6.7%**	**6.9%**	**7.2%**	**7.5%**	
NOI Margin (Economic)		48.5%	48.9%	49.3%	49.7%	50.1%	50.4%	50.8%	51.2%	51.6%	51.9%	
Home Value	$130,560	$139,699	$146,684	$152,552	$157,128	$161,842	$166,697	$171,698	$176,849	$182,155	$187,619	
Home Price Appreciation		**7.0%**	**5.0%**	**4.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	**3.0%**	*3.0% Long-term HPA*
Total Return on Investment		**12.3%**	**10.5%**	**9.8%**	**9.0%**	**9.2%**	**9.4%**	**9.7%**	**9.9%**	**10.2%**	**10.5%**	
Unlevered IRR:	**9.1%**											

Source: Company Data, Morgan Stanley Research

NOI growth and HPA will be return drivers in the long-run. We expect NOI growth on ~3-4% rent growth and ~2% expense growth, as we see both rent upside and opportunities for cost savings. We see material upside to rent as: 1) Lack of data, experience, and institutional presence in the BTR market to date have likely resulted in sub-optimal rents; 2) Operators will shift from a "get the homes occupied" mentality to an "optimize the portfolio's revenue" mentality once portfolios stabilize; and 3) Tenant "stickiness" will likely allow BTR operators to push rents on renewal. We also expect to see cost efficiencies over time as the industry moves out of its acquisition phase and devotes more resources (and years of experience) to operational improvements, particularly on the technology front. Furthermore, we note that there is historical precedent for margin expansion, as we saw a similar dynamic in the apartment REIT space over the last decade, as the sector embraced and leveraged technology to enhance bottom lines. On the HPA side, our Morgan Stanly Housing Team sees long-term sustainable HPA of 1-2% above CPI.

Exhibit 6

Unlevered IRR sensitivity to NOI growth and HPA

		Long-term Sustainable HPA								
		2.00%	**2.25%**	**2.50%**	**2.75%**	**3.00%**	**3.25%**	**3.50%**	**3.75%**	**4.00%**
	2.00%	8.1%	8.3%	8.4%	8.5%	8.7%	8.8%	9.0%	9.1%	9.3%
	2.25%	8.2%	8.3%	8.5%	8.6%	8.7%	8.9%	9.0%	9.2%	9.3%
	2.50%	8.2%	8.4%	8.5%	8.6%	8.8%	8.9%	9.1%	9.2%	9.4%
	2.75%	8.3%	8.4%	8.6%	8.7%	8.8%	9.0%	9.1%	9.3%	9.4%
	3.00%	8.3%	8.5%	8.6%	8.7%	8.9%	9.0%	9.2%	9.3%	9.4%
	3.25%	8.4%	8.5%	8.7%	8.8%	8.9%	9.1%	9.2%	9.4%	9.5%
	3.50%	8.4%	8.6%	8.7%	8.8%	9.0%	9.1%	9.3%	9.4%	9.5%
NOI	**3.75%**	8.5%	8.6%	8.8%	8.9%	9.0%	9.2%	9.3%	9.5%	9.6%
CAGR	**4.00%**	8.5%	8.7%	8.8%	9.0%	**9.1%**	9.2%	9.4%	9.5%	9.7%
	4.25%	8.6%	8.7%	8.9%	9.0%	9.1%	9.3%	9.4%	9.6%	9.7%
	4.50%	8.7%	8.8%	8.9%	9.1%	9.2%	9.3%	9.5%	9.6%	9.8%
	4.75%	8.7%	8.8%	9.0%	9.1%	9.3%	9.4%	9.5%	9.7%	9.8%
	5.00%	8.8%	8.9%	9.0%	9.2%	9.3%	9.4%	9.6%	9.7%	9.9%
	5.25%	8.8%	9.0%	9.1%	9.2%	9.4%	9.5%	9.6%	9.8%	9.9%
	5.50%	8.9%	9.0%	9.2%	9.3%	9.4%	9.6%	9.7%	9.8%	10.0%

Source: Company Data, Morgan Stanley Research

Exhibit 7

NOI CAGR sensitivity to rent and expense growth

		Expense & Cap Ex Growth (for non-revenue-linked expenses)								
		1.00%	**1.25%**	**1.50%**	**1.75%**	**2.00%**	**2.25%**	**2.50%**	**2.75%**	**3.00%**
	1.00%	1.0%	0.8%	0.6%	0.3%	0.1%	-0.1%	-0.4%	-0.7%	-0.9%
	1.25%	1.5%	1.3%	1.0%	0.8%	0.6%	0.4%	0.1%	-0.2%	-0.4%
	1.50%	1.9%	1.7%	1.5%	1.3%	1.1%	0.8%	0.6%	0.4%	0.1%
	1.75%	2.3%	2.2%	2.0%	1.8%	1.5%	1.3%	1.1%	0.9%	0.6%
	2.00%	2.8%	2.6%	2.4%	2.2%	2.0%	1.8%	1.6%	1.3%	1.1%
	2.25%	3.2%	3.0%	2.8%	2.7%	2.5%	2.3%	2.0%	1.8%	1.6%
	2.50%	3.6%	3.5%	3.3%	3.1%	2.9%	2.7%	2.5%	2.3%	2.1%
Rent	**2.75%**	4.0%	3.9%	3.7%	3.5%	3.3%	3.2%	3.0%	2.8%	2.5%
Growth	**3.00%**	4.5%	4.3%	4.1%	4.0%	**3.8%**	3.6%	3.4%	3.2%	3.0%
	3.25%	4.9%	4.7%	4.5%	4.4%	4.2%	4.0%	3.8%	3.7%	3.5%
	3.50%	5.3%	5.1%	5.0%	4.8%	4.6%	4.5%	4.3%	4.1%	3.9%
	3.75%	5.7%	5.5%	5.4%	5.2%	5.0%	4.9%	4.7%	4.5%	4.3%
	4.00%	6.1%	5.9%	5.8%	5.6%	5.5%	5.3%	5.1%	5.0%	4.8%
	4.25%	6.4%	6.3%	6.2%	6.0%	5.9%	5.7%	5.5%	5.4%	5.2%
	4.50%	6.8%	6.7%	6.6%	6.4%	6.3%	6.1%	6.0%	5.8%	5.6%
	4.75%	7.2%	7.1%	7.0%	6.8%	6.7%	6.5%	6.4%	6.2%	6.0%
	5.00%	7.6%	7.5%	7.3%	7.2%	7.1%	6.9%	6.8%	6.6%	6.5%

Source: Company Data, Morgan Stanley Research

Examining the Opportunity: Where is BTR, and Where is it Headed?

Sizing Institutional Buy-to-Rent to Date

It is difficult to obtain reliable estimates for the size of the institutional single-family buy-to-rent market. We used transaction level data from Dataquick, compiled from data recorded when a housing sale/purchase is effected, and developed an algorithmic approach to identify transactions that can be reasonably classified as institutional buy-to-rent investments. We developed several rules of thumb in our approach. Among others, the key rules we used in classifying transactions as institutional buy-to-rent were the following:[1]

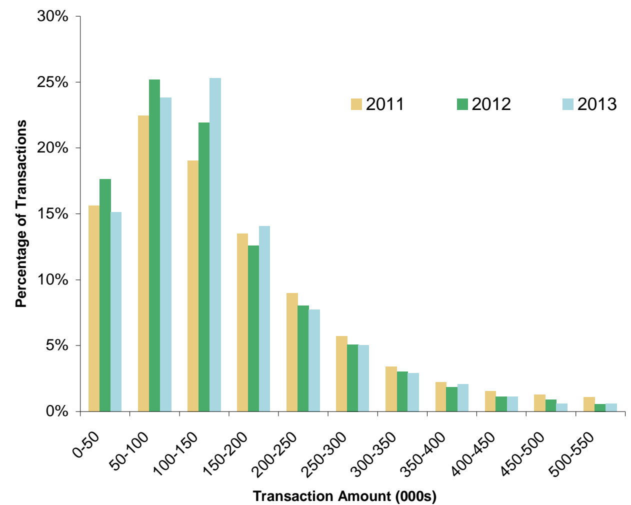
- The transaction had to be considered “distressed” (i.e., a short sale, foreclosure sale or REO sale).
- The transaction had to be in cash (i.e., did not include a mortgage).
- The buyer had to have acquired at least 10 such properties since the beginning of 2011.
- Property type had to be single-family (1-4 units).
- We also included a number of qualifiers to identify buyer names that were likely institutional (e.g., “LLC”, “Corp”, “Co.”, among others). We also used names and variations of well-known institutional buyers.
- To eliminate flips, if a property changed hands twice within a six-month period, we took only the last transaction into account.

Key takeaways from our exercise are as follows:

- We estimate that from January 2011 through May 2013, total institutional investments have amounted to roughly $17 billion, with a median value of $176,500.[2]
- Institutional investors appear to target specific types of property. Over 80% of homes have been purchased for less than $200k (Exhibit 8). Over 75% measure between 1,000 and 2,500 square feet (Exhibit 9).
- Institutional investment activity has been concentrated in California, Arizona, Florida, and Georgia.

Exhibit 8

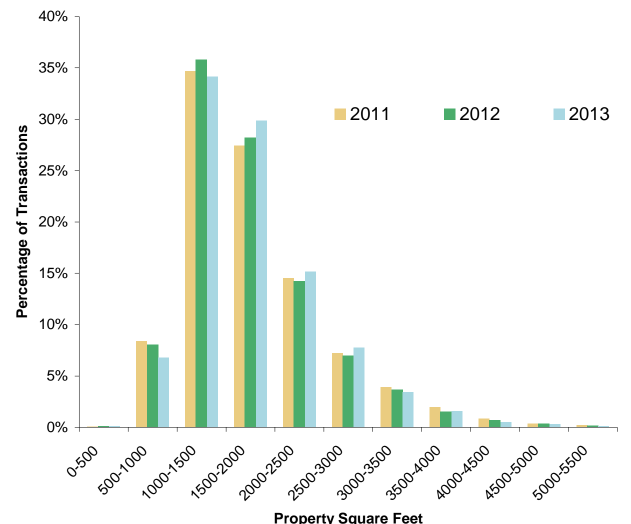
Distribution of Yearly Buy-to-Rent Purchases by Transaction Amount



Source: Dataquick, Morgan Stanley Research

Exhibit 9

Distribution of Yearly Buy-to-Rent Purchases by Size of Property



Source: Dataquick, Morgan Stanley Research

[1] In addition to these rules of thumb, our algorithm also included a number of checks to exclude records with outliers, non-arms-length transactions and obvious data errors.

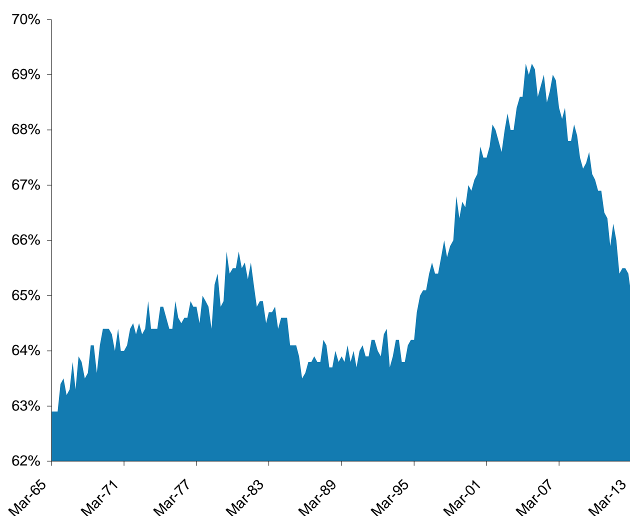
[2] This estimate is limited by data coverage and reporting issues intrinsic to specific locales. The most salient example would be difficulty obtaining data on transactions in non-disclosure states (such as Texas) and certain counties within them.

Homeownership vs. "Rentership" – Where are We Headed?

The homeownership rate has been falling steadily for several years. According to US Census Bureau data, homeownership peaked at 69.2% in late 2004, hovered around the 69% mark until the end of 2006, and has been on a steady decline ever since – reaching 65% at the end of 1Q 2013 (Exhibit 10).

Exhibit 10

Homeownership on a Steady Decline



Source: Bloomberg, Morgan Stanley Research

Rising rentership is an obvious converse to falling ownership. We had argued in the past (see *A Rentership Society*, July 20, 2011) that the combination of falling home prices, limited mortgage credit, continued liquidations, and better rental options is fundamentally changing the way Americans live. We had suggested that this change is only beginning, and is moving the country towards a rentership society. Some of the factors we identified as contributing towards this phenomenon have changed, as we noted earlier, particularly home prices, which have reversed their trajectory. Further, the rate of new delinquencies has also declined notably. Is it fair to argue that the declining trend in homeownership would change trajectory?

