



Economic Stress Index™





About LegalShield



#1 Provider of subscription-based legal plans to households



1.8 million+ memberships paying monthly via credit card/ debit card/payroll deduction



49 year history and counting



47,000 small business accounts



6,900 broker & agency clients served by our dedicated B2B division



39 law firms in 50 states, Canada and the United Kingdom with a total of 900 lawyers, and a referral network of 4,600 lawyers, with average of 22 years experience



About the LegalShield Economic Stress Index

- ✓ The LegalShield Economic Stress Index is a suite of leading indicators of the economic and financial status of U.S. households and small businesses.
- ✓ The LegalShield Economic Stress Index is comprised of five sub-indices that are constructed from LegalShield's proprietary data, which reflect the demand for various legal services over the past 15+ years. Each time a LegalShield provider law firm receives a request from a LegalShield customer, the request is logged as an "intake" in one of roughly 70 unique areas of law (e.g., real estate) depending on the nature of the request.
- ✓ Each sub-index reflects the number of intakes in an area of law as a share of total intakes across all areas of law in a given quarter. In some instances, individual indices across multiple areas of law (e.g., bankruptcy, foreclosure, consumer/finance) are combined to produce a composite index (e.g., consumer financial stress).
- ✓ The sub-indices that comprise the LegalShield Economic Stress Index were selected because they tend to lead an existing economic indicator that sheds light on the health of the U.S. economy (i.e., the target economic indicator). In this way, the LegalShield Economic Stress Index provides actionable intelligence about the direction of the U.S. economy in the near term.

Advantages of the LegalShield Economic Stress Index



UNIQUE

The LegalShield Economic Stress Index is based on inquiries into specific legal services each month. To the best of our knowledge, there is no comparable data on the market.



PROPRIETARY

The LegalShield Economic Stress index is based on data collected through LegalShield's provider law firms in all 50 states, thereby offering information that is not accessible to the general public.



HIGH-FREQUENCY

The LegalShield Economic Stress Index is based on data collected on a near real-time basis, and can be refreshed on a weekly, monthly, or quarterly basis depending on the user's needs.



ROBUST

The LegalShield Economic Stress Index is based on intakes for more than 1.8 million memberships (including individuals and small businesses), providing a window into the experiences of families and businesses across the country at any given point in time.

Interpreting Each Component of the LegalShield Economic Stress Index

CONSUMER STRESS INDEX

Consumer spending accounts for more than two-thirds of U.S. economic activity. The flagship Consumer Stress Index tends to lead the Conference Board's Consumer Confidence Index by one to three months. The Consumer Stress Index also provides a useful "hard" data check on the Consumer Confidence Index and similar measures of consumer confidence that are based on "soft" survey data, as these measures are not always consistent with underlying economic conditions.

BANKRUPTCY INDEX

Bankruptcy data provide an important insight into the overall financial health of consumers and businesses. As witnessed during the Great Recession of 2008-09, an uptick in bankruptcies can foreshadow significant turmoil within the economy. The Bankruptcy Index tends to lead the trajectory of total bankruptcies by roughly one month, providing an early warning signal of an economic downturn.

FORECLOSURE INDEX

A rise in foreclosures often signals a worsening of household finances, as households typically delay payments on other debt obligations in order to pay their mortgages on time. The Foreclosure Index closely tracks foreclosures as reported each quarter by the Mortgage Bankers Association.

HOUSING CONSTRUCTION INDEX

The housing market, broadly defined, accounts for up to one-seventh of U.S. economic activity, and the amount of new residential construction (as measured by housing starts) can provide insights into consumers' confidence about their jobs and future income. The Housing Activity Index tends to lead U.S. Census data on housing starts (a key economic indicator) by 1-2 months — providing timely intelligence about near-term housing market health.

HOUSING SALES INDEX

The housing market accounts for a significant share of U.S. economic activity, and the pace of existing home sales can provide insights into consumers' confidence about their jobs and future income. The Housing Sales Index tends to lead existing home sales as published by the National Association of Realtors and offers an early look at emerging trends in the housing market.



Consumer Stress Index

The LegalShield Consumer Stress Index fell to another historical low in December. Financial stress has remained muted thanks to accumulated savings and favorable labor market conditions, although high inflation has emerged as a significant headwind to consumer sentiment.

The LegalShield Consumer Stress Index decreased (improved) 1.4 points in December to 56.4. Meanwhile, the Conference Board's Consumer Confidence Index rose 3.9 points in December to 115.8.

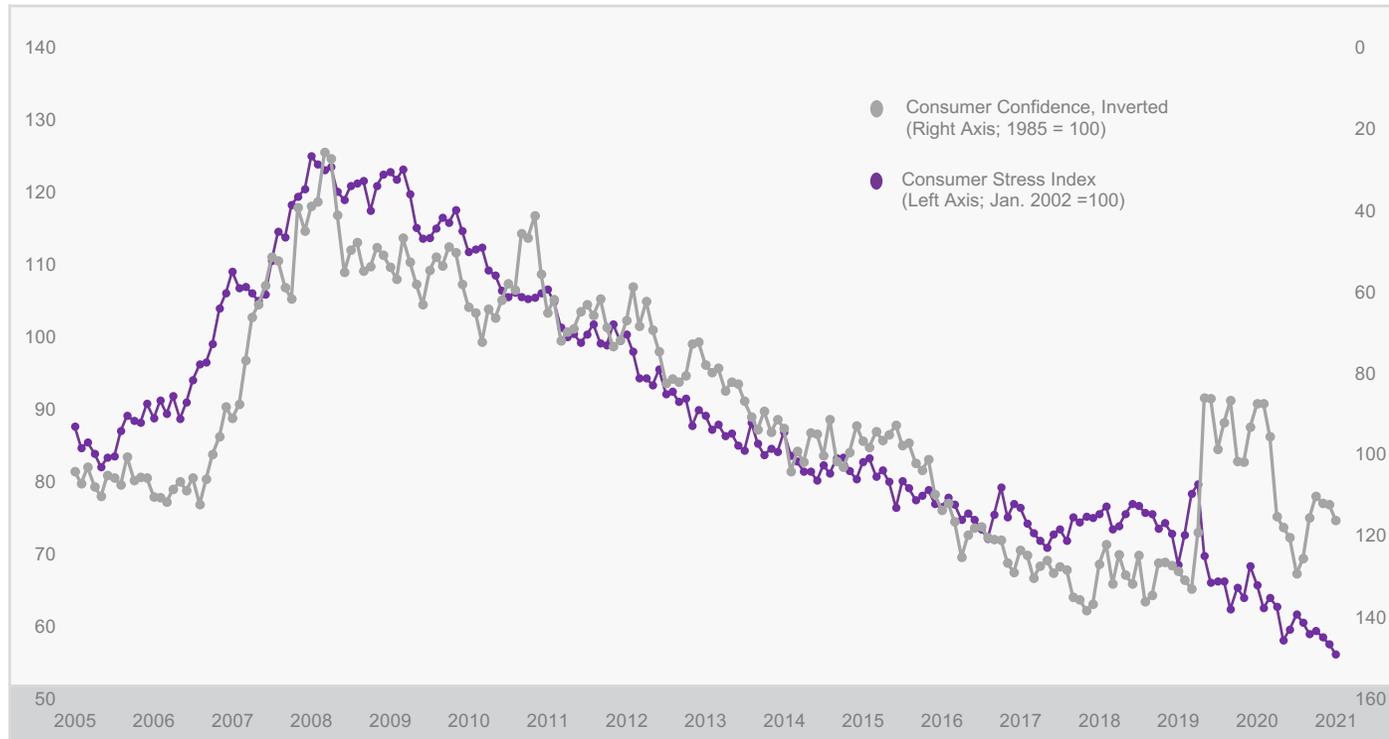
Consumers continue to benefit from accumulated savings, strong nominal wage growth, and low unemployment. While the Omicron variant presents a challenge, consumers are showing resilience in their spending and mobility thus far. For example, data from Mastercard shows that holiday sales rose at the fastest pace in 17 years, increasing 8.5% Y/Y. Meanwhile, Sensormatic Solutions reports that in mid-December, store traffic was up 20% compared to a year ago (though it is still 23% below pre-pandemic levels). An [Axios-Ipsos](#) poll conducted in early December found that most Americans did not plan to halt indoor dining or cancel their holiday plans due to Omicron, though 62% of respondents said they would wear masks while in indoor public spaces. While it is possible that consumer activity will slow in January if infections rise as expected, data from South Africa and the United Kingdom suggest cases may fall as quickly as they rose, which should help to limit the economic impact.

