

# Consumer sentiment, politics and markets



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## Glossary

This report will use the Thomson Reuters / Ipsos codes in charts to indicate the question and demographic group being mapped. These are four-letter codes combining a two-letter code for the question followed by a two-letter code for the demographic group.

Series Code	Series Description	Survey Question
<b>FC</b>	Current Financial Situation	Rate your current financial situation, using a scale from 1 to 7, where 7 means your personal financial situation is very strong today and 1 means it is very weak.
<b>FF</b>	Future Financial Situation	Looking ahead six months from now, do you expect your personal financial situation to be much stronger, somewhat stronger, about the same, somewhat weaker, or much weaker than it is now?
<b>IF</b>	Investing In Future	Compared to 6 months ago, are you NOW more or less confident of your ability to invest in the future, including your ability to save money for your retirement or your children's education?
<b>JF</b>	Future Job Loss	Now look ahead at the next six months. How likely is it that you, someone in your family or someone else you know personally will lose their job in the next six months as a result...
<b>JL</b>	Job Loss	Thinking of the last 6 months, have you, someone in your family or someone else you know personally lost their job as a result of economic conditions?
<b>JS</b>	Job Security	Compared to 6 months ago, are you NOW more or less confident about job security for yourself, your family and other people you know personally?
<b>LC</b>	Current Local Economy	Rate the current state of the economy in your local area using a scale from 1 to 7, where 7 means a very strong economy today and 1 means a very weak economy.
<b>LF</b>	Future Local Economy	Looking ahead six months from now, do you expect the economy in your local area to be much stronger, somewhat stronger, about the same, somewhat weaker, or much weaker than it is now?
<b>OC</b>	Current Overall Economy	Now, thinking about our economic situation, how would you describe the current economic situation?
<b>PH</b>	Household Purchase	Compared to 6 months ago, are you NOW more or less comfortable making other household purchases?
<b>PM</b>	Major Purchase	Compared to 6 months ago, are you NOW more or less comfortable making a major purchase, like a home or car?
<b>PS</b>	Primary Consumer Sentiment Index	None

Demo Code	Demographic Slice	Demographic Description
<b>NULL</b>	None	ALL
<b>TO</b>	None	Total
<b>MA</b>	Gender	Male
<b>FE</b>	Gender	Female
<b>35</b>	Age	Under 35
<b>49</b>	Age	35-49
<b>64</b>	Age	50-64
<b>EP</b>	Employment	Employed
<b>UN</b>	Employment	Not Employed
<b>EL</b>	Education	Low
<b>EM</b>	Education	Medium
<b>EH</b>	Education	High
<b>MY</b>	Marital Status	Married
<b>MN</b>	Marital Status	Other
<b>IL</b>	Household Income	Low
<b>IM</b>	Household Income	Medium
<b>IH</b>	Household Income	High
<b>CY</b>	Chief Income Earner	Yes
<b>CN</b>	Chief Income Earner	No

## Consumer sentiment: What else can it do?

Consumer sentiment is a commonly used indicator in the financial and economics press. When a new month's data emerges, articles are quickly written using consumer sentiment as a peg for projections about how the market will perform in the near future.

Those articles are useful, and, indeed, we at Oxford Analytica write about consumer sentiment in many of our macroeconomic pieces. However, these articles do not always use consumer sentiment to its full potential, and may miss out on the full utility of this dataset.

Consumer sentiment is one of the richest and most frequent sources of population-wide attitudes. The Thomson Reuters / Ipsos consumer sentiment survey tracks sentiment across 22 countries, 17 demographic categories, and 12 questions on a monthly basis. That provides researchers with 53,856 data points every year, with seven years of historical data for all countries. This offers a tremendous potential for nuanced and in depth analysis.

This report will use Thomson Reuters / Ipsos data from 2010 to explore some of the biggest events and themes of major economies in the past few years. These are issues that have been covered extensively elsewhere, but have not yet been addressed using this unique dataset. In this report, we will look at:

- the populist 'surge' in the United Kingdom and France in 2016-2017;
- youth unemployment in Europe;
- the 2016 US presidential election;
- scandal and recession in Brazil; and
- an aging society in Japan.

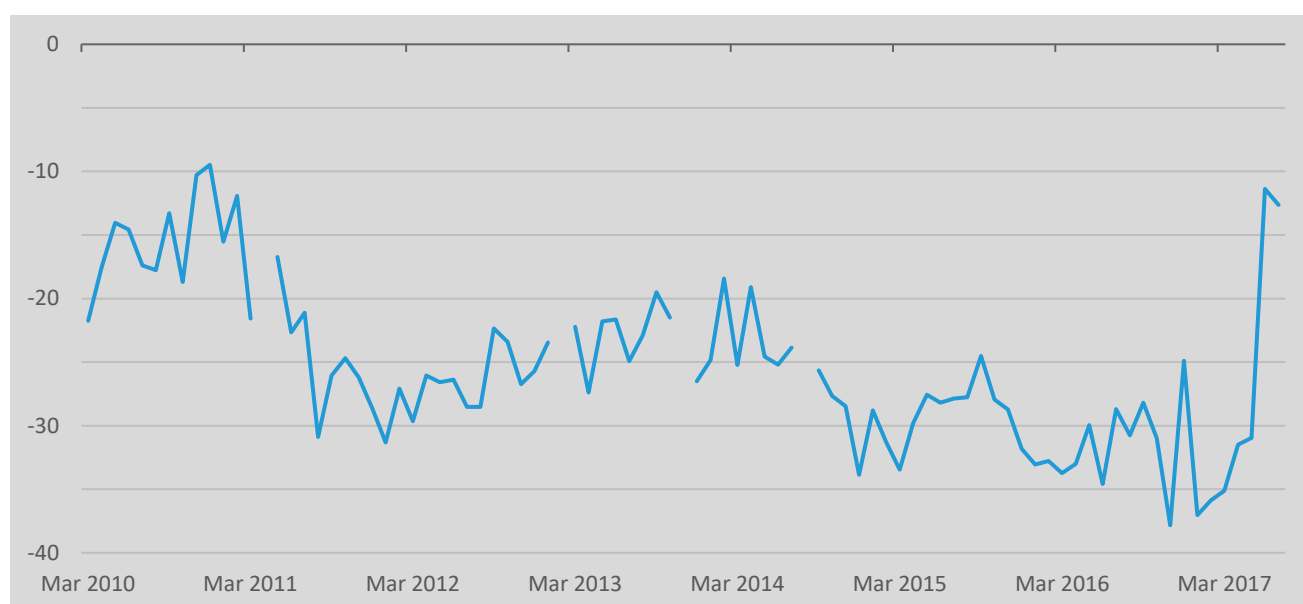
While this report will not be able to draw definitive conclusions about these topics -- each of which would require far more space to do so -- it will seek to highlight significant or interesting indications presented as an investigation about consumer sentiment. There is plenty of work that could be done with this data, from including it in predictive analytics to using the crosstabs in more media articles. This report seeks to start that research with explorations of five topics we believe will be of particular interest to the attendees of Global Horizons 2017.

## Research on consumer sentiment so far

Academics have for decades studied headline consumer sentiment to understand a population's view of politics. They have, for example, found that, in France, during cohabitation periods (when the president and prime minister are of different parties), only the prime minister's approval ratings -- not the president's -- was useful for predicting consumer sentiment.<sup>1</sup> They have also found that in the United States, consumer sentiment explained 70% of the variance in the popular vote for presidential elections, a better predictor than incumbent presidential approval.<sup>2</sup>

Further, it is clear from events that consumer sentiment can be extremely sensitive to political events. One example is in South Korea, where consumer sentiment jumped to its highest level in over six years and saw its biggest monthly move in the data set during the month of a presidential election.<sup>3</sup>

**Figure 1: South Korean total sentiment**



Yet to look simply at the time immediately surrounding a political event can be misleading.