In our view, the answer is not yet. There are three main reasons for this. First, mortgage defaults have been the primary reason for the significant decline in homeownership we have seen over the last few years. Until they restore their impaired borrowing ability and/or their financial health substantially improves, many of the recently defaulted borrowers are unlikely to become owners and will likely have no choice but to look to the rental market. As Exhibit 11 shows, restoration of credit scores after a mortgage delinquency/default takes time.

Exhibit 11

Estimated Time of Full FICO® Score Recovery

Starting FICO® Score	680	720	780
Time for FICO® Score to recover after these events:			
30 days late on mortgage	~9 months	~2.5 years	~3 Years
90 days late on mortgage	~9 months	~3 Years	~7 Years
Short sale / deed-in-lieu / settlement (no deficiency balance)	~3 Years	~7 Years	~7 Years
Short sale (with deficiency balance)	~3 Years	~7 Years	~7 Years
Foreclosure	~3 Years	~7 Years	~7 Years
Bankruptcy	~5 Years	~7-10 Years	~7-10 Years

Source: FICO® Banking Analytics Blog.

Second, while mortgage affordability remains high relative to long-term averages, despite recent sharp increases in mortgage rates, access to credit remains constrained. While we do expect mortgage credit to expand, the expansion is unlikely to benefit borrowers with a relatively recent history of mortgage delinquency.

Third, there is a notable demographic effect on owning versus renting. The 18-34 age cohort experienced the largest decline in homeownership relative to other age cohorts during the Great Recession. As a recent report from the Demand Institute[3] notes, "eighteen to 34-year olds will account for 43% of all current heads of households moving during the next two years. More than half of these young movers expect to rent when they next move. This age group was particularly hard-hit by the recession and even as the economy recovers, they are more likely to find home ownership challenging, given the higher credit and down payment requirements, and look to rental housing for shelter." Similarly, as pointed out by the Joint Center for Housing Studies of Harvard University[4], the drop in homeownership has been particularly severe among minorities and low-income households – groups with higher rates of mortgage denials relative to the rest of the population.

For all these reasons, we expect that homeownership rates will continue to decline for the next few years. Our best rough estimate is that it will stabilize around 63%. In other words, the rise of rentership remains a secular phenomenon.

While the stock of distressed housing (shadow inventory) has declined noticeably, it is still sizable enough to meet this growing demand for rentals, particularly in the single-family space. Home prices in general, and distressed home prices in particular, remain below their peak levels. Thus, in our view, the case for strong investor appetite remains, both individual and institutional, to take advantage of the declines in distressed home prices and convert the shadow inventory to rental homes. We continue to see the investor bid as a positive force for US housing.

[3] "The Shifting Nature of US Housing Demand", The Demand Institute, May 2012

[4] "The State of the Nation's Housing 2013", Joint Center for Housing Studies of Harvard University, June 2013

Evolution of the Credit Market for Buy-to-Rent

Credit availability is improving…
BTR investors are buying homes in all-cash transactions today and will seek to layer on debt in the future. Availability and terms of bank loans to BTR investors are showing signs of improvement with non-recourse loans with varying lengths and leverage (and pricing) levels. Some lenders are even willing to lend against homes without existing tenants.

In the middle of last year, Waypoint Real Estate Group LLC, one of the early institutional investors in the buy-to-rent space, secured a $245 million loan from Citigroup to help beef up its portfolios of properties to rent out. Earlier this year, Deutsche Bank announced that it is planning an REO-to-rental lending add-on to its existing US commercial mortgage-backed securities (CMBS) conduit platform. The bank provided Blackstone a $2B secured line of credit to purchase single-family homes. Among the publicly traded players, American Residential Properties (Ticker: ARPI) received a $150M revolving line of credit in January 2013 with an accordion feature up to $300M, and Silver Bay received a $200M credit facility in May, 2013.

... But emergence of a securitization market will be key.
In the long-run, the emergence of a securitization market will be a critical development for the BTR market as it will allow those landlords (larger players first) to grow faster and have access to cheaper capital than their competitors. Earlier this year, Deutsche Bank provided a $100M credit facility for investment firm Five Ten Capital. The loan is backed by mortgages on rental houses, a structure that includes separate loans on each property, helping address one concern raised by the rating agencies. The Wall Street Journal (July 30, 2013) reported that Deutsche Bank and Blackstone are in talks to sell the first ever securitization backed by home rental payments. While the deal is not yet complete, we think it may prove to be a key development in the evolution of the industry's life cycle.

The Delinquency Share Ratio (DSR) – A “Fair Share” Metric

We have long argued that one development that grew out of the housing crisis the nation has endured is that in any MSA, there are now broadly two housing markets – distressed and non-distressed. The former represent transactions that are a result of a mortgage delinquency and the lender or the mortgage servicer makes the sale decisions. In contrast, non-distressed transactions are regular housing transactions where the homeowners make the sale decisions voluntarily. There is a substantial discount in distressed transactions. We estimate that distressed discounts are currently at 30%, although the extent of discounts of distressed sales relative to non-distressed sales depends on the type of distressed sale – currently at 16% for short sales, 44% for foreclosure sales and 40% for REO sales.

In our view, an overabundance of properties available at “distressed” prices, i.e., a substantial discount to regular or “non-distressed” transactions, is a necessary condition for buy-to-rent investments to take off in a given area. Counting the extent of delinquencies provides a good proxy for potential distressed transactions. We develop a simple metric to determine what the “fair share” of potential distressed transactions for a given MSA is. We look at the proportion of total national delinquencies in a given area versus the proportion of total mortgages in that area and calculate a metric we call “delinquency share ratio (DSR)”[5].

The numerator of the DSR is delinquencies in a specific MSA divided by total nationwide delinquencies, and the denominator is all mortgages outstanding in that same MSA divided by total mortgages outstanding nationwide. If the DSR is equal to 100%, we know that the MSA has exactly its fair share of shadow inventory. If it is greater than 100%, the MSA has more than its fair share, and if it is less than 100%, the MSA has less than its fair share.

Our premise is that an MSA with a DSR above 100% has an overabundance of delinquent homes for the population in that MSA, meaning both more supply (delinquent homes) and rental demand (foreclosed borrowers who cannot qualify for a mortgage) – and thus it could be an attractive location for investors.

Institutional Buy-to-Rent Case Study: Phoenix, AZ

Phoenix has emerged as the ‘poster child’ for the buy-to-rent trade. In this section, we explore what made that MSA so attractive for investors, and what impact their activity had on the market.

Phoenix was attractive to investors for two reasons. First, the sharp price declines in the area meant that houses were available at an unusually steep discount to peak market values. Exhibit 12 shows that Phoenix had the second-largest peak-to-trough decline of the MSAs in Case-Shiller’s 20-City Index.

[5] We first used this approach in In the Shadows, January 28, 2011. .

Exhibit 12

Peak-to-Trough Declines Across Major MSAs

MSA	Peak to Trough	MSA	Peak to Trough
Las Vegas	-61.72%	Minneapolis	-36.05%
Phoenix	-56.50%	Washington	-32.85%
Miami	-51.16%	Seattle	-30.82%
Tampa	-47.74%	Portland	-28.78%
Detroit	-47.46%	New York	-25.66%
San Francisco	-45.26%	Cleveland	-21.11%
San Diego	-42.22%	Charlotte	-17.82%
Los Angeles	-41.44%	Boston	-17.50%
Atlanta	-37.03%	Denver	-11.46%
Chicago	-36.95%	Dallas	-9.48%

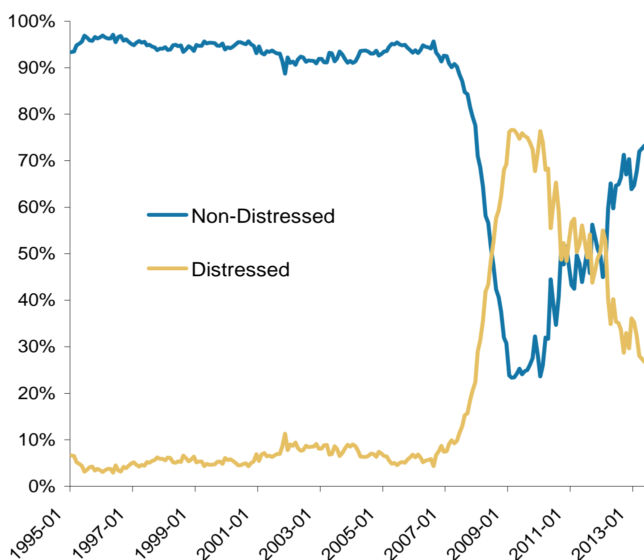
Source: Case-Shiller, Morgan Stanley Research

Second, while delinquencies were abundant across the nation, Phoenix had far more than its fair share. In January 2011, the DSR for the Phoenix MSA was 143.8%

With the stage now set in Phoenix, investors went into action. Distressed transactions, which had previously represented less than 10% of monthly volumes, swelled to above 75% (Exhibit 13). Distressed sales continued to represent the majority of monthly transactions in Phoenix until February 2012.

Exhibit 13

Distressed v. Non-Distressed Transactions in Phoenix

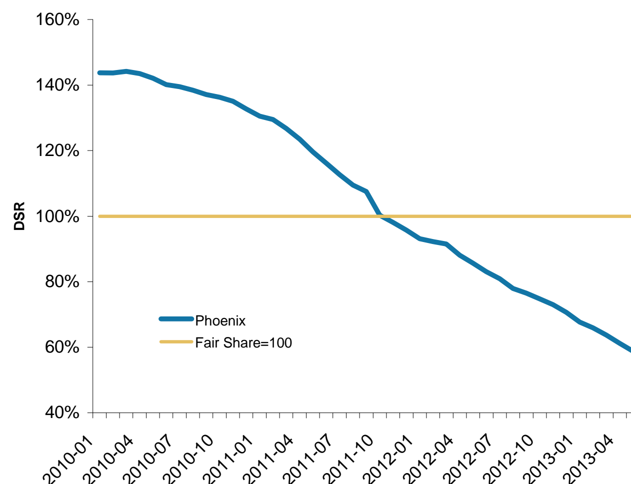


Source: Dataquick, Morgan Stanley Research

As distressed transactions increased, the DSR for Phoenix dropped drastically. Exhibit 14 shows that over the past 3+ years the level of delinquencies in Phoenix has fallen much more quickly than the national average, bringing Phoenix's current DSR all the way down to 58.8%.

Exhibit 14

For Phoenix, the "Fair Share" of Delinquencies Has Decreased Dramatically



Source: LPS, Morgan Stanley Research

Concurrently, home prices in Phoenix rallied massively. Of the 20 cities we mentioned earlier, Phoenix is second only to San Francisco in terms of trough-to-current rally (Exhibit 15).

Exhibit 15

Trough-to-Current Changes Across Major MSAs

MSA	Trought to Current	MSA	Trought to Current
San Francisco	36.53%	Tampa	15.41%
Phoenix	35.16%	Portland	14.55%
Detroit	27.36%	Seattle	14.23%
Las Vegas	23.84%	Denver	13.50%
Los Angeles	21.89%	Dallas	10.94%
Atlanta	21.38%	Charlotte	9.84%
San Diego	20.43%	Chicago	9.37%
Minneapolis	20.02%	Boston	9.03%
Miami	18.77%	Cleveland	6.33%
Washington DC	16.40%	New York	3.43%

Source: Case-Shiller, Morgan Stanley Research

In addition to the price declines and the abundance of delinquent mortgages, the fact that Arizona is a non-judicial foreclosure state also helped. Without the bottleneck in the liquidation process caused by the courts, investors had the prospect of picking up more properties more quickly in Arizona.

Further, Phoenix had a few other demographic factors working in its favor – sizable population at 4.26 million (14th largest MSA in the country, per 2011 US Census data) and a growing population with better employment growth relative to the national average (Phoenix has a current unemployment rate of 6.2%, down from a peak of 10.5%, versus the national

unemployment rate currently at 7.6%, down from a peak of 10%).

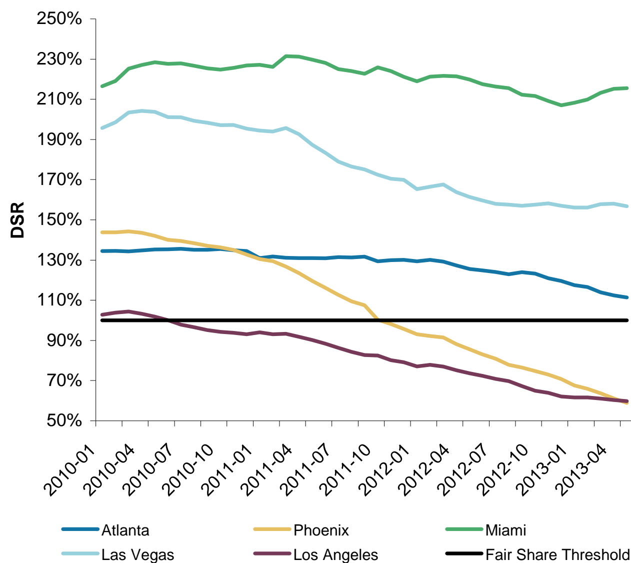
The key takeaway from our case study is that an overabundance of distressed properties and a significant drop in home prices, along with favorable demographics, created attractive conditions for investor activity, which in turn contributed to the recovery we now see taking place in Phoenix.

