



Driving the Economy Through the Rear-View Mirror: Concerns Behind Shelter Inflation's Lag

Recent historic movements in housing or “shelter” costs, as measured by the Bureau of Labor Statistics (BLS), may have exposed a weakness in the indices used by policymakers to measure inflation. Were a timelier measure of shelter inflation used, Amherst believes recent monetary policy decisions could have been quite different both in timing and magnitude. Our house view is that the Federal Reserve (Fed) has been late in picking up sustained high levels of inflation, may still be materially behind the curve, and, if it continues relying on prevailing statistics, could overshoot as the next six quarters unfold. This article describes a well-known cause of shelter lag, presents a potential additional source of lag, and illustrates how both may lead to a mismatch between monetary policy and the state of inflation.

Sources of Lag and Noise in the BLS Shelter Inflation Index

There is clear evidence that the patterns observed in the BLS shelter inflation index lag the actual market-rate costs of housing. There are two main drivers of this lag:

The Use of Current Cost of Lease Instead of Market-Rate Costs – The BLS estimates shelter costs through a survey of renters, who are asked about the cost of lease they currently pay. Because typical lease contracts tend to lock in rents for 6 to 12 months, any survey of current tenants will reflect rents that were prevalent when the leases were signed, instead of rents today.¹ In times of rapid increases in rents, as we have experienced over the past 18 months, the BLS measure will severely underestimate the market-rate increase in rental costs.² Additionally, the BLS measure will continue to report a high shelter cost inflation number for several quarters even after market-rate rent growth has tapered or slowed.

Property Owner Behaviors and Incentives – In addition, we believe that property owner behaviors and incentives can aggravate the aforementioned lag related errors in the shelter index. Property owners have significant incentives to retain existing residents and attain this strategy by renewing leases at rates well below market rents. This is rational behavior, because passing along market rate inflation increases the risk of the resident moving out and the “switch cost” of residents includes large economic and non-economic costs. On the economic side, losing a tenant can easily create costs of one (or more) month of lost

¹ Measuring Changes in Shelter Prices in the Consumer Price Index. BLS. May 20, 2022.

² Zhou, Xiaoqing and Dolmas, Jim. Surging House Prices Expected to Propel Rent Increases, Push Up Inflation. Federal Reserve Bank of Dallas. August 24, 2021.



revenue and several thousand dollars in property repair, marketing, and other costs, easily totaling 15-20% of the annual property revenue. Said another way, the opportunity to increase rents by 5% may be outweighed by the risk of losing 15-20% of the next 12 months of revenue. In terms of the non-economic costs, increasing rents can put pressure on loyal residents whom the property owner has come to know and trust. The loss of established resident rapport, the headaches of managing turnover repairs, marketing the home, taking applications, and taking on a new unknown resident can further reduce the incentive to pass along single digit rent growth. This is true at all scales. For instance, the Amherst portfolio of more than \$10 billion of single-family, three-bedroom rental homes is currently leased at approximately 9.5% below market rates, and there is a significant difference between rent growth for new leases versus renewing leases. Even during the period of high rent growth over the past 12 months (since June 2021) the Amherst platform's annualized rent growth has averaged 9.7% for new leases and 6.7% for renewing resident households.

Concerns Introduced by the Incentive Hurdle

However, we believe the “incentive hurdle” for owners to risk turnover has been breached by historically high fair market value (FMV) rent growth driven by pandemic-era demand for homes and may cause a change in the behavior of owners. From summer 2021 through June 2022, year-over-year (YoY) single-family rent growth has consistently been in excess of 10%, meaning many markets have seen FMV rent growth over 20% during the same period.³ *Consequently, should property owners react to these larger incentives, BLS observations could show a several-year catchup over a short period of time causing observed rents to exhibit meaningful upward movements.*

