



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 edged up in September after improving in August. Inflation continues to put upward pressure on consumer stress, but the labor market remains strong despite rising interest rates. LegalShield does not anticipate a sharp increase in stress this year.

Latest Reading: In September, the LegalShield Consumer Stress Index increased (worsened) 0.5 point to 61.4 but remains low by historical standards. Meanwhile, the Conference Board's Consumer Confidence Index improved 4.4 points to 108.0, rising for the second consecutive month.

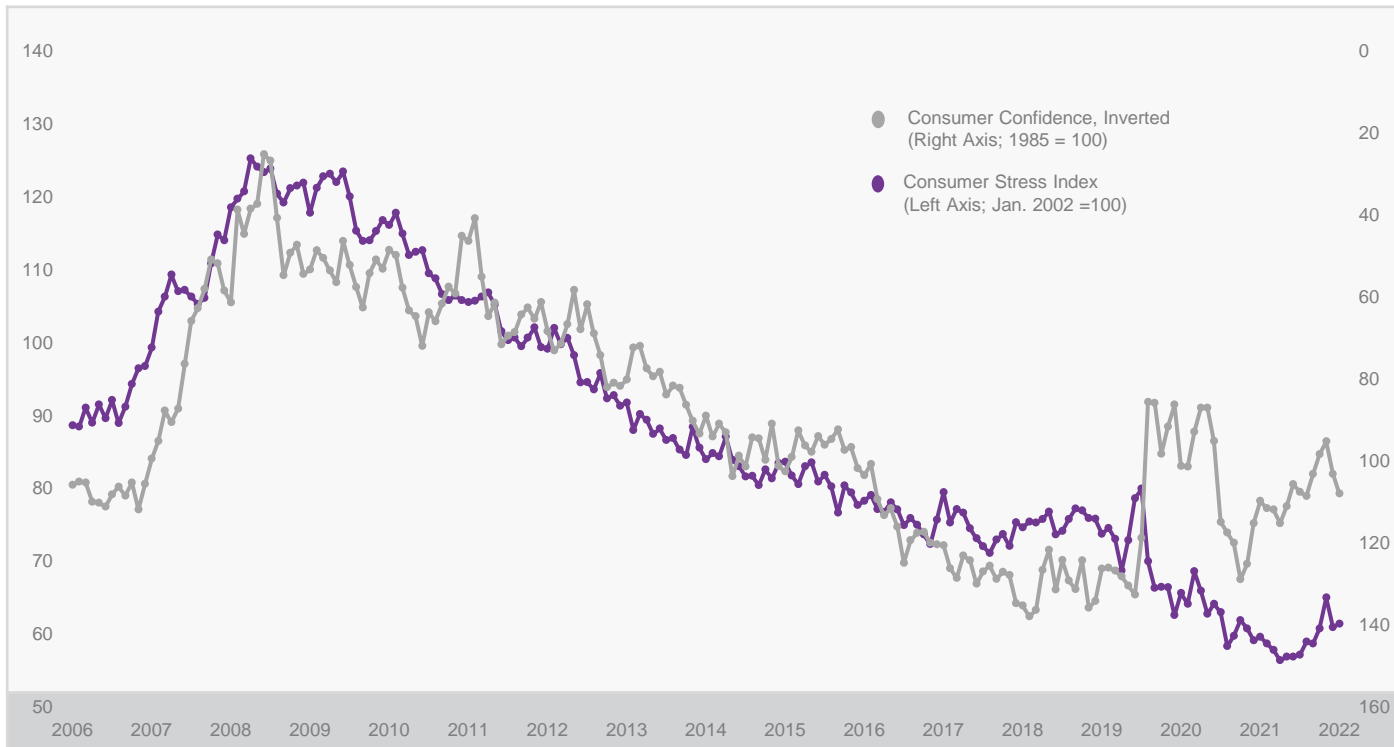
Economic Context: Inflation remains a looming headwind for consumers. In August, headline inflation was essentially flat compared to the previous month and decelerated to 8.25% on an annual basis. However, core inflation (which excludes food and energy prices) rose much more quickly than expected, adding to growing evidence that price increases are becoming increasingly “baked” into the economy. Further, prices continue to rise faster than wages, which is eroding consumer purchasing power and causing many consumers to either dip into savings, rely more on revolving credit (i.e., credit cards), or pare back their spending. In one [poll](#), half of respondents reported that inflation was causing financial hardship while one-fourth of respondents reported reducing purchases to adjust. Meanwhile, the personal savings rate has been below 4% since March, roughly half its pre-pandemic level.

More positively, as gas prices have declined over the summer and jobs have remained plentiful, consumer sentiment has improved somewhat despite high inflation. Indeed, the strong labor market has been resilient to tighter monetary policy thus far, and after another solid employment report in September, it is likely that the Fed will continue raising rates in Q4 to bring inflation to heel. In addition, many people continue to benefit from the savings buffer built up during the pandemic: a JPMorgan Chase analysis shows that as of this summer, roughly 60% of households had higher checking account balances than they did three years earlier.

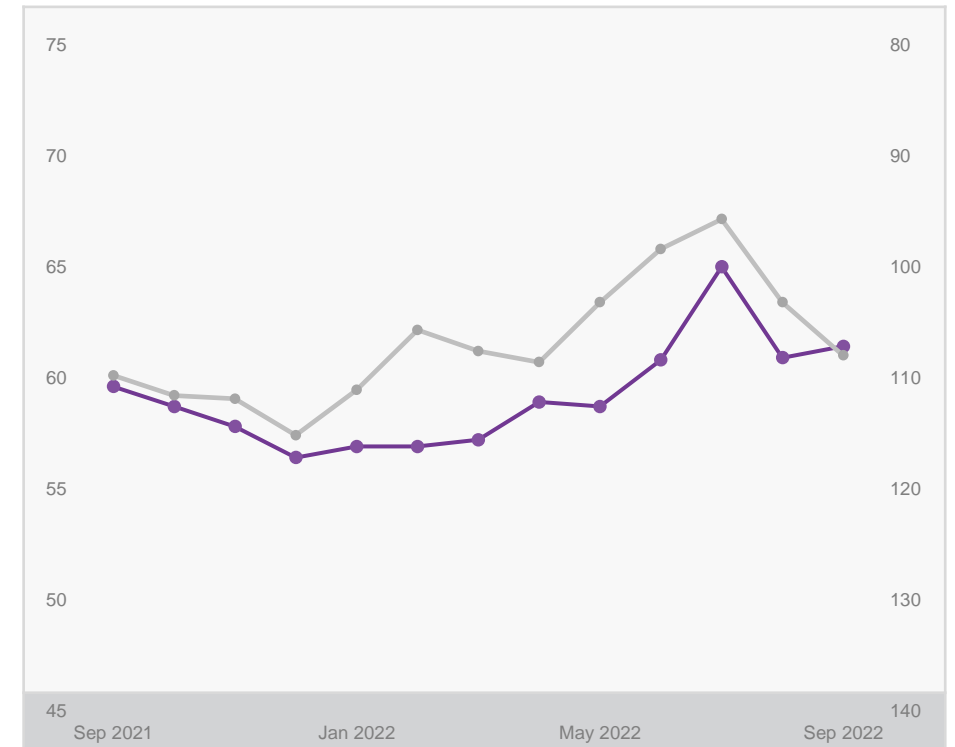
In sum, while financial stress is likely to continue to build, most consumers remain well-positioned to handle it. Given current data, LegalShield does not anticipate a sharp increase in stress this year.