Rising inflation, on the other hand, is a more significant concern for consumers in 2022 due to its deleterious effect on confidence and spending power. A survey by the [Wall Street Journal](#) found that a majority of Americans say inflation is already causing some financial strain — and expect it to worsen. Indeed, rising prices are diminishing wage gains and impacting consumers of all income levels. While workers have seen strong nominal (i.e., pre-inflation) wage growth in recent months, an analysis from [Brookings](#) found that high inflation erased at least half of the average wage gains for frontline workers. Inflation hits lower-income families the hardest: an [AP](#) survey found that half of respondents with incomes under \$50K said recent price increases had a major impact on their household finances.

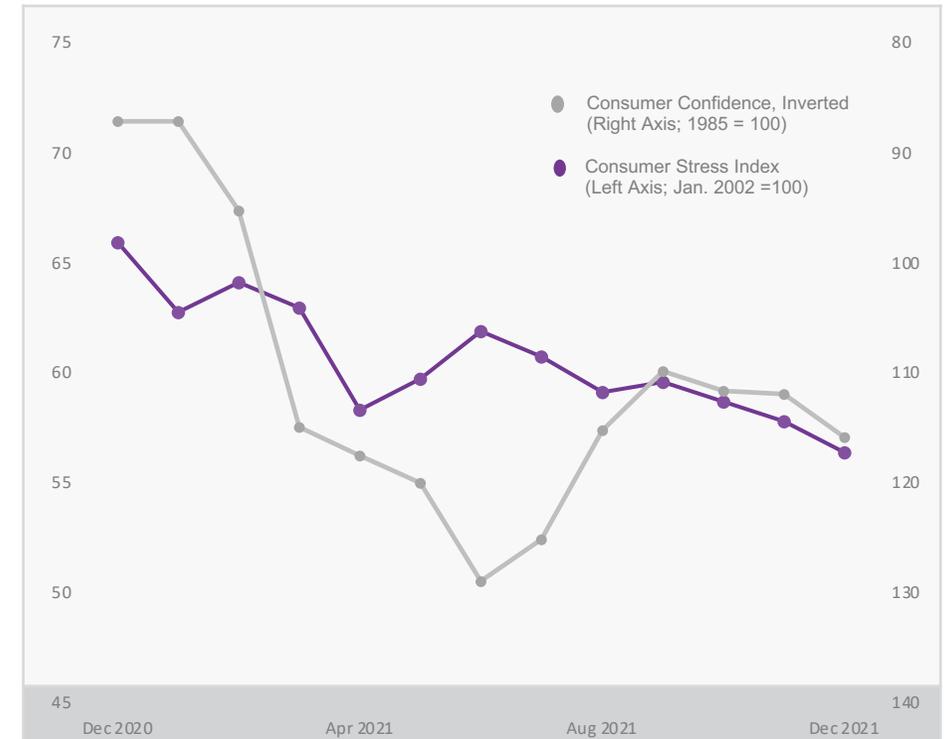
Overall, consumer financial stress should remain near historic lows over the next one to three months, but if inflation remains at current levels, the Consumer Stress Index may rise later this year.

Consumer Stress Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Bankruptcy Index

The LegalShield Bankruptcy Index fell to another record low in December. Consumers remain in good financial standing thanks to a strong labor market and savings accumulated during the pandemic.

The LegalShield Bankruptcy Index decreased (improved) 1.9 points to 17.4 in December. Meanwhile, total seasonally adjusted bankruptcy filings decreased by 3.8% to 30,543 in November and were down 20% compared to a year ago.

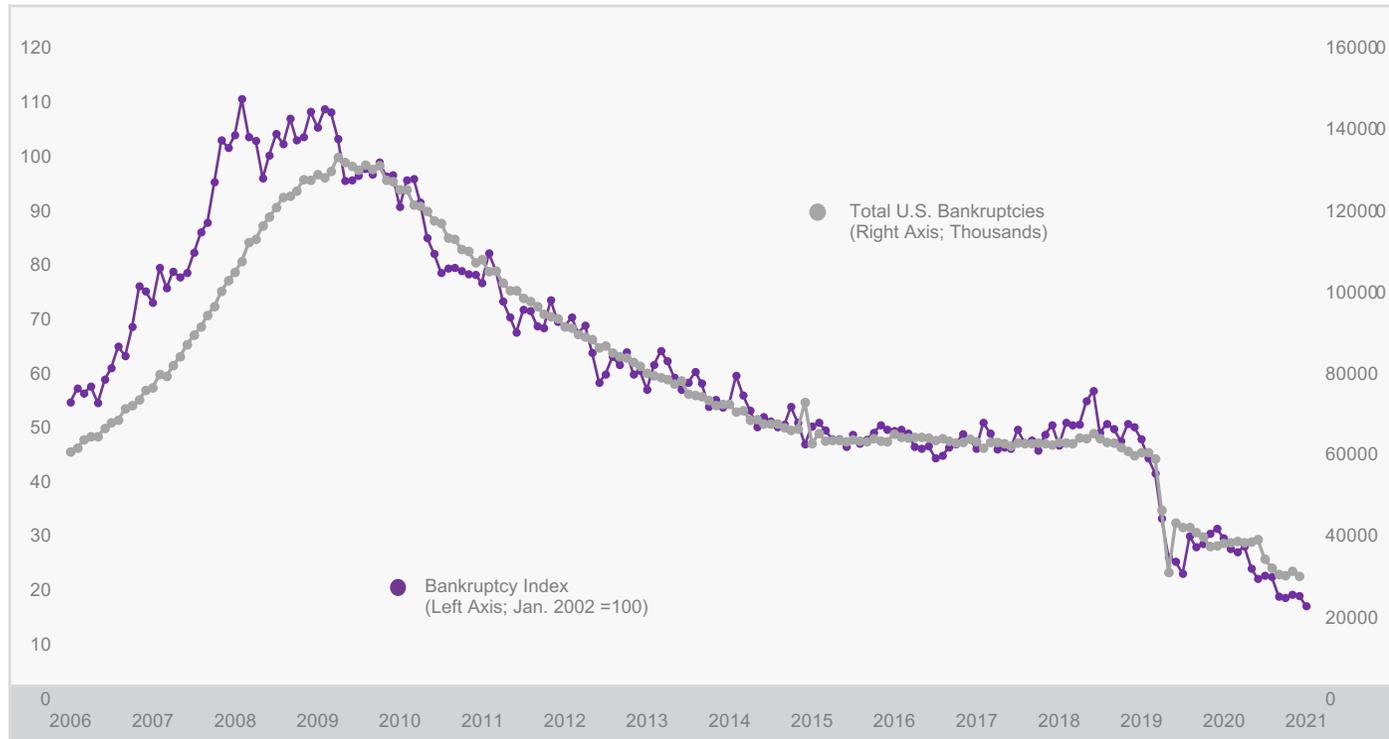
Consumer finances continue to be buoyed by savings from government transfer payments. A [report](#) by the Financial Stability Oversight Council found that although household debt rose to a record \$17 trillion in 2021 Q2, consumer financial stress remains low thanks to pandemic-era federal support programs, including expanded unemployment insurance and economic impact payments. Additionally, the report found that the ratio of household debt to disposable personal income is well below the peak recorded during the 2008 financial crisis and slightly below pre-pandemic levels. This lower debt ratio is aided by rising incomes and low interest rates. Notably, these metrics remain healthy even as consumer spending patterns and the personal savings rate have normalized.

However, there is evidence that consumer financial stress may rise this year. For example, [Moody's Analytics](#) predicts that among lower- and middle-income households, excess savings could run out early this year. In addition, over 30 million households received their last enhanced child tax credit payment in December; [early estimates](#) predicted the program would significantly reduce the child poverty rate, and a recent [analysis](#) found that it indeed reduced poverty by more than one-third.