In the United Kingdom, two of the largest drops in consumer sentiment in recent years were immediately after the 2016 Brexit referendum and when the 2017 General Election was called --

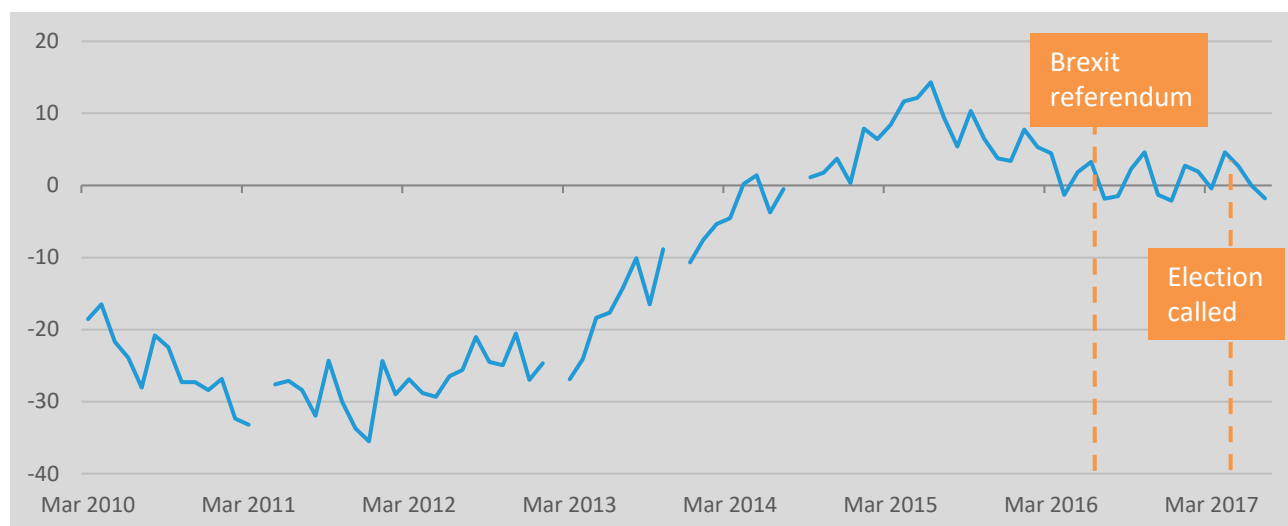
<sup>1</sup> Consumer sentiment and government confidence: Is there a stable causal relationship?. Véronique Flambard, Nicolas Vaillant.

<sup>2</sup> <https://ropercenter.cornell.edu/public-perspective/ppscan/41/41031.pdf>

<sup>3</sup> <http://www.reuters.com/article/us-southkorea-economy-sentiment/optimism-among-south-korean-consumers-hits-a-three-year-high-in-may-idUSKBN18L2SW>

both of which were unexpected and made the economic outlook more uncertain.<sup>4</sup> However, the data indicate that the drops in sentiment were not isolated or extreme, but fit within the pattern of usual monthly variance in UK sentiment. Below is the net UK consumer sentiment from 2010-2017 (optimistic minus pessimistic responses to survey questions).

**Figure 2: UK total sentiment**



In the case of Brexit, the more relevant data is how sentiment has stagnated in the United Kingdom since the referendum, perhaps indicating a population wary about the course of Brexit negotiations.

Therefore, existing research and widely publicised data lead to an important conclusion and a caveat.

Consumer sentiment certainly can be used to explore political attitudes, but must be analysed in the appropriate time span for the questions. Additionally, it is necessary to remember that headline sentiment scores can mask the more important shifts occurring within various questions and demographics. After an election, for example, the winning set of supporters might be more optimistic, but are equalled by the newfound pessimism of the losing group.

A researcher looking only at the headline sentiment index would see no change. But one examining the demographic categories and the questions would pick up more information about the underlying trends in the economy.

For this, the Thomson Reuters / Ipsos data is particularly crucial.

<sup>4</sup> Prediction markets held a 75% chance of a Remain victory in the Brexit referendum and Theresa May had repeatedly denied plans for calling an election before 2020.

## Sentiment and markets: Did consumers predict populism?

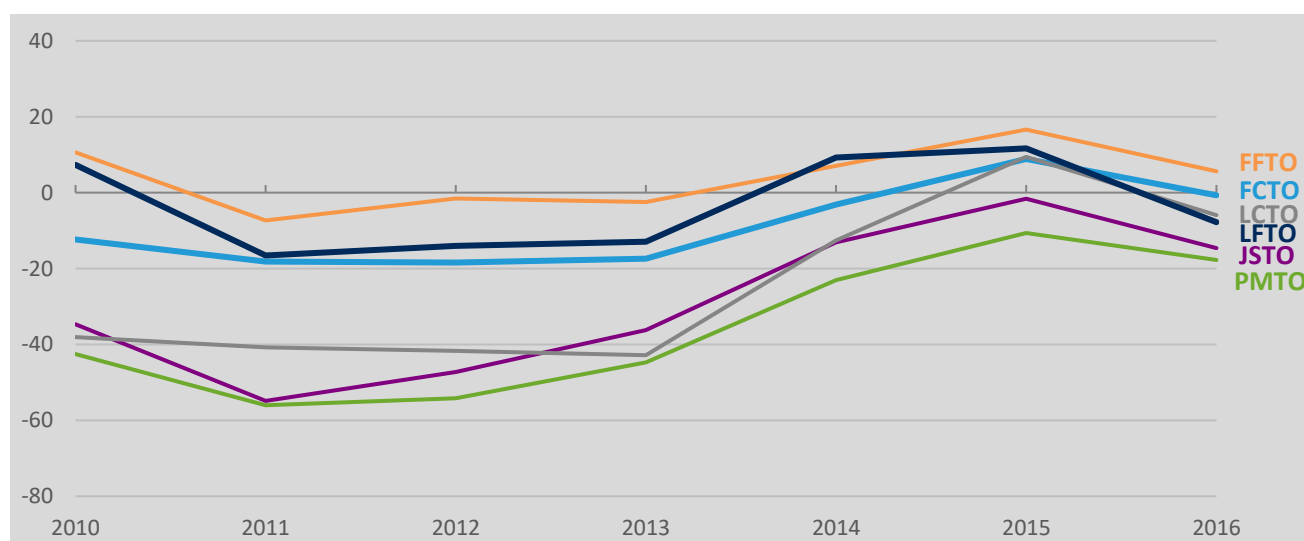
France and the United Kingdom each saw elections in the past two years that took political observers by surprise and were said to be evidence of a 'populist' surge in Europe. Since these elections allegedly revealed broad discontent among society that went missed by most experts, consumer sentiment may be the place to look for evidence of the bubbling discontent.

For each event, we report sentiment for the three-month average leading up to the event, plus the same three months in previous years, to account for seasonal variation. We do this for a selection of indicators available in the Thomson Reuters / Ipsos sentiment suite, for selected demographic subsets. These are matched to financial market data and purchasing managers index (PMI) data. We also report a global developed market (DM) and emerging market (EM) number.

We mainly examine Current Financial Situation, Future Financial Situation, Job Security, Current Local Economy, Future Local Economy, and Major Purchases. For each of these, we report on the Overall indicator and on the demographic groups Employed, Lower Education, Higher Education, Chief Income Earners.<sup>5</sup> We also report Under-35 age group (male and female) and 50-64 age group (male and female).

