

NORTH CAROLINA  
DEPARTMENT OF STATE TREASURER



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INVESTMENT MANAGEMENT DIVISION

# Inflation Portfolio Review

February 23, 2022



## Role in the Portfolio

### Inflation Protection

- Provide some degree of protection against the risks associated with inflation

### Attractive Absolute Returns

- Provide an attractive return over the long-term by making investments that provide a nominal total return that rises with inflation

### Competitive Relative Returns

- Achieve or exceed the return on the performance benchmark over a long period of time, within reasonable risk parameters

### Diversification

- Enhance the diversification of the Fund's total investment portfolio relative to public equity and nominal fixed income

### Liquidity

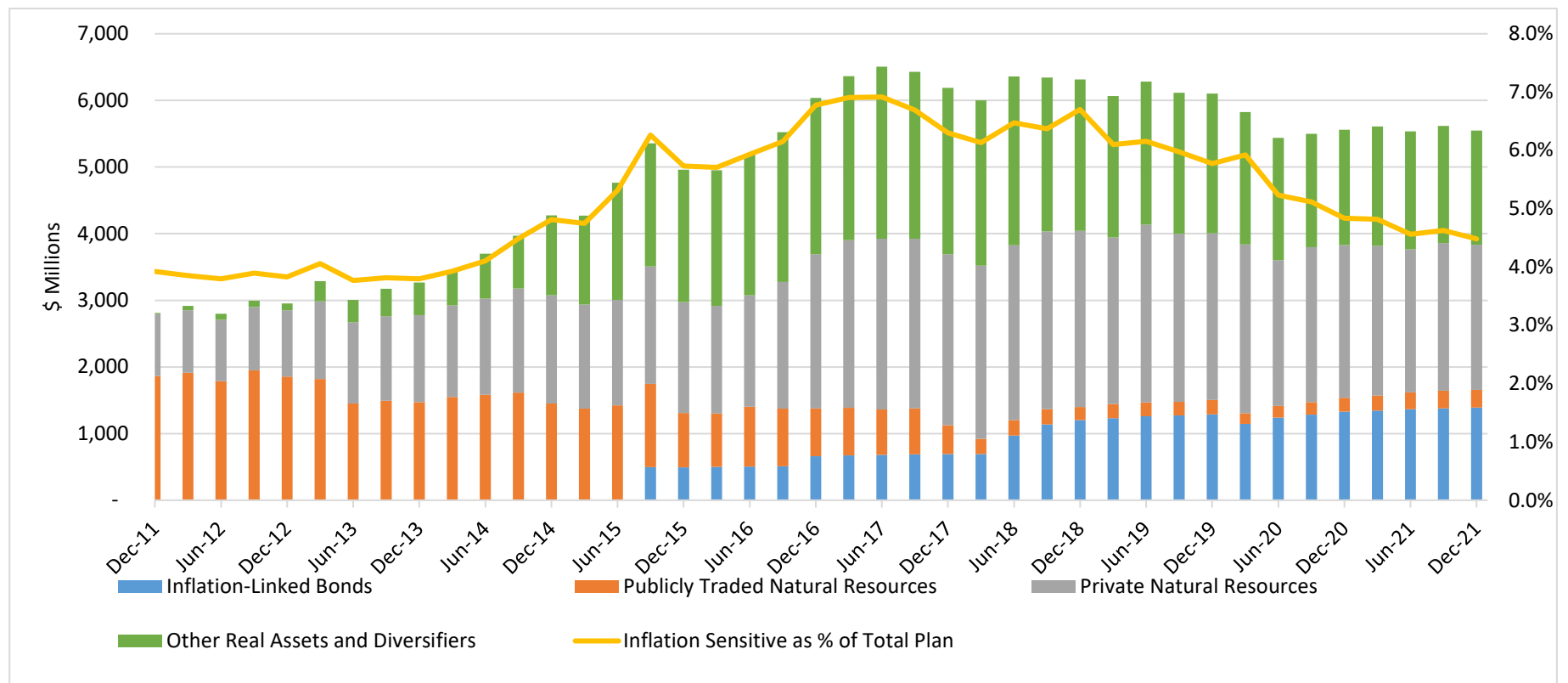
- Provide a source of liquidity to the Fund when other Portfolios are experiencing lower returns due to unanticipated inflation



# Portfolio History

## As of December 31, 2021

### Historical Allocation by Sub-Strategy



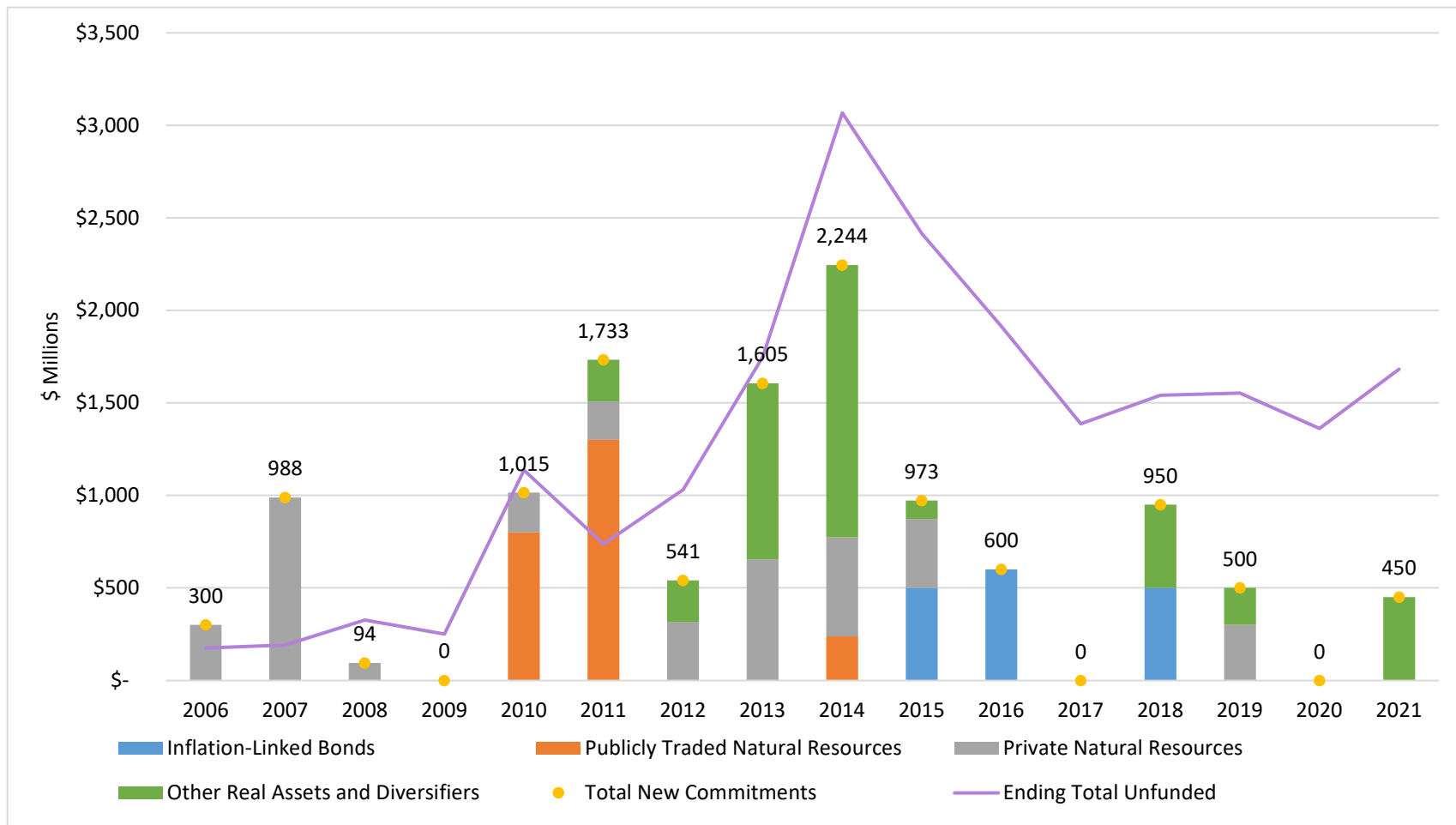
- Inflation Sensitive Portfolio diversification has expanded substantially