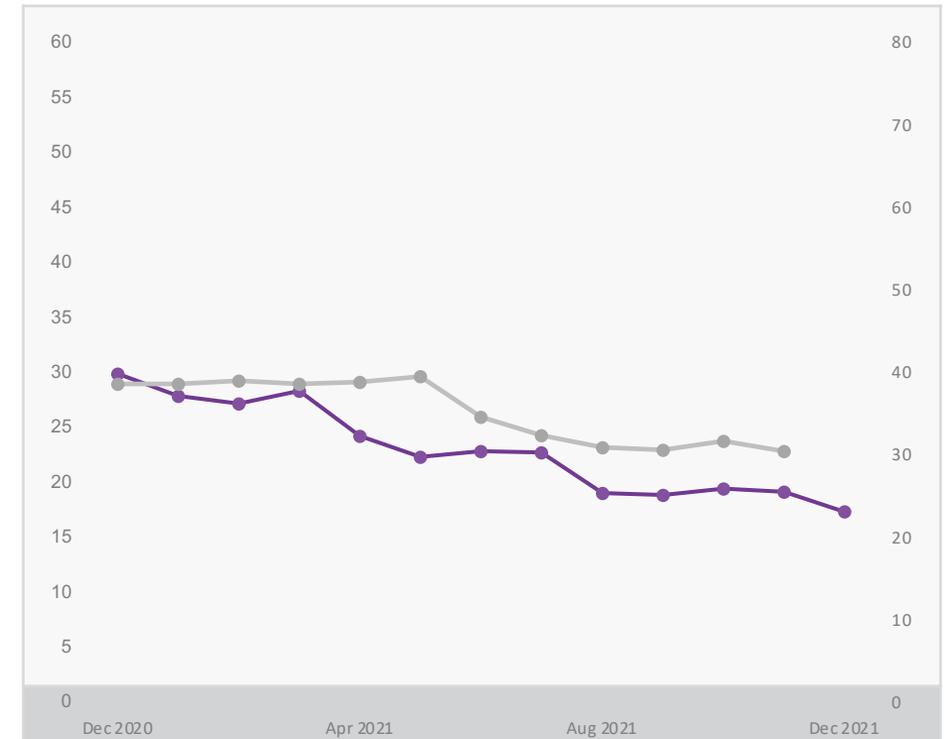
Rising financial stress will not immediately translate to increased bankruptcy, however, and robust employer demand bodes well for the labor market and should dampen the effects of expiring federal aid and reduced savings. As such, it is unsurprising that LegalShield data point to muted bankruptcy filings in the near term.

Bankruptcy Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Foreclosure Index

The LegalShield Foreclosure Index decreased in December for the second straight month. Foreclosure activity remains well below its pre-pandemic level as homeowners benefit from high real estate prices, along with loss mitigation options offered by service providers and the government.

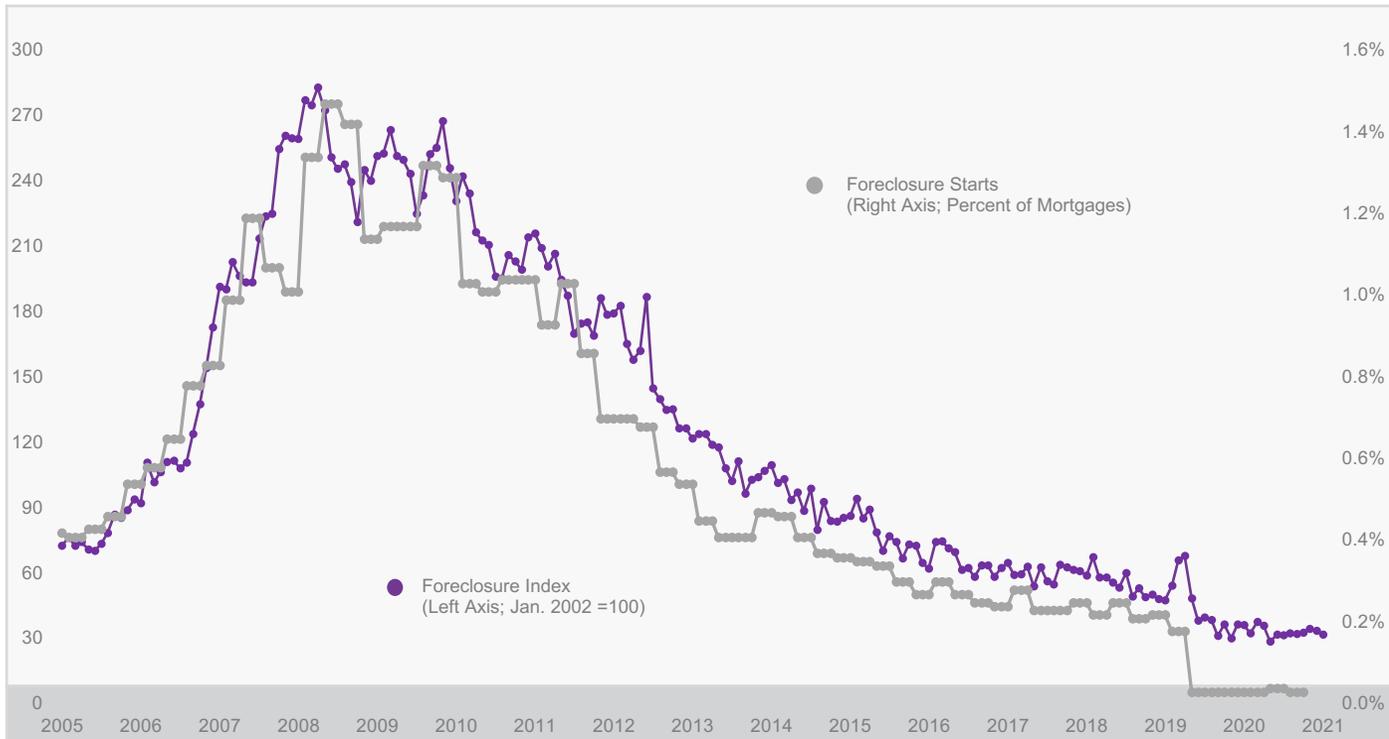
The LegalShield Foreclosure Index decreased (improved) 1.8 points to 32.3 in December. Similarly, [ATTOM](#) reports a total of 19,479 foreclosure filings in November, representing a 5% decrease M/M. Meanwhile, Black Knight reports that both foreclosure starts and active foreclosure inventory fell to record lows in November. In promising news, over half of the 7.7 million mortgage borrowers who utilized forbearance are now current on their loan payments, and only 3% of borrowers in forbearance (264K) are behind on their installments.

While there are few signs of major distress in the mortgage market, serious delinquencies remain more than double their pre-pandemic rate, while prepayment activity fell to its lowest level in nearly two years in November. Rising mortgage rates are an emerging headwind for mortgage borrowers: the average long-term mortgage rate rose to its highest level since May 2020 in late 2021, and economists expect mortgage rates to continue rising in 2022 as the Fed tightens monetary policy in response to high inflation.

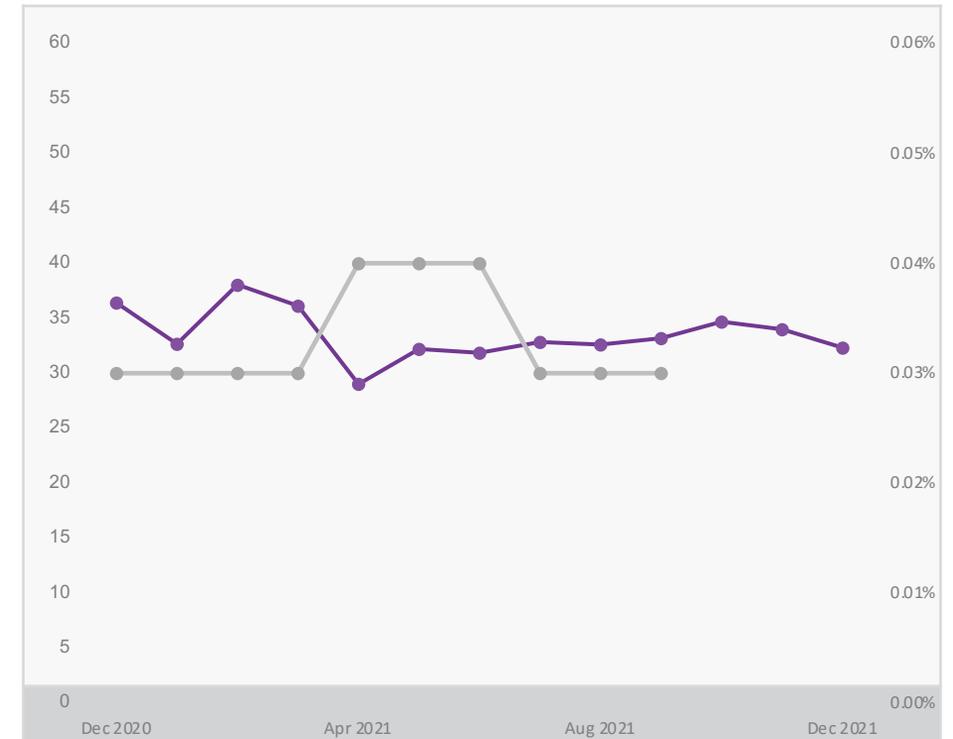
Overall, foreclosure activity is expected to remain low in the near term, though it may slowly rise later this year if interest rates rise and financial stress increases, as expected.

Foreclosure Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Housing Construction Index

The LegalShield Housing Construction Index fell for the third consecutive month in December, though it remains historically high. While builders are having to contend with high materials costs, difficulties hiring skilled labor, and supply chain disruptions, construction activity remains at a healthy level.