Attractive Locations for Future Buy-to-Rent

Phoenix is just one of the popular locales for investors looking to implement a buy-to-rent strategy. In Exhibit 16, we show the changes in DSRs over time across a number of MSAs with institutional buy-to-rent activity.

Exhibit 16

DSRs Have Dropped Across Popular BTR MSAs – Though Some Remain Well Above 100%



Source: LPS, Morgan Stanley Research

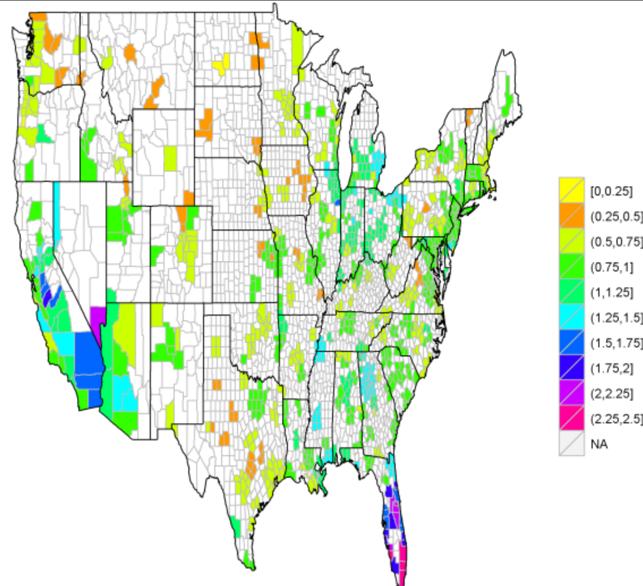
As Exhibit 16 shows, most of the cities above have exhibited the same behavior as Phoenix, though not to the same degree. Las Vegas remains well above the 100% "fair share" equilibrium ratio, though down significantly from its peak above 200%. Miami remains above 200% despite significant investor activity. That is at least in part due to the long foreclosure timelines in Florida related to the judicial foreclosure process – ensuring a healthy amount of delinquencies are held off the market, thus weighing on the delinquency share ratio. We can surmise that based on the DSR analysis, strong prospects remain for buy-to-rent investments in Miami, Las Vegas and Atlanta while prospects are no longer attractive in Phoenix and Los Angeles.

Where will buy-to-rent opportunities exist going forward? To answer this question, we identify MSAs that meet similar criteria to Phoenix before the influx of investor capital: large price declines and high DSRs.

Looking first at the evolution of DSRs across the country, the transition in the three years from May 2010 through May 2013 is remarkable. In the maps below, the pink, purple, and blue end of the color spectrum corresponds to higher "fair share" ratios, while yellow, orange, and light green reflect lower ratios. As shown in Exhibit 17, delinquencies were overly concentrated in southern Florida, southern California, and the Las Vegas area in 2010.

Exhibit 17

May 2010 DSR Heat Map

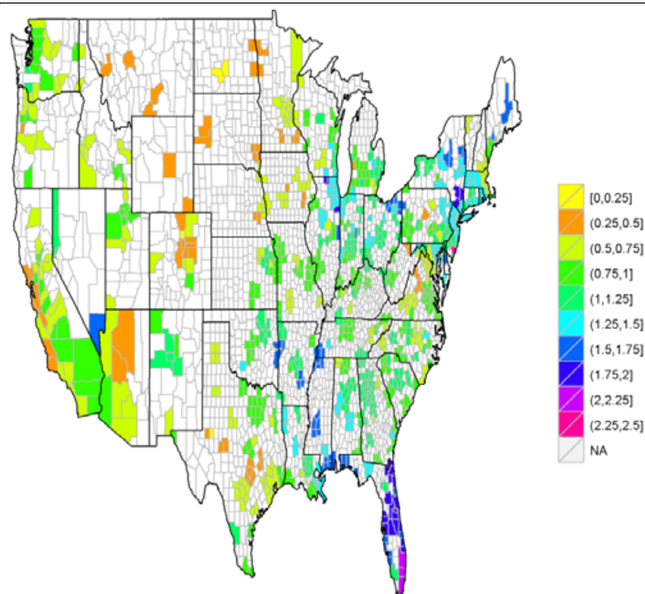


Source: LPS, Morgan Stanley Research

By 2013, the concentration in California, Arizona and Las Vegas had dropped dramatically. Similarly, southern Florida's transition from reds and purples to blues in Exhibit 18 shows that its delinquency burden has been somewhat alleviated. In their place, we have a number of locations in Florida, the Midwest, and the Northeast constituting a larger proportional share of the nation's delinquencies.

Exhibit 18

May 2013 DSR Heat Map



Source: LPS, Morgan Stanley Research

If we take a closer look at some of these MSAs, we will see DSRs growing steadily over the past three years (Exhibit 19). This shift in delinquency concentration suggests supply of delinquent inventory for buy-to-rent investors. Examples of these MSAs include Tampa, Jacksonville, Cleveland, Chicago, among others. Miami and Las Vegas show a declining trend in DSRs but the level of DSRs is still very high – 215% in Miami, for example. This suggests that despite some progress in clearing distressed properties, there is still much work to be done there and thus they continue to present interesting opportunities. If we look at HPA trends within these MSAs, while they might not have fallen as far as some of the MSAs shown earlier, they still have room to appreciate.

Exhibit 19

Potentially Attractive MSAs for Buy-to-Rent

MSA	DSR Jan '10	DSR May '13	Peak to Trough	Peak to Current
Miami	216.5%	215.5%	-51.2%	-42.0%
Tampa	164.8%	194.3%	-47.7%	-39.7%
Jacksonville*	143.1%	190.9%	-39.6%	-33.0%
Las Vegas	195.7%	156.8%	-61.7%	-52.6%
Cleveland	130.6%	151.4%	-21.1%	-16.1%
Chicago	115.5%	136.5%	-36.9%	-31.0%
Akron*	111.3%	128.1%	-23.4%	-13.8%
Philadelphia*	80.1%	124.7%	-20.5%	-15.2%
Columbus*	107.8%	121.0%	-17.8%	-11.3%
Cincinnati*	99.6%	114.8%	-17.9%	-13.9%

Source: LPS, Morgan Stanley Research
* Price changes calculated MS Proprietary repeat sales index

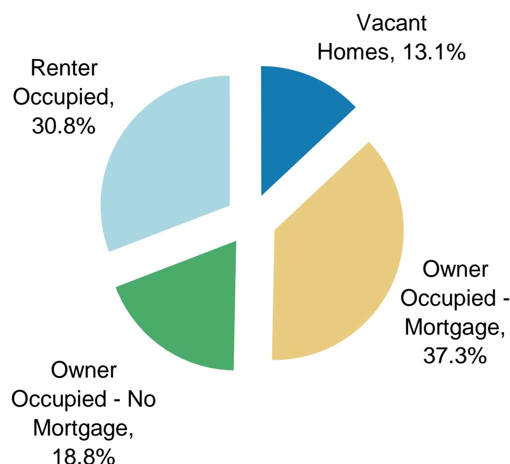
A few words about the New York MSA are in order here. It might be surprising to note that New York would have made the cut for inclusion in Exhibit 19. DSR for the New York MSA[6] has risen from 89% in 2010 to 140% now. Peak to current is -23.1% and peak to trough is -25.7%. The growing foreclosure backlog in New York and New Jersey explains the rising DSR. However, high DSRs and room to appreciate may not alone be sufficient to make a case for buy-to-rent investments. As noted in the section on the Economics of Buy-to-Rent, there is a sweet spot in home prices in the $100,000 to $250,000 range. The average loan size of delinquent properties in the New York MSA is $329,340, far outside the sweet spot range.

How Big Could Institutional Buy-to-Rent Become?

Having made the case for rentership to be a sustainable phenomenon, we now size the single-family buy-to-rent investment opportunity.

Exhibit 20

Renters are a Significant Portion of the Market



Source: US Census Bureau, Morgan Stanley Research

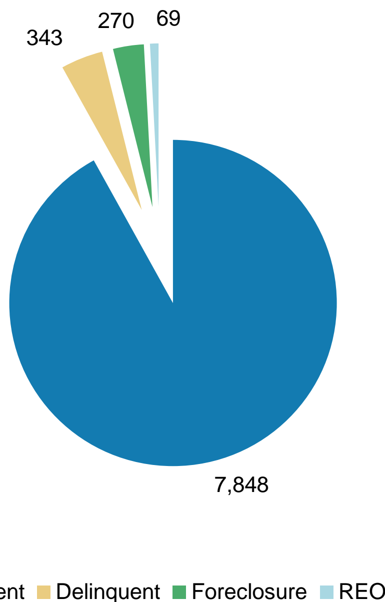
Two points are worth noting. First, rentals, with a 35.4% share of occupied housing units,[7] are already a significant part of the housing market (Exhibit 20). Second, single-family rentals (defined as properties with up to four units, and manufactured housing), account for roughly 21.4 million units or 52.5%[8] of the rental housing market. Assuming an average unit value of $156,000, we get an existing single-family rental market valued at $3.3 trillion.

[6] New York MSA includes New York city, Long Island, Northern New Jersey and parts of Pennsylvania.
[7] Rental housing as a percentage of total occupied housing units, US Census Bureau.
[8] Source: US Census Bureau.

This does not include our current shadow inventory estimate of 4.4 million properties, which roughly represents an additional $700 billion in market value (Exhibit 21). If the homeownership rate declines from the current 65% to our projected rate of 63%, it would result in demand for 2.3 million rental housing units. Thus, even if only half of the current shadow inventory is turned into rentals, it would represent about $350 billion in market value and still not be enough to meet our expected rental demand.

Exhibit 21

Property Value by Delinquency State ($billion)



Source: LPS

Sizing the total market opportunity provides a context for the potential growth in the single-family rental market. We estimate that institutional investors thus far have accounted for just about 7%-10% of total distressed sales, the rest being “mom and pop” retail investors. Since institutional investor involvement is a relatively recent phenomenon, it is reasonable to surmise that the share of institutional investors would grow from here. Conservatively, we estimate their share to grow to 25%, which puts the remaining market opportunity at about $90 billion.

In our analysis, we are assuming that the entire buy-to-rent investment will only be through distressed transactions. We are also not taking into account potential new contributions to the shadow inventory and counting only half of the current shadow inventory as potential rentals. Nevertheless, given that our estimate of the funds invested in this space thus far amounts to merely $17 billion, we see the potential opportunity for this industry to be substantial.

Key Differentiators Among Institutional Buy-to-Rent Operators

We expect four key differentiators to emerge:

1) Management Structure – Internal beats external;

2) Operating Acumen – Experience is essential

3) Acquisition Discipline / Portfolio Quality – owning the right assets in the right locations is key to tenant turnover, which will be critical to yields in the long-run.

4) Scale – Bigger is better (all else equal)

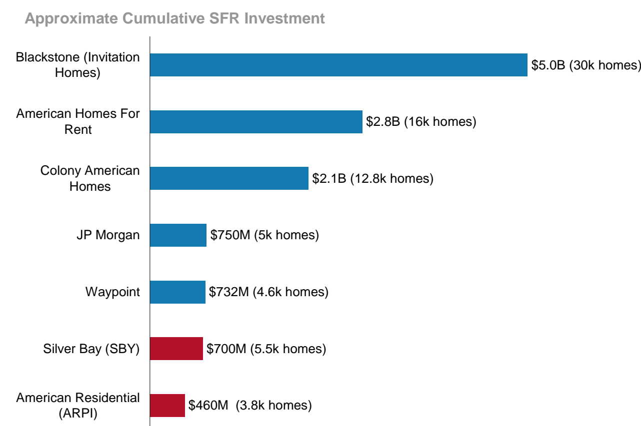
1) Management Structure
In general, we strongly prefer internally managed REITs to externally managed REITs (and believe most REIT investors share our sentiment), as we believe it better aligns management incentives with shareholders. We ultimately expect the market to ascribe a valuation premium for internal management structures, as is currently the case in the major real estate asset classes. Furthermore, due to the operationally intensive nature of the single family rental business, we believe that developing an efficient in-house property management platform is critical to returns in the long-run.

2) Operational Acumen / Experience
Given the number, isolation, and geographic spread of units in a single family rental portfolio, we believe single family BTR is among the most operationally intensive class of real estate. Operating margins and cap ex requirements will be key to returns in the long-run once platforms are fully built out. While it is difficult to gauge which operators are the most efficient and disciplined today given the un-stabilized nature of the portfolios, we think that those with the most years of experience have a clear advantage.

