



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



46+ 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 rose in June for the second consecutive month, though it remains historically low. While stimulus payments and federal protections have kept consumer stress muted throughout the pandemic, financial strain may increase as government interventions are phased out.

The LegalShield Consumer Stress Index ticked up (worsened) 2.2 points in June to 61.9. Meanwhile, the Conference Board's Consumer Confidence Index surged in June to 127.3, its highest point of the pandemic.

As the public situation continues to improve and business operations normalize, many consumers are unleashing pent-up demand for restaurant meals, travel, and other in-person activities. For example, spending by [JPMorgan](#) customers was up 17% relative to 2019 through May, while Commerce Department retail sales data show that the spending surge that began in March after passage of the American Rescue Plan has been maintained throughout the spring. Driven by robust spending, the U.S. economy should be larger than its pre-pandemic level when official GDP for Q2 are released later this month.

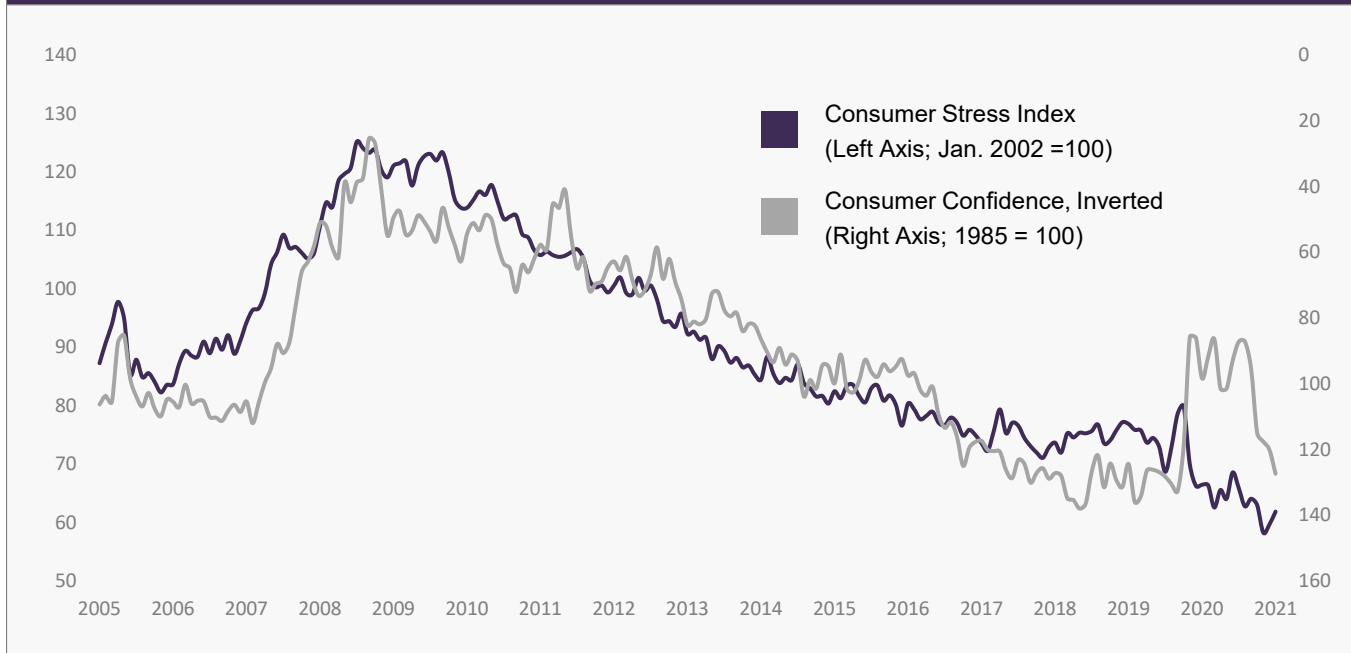
However, as with many pandemic-era economic indicators, the spending boom reflects a K-shaped recovery in which not all consumers are benefitting. A recent [TIAA](#) survey shows that nearly one-third of respondents are worse-off compared to last March, and among lower-income consumers the share is even higher. This is not surprising, as the coming expiration of several consumer protection measures could reveal underlying consumer stress that has been percolating for months. Per the Census Bureau, about one-third of Americans who are not current on their mortgage or rent believe foreclosure or eviction over the next two months is somewhat or very likely, and 28% faced difficulty meeting usual spending needs within the last week.

Fortunately, increased labor power may help alleviate some of this stress. Wages are quickly rising in the face of record-high job vacancies, particularly in lower-wage occupations. For example, the lowest salary that workers without a college degree were willing to accept for a new job in March 2021 was \$61K, up over 20% from the last year. [Wages of nonsupervisory workers](#) in the leisure and hospitality sector are up 11% Y/Y, the fastest increase in more than 50 years.

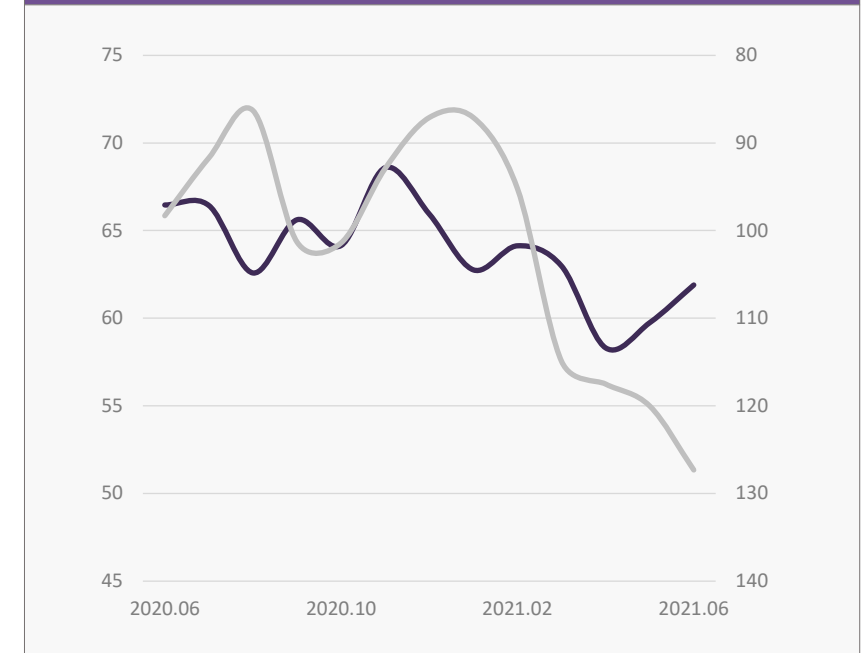
Consumer stress is expected to stay low in the near term. However, stress may rise as federal protections end. 6

Consumer Stress Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Bankruptcy Index

The LegalShield Bankruptcy Index ticked up in June but remains at the second-lowest reading on record. Bankruptcies should stay low in the coming months but may rise once federal protections end.

