

# The Affordable Mortgage Depression

Government policies were designed to increase homeownership. Affordable Mortgages, created to realize this goal, were responsible for the Housing Bubble and distorted the economy. The unwinding of these distortions will result in a Global Depression.

Doomsday Scenarios: Could the Net Home Equity Value of the Entire U.S. Housing Stock Fall to Zero?

It is easy to conceptualize the Home Equity of an individual homeowner falling to zero. A buyer overpays for a house, does not invest a sufficient down payment and ends up with mortgage debt in excess of the market value of the home. In fact one-in-three U.S. homeowners with a mortgage current find themselves in this predicament. Record foreclosures have resulted.

It is far more difficult to imagine the total net Home Equity of the United States falling to zero.

*Clarification: "Net National Home Equity of Zero" does not mean that everyone loses the equity in their house. There are plenty of cities and states untouched by the Housing Bubble or its collapse. Tens-of-millions of people will retain large sums of Home Equity no matter what happens. But those homeowners with negative Home Equity directly off-set others with positive balances.*

Home prices continue to decline at a record pace rapidly eroding leveraged equity. Yesterday I analyzed the prospect of further price declines destroying all of those gains accumulated during the Housing Bubble. ([Link to Article](#))

The possibility of the nation's Home Equity approaching zero may be a challenge to conceptualize, but the same laws of accounting, finance and reality apply to the entire housing stock as do to individual homeowners.

What if the fair value of houses in the U.S. is less than the total amount of existing mortgage debt? What if the value of the housing stock falls below this mortgage total?

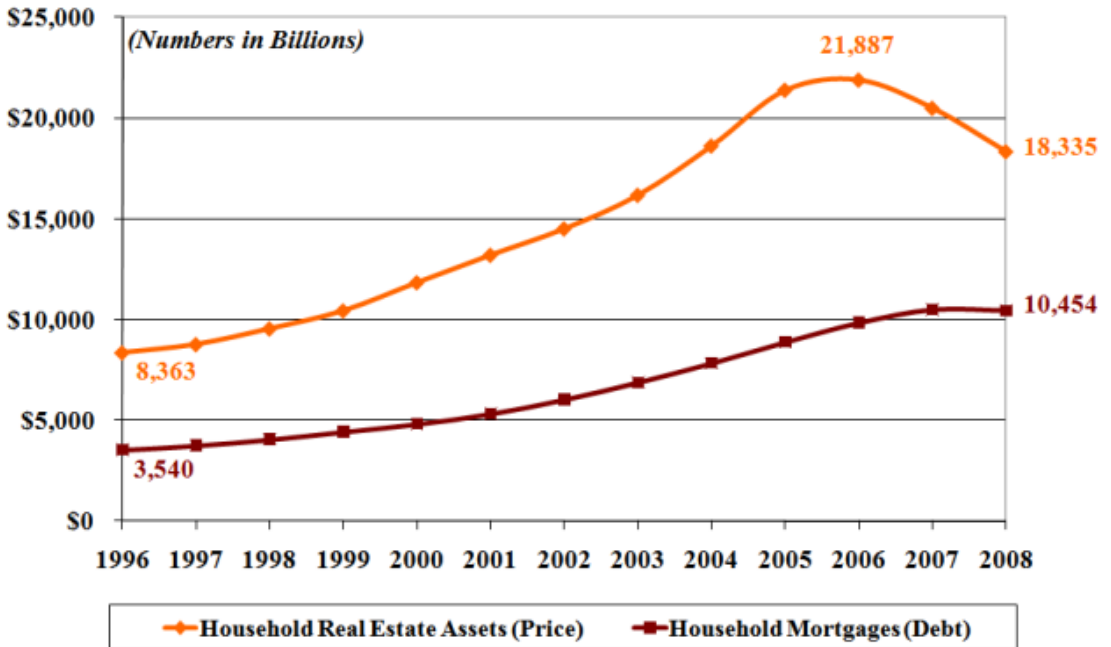
In the interest of fair disclosure, it is functionally unlikely that this scenario would be entirely realized due to the inevitability of foreclosures. When the prices of individual properties fall below the mortgage balance, negative equity does not necessarily persist. Many times foreclosures result, mortgage debt is written down and replaced by a lower balance when a new buyer purchases the distressed property. Mortgage debt is reduced and the negative equity is transformed into a positive balance depending on the use of a down payment by the new buyer. This is one of many reasons why foreclosures are vitally important.