### United Kingdom before Brexit

Figure 3: UK sentiment indices, March-May average



Source: Thomson Reuters / Ipsos, Oxford Analytica

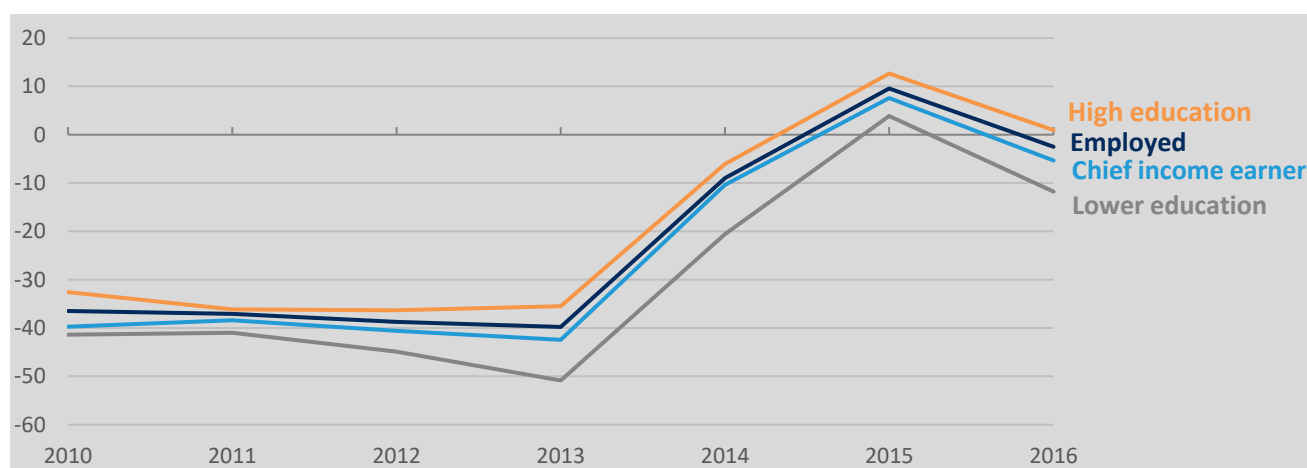
<sup>5</sup> Our selection of components and demographic groups drew on existing research using the Thomson Reuters / Ipsos data. This included "Beyond Headline Unemployment" (Lipper Alpha Insight Research Team, January 17, 2016) and "Country Rotation with Thomson Reuters / Ipsos Primary Consumer Sentiment Index" (Thomson Reuters Starmine Research, August 2015). The components 'Job Loss Last 6 Months' and 'Future Job Loss' were examined but did not yield valuable insights.



Notes: Balance of sentiment (% optimistic minus % pessimistic). FC=Current financial situation, FF=Future financial situation, JS=Job security, LC=Current local economic situation, LF=Future local economic situation, PM=Major purchases. ("TO" refers to demographic: Total)

The first noteworthy piece of data about the United Kingdom pre-Brexit referendum is the sharp downturn in six of the sentiment indicators in the three months prior to Brexit, versus those same three months in 2015. This downturn was true of every demographic subset we examined and a sharp contrast to previous years of the economic recovery.

**Figure 4: UK demographic variation, March-May average**



Source: Thomson Reuters / Ipsos, Oxford Analytica.

## Populism and the market

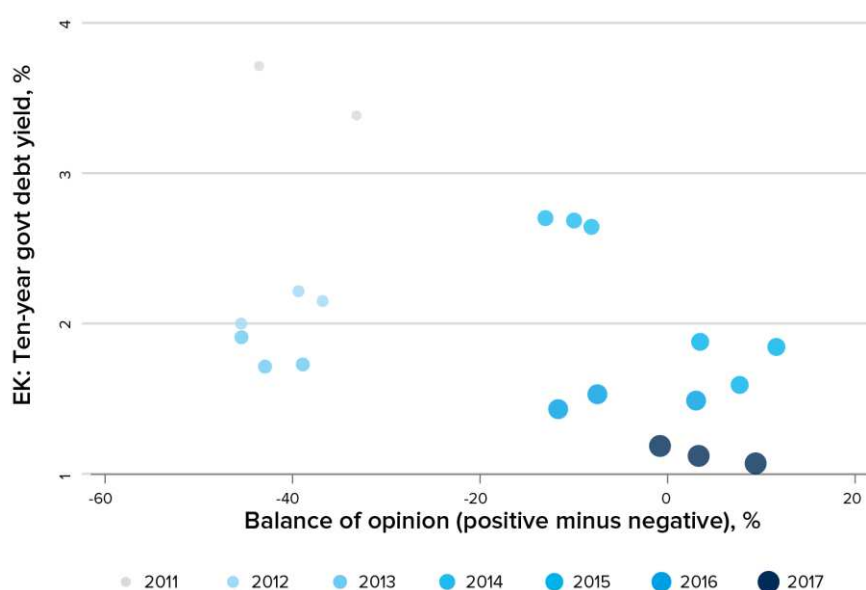
The figures below report the three months prior to Brexit (i.e. March, April, May) in 2016 and the same three months for preceding years, compared to financial market indicators.

In the first, we see that consumer sentiment is loosely correlated with the yield on government debt, although there was no linear progression from 2011-2017. The second figure below shows that the main stock market index improved every year, with the notable exception of the three months on the eve of Brexit. The balance of opinion on local economic conditions also turned negative that year, having posted consistent increases previously. The exchange rate was weaker in 2016 on the eve of Brexit along with sentiment, but otherwise the two show no relationship. The sharp decrease in the exchange rate a year later (2017) is one reason for the exuberant stock index readings for 2017.

One important factor is that the fall in the stock market in 2016 could have been itself Brexit related, as markets were moving to price in Brexit risk and saw sudden selloffs whenever news broke that implied the risk of Brexit was growing. In this, we see that market worries about Brexit were correlated with a downturn in consumer sentiment. While this does not imply a particular direction of causation, it does imply that populist moments perhaps can build their own momentum, as both markets and consumers are concerned by uncertain conditions.

Moving forward, consumer sentiment is likely to become a crucial indicator of spending patterns. We see that the stock market and consumer sentiment became roughly decoupled in 2017; as the pound depreciated, the internationally-oriented FTSE 100 found their values rise, while consumers kept the economy churning through drawing down savings. Since this is likely to have a natural end point – and may have already happened given the low GDP per capita growth in the first half of 2017 – consumer sentiment in current and future financial situations will be one of the most important indicators of how the main economic drivers of the UK economy views the uncertainty surrounding the impending Brexit date.

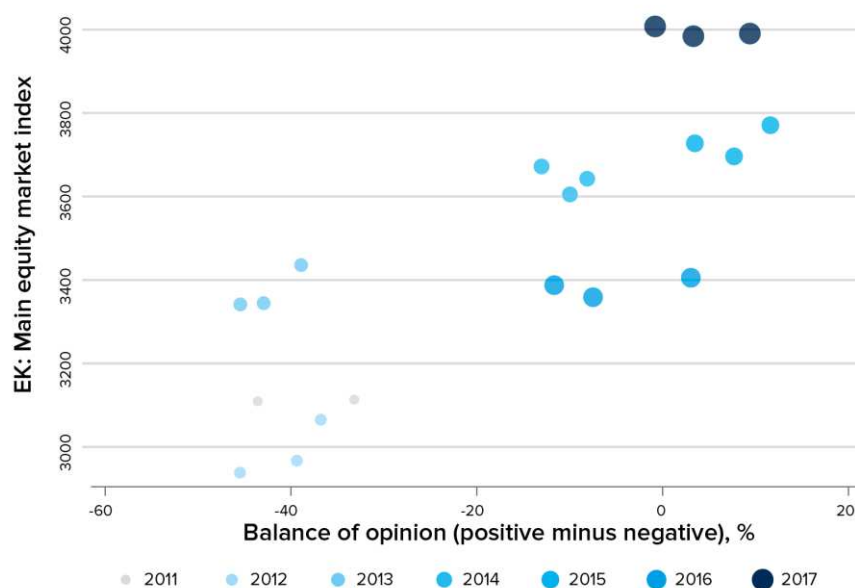
**Figure 5: UK sovereign yield, March-May of 2011-2017 (%)**