# Portfolio History

## As of December 31, 2021

**Historical New Commitments by Component and Total Unfunded**



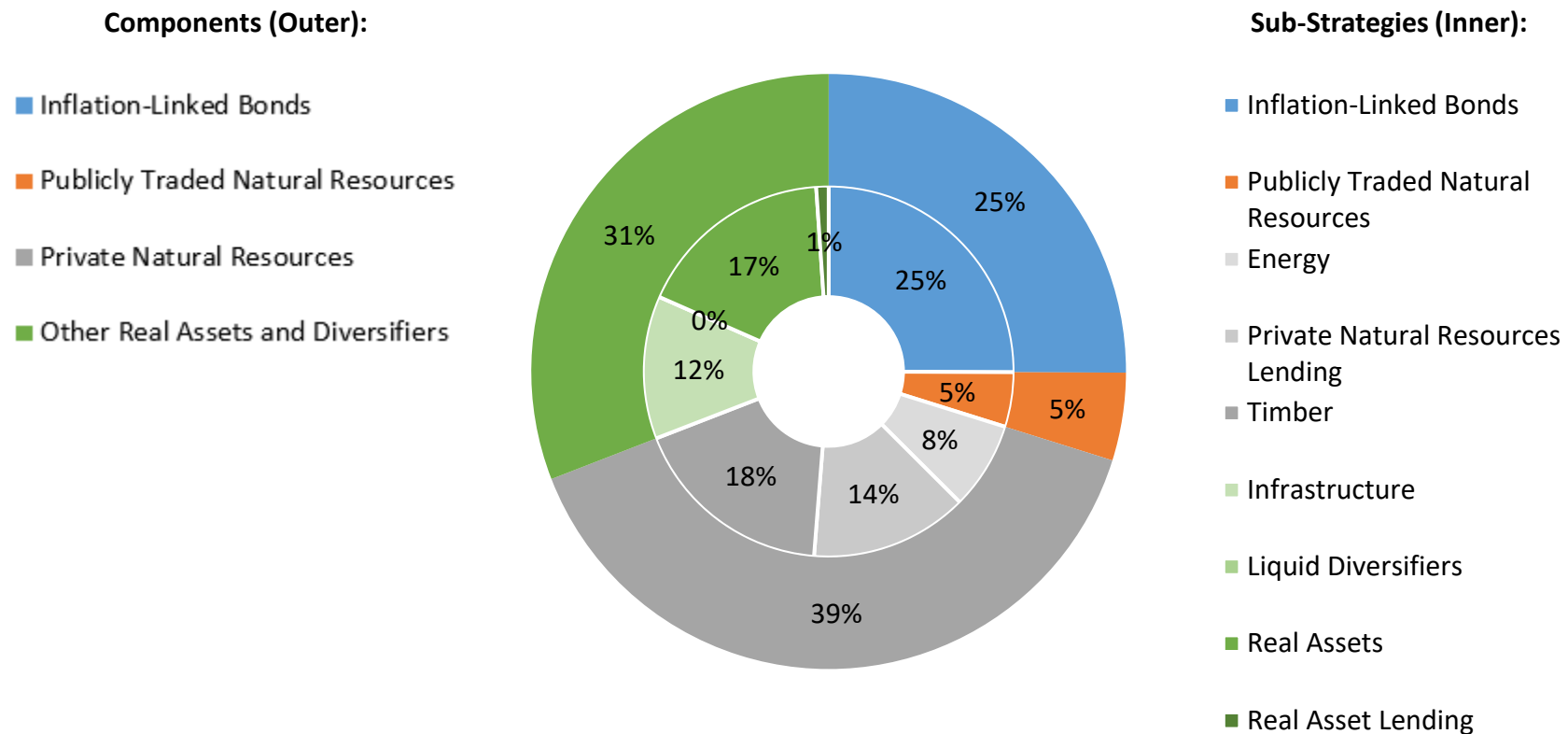
Note: Unfunded values are as of each respective calendar year end