That the possibility of national Home Equity falling to zero is even considerable, though, is a frightening prospect. But it makes for a fascinating analysis.

As of year-end 2008 there was \$10.5 trillion of mortgage debt on residential housing. This figure is higher than the entire value of the U.S. housing stock in 1999. Were the price of America's housing to fall to \$10.5 trillion without a reduction in mortgage debt Home Equity would be reduced to zero.

This scenario seems highly unlikely today given that the value of the housing stock at year-end 2008 was \$18.3 trillion. There was a \$7.9 trillion Home Equity cushion that would need to disappear.

# Value of Household Real Estate Assets Compared to the Balance of Home Mortgages



But house prices are declining at record rates, Home Equity is disappearing at a pace in excess of \$2 trillion per year and today the Federal Reserve will announce a first quarter decline in equity of approximately \$600 billion.

## A Perspective on Fair Housing Value

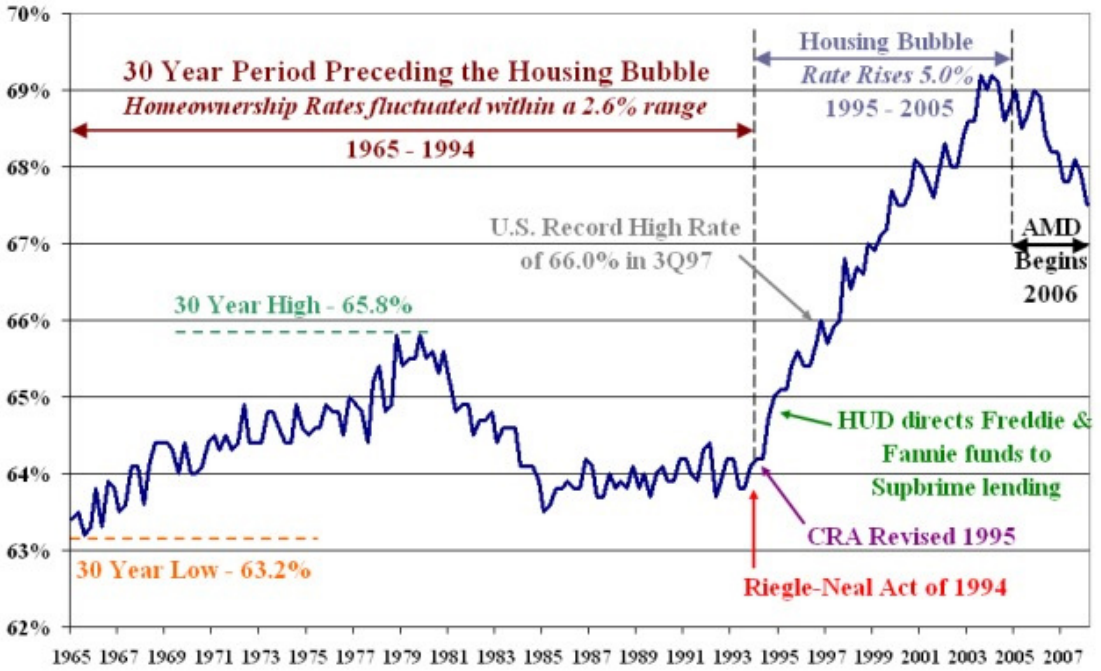
For the Doomsday Scenario to be approachable the value of the U.S. housing stock would have to fall to \$10.5 trillion. The question becomes what is the fair value of housing and will prices approach this figure?

TheAMD.com has advocated a methodology for estimating the fair value of housing based on an historical understanding of:

- When the Housing Bubble began
- What caused it
- How those catalysts distorted prices
- When housing prices began to rise unsustainably

