



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

Bottom Line: The LegalShield Consumer Stress Index worsened in July to its highest level since December 2020, though it remains low by historical standards. Inflation poses a strong headwind for consumers, putting upward pressure on consumer financial stress as prices food and other household essentials continue to rise.

Latest Reading: In July, the LegalShield Consumer Stress Index increased (worsened) 4.2 points to 65.0, while the Conference Board's Consumer Confidence Index worsened 2.7 points to 95.7, its lowest value in a year and a half.

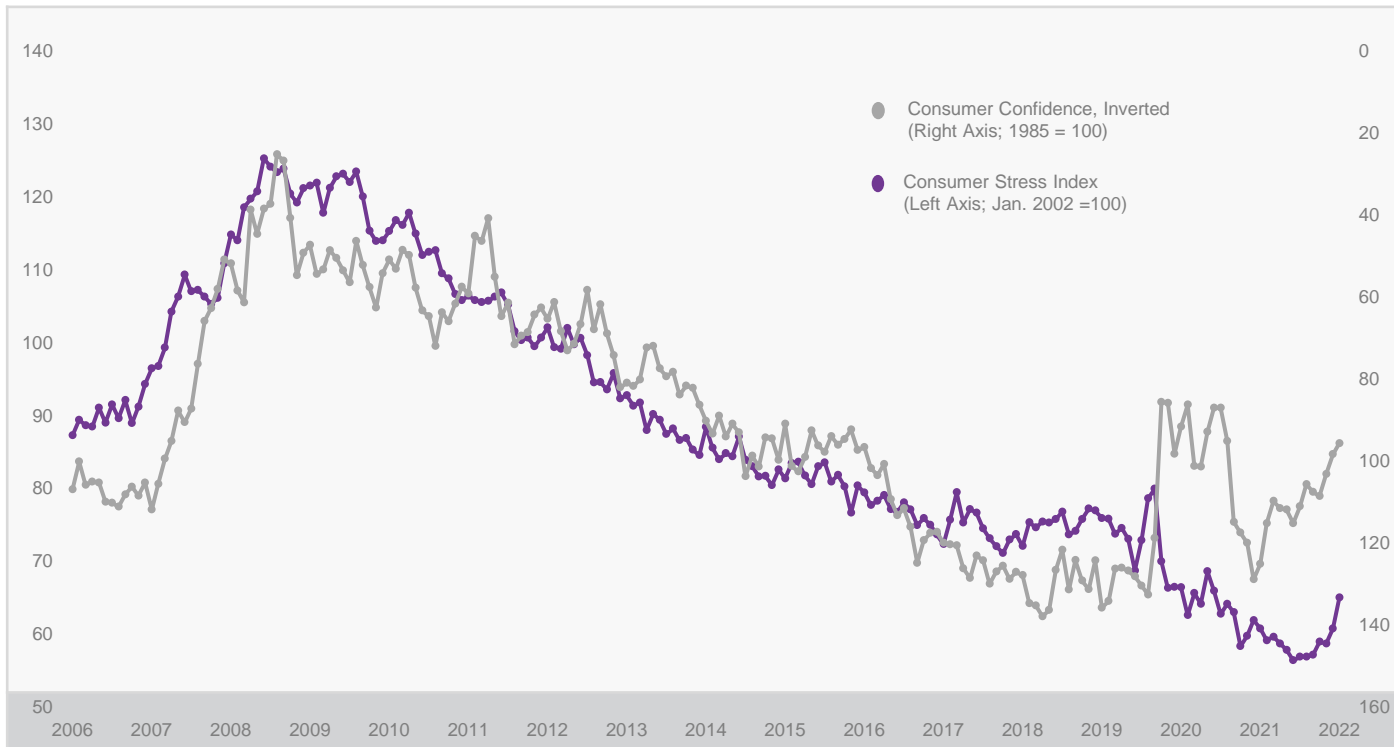
Economic Context: Inflation continues to put upward pressure on consumer financial stress. The headline Consumer Price Index was up 8.5% Y/Y in July, down somewhat from June's reading but nonetheless elevated. Though gas prices eased slightly in July, energy prices remain a significant headwind for consumers. Likewise, food prices are a major concern; in July they had risen nearly 11% from a year prior. Meanwhile, average hourly earnings growth lagged well behind inflation at +5.2% Y/Y in July. Though nominally strong, consumer wages are not keeping up with price growth and many consumers are feeling the pinch. In one [survey](#), half of respondents were "somewhat" or "strongly" concerned that their paycheck was not enough to support themselves and/or their families. As a result, many consumers are saving less: the personal savings rate fell to a 13-year low of 5.1% of disposable personal income in June. Along with cutting savings, many consumers are also [reportedly](#) planning to pare back purchases to absorb higher costs of essentials. Indeed, real personal consumption expenditures rose only slightly (+0.1%) in June, likely reflecting the effects of higher prices and consumers adjusting their spending patterns.

Despite these headwinds, the labor market remains remarkably strong. In July, the U.S. economy added 528,000 jobs, more than double consensus expectations, despite rising interest rates and negative GDP growth in both Q1 and Q2. Job growth may slow as the Fed continues to raise interest rates, but the labor market appears to be well-positioned to handle additional rate hikes.

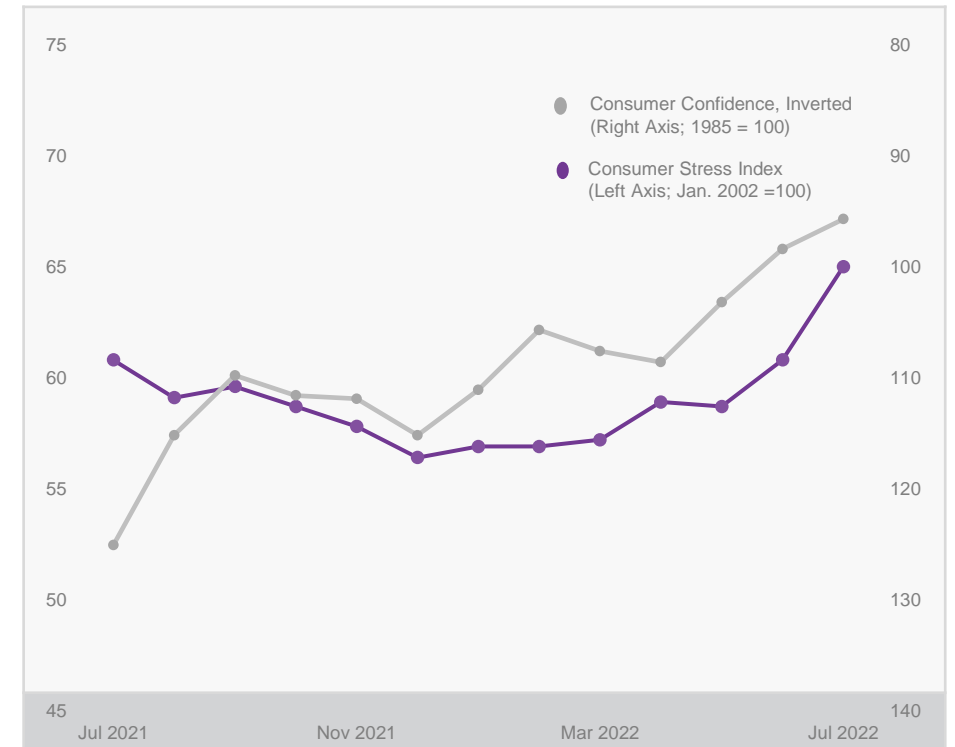
There are clear signs that consumer financial stress is rising, though fortunately most households are starting from a position of strength. We expect financial stress to continue to rise throughout the year as high inflation and rising interest rates weigh on consumers.

