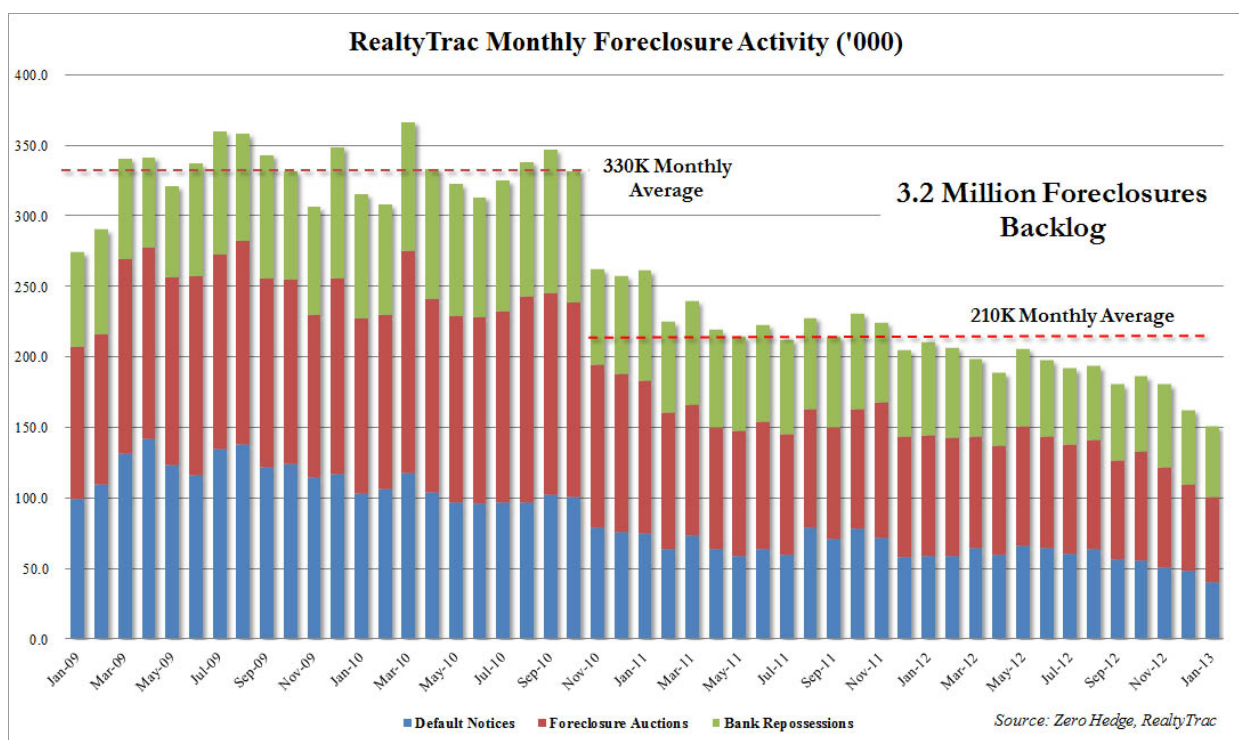
5100 Westheimer Rd • Ste 115
Houston, Texas 77056
Office: +1 (832) 356-0775
Fax: +1 (954) 229-2223
www.theadagiogroup.com

DETERMINING EQUILIBRIUM VALUE FOR RESIDENTIAL REAL ESTATE

One of the most pervasive challenges facing the residential real estate market is the determination of property values. As a result of TARP and other federal subsidies to institutional mortgage lenders, in addition to administrative incompetence, the foreclosure pipeline has been clogged.[1] The expected glut of inventory resulting from the mortgage and financial crisis has yet to materialize, and correspondingly, prices have been lifted by artificially limited supply.