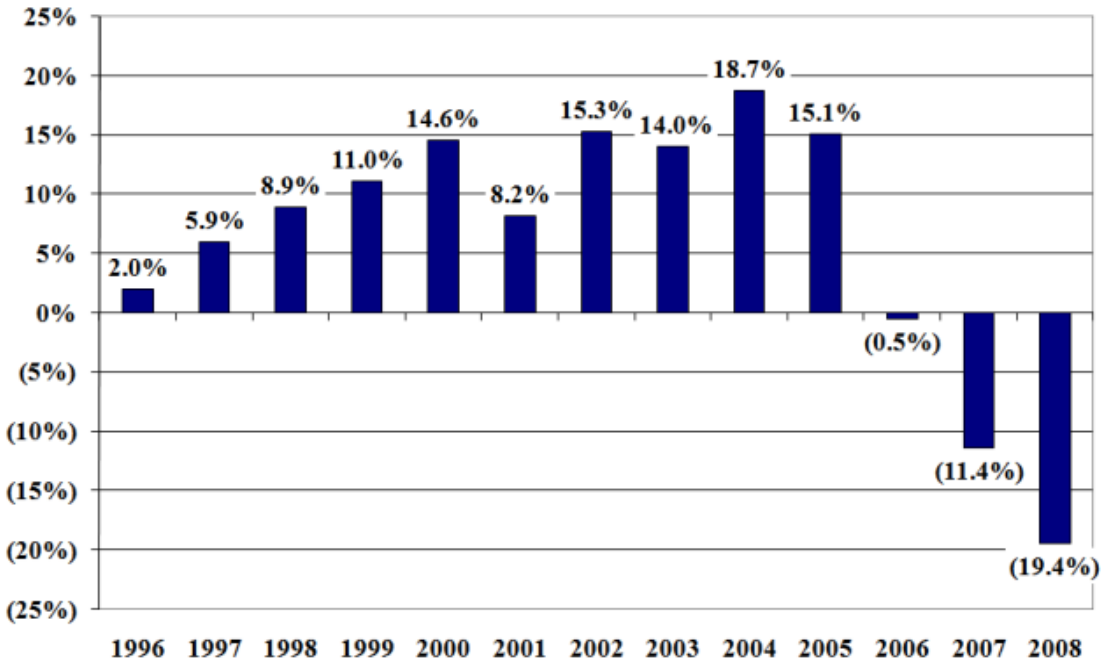
The Housing Bubble began in 1995 when Government initiatives designed to realize a social agenda triggered an historic and sustained increase in Homeownership rates to record levels.

## U.S. Homeownership Rates



Record high Homeownership triggered an unsustainable and accelerating increase in national home prices which began in 1997.

## 10 City Home Price Index Annual Performance



Home prices decoupled from the sustainable rate of appreciation consistent with inflation and income growth because of Government intervention and the proliferation of wildly distortive Affordable Mortgages.

Now that the Bubble has collapsed and the market conditions which determine value have reverted to a pre-bubble dynamic, it is reasonable to expect that prices will return to sustainable levels which existed prior to the national distortion.

It is difficult to quantify the current justifiable price of the U.S. housing stock using 1997 valuations

because homes, neighborhoods, cities and states are dynamic. The following analysis is admittedly limited but conceptually valid and makes for an interesting study.

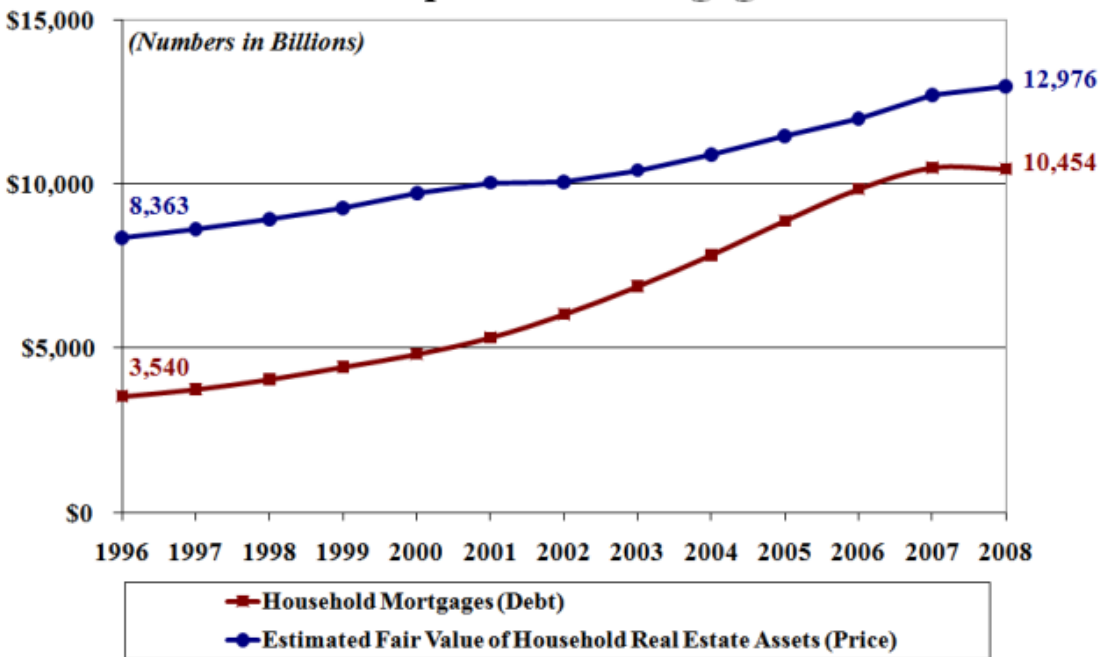
### Methodology for Calculating the Fair Value of the U.S. Housing Stock