Source: Thomson Reuters / Ipsos, Oxford Analytica

Note: UK chief income earners' sentiment regarding current local economy

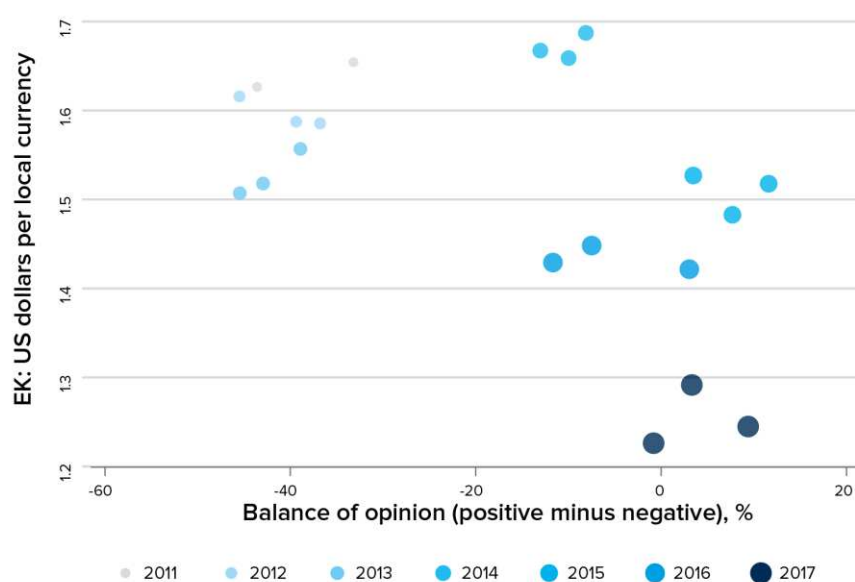
Figure 6: UK stock market



Source: Thomson Reuters / Ipsos, Oxford Analytica

Note: UK chief income earners' sentiment regarding current local economy

Figure 7: UK exchange rate



Source: Thomson Reuters / Ipsos, Oxford Analytica

Note: UK chief income earners' sentiment regarding current local economy

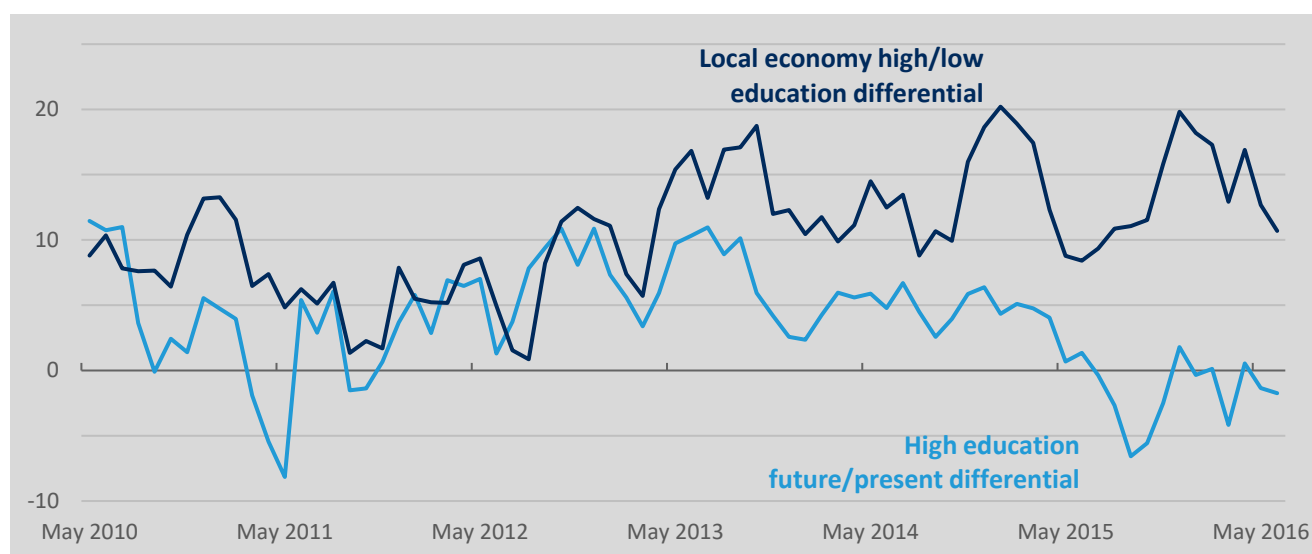
## How were groups affected by Brexit?

Digging into the demographic groupings in the sentiment data, we find that employed respondents' expectations of their future financial situation lowered in the lead-up to the Brexit vote. While the highly educated had tended to be slightly more optimistic about their future finances than present, that dropped to slightly less optimistic for the future just before Brexit.

Further, those with low education saw their optimism about their local economies grow in the lead up to the Brexit vote while those with high education grew more worried about their local economies, suggesting that the Brexit campaign instilled fear in those more likely to have knowledge-based jobs, and gave hope to those who may have felt left behind by the global economy.

The demographic data in the consumer sentiment set shows what many media commentators were observing around the time of the referendum. This could be useful data for the next UK general election, especially if the demographic data are mapped to areas of the country with marginal seats.

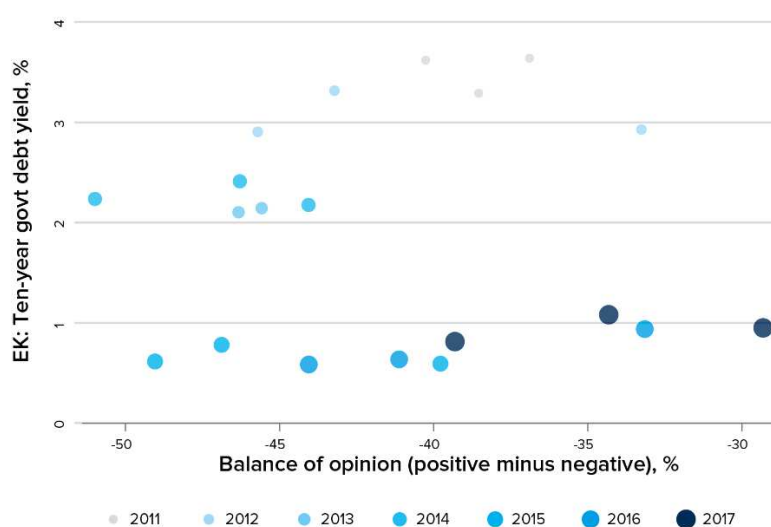
**Figure 8: UK sentiment questions showing a movement before Brexit**



## France before Le Pen

In France, consumer sentiment before the election was not closely correlated to stock market fundamentals or the strength of the euro, although there was some correlation with the French sovereign yield. In fact, Bank of America-Merrill Lynch has found that France has had a “confidence excess” from 2015-2017, i.e., sentiment indices have been more positive than economic fundamentals or consumer spending patterns would suggest.

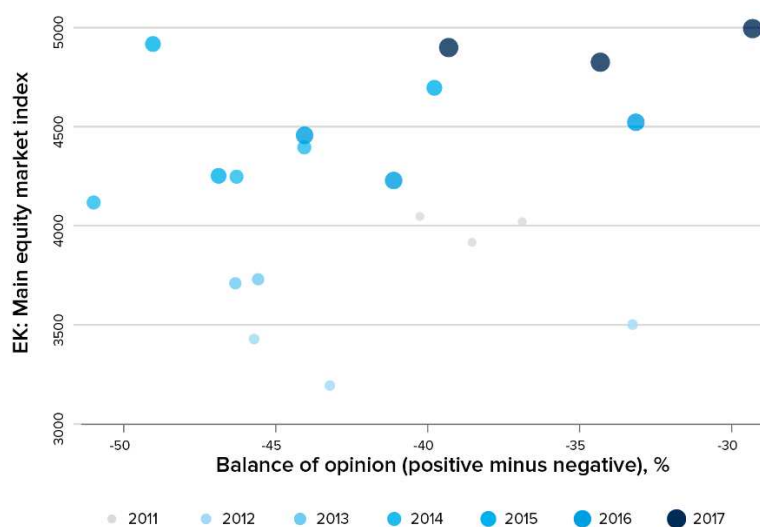
**Figure 9: France sovereign yield (%)**