Consumer Stress Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Bankruptcy Index

Bottom Line: In September, the LegalShield Bankruptcy Index eased for the second consecutive month. Given that the index remains well below pre-pandemic levels, bankruptcies are likely to remain subdued in the fourth quarter.

Latest Reading: The LegalShield Bankruptcy Index decreased (improved) 2.6 points to 20.0 in September. In August, total seasonally adjusted bankruptcy filings eased 1.6% to 31,193 — virtually unchanged from a year prior.

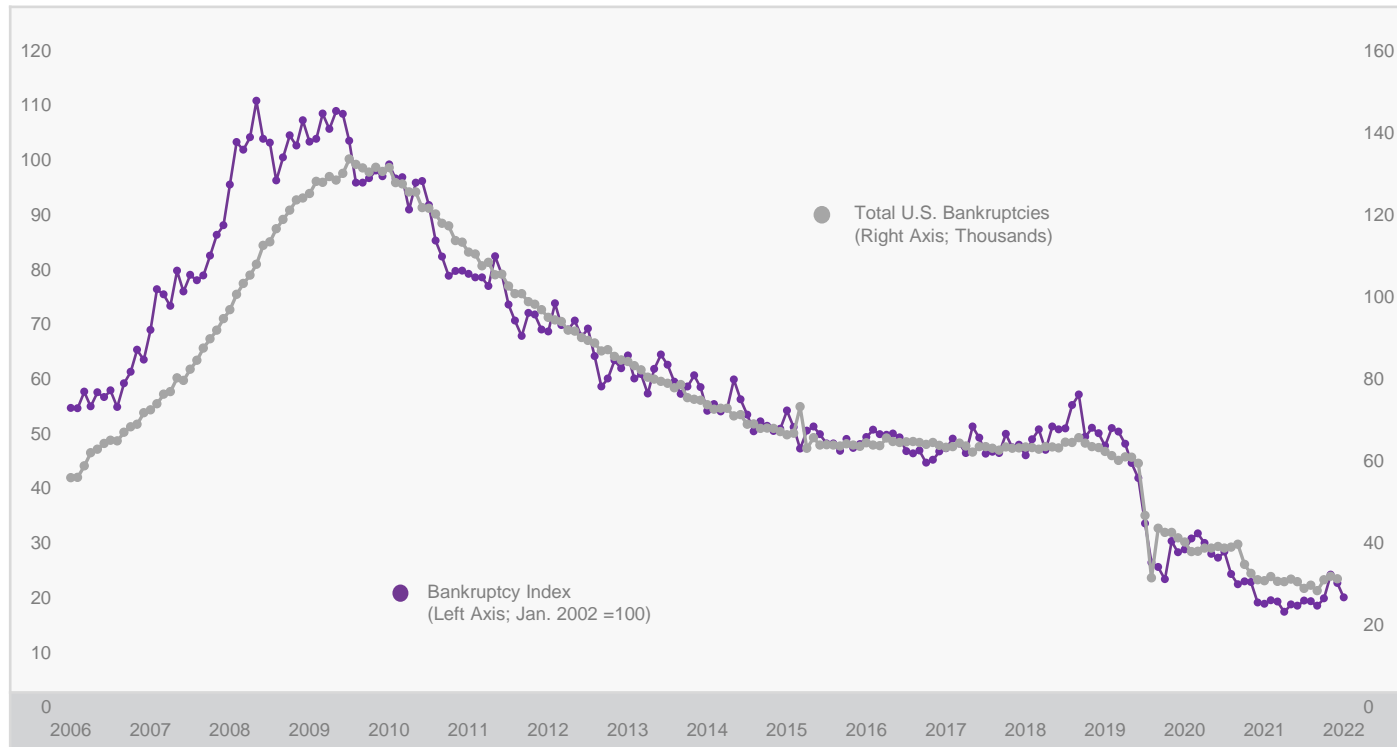
Economic Context: After falling steadily for most of the last decade, bankruptcies plummeted during the pandemic and remain well below long-term trends. Further, given the strong labor market, it is unlikely that they will rise substantially in the near term. Still, with economic headwinds continuing to build, there are signs that debt delinquencies could increase in the coming months, which could lead to an increase in bankruptcies next year. For example:

- In August, the NY Fed [reported](#) that 12% of households were worried about becoming delinquent on a debt payment in the next three months, the highest share since May 2020.
- In the auto market, rising car prices and higher interest rates have led to longer loan terms and larger monthly payments, which some consumers are finding increasingly difficult to pay. There are [signs](#) that auto loan delinquencies are rising, though they remain low by historical standards.
- Revolving debt continues to rise quickly, particularly among lower- and middle-income consumers. Consumer debt for the bottom 90% of U.S. households [reached](#) a historic high last year, while debt among the top 10% of households was virtually unchanged. Given that most credit card APRs are tied to the “prime” rate and thus directly affected by higher interest rates from the Fed, consumers who revolve a credit card balance each month will face higher payments.

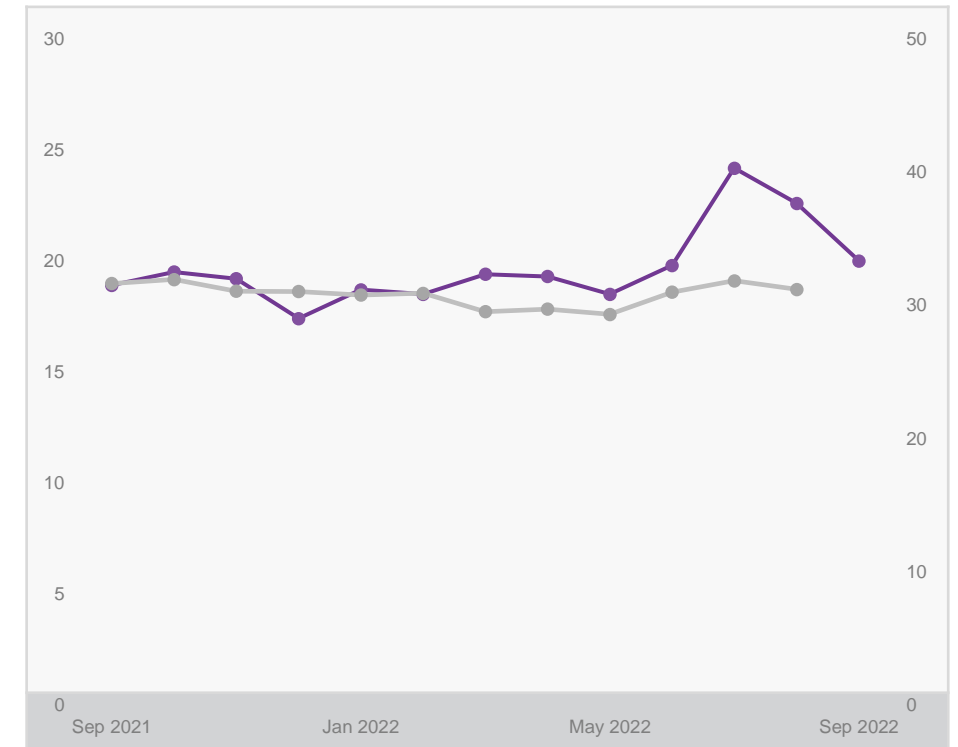
While consumer delinquency rates are likely to rise, bankruptcies should remain near historic lows for the remainder of the year.