The LegalShield Housing Construction Index fell 1.5 points in December. Meanwhile, housing starts rose 12% in October and were 8% higher compared to a year ago.

Homebuilders continue to struggle with high input costs, worker shortages, and disrupted supply chains.

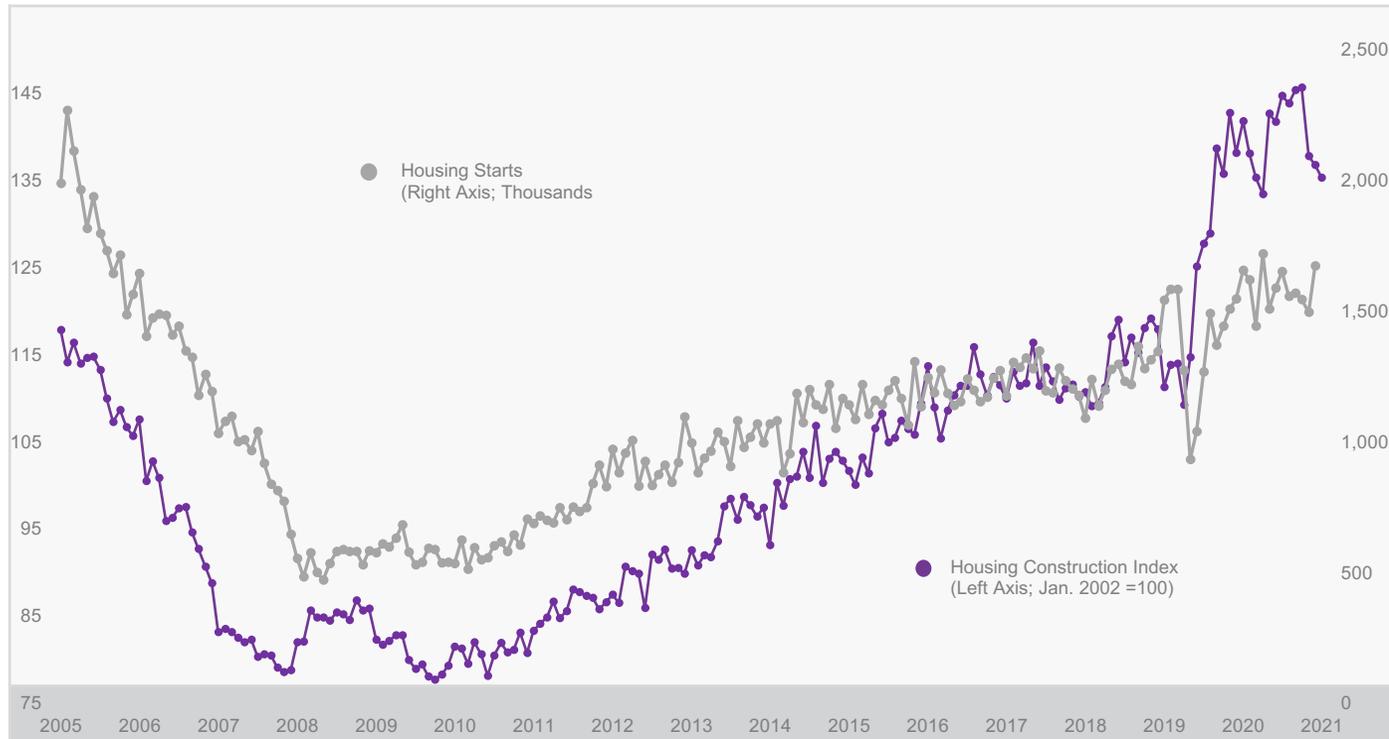
- Costs for several key materials have increased in recent months. For example, the [National Association of Home Builders](#) (NAHB), reports that lumber prices have nearly tripled in the last four months and are adding \$18,600 to the cost of the average new home. Meanwhile, the cost of [ready-to-mix concrete](#) are up nearly 7% year-to-date.
- Homebuilders continue to face labor constraints. Although construction hiring has been strong lately — 53,000 new construction jobs were created in November and December — it has not kept up with demand, as there were still 345,000 unfilled positions as of November according to NAHB.

Nevertheless, the combination of strong housing demand and limited inventory should translate to continued strong construction activity for the foreseeable future. Indeed, the NAHB/Wells Fargo [Housing Market Index](#) (HMI) rose to the highest level on record in November amid robust builder sentiment.

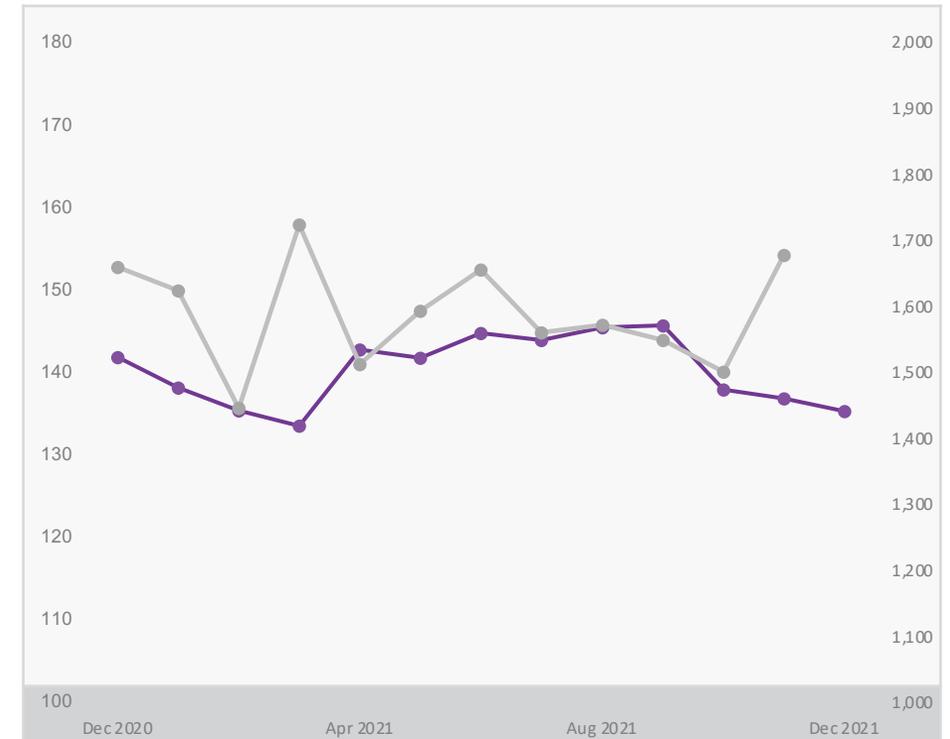
In all, LegalShield data suggests that homebuilders should benefit from elevated demand for new homes in the months ahead, despite labor supply constraints and high input costs.

Housing Construction Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Housing Sales Index

The LegalShield Housing Sales Index fell to the lowest level since July 2020 as overall housing demand slowed due to low inventories and high prices. However, strong Millennial demand should keep sales healthy in the near term.

The LegalShield Housing Sales Index fell 3.1 points in December to 109.6, its third consecutive monthly decline (though it remains well above its pre-pandemic level). Meanwhile, existing home sales fell 1.9% in November and are down 2.0% compared to last year. Pending home sales, which are a leading indicator of imminent sales, fell 2.2% in November.

Some pandemic-era factors that strengthened the housing market earlier in the pandemic are now normalizing. For instance, while the pandemic drove single-family housing demand in the [suburbs](#), demand is now improving in urban centers. Meanwhile, mortgage rates have been gradually rising, and many experts expect this trend to continue in 2022. Not surprisingly, the combination of higher interest rates and [limited inventories](#) have caused mortgage applications to fall: according to the [Mortgage Bankers Association](#)'s weekly index, mortgage loan application volumes are now at their lowest level since January 2020.

However, strong demand — particularly from [Millennials](#) — is keeping the housing market healthy. CoreLogic recently reported that Millennials account for two-thirds of first-time home purchase mortgage applications through August 2021. While high prices are a significant constraint for first-time home buyers who often do not have resources to compete in bidding wars, it appears that Millennials, who were slower than previous generations to form new households and purchase homes, are now driving demand.