Source: Thomson Reuters / Ipsos, Oxford Analytica

Note: French chief income earners' sentiment regarding current local economy

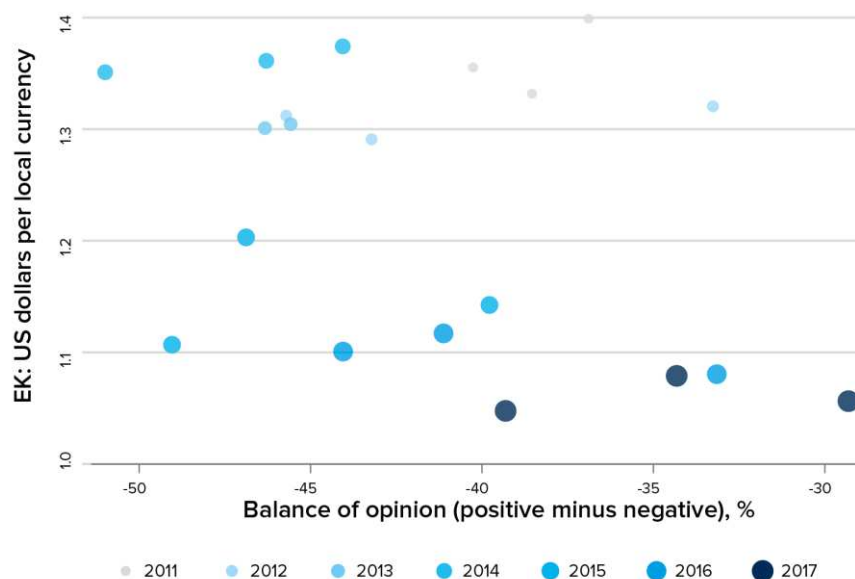
**Figure 10: France stock market**



Source: Thomson Reuters / Ipsos, Oxford Analytica

Note: French chief income earners' sentiment regarding current local economy

Figure 11: Euro



Source: Thomson Reuters / Ipsos, Oxford Analytica

Note: French chief income earners' sentiment regarding current local economy

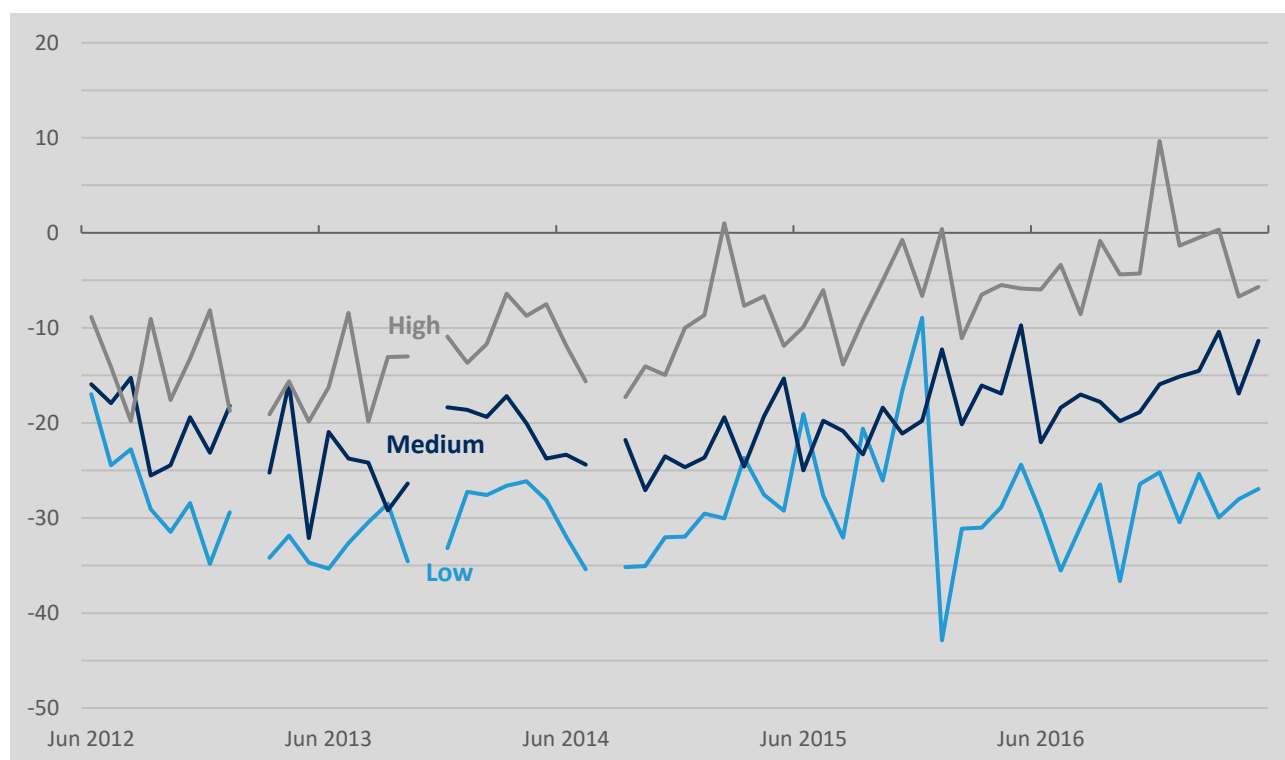
In terms of politics, France in this time period was anomalous across the developed world for the unpopularity of its president. Aside from brief periods after the Charlie Hebdo and Bataclan terrorist attacks at the beginning and end of 2015, President Francois Hollande's approval rating hovered between 20% and 30% from 2013 to 2016, dropping to 4% approval in December 2017.

These incidents did not seem to affect public sentiment, which continued to improve across most groups through 2017. Most notably, 2017 saw improvements in sentiment about job security, ability to make major purchases, and strength of local community. A general increase in sentiment regarding current and future financial situation was slight but not insignificant in 2017. Therefore, it appears that the difference between the United Kingdom and France in the run up to their two purported populist votes was stark.

While in the United Kingdom, the Brexit vote happened after a drop in consumer sentiment (and the campaign itself may have contributed to that drop), in France consumer sentiment continued to rise gradually, despite an unpopular president and a shake up of the party system -- as it had throughout Hollande's unpopular presidency.

With French President Emmanuel Macron seeing his approval ratings drop as he moves to implement his reform plans, it seems that observers should be wary of assuming that consumers will be affected by their views of the president. Although Hollande may have been an exception in the levels of his unpopularity, it does appear that, in France at least, political approval has become slightly decoupled from consumer sentiment. Whether this is due to France's position within the euro (and therefore its politicians have less economic impact than in the United Kingdom) would require further research. However, it is a telling indicator that the economic patterns of consumers in France have changed since the previous research on France and consumer sentiment.

**Figure 12: French sentiment during Hollande presidency**



## Youth unemployment in Europe

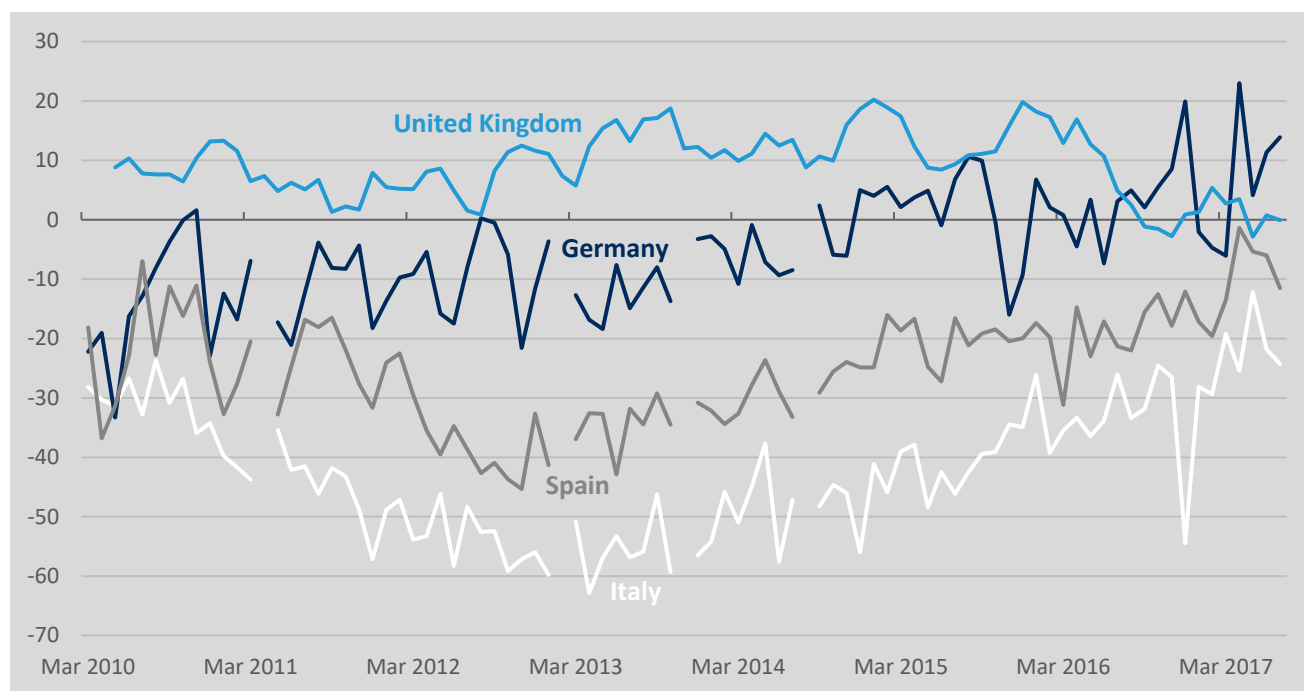
While sentiment often tracks the broader economy, the relationship is not perfect within demographic groups. That variance can be revealing for political attitudes.