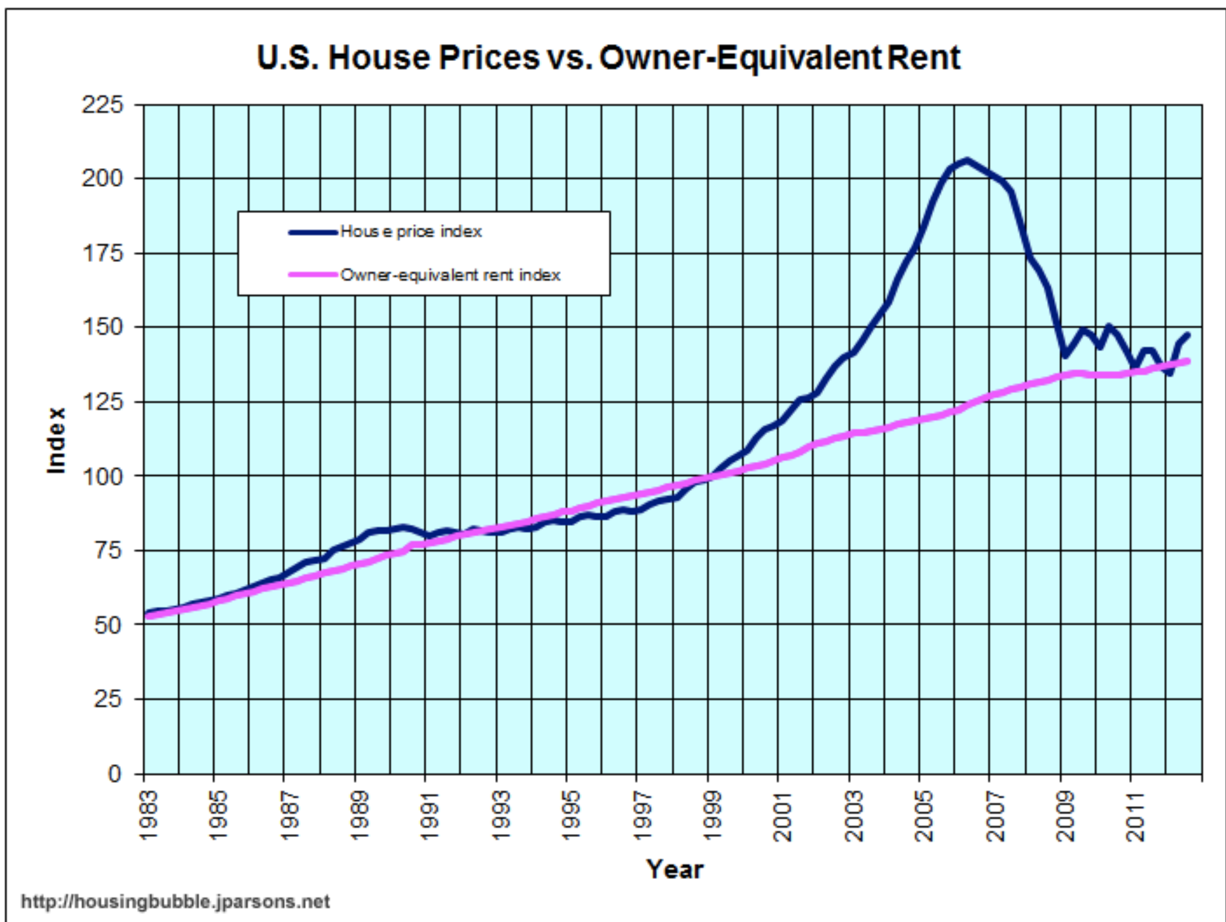
With such limited inventory, most areas are plagued by an insufficient number of transactions from which to meaningfully analyze market value for a particular property. Appraisers are forced to utilize extensive adjustments to recent comparable sales as a means to create some reasonable assessment of value. As already mentioned, the price of more recent sales is skewed by suppressed inventory in addition to an influx of capital from large financial firms seeking refuge in the residential real estate market.[2] The result is that again, prices are detached from what a free market would prescribe them to be.

