THE WEALTH BUILDING HOME LOAN

Presented by
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American Enterprise Institute
Center on Housing Markets and Finance
http://www.aei.org/housing/

AEI's Housing Center

- We started the Center in 2013
- Mission
  - Provide detailed measures of risk in mortgage and housing markets
  - Promote sustainable homeownership
  - Develop market-based solutions to the shortage of economical housing

Why Did We Develop the WBHL?

- Homeownership can build wealth but current policy undercuts this goal
  - Heavy debt burdens on many borrowers
  - Mortgages that pay down very slowly
- WBHL promotes sustainable homeownership and wealth accumulation

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Mortgage Risk is Rising

Agency Primary Home Purchase Loans		
Risk Factor	**Jul. 2013**	**Jul. 2018**
Credit score < 660	11%	17%
DTI > 43%	23%	36%
CLTV ≥ 95%	54%	57%
30-year term	93%	95%
Risk layering	***22%***	***32%***

Note: Calculated for home purchase loans for primary owner-occupied properties with a government guarantee and reported information for the risk factor. Loans with risk layering have at least 3 of the 4 risk features in the table.
Source: AEI's Center on Housing Markets and Finance.

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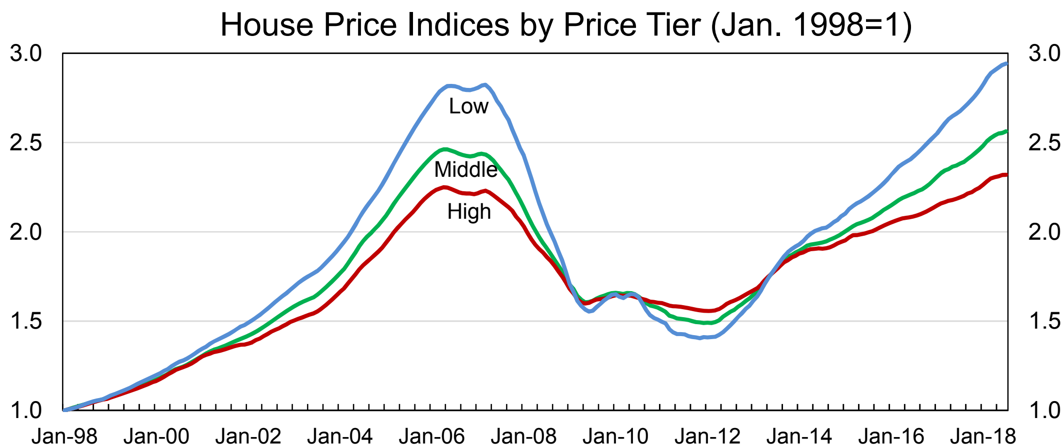
Unsustainable House Price Boom



Source: CoreLogic Case-Shiller, compiled by John Burns Consulting and AEI's Center on Housing Markets and Finance.

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Key WBHL Features

- Loan term of 20 years or less
- Little or no downpayment
- Monthly payments that fit comfortably in borrower's budget
- FRM or ARM. Initial ARM rate fixed at least 5 years, with modest payment increases

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WBHLs in the Market Today

- NACA: 15-year fixed-rate WBHL
- Androscoggin Bank: offered first market-rate WBHL; two-step rate structure
- More than 30 other lenders offer WBHLs through MI program developed by MGIC

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WBHLs in the Market Today, Cont.