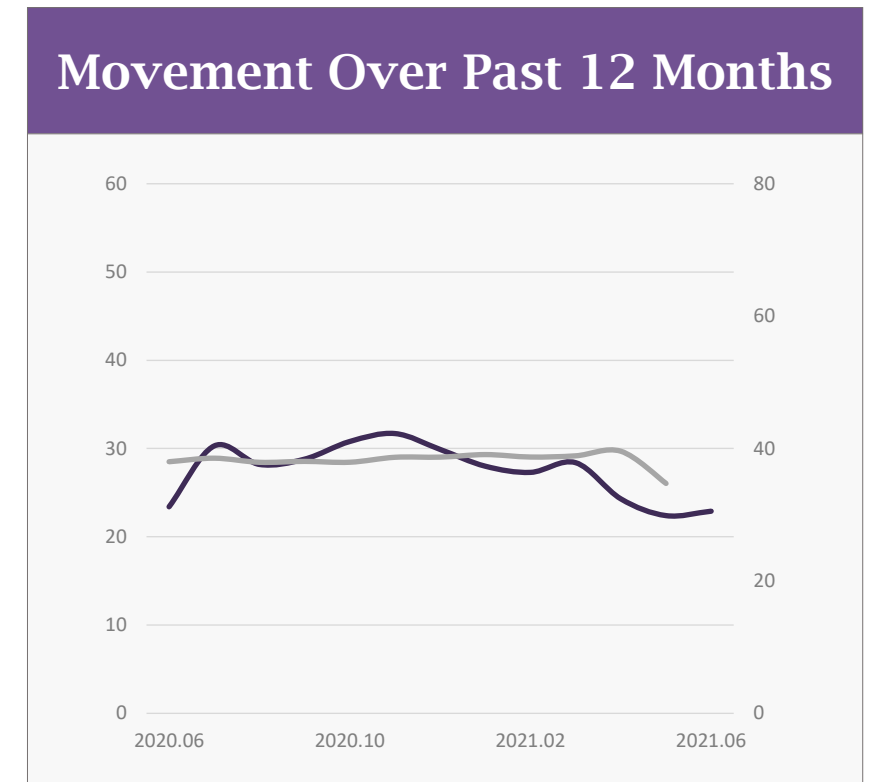
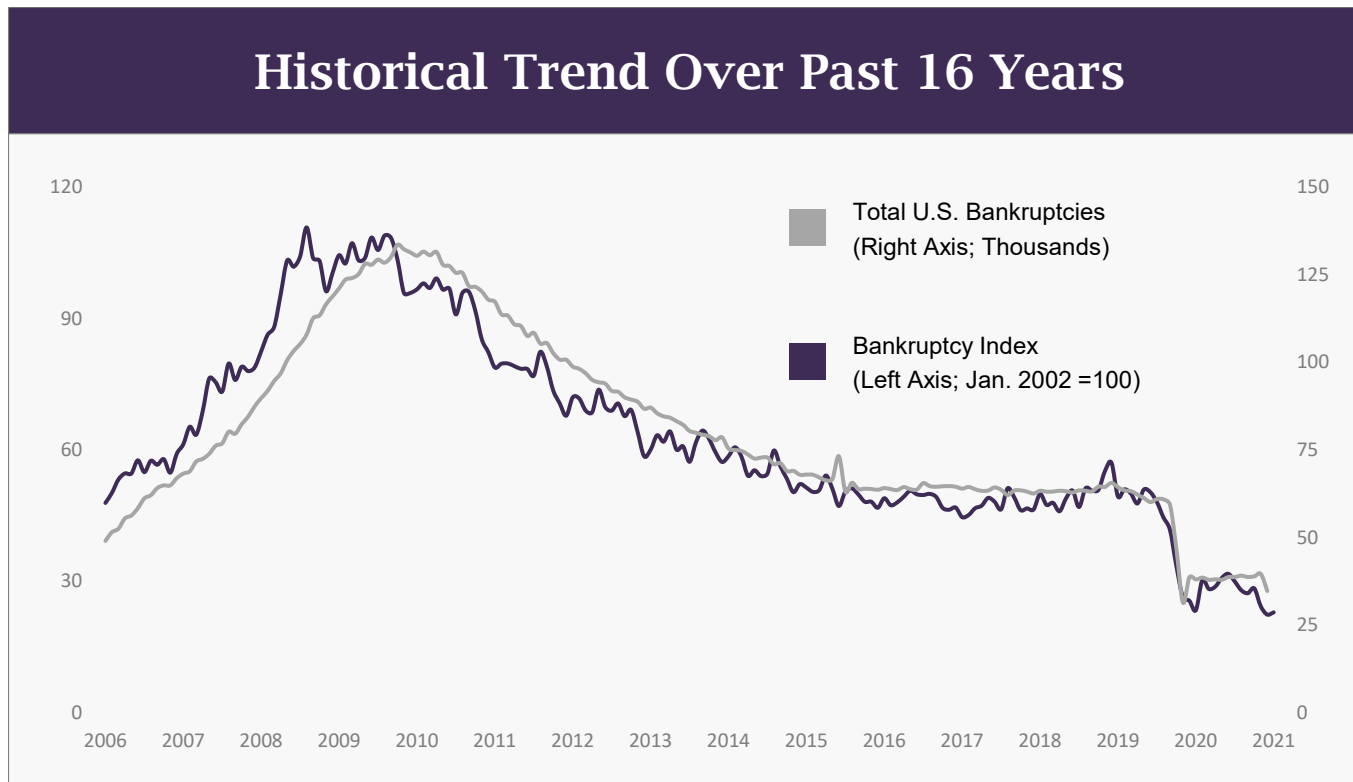
The LegalShield Bankruptcy Index edged up (worsened) 0.5 point to 22.9 in June. Meanwhile, total seasonally adjusted bankruptcy filings fell by 4.6% to 34,707 in May and were down 13% compared to last year.

Bankruptcies are little changed thanks to pandemic-era federal measures like direct transfer payments and federal moratoria on certain loan installments. Reflecting these and other support measures, [Wells Fargo](#) estimates that consumers have accumulated \$2.4 trillion in excess savings since the pandemic began, and this support has benefitted households across the income spectrum. According to [Federal Reserve data](#), the aggregate net worth of the top half of households grew by 33% while the net worth of the bottom half of households rose by 36%. Further, consumers have reduced their revolving debt (largely credit card debt): according to the [Atlanta Fed](#), just over half of credit card holders carried a revolving balance in 2020, the lowest share since 2015.

Even as borrowers exit forbearance programs and loan payments resume, it's not a given that elevated financial stress will lead to a wave of bankruptcies. For one, many households have been able to accumulate significant savings during the pandemic thanks to the generous federal UI programs. Second, households don't file for bankruptcy as soon as they miss a payment. A recent National Bureau of Economic Research [paper](#) finds that on average, consumers wait about 22 months after their first 90-day past-due notice to file for bankruptcy. Even if the expiration of pandemic-era protections turns out to be the starting point for this countdown, there could still be a substantial lag between when support measures expire and when bankruptcies begin to rise.