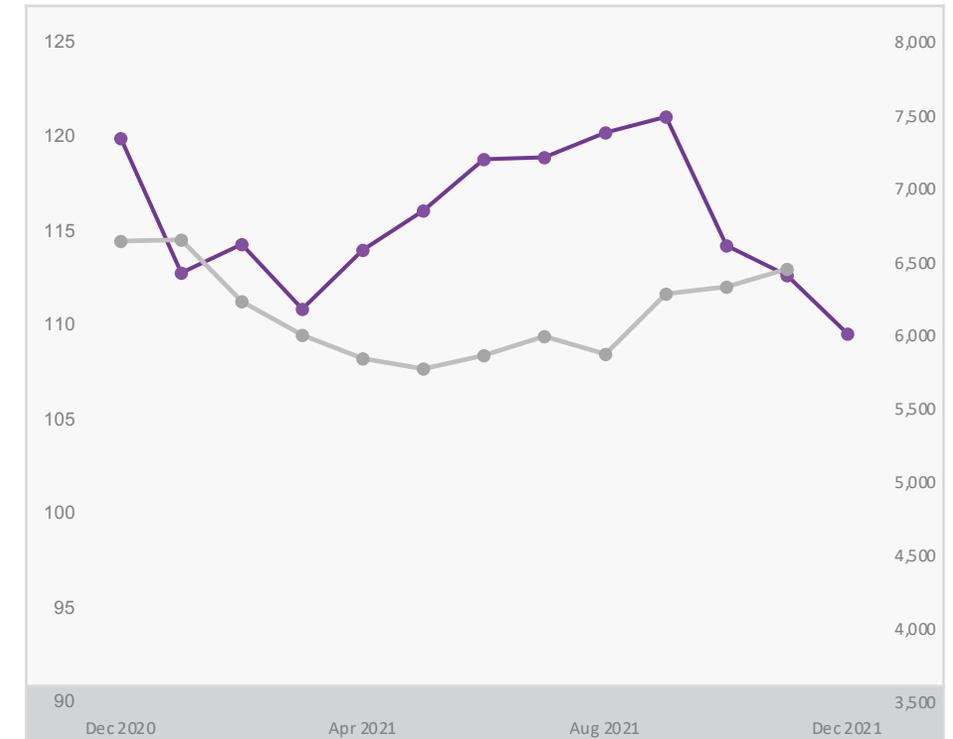
Overall, the combination of high prices, low inventories, and rising mortgage rates will likely slow sales compared to the frantic pace experienced throughout much of 2021. However, housing sales are expected to remain elevated by historical standards thanks to sustained demand.

Housing Sales Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months



Technical Appendix



Key Findings

Three individual AOLs demonstrated strong correlation and leading properties against five target macroeconomic indicators.

Summary Of Results							
LEGALSHIELD AREA OF LAW	TARGET MACRO INDICATOR(S)	CORRELATION (LEVEL)	CORRELATION (Y/Y)	CORRELATION (Q/Q)	TRACKS HISTORICAL TREND?	ESTIMATED LEAD	ROBUST OVER TIME?
Bankruptcy	Bankruptcies	0.75	0.74	0.22	✓	≈ 1 mo.	✓+
Foreclosure	Foreclosures	0.96	0.88	0.47	✓	Coincident*	✓+
Real Estate	Existing Home Sales	0.87	0.65	0.46	✓	≈ 0-1 mo.*	✓

*These indices have a timing advantage over their target indicators due to the release schedule of the target series.

Composite Indices

We developed two composite indexes that are strongly correlated with and tend to lead economic indicators of interest.



LegalShield “Consumer Stress” Index

- ✓ **Component AOLs:** (1) Bankruptcy; (2) Consumer/Finance; (3) Foreclosure
- ✓ **Target Indicator:** Consumer Confidence
- ✓ **Performance:** -0.85 Correlation; 1-3 Month Lead



LegalShield “Housing Construction” Index

- ✓ **Component AOLs:** (1) Real Estate; (2) Foreclosure
- ✓ **Target Indicator:** Housing Starts
- ✓ **Performance:** 0.91 Correlation; 0-2 Month Lead*

*In addition to its statistical lead time, the Index also has a timing advantage over housing starts of roughly one week due to release schedules.

Methodology:

**Individual Index
Development**



Methodology

A six-step process was used to convert LegalShield intake data into potential indices.

1

CONSTRUCT DATASET:

Conduct preliminary data cleaning, processing, and formatting.

2

DETERMINE SCOPE OF ANALYSIS:

Examine differences across plan types and subscriber samples to determine the optimal “subscriber universe” for index development.

3

DEFINE INTAKE METRIC:

Test competing approaches for normalizing intake data.

4

FILTER AOLS:

Evaluate and scope the original list of 65 areas of law (AOLs) to identify the best candidates for index development.

5

TEST:

Run the scoped AOLs through a series of transformations and statistical tests to identify quantitative relationships with key macroeconomic indicators.

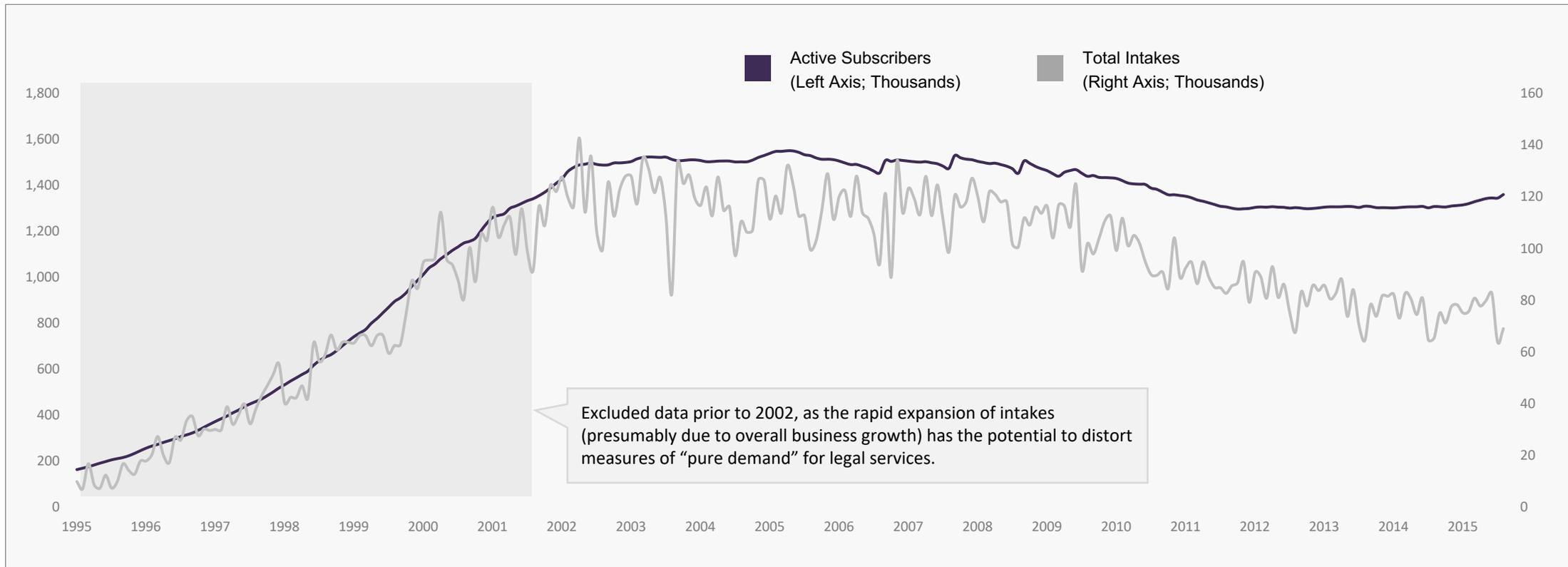
6

DEVELOP INDEXES:

Combine specific AOLs into composite indexes and test relationships with key macroeconomic indicators.

Data Construction & Cleaning

Monthly subscriber and intake data was trimmed to improve the stability of the dataset over time.



Filter AOLs

Out of 65 AOLs in the original intake data, a three-step filtering process identified 27 as suitable candidates for index development.

Scoping Intake Data

1

ORIGINAL DATASET:

Historical intake data from LegalShield included 65 AOLs.



2

CONSOLIDATE AOLs:

Consolidating “like” AOLs reduced the number from 65 to 49.