---

[1] "Foreclosure Stuffing." *Zero Hedge*. 13 Sept 2012. Web. Retrieved 22 Feb. 2013. <http://www.zerohedge.com/news/foreclosure-stuffing>.

[2] Collins, Margaret, John Gittelsohn, and Heather Perlberg. "JPMorgan Joins Rental Rush For Wealthy Clients: Mortgages." *Bloomberg*. 4 Feb 2013: n. page. Web. 22 Feb. 2013.

When it comes to residential property, most end-use buyers think in the same terms as renters: monthly housing expenditure. In other words the purchase price is most often evaluated in terms of monthly payments for principle-interest-taxes-insurance ("PITI"), home owners' association ("HOA") dues, upkeep, etc. This is especially true when lending standards are lax and required down payments are low. With this in mind, it seems almost obvious that given a particular mortgage interest rate, housing prices should closely track their respective rental market… and until the housing bubble starting in 2001, they did. The U.S. Federal Reserve lowered the federal funds rate eleven times, from 6.5% to 1.75% over the course of 2001.[3] By 2002 home prices were appreciating at an annual rate of 10% or more in California, Florida, and most Northeastern states. Low interest rates compounded by poor underwriting and a gross expansion of the securitization chain lead to housing prices increasing exponentially in relation to commensurate rents.



Since 1982 changes in rents have been tracked and published by the Bureau of Labor Statistics ("BLS"). Rent of primary residence ("rent") and owners' equivalent rent of primary residence ("rental equivalence") are the two main shelter components of the Consumer Price Index ("CPI"),[4] the most popular measurement of inflation. Owner equivalent rent ("OER") is the amount of rent that could be paid to substitute a currently owned house for an equivalent rental property. It measures the change in

3 United States Federal Reserve System. Federal Reserve Bank of New York. Historical Changes of the Target Federal Funds and Discount Rates. New York, NY. Print. <http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html>.

4 United States Department of Labor. Bureau of Labor Statistics. Consumer Price Indexes for Rent and Rental Equivalence. Washington, DC: 2007. Print. <http://www.bls.gov/cpi/cpifact6.htm>.

implicit rent, which is the amount a homeowner would pay to rent or would earn from renting his or her home in a competitive market.

House Price Index ("HPI") is broad measure of the movement of single-family house prices in the U.S. It is a weighted, repeat-sales index, which means that it measures average price changes in repeat sales or refinancings on the same properties. The HPI is based on transactions involving conventional and conforming mortgages - only on single-family properties - that have been purchased or securitized by Fannie Mae or Freddie Mac. The HPI is published by the Federal Housing Finance Agency ("FHFA") using data supplied by Fannie Mae and Freddie Mac.[5]