Bankruptcy Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Foreclosure Index

Bottom Line: The LegalShield Foreclosure Index worsened in September from its lowest reading in 2022. Foreclosure activity has been gradually returning to its pre-pandemic trend after the expiration of government support but 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) 4.7 points to 39.4 in September after easing in August. Meanwhile, ATTOM reports that foreclosure starts increased to 23,952 in August, up 12% M/M and up 187% Y/Y.

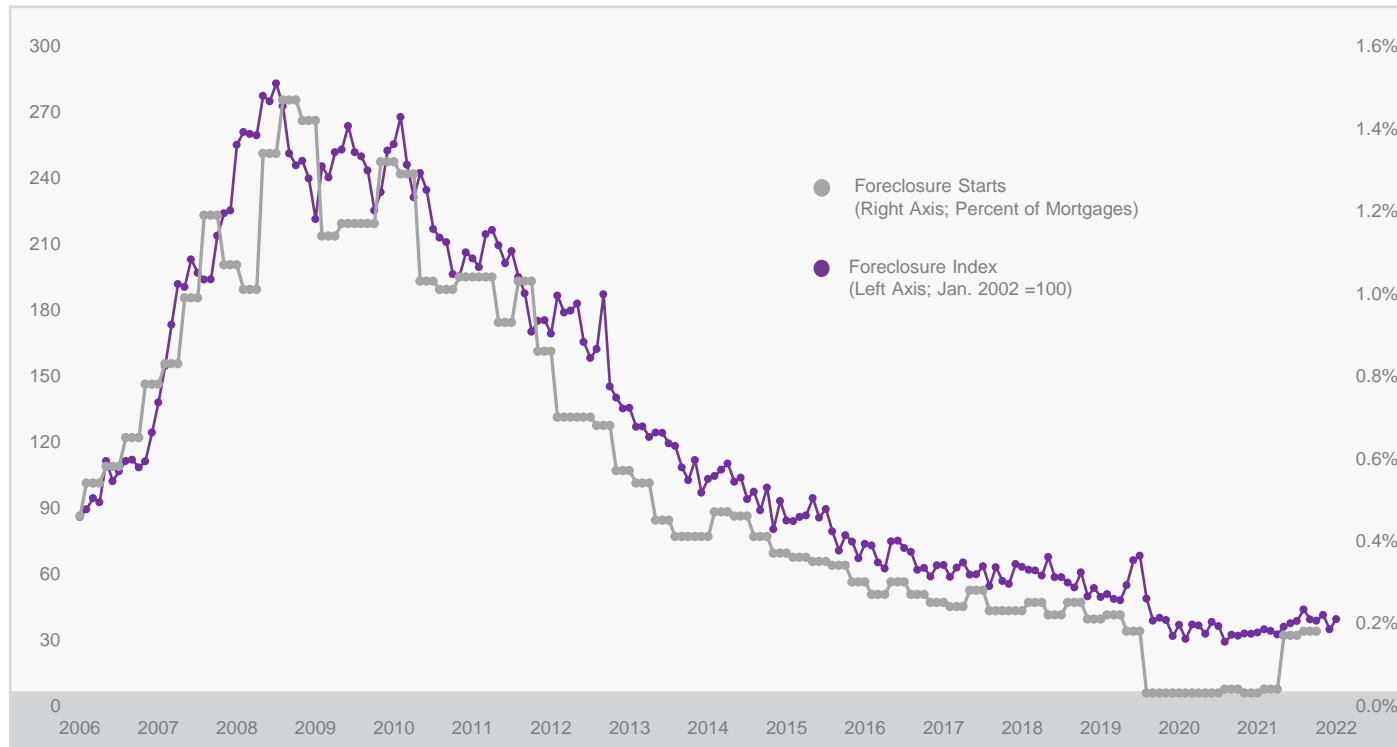
Economic Context: Foreclosures remain historically low, though they are expected to increase during the coming months given that foreclosure starts are drawing closer to pre-pandemic levels. Further, new mortgage delinquencies (i.e., payments between 30- and 60-days delinquent) [edged up](#) in July, an early indicator of financial distress. One worrying sign is the increasing prevalence of adjustable-rate mortgages (“ARMs”). Homebuyers are finding it difficult to afford homes at fixed mortgage rates of nearly 7% and are turning to ARMs instead, as they typically carry lower introductory rates that adjust over time. According to the Mortgage Bankers Association, ARMs now comprise nearly 12% of weekly mortgage applications, the highest share since the Great Recession. Although current ARMs typically do not begin adjusting for 5–10 years (and thus differ from the short-term, higher-risk versions that contributed to the mid-2000s housing crash), if interest rates continue to rise and remain high to control inflation, some borrowers may find themselves in worse financial shape down the road when their loans adjust.

On the bright side, rising prices have dramatically increased many homeowners' equity. Even among homeowners who are currently in foreclosure, [90%](#) have positive equity in their homes and could thus sell these properties at a profit. This is another key difference from housing market conditions during the mid-2000s, and it should help contain foreclosure growth in the months ahead.

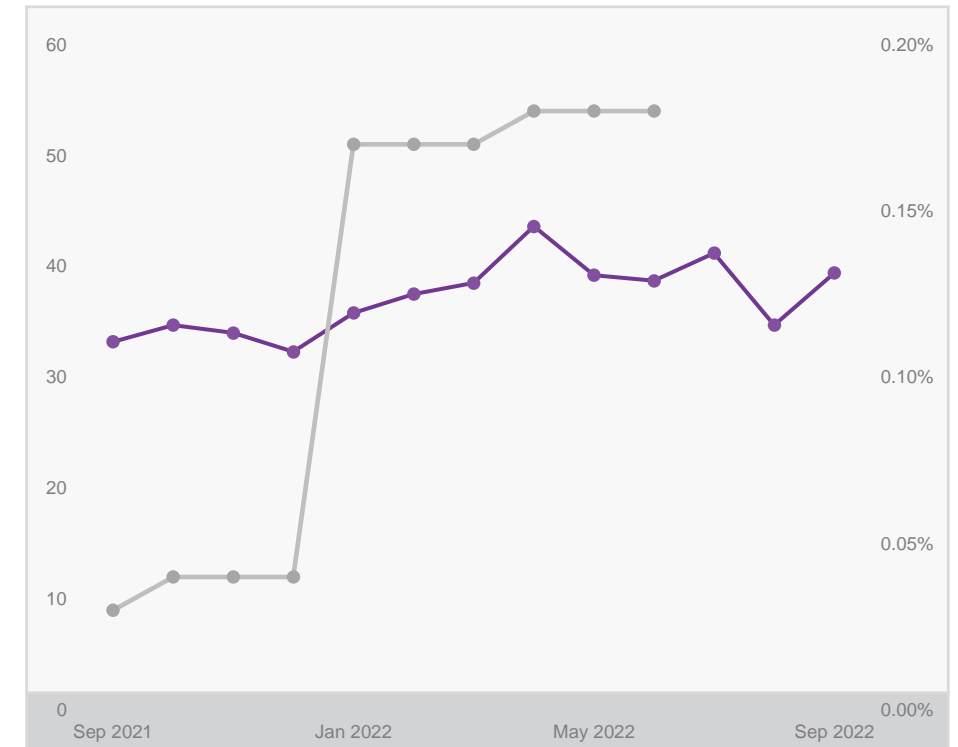
Overall, LegalShield data suggest that foreclosure activity may slowly rise but should remain low by historical standards over the next few months.