As a result, LegalShield believes that bankruptcies will remain low for the remainder of the year.

Bankruptcy Index





FORECLOSURE



**FOR
SALE**

Foreclosure Index

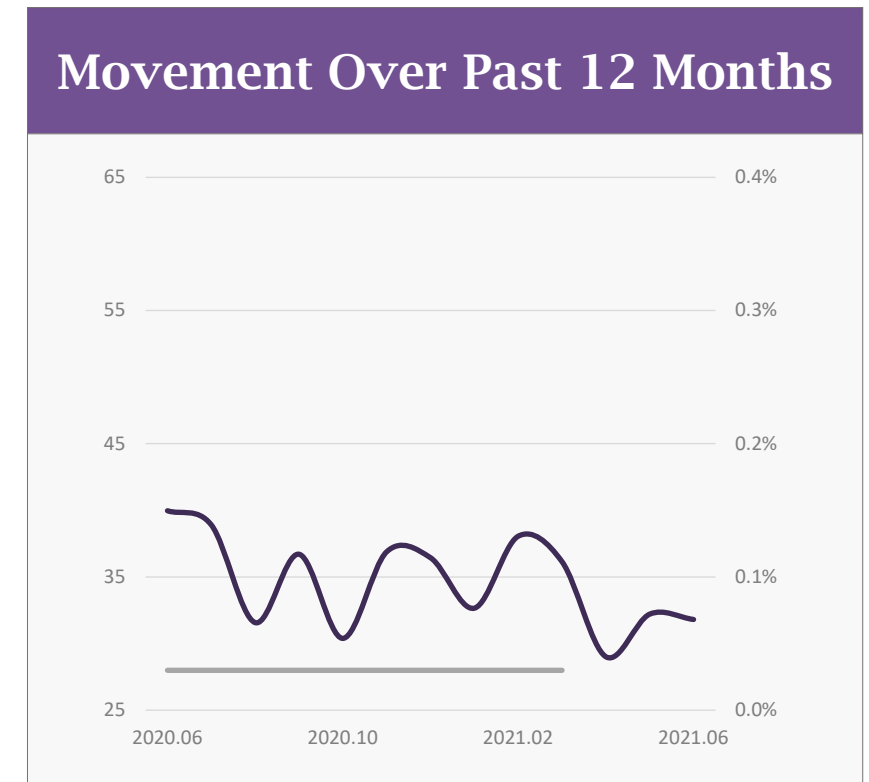
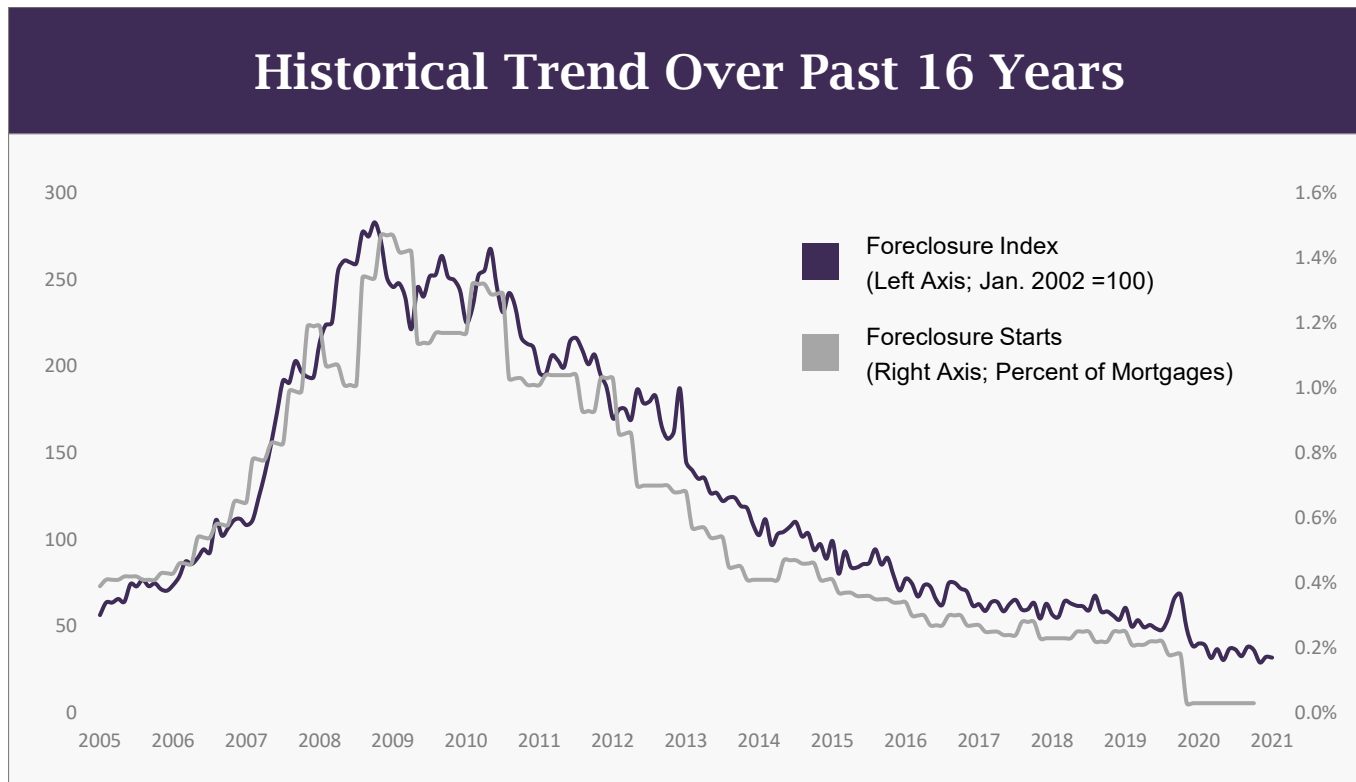
The LegalShield Foreclosure Index edged down in June to the fourth lowest level on record. Foreclosures should remain low while government support measures remain in place, and while they are likely to rise after protections are lifted, a foreclosure wave appears less likely than it did several months ago.

The LegalShield Foreclosure Index edged down (improved) 0.4 point to 31.8 in June, reflecting pandemic-era interventions from the government and private sectors.