- All market-rate WBHLs are QM loans
- WBHL is currently a portfolio product; no securitization vehicle yet

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MGIC WealthBuilder Program

- Available in all states excl. NY and WA
- Loan/property type: purchase loans for primary owner-occupied 1-unit properties
- LTVs: 97.01% to 100%
- Minimum credit score: 680
- Maximum DTI: 43%

MGIC WealthBuilder Portfolio

- 87% have 20-year term; 69% are ARMs
- Borrower characteristics
  - Median credit score: 746
  - Median household income: $95,000
  - 46% are first-time buyers
- Borrower characteristics suggest lenders have been cautious with a new program

Related Federal Programs

- FHA dominates high-LTV lending to first-time buyers (FTBs)

Home purchase loans to FTBs with CLTV > 95%, 2013-2017			
GSEs	FHA	VA	RHS
391,000	2.69 *million*	702,000	423,000

Note: Data pertain to 1-4 unit properties.
Source: AEI's Center on Housing Markets and Finance

- We'll compare WBHLs to 30-year FHA loans at various points in the presentation

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Analysis of House Price Risk

- Use FHFA HPIs for 5-digit zips in 100 largest metros
- Long historical coverage: 1990-2015
- Divide zips in each metro into three price tiers; FTBs tend to buy in lower tier
- Most complete analysis yet of market tiers

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Significant Risk of Price Decline

Top 100 metros	Share of zips with decline in house price index		
	1990-1995	2005-2010	2010-2015
All zips	35%	78%	29%
By price tier within metro			
Upper price tier	27%	71%	15%
Lower price tier	41%	83%	43%

Note: Results based on FHFA house price indices and Zillow estimates for median home values (used to group zips into price tiers). Source: AEI's Center on Housing Markets and Finance.

- Prices rose almost everywhere in the boom (1995-2005)
- But in other periods, table shows many zips had price declines, esp. in the lower price tier

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And Average Price Rise is Slow

Top 100 metros	Avg. annual price change, 1990-2015
All zips	2.8%
By price tier within metro	
Upper price tier	3.1%
Lower price tier	2.5%

Note: Results based on FHFA house price indices and Zillow estimates for median home values (used to group zips into price tiers). Source: AEI's Center on Housing Markets and Finance.

- Barely beats general price inflation
- Same result holds for long history back to 1890 (Robert Shiller)

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Key Takeaways

- Homebuyers can't count on price appreciation to build wealth
- Especially true in lower tier of the market
- Only sure way to accumulate equity is to pay down mortgage debt

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Analysis of Equity Buildup from Paying Down the Mortgage

- Compare 15- and 20-year WBHLs to 30-year FHA loan
- WBHLs are 7/1 ARMs with 3% down
- FHA loan is FRM with 3.5% down and upfront MI rolled into the loan

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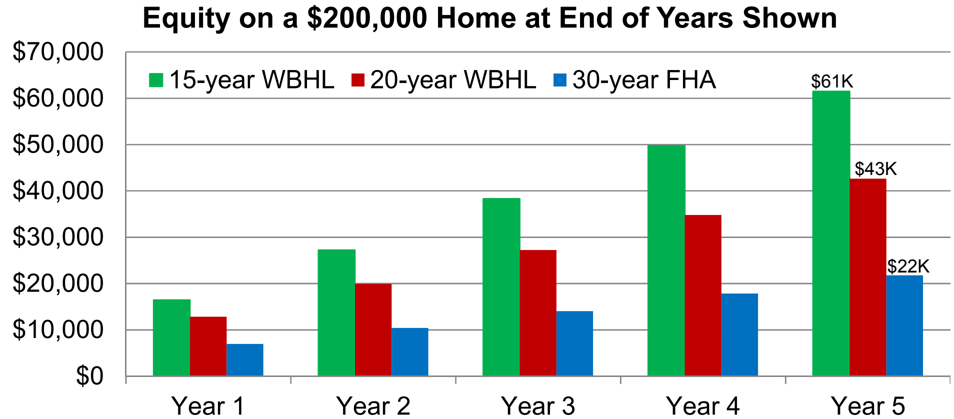
WBHLs Build Equity Rapidly



Source: AEI's Center on Housing Markets and Finance.