Foreclosure Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Housing Construction Index

Bottom Line: The LegalShield Housing Construction Index worsened in September to its lowest level since June 2020, though it remains above pre-pandemic levels. Rising interest rates, high costs of building materials, and high home prices continue to dampen homebuilding activity.

Latest Reading: The LegalShield Housing Construction Index decreased 1.5 point to 127.7 in September. Meanwhile, housing starts increased 8.9% M/M in August but were down marginally from the year prior.

Economic Context: Building activity has faced strong headwinds in recent months due to rising interest rates, ongoing supply chain problems, and high building costs. In response, home builders are growing increasingly discouraged: [NAHB's](#) Builder Confidence Index fell for the ninth consecutive month to 46 in September, the lowest level since May 2014 (apart from April and May 2020).

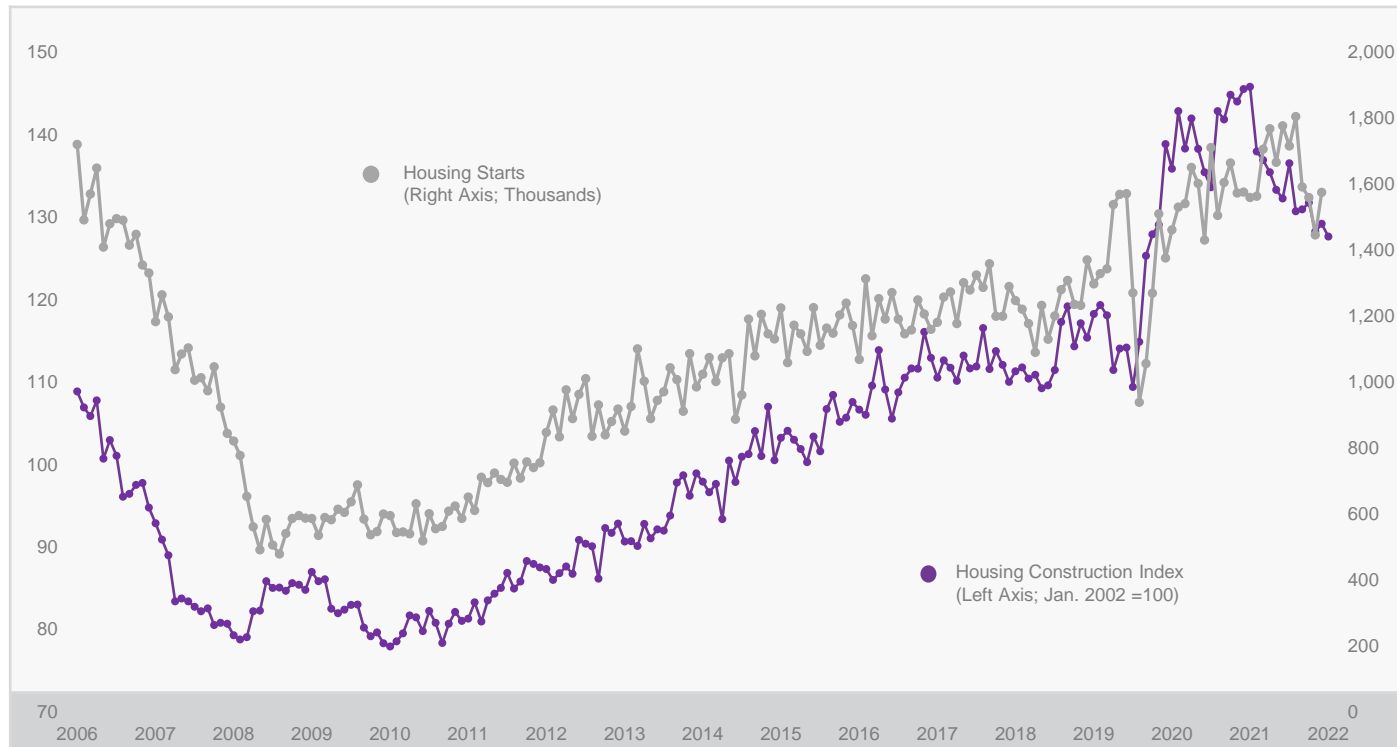
Builder sentiment shows no sign of improving as builders work against high construction costs and weakening demand. In fact, the producer price index for residential construction goods accelerated in August and is now 16% higher than a year ago. Though costs remain high, selling prices are declining as demand falls for new homes and remodels: 25% of builders to reduce home prices in September, a 5pp increase compared to August.

Meanwhile, supply chain constraints and labor shortages continue to impede construction. This has pushed the backlog of homes under construction to new record highs, even as the issuance of new housing permits has weakened. While the construction backlog should help to buoy construction activity in the near term, the broader trend of lower housing demand is undeniable, and construction activity is likely to weaken over the next year.

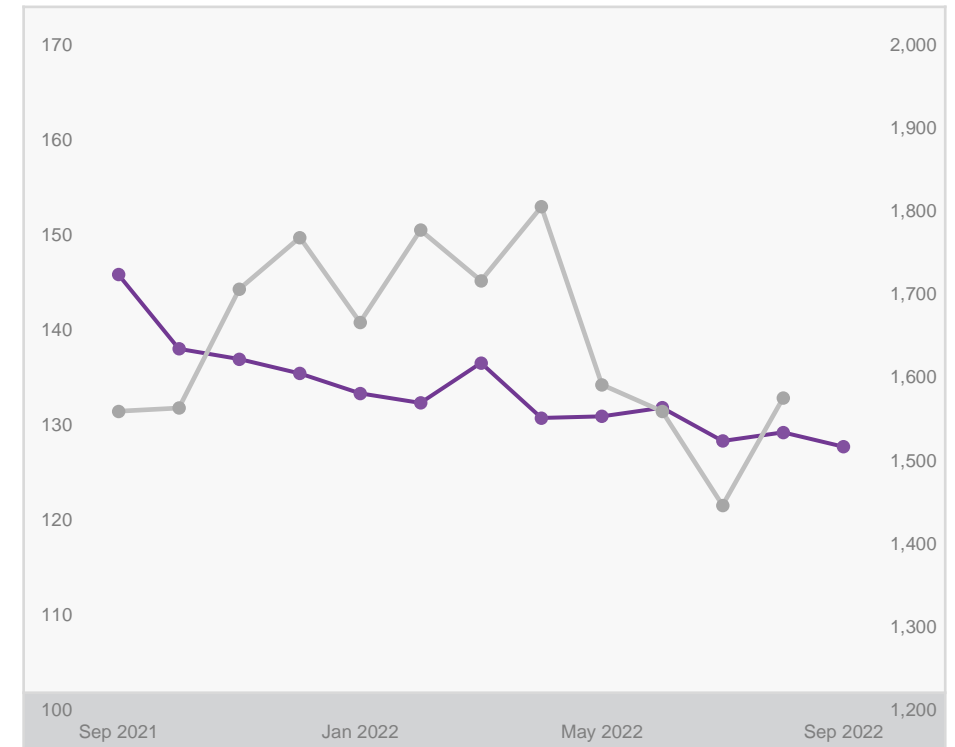
Overall, LegalShield data suggest that construction activity will ease further in the coming months, although the construction backlog should help to keep homebuilders busy for now.