3) Acquisition Discipline / Portfolio Quality
Some have called the current buying phase of the industry's growth a "pie-eating contest," and while we believe achieving scale is important, we believe in the long-run buying smart will prove to beat buying for the sake of buying. Over the long-run, we believe tenant quality will be critical to margins, as the "right" tenants will be resistant to moving (i.e., lower turnover and be more willing to accept rent increases) and take better cares of their homes (i.e., require less maintenance cost and cap ex). To attract these types of tenants, we believe it is important to own homes of good to very good quality that are close to schools, shopping, etc. As such, we prefer BTR operators who take a disciplined approach to acquisitions and have developed systems and regional expertise to ensure quality of acquisitions.

4) Scale
We believe having a large portfolio in a region benefits margins as economies of scale drive down per home costs (i.e., synergies are created as the management platform is spread across a greater number of homes). Furthermore, upfront renovation costs benefit from scale as companies can negotiate bulk purchase discounts with suppliers and contractors. Lastly, we think larger players in the industry are more likely to become consolidators in the long-run, providing an avenue for portfolio growth even after gross yield in the market place slow the pace of MLS/auction acquisitions. An important caveat to the scale advantage, however, is that bigger is only better as long as the portfolio can continue to be managed efficiently. We would rather see disciplined portfolio growth and efficient operations than dramatic scale at the expense of operational execution.

Exhibit 22
Largest Known Institutional BTR Operators to Date



Source: Company Data

REIT Implications: ARPI Will be a Winner in the SFR REIT Space

American Residential is a best-in-class operator.

While no BTR operator has an advantage in all three categories of our differentiation continuum – management structure, operating efficiency, and scale – we believe American Residential Properties (ARPI, rated Overweight) stacks up very well. We believe ARPI ranks at the top in terms of management structure and operating efficiency, and while it lags peers with respect to scale, we believe this will be an opportunity for the company going forward.

American Residential is internally managed.
ARPI's only publicly traded single family housing peer today (Silver Bay - SBY) is externally managed, and we believe much of the early wave of SFR players to come public will be externally managed. We believe ARPI should ultimately realize a cost advantage and valuation premium for its internal management versus externally managed peers.

Management has nearly 5 years of operating experience.
Operating margins and cap ex will be key to returns in the long-run once platforms are fully built out. While these remain an unknown across the industry today, we think ARPI's industry-leading operating experience provides significantly more insight than peers. ARPI's CEO and President have been investing in and operating single family rentals since October 2008, longer than any other large scale operator we know of. As such, ARPI has had more time to develop and fine-tune its acquisition and property management platforms and to gauge actual results in the business. Furthermore, we believe ARPI's operating efficiency advantage could allow it to become a consolidator in the long-run, which we expect to be the next phase of the SFR growth story.

Our property tours in several markets (Dallas, Las Vegas, Phoenix) have also supported our view that American Residential is a disciplined and consistent underwriter, with more of an eye towards long-term yields and operating efficiency than many peers who are focused more myopically on home price appreciation. For acquisitions to meet ARPI's criteria, not only must the initial yields work, but the homes must meet market-specific quality and location requirements.

American Residential is currently on the smaller end of the scale spectrum, but has opportunity to grow rapidly.
We believe American Residential currently owns ~3,800 homes, which ranks at the bottom of the top seven single family rental players (we estimate the median number of homes owned among these seven players to be 5,000). That said, as the second to come public, and with a line of credit already in place, we believe American Residential has an access to capital advantage and an ability to grow very rapidly in the near-term. We expect American Residential to approximately double the size of its portfolio by the end of 2013, and for its portfolio to reach ~24,000 homes ($3.45B) by the end of 2017. Ultimately, securing long-term debt will be critical to growth, and we believe American Residential's early mover advantage and years of experience could allow it to be amongst the first to accomplish this as well.

Exhibit 23
ARPI vs Public Peer SBY

	American Residential	Silver Bay
Homes Owned	3,800	5,500
Top Markets	1. Phoenix (41%) 2. Chicago (12%) 3. Indianapolis (10%)	1. Phoenix (28%) 2. Tampa (20%) 3. Atlanta (17%)
Current Occupancy	86%	44%
Stabilized Occupancy*	92%	92%
Avg. Investment/Home	$135,249	$126,079
Avg. Square Feet	1,563	1,690
Avg. Age of Home	25	25
Management Structure	Internal	External
SFR Experience Since:	2008	2009

Source: Company Data, Morgan Stanley Research
*Occupancy of homes available for rent >90 days for SBY; Occupancy of homes owned for at least 180 days for ARPI

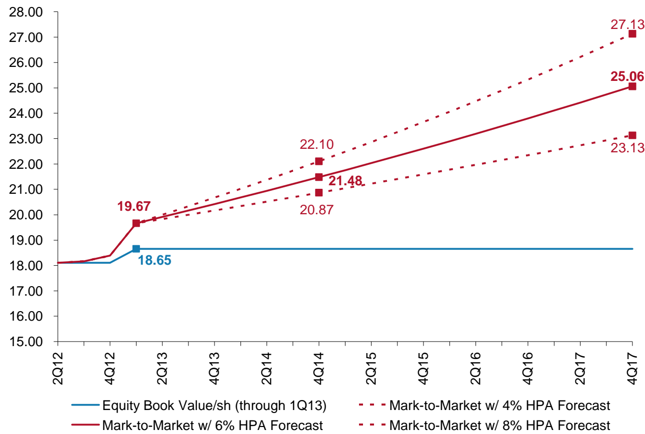
Valuation and risk-reward are attractive

We think the market is baking in negative value for HPA, ARPI's operating platform, and the company's ability to create value through accretive acquisitions and cash flow generation. 1Q13 book value is $18.65 per share. However, marking ARPI's portfolio to market based on the known timing and location of acquisitions and using changes in the Case Shiller regional home price indices (which we think is conservative, as American Residential's buying methodology and renovations have likely generated HPA well in excess of Case Shiller), we estimate market book value at the end of 1Q13 of $19.67. At its current price, ARPI is therefore trading at a 14% discount to the liquidation value of its assets, implying that the market is pricing in value destruction going forward. To be clear, we think there is an opportunity for ARPI to *create* (not

destroy) value over time through HPA, cash flow growth, and its operating platform.

Exhibit 24

1Q13 book value is $18.65, but we believe it would be $19.67 if marked to market; 6% estimated annual HPA implies liquidation value* of $21.48 at YE 2014



Source: Company Data, Morgan Stanley Research estimates

Our price target is $24

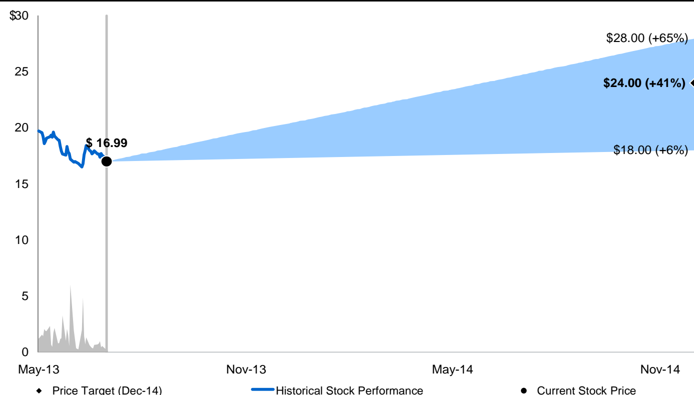
In our base case, we compare ARPI to its lone publicly traded peer Silver Bay (SBY – NYSE-listed since Dec '12). We believe the two home portfolios are comparable, but we ascribe a premium to ARPI for its internal management structure and what we perceive to be stronger operating platform, and add on a conservative forecast of 10% HPA between 1Q13 and YE 2014 to get to a forward ARPI price target of $24. Risks to our price target include: 1) Operational missteps on rapid growth with an untested business model; 2) Yield compression as prices rise; and 3) Pipeline of other SFR IPO's competing for investors' capital.

Risk-reward is skewed to the upside

ARPI is now trading 6% below our YE'14 bear case of $18. We see limited downside from here, as we believe the 1Q13 liquidation value of ARPI's home portfolio ($19.67 per share, by our estimate) should serve as an approximate floor for the stock. We expect upside ($24 base case; $28 bull case) to be driven by HPA, cash flow growth, and multiple expansion as ARPI proves its platform value over time.

Risk-Reward: American Residential Properties (ARPI, $16.99, OW, PT $24)

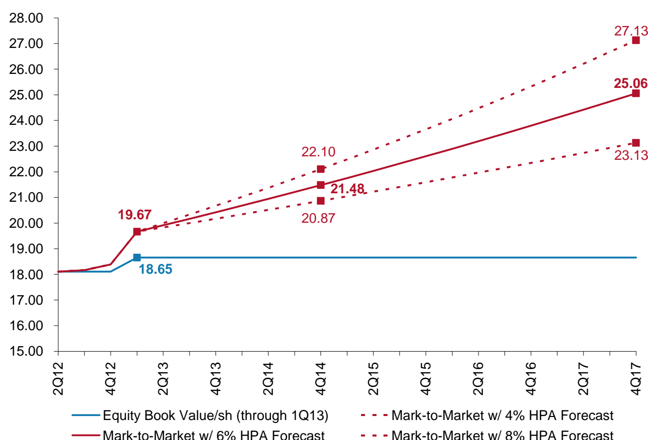
Risk-Reward View: Limited Downside, Attractive Upside Driven by HPA



Source: Thomson Reuters, Morgan Stanley Research estimates

Price Target $24		10% premium (for experience and operational efficiency) to key comp SBY's management structure-adjusted price-to-book multiple, plus 10% home appreciation through year-end 2014
Bull Case $28	1.6x 1Q13 Book Value	**Home prices surge; ARPI proves to be best-in-class operator.** HPA of 20% between 1Q13 and YE 2014 (~11% annualized). ARPI consistently reports better operating metrics than peers, warranting a 20% price-to-book multiple premium to SBY.
Base Case $24	1.4x 1Q13 Book Value	**Market starts to appreciate value of HPA and platform.** HPA of 10% between 1Q13 and YE 2014 (~6% annualized). After multiple quarters of results, ARPI makes its platform value clear and benefits from multiple expansion (10% premium to peer SBY).
Bear Case $18	1.0x 1Q13e Book Value	**Home prices stall, and operational missteps pile up.** ARPI trades at a 3% discount to our estimated 1Q13 liquidation value to shareholders after investors lose trust in ARPI's platform and HPA.

HPA drives upside: Book value is $18.65, but $19.67 on a marked to market basis; 6% annual HPA implies liquidation value of $21.48 at YE14



Source: Thomson Reuters, S&P / Case-Shiller, Morgan Stanley Research estimates

Investment Thesis

- **Overweight:** We believe in the single family rental (SFR) investment thesis, and view ARPI as a quality operator. At current valuation, we believe the market underappreciates future growth, home price appreciation (HPA), and platform value.
- **Significant growth opportunity…** ARPI is buying homes 30-50% below prior peaks and replacement cost, and we expect 6% average HPA over the next five years in our base case.
- **... Supplemented by a real current return.** Net yields are in the mid-6%'s. To be clear, though, this is not a yield story in the near-term as cash flow will struggle to keep up with the pace of vacant home acquisitions.
- **ARPI is a high quality operator.** ARPI management has a longer SFR track record than any other operator, and property tours confirm acquisition discipline and operational efficiency.

Key Value Drivers

- Home price appreciation (HPA)
- Large, accretive acquisition volume
- Occupancy rates and lease-up speed
- Rental rate growth in the long-term

Potential Valuation Catalysts

- HPA implied by monthly Case Shiller Home Price indices
- Securitization of a LT debt vehicle
- Increased inclusion of SFR's in REIT indices and investors' mindshare
- Consistent reports of large acquisition volume without operational hiccups.

Key Risks to Our Price Target

- Operational missteps on rapid growth with an untested business model
- Yield compression as prices rise
- Pipeline of other SFR IPO's competing for investors' capital

Hardlines Retail: BTR a Home Improvement (HD / LOW) Stimulant

Activity in the buy-to-rent market could benefit the home improvement industry directly by $20-30bn over the next 4 years as well as providing an indirect benefit. Assuming that 50% of the 4.4mm shadow inventory is converted for rental purposes, we estimate that would add about $20-30bn, or 8%, to home improvement spend over the next 4 years against a total market of ~$300bn. Further, the indirect benefit from higher home prices could be greater.

HD will likely see a greater share of direct activity given that it has a ~20% share of the pro market vs. ~10% for LOW. Nonetheless, we continue to favor LOW as our preferred way to play buy-to-rent and improving home improvement activity given higher relative margin upside, stronger return of capital, and a more attractive valuation.