VALUING RESIDENTIAL PROPERTY - INVESTORS VS. HOMEOWNERS

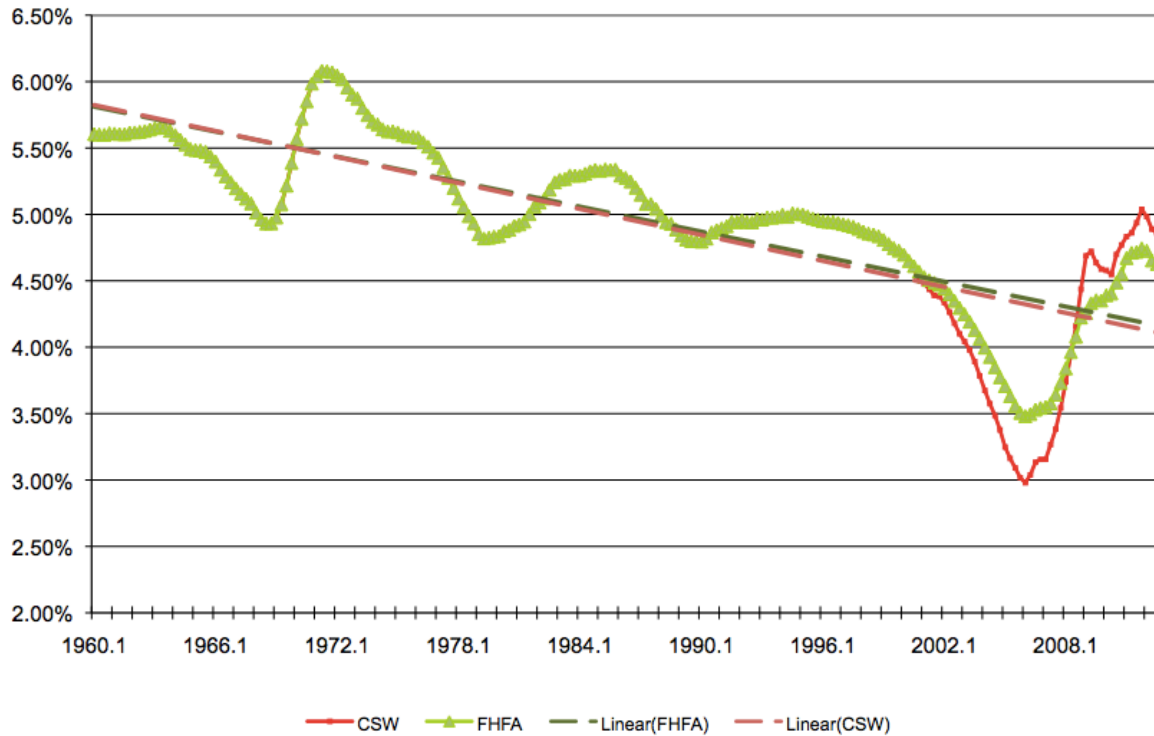
So the question remains… what ratio between value and rent represents stability in the residential housing market? Going back to 1982 when the BLS began tracking rental data and ending at 2001when the great housing bubble began, annual gross rents increased steadily and in sync with property values averaging a 20 to 1 ratio, respectively. In other words, a property should be expected to yield 5% per year of its true market value in gross rents in a stable market. Going back to 1960, however, the chart below indicates a steady decline in annual gross rental income as a percentage of value oscillating about a linear trend.[6] We expect this a symptom of a decrease in purchasing power of the U.S. middle class since the gold window was closed in 1971. *(For more information on inflationary pressures see Adagio's white paper from Q3 2012 on Deciphering Monetary Policy as a Means to Beat the Market.)*

That being said, based upon national averages, an owner-occupant should strive to pay no more than 20 times the projected annual gross rent for the target property to mitigate the risk of over paying in a the trap of a real estate bubble. It is important to note that local market conditions can vary drastically from national averages. When evaluating a particular property, it is important to consider historical value to rent ratios for that property's local market when applying this valuation method.

---

5 United States. Federal Housing Finance Agency. About HPI. Washington, DC: , Print. <http://www.fhfa.gov/Default.aspx?Page=81>.

6 Davis, Morris A., Lehnert, Andreas, and Robert F. Martin, 2008, "The Rent-Price Ratio for the Aggregate Stock of Owner-Occupied Housing," *Review of Income and Wealth,* vol. 54 (2), p. 279-284; data located at Land and Property Values in the U.S., Lincoln Institute of Land Policy <http://www.lincolninst.edu/resources/>



From an investor's perspective as with that of an owner-occupant, it's important to value a property as a function of its rental income rather than potential appreciation. While a given house will appreciate over time, barring real estate bubbles, most if not all of that appreciation will be offset by inflation… so betting on appreciation is a highly speculative proposition that incurs disproportionately high systematic risk relative to potential real return. When looking at a residential property from a rental income perspective, valuing it based upon its net operating income ("NOI") or net rent is much more meaningful than its gross counterpart. Net rents are analogous to corporate earnings, except that in the residential market, rents experience relatively little volatility (i.e. risk). Continuing the analogy between residential real estate and stocks, historically a price to earnings ratio of approximately 15 or better has represented a good buy in the S&P 500. That ratio applied to residential real estate yields a cap rate (NOI / Price) of 6.67% or better.