Housing Construction Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Housing Sales Index

Bottom Line: In September, the LegalShield Housing Sales Index improved slightly from its lowest level since May 2020. Despite this increase, the housing market is softening, and LegalShield data suggest that existing home sales will weaken over the remainder of the year. Housing affordability remains a daunting headwind.

Latest Reading: The LegalShield Housing Sales Index increased 1.9 points to 107.1 in September. Meanwhile, existing home sales eased slightly in August and are down 19.9% Y/Y.

Economic Context: Home sales decreased for the seventh straight month in August, reflecting weakening buyer demand. Dramatically higher mortgage rates have made home buying increasingly unaffordable and have discouraged many would-be homebuyers. The average 30-year fixed-rate mortgage jumped nearly a full percentage point in September, clocking in at 6.7% during the last week of the month. Mortgage rates are likely to continue their upward march if the Fed continues to raise interest rates to fight inflation, as expected.

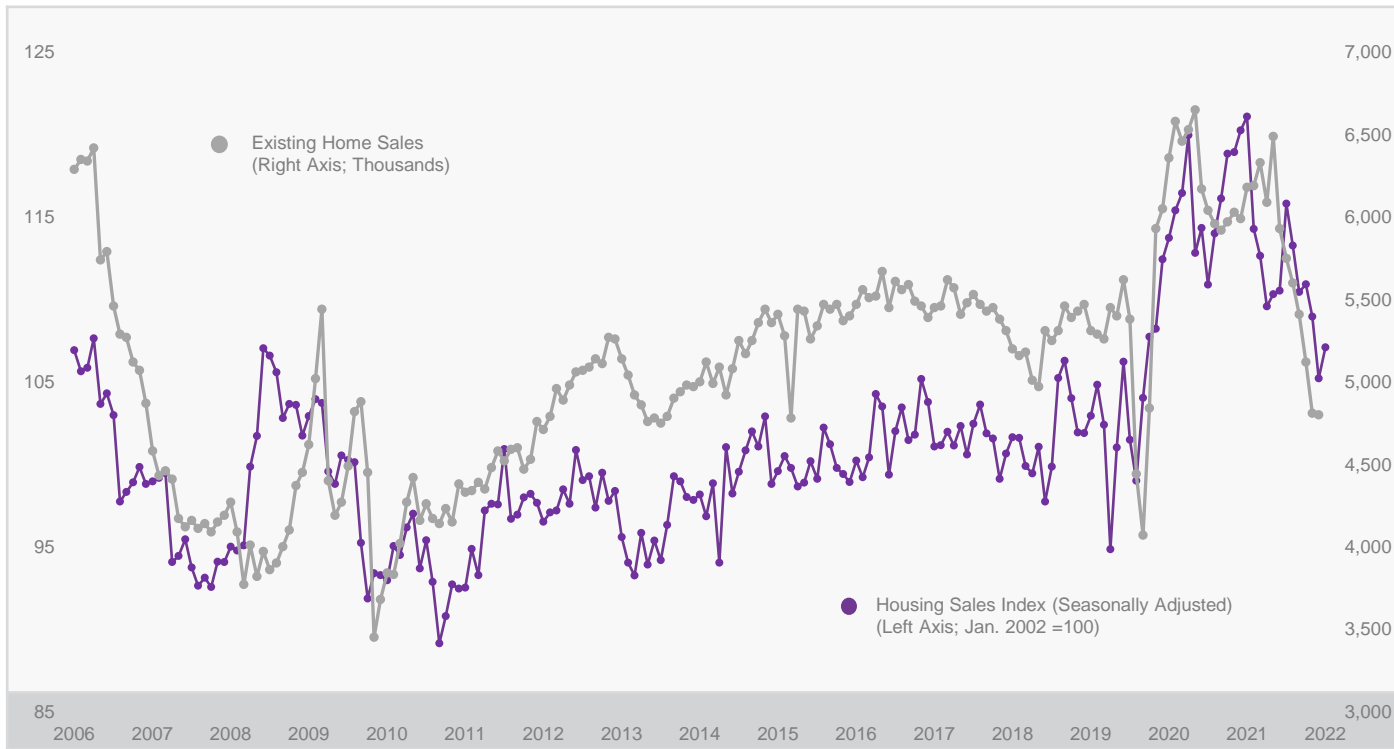
Other signs of waning buyer demand include:

- [Mortgage applications](#) fell to their lowest level in 25 years at the end of September.
- Homes for sale are staying on the market for longer, and housing inventory has [doubled](#) since January.
- Home prices fell in both July (1.05%) and August (0.98%) — the sharpest monthly declines since 2009 — and Redfin reports that the share of active listings with price drops climbed to 7.6% in late September.

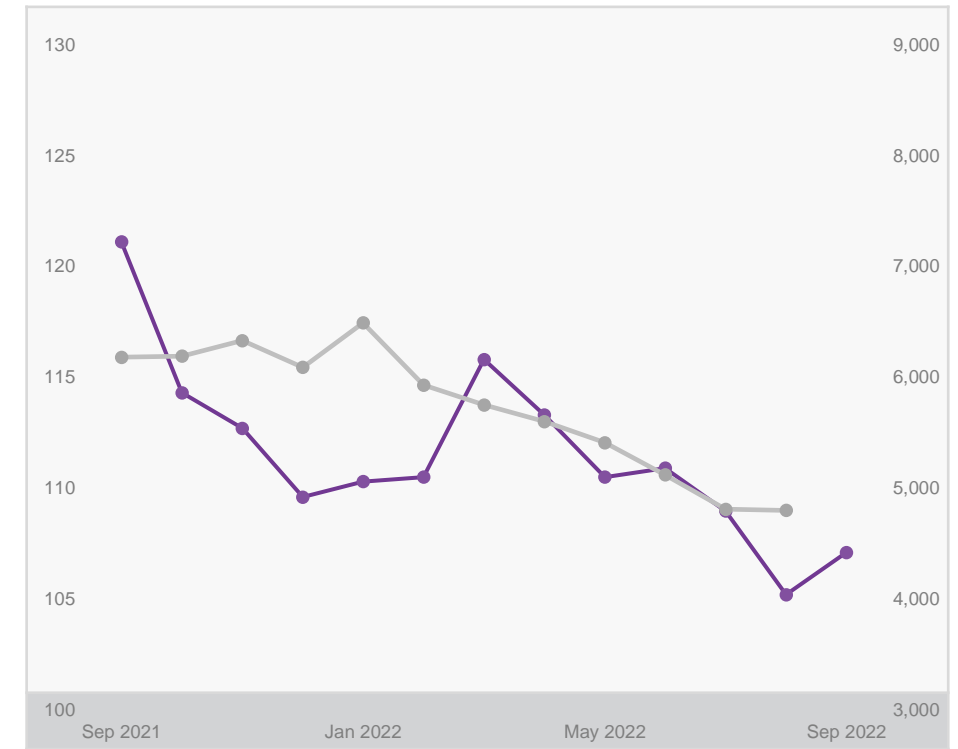
Affordability concerns continue to weigh on homebuying activity, and LegalShield data do not suggest that a turnaround in home sales activity is likely to occur any time soon — particularly if the Fed continues to raise rates.