Exhibit 25

Cost of materials to rehab distressed home for rental results in ~2% annual HI market growth

	2013E	2014E	2015E	2016E
Rehab/House ($k)	$20.8	$21.2	$21.6	$22.1
Labor/Building materails split (%)	50.0%	50.0%	50.0%	50.0%
Cost of Materials/House ($k)	$10.4	$10.6	$10.8	$11.0
Total Distressed Homes	4,400,000			
% Converted to Rentals	50.0%			
Distressed Homes Converted to Rentals	2,200,000			
Distressed Sales as % EHS	35.0%			
Annual EHS	5,080,000			
Distressed Homes Converted to Rentals	370,417	889,000	889,000	51,583
Total Implied Spend	**$3,852**	**$9,431**	**$9,619**	**$569**
as % total HI Market Spend	1.3%	2.9%	2.9%	0.2%

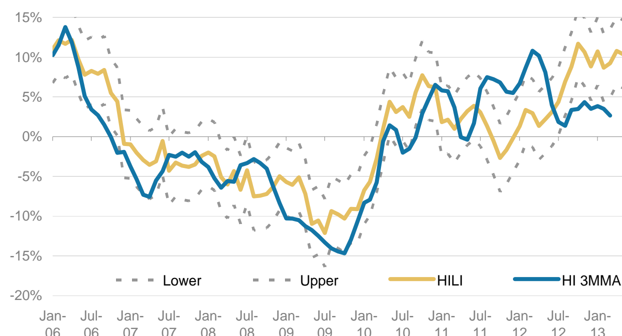
Source: Morgan Stanley Research

While we see benefits for the next few years, we would note that there may be some longer-term repercussions due to a shift towards rentership. We estimate that historically rental home improvement spend has been 50% that of owner-occupied spend. Even after adjusting for differences in historical sizes of the dwellings, we estimate that renter occupied spend per home has been 20-30% below owner occupied spend.

Home prices likely continue to benefit, fueling further home improvement spend. BTR activity has helped to drive home price appreciation more quickly and sharply than most expected as it has helped to offset weak credit availability. If BTR activity continues to help propel home prices, home improvement should benefit. In a regression analysis of the past 40 years, home prices explain 30% of the changes in home improvement industry growth and has the greatest correlation with average ticket spend. **The lead indicator currently forecasts 9-11% growth in 2H13.**

Exhibit 26

HILI suggests growth should remain strong, with HPA a driving force

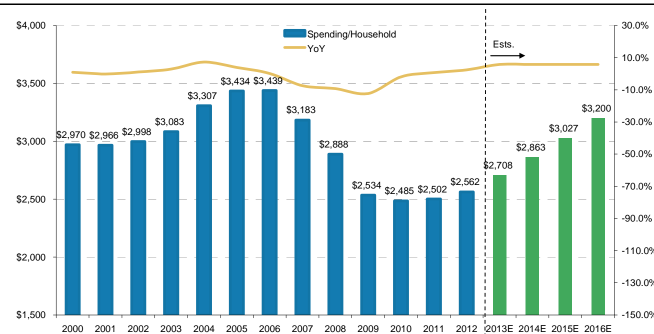


Source: Census Bureau, NAR, Federal Reserve Board, Institute for Supply Management, Morgan Stanley Research

HD and LOW should benefit from improving home improvement spending per household. Home improvement spending was $2,562 per household in 2012, 13% below the ten year average of $2,942 on an inflation adjusted basis. We expect spending to approach $3,200 by 2016, which has been a reasonable peak level over time, and estimate that the number of households will grow by 0.5% per year, in line with the 5-year CAGR between 2007 and 2012. **As a result, we expect total home improvement spending to grow by a 6.2% CAGR between 2012 and 2016.**

Exhibit 27

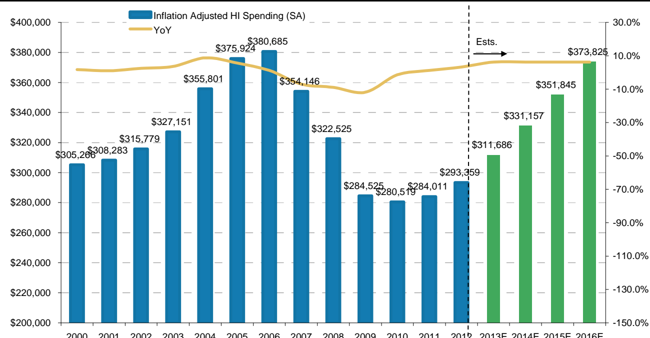
HI spend per home (inflation-adjusted) was ~10% off long-term average in 2012



Source: Census Bureau, Morgan Stanley Research

Exhibit 28

Expect HI Spending to Grow at a 6-6.5% CAGR



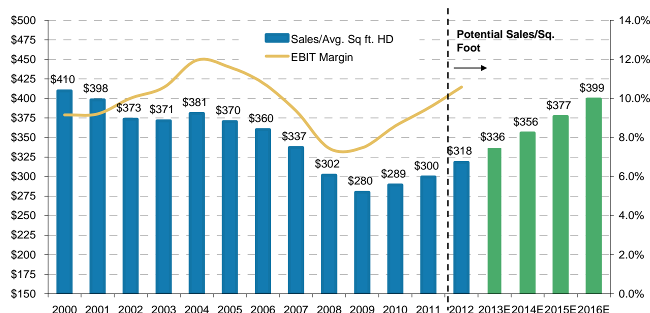
Source: Company Data, Morgan Stanley Research

Home Depot:

Potential for $400 sales per sqft by 2016, Current Est $370:
Assuming that HD maintains its 25% market share, we believe that sales per square foot have the potential to approach $400 in 2016, 7-8% above our current estimate of $370. For HD, this estimate is 25% above 2012 sales/square foot of $318 but 5% below peak levels of $420 sales/square foot in 1999.

Exhibit 29

HD Sales/Square Foot Potential



Source: Company Data, Morgan Stanley Research

$400 Sales/sqft could drive 13-13.5% EBIT margins:
If HD realizes $400 in sales per square foot, we believe that operating margins can approach 13-13.5% in 2016 compared to our current estimate of 13%. In this scenario, there would be 10-20% upside to our 2016 HD EPS.

Exhibit 30

HD Potential EPS – 2016E

	HD - Sales per Square Foot						
EBIT Margin	$325	$350	$375	$400	$425	$450	$475
11.3%	$3.98	$4.33	$4.69	$5.05	$5.40	$5.76	$6.11
11.6%	$4.12	$4.49	$4.86	$5.22	$5.59	$5.96	$6.33
12.0%	$4.26	$4.64	$5.02	$5.40	$5.78	$6.16	$6.54
12.3%	$4.41	$4.80	$5.19	$5.58	$5.97	$6.36	$6.75
12.7%	$4.55	$4.95	$5.35	$5.75	$6.16	$6.56	$6.96
13.0%	$4.70	$5.11	$5.52	$5.93	$6.34	$6.76	$7.17
13.4%	$4.84	$5.26	$5.69	$6.11	$6.53	$6.96	$7.38
13.7%	$4.99	$5.42	$5.85	$6.29	$6.72	$7.16	$7.59
14.1%	$5.13	$5.57	$6.02	$6.46	$6.91	$7.35	$7.80
14.4%	$5.27	$5.73	$6.19	$6.64	$7.10	$7.55	$8.01
14.8%	$5.42	$5.88	$6.35	$6.82	$7.29	$7.75	$8.22
15.1%	$5.56	$6.04	$6.52	$7.00	$7.48	$7.95	$8.43
15.5%	$5.71	$6.20	$6.68	$7.17	$7.66	$8.15	$8.64
15.8%	$5.85	$6.35	$6.85	$7.35	$7.85	$8.35	$8.85

Source: Company Data, Morgan Stanley Research

Exhibit 31

HD Upside to Current 2016E EPS

	HD - Sales per Square Foot						
EBIT Margin	$325	$350	$375	$400	$425	$450	$475
11.3%	-27.5%	-21.0%	-14.5%	-8.0%	-1.5%	5.0%	11.5%
11.6%	-24.9%	-18.2%	-11.5%	-4.8%	1.9%	8.6%	15.3%
12.0%	-22.3%	-15.4%	-8.5%	-1.6%	5.3%	12.3%	19.2%
12.3%	-19.6%	-12.5%	-5.4%	1.7%	8.8%	15.9%	23.0%
12.7%	-17.0%	-9.7%	-2.4%	4.9%	12.2%	19.5%	26.8%
13.0%	-14.4%	-6.9%	0.6%	8.1%	15.7%	23.2%	30.7%
13.4%	-11.7%	-4.0%	3.7%	11.4%	19.1%	26.8%	34.5%
13.7%	-9.1%	-1.2%	6.7%	14.6%	22.5%	30.4%	38.4%
14.1%	-6.5%	1.6%	9.7%	17.9%	26.0%	34.1%	42.2%
14.4%	-3.9%	4.5%	12.8%	21.1%	29.4%	37.7%	46.0%
14.8%	-1.2%	7.3%	15.8%	24.3%	32.8%	41.4%	49.9%
15.1%	1.4%	10.1%	18.8%	27.6%	36.3%	45.0%	53.7%
15.5%	4.0%	12.9%	21.9%	30.8%	39.7%	48.6%	57.6%
15.8%	6.6%	15.8%	24.9%	34.0%	43.1%	52.3%	61.4%

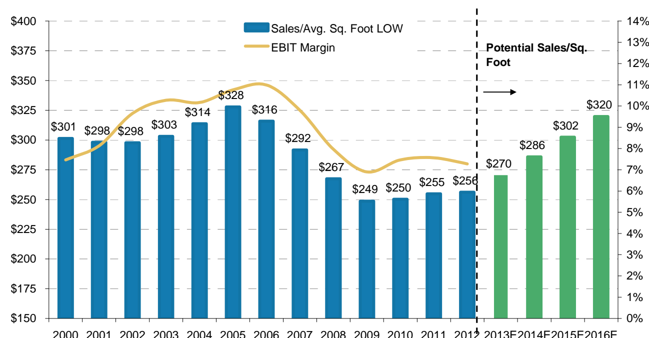
Source: Company Data, Morgan Stanley Research

Lowes:

Potential for $320 sales per sqft by 2016, Current Est $290: If LOW maintains its 17% market share, its sales per square foot can approach $320 in 2016, 10-11% above our current estimate of $290 and 25% above its 2012 level of $256. Also, this estimate is still 2.5% below its peak level of $328 in 2005.

Exhibit 32

LOW Sales/Square Foot Potential



Source: Company Data, Morgan Stanley Research

$320 Sales/sqft could drive 10-11% EBIT margins:
At LOW, if sales/square foot reach $320 in 2016, operating margins can approach 10-11% compared to our current estimate of 9.4% and 20-30% upside to our LOW EPS estimates.

Exhibit 33
LOW Potential EPS – 2016E

	LOW - Sales per Square Foot					
EBIT Margin	$250	$275	$300	$325	$350	$375
8.0%	$2.38	$2.67	$2.95	$3.23	$3.51	$3.79
8.4%	$2.51	$2.80	$3.09	$3.39	$3.68	$3.98
8.7%	$2.63	$2.94	$3.24	$3.55	$3.85	$4.16
9.1%	$2.75	$3.07	$3.39	$3.71	$4.03	$4.34
9.4%	$2.88	**$3.21**	**$3.54**	**$3.87**	**$4.20**	$4.53
9.8%	$3.00	**$3.34**	**$3.69**	**$4.03**	**$4.37**	$4.71
10.1%	$3.12	**$3.48**	**$3.83**	**$4.19**	**$4.54**	$4.90
10.5%	$3.25	**$3.61**	**$3.98**	**$4.35**	**$4.72**	$5.08
10.8%	$3.37	**$3.75**	**$4.13**	**$4.51**	**$4.89**	$5.27
11.2%	$3.49	**$3.88**	**$4.28**	**$4.67**	**$5.06**	$5.45
11.5%	$3.61	$4.02	$4.42	$4.83	$5.23	$5.64
11.9%	$3.74	$4.15	$4.57	$4.99	$5.40	$5.82
12.2%	$3.86	$4.29	$4.72	$5.15	$5.58	$6.01
12.6%	$3.98	$4.43	$4.87	$5.31	$5.75	$6.19

Source: Company Data, Morgan Stanley Research

Exhibit 34
LOW Upside to Current 2016E EPS

	LOW - Sales per Square Foot					
EBIT Margin	$250	$275	$300	$325	$350	$375
8.0%	-29.6%	-21.3%	-12.9%	-4.6%	3.7%	12.0%
8.4%	-25.9%	-17.3%	-8.6%	0.1%	8.8%	17.4%
8.7%	-22.3%	-13.3%	-4.2%	4.8%	13.8%	22.9%
9.1%	-18.7%	-9.3%	0.1%	9.5%	18.9%	28.3%
9.4%	-15.0%	**-5.3%**	**4.5%**	**14.3%**	**24.0%**	33.8%
9.8%	-11.4%	**-1.3%**	**8.9%**	**19.0%**	**29.1%**	39.2%
10.1%	-7.8%	**2.7%**	**13.2%**	**23.7%**	**34.2%**	44.7%
10.5%	-4.1%	**6.7%**	**17.6%**	**28.4%**	**39.3%**	50.1%
10.8%	-0.5%	**10.7%**	**21.9%**	**33.2%**	**44.4%**	55.6%
11.2%	3.1%	**14.7%**	**26.3%**	**37.9%**	**49.5%**	61.0%
11.5%	6.8%	18.7%	30.7%	42.6%	54.6%	66.5%
11.9%	10.4%	22.7%	35.0%	47.3%	59.6%	72.0%
12.2%	14.1%	26.7%	39.4%	52.1%	64.7%	77.4%
12.6%	17.7%	30.7%	43.8%	56.8%	69.8%	82.9%