Consumer Stress Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Bankruptcy Index

Bottom Line: In July, the LegalShield Bankruptcy Index increased by the most in two years, though it remains well below pre-pandemic levels. Bankruptcies may rise in the near term, but a sharp increase in the near term is unlikely.

Latest Reading: The LegalShield Bankruptcy Index increased (worsened) 4.4 points to 24.2 in July. In July, total seasonally adjusted bankruptcy filings rose 2.8% to 31,841, but were down 0.9% compared to a year ago.

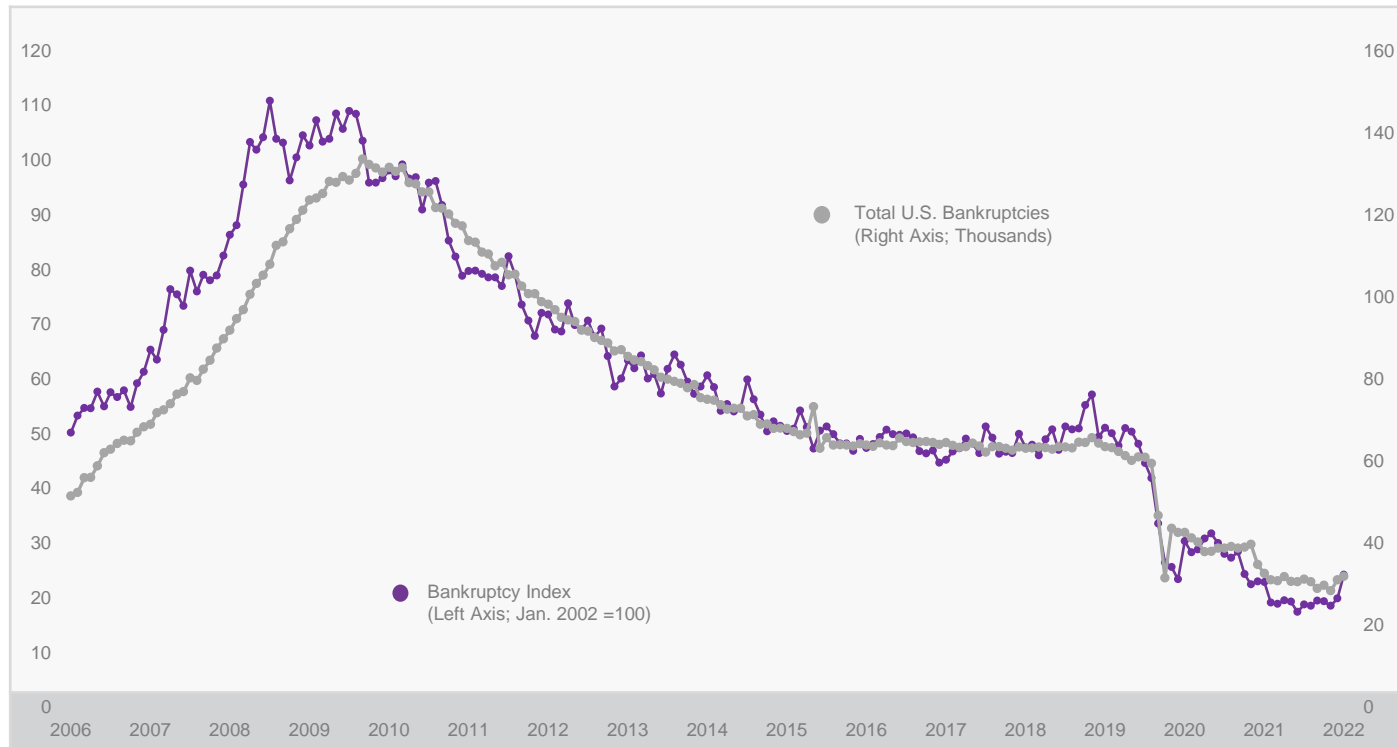
Economic Context: Though the LegalShield Bankruptcy Index remains low, there are signs that debt delinquencies — and eventually bankruptcies — could increase in the coming months. In the [New York Fed's](#) Survey of Consumer Expectations, consumers said they were more likely to become delinquent on debt payments in the next three months than at any point since May 2020. One telecom company [reported](#) that customers were slower to pay their monthly bills in Q2, a warning sign that late payments could increase in Q3. Furthermore, according to the most recent release of the Census Bureau's Household Pulse Survey, 53.3% of respondents who paid for their bills with credit said they had either a "somewhat difficult" or "very difficult" time affording household expenses in the week prior, the highest share since the survey started at the beginning of the pandemic. At the same time, however, the Household Debt and Credit [report](#) finds that while inflation is driving up credit card balances, most consumers remain well-positioned to afford their debt payments. Despite warning signs that some consumers might be struggling, delinquency rates remain historically low overall.

Given negative GDP growth in both Q1 and Q2, there are concerns that the U.S. economy could slip into recession later this year or early next year, which would likely be coupled with rising unemployment and increased bankruptcies. [Reportedly](#), small business leaders' expectations for future conditions fell to a series low in June, and though they recovered modestly in July, the outlook remains relatively bleak.