# Current Portfolio Allocation

## As of December 31, 2021

### Allocation by Component and Sub-Strategy

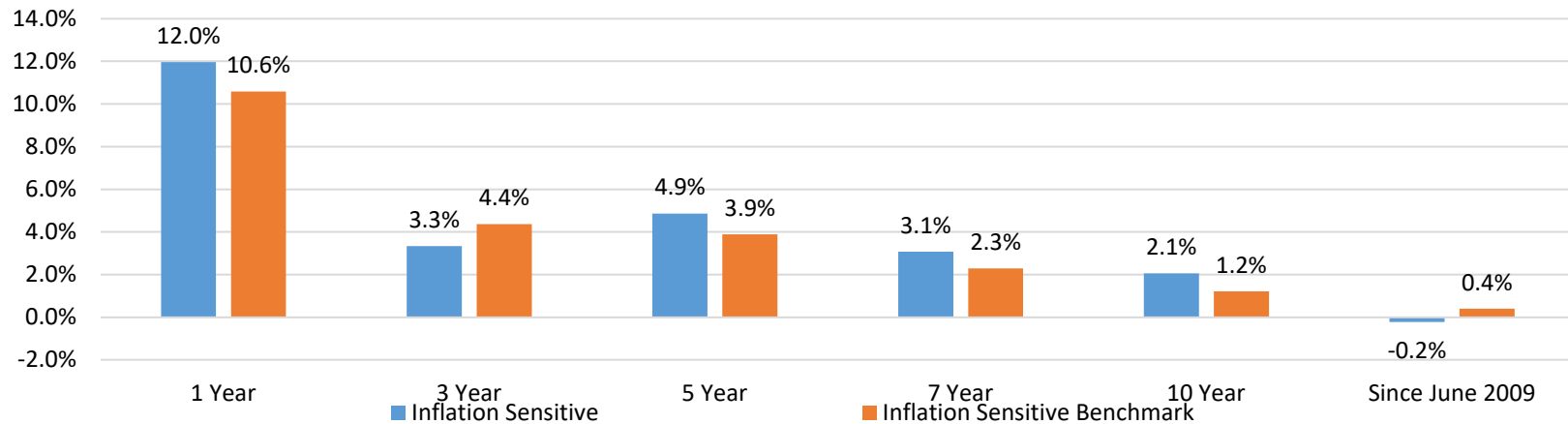




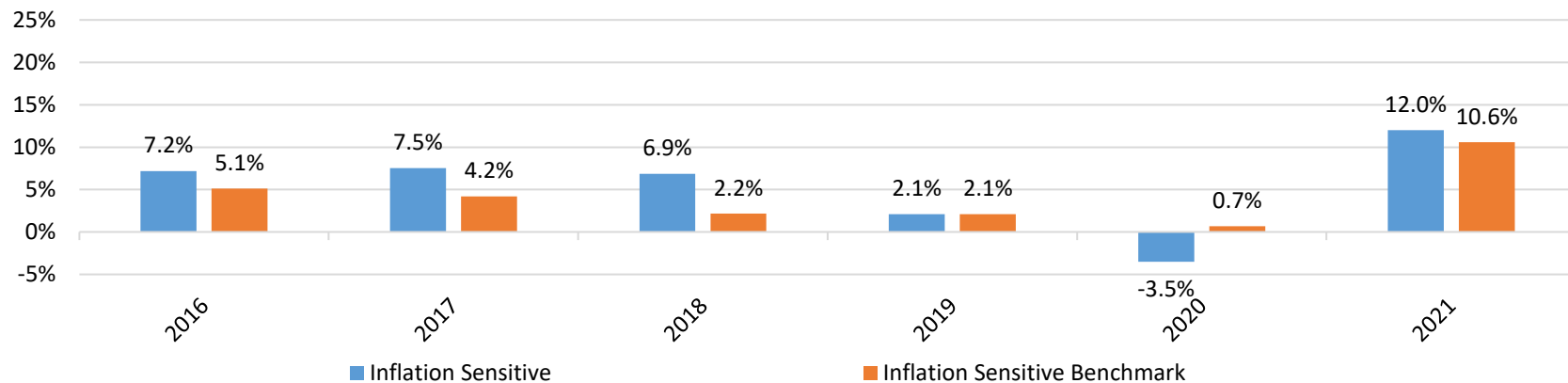
# Portfolio Performance

As of December 31, 2021

## Annualized Performance



## Calendar Year Performance



### Notes:

Periods greater than one year are annualized

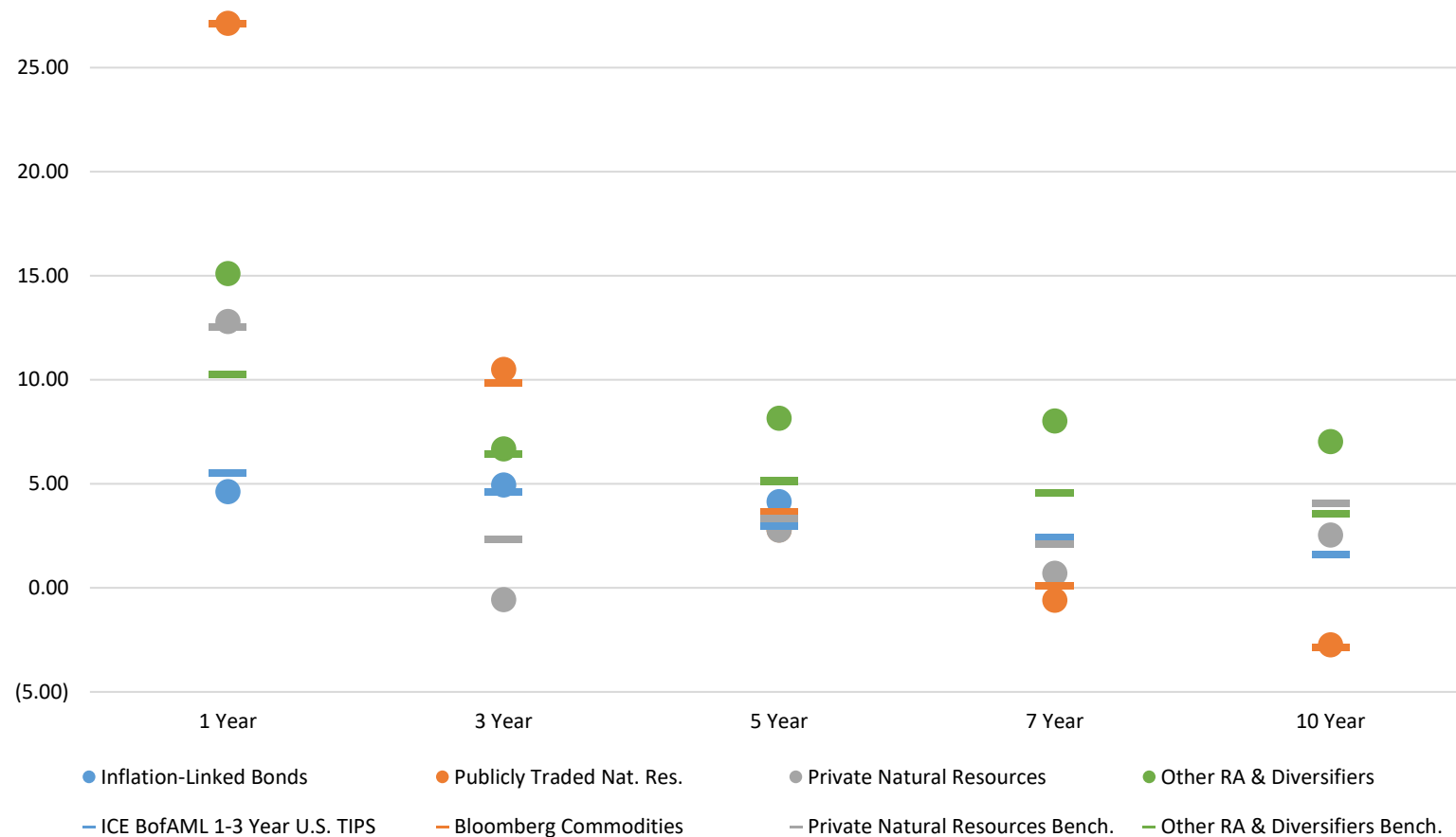
See slide 22 for details on the composition of the Inflation Sensitive Benchmark



# Portfolio Performance

As of December 31, 2021

## Performance by Component



### Notes:

Periods greater than one year are annualized

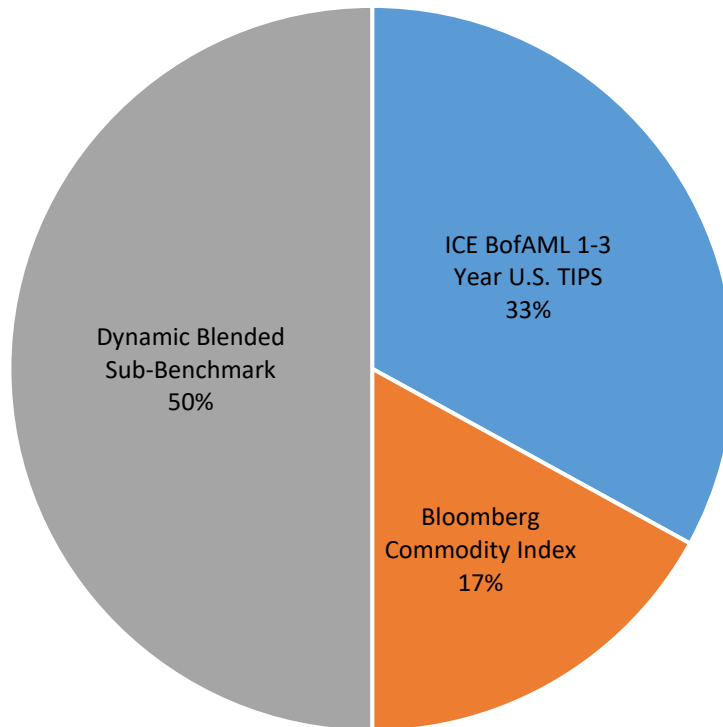
See slide 22 for details on the composition of the Inflation Sensitive Benchmark