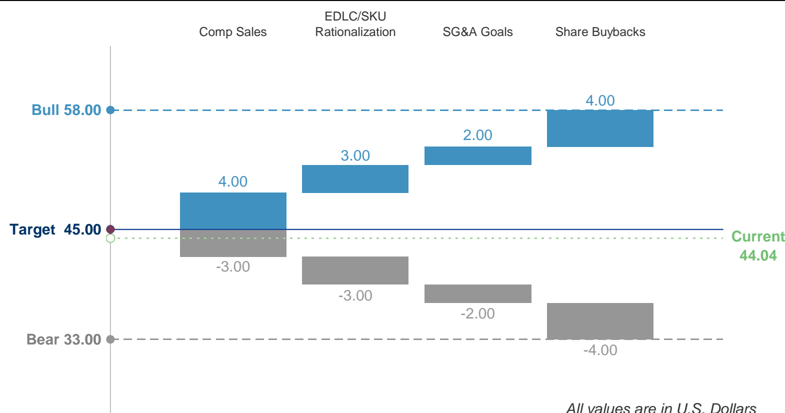
Source: Company Data, Morgan Stanley Research

Risk-Reward Snapshot: Lowe's (LOW.N, $44.04, OW, PT $45)

Margin Improvement & Accelerating Buybacks Drives Outlook

Bull Case $58	20x Bull Case 2014E EPS	**LOW reaches 10% EBIT margins by '15E, above its 9.7% guidance.** Long-term comp growth of 5-6% returns to historical industry averages. In line with guidance, gross margins expand by 80-100bps and SG&A cuts result in ~300bps of margin expansion by '15E. Assume LOW repurchases $14 bn of stock by '15E.
Base Case / PT $45	17.5x Base Case 2014E EPS	**Top-line & margins continue improvement in '13, and LOW reaches ~9.0% LT margins by '15E.** LOW's comp grows ~3.5% in '13 and ~2-3% LT. SKU rationalization provides 80-90bps of gross margin expansion by 15E. Lower labor, marketing, and op ex reductions result in ~200-250bps of margin expansion by '15E. We assume LOW repurchases $11-12 bn of stock by '15E.
Bear Case $33	14.5x Bear Case 2014E EPS	**Housing improvement short lived, comps grow 3% in 2013.** A reacceleration in home price declines reverse housing turnover improvement. LOW returns to stalemate in '14 and LT comps are up 100-200 bps. LOW deleverages from lower sales outlook and margins are flat by '15E. Thus, LOW is only able to repurchase $4-5 bn of stock by '15E.

Bear to Bull: Comp highly important due to refined model



Source: Source: Thomson Reuters, Morgan Stanley Research

Why Overweight?

- Rising housing sentiment and easier comparisons should support near-term top-line improvement. Further, top-line leverage as well as internal focus on margin initiatives should result in LOW EBIT margin expansion of ~200-250bps through 2015E.
- Additionally, combined with an increase in its leverage profile to about 2-2.25x adjusted debt/ EBITDAR, we expect LOW to buyback about $11.5bn in stock through 2015E.
- While LOW's trades at 16x '14E P/E multiple, ~1x above its 5-year historical average, given LOW's operating margin improvements, robust return of capital plans, and recent improvements in underlying housing market we believe a valuation premium is merited.

Key Risks to our Price Target

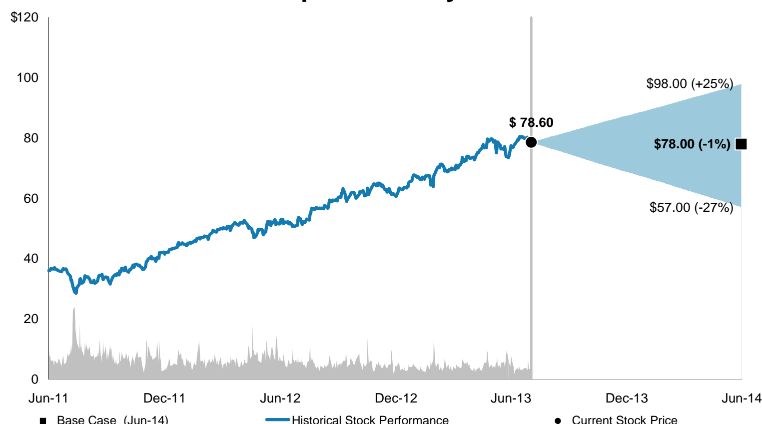
- Recent housing macro improvements were temporary and weather driven, and housing prices and turnover begin to slow again.
- Near-term gross margin pressure or sales missteps could be greater than we expect as LOW manages ~$300 mm of inventory rationalization by 2015E.

Price Target Methodology

We use an average of our DCF analysis and P/E multiple valuation. Our DCF is based on a 7.5% weighted average cost of capital and 1.0% long-term growth rate. Our P/E multiple analysis is based on 15x 2016E EPS, which we discount back using a 9.2% ROE.

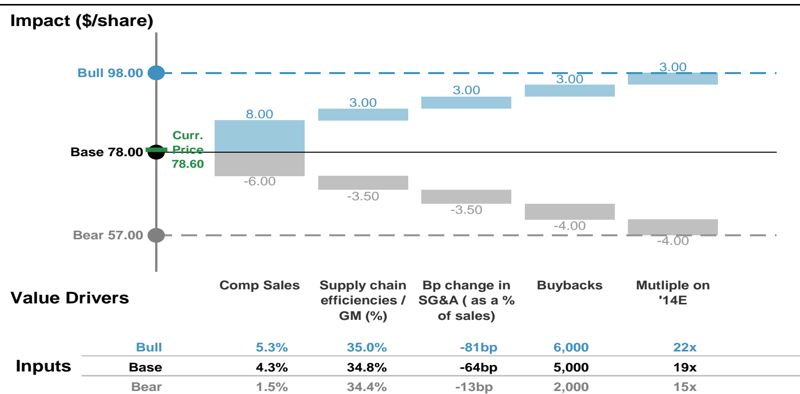
Reward Snapshot: Home Depot (HD.N, $78.60, EW)

Balanced risk-reward despite industry tailwinds



Bull Case $98	21x Bull Case 2014E EPS	**Economic & housing improvement drives 6-7% comp growth.** HD's comp accelerates 200-300bps in the next few years due to macro recovery and better in-stock levels from its distribution investments. Long-term HD maintains a 4-5% comp and the company's supply chain investments result in ~300bps of margin expansion by 2015E.
Base Case $78	18.5x Base Case 2014E EPS	**At steady state comp of ~4-5% growth.** HD grows in-line with our overall home improvement outlook in '13 of ~4%. It maintains the cost efficiencies from supply chain improvements and further refinements of operations results in ~250bps of margin expansion by 2015E.
Bear Case $57	16x Bear Case 2014E EPS	**Consumer contraction & slowed housing improvements cause comps to be 1.5-3%.** A deceleration in housing and consumer deterioration results in 3% comps in '13. In addition to sales deleverage, slowed supply chain margin improvements and an increase in promotions results in HD falling short of its 12% EBIT margin targets by '15E.

Bear to Bull: Execution on cost/efficiency initiatives is key



Inputs	Comp Sales	Supply chain efficiencies / GM (%)	Bp change in SG&A (as a % of sales)	Buybacks	Mutliple on '14E
Bull	5.3%	35.0%	-81bp	6,000	22x
Base	4.3%	34.8%	-64bp	5,000	19x
Bear	1.5%	34.4%	-13bp	2,000	15x

Source: Thomson Reuters, Morgan Stanley Research

Why Equal-weight?

- Improving housing fundamentals should support near-term top-line improvement. Further, continuing efficiencies from supply chain refinement should result in adjusted EBIT margin expansion of ~250bps through 2015E.
- HD trades on 18x '14E P/E and 11x '14E EV/EBITDA. While its P/E multiple is 2x above its historical average, we believe it is justified given HD's leverage to the housing recovery, its margin expansion opportunities, and its more muted threat from e-commerce relative to other Hardlines subcategories' exposure.

Key Risks

- Recent housing macro improvements were temporary and weather driven, and housing prices and turnover begin to slow again.
- Supply chain efficiencies become more muted.

Potential Catalysts

- While HD already maintains a small exposure to Canada, Mexico, and China—further expansion in international territories could provide a source of stronger than expected growth.

Valuation Methodology

We use a weighted average of our DCF analysis and P/E multiple valuation. Our DCF is based on a 7% weighted average cost of capital and a 1.0% long-term growth rate. Our P/E multiple analysis is based on 16x 2016E EPS, which we discount back using an 8.6% ROE.

Large & Midcap Banks: TCB, BAC & STI Most Levered to BTR-Induced Credit Improvement

Stronger buy to rent trends are a positive for banks as it improves bank asset quality, key to boosting EPS and PE multiples. Why?

- Investor purchase of delinquent properties adds new buyers to the market which speeds up the sales cycle of homes. Shorter time-to-sell reduces the risk that you misprice a property. Lower risk gives banks confidence to put more properties on the market, cleaning up the asset quality of the banks.
- Investor refurbishment of homes increases the value of that home and surrounding homes, improving the credit quality of the region and banks exposed to that region. Higher credit quality also lowers risk-weighted assets, freeing up capital for repatriation to investors. Rising asset quality boosts PE and PB multiples for bank stocks.
- As banks sell delinquent, nonperforming, foreclosure and OREO (other real estate owned) properties, they need fewer staff to manage these highly labor intensive assets. Expenses decline, boosting bank EPS

To assess which banks out of our coverage benefit from housing the most, we rank them on the two key metrics that BTR helps improve:

1) lower NCOs

2) lower credit related expenses

We then overlay the geographies where BTR has been strong and is expected to be strong. The "has been" strong is important as the credit benefits from recent BTR activity in markets like Phoenix, Atlanta, Las Vegas is still coming through bank asset quality and expenses. There is a lag effect that will continue to positively impact banks for the next several quarters. The "will be strong" BTR markets are important as indicators of accelerating asset quality in 2H14.

Exhibit 35

We Run Sensitivities to Assess Which Banks Potentially Benefit Most/Least From Housing Improvement (Expressed as % of 2014 EPS)

Large Cap and Midcap Banks Stack Ranked

Rank	Bank	10% Lower NCOs	Lower credit related expenses (1Q faster disposition)	Benefit to 2014 EPS
1	TCB	1.4%	0.6%	2.0%
2	BAC	0.8%	0.9%	1.8%
3	STI	1.1%	0.6%	1.7%
4	FHN	0.7%	0.5%	1.2%
5	WBS	0.9%	0.3%	1.2%
6	WFC	0.6%	0.5%	1.1%
7	C	0.8%	0.2%	1.0%
8	SNV	0.6%	0.4%	1.0%
9	PNC	0.7%	0.3%	1.0%
10	HBAN	0.7%	0.2%	0.9%
11	FITB	0.6%	0.2%	0.9%
-	**Median LC**	**0.5%**	**0.3%**	**0.8%**
12	BXS	0.4%	0.4%	0.8%
13	BBT	0.5%	0.1%	0.7%
14	WAFD	0.2%	0.4%	0.6%
15	JPM	0.2%	0.4%	0.6%
16	KEY	0.5%	0.1%	0.6%
17	RF	0.4%	0.2%	0.6%
18	ASBC	0.4%	0.2%	0.6%
-	**Median**	**0.3%**	**0.2%**	**0.6%**
19	ZION	0.4%	0.1%	0.6%
20	BKU	0.1%	0.4%	0.5%
21	USB	0.3%	0.1%	0.4%
-	**Median MC**	**0.2%**	**0.2%**	**0.4%**
22	HBHC	0.1%	0.4%	0.4%
23	PBCT	0.3%	0.2%	0.4%
24	BOKF	0.1%	0.3%	0.4%
25	MTB	0.2%	0.2%	0.4%
26	NYCB	0.1%	0.2%	0.3%
27	CYN	0.1%	0.1%	0.3%
28	COF	0.1%	0.1%	0.2%
29	VLY	0.1%	0.1%	0.2%
30	EWBC	0.1%	0.1%	0.2%
31	WABC	0.0%	0.1%	0.1%
32	BOH	0.1%	0.1%	0.1%
33	CBSH	0.0%	0.0%	0.1%
34	FRC	0.0%	0.0%	0.1%
35	PB	0.0%	0.0%	0.0%

Source: Company Data, Morgan Stanley Research estimates
Note: Citi includes beneficial DTA impact. BPOP omitted due to majority of resi loans outside continental US.