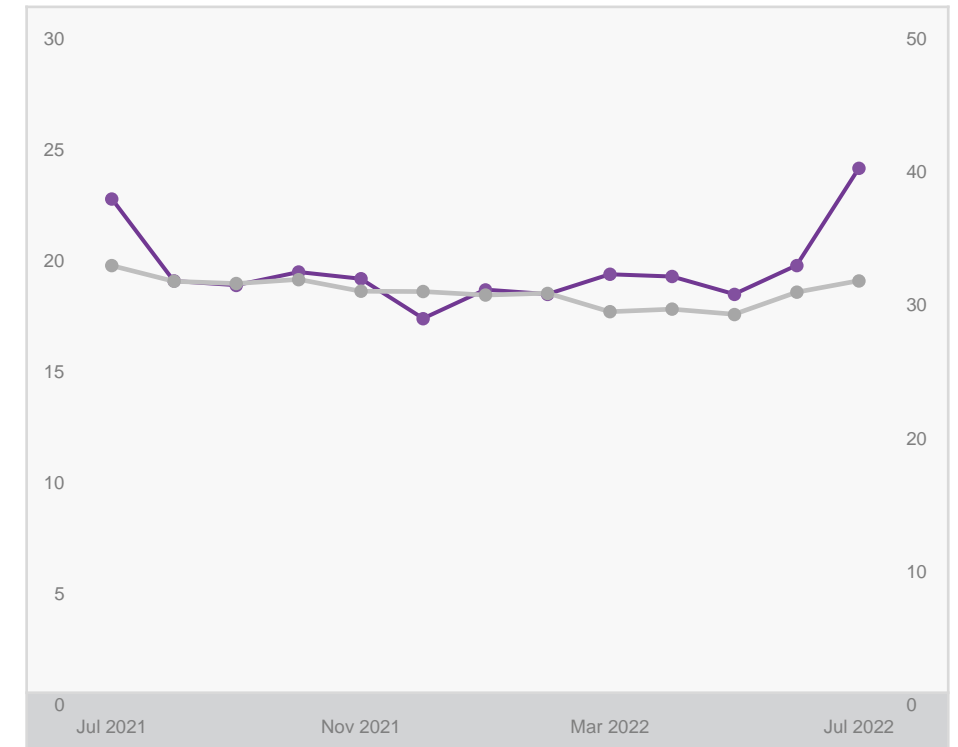
Though there are some warning signs that bankruptcies will rise later this year, LegalShield data suggest that any increase is likely to be gradual.

Bankruptcy Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Foreclosure Index

Bottom Line: The LegalShield Foreclosure Index increased in July, though it remains below its pre-pandemic level. Foreclosure activity has been gradually returning to its pre-pandemic trend after the expiration of government support, though it remains low by historical standards. A slow and steady normalization in foreclosure starts is expected in the months ahead.

Latest Reading: The LegalShield Foreclosure Index increased (worsened) 2.5 points to 41.2 in July after easing the prior two months. Meanwhile, ATTOM reports that 22,239 properties had foreclosure filings in June, up 1% M/M.

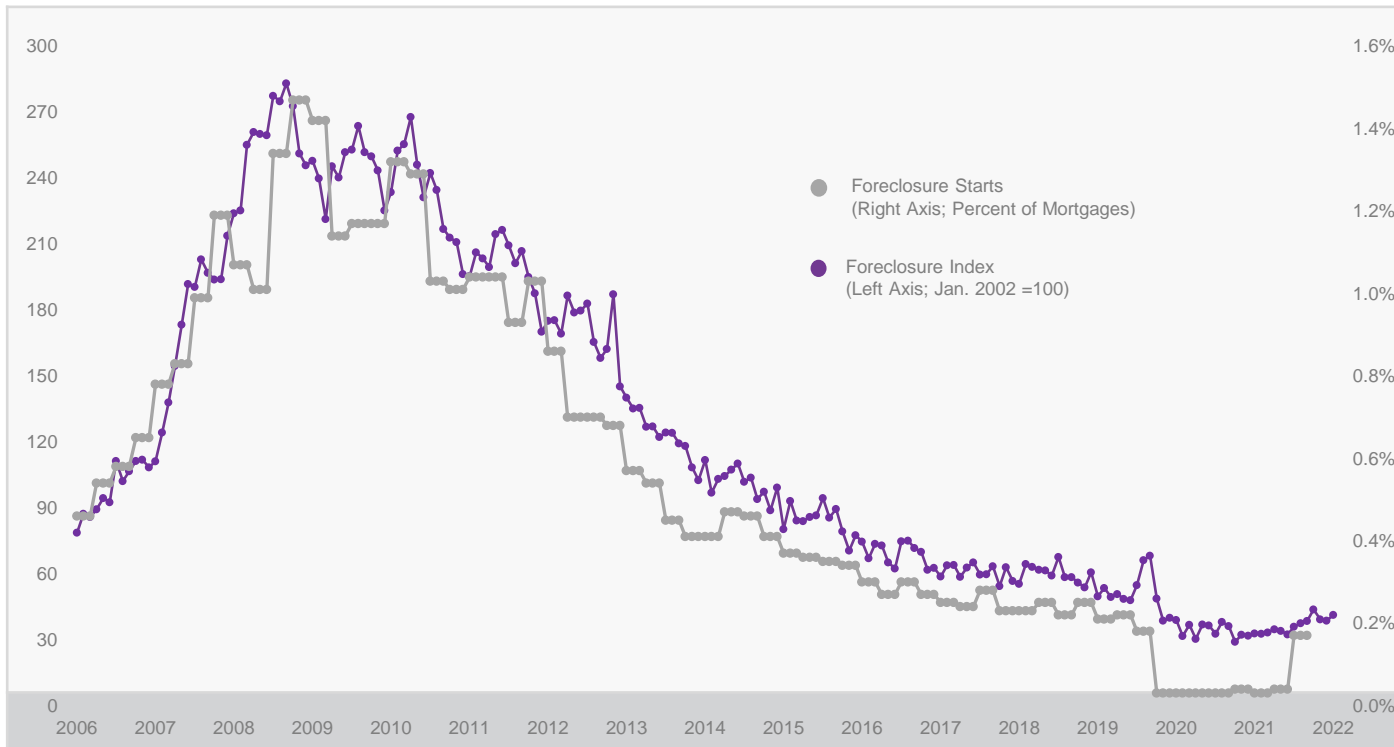
Economic Context: Though foreclosures remain muted, the expiration of the pandemic-era foreclosure moratorium has put upward pressure on foreclosure activity. [Reportedly](#), in the first half of 2022, foreclosures were only slightly less than in the first six months of 2020 at the start of the pandemic. Much of this foreclosure activity is on loans that were already in foreclosure or were more than 120 days delinquent prior to the pandemic and the ensuing foreclosure moratorium. However, according to ATTOM, U.S. foreclosures may return to a pre-pandemic norm sometime in early 2023.

Many homeowners refinanced their mortgages in 2020 and 2021 at historically low rates, which has improved housing affordability for existing homeowners even prospective buyers are increasingly priced out of the market. Although refinancing activity has slowed this summer as the Federal Reserve raises interest rates to combat inflation, many homeowners are better positioned to make their monthly payments than they were prior to the pandemic, which should help to keep near-term foreclosure rates in check.