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.

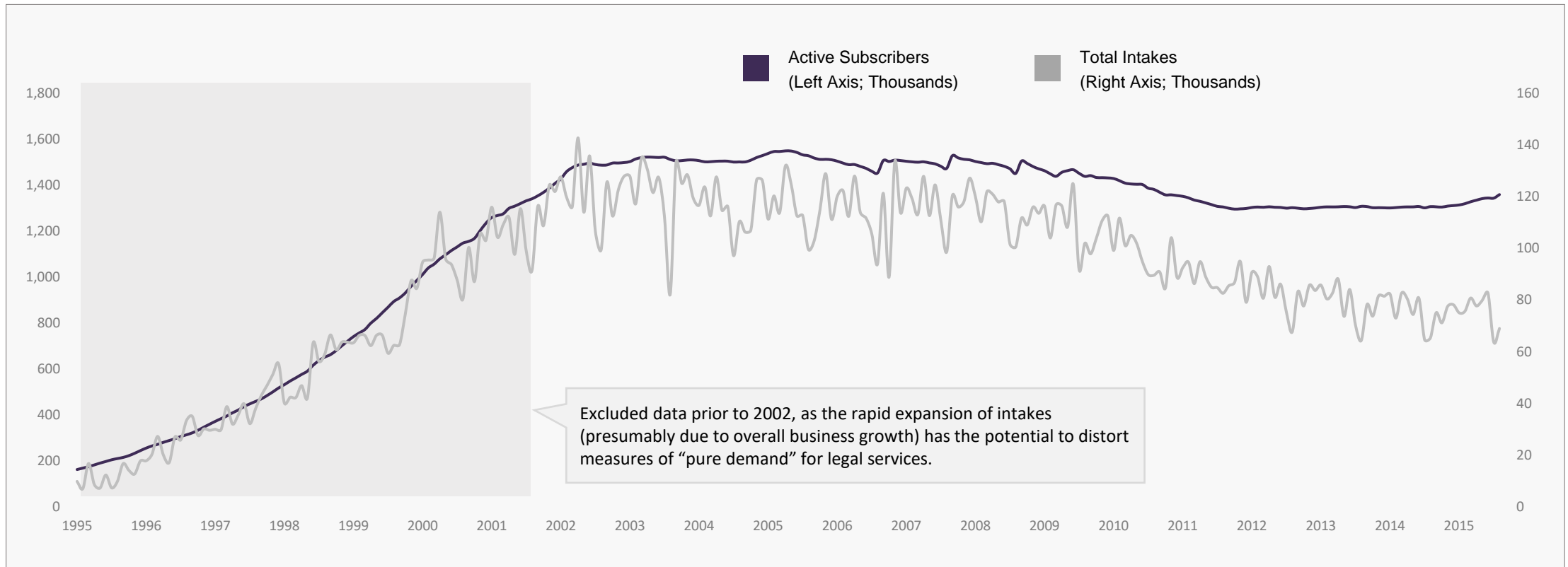
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DEVELOP INDEXES:

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

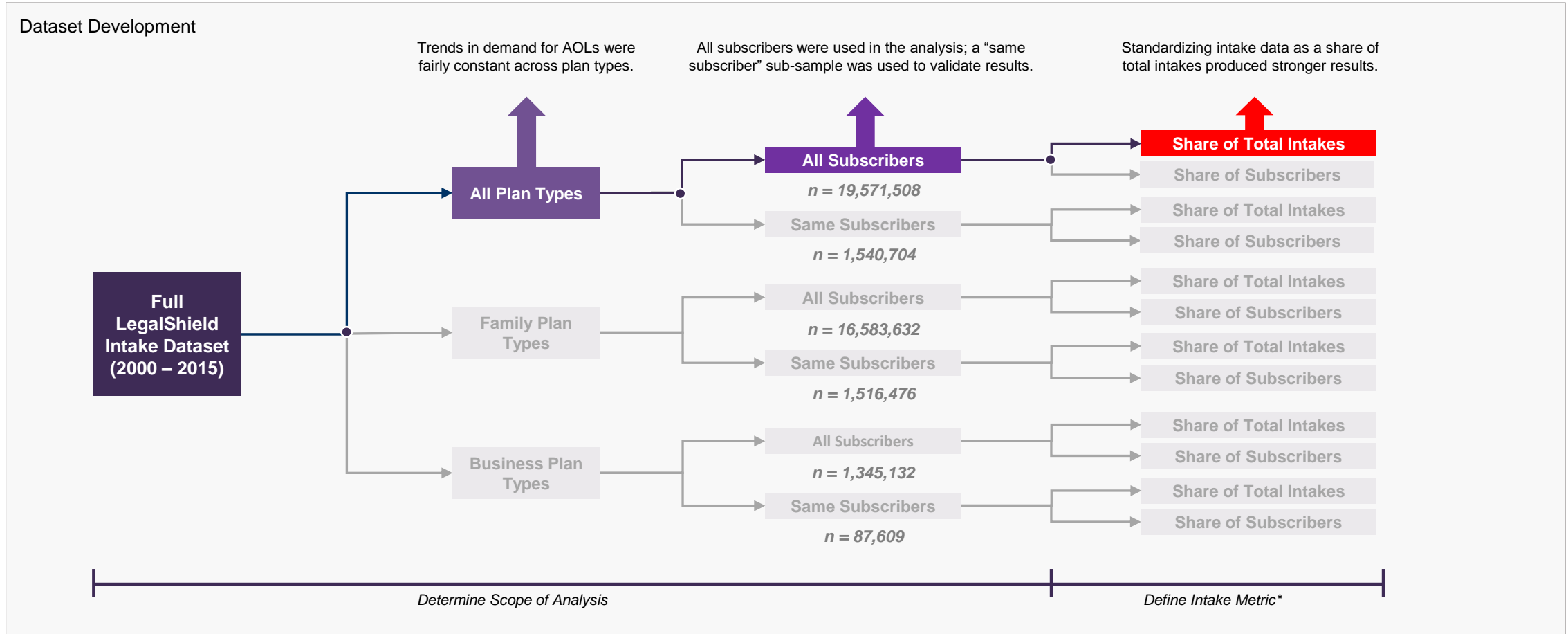
Data Construction & Cleaning

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



Analytical Scope

Testing and index development used intake data from all subscribers across all plan types, standardized by total intakes.