- The government's foreclosure moratorium has played an important role throughout the pandemic in keeping foreclosures low, and the Biden administration has extended the foreclosure moratorium for one additional month until July 31. However, once this date passes, the administration has been clear that federal support will end. At that point, it will be up to states and municipalities to determine whether to extend the moratorium — and as of now, most have not. Meanwhile, the [Consumer Financial Protection Bureau](#) has finalized a rule to protect borrowers from the end of August through the end of the year. The rule bars mortgage servicers from foreclosing on most home unless they comply with new requirements, while also allowing mortgage services more flexibility in offering loan modifications.
- Private lenders have also played a significant role in Americans' ability to weather the pandemic. While about [7.1 million](#) homeowners entered pandemic-related forbearance programs, roughly 5-in-6 of these borrowers are either current on their payments or have fully paid off their loans. According to [Black Knight](#), just over 2 million borrowers were still in forbearance in early June, the lowest level since the pandemic began.

All told, foreclosures should remain muted in the near term, but may begin to rise toward the end of this year and into next year.

Foreclosure Index





Housing Construction Index

The LegalShield Housing Construction Index climbed in June to another all-time high. While strong housing demand should continue to spur construction, costly materials and labor shortages are major headwinds.

The LegalShield Housing Construction Index rose 3.0 points to 149.9 in June. Housing starts rose 3.6% in May and were up 50% compared to year-ago levels. Meanwhile, the number of homes authorized to be built but not yet started rose 0.8% in May to the highest level since the series began in 1999.

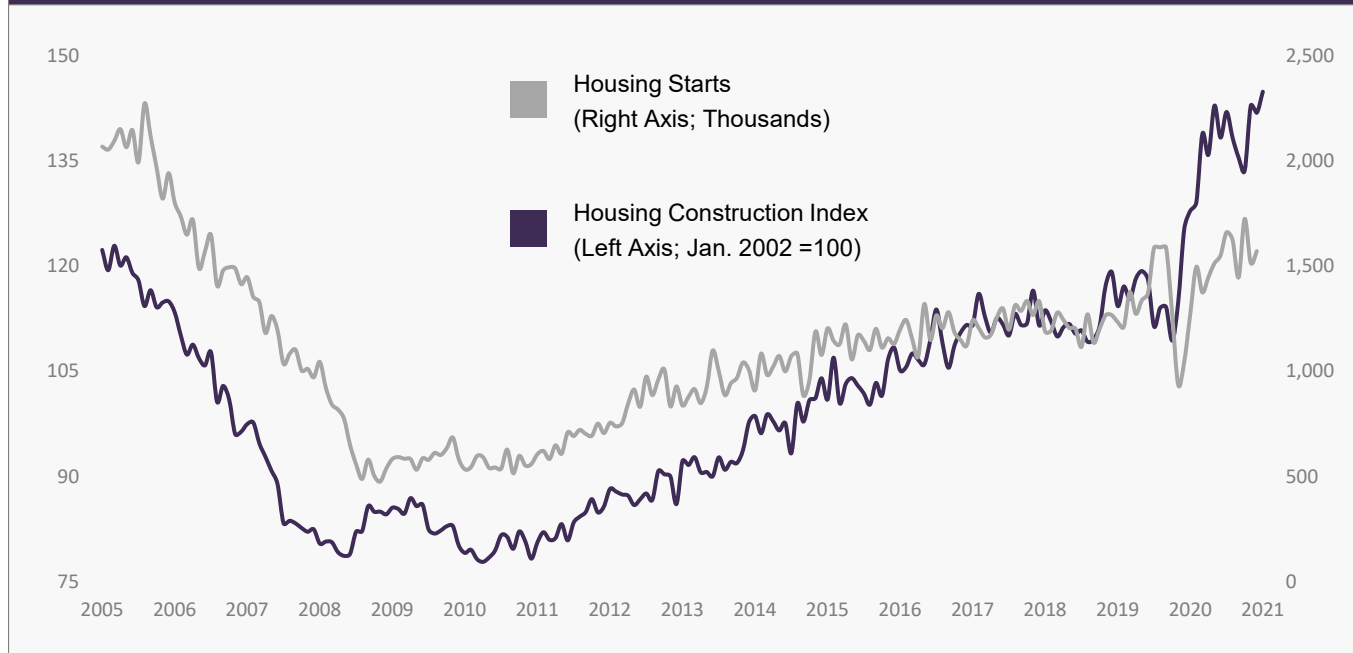
Although housing demand remains strong, rising input costs and labor shortages are tempering expectations in the housing construction industry. For example:

- According to the NAHB/Wells Fargo [Housing Market Index](#), builder confidence fell in June to its lowest level in ten months (though it remains high by historical standards).
- Separate survey data from the [NAHB](#) reveals that about 20% of builders have capped their sales activity to cope with supply-chain constraints.
- While [lumber prices](#) have fallen from their record-high in May, prices of softwood lumber are up 154% Y/Y.
- Construction employment fell for the third straight month in June, despite job vacancies in the sector recording their second-highest reading earlier this spring.

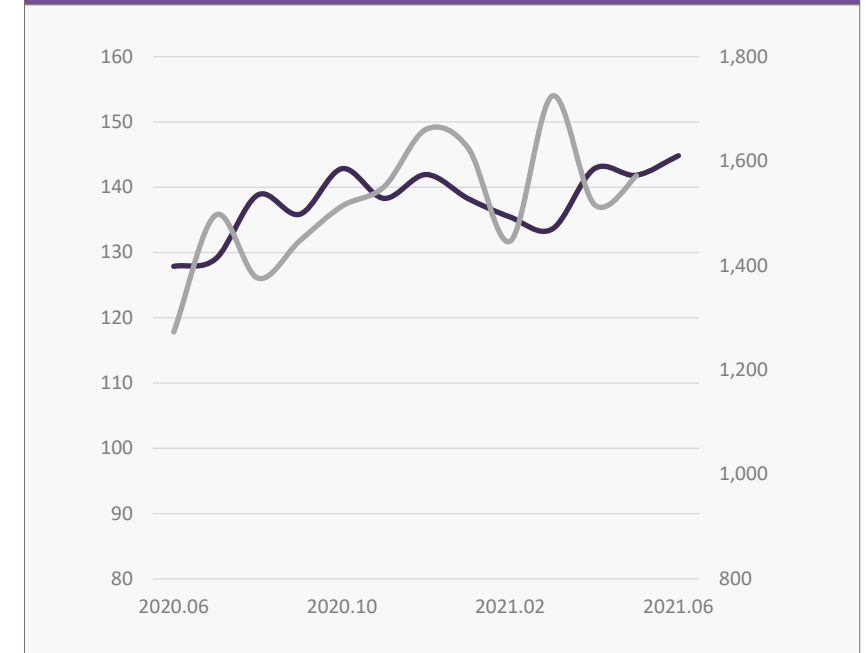
These headwinds are beginning to weigh on the industry, as construction spending ticked down 0.3% M/M in May, while permits for future homebuilding fell 3%. Nevertheless, strong housing demand and inventory shortages should keep housing construction activity strong for the next few months.

Housing Construction Index

Historical Trend Over Past 16 Years



Movement Over Past 12 Months





Housing Sales Index

The LegalShield Housing Sales Index rose in June to just shy of another record high. Existing home sales are forecasted to remain strong in the near term, though sales may moderate as affordability constraints worsen.