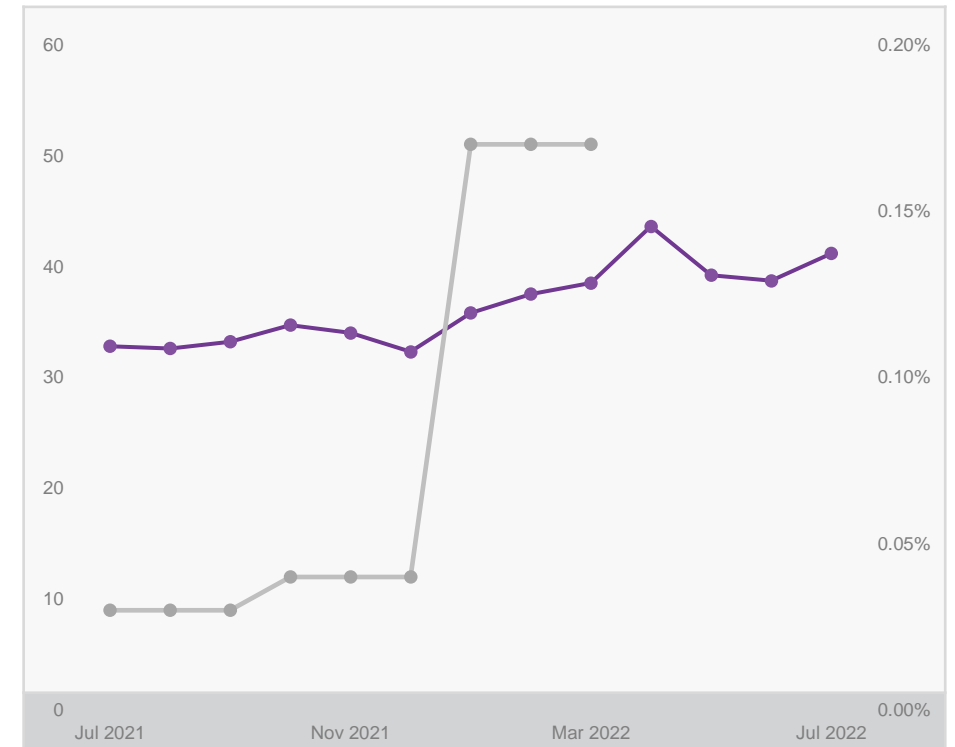
Overall, while the LegalShield foreclosure index increased in July as the Fed continued to raise rates, foreclosure activity remains historically low. LegalShield data suggest that a gradual normalization of foreclosure filings is likely.

Foreclosure Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Housing Construction Index

Bottom Line: The LegalShield Housing Construction Index decreased in July, its first decline in three months. The index is at its lowest level since June 2020, though it remains above pre-pandemic levels. Rising interest rates and high costs of building materials are weakening demand and causing homebuilder optimism to fall.

Latest Reading: The LegalShield Housing Construction Index decreased 3.5 points to 128.3 in July. Meanwhile, housing starts decreased 2.0% M/M in June and were down 6.3% Y/Y.

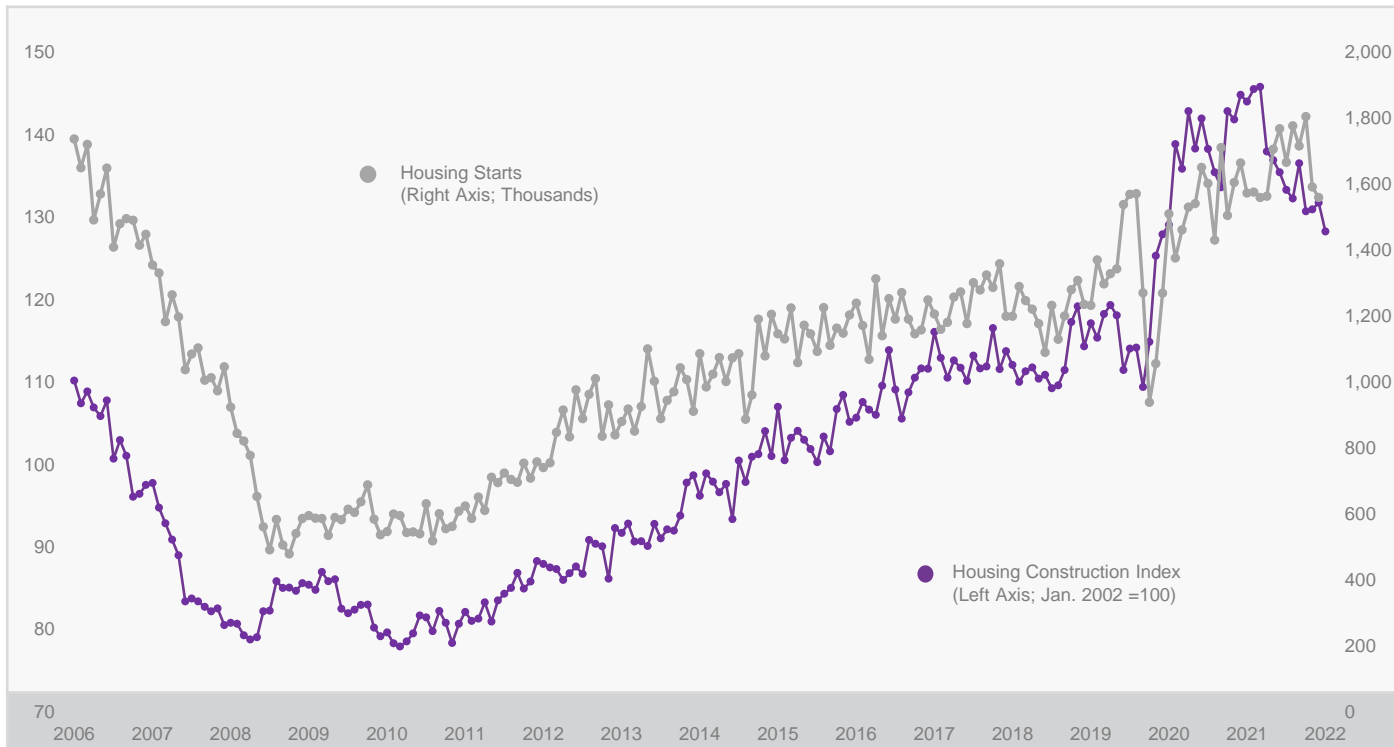
Economic Context: Strong demand and low housing inventories sustained housing construction throughout much of the pandemic but building activity has faced strong headwinds in recent months due to material supply delays and high building costs. Prices for inputs to residential construction have not eased much even as demand wanes; in June, the producer price index for inputs to residential construction was up 18% Y/Y. Rising material and building costs coupled with production bottlenecks are causing many builders to halt or slow construction. Indeed, the backlog of homes under construction but not completed hit a record high for the fourth consecutive month at 1.7 million units in June. Despite these delays, homes under construction could continue to support activity the homebuilding sector to some degree, though some building plans could be cancelled due to cost increases.

As home prices and interest rates have risen, buyer demand has fallen, leaving many builders pessimistic about the current housing market. According to [NAHB](#), builder confidence plunged in July as sales and buyer traffic slowed. Builder confidence in the market for new, single-family homes declined for the seventh straight month, plummeting 12 points to 55 in the largest single-month drop in the series (aside from April 2020). Further, building permits, a leading indicator of construction activity, decreased again in June, though they remain higher than a year prior.