*Standardizing intake data as a share of active subscribers controls for the change in the size of the subscriber base over time. Standardizing intake data as a share of total intakes controls for shifts in the relative demand for different AOLs 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)

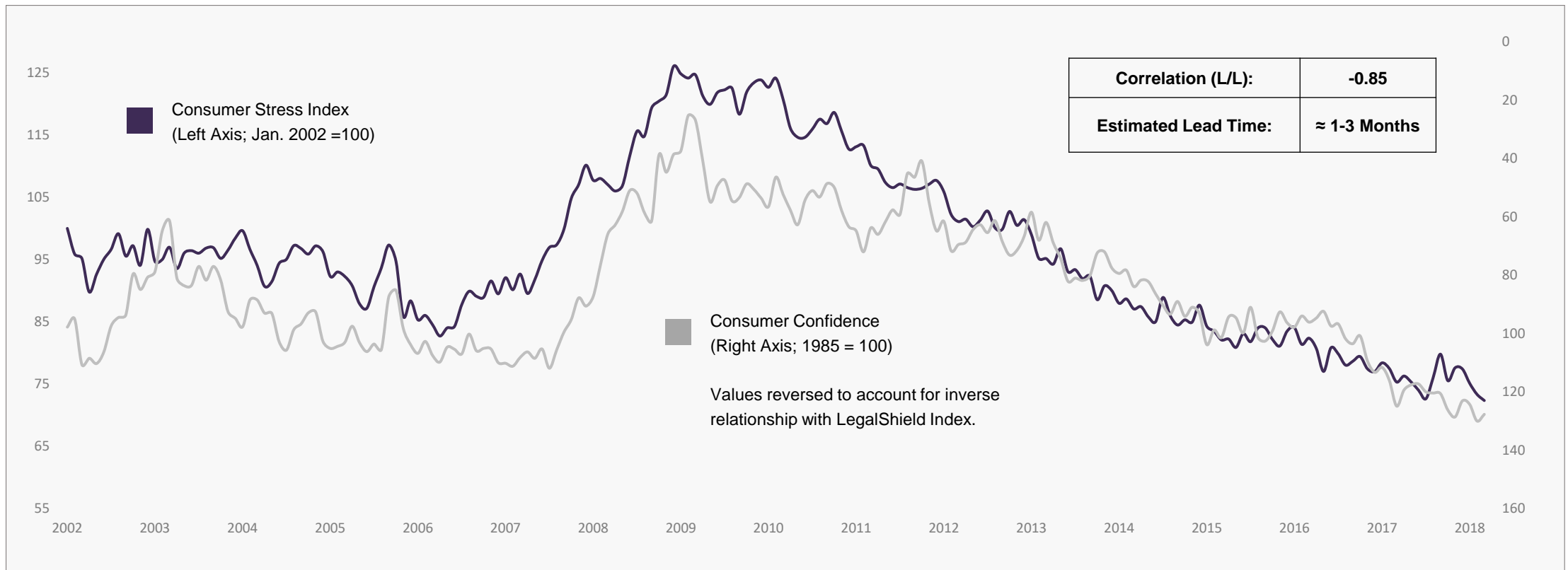
Test 2: Compared correlations between random samples of the data