- The value of the U.S. housing stock was \$8.4 trillion at year-end 1996
- Housing units have expanded from 114,555 at year-end 1996 to 130,840 at year-end 2008; an increase of 14.2%
- Assumption made that newly constructed homes are 20% more valuable than existing stock (this is similar to the valuation premium seen in historical and current median transactions, but admittedly could vary in either direction for a variety of reasons)
- The rate of inflation from 1996 through 2008 was 32.6%

Estimated Fair Housing Value = 8,363 \* (1 + (cumulative housing stock growth \* (1 + new house premium))) \* (1 + cumulative inflation))

Based on this simplified calculation the U.S. housing stock today is fairly valued at a 55.2% premium to the 1997 figure of \$8.4 trillion. This equates to a sustainable price of \$13.0 trillion.

## Estimated Fair Value of Household Real Estate Assets Compared to Mortgage Debt



Should the price of the U.S. housing stock return to the sustainable, inflation-adjusted valuation of year-end 1996, Home Equity would decline to \$2.5 trillion.

Could Home Equity Fall Below the \$2.5 Trillion Level Consistent with Sustainable Value?

Prices during bubble-cycles tend to rise above fundamentally justifiable valuations during the boom-time and overshoot fair value to the downside during the bust. Traditionally, the higher the boom valuation the more the trough falls below fair value. It is entirely possible given the centrality of falling house prices to the economic downturn that prices could overshoot 1997 levels.

Furthermore, the market conditions which determine the price of houses have not reverted to 1997 levels, they are much worse. These include:

- Credit availability is reduced
- Credit terms are more stringent
- Hybrid mortgages are no longer prevalent (ARMs, Option-ARMs, Alt-As, Interest-Only)

- Demand for homes has decreased
- Supply of houses has increased (Inventories are at record highs and total units have increased by 14.2%)
- The perceived risk of owning a home has increased
- Expectation for future home price performance has diminished
- Unemployment is much higher and rising
- Foreclosures are at record highs and will persist
- Marginal mortgage interest rates are much higher (relative to bubble hybrid alternatives)

Given that the market conditions that determine prices are substantially worse than that which existed in 1997, it is entirely possible that the housing market could stabilize at a valuation that is less than this historical level.

### Background Noise that Inhibits Analysis

I find this conceptual analysis to be interesting but I do recognize its limitations. The value of the housing stock is affected by a huge number of factors. A non-exhaustive list of these difficult to capture value-influencing characteristics includes:

- Cultural and social perception of housing changes over time. It was rising, now it is falling
- Some homes depreciate in value; we see this clearly with foreclosed and abandoned properties
- Other homes increase in value due to capital investments such as expansions or pool installations
- Some neighborhoods improve in value and others decline
- The median price premium of new homes (used in the calculation) may not fully capture the incremental value of these assets relative to existing houses
  - Many large homes or high-end properties are dramatically more valuable than the median
  - Other new homes were poorly constructed, built with Chinese dry-wall or are no longer worth their replacement value

Many factors not captured could influence fair price of the U.S. housing stock relative to that calculated in this analysis using 1997 valuations.