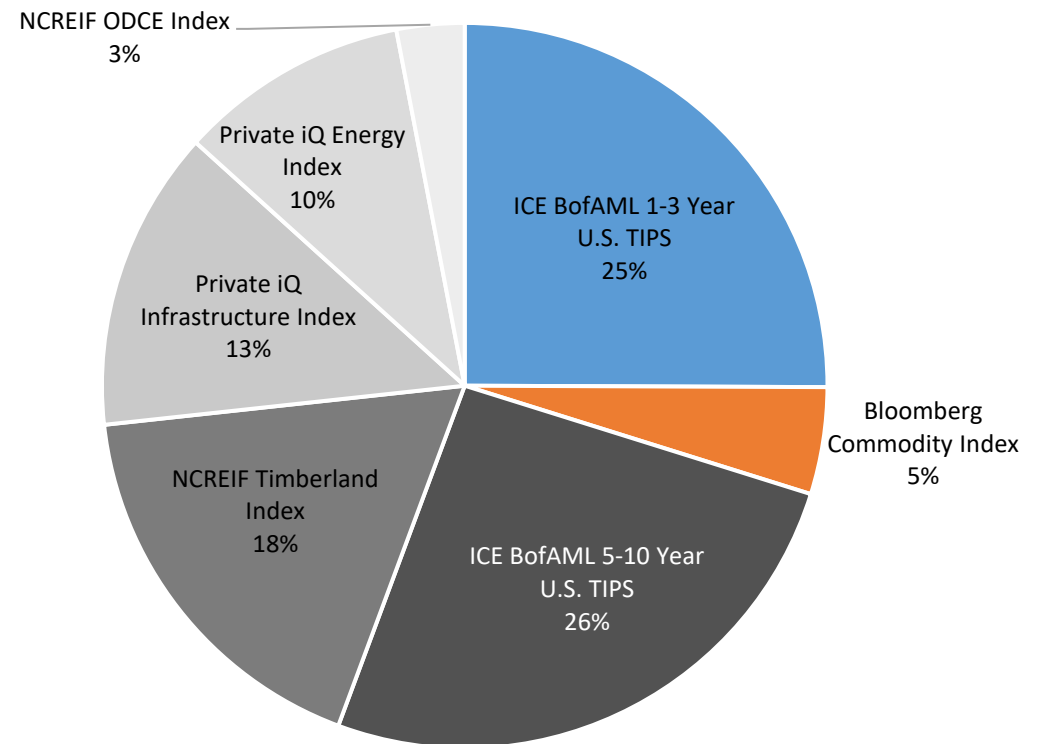
# Inflation Sensitive Benchmark Composition

As of December 31, 2021

**Long-Term Target Benchmark**



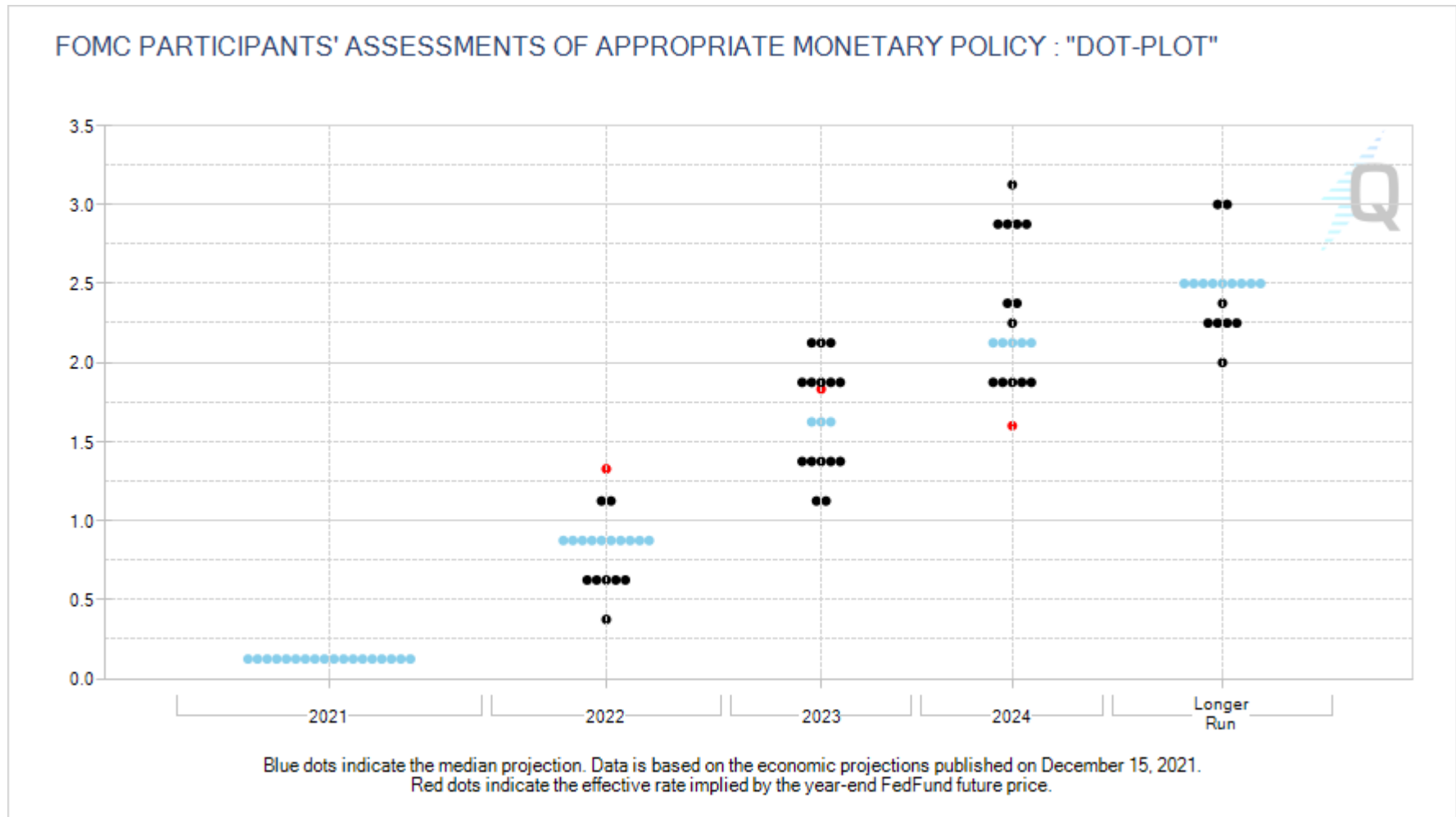
**Benchmark Composition by Current Market Weight**





## Current Inflation Environment

Federal Reserve is expected to start raising rates in March, with a 44% probability of 4 rate hikes expected by the market in 2022