Customer Awareness

- We believe few borrowers realize how much equity they'd build with 15- and 20-year loans
- Showing customers a chart like the previous slide could influence choices

Analysis of Monthly Payments

- Compare 15- and 20-year WBHLs to 30-year FHA loan
- Use avg. 2017 mortgage rates for FHA loans and high-LTV GSE loans
- Payment includes P&I and MI

20-year WBHL vs. FHA Loan

Assumed $200,000 house price		
Loan	**Monthly P&I (incl. MIP)**	**Difference vs. FHA**
FHA 30-year FRM	$1101	--
WBHL, 20-yr FRM	$1272	$171
WBHL, 20-yr 7/1 ARM	$1211	$110

Notes: FHA 30-year loan: Has LTV of 96.5% and FRM rate of 4.21% (average rate in 2017 on 30-year FHA purchase loans). Mortgage insurance premiums: Upfront MIP of 1.75% rolled into loan amount and annual MIP of 0.85%. 20-year WBHLs: Have LTV of 97%. FRM rate is 4.09% (average rate in 2017 on 20-year GSE primary owner-occupied purchase FRMs with LTVs ≥ 95% and credit scores of 700-719); 7/1 ARM rate is set 0.6 ppt below FRM rate to reflect recent rate spreads. Annual MIP of 0.61% based on MGIC rate sheet dated 11/6/17 for loans with LTVs of 95.01 to 97%, credit scores of 700-719, loan terms ≤ 20 years, fixed payments for at least 5 years, and the middle level of coverage (25%). Monthly payment on WBHLs is reduced by $12 to reflect $1000 upfront saving from smaller downpayment vs. FHA, which is spread over assumed 7-year life of the mortgage.
Source: AEI's Center on Housing Markets and Finance using data from AEI's National Mortgage Risk database, Freddie Mac Primary Mortgage Market Survey, Bankrate.com, and MGIC.

15-year WBHL vs. FHA Loan

Assumed $200,000 house price		
Loan	**Monthly P&I (incl. MIP)**	**Difference vs. FHA**
FHA 30-year FRM	$1101	--
WBHL, 15-yr FRM	$1475	$374
WBHL, 15-yr 7/1 ARM	$1419	$318

Notes: FHA 30-year loan: Has LTV of 96.5% and FRM rate of 4.21% (average rate in 2017 on 30-year FHA purchase loans). Mortgage insurance premiums: Upfront MIP of 1.75% rolled into loan amount and annual MIP of 0.85%. 15-year WBHLs: Have LTV of 97%. FRM rate is 3.52% (average rate in 2017 on 15-year GSE primary owner-occupied purchase FRMs with LTVs ≥ 95% and credit scores of 700-719); 7/1 ARM rate is set 0.6 ppt below FRM rate to reflect recent rate spreads. Annual MIP of 0.61% based on MGIC rate sheet dated 11/6/17 for loans with LTVs of 95.01 to 97%, credit scores of 700-719, loan terms ≤ 20 years, fixed payments for at least 5 years, and the middle level of coverage (25%). Monthly payment on WBHLs is reduced by $12 to reflect $1000 upfront saving from smaller downpayment vs. FHA, which is spread over assumed 7-year life of the mortgage.
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Key Takeaways

- 20-yr ARM version of WBHL has monthly payment only slightly above FHA loan
- Borrower gets a huge return vs. FHA loan
  - Over 5 years, $21,000 in extra equity on $6,600 in extra payments

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Analysis of ARM Payment Shock

- Among 30-year loans, FRMs are far more popular than ARMs
- But reverse is true for WBHLs
- This makes sense – ARMs are a much safer choice for WBHLs than for 30-year loans

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20-year ARMs Reduce Risk of Payment Shock

	% rise in P&I at lifetime cap*			
	Total		Annual rate	
ARM type	30-year	20-year	30-year	20-year
5/1	60%	36%	7.0%	4.5%
7/1	55%	31%	5.0%	3.1%
5/5	23%	14%	4.2%	2.7%

*Assumes 2/2/5 cap structure. For the 5/5 ARM, the rise in P&I is shown for the first rate reset.
Source: AEI's Center on Housing Markets and Finance.