To put context around the potential catchup, consider the following. Since January 2020, the Amherst Rent Growth Index grew 25% cumulatively, while shelter CPI grew only 9%. If we consider the BLS metric a fair measure of “in place” or actual rent, we see a historically high gap of 16 percentage points between Actual and Fair Market Value. If we assume only 20% of owners are willing to take vacancy risk and turn the house over for higher market rent, this will lead to a 3.2pp increase in shelter inflation and a 1.1pp increase in overall inflation. Since not all tenants have been residing with their landlord for less than two years, table calculations take into consideration the year tenants moved into their rental units.⁴ However, because the difference in CPI versus market-rate rent growth has only been substantial since the pandemic's onset, the inclusion of tenure length does not materially impact implied CPI increases.

³ Amherst Rent Growth Index

⁴ Impact of incentive take-up is computed as 20% * 16pp CPI vs. Amherst Rent Growth gap over the last two years * current shelter inflation at 5.6%. Impact on CPI stems from BLS weights of shelter inflation in the CPI. Table calculations take into consideration tenure length among renter households using figures from the 2020 5-year ACS.



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FIGURE 1: CUMULATIVE RENT GROWTH VS. SHELTER INFLATION SINCE 2020

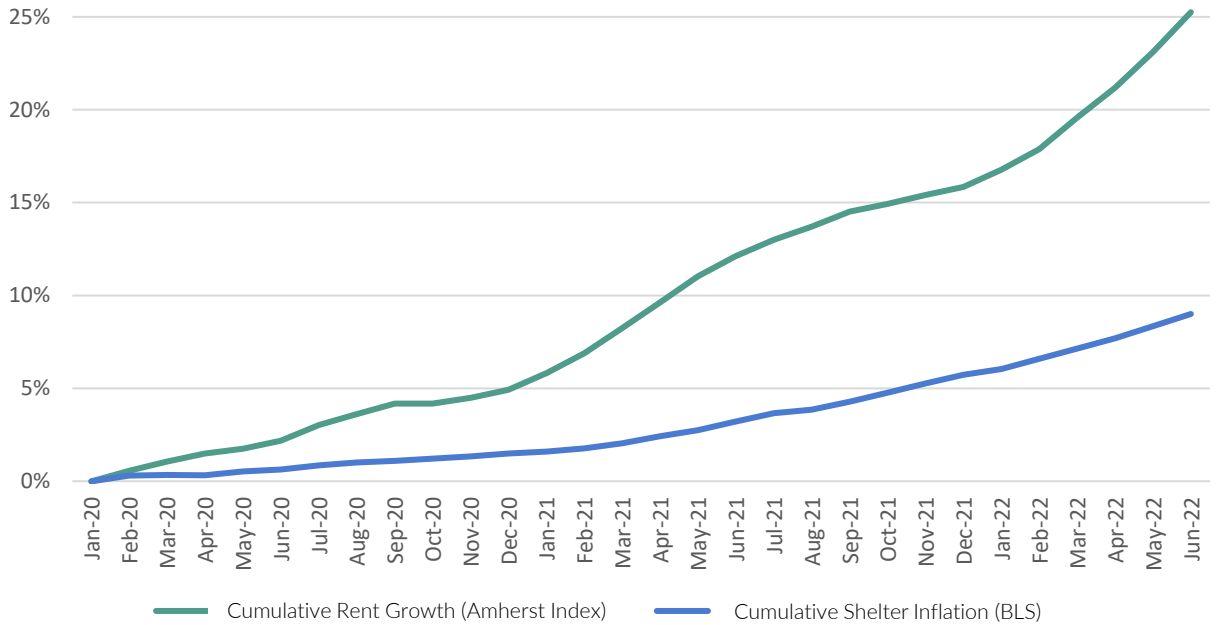


TABLE 1: % OF OWNERS WILLING TO TAKE VACANCY FOR MARKET-LEVEL RENT

	Actual	20%	40%	60%	80%
Increase in Shelter Inflation (as of June 2022)	5.6%	3.1pp	6.2pp	9.3pp	12.5pp
Increase in YoY CPI (as of June 2022)	9.1%	1.0pp	2.1pp	3.1pp	4.1pp