Youth unemployment has been one of the largest problems in Europe since 2008. There is the risk of many European countries seeing a 'lost generation' of citizens who have been shut out of the workforce for a decade, and who will never recover the spending power they would have been projected to have in 2007. With this generation comprising an ever-larger percentage of the consumer base, this could lead to a generation with different spending patterns for life: perhaps more frugal and more pessimistic due to the unemployment and underemployment they faced at the start of their working lives.

Yet when comparing the data across countries, the relative rankings of countries does not seem to fit the economic fundamentals. It makes sense that Germany (6.7% youth unemployment in May 2017) and the United Kingdom (12.3%) would see generally higher sentiment among those under 35 years old than Italy (37.0%) and Spain (38.6%). Yet it does seem remarkable that Spain and Italy have moved towards convergence with the United Kingdom and Germany since 2013, despite remaining so different in their respective employment environments.

One possible explanation for this movement is that the under-35 demographic varies significantly in its composition. While it begins asking consumers at the age of 16, many are not in the workforce until the age of 22 -- and perhaps later if graduate education is pursued. Further, the under-35 cohort by 2017 was comprised mostly of people who entered the workforce during the recession. In Spain, the youth unemployment rate rose from 20% in 2008 to 56% in 2013. When that is one's first experience with being in the economy, a drop to below 40% youth unemployment -- while aging into potential job openings -- may seem much like a very positive movement. This level of optimism may explain why Spanish sentiment is so close to German sentiment, even though in Germany youth unemployment never rose beyond 12%.

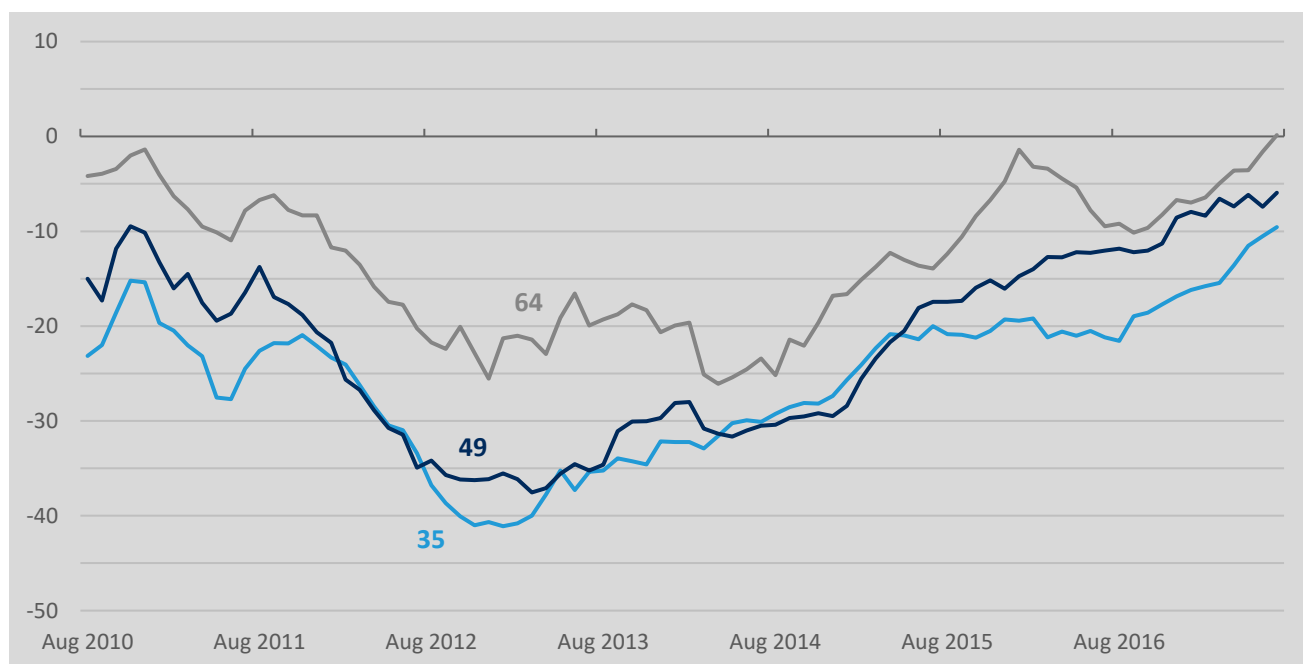


**Figure 13: Sentiment under 35 in Europe**

### Youth resilience

This may suggest that consumer sentiment, especially among younger workers who have less experience of the range of economic environments possible, is particularly based on the overall direction of the economy, especially uncertainty about the future, rather than overall level of prosperity. This may explain the sharp drop among younger voters in Italy in November 2016, when the country was debating a referendum that would have drastically reshaped the country's political system, and then the rebound in confidence when that referendum failed. This would indicate that younger generations' spending patterns are more likely to bounce back as employment rises, with their optimism about the future driven by the momentum of a growing economy.

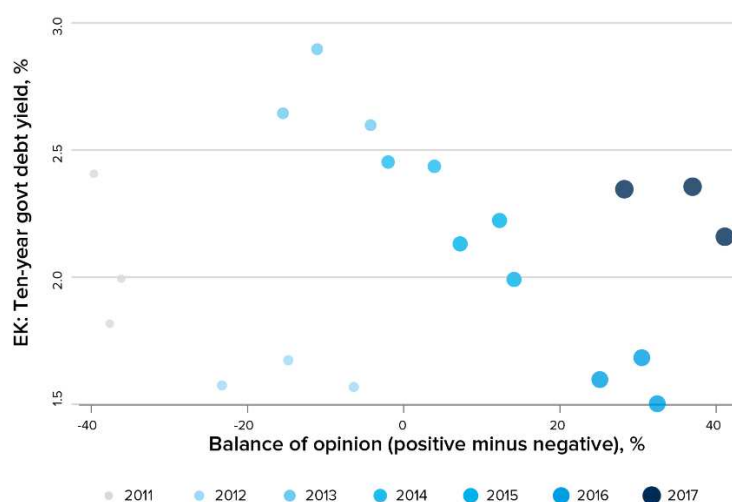
However, the seeds exist of generational conflict that may define the next round of political divides in the developed world. In Spain, the sentiment of 16-34 year olds and 35-49 year olds were closely correlated throughout the earlier parts of the recession, and were significantly different in their outlook from those 50 years old and older. The 35-49 cohort has since 2015 moved closer to the 50-64 cohort. Since older citizens vote in higher percentages than those younger, this could lead to a situation in which the dissatisfied youth are not represented by a political class elected by the more optimistic older generations. Political observers could use this data to track the propensity for countries to devolve into difficult disagreements on policies that decide how wealth is allocated between age groups.

**Figure 14: Sentiment in Spain by age cohort**

## United States: Were there warnings of Trump?

The US economy has in recent years been leading OECD economies' economic recovery.<sup>6</sup> US stock markets have continued their long bull run that has followed the 2007-08 financial crisis. Headline consumer sentiment data roughly correlates with the stock market and the strength of the US dollar. In that sense, the broad trajectory of consumer sentiment since the election of Donald Trump is unsurprising.