Chart | Table

Current S&P 500 PE Ratio: 17.24 +0.15 (0.88%)

4:02 pm EST, Fri Feb 22

Mean:	15.49	
Median:	14.49	
Min:	5.31	(Dec 1917)
Max:	123.79	(May 2009)

Given cost of ownership, a residential property purchased at market value and leased at market rent will most often create a negative cash flow after accounting for insurance (approximately 1% of value per annum), taxes (3%), maintenance (roughly 1%), property management (10% of gross rental income) and vacancy… especially if a mortgage is involved (which is not a component of cap rate calculations). Therefore, in most markets, investors must find substantial discounts to market value to generate the target cap rate of 6.67%. Residential properties available at a significant discount are few in number and difficult to find. Most markets are saturated with local investors who are solely dedicated to sourcing such opportunities. This problem is compounded by the pressures associated with the downward trend in average gross rent to price ratio.

THE REAL ESTATE INVESTOR'S DELIMMA

To be a successful investor in the residential real estate market requires the understanding that real estate is more than just a collection of hard assets, it's a business built upon hard assets. It's a business that requires market knowledge to understand what to pay, time to source assets that can be bought at the right price amongst a sea of competition, capital to execute the deal, and skill to manage the portfolio. If any one of these components is missing, the ostensibly simple process of buying an investment property can easily turn into a financial failure.

One solution for an investor is to commit to acquiring all of the resources and skills required to be successful. Another is to fill the role(s) that leverage the investor's individual assets as part of a comprehensive team. Often, neither of these options represents an appealing or feasible option. The

result is a glut of fragmented investing skills and resources unable to effectively capitalize on quality opportunities in the residential real estate market.

GAINING COMPETITIVE ADVANTAGE THROUGH MORTGAGE LENDING

Adagio chooses not to compete with the saturated market of real estate investors laboring to find the best deals, but to cooperate as a lending partner with those investors. Most of the investors dedicated to sourcing the best opportunities don't have sufficient capital to buy the properties they find as all cash transactions. Adagio provides those investors with the mortgages they need to bring their efforts to fruition. As a lender, Adagio 1) can control its basis in each property by setting loan-to-value ("LTV") ratios (maximum 65%), 2) can determine cash flow by setting each loan's interest rate, 3) can manage inflationary risk exposure by setting each loan's term (six months to two years), and 4) maintains low liability risk in each transaction as a first position mortgagee (for purchase or refinance of non-owner occupied, "NOO", properties). Adagio captures the advantages of investing without incurring many of the liabilities. So instead of having to beat investors to find to the best deals, they bring the best deals to Adagio. On the flip side, Adagio is able to offer investors flush with cash but lacking in expertise or time the opportunity to capitalize on these deals by either investing in individual notes and mortgages or into one of Adagio's lending funds.

ADAGIO'S ASSET-BASED LENDING VS. CONVENTIONAL MORTGAGES

While conventional lenders base their underwriting primarily on the credit worthiness of borrowers, Adagio has taken a different tack that allows borrowers access to capital they would otherwise be unable to procure. Due to its largely stable rental market, the residential real estate sector has been Adagio's primary investment focus since being founded in 2005. While others did and continue to employ the comparable sales model as their primary valuation tool, Adagio's focus on rental income as the primary valuation metric insulates it from busts in artificial appreciation. Having a true understanding of real estate as an investment vehicle allows Adagio to responsibly provide a true asset-based lending ("ABL") program to real estate investors that alleviates the arbitrary and unnecessary hurdles required by conventional lenders.