3

CRITERIA 1: HISTORICAL DATA

18 AOLs lacked sufficient historical data.



4

CRITERIA 2: NARROW SCOPE

4 AOLs were defined too broadly to support a specific index narrative, leaving 27 “qualifying” AOLs.



Filter AOL

Detailed Inclusion Filter Results (1/2)

ID	LEGALSHIELD AREA OF LAW	ASSOCIATED WITH +/- LIFE EVENT	HISTORICAL DATA	NARROW SCOPE	INCLUDE IN DATASET
1	Administrative Law	Ambiguous		✓	
2	Automobile Accident	-	✓	✓	✓
3	Banking	Ambiguous	✓		
4	Bankruptcy	-	✓	✓	✓
5	Business License, Fees, etc.	Ambiguous	✓	✓	✓
6	Civil Litigation	-	✓	✓	✓
7	Collection	-	✓	✓	✓
8	Consumer/Finance	Ambiguous	✓	✓	✓
9	Contract	Ambiguous	✓	✓	✓
10	Corporate	+	✓	✓	✓
11	Criminal	-	✓	✓	✓
12	Divorce	-		✓	
13	Divorce Uncontested	-		✓	
14	Education	-	✓	✓	✓
15	Elder Law	-	✓	✓	✓
16	Employment	Ambiguous	✓	✓	✓
17	Entertainment	Ambiguous		✓	
18	Estate Planning	Ambiguous	✓	✓	✓
19	Family Law	Ambiguous	✓	✓	✓
20	Firearm	Ambiguous		✓	
21	Foreclosure	-	✓	✓	✓
22	Franchise Law	Ambiguous		✓	
23	General Law	Ambiguous	✓		
24	Identity Theft	-		✓	
25	Immigration	Ambiguous	✓	✓	✓

Filter AOL

Detailed Inclusion Filter Results (2/2)

ID	LEGALSHIELD AREA OF LAW	ASSOCIATED WITH +/- LIFE EVENT	HISTORICAL DATA	NARROW SCOPE	INCLUDE IN DATASET
26	Insurance	-	✓	✓	✓
27	Labor Law	-		✓	
28	Landlord Tenant	-	✓	✓	✓
29	Legal Malpractice	-		✓	
30	Loan Modification	Ambiguous		✓	
31	Medical Malpractice	-	✓	✓	✓
32	Military Law/Security Clearance	Ambiguous		✓	
33	Other	Ambiguous	✓		
34	Patents Combined	+	✓	✓	✓
35	Personal Injury	-	✓	✓	✓
36	Probate	-	✓	✓	✓
37	Product Liability	-		✓	
38	Public Service	Ambiguous		✓	
39	Real Estate	+	✓	✓	✓
40	Request for Service	Ambiguous			
41	Small Claims	-	✓	✓	✓
42	Social Security	-	✓	✓	✓
43	Tax	Ambiguous	✓		
44	Trademarks	+		✓	
45	Traffic	-	✓	✓	✓
46	Veteran's Affairs	Ambiguous		✓	
47	Will Workshop	Ambiguous		✓	
48	Workman's Compensation	-	✓	✓	✓
49	Wrongful Death	-		✓	
TOTAL			31	44	27

Testing

Intake data from the 27 “qualifying” AOLs was then tested against 15 economic indicators of interest to assess potential predictive value.

MACROECONOMIC INDICATORS:

1. Conduct preliminary data cleaning, processing, and formatting.
2. Examine differences across plan types and subscriber samples to determine the optimal “subscriber universe” for index development
3. Test competing approaches for normalizing intake data.

HOUSING INDICATORS:

4. Housing Starts
5. Existing Home Sales (NAR)
6. Residential Construction Permits
7. Small Business Optimism Index (NFIB)

FINANCIAL HEALTH INDICATORS:

8. Total Bankruptcies (Total Filings; Epiq)
9. Delinquencies (All Loans & Leases; St. Louis Fed)
10. Foreclosures (All Mortgage Foreclosures Started; Mortgage Bankers Association)
11. Consumer Credit (Total; Revolving; Non-Revolving)
12. S&P 500 Index
13. Wilshire 5000 Index

CONFIDENCE INDICATORS:

14. Consumer Confidence Index (Conference Board)
15. Small Business Optimism Index (NFIB)

Testing

Three out of the final 27 AOLs demonstrated a strong statistical relationship to a handful of economic indicators.

Scoping Intake Data

- 1 27 SCOPED AOLS:** 27 AOLs were subjected to several rounds of statistical testing. 
- 2 STATISTICAL RELATIONSHIP:** Test for correlation across various transformations. 
- 3 TRACKING HISTORICAL TREND:** Visually assess AOL to determine how closely it tracks its target indicator. 
- 4 LEADING PROPERTIES:** Test for leading / concurrent properties. 
- 5 ROBUST ACROSS TIME:** Confirm that relationships hold across various out-of-sample time periods. 

Testing

Testing included computing various correlations, assessing historical trends and leading properties, and evaluating stability over time.

1

BASIC COORELATIONS:

- Examined the correlation between AOL and target macro indicator using different transformations



2

HISTORICAL TREND & LEADING PROPERTIES:

- Produced charts of transformed AOL and select economic indicators to confirm/reject if AOL tracks indicator's historical trend
- Examined AOLs on both a concurrent and leading basis

3

STABILITY TESTS:

- Performed testing to confirm that relationship between AOL and macro indicator was not driven solely by a specific time period within the dataset and ensure that the relationship holds across time
- Test 1: Compared correlations between first half of data (2000 – 2007) and second half of data (2008 – 2015)
- Test 2: Compared correlations between random samples of the data
- Test 3: Compared earliest and latest data (2000 – 2005, 2010 – 2015) with middle of data (2006 – 2009)
- Test 4: Compared correlations between 20% of most recent data (Nov 2012 – Dec 2015) and remaining data

Testing

Statistical Relationship Testing, Select Results

Correlation Results (2002 – 2017)				
LEGALSHIELD AREA OF LAW	TARGET INDICATOR	CORRELATION (LEVEL)	CORRELATION (Y/Y)	CORRELATION (Q/Q)
Bankruptcy	Bankruptcies	0.76	0.67	0.20
Foreclosure	Foreclosures	0.96	0.87	0.49
Real Estate	Existing Home Sales	0.85	0.58	0.36

Testing

Historical Trend & Leading Properties Testing, Select Results

Historical Trend & Leading Properties Results (2002 – 2016)				
LEGALSHIELD AREA OF LAW	TARGET INDICATOR	TRACKS HISTORICAL TREND?	LEADING PROPERTIES	APPROXIMATE LEAD TIME
Bankruptcy	Bankruptcies	✓	✓	≈ 1 mo.
Foreclosure	Foreclosures	✓	r	Coincident*
Real Estate	Existing Home Sales	✓	✓	≈ 1 mo.*

* These indices have a practice lead time of varying length due to the release schedule of the target series.

Testing

Intertemporal Stability Testing, Select Results

Stability Test Results (2000 – 2015)							
LEGALSHIELD AREA OF LAW	TARGET MACRO INDICATOR(S)	TEST 1*	TEST 2*	TEST 3*	TEST 4*	OVERALL SCORE	KEY TAKEAWAYS
Bankruptcy	Bankruptcies	✓	✓	✓	✓	✓+	Performed well across all tests
Foreclosure	Foreclosures	✓	✓	✓	✓	✓+	Performed well across all tests
Real Estate	Existing Home Sales	r	✓	✓	✓	✓	Performed well on all but one test

* Test 1: Compared correlations between first half of data (2000 – 2007) and second half of data (2008 – 2015)

* Test 2: Compared correlations between random samples of the data

* Test 3: Compared earliest and latest data (2000 – 2005, 2010 – 2015) with middle of data (2006 – 2009)

* Test 4: Compared correlations between 20% of most recent data (Nov 2012 – Dec 2015) and remaining data

Methodology:

Composite Index Development



Methodology

A five-step process was used to convert LegalShield data into composite indices.

- 1 SELECT AOLS:** Select individual AOLs to be included in the composite index, based on results of statistical tests and desired index “narrative” (e.g., consumer stress).
- 2 TRANSFORM AOLS:** Compute the month-on-month percent change for each AOL.
- 3 STANDARDIZE:** Create a standardization factor for each AOL, based on its standard deviation. Multiply each transformed AOL by the standardization factor to produce an “adjusted monthly contribution” for each AOL.
- 4 SUM COMPONENTS:** Sum the adjusted monthly contribution across each AOL to produce a monthly index growth rate.
- 5 REBASE TO 100:** Rebase the monthly index growth rate to a given month (January 2000 = 100) and to produce a monthly composite index.

Testing

Historical Trend & Leading Properties Test Results

Historical Trend & Leading Properties Results (2002 – 2016)				
COMPOSITE INDEX	TARGET INDICATOR	TRACKS HISTORICAL TREND?	LEADING PROPERTIES	APPROXIMATE LEAD TIME
Consumer Stress	Consumer Confidence	✓	✓	1 - 3 mo.
Housing Construction	Housing Starts	✓	✓	0 – 2 mo.*

*In addition to its statistical lead time, the Index also has a timing advantage over housing starts of roughly a week due to release schedules.