**Figure 15: US sovereign yield (%)**

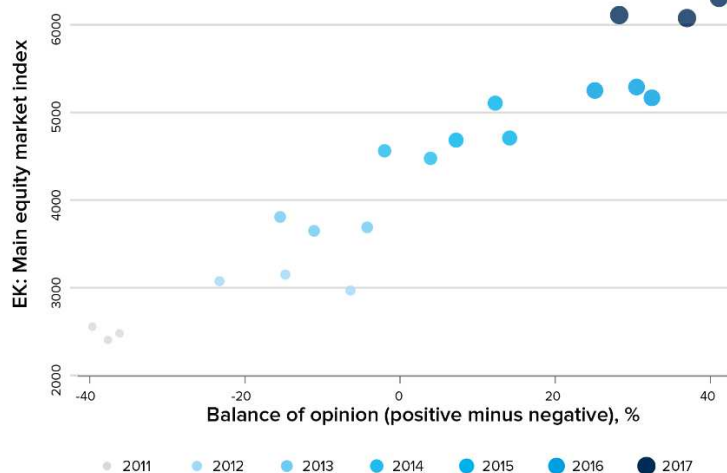


Source: Thomson Reuters / Ipsos, Oxford Analytica

Note: USA chief income earners' sentiment regarding current local economy

<sup>6</sup> Thomson Reuters / Ipsos has data on the United States dating back to 2003. We have placed focus on the time period

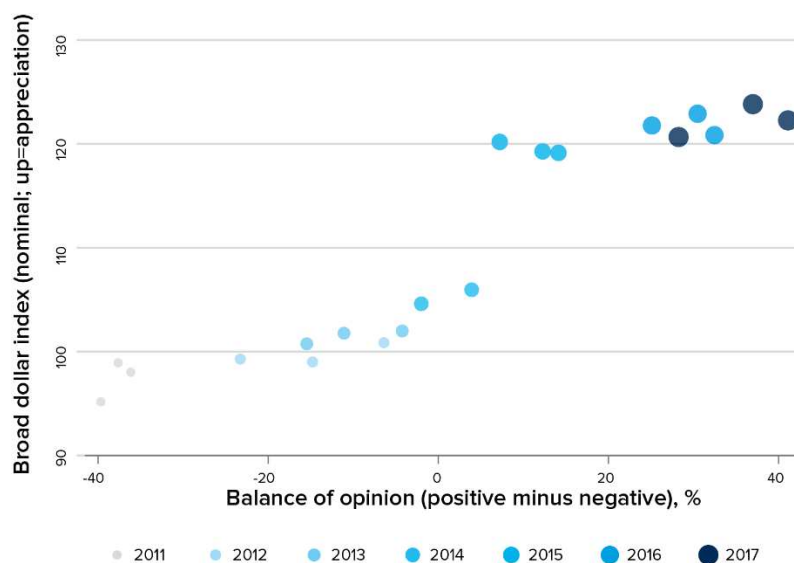
Figure 16: US stock market



Source: Thomson Reuters / Ipsos, Oxford Analytica

Note: USA chief income earners' sentiment regarding current local economy

Figure 17: US dollar



Source: Federal Reserve, Thomson Reuters / Ipsos, Oxford Analytica

Note: USA chief income earners' sentiment regarding current local economy

Within the United States over this time period, there was considerable variance in which demographic groups, and which questions, were the best at predicting economic activity. Overall, high education, low income, and fears about job loss were the most closely correlated with future returns. This would make sense, as those two demographic groups are powerful segments of the consumer base: high education may be more discriminating about purchases and low income consume a greater percentage of their income. Meanwhile, job loss, especially in the years following a devastating recession, is a spectre that would hang over any major spending decision.

### US Change Signal Correlation to Future 6 Month Country Returns

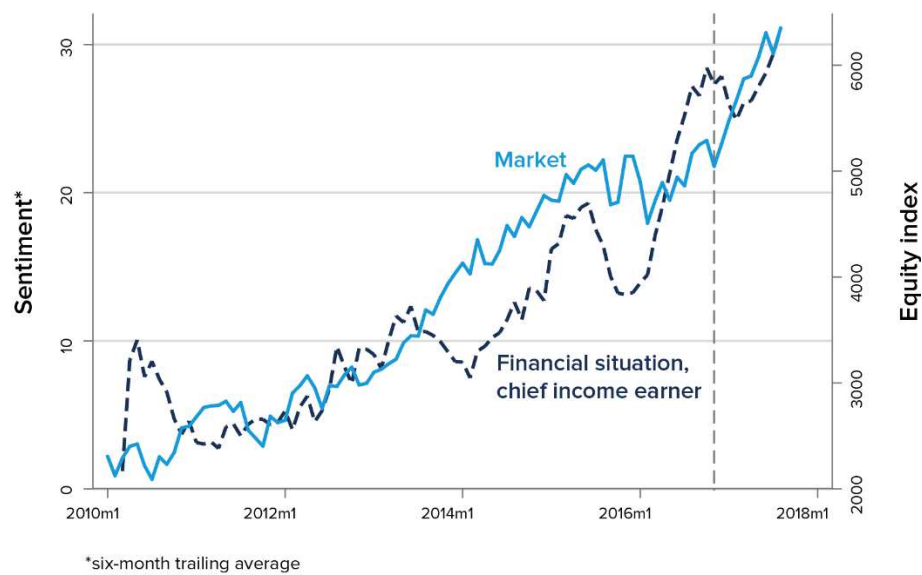
	MA	FE	35	49	64	EP	UN	EL	EM	EH	MY	MN	IL	IM	IH	CY	CN	TO
FC	0.03	-0.06	-0.03	-0.01	0.02	0.00	-0.05	0.04	-0.07	-0.04	-0.09	0.03	0.05	0.07	-0.06	0.08	-0.11	-0.02
FF	-0.09	0.03	-0.04	-0.09	0.02	-0.03	-0.09	-0.15	0.01	0.07	-0.05	-0.03	-0.01	0.01	-0.07	-0.04	-0.05	-0.05
IF	-0.08	0.02	-0.06	-0.06	-0.02	-0.04	-0.09	-0.07	-0.08	0.03	0.05	-0.13	-0.03	0.04	-0.07	-0.02	-0.08	-0.07
JF	-0.02	0.03	-0.03	0.06	-0.03	0.03	-0.03	0.00	-0.04	0.04	0.04	-0.05	0.01	-0.09	0.03	-0.02	0.02	0.01
JL	0.08	0.06	0.08	0.06	0.04	0.11	0.05	0.08	0.01	0.08	0.08	0.06	0.06	0.06	0.06	0.10	0.05	0.09
JS	-0.11	-0.03	-0.10	-0.05	-0.07	-0.11	-0.09	-0.08	-0.13	-0.01	-0.06	-0.13	-0.03	-0.02	-0.11	-0.08	-0.08	-0.11
LC	-0.08	-0.03	-0.14	-0.05	0.06	-0.05	-0.10	-0.10	-0.01	-0.03	-0.07	-0.05	-0.02	-0.08	-0.04	-0.05	-0.09	-0.08
LF	-0.04	0.00	-0.07	-0.05	0.05	-0.02	-0.04	-0.05	-0.01	0.03	-0.04	0.01	0.06	-0.01	-0.05	0.01	-0.07	-0.03
OC	0.04	-0.02	-0.01	0.00	0.05	0.01	0.00	-0.01	0.09	0.00	0.00	0.03	0.09	0.03	-0.04	0.03	0.00	0.02
PH	-0.09	0.02	-0.01	-0.03	-0.08	-0.08	-0.02	-0.10	-0.01	0.05	-0.06	-0.02	-0.02	0.03	-0.11	-0.08	0.00	-0.06
PM	-0.10	0.03	-0.02	-0.01	-0.10	-0.06	-0.08	-0.10	-0.04	0.04	-0.09	0.00	-0.03	0.03	-0.11	-0.06	-0.02	-0.07
PS	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	-0.05
Demo Avg	-0.04	0.00	-0.04	-0.02	-0.01	-0.02	-0.05	-0.05	-0.02	0.02	-0.03	-0.03	0.01	0.01	-0.05	-0.01	-0.04	-0.03

### Polarized society and the consumer base

However, when digging into the data, we see that the broad trends conceal drastic fluctuations. For example, chief income earners' sentiment dropped sharply after the election of Donald Trump, having risen quickly throughout 2016; the unemployed opinion about investing in the future is the opposite -- dragged down throughout the election and then bouncing back after the election. While further research would be required to study exactly the reasons why this happened, some likely causes are possible to deduce.