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15-year ARMs Do Even More So

	% rise in P&I at lifetime cap*			
	Total		Annual rate	
ARM type	30-year	15-year	30-year	15-year
5/1	60%	24%	7.0%	3.1%
7/1	55%	18%	5.0%	1.9%
5/5	23%	10%	4.2%	1.9%

*Assumes 2/2/5 cap structure. For the 5/5 ARM, the rise in P&I is shown for the first rate reset.
Source: AEI's Center on Housing Markets and Finance.

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Key Takeaways

- WBHLs substantially reduce potential ARM payment shock
- Benefit comes from faster paydown of loan balance
- ARM structure can provide a safe way to hold down monthly payments

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Analysis of Negative Equity

- How much would WBHLs have reduced negative equity during financial crisis?
- Analysis 1: Simulation study for Washington DC metro area
- Analysis 2: Study of 30-year FRMs that defaulted nationwide

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DC Area Analysis

- Compare 30-yr FHA loan to WBHLs using house-level HPIs for >500,000 homes
- Assume mortgage originated at start of 2004 and track equity for 7 years. Repeat for originations at start of 2005, 2006, 2007
- Compute share of loan-years with severe negative equity (LTV ≥ 120%)

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WBHLs Would Have Helped a Lot in Areas with Volatile House Prices

	Share of loan-years with severe negative equity		
Part of DC Metro Area	30-year FHA	20-year WBHL	15-year WBHL
Entire metro*	19%	12%	6%
Prince William Co., VA	33%	22%	13%
Arlington Co., VA	1%	1%	0%

*Includes District of Columbia; Arlington, Fairfax, Loudoun, and Prince William Counties in VA; Montgomery and Prince George's Counties in MD.
Source: AEI's Center on Housing Markets and Finance.

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National Analysis

- Estimate CLTVs at default for 30-year FRMs originated from 2004 to 2007
- Default: D180+ or earlier involuntary termination
- Calculate hypothetical CLTV at default date had borrower taken out a WBHL instead

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WBHLs Would Have Reduced Incentive to Default

Percent of loans at default date with CLTV ≥ 120%		
30-year FRM	20-year WBHL (Hypothetical)	15-year WBHL (Hypothetical)
39%	31%	23%

Note: Loan data for the analysis provided by CoreLogic©.
Source: AEI's Center on Housing Markets and Finance.

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Analysis of Default Risk

- Compare defaults on 15, 20, and 30-year FRMs during and after financial crisis
- Dataset: 2.5 million GSE "plain vanilla" purchase loans originated in 2005-07
- Control for key risk factors and HPI
- Default: D180+ or earlier involuntary termination

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15- and 20-year Loans Had Much Lower Default Rates

	House price decline	
Loan term	**Below median**	**Above median**
20-year vs. 30-year	41% lower	53% lower
15-year vs. 30-year	57% lower	66% lower

Note: Analysis based on primary owner-occupied purchase loans originated during 2005-07 and acquired by the GSEs. Controls for risk factors include credit score buckets, DTI buckets, CLTV buckets, and zip-level house-price change.
Source: AEI's Center on Housing Markets and Finance using GSE loan-level datasets.

Why Offer the WBHL?

- Growth opportunity
  - Fills a hole in lineup of mortgage products
  - Appeals to savings-oriented customers
  - Potential for cross selling
- Much lower risk than other high-LTV loans
- Perfect fit for credit union mission

Hole in the Product Lineup: A Market Opportunity

Credit union first-lien mortgage originations in 2017		
Loan term	**ARMs**	**FRMs**
15 or 20 years	0%	9%
30 years	1%	90%

Note: Based on a large representative sample of first-lien mortgage loans originated by credit unions in 2017. The sample is created by matching public records to HMDA and other datasets. Source: AEI's Center on Housing Markets and Finance.

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Final Thoughts

- WBHLs offer a safe path to homeownership and wealth accumulation
- Fit perfectly with credit union mission
- Can help you compete more effectively
- We offer free consulting to set up a WBHL program

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Any Questions?

Please contact us!

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Paper with full research results is here.