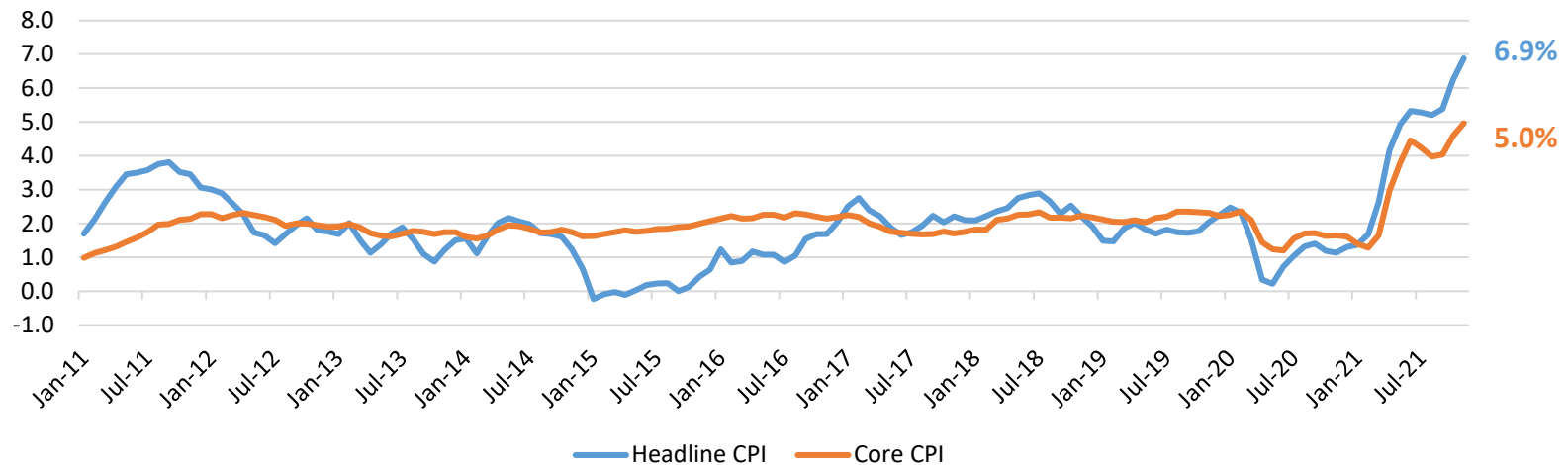




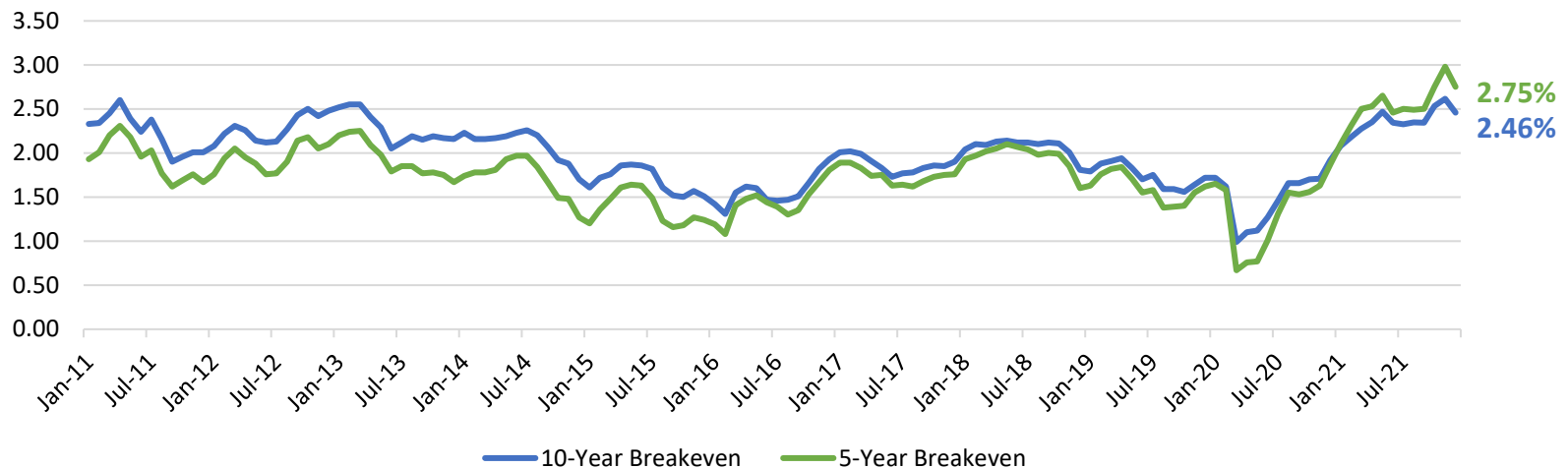
# Current Inflation Environment

The gap between breakeven expectations and CPI continue to suggest a potential convergence

## CPI Year over Year Change



## Inflation Breakeven Rates

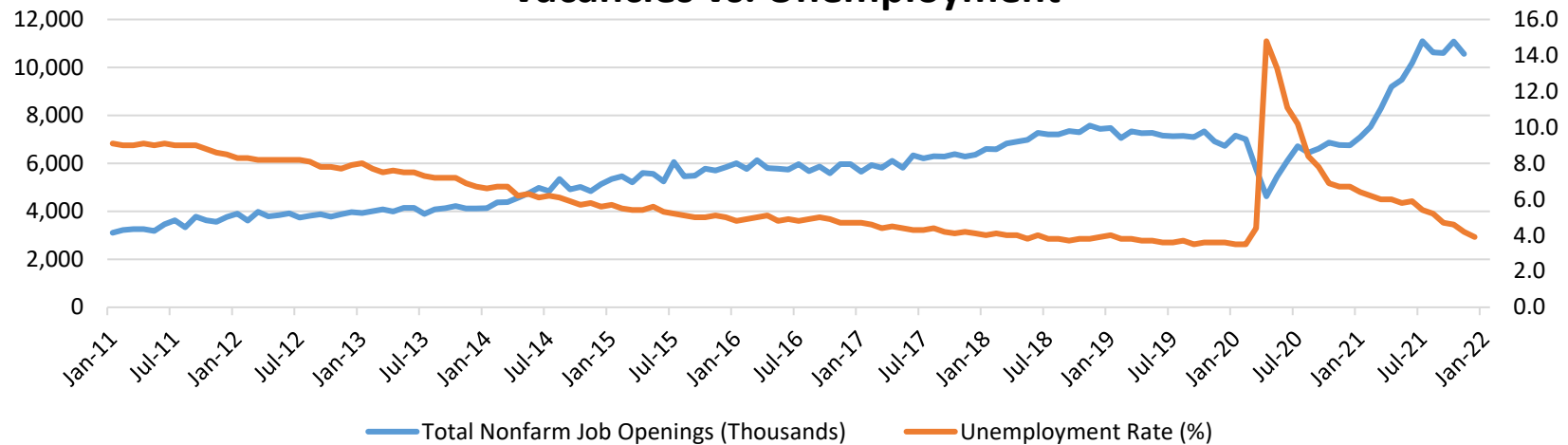




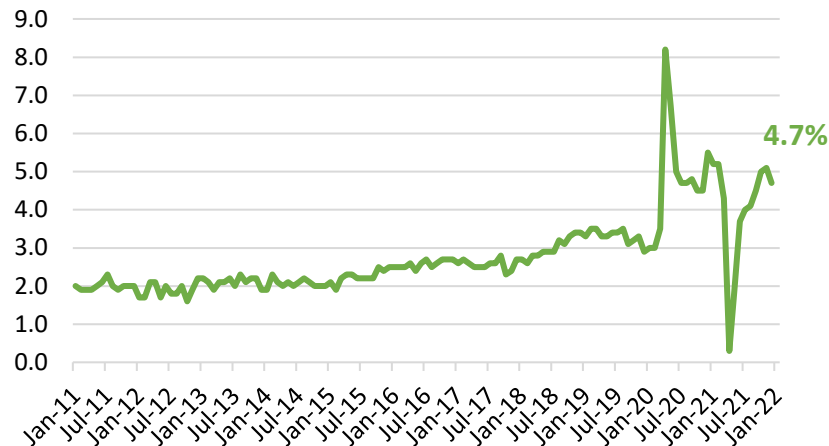
# Current Inflation Environment: Labor

Job openings remain high while unemployment rate continues to decline – workers exit the labor force.