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

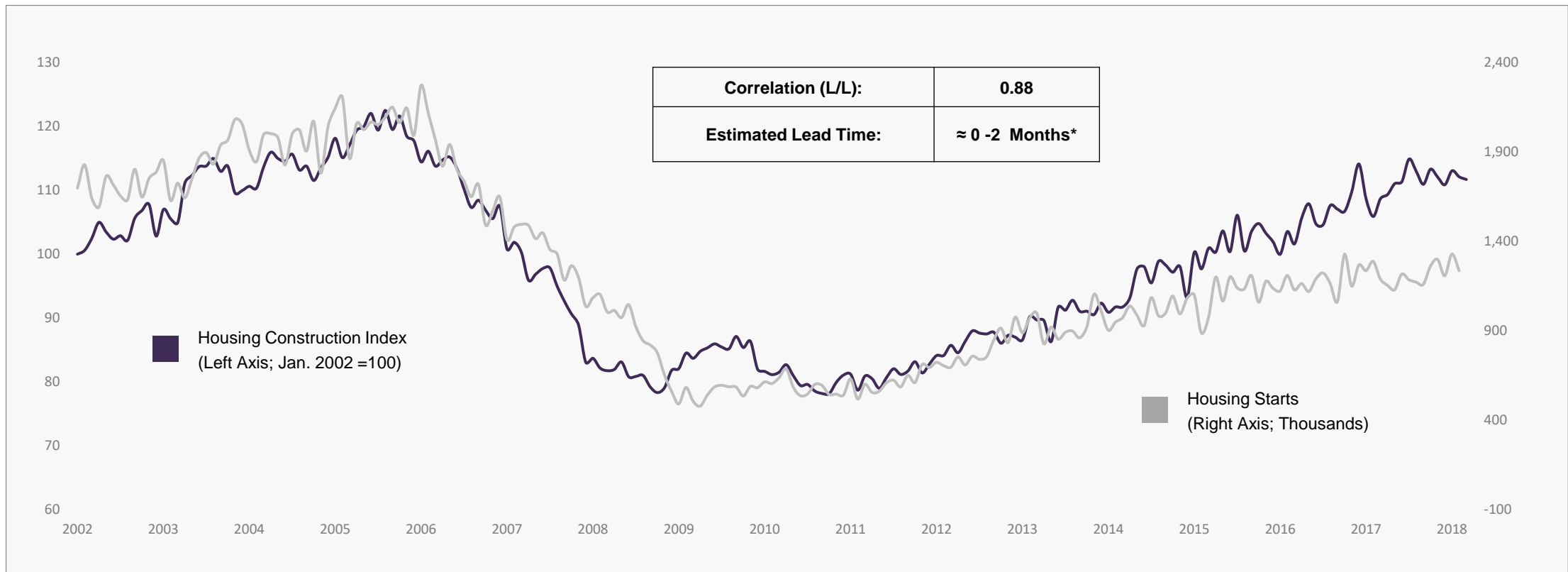
Composite Index: Consumer Stress

AOLs: Bankruptcy; Foreclosure; Consumer Finance



Composite Index: Housing Construction Index

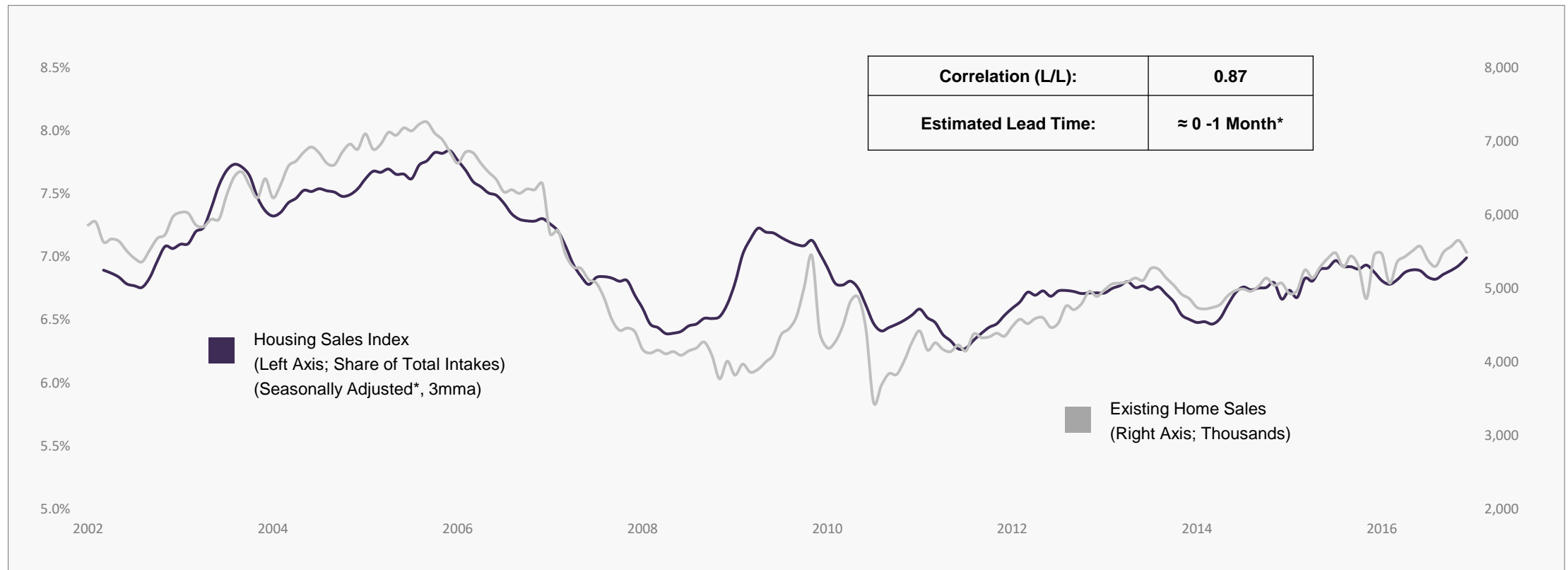
AOLs: Foreclosure; Real Estate*



*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

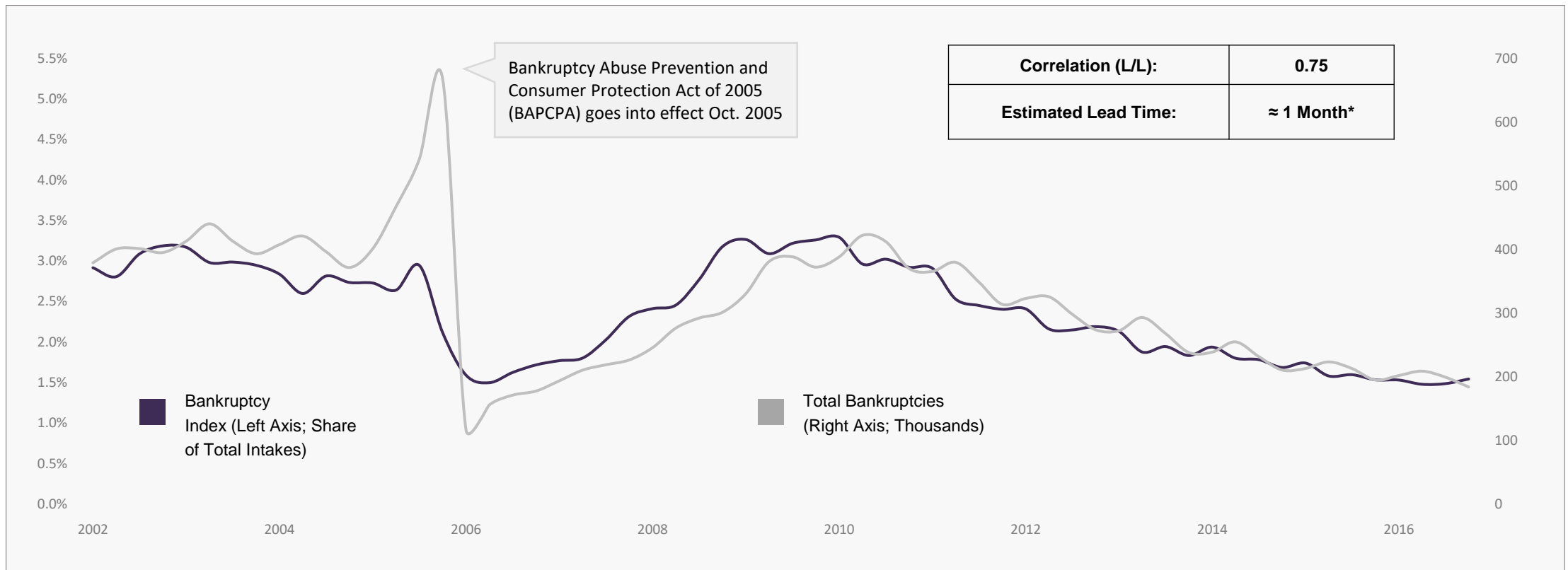
Target Series: Real Estate*



*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.

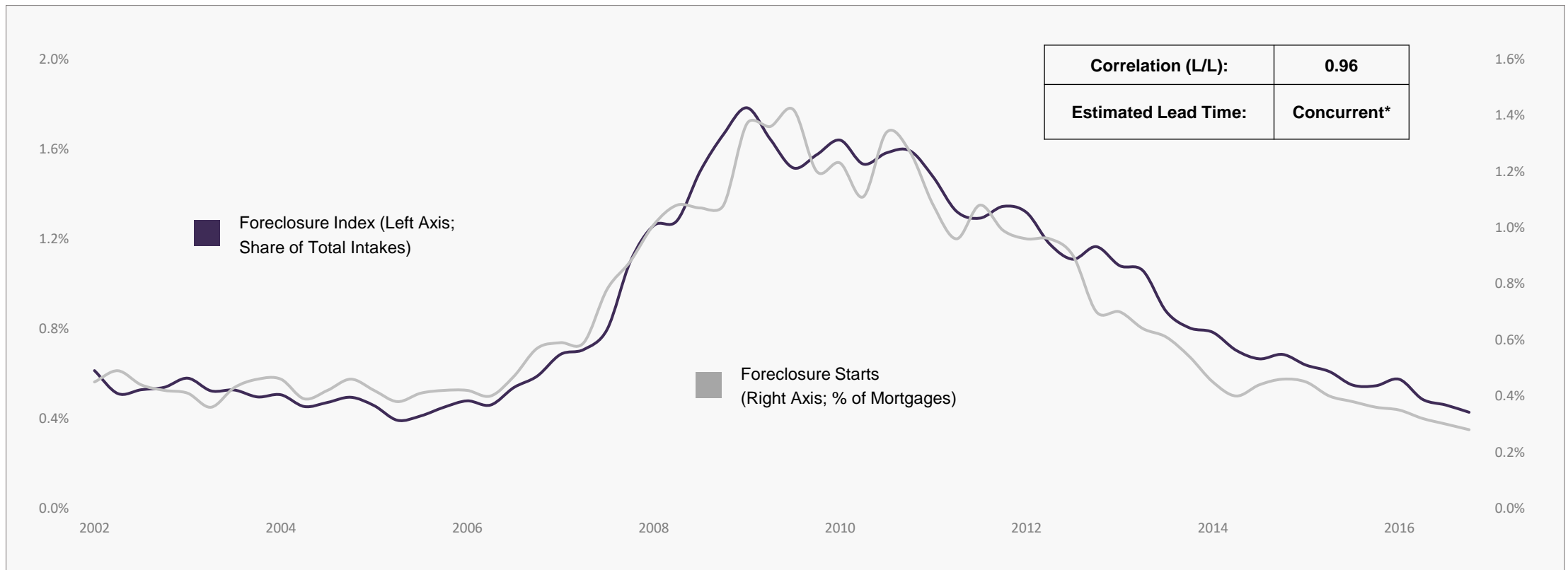
AOL: Bankruptcy

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™**