Adagio ABL	Conventional Lending
• Loan to Value (LTV) • Utilize Adagio investment process for valuation • Add market-specific knowledge and experience • Lending criteria based on property's value • Loan collateral de facto strong • Loan terms avoid the foreclosure process • Managing a portfolio of real estate is our strength	• Loan to Cost (LTC) • Borrower responsible for valuation • Appraiser relies on sales data up to 12 months old • Lending criteria based on borrower credit profile • Loan likely poorly collateralized • Default means lengthy, expensive foreclosure • Ill-equipped to effectively manage REOs

Removing borrower credit qualifications, determining LTV as a function of cap rate-based value as opposed to purchase price, and deferring escrow costs to closing is absolutely unique to Adagio. Removal of these and other hurdles ensures that capital flows to viable deals without undue restrictions. These deals provide borrowers the opportunity to add real value either directly to the specific loan collateral, or in cases of refinance, to other potentially profitable business. Additionally, Adagio's ABL program is nonrecourse, so that in case of default, the borrower suffers no risk of loss beyond the collateral real estate (which is NOO), and his credit report is unscathed. Adagio's model creates a win-win situation for both its investors and borrowers: Adagio's investors are afforded a noncompeting position above a saturated market of competing discount buyers while providing the best of those buyers the financing they require to be successful.

SAMPLE ADAGIO ABL REO PARAMETERS

Traditional Third-Party Appraised Value of $725k

Cap Rate-Based Property Value (for quick sale):
$500k

Increased Equity (Value minus Loan Amount):
$191.25k

Annual Net Rental Income:
$31.25k

This property was effectively bought for (Loan Amount):
$308.75k

For more information on any of the topics discussed in this document, contact Benjamin D. Summers at +1.713.775.1011 or bsummers@adagiollc.com.

LEGAL NOTICES & DISCLAIMERS

Copyright: All contents © Copyright 2013 ADAGIO, LLC. All rights reserved.

No Offering of Securities: This document is neither an offer to sell, nor a solicitation of an offer to purchase any securities instrument or any interest in ADAGIO, LLC or its current or future affiliated entities (collectively, "ADAGIO, LLC"). Any investment in ADAGIO, LLC must be made via Subscription Agreement and accompanied by a Private Placement Memorandum and/or any other documents as may be required by law.

No Rendering of Advice: The financial content in this document is provided for your personal information only, is not intended for trading purposes, and cannot substitute for professional financial advice. Always seek advice of a competent financial advisor with any questions you may have regarding a financial matter. Information in this document is not appropriate for the purposes of making a decision to carry out a transaction or trade nor does it provide any form of advice (investment, tax, or legal) amounting to investment advice, or make any recommendations regarding particular financial instruments, investments, or products.

Forward Looking Statements: This document and other communications, including but not limited to Company presentations or emails prepared by the ADAGIO, LLC, contain certain statements that are forward-looking in nature. Actual results may differ materially from those projected as a result of certain risks and uncertainties. These risks and uncertainties include, but are not limited to: local, regional and national economic and marketing conditions, including, but not limited to, the competitive environment in the vicinity of Florida, the supply and demand for residential properties, with resulting impact on pricing; and other risks and uncertainties. These forward looking statements are made only as of the date on which the statement is or was made, and ADAGIO, LLC undertakes no obligation to update or revise the forward looking statements, whether as a result of new information, future events or otherwise.

Although ADAGIO, LLC believes that the expectations reflected in the forward looking statements are reasonable, there can be no assurance that such expectations will prove to be accurate. All phases of the Company's operations are subject to a number of uncertainties, risks and other influences, many of which are outside the control of the Manager and the Company and cannot be predicted with any degree of accuracy. In light of the significant uncertainties inherent in the forward-looking statements in this document, the inclusion of such statements should not be regarded as a representation by ADAGIO, LLC or any other person that the objectives and plans of the Company will be achieved.