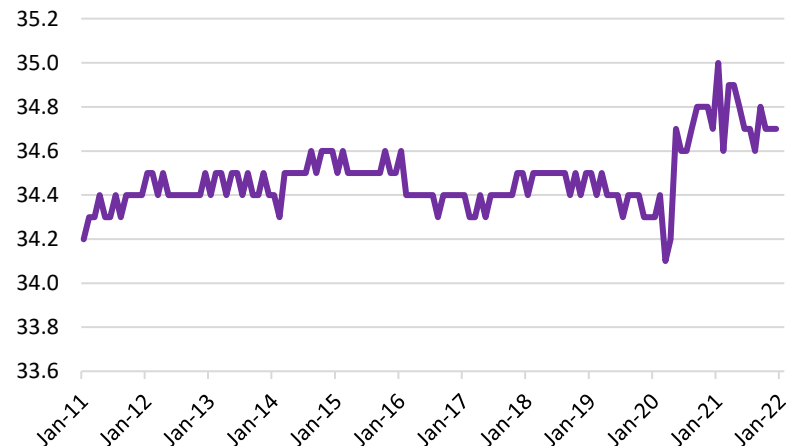
**Vacancies vs. Unemployment**



**Average Hourly Earnings – YoY Change**



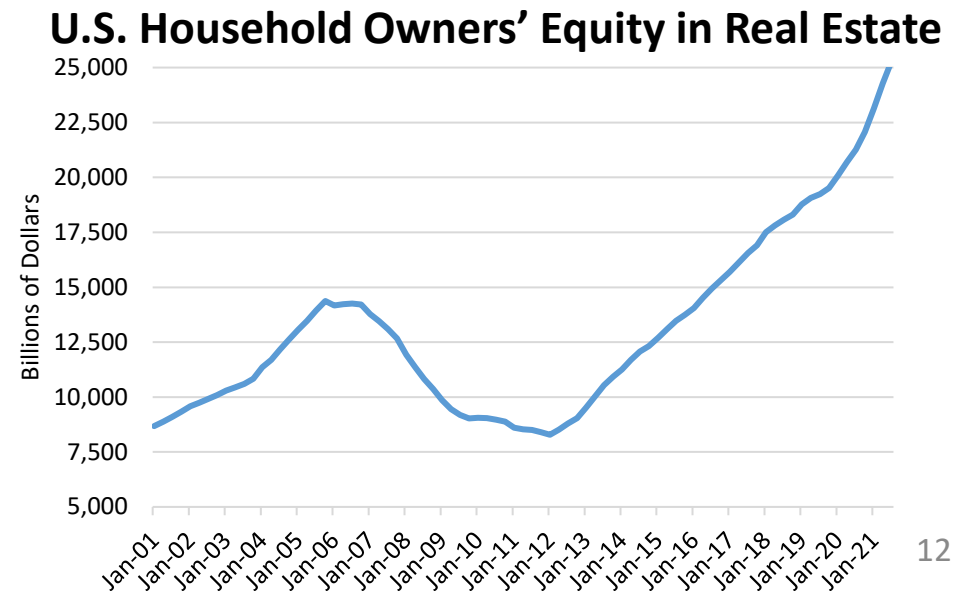
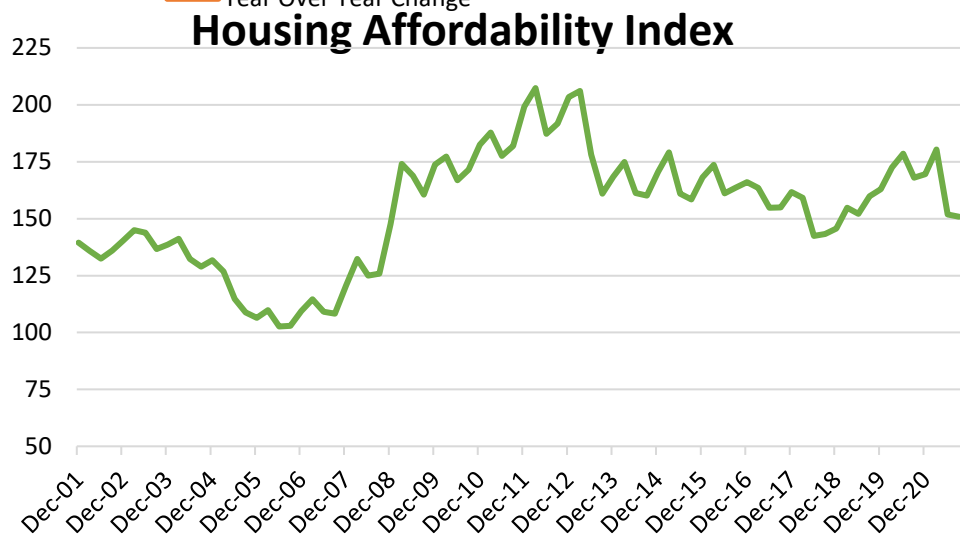
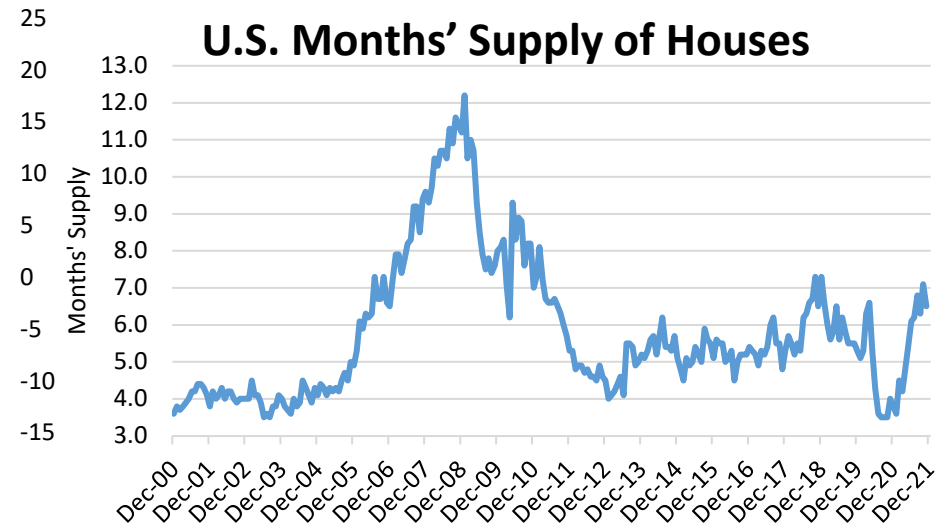
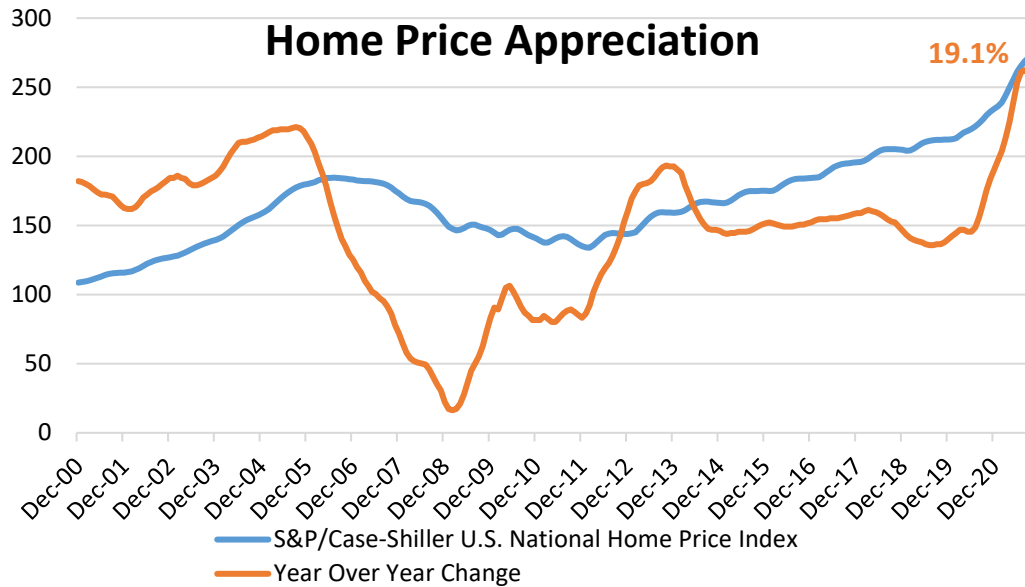
**Average Weekly Hours – Private Sector**





# Housing Market Review

Housing is supported by constrained supply and low rates, boosting household balance sheets