The LegalShield Housing Sales Index increased by 2.7 points in June to 118.8. Meanwhile, existing home sales declined 0.9% compared to April but remain 45% over year-ago levels.

Various indicators suggest that the housing market continues to perform strongly. For example, pending home sales surged by 8% to the highest ever reading for the month of May since 2005. Meanwhile, Redfin reports that homes that were sold in May stayed on the market for about 15 days, the lowest reading ever and indicative of the sky-high demand for homes.

Not surprisingly, prices have continued to climb in the face of robust demand. One measure, the CoreLogic Home Price Index, jumped 14% Y/Y in April to the highest level in the thirty-year history of the series. Indeed, evidence is mounting that high prices are beginning to constrain new sales:

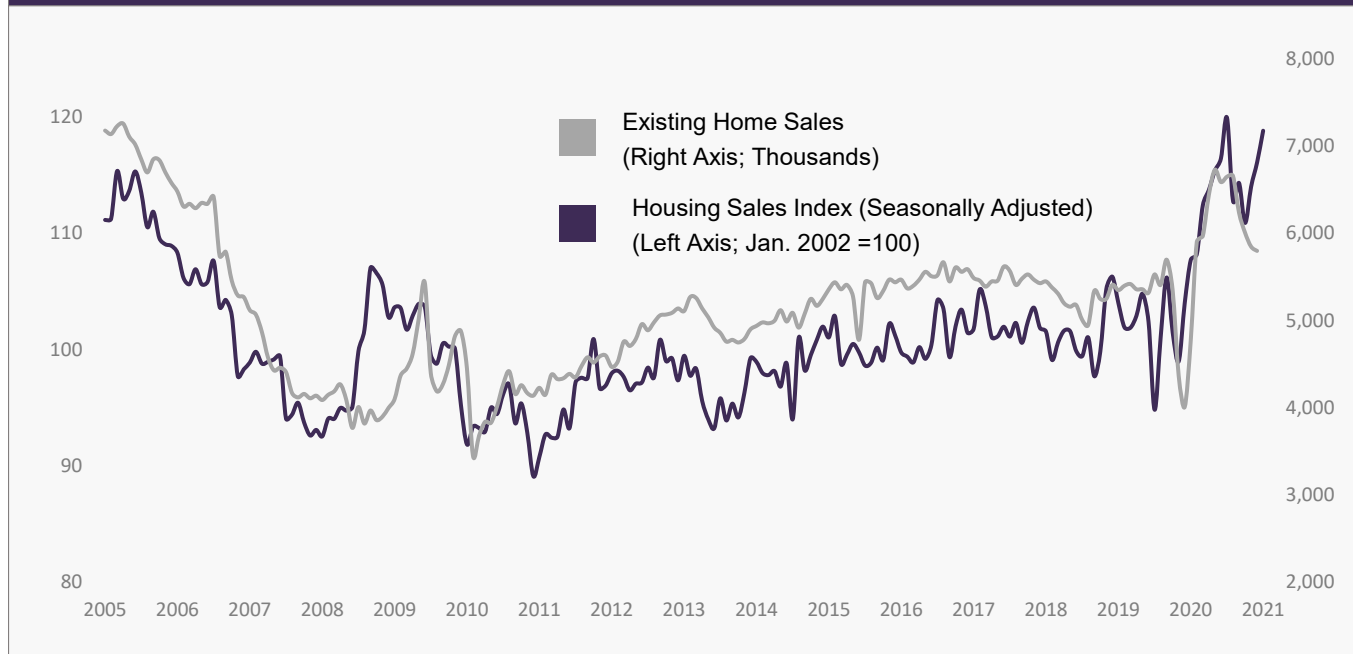
- Per a survey by the [University of Michigan](#), 52% of consumers cited high home prices when evaluating home buying conditions, the highest proportion recorded in the survey's history.
- The Census Bureau's measure of new home sales dropped in May to the lowest level in a year.
- The [Mortgage Bankers Association](#)'s weekly mortgage applications index fell in late June to the lowest level in nearly a year and a half.

Affordability concerns are apparent in sales data: according to the [National Association of Realtors](#), while sales of homes over \$1 million were 245% above year-ago levels, sales of homes under \$100K fell by 11% Y/Y.

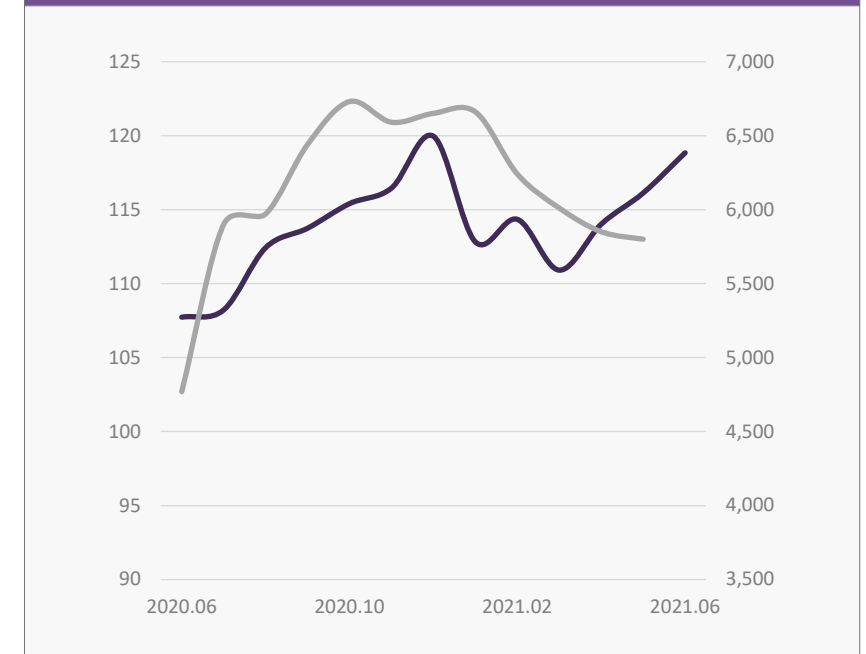
Looking ahead, while the housing market has been a bright spot during the pandemic, there are growing signs that it may be cooling. For now, however, LegalShield data suggests housing sales should remain elevated.

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.