Source: Amherst estimates using publicly available data



Estimates of Where CPI Would Be Were FMV Rents Used for Shelter Inflation

Replacing shelter inflation with a cost of lease index that reflects market-rate growth suggests inflation should be 2pp higher than what is currently reflected, and that BLS CPI inflation inherently lags market-level rent growth by six quarters. We are still in a period where rents are rapidly inflating, so we expect this to continue into the future. However, even after actual rent growth does slow down, we would still expect BLS shelter inflation to continue climbing. As a result, we believe using the current CPI to deliberate on interest rate hikes may cause the Fed to not raise rates high enough today and to raise rates too much in the future.

Conclusion

The current methodology used by the BLS causes CPI growth to be under-reported during periods of rapid housing cost expansion. The past two years of unprecedented rent growth have exposed strains in the methodological framework. Firstly, an inherent lag between observed and FMV rents cause us to believe that CPI in June should have been 2pps higher than what was reported. Secondly, the large gap between in-place rents and FMV rents could incent owners to adjust lease costs to market rate, causing a further jump in market-rate shelter costs that will only be reflected in future CPI surveys. Together, these factors lead us to believe that monetary policy should have tightened both sooner and more dramatically, and we are concerned that future shelter statistics could result in an overreaction creating unnecessary further tightening.



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Amherst Data Details

Amherst Rent Growth Index

The Amherst Rent Growth Index follows single-family detached homes rent price changes for the same MSAs that are used to construct the S&P CoreLogic Case-Shiller 20-City Index. Amherst also follows market-level statistics for over 150 CBSAs in the United States. The index is published on a monthly basis and is based on the Case Shiller repeat-sales methodology. The index incorporates both MLS and Altos rental data to produce a timely rent index.

BLS Shelter Inflation

The index for shelter, the service that a housing unit provides its occupants, is one of the largest components (~33%) of the CPI market basket. Owners' equivalent rent of residences (OER) and rent of primary residence (rent) measure the majority of change in the shelter cost consumers experience. Most of the cost of shelter for renter-occupied housing is rent. For an owner-occupied unit, most of the cost of shelter is the implicit rent that owner occupants would have to pay if they were renting their homes, without furnishings or utilities. For more information, see <https://www.bls.gov/cpi/factsheets/owners-equivalent-rent-and-rent.html>



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ABOUT AMHERST

Amherst is on a mission to transform the way real estate is created, owned, financed, and managed. Amherst leverages its proprietary data, analytics, technology, and decades of experience to seek solutions for a fragmented, slow-to-evolve real estate ecosystem and to materially improve the experience for residents, buyers, sellers, communities, and investors. Today Amherst has over 1,400 employees and \$15.2 billion in assets under management.

Over the past decade, Amherst has scaled its platform to become one of the most expansive providers of high-quality, affordable single-family homes in communities across the U.S. Built on a long tradition of working with residents to promote their housing stability, Amherst has renovated and leased more than 50,000 homes across 32 markets (32 cities, 19 states) in the U.S. The firm delivers customized, stabilized cash-flowing portfolios of homes to its investors, wrapped in all the ongoing services required to manage, own, and finance the homes and provide a positive resident experience, including property management, portfolio management, and a full capital markets team. In addition to its single-family rental platform, Amherst's¹ debt business pursues two distinct credit strategies in mortgage-backed securities and commercial real estate lending. Over its 27-year history, Amherst has developed a deep bench of research and technology talent, and leverages data and analytics at every stage in the asset lifecycle to improve operations and preserve long-term value for our investors and the more than 188,000 residents the firm has served. (Data as of 3/31/2022) www.amherst.com

¹Managed through Amherst Capital Management

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