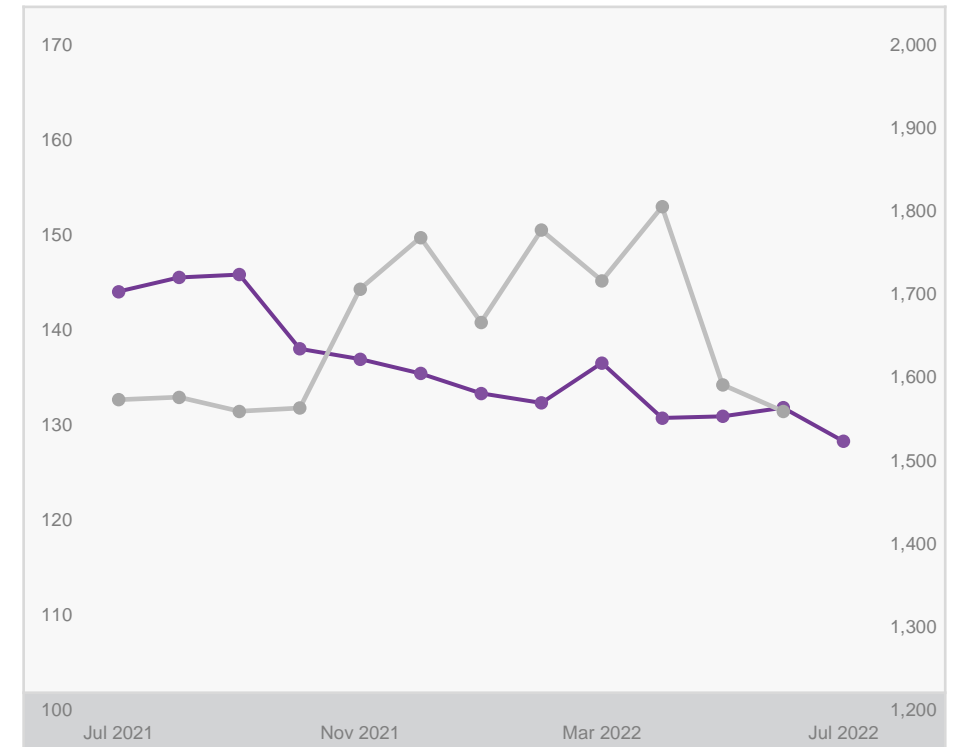
Overall, LegalShield data suggest that construction activity will ease in the coming months due to the headwinds mentioned above, though construction levels may remain elevated by pre-pandemic standards.

Housing Construction Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Housing Sales Index

Bottom Line: In July, the LegalShield Housing Sales Index fell to its lowest level since June 2020. LegalShield data suggest that existing home sales will likely continue to ease over the remainder of the year. Housing affordability is a growing concern as the Federal Reserve raises interest rates and home prices remain high.

Latest Reading: The LegalShield Housing Sales Index decreased 1.9 points to 109.0 in July. Meanwhile, existing home sales fell 5.4% in June and are down 14.2% compared to year-ago levels.

Economic Context: Rapidly rising home prices and mortgage costs have slowed buyer demand in recent months, and the red-hot housing market of the last two years has begun to cool.

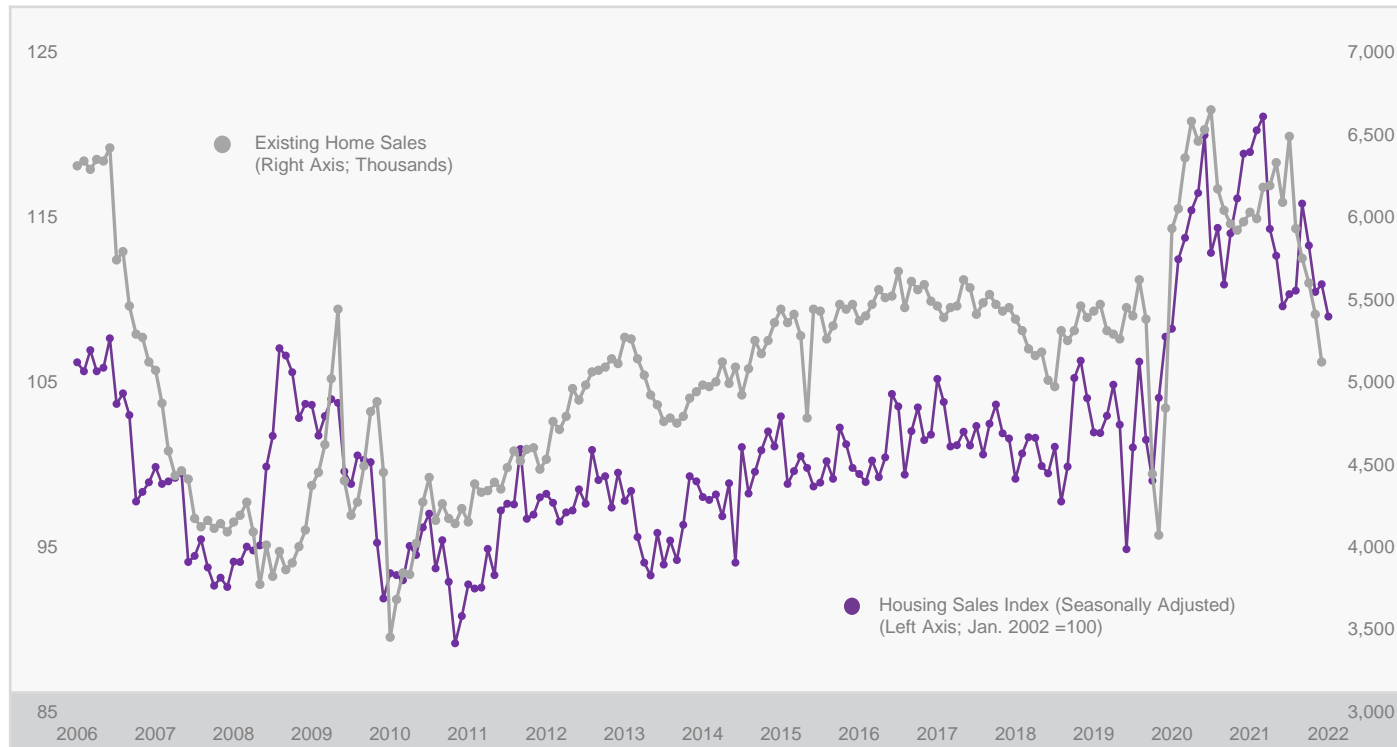
- **Rising prices:** The S&P/Case-Shiller National Home Price Index rose 19.7% Y/Y in May, decelerating slightly, but still near a series high. More recent data show that the median new-home sales price in June was \$402,400, up 7.4% from a year earlier, but down 9.5% from the prior month. According to [NAR](#), homes were 80% more expensive in June 2022 than in June 2019.
- **Rising rates:** The Fed's efforts to combat inflation have pushed the average 30-year fixed-rate mortgage well above 5%. According to NAR, nearly one-in-four buyers who purchased a home three years ago would not be able to do so now, as they no longer earn the qualifying income to buy a median-priced home today.