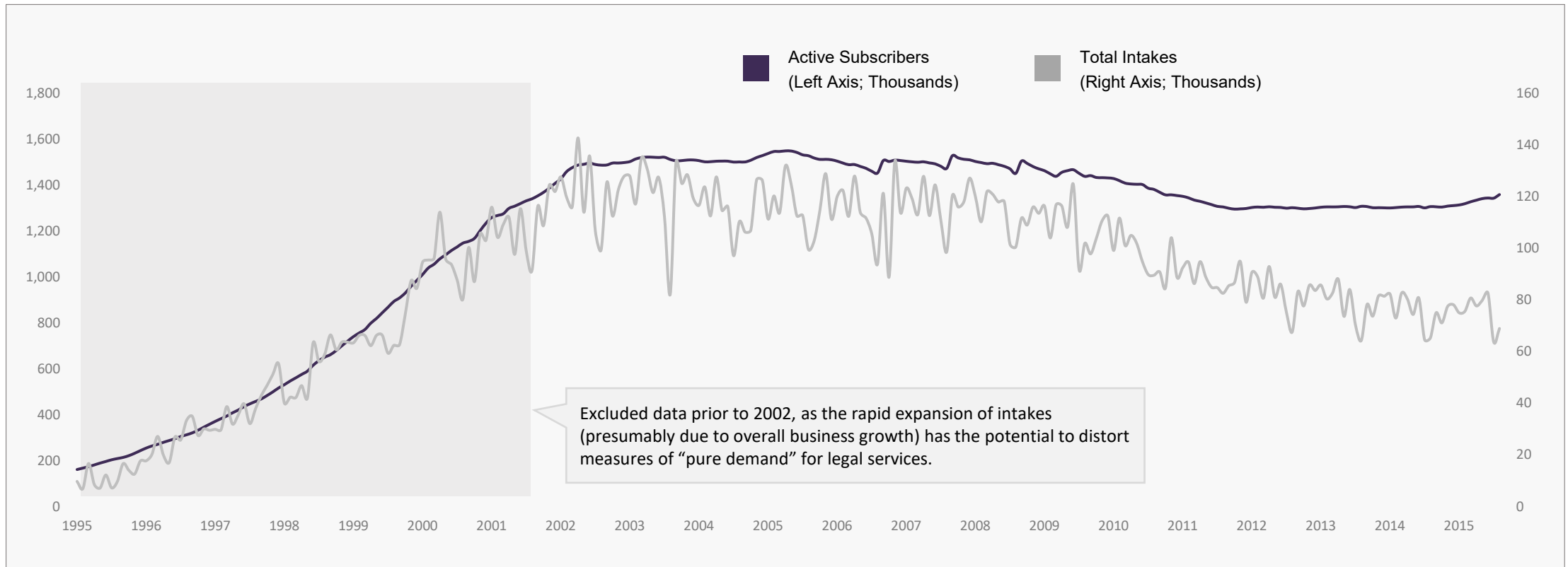
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DEVELOP INDEXES:

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

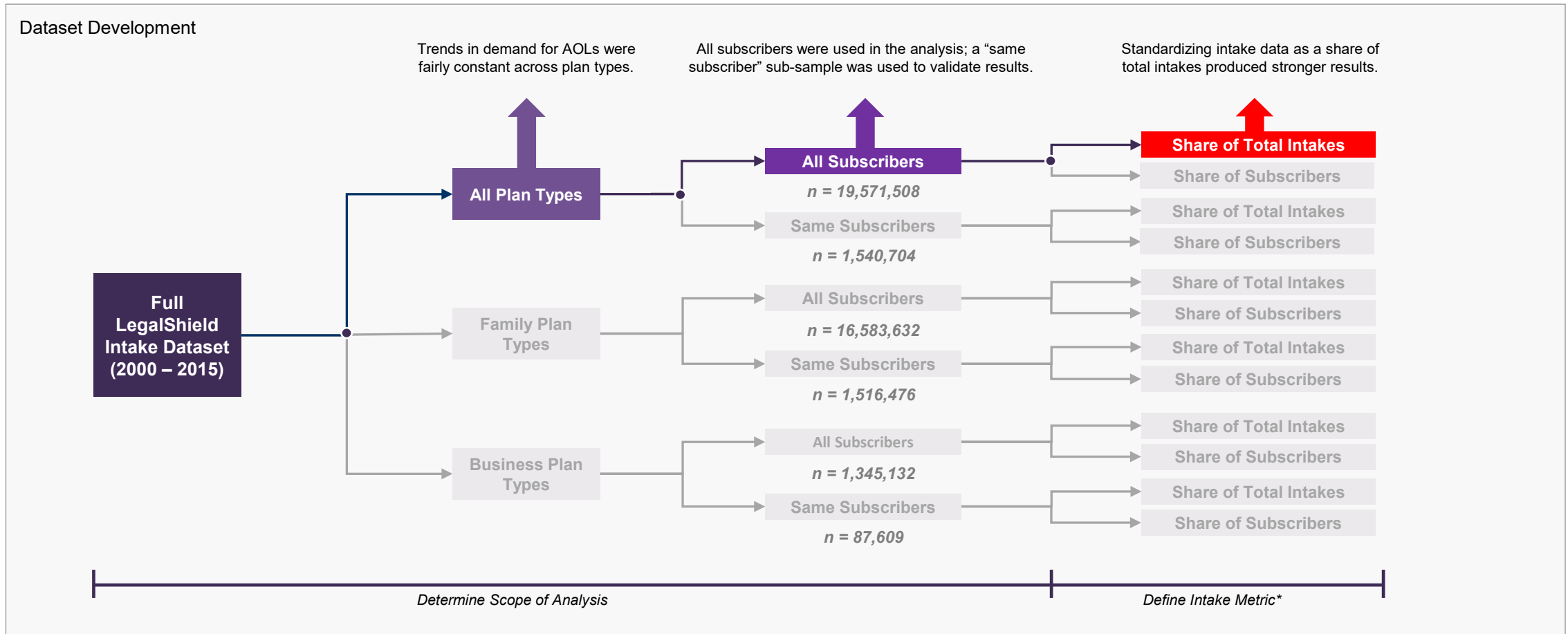
Data Construction & Cleaning

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)