Testing

Statistical Relationship Test Results

Correlation Results (2002 – 2017)				
COMPOSITE INDEX	TARGET INDICATOR	CORRELATION (INDEX)	CORRELATION (Y/Y)	CORRELATION (Q/Q)
Consumer Stress	Consumer Confidence	-0.85	-0.58	-0.33
Housing Construction	Housing Starts	0.88	0.55	0.23

Testing

Intertemporal Stability Tests

Stability Test Results (2000 – 2015)							
COMPOSITE INDEX	TARGET INDICATOR	TEST 1*	TEST 2*	TEST 3*	TEST 4*	OVERALL SCORE	KEY TAKEAWAYS
Consumer Stress	Consumer Confidence	r	✓	✓	✓	✓	Performed well on all but one test
Housing Construction	Housing Starts	r	✓	✓	✓	✓	Performed well on all but one test

Test 1: Compared correlations between first half of data (2000 – 2007) and second half of data (2008 – 2015)

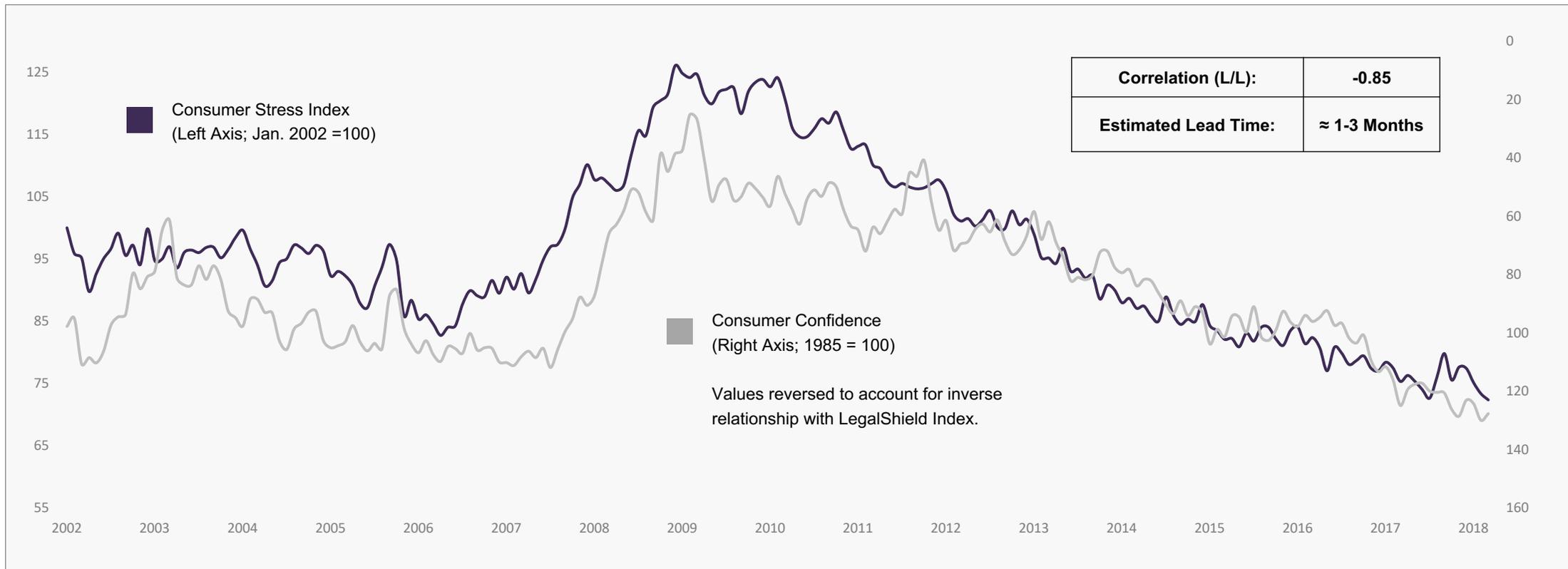
Test 2: Compared correlations between random samples of the data

Test 3: Compared earliest and latest data (2000 – 2005, 2010 – 2015) with middle of data (2006 – 2009)

Test 4: Compared correlations between 20% of most recent data (Nov 2012 – Dec 2015) and remaining data