Not surprisingly, the combination of high prices and high financing costs are weighing on home sales. The Mortgage Bankers Association said mortgage applications fell for the fourth consecutive week in the week ended July 22, pushing measures of mortgage application activity to their lowest level in 22 years. Further, high home prices are forcing some buyers who have entered contracts to rethink purchases: home sale cancellations increased in June, with 15% of home sales that entered under contract falling through, per Redfin. This is the highest share of home cancellations since Q2 2020.

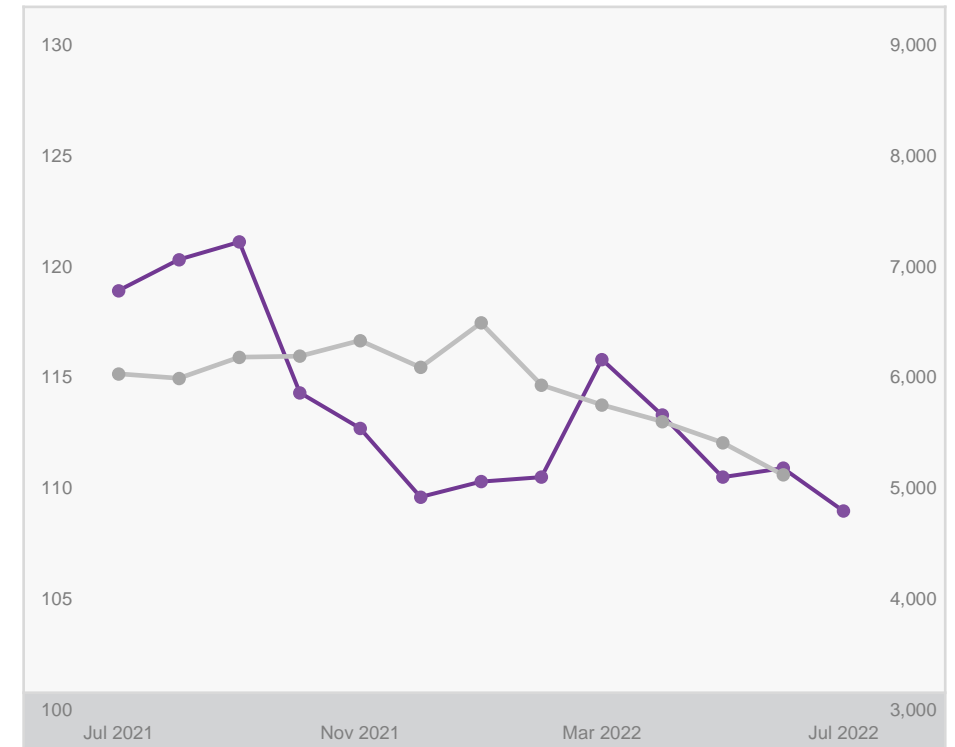
Affordability concerns are a major headwind facing the real estate market and are the primary reason LegalShield expects existing home sales to remain weak in the coming months.

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.

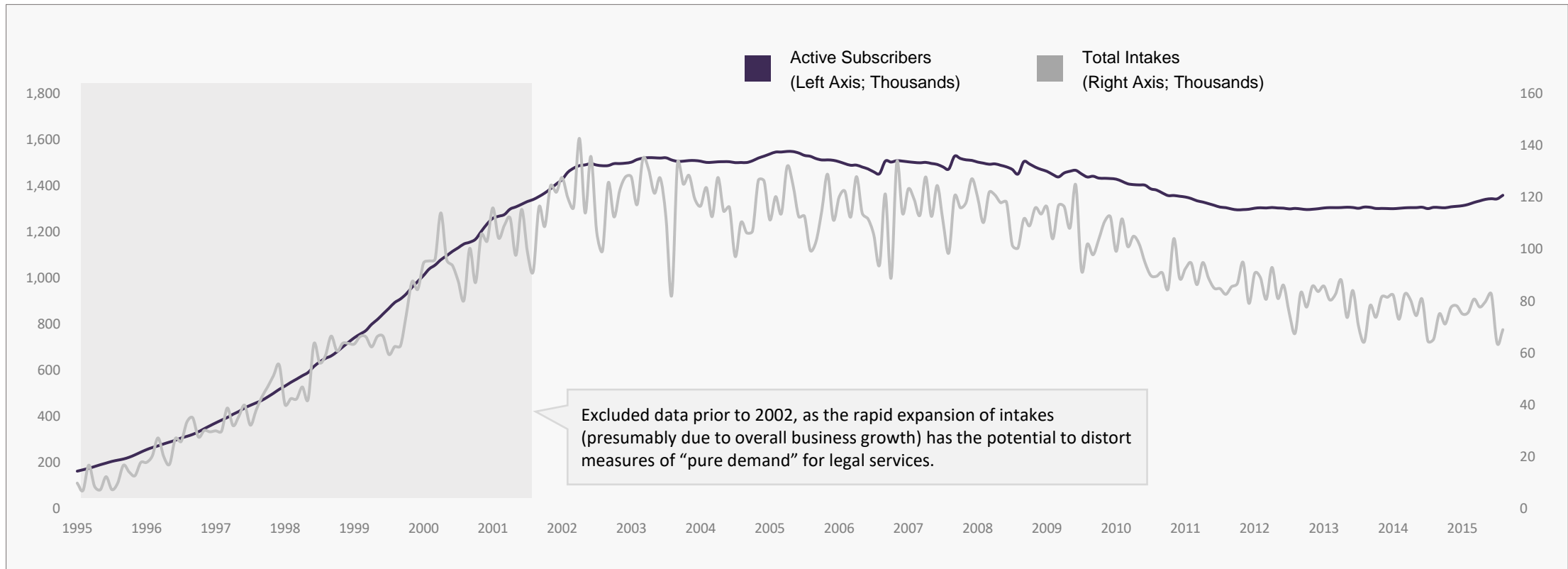
6

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)