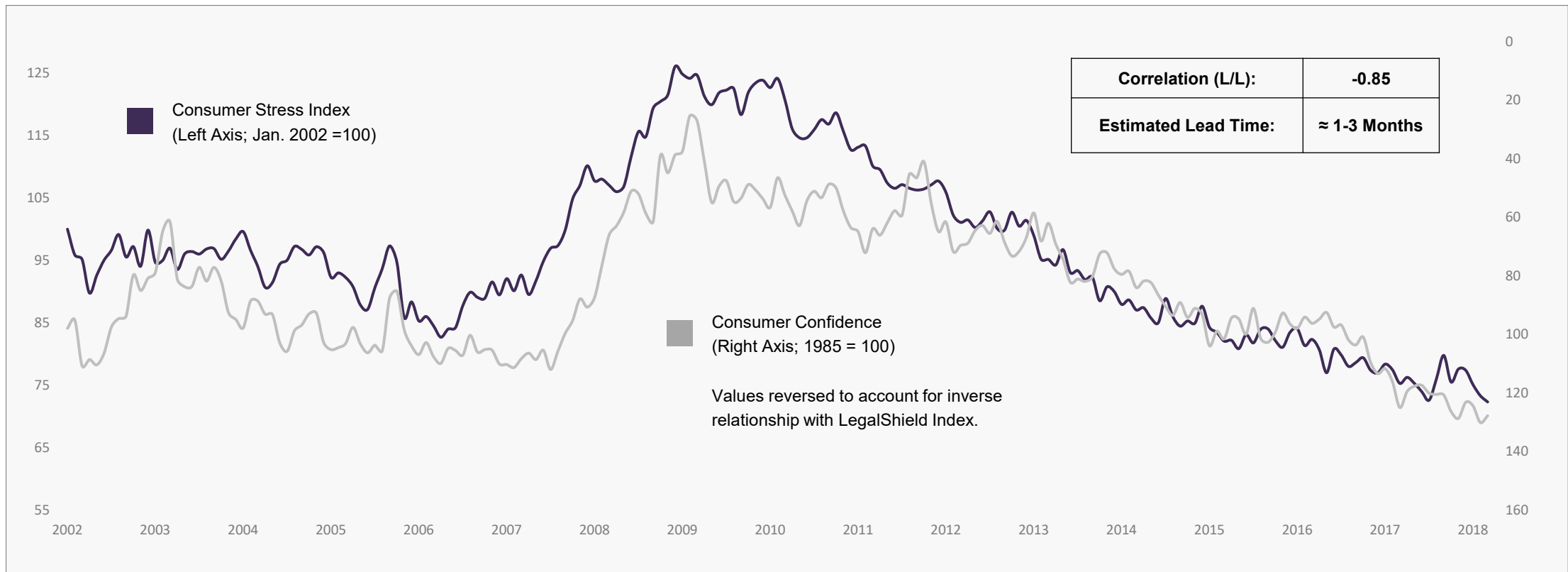
Test 2: Compared correlations between random samples of the data