## Current Inflation Environment

Unprecedented levels of liquidity weakened the Dollar and spurred inflation. Conditions should continue to be supportive of commodity prices and real asset valuations





## Strategic Considerations for 2022

- 1) Rationalize current manager lineup; focus on high conviction opportunities
- 2) Maintain vintage and strategy diversification
- 3) Add exposure to inflation strategies where there are:
  - ❖ gaps in the portfolio
  - ❖ attractive valuations
  - ❖ strong industry tailwinds



## Strategies of Interest for 2022

### Energy

- Energy Transition
- Renewables
- Storage & Intermittency Management
- Private debt across multiple sectors
- Midstream

### Technology & Data

- Cell Towers
- Data Centers
- Fiber
- Music Royalties

### Logistics and Other Essential Infrastructure

- Transportation (i.e., leasing assets)
- Storage
- Traditional Infrastructure
- Real Asset Focused Secondaries

### Health Care

- Dental
- Vision
- Primary Care
- Veterinarian
- Drug Royalties
- Real Estate for Medical Practices

### Real Estate

- REITS
- Single Family Rentals
- CMBS
- RMBS
- Residential Whole Loans
- Timberland

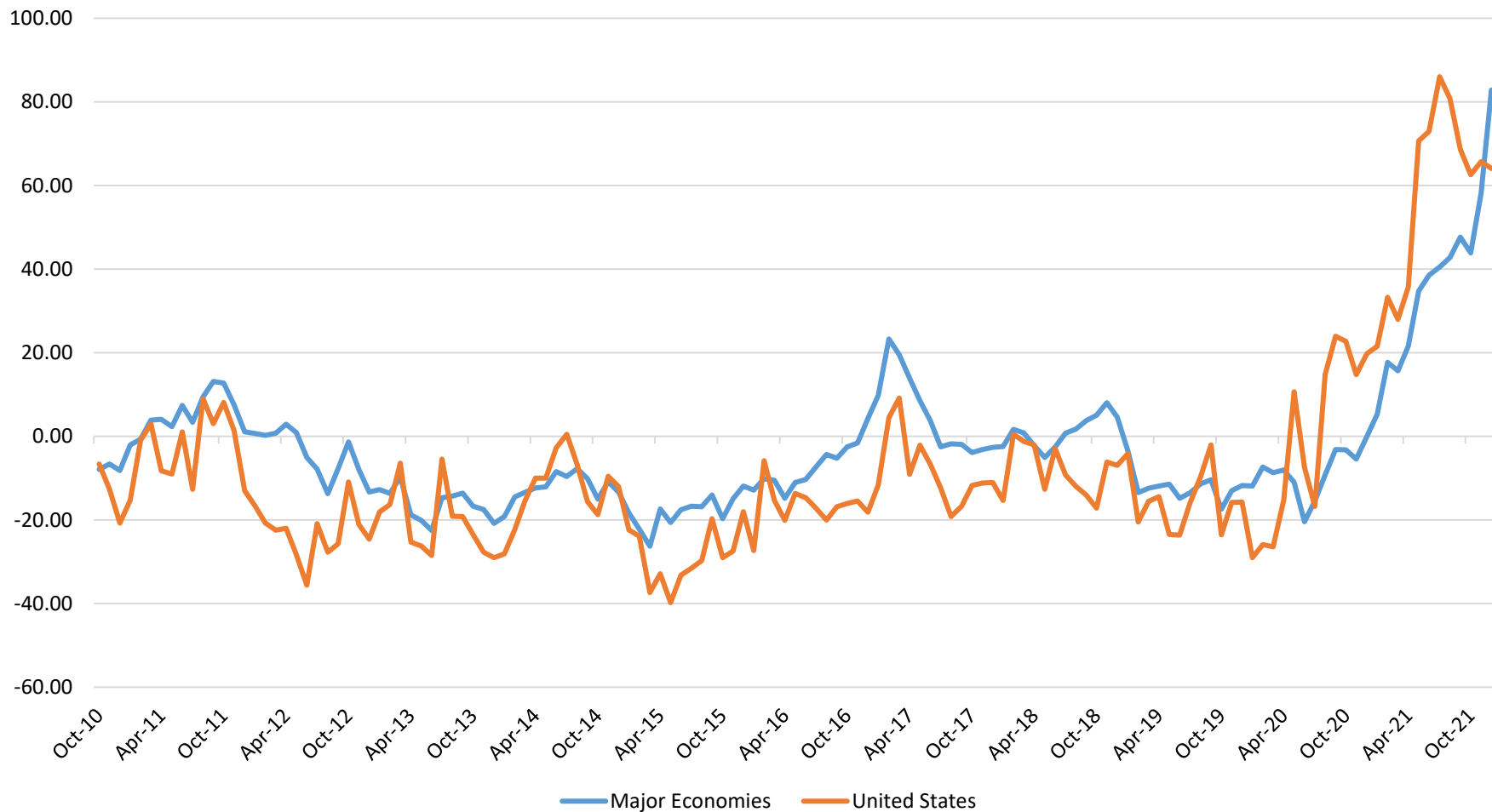


## Appendix



# Current Inflation Environment

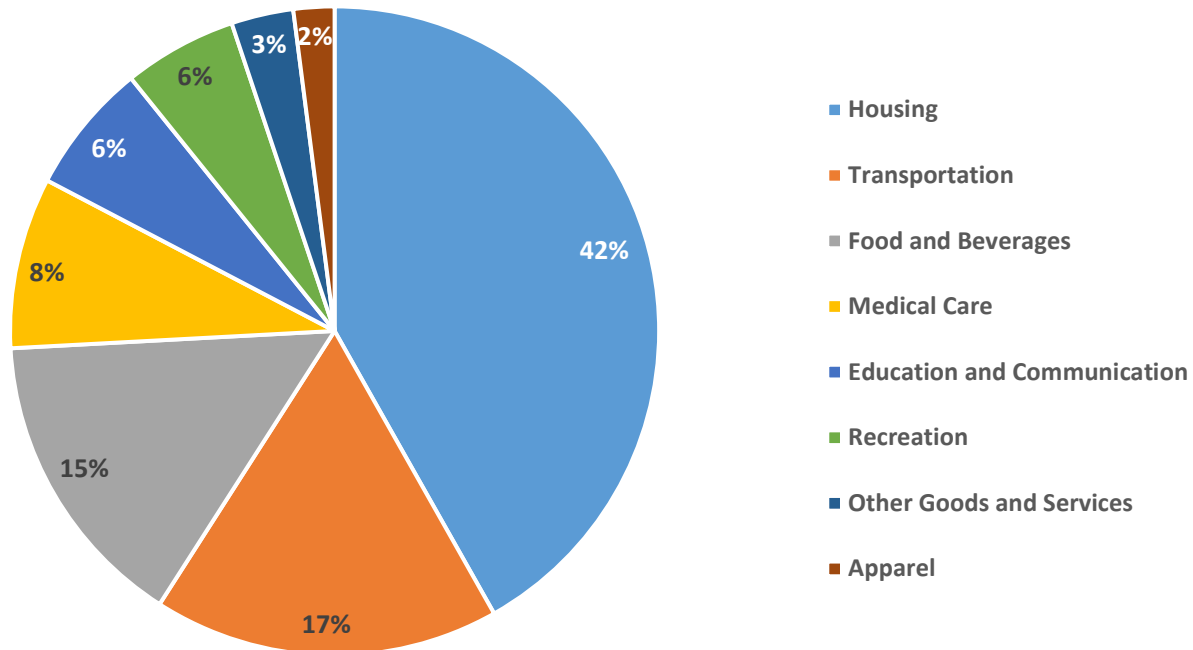
## Inflation Surprise Index





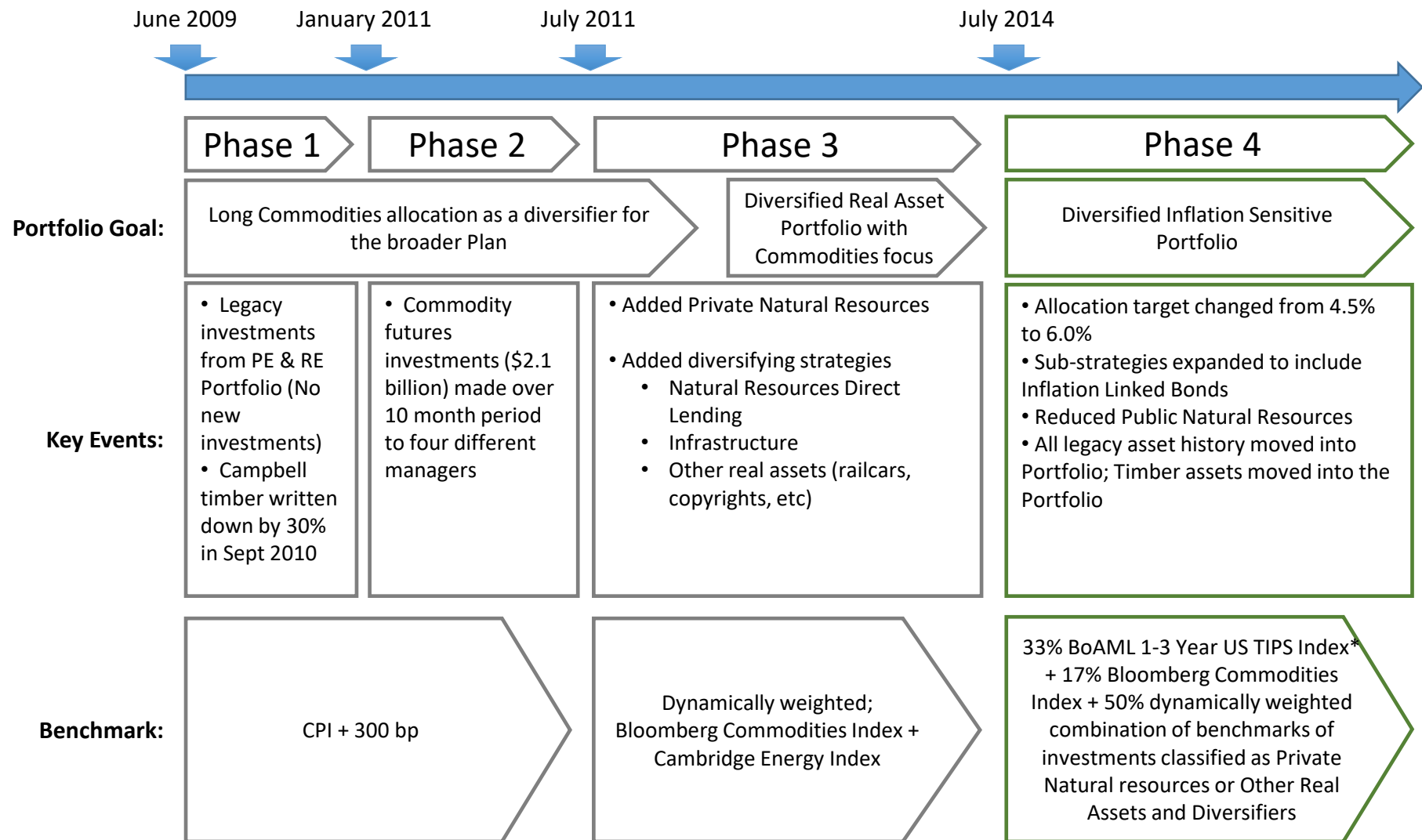
# CPI Composition

## All Urban Consumers (CPI-U) U.S. Average





## Portfolio History



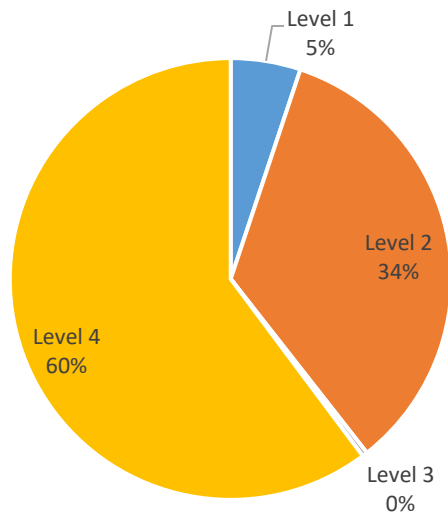
\*Source: BofA Merrill Lynch, used with permission; see disclaimer on page 23



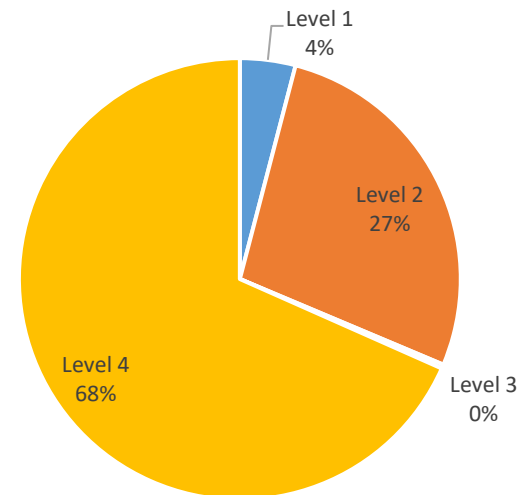
# Portfolio Liquidity

As of December 31, 2021

**Market Value**



**Market Value + Unfunded**





# Inflation Portfolio IRR by Vintage Year

As of December 31, 2021