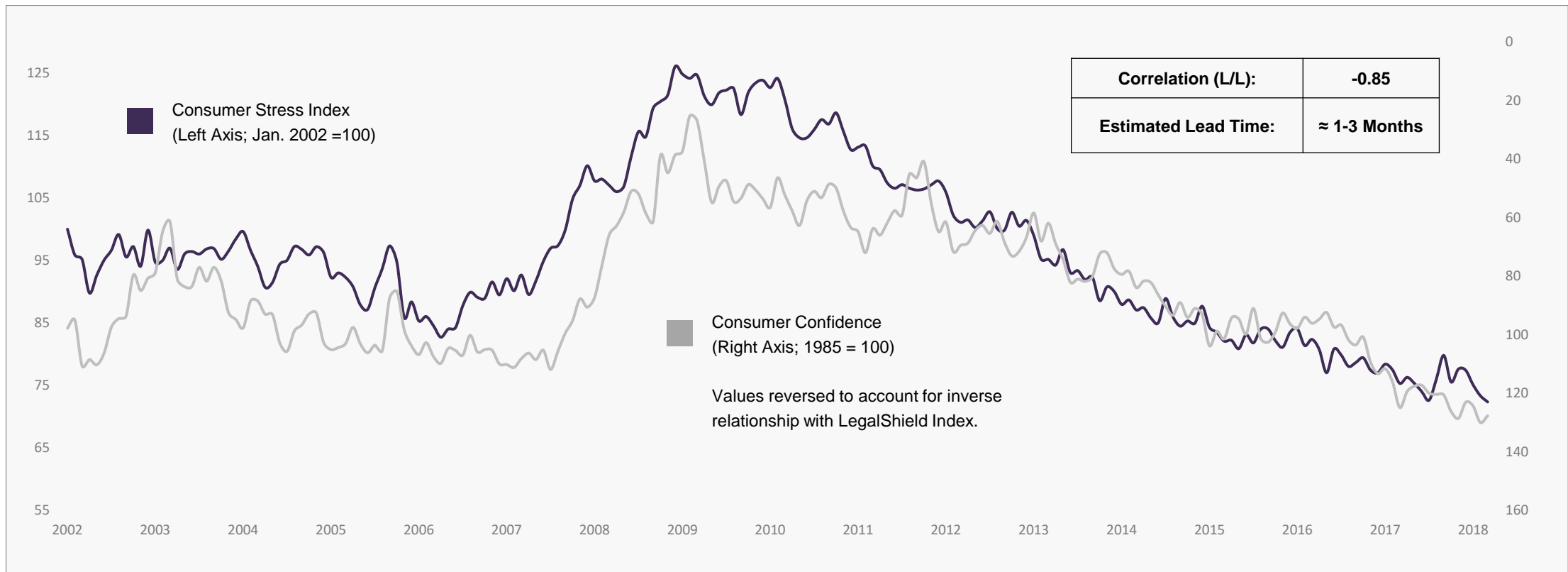
Test 2: Compared correlations between random samples of the data