### Dismal Reality

It is certainly possible that housing prices will stabilize above 1997 valuation levels. This would be consistent with the perspective of many analysts, economists and politicians who failed to predict the Housing Collapse or the Economic Depression. But it is also possible that prices will fall to this level or beyond based on the market fundamentals which determine value.

The calculated fair value, Home Equity figure of \$2.5 trillion is a big number relative to zero. Regardless, a decline of this order of magnitude would have a disastrous, persistent impact on a consumer-based economy that has profoundly restructured itself for more than a decade to operate in an environment characterized by high and rising levels of Home Equity. The Affordable Mortgage Depression is unlikely to end for years.

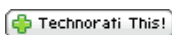
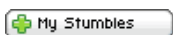
Tomorrow's Home Equity Week (HEW) Article: [What Needs to Happen to Owner's Home Equity for Housing to Stabilize Before 2014](#)

Monday's HEW Article: [Historical Home Equity Percentages Since 1945](#)

Tuesday's HEW Article: [A Focus on Home Equity Since the Housing Bubble's Inception](#)

Wednesday's HEW Article: [The Impact of Falling Prices on Housing Bubble Home Equity](#)

Weekend HEW Article: [What Needs to Happen to Owner's Home Equity for Housing to Stabilize Before 2014](#)



Posted by Whitney Ross at [6/11/2009 9:54 AM](#)

Categories: [Focus on Home Equity](#), [Doomsday Scenarios](#)

Dead End wrote:

6/12/2009 5:43 AM

I think that is misleading statistic to be following. With something in the region of 30% of all homes in this country being owned outright by homeowners who fulfilled their obligation to their banks, thats a lot of equity that has not been destroyed, but is not really shown in your net accounting. There are still plenty of homeowners who are still right side up and above water on their homes and loans as well.

Its the reality of this situation is that there is a significant minority, I would guess in the region of 10%, who are upside down on their on their loan because of price declines and/or cashed out on their HELOC along with the already foreclosed clowns who are largely responsible for this set of statistics. If you bought in 2004-6 you are getting deservedly absolutly pouned for buying into the top of a rally. Some of them, most of them can probably weather the storm, but the ones who took the short cut are going to get cut down at the knees.

Reply to this

Whitney Ross wrote:

6/12/2009 9:53 AM

Dead End,

Thanks for the comment but I think I have failed to explain the analysis clearly enough. I have added a definition of Net Zero National Home Equity in the hopes of clarifying this confusion.

Definition of Zero Home Equity

Net national Home Equity of zero does NOT mean that EVERYONE loses the equity in their house.

There are plenty of cities and states untouched by the Housing Bubble or its collapse. Tens-of-millions of people will retain large sums of Home Equity no matter what happens. Even if my Doomsday Scenario played out these people would retain equity.

But those people with negative Home Equity directly off-set others with positive balances. Given that 1-in-3 mortgages are already underwater this theoretical possibility isn't as crazy as it might seem.

Price Reversion to Sustainable Valuations

My starting point, the total value of Household Real Estate Assets at year-end 1996 included the ENTIRE stock of housing. This included Montana, South Dakota, Upstate-New York, Bainbridge Ohio and all the other places people email me about that are not experiencing price declines.

The point is that the value of the NATIONAL housing stock appreciated dramatically from this all encompassing figure due to the Housing Bubble. I happen to believe that what houses were valued at prior to the distortion is a relevant metric.

## A Fundamental Question for Anyone Who Cares to Answer

Riddle me this: Why should the exact same house located ANYWHERE in the United States be worth more today, on an inflation adjusted basis, than it was worth in 1997?

You may apply this exercise to the New York condo up 400% since 1997, to the small town home that is only up 75% or to any property in America. Obviously some neighborhoods have improved. But some have worsened and others are the same. There are specific markets that have unusual characteristics of supply and demand that may justify an increase.

But the exact same house, that has only been maintained for the past 12 years, in Tampa, Nashville, New Haven, Omaha and likely your home town should not have appreciated more than approximately the rate of inflation.

### Market Forces Determine Prices

Real sustainable valuations are determined by economics, supply and demand, marginal analysis, availability of credit, marginal interest rates, etc...

People saw this clearly during the up-cycle and readily accepted it. But during the correction they rail against the same reality.

Detroit provides the nation with a wonderful example of what can happen to house prices if economic fundamentals erode, unemployment increases, incomes decline, etc... The entire country's mortgage environment has changed. The entire country is seeing economic fundamentals erode.