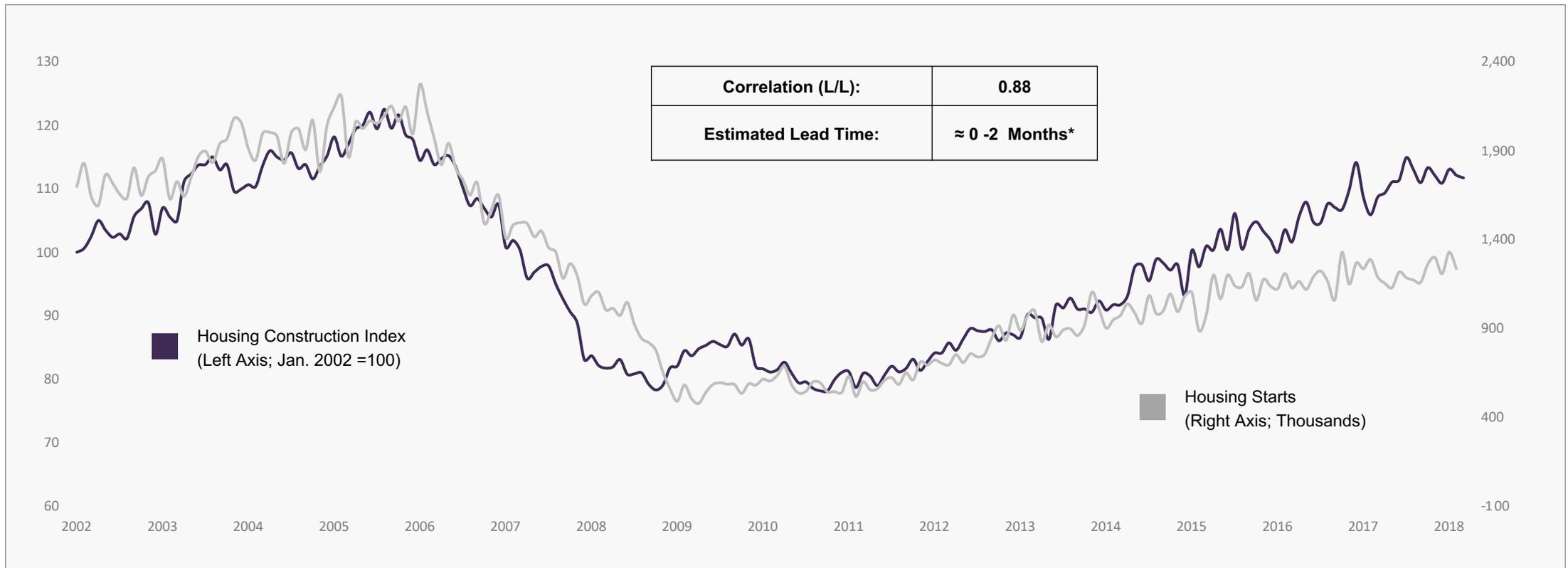
Composite Index: Consumer Stress

AOLs: Bankruptcy; Foreclosure; Consumer Finance



Composite Index: Housing Construction Index

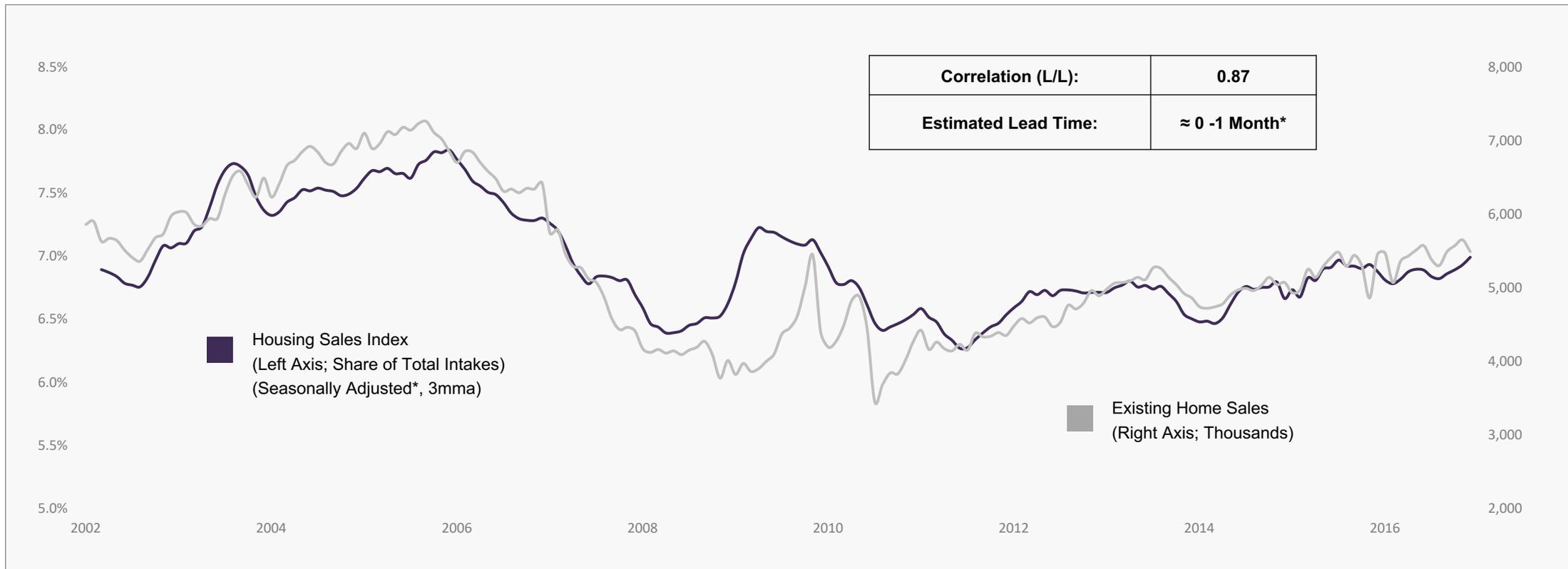
AOLs: Foreclosure; Real Estate*



*The Housing Construction Index component of the Housing Activity Index was seasonally adjusted using the Census Bureau's X-13 ARIMA-SEATS Seasonal Adjustment Program. In addition to its statistical lead time, the Index has a timing advantage over housing starts of roughly a week due to release schedules.

AOL: Real Estate

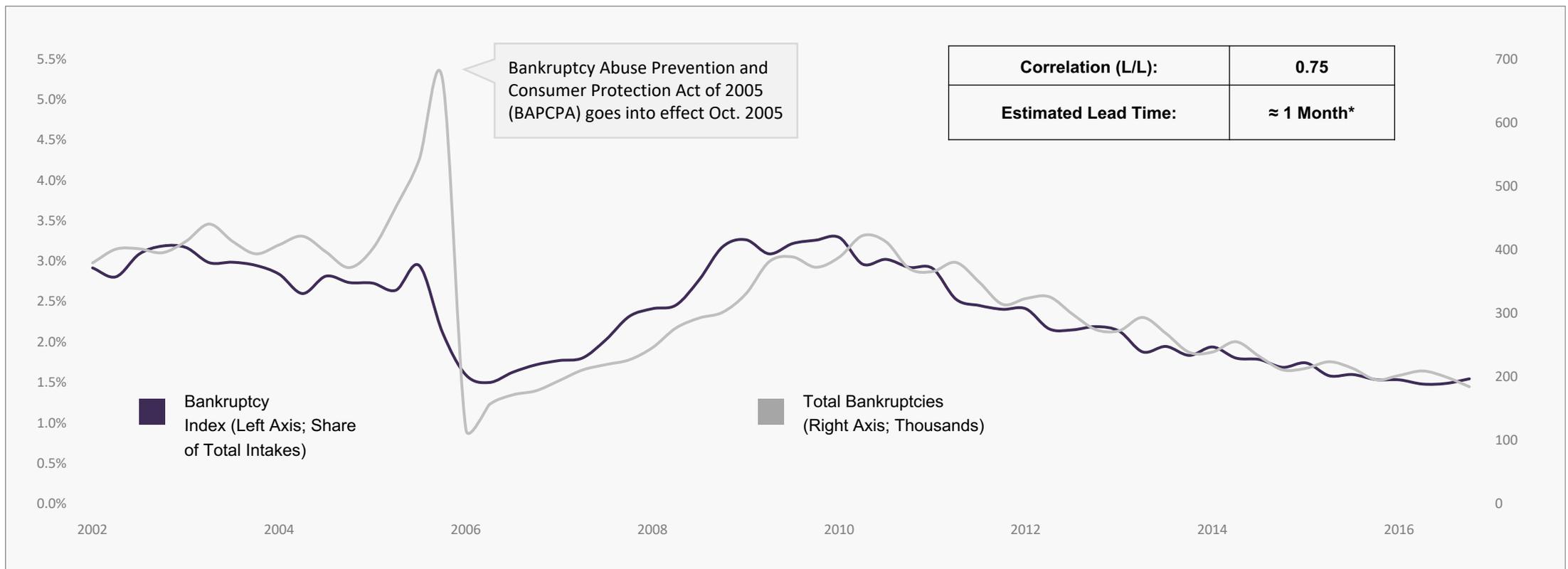
Target Series: Real Estate*



*The Housing Sales Index was seasonally adjusted using the Census Bureau's X-13 ARIMA-SEATS Seasonal Adjustment Program. In addition to its statistical lead time, the Index has a timing advantage of roughly two weeks over existing home sales due to release schedules.

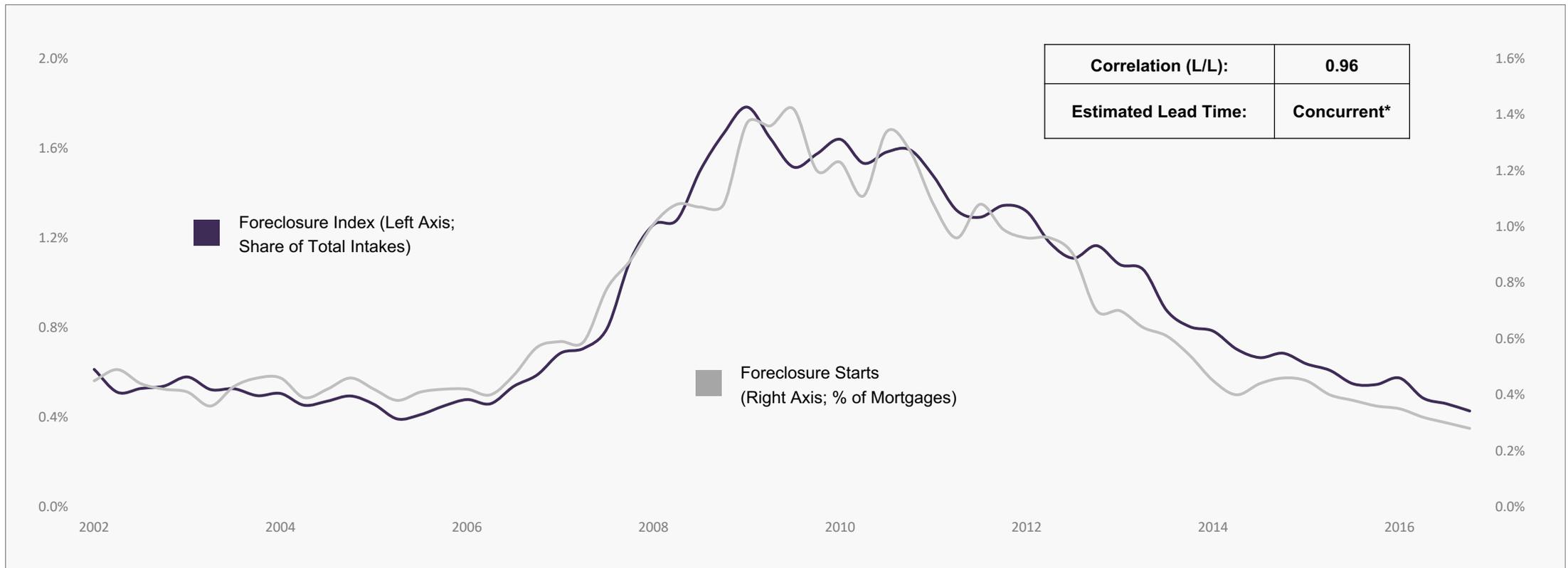
AOL: Bankruptcy

Target Series: Consumer Bankruptcies



AOL: Foreclosure

Target Series: Foreclosure Starts



*Foreclosures starts are statistically coincident with the LegalShield Foreclosure Index, but the Index has a significant timing advantage time due to its monthly release (compared to the quarterly release of foreclosure starts).

Results

Summary of Key Findings

Summary of Results						
LEGALSHIELD LAW Index	TARGET SERIES	CORRELATION (LEVEL)	CORRELATION (Y/Y)	CORRELATION (Q/Q)	APPROXIMATE LEAD TIME	ROBUST ACROSS TIME
Bankruptcy	Bankruptcies	0.76	0.67	0.20	≈ 1 mo.	✓+
Foreclosure	Foreclosures	0.96	0.87	0.49	Coincident*	✓+
Housing Sales	Existing Home Sales	0.85	0.58	0.36	≈ 0-1 mo.*	✓
Consumer Stress	Consumer Confidence	-0.85	-0.58	-0.33	≈ 1-3 mo.	✓
Housing Construction	Housing Starts	0.88	0.55	0.23	≈ 0-2 mo.*	✓

Thank you!



**Economic
Stress Index™**