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

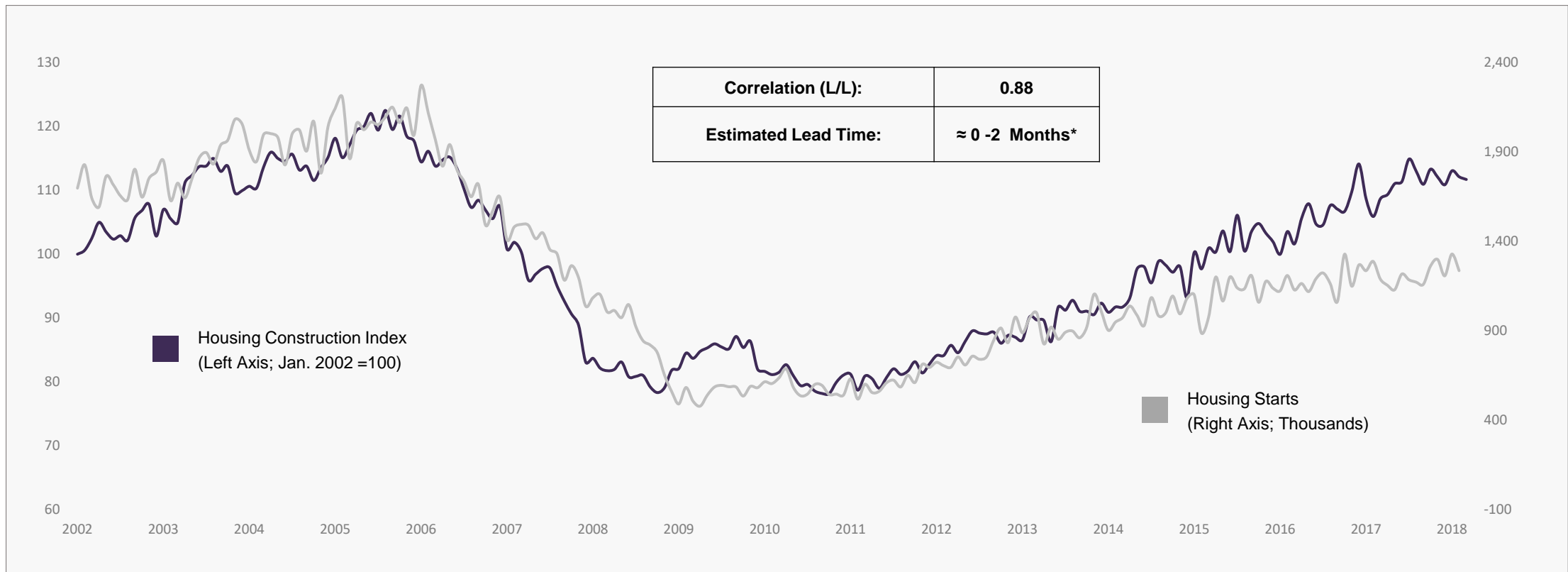
Composite Index: Consumer Stress

AOLs: Bankruptcy; Foreclosure; Consumer Finance



Composite Index: Housing Construction Index

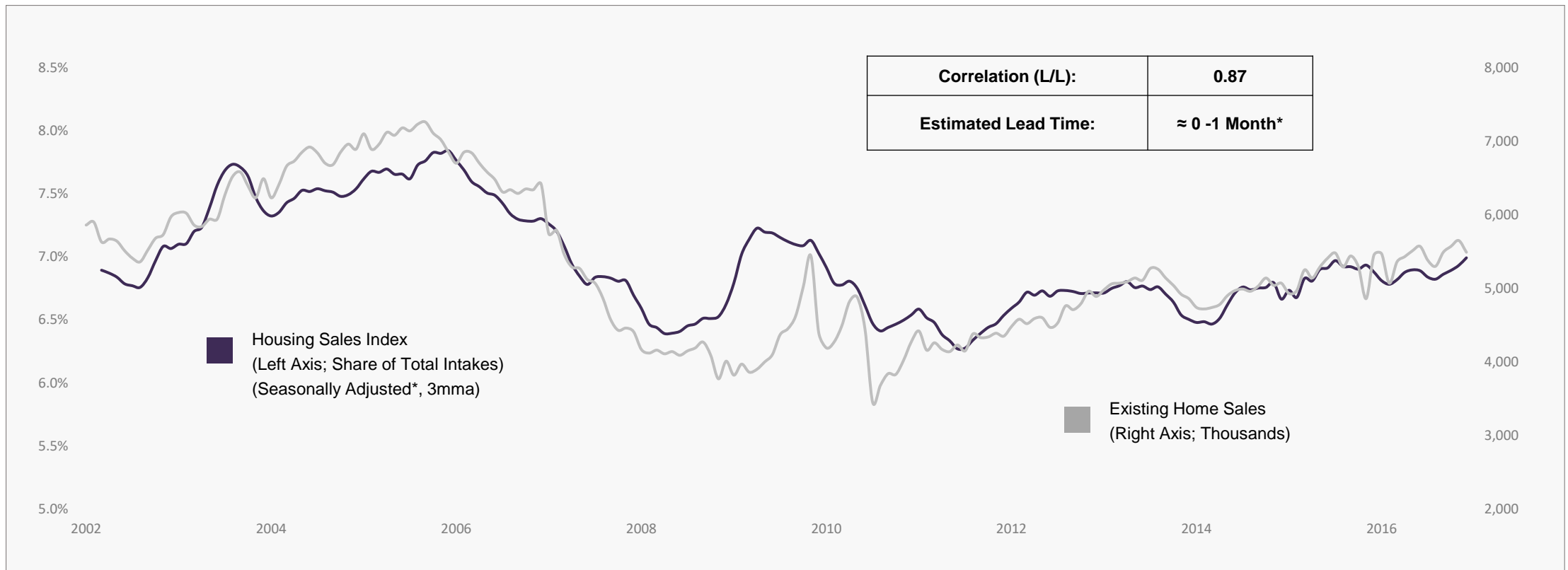
AOLs: Foreclosure; Real Estate*



*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

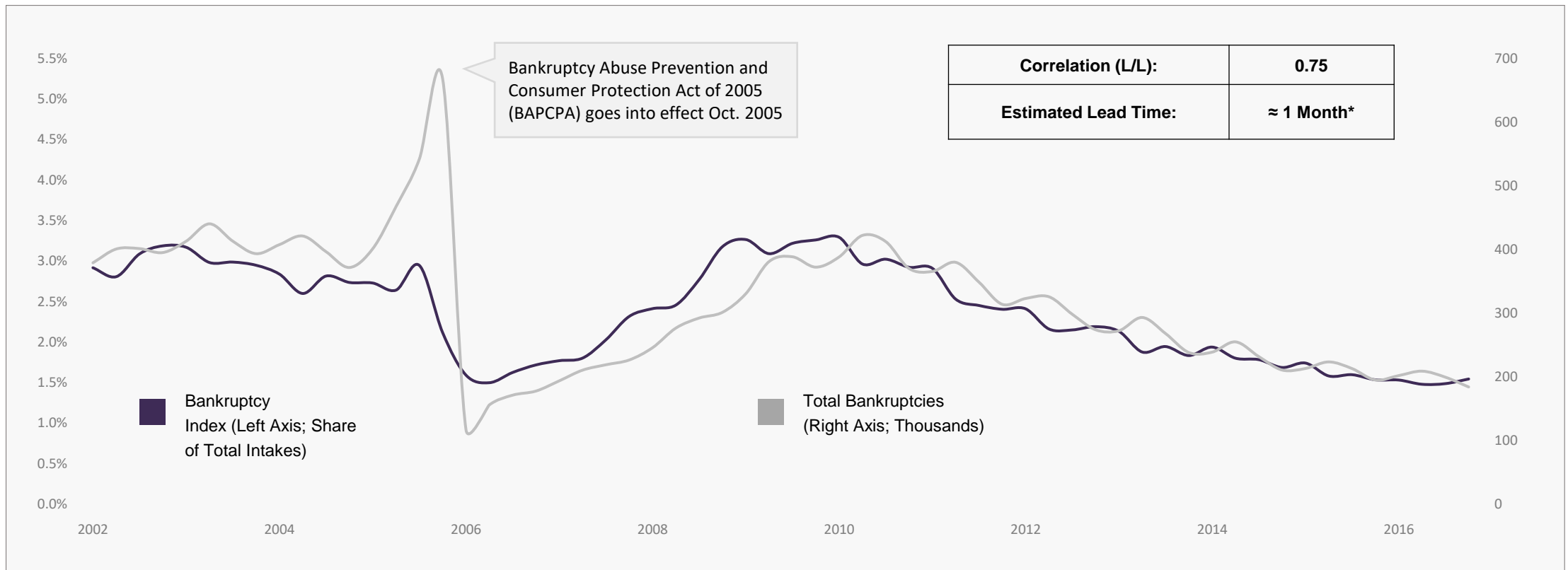
Target Series: Real Estate*



*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.

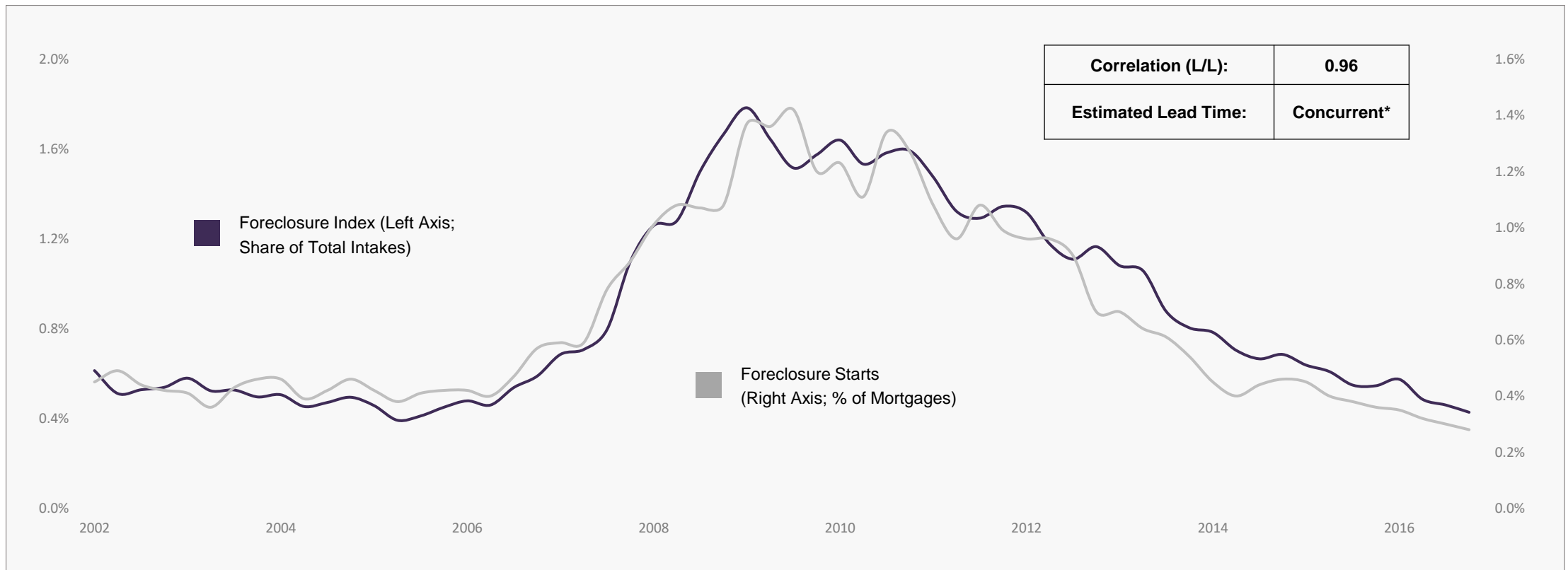
AOL: Bankruptcy

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™**