While my analysis is hypothetical and incomplete, it is relevant and certainly bodes poorly for consumption regardless of where prices eventually stabilize.

### Reply to this

Eric wrote:

6/12/2009 12:27 PM

"Riddle me this: Why should the exact same house located ANYWHERE in the United States be worth more today"

Exactly! Its the SAME HOUSE! Like I heard someone describe a house -- a box sitting out in the elements. It's wearing out. Why would it possibly be 'worth' more?

I foresee housing in the future being similar to cars -- you pay a premium for a new one and then it depreciates down to a stable level, rather than appreciates. Those who want that 'new house smell' will pay for it.

Housing has been a ponzi scheme and I don't believe the next generation is gonna participate. Count me out for sure.

Reply to this

meeeeee wrote:

6/12/2009 8:14 AM

The fed intends to use high inflation to solve this problem.

If you have 1000% inflation, now your house is worth 10x what it used to be. But your debt stays the same.

High inflation is great for people with huge debts. At least on paper. And as long as their wages inflate too.

Of course, this will end badly.

Reply to this

Whitney Ross wrote:

6/12/2009 10:33 AM

Excellent point. And I agree with you that that is their intent.

But the presence of inflation does not by definition lift the value of all assets.

We are and have been experiencing asset price deflation during 2 years of expansionary monetary policy by the Fed.

If you remember, when Bernanke originally cut interest rates in a steep and uncoordinated fashion we saw inflation spike for a short period. They didn't care because they anticipated deflationary pressures. But I note that home prices only accelerated their pace of price decline during that period.

Should houses reach a fundamentally justifiable valuation then I agree with you that they would track with eventual inflation. My argument is that we have a ways to fall, based on the market fundamentals which determine prices, before this would occur.

[Reply to this](#)

Michael wrote:

[6/12/2009 9:15 AM](#)

Your logic was excellent and included most of the relevant supply/demand factors that have changed since 1997.

One factor you might have missed (which could be relevant) is mortgage rates are lower today than they were in 1997 which normally would be a huge demand factor supporting higher prices.

I personally think excess housing supply growing dramatically (I think this economy will be so bad the number of households contracts as the average number of people living in a residence grows) will outweigh the lower mortgage rates and your argument may prove accurate but mortgage rates are still important.

If mortgage rates increase you may look like even more of a prophet.

[Reply to this](#)

Whitney Ross wrote:

[6/12/2009 10:03 AM](#)

My friend,

You raise one of the FUNDAMENTAL issues of the Housing Bubble and the ongoing collapse in prices.

The media, politicians and real estate brokers preach that mortgage interest rates are lower today than during the Housing Bubble.

This is ABSOLUTELY FALSE and is central to an understanding as to why this is The Affordable Mortgage Depression.

Prices are determined at the margin. At the margin during the Housing Bubble Affordable Mortgages were available. No-down payment, Interest Only, ARMs and Option-ARMs drove ever rising house prices.

Access to Credit, Cash Flow and Capital were/are prerequisites for owning a home and act to restrain home prices. Affordable Mortgages removed these requirements, and buyers utilizing them became insensitize to price.

The functional cost of owning a house after purchase is your monthly mortgage payment. An interest-only loan, for instance, removed the cash flow requirement that capital be repaid thus lowering the cost of ownership. Try getting such a loan today.

But the real culprits were ARMs and Option-ARMs. People made the decision as to what they could afford to pay for a house based on the monthly service requirement at the adjustable-rate. These rates fell to as low as 1%. At a 2% introductory rate one's annual mortgage payment on a \$500,000 mortgage is \$10,000. Anyone who could afford rent in America, could afford to overpay for an already overvalued house. Today, at the lowest 30-year rates in history (5%) that same mortgage would be two-and-a-half times as expensive and cost \$25,000 a year.

It seems insane now, but all parties believed that the home could be refinanced or sold for a profit prior to the interest rates resetting. Today those interest rates are resetting. And they will continue

to reset through 2012.

At present the 30-year fixed interest rate is at near-record lows because the Government is subsidizing it. AND IT DOES NOT MATTER. Marginal interest rates today are MUCH higher due to the eradication of adjustable rate loans.

Please see the article "Mortgage Rates Do Not Matter" for a better explanation.

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