Vintage Year	Inflation-Linked Bonds	Publicly Traded Natural Resources	Private Natural Resources	Other Real Assets and Diversifiers	All
1993	-	-	9.38	-	9.38
2006	-	-	0.62	-	0.62
2007	-	-	-7.73	-	-7.73
2008	-	-	-4.86	-	-4.86
2010	-	-5.2	-27.62	-	-7.01
2011	-	-10.33	0.04	3.17	-6.07
2012	-	-	3.77	7.83	5.69
2013	-	-	3.57	6.91	5.70
2014	-	-3.98	6.73	8.48	6.68
2015	1.44	-	9.98	11.96	7.19
2016	4.18	-	-	-	4.18
2017	-	-	-6.52	-	-6.52
2018	-	-	-	20.64	20.64
2019	-	-	30.37	27.35	29.99
2020	-	-	-	-	
2021					
All	3.83	-7.23	1.71	7.86	1.66



## Notes:

All data presented are based on currently available information at time of publication and may be revised subsequently.

The Inflation Sensitive Benchmark is the dynamically weighted combination of the ICE Bank of America Merrill Lynch 1-3 Years U.S. Inflation-Linked Treasury Index (Inflation-Linked Bonds)\*, the Bloomberg Commodities Index (Public Natural Resources), and a combination of the benchmarks of investments classified within Private Natural Resources or Other Real Assets and Diversifiers.

The Private Natural Resources Benchmark is the dynamically weighted combination of the benchmarks of investments classified within Private Natural Resources.

The Other Real Assets and Diversifiers Benchmark is the dynamically weighted combination of the benchmarks of investments classified within Other Real Assets and Diversifiers.

The Inflation Sensitive asset class (G.S. 147-69.2(b)(9a)) was created by the General Assembly in June 2009. It included some investments that were previously authorized under other provisions of G.S. 147-69.2.

\*Source: BofA Merrill Lynch, used with permission. See disclaimer on next page.



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