Geographically Advantaged for BTR Trends

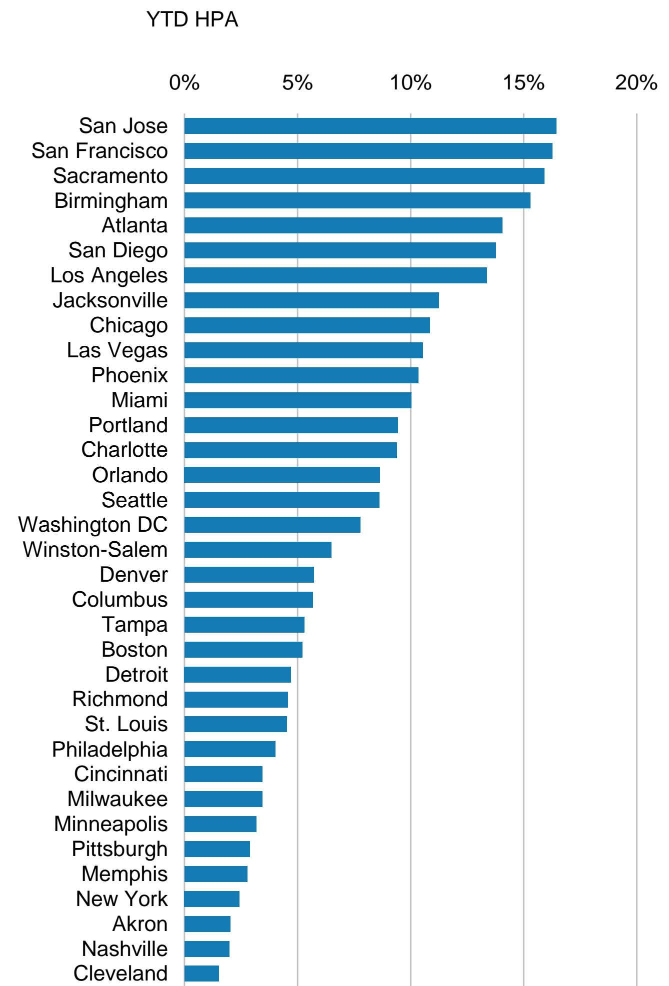
California and Southeast Banks Biggest Beneficiaries of BTR Trends to Date

BTR has benefitted California and Southeast home prices the most as their HPA is up the most year-to-date.

Banks that should benefit the most are the pure-play California Banks (WABC, EWBC, CYN, FRC) and STI among Southeast banks. Although admittedly, many of the pure-play California banks, including FRC, already have pristine credit quality, suggesting more of their benefit comes from loan growth. BAC benefits from having a strong footprint in both California and the Southeast.

Exhibit 36

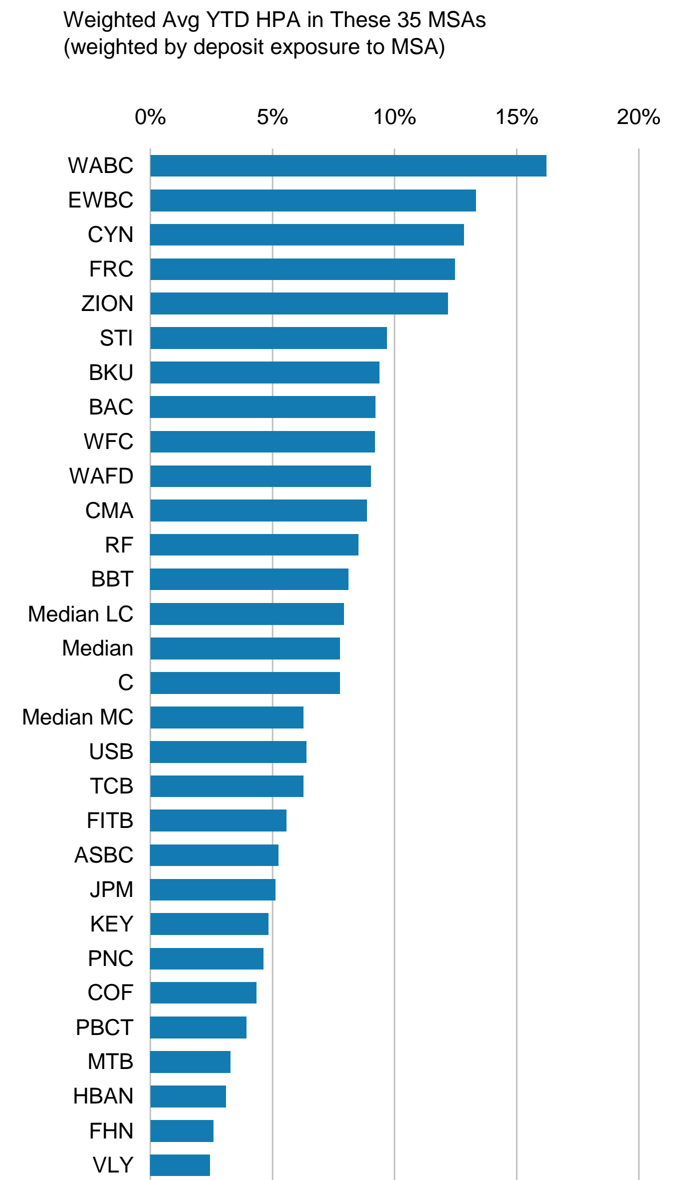
HPA Growth for Major MSAs: +1.5% to 16.5% YTD



Source: Morgan Stanley Research

Exhibit 37

LC and MC banks Ranked by WAVG YTD HPA Growth in their Deposit Footprints.



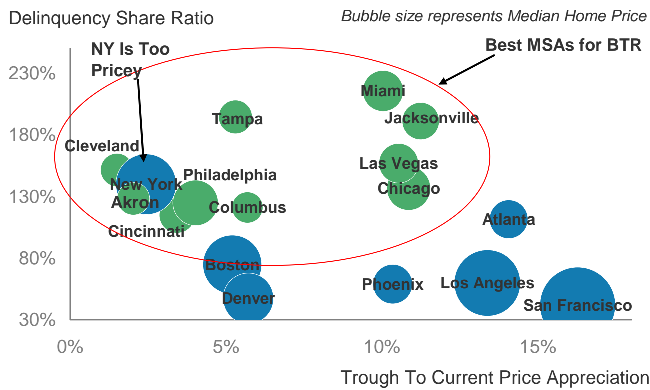
Source: Company Data, Morgan Stanley Research

We also stack ranked our banks based on their exposure to attractive buy-to-rent MSAs. These MSAs have 3 criteria:

- High Delinquency Share Ratio (DSR)
- Lower Trough-to-Current Price Appreciation
- Sweet Spot Home Values of $100-250k

Exhibit 38

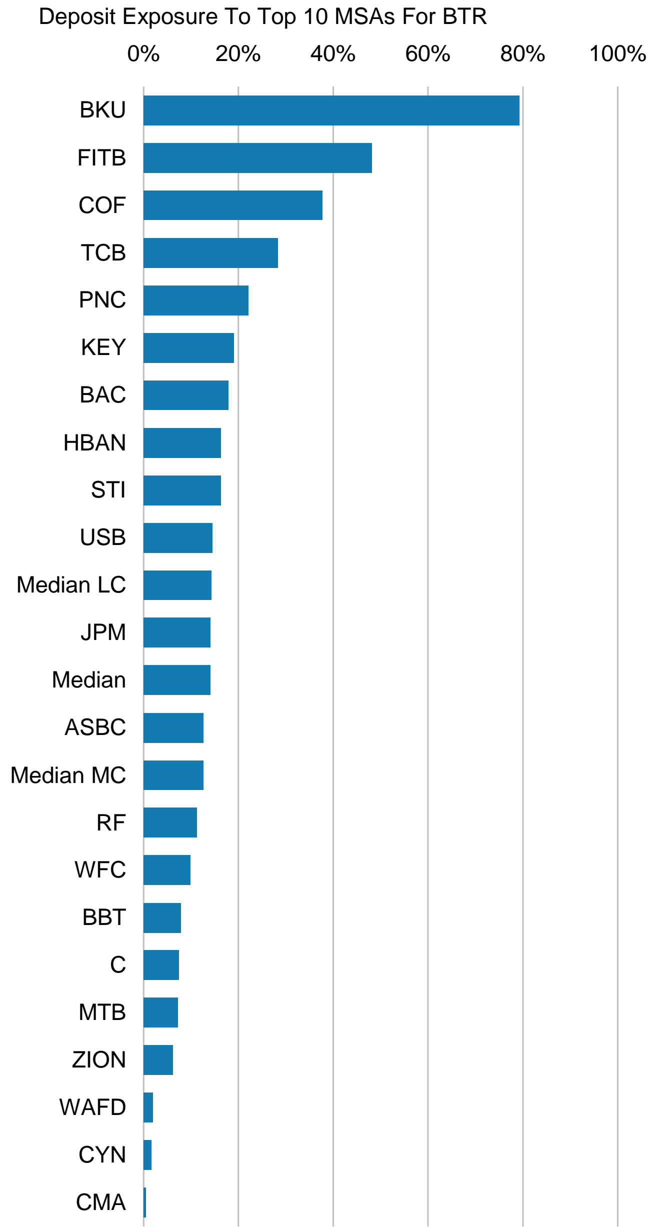
MSAs That 1) Have Moderate Home Values, 2) Show Low Improvement From Trough Price, and 3) Have High DSRs Are The Best For BTR (shaded in green)



Source: Company Data, Morgan Stanley Research

Exhibit 39

LC and MC banks Ranked by Deposit Share Within the Top 10 MSAs For BTR



Source: Company Data, Morgan Stanley Research

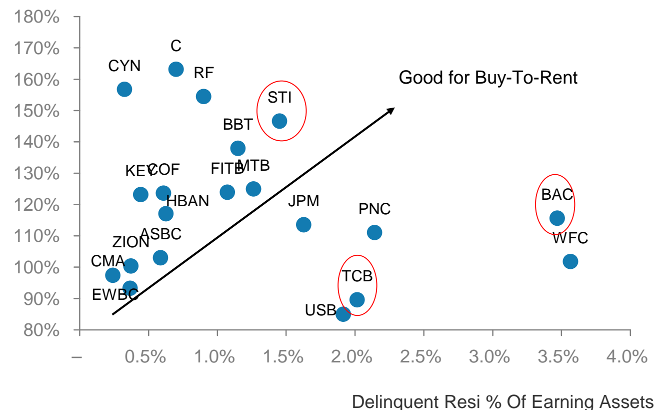
Pulling this together, we show bank stocks mapped by their weighted average DSR versus the percentage of earning assets that is in delinquent residential real estate. The DSR is a weighted average for each bank for 27 of the 35 MSAs that have a median home price between $100K and $250K. We use this range of home prices as MS housing analysts believe it is the sweet spot for buy-to-rent. We are defining delinquent resi real estate as delinquent, nonpeforming and OREO first and second residential mortgage exposures.

A higher DSR weighting means that the bank has a significant deposit share in cities where buy-to-rent is likely to occur. A higher resi real estate delinquency ratio means the bank has more opportunities to clean up its balance sheet and boost earnings by selling housing loans into an improving market. As a result, the upper right quadrant of this chart shows the bank stocks best positioned to benefit from buy-to-rent trends which help banks clean up assets, boost earnings, lift EPS and boost valuation multiples.

Large cap and Midcap bank stocks best positioned to benefit from buy to rent trends are overweight rated BAC and SunTrust and EW rated TCB. BAC is a top pick as it has more delinquent loans, SunTrust as it has high exposure to cities where buy to rent is likely to be strong, or TCB which has a combination of the two, especially in cities where we expect buy to rent investing will accelerate.