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

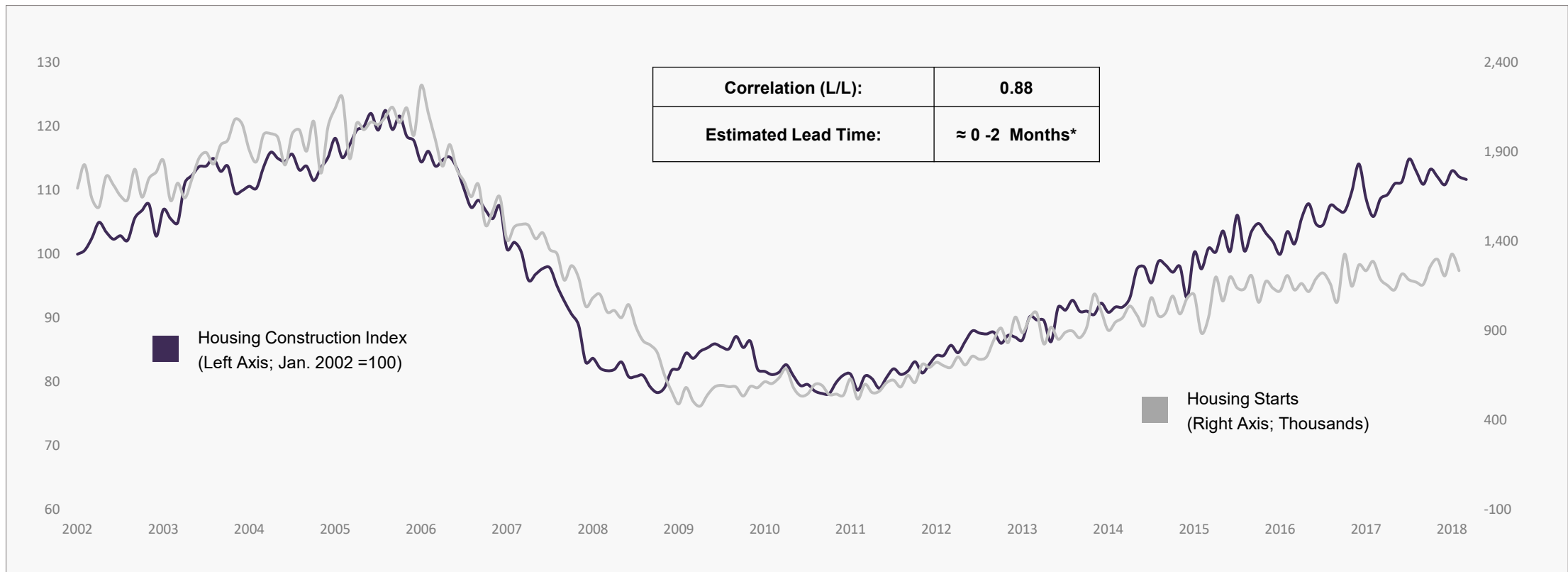
Composite Index: Consumer Stress

AOLs: Bankruptcy; Foreclosure; Consumer Finance



Composite Index: Housing Construction Index

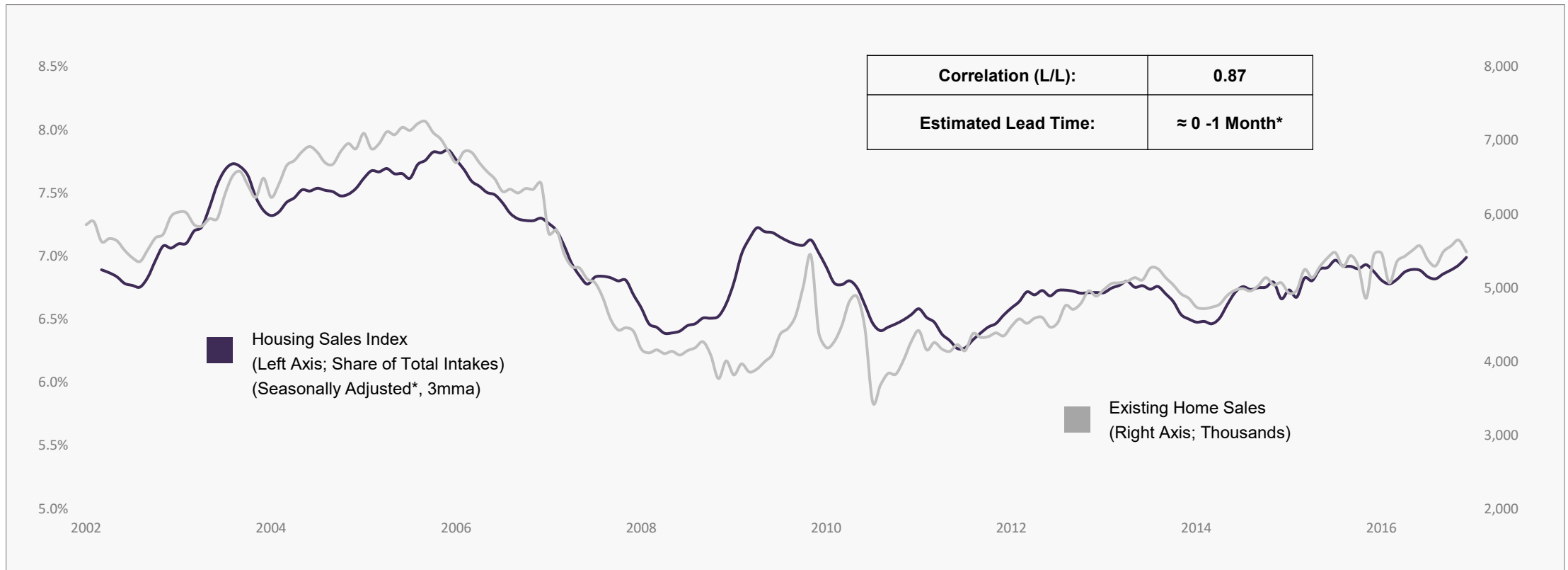
AOLs: Foreclosure; Real Estate*



*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

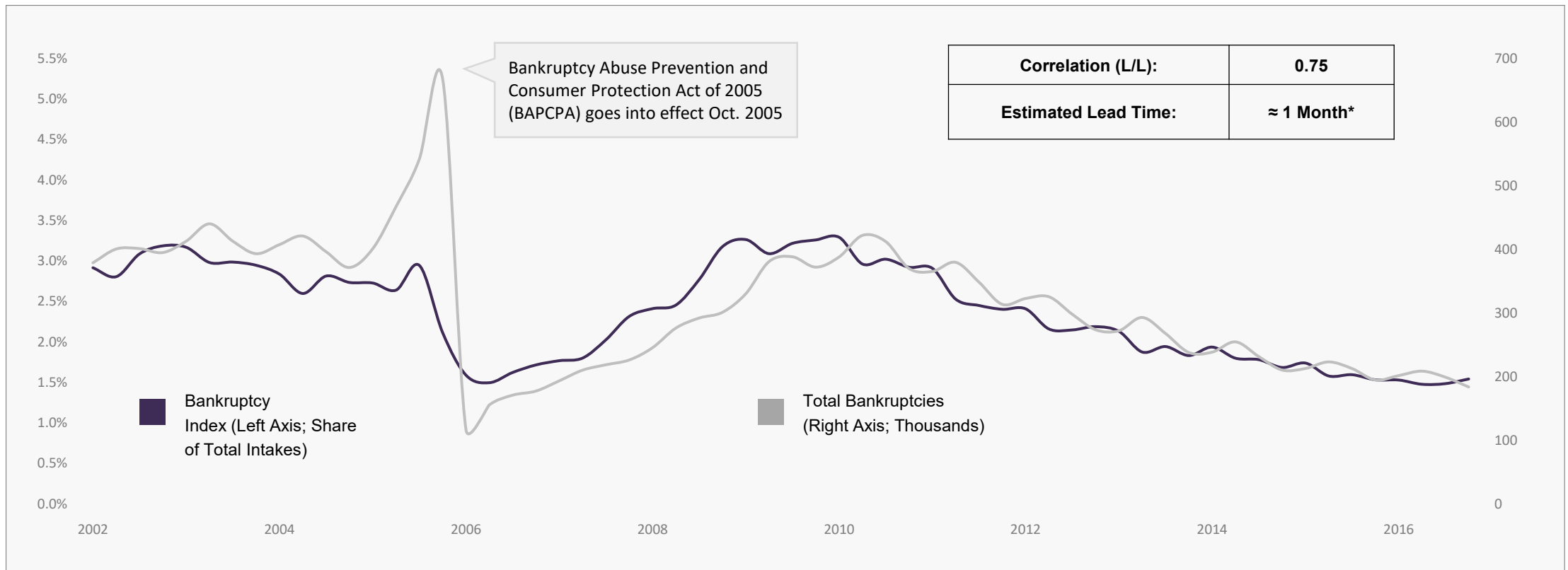
Target Series: Real Estate*



*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.

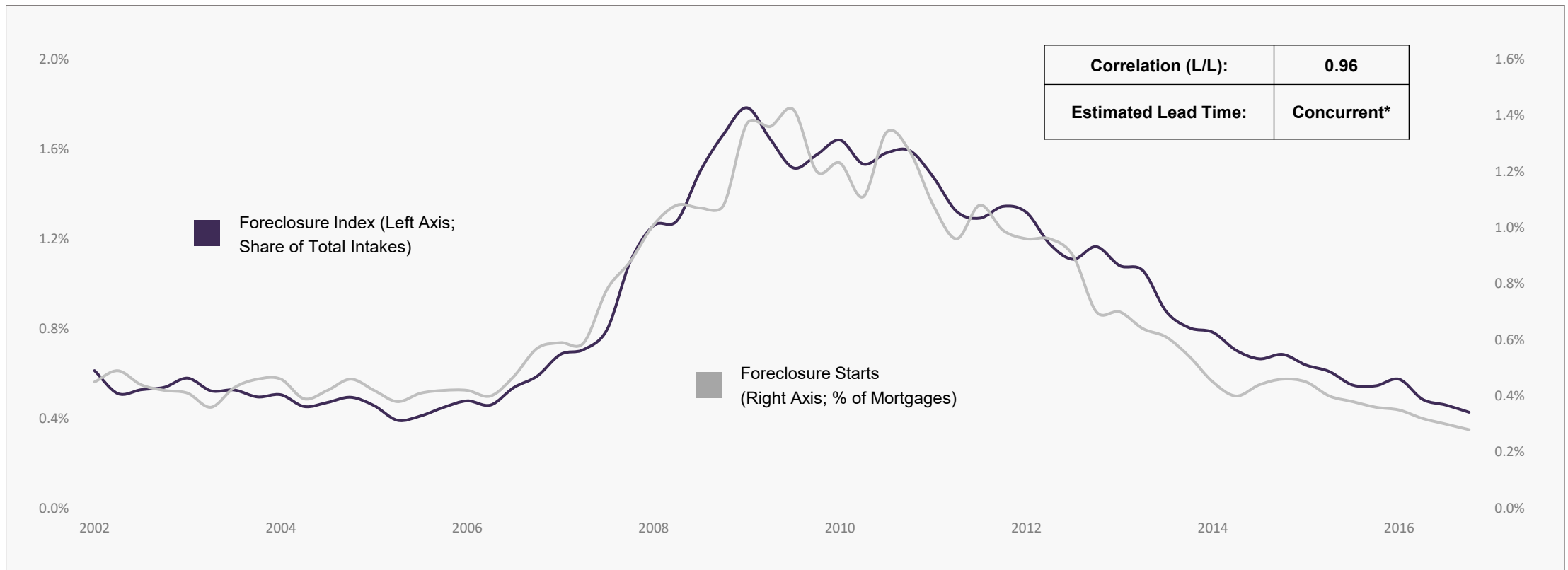
AOL: Bankruptcy

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™