Exhibit 40

Banks With A High Portion Of Delinquent Resi Assets and High Weighted DSR Are Well Positioned For BTR



Source: Company Data, Morgan Stanley Research
Note: BKU and FRC are omitted due to scale. Data from 1Q13 is being utilized above as 2Q13 data is not yet available

Ranking the Banks on Housing Improvement

To assess which banks benefit most/least, we apply a sensitivity analysis on each bank to measure the potential impact to 2013e EPS and stack rank:

1) 10% lower NCOs

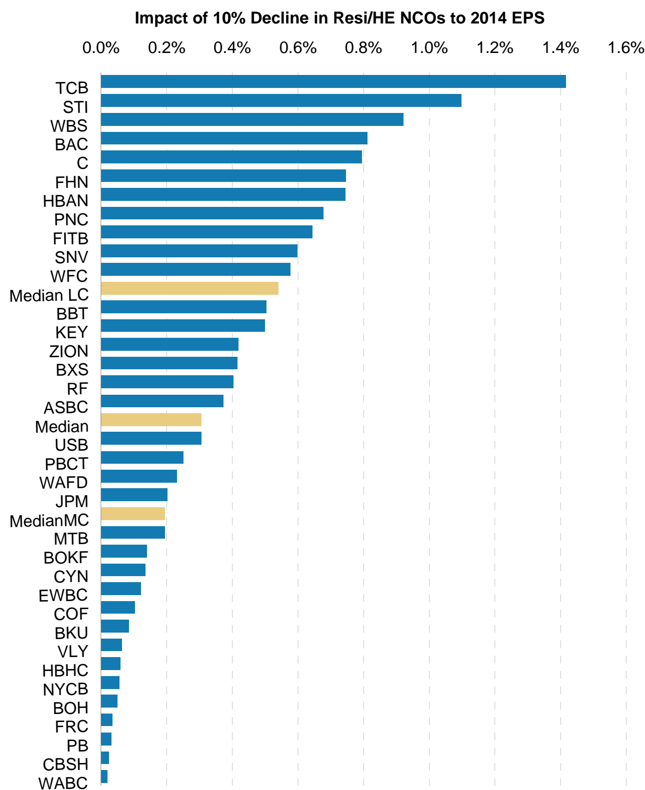
2) One-quarter faster disposition of distressed housing assets…driving lower foreclosure/delinquent carrying costs

1) Lower Housing Net Charge-Offs

TCB and STI stand to benefit the most from lower NCOs on resi mortgage and home equity. A 10% reduction in housing related losses would generate a beneficial impact to 2014 EPS of 1.4% and 1.1% for TCB and STI, respectively. The median impact to LC banks (0.5%) is substantially greater than that for MC banks (0.2%), given that LC banks are more skewed to housing in their loan books.

Exhibit 41

Lower NCOs: Impact of 10% Sensitivity



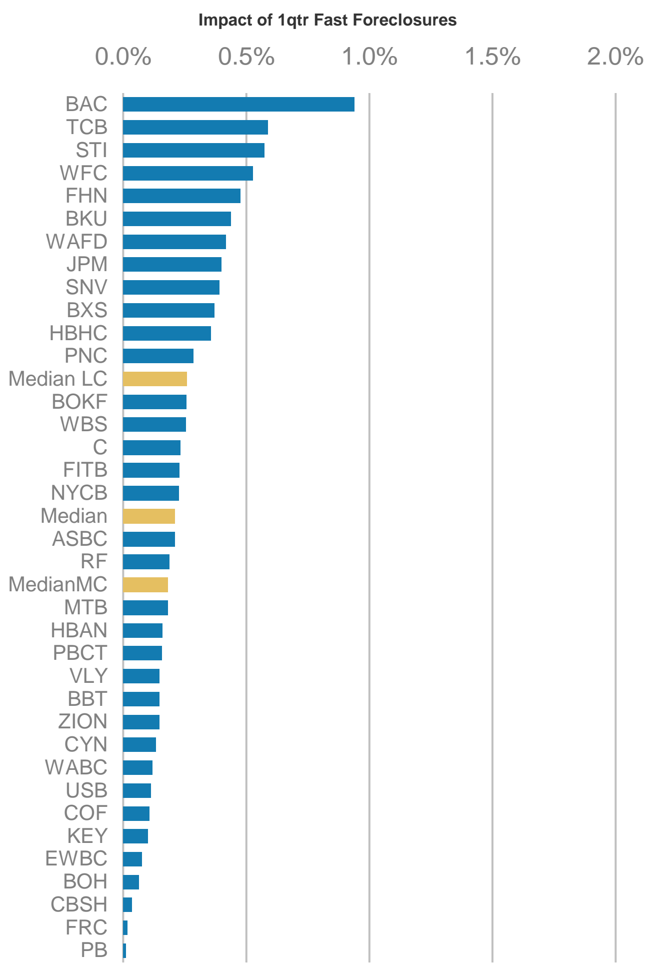
Source: Company Data, Morgan Stanley Research estimates
Citi includes beneficial DTA impact

2) Lower Foreclosure Costs

BAC, TCB and STI benefit most from a 1-quarter faster disposition of distressed housing assets. As such an increase would potentially drive our 2014 EPS estimates higher by 0.9%, 0.6%, and 0.6% vs. current MS estimates.

Exhibit 42

Foreclosure speed sensitivity: Impact of 1qtr faster foreclosures on 2014 EPS estimates

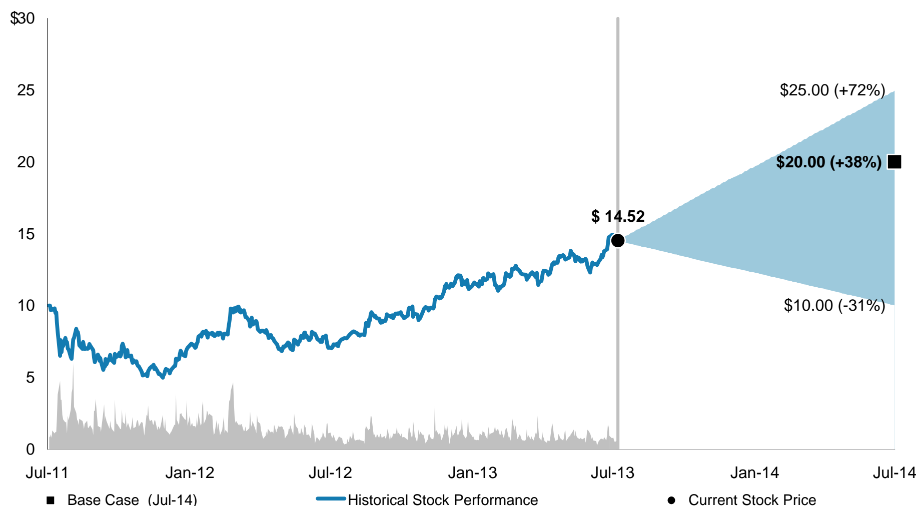


Source: Company Data, Morgan Stanley Research

We estimate foreclosure and delinquency carrying costs by looking to STI's cost disclosure. This implies foreclosure costs are about 13% of STI's distressed loan portfolio (90+DPD and nonaccruals), or about 7% of STI's distressed servicing assets. We estimate for peers by applying these percentages against each bank's distressed servicing assets (where available), or against the bank's own distressed portfolio. We estimate about 65% of these costs will come out over the next 5 yrs, or 20 quarters.

Risk-Reward Snapshot: Bank of America (BAC, Overweight, PT $20)

Risk-Reward View



Source: Morgan Stanley Research, FactSet

Price Target $20		Based on blend of valuation methodologies including residual income, P/E, P/B, P/TBV and sum-of-the-parts.
Bull Case $25.00	1.0x 2015e BV	**Sharper Economic Recovery.** Economy accelerates in 2013-14 as world rebounds more sharply driving down cost of equity, and housing improvement accelerates. The market looks forward 2-yrs for expected ROEs.
Base Case $20.00	0.82x 2015e BV	**Modest Economic Recovery**. Housing recovers modestly in 2013-14 (HPA growth of 6-8%); non-mortgage credit improves.
Bear Case $10.00	0.41x 2015 BV	**Double Dip Recession**. Consumer demand fades driving double dip recession. Reps/warranties loss rate rises to 6% vs 2% implied by recent settlement.

Why Overweight?

- We see accelerating exp cuts more than offsetting remaining litigation risk.
- We see $16.5b in cost saves coming through over next 3 years. This is more than the incremental $4.5b in litigation expense we have in our base case.
- Importantly, we expect cost saves will accelerate in 2h13
- BAC's 9.6% Basel 3 CT1 ratio is already above the FSB's minimum of 8.5%, suggesting BAC has the firepower to sizably ratchet up capital return in 2014.

Key Value Drivers/Catalysts

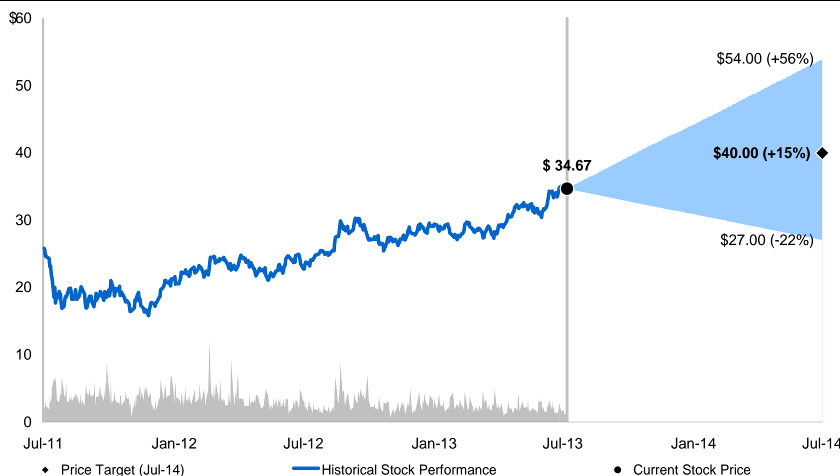
- Shrinking distressed housing balances.
- Reducing mortg servicing headcount.
- Lowering legacy asset costs.
- Executing on targeted expense saves.
- RMBS consortium settlement approved.
- Normalize reps/warranty payments.
- HPA improvement accelerates in 2013.
- Loan growth.
- Higher interest rates.

Risks to Our Price Target

- QE3 cessation drives up interest rates stopping home price appreciation while slow decline in unemployment keeps Fed Funds low until 2H16. Flat-to-down home prices slow earnings improvement for most banks, but expense saves help insulate BAC vs. peers.
- Inability to repurchase shares: Regulators determine BAC ability to return capital to shareholders and is a moving target. We bake in an 11.9% Basel 3 Common tier 1 ratio in 2015 with payout rising from 35% in 2013 to 63% in 2015. So even if capital ratios are tougher than what we are looking for, there is still plenty of room for dividends and buyback to rise.
- Higher than expected litigation and reps/warranties costs.

Risk-Reward Snapshot: SunTrust (STI, Overweight, PT $40)

Risk-Reward View



Source: Morgan Stanley Research, Thomson Reuters

Price Target $40		Based on blend of valuation methodologies including residual income, P/B and P/E.
Bull Case $54	11.7x Bull Case 2015 EPS	**Faster, Stronger US Recovery.** Greater GDP and HPA growth. Credit and unemployment improve more rapidly than our base case, driving rate hike sooner. Florida housing improves quicker than expected.
Base Case $40	10.7x Base Case 2015 EPS	**Modest Economic Recovery** Near end of consumer deleveraging. Improving housing with HPA +6-8% in 2013 and a further +4-6% in 2014, driving lower losses and lower foreclosure expenses. Improving macro with MS economists expecting above trend US GDP growth beginning in 2H13 continuing into 2014 from current 1.8% to 2.8% in 4Q13 and accelerating slightly to 3.0% by 4Q14.
Bear Case $27	10.2x Bear Case 2015 EPS	**Double Dip Recession.** Corporate reinvestment does not increase, consumer demand fades driving double dip recession. Unemployment rises to 12%. Market does not look through to normalizing EPS, nor does it discount strategic options. Florida housing deteriorates, and the judicial process for foreclosures slows further - keeping credit costs elevated.

Why Overweight?

- We are Overweight STI, which benefits most from an improvement in housing in the southeast. Expect improving housing will drive lower loan losses, lower credit related costs, higher purchase mortgage volumes and higher loan growth.

Key Value Drivers

- Mortgage production volumes. We believe STI will continue to gain share through 2013/14 as refis benefit from STI's outbound marketing efforts, and purchase volumes benefit from improving southeast HPA.
- Credit-related costs/Loan losses. STI benefitting from its 2H12 actions of selling down nonperforming and delinquent assets (now down 54% vs. 2Q12 levels) and improving southeast housing. Expect lower credit related costs drive a 2.6%-pt improvement y/y in STI's tangible efficiency ratio in 2013.
- Expense management. We look for STI's tangible efficiency ratio to decline from 69% in 2012 to 65% in 2013 and 62% in 2014 as a result of lower credit related costs and continued cost saves.

Potential Catalysts

- Strong purchase mortgage production revenues.
- Higher-than-expected cost saves.
- Home Price Index data (Southeast).
- FL foreclosures accelerate.
- C&I loan utilization
- 2014 CCAR

Risks to Price Target

- Risks to our price target include higher home equity, commercial real estate and residential construction losses, higher mortgage reps and warranties expense, higher than expected credit related costs, deteriorating housing market in Florida, slower expense improvements and lower mortgage revenues as a result of lower than expected refis/gain on sale.

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(as of June 30, 2013)

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	Coverage Universe		Investment Banking Clients (IBC)		
Stock Rating Category	Count	% of Total	Count	% of Total IBC	% of Rating Category
Overweight/Buy	**1020**	**36%**	**410**	**39%**	**40%**
Equal-weight/Hold	**1263**	**44%**	**485**	**47%**	**38%**
Not-Rated/Hold	**109**	**4%**	**24**	**2%**	**22%**
Underweight/Sell	**469**	**16%**	**123**	**12%**	**26%**
Total	**2,861**		**1042**		

Data include common stock and ADRs currently assigned ratings. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months.

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Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
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Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

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Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.
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