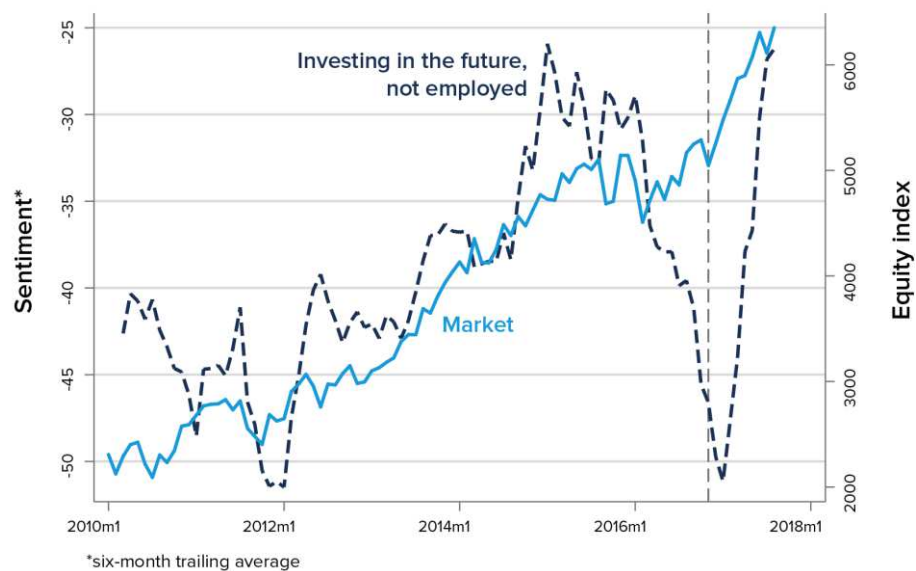
Chief income earners will skew to a younger and more Democratic-leaning demographic, as unmarried younger people are their own heads of households (before some of them become secondary earners after marriage). A year of seeing Hillary Clinton leading in the polls may have driven confidence higher before a drop on November 9. For the unemployed, who may skew Republican, they heard their party's nominee speak for a year about how the country was crumbling and needed to be made great again. That, and Trump's poor polling, seems to have dropped their willingness to invest in their future.

Figure 18: US chief income earners drop after election



Source: Thomson Reuters / Ipsos, Oxford Analytica

Figure 19: US unemployed depressed during election campaign



Source: Thomson Reuters / Ipsos, Oxford Analytica

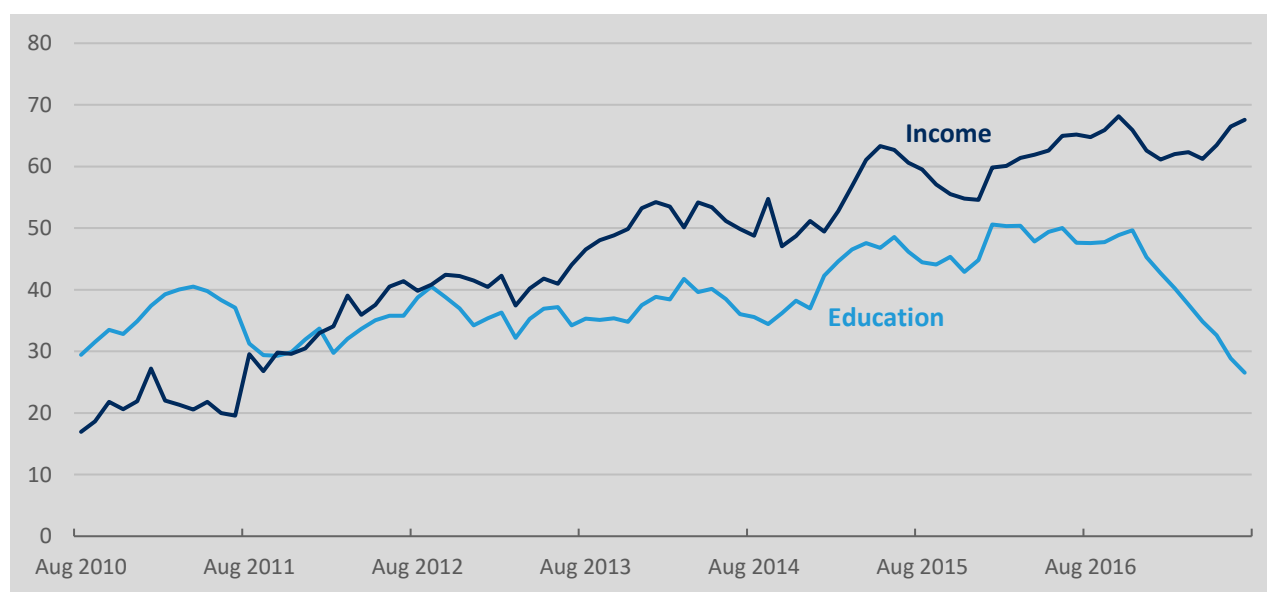
There are two particularly important indicators in consumer sentiment data about the state of US politics.

In Figure 20, we see the difference in sentiment on major purchases for the high and low income, and high and low education. This question was chosen because it focuses the respondents' attention of a personal attitude, and so should not be influenced as much by media coverage or partisan-driven opinions about the national economy. It also asks the respondents to consider the direction of the economy, by asking them to compare their current state to six months ago.

As can be seen from Figure 20, those with more education and higher income grew progressively more optimistic from 2010 onwards. Education moved more slowly, and the highly educated went from 30 points more optimistic than those with low levels of education in 2010 to 50 points more optimistic in 2016. High income earners rose steadily as the country exited the recession, and by the time of the 2016 election were 75 points more optimistic than low income earners. This fits with the perception that the rich have benefited most from the economic recovery, and also shows that while education is correlated with income, it is not nearly a perfect correlation. While this does not predict the idea of a populist surge, it does perhaps show the economic foundation for the willingness of a large section of the electorate to vote for an outsider who specialty lay in attacking establishment politicians and attacking norms.

However, the net differential narrowed dramatically in November 2016 and has tightened dramatically for education since the 2016 election began in earnest, and continued to grow for the high-income. This fits with research showing that the average Clinton voter had higher levels of education, while the average Trump voter had a higher income.<sup>7</sup>

**Figure 20: Education and income sentiment differences in the United States**



<sup>7</sup> [https://www.washingtonpost.com/news/monkey-cage/wp/2017/06/05/its-time-to-bust-the-myth-most-trump-voters-were-not-working-class/?utm\\_term=.07fc98122f09](https://www.washingtonpost.com/news/monkey-cage/wp/2017/06/05/its-time-to-bust-the-myth-most-trump-voters-were-not-working-class/?utm_term=.07fc98122f09);  
<http://fivethirtyeight.com/features/education-not-income-predicted-who-would-vote-for-trump/>

## Brazil: Upheaval and recession

The Brazilian economy is gradually emerging from its deepest and longest recession in decades, but the country remains mired in political scandal. Corruption investigations centring on some of the country's largest corporate players, including Petrobras, Odebrecht and JBS, have engulfed dozens of the country's leading politicians and President Michel Temer's position is tenuous.

### Consumer reaction to scandals

Trends in Brazilian consumer sentiment have largely reflected political turmoil in recent years, especially on questions of job security and financial situations.

Following the re-election of president Dilma Rousseff in October 2014, consumer assessment of present and future financial situations started to worsen significantly. They stabilised at a low point in early 2016, when it was becoming increasingly clear that the president could be impeached by Congress. The fact that mass demonstrations were held to demand her ousting since the early days of her second term may have increased overall perception of poor governance in the eyes of consumers, undermining their confidence.

It is not possible to determine a clear causal relationship between the political crisis and worsening consumer sentiment, because from the first quarter of 2015 to the last quarter of 2016, the country suffered a deep recession. Given that consumers were forced to deleverage amid high and rising unemployment for a prolonged period, poor sentiment is not surprising. The political crisis clearly created difficulties to reach compromises in Brasilia and implement crisis-fighting measures. However, the very sources of the recession, including a fiscal crisis and excessive credit-fuelled consumption, mean a quick recovery both in GDP and consumer sentiment were unlikely.

Nonetheless, it is interesting to note how a drop in job security sentiment coincided with the announcement of Operation Car Wash -- the corruption investigation -- and preceded the beginning of the recession. Job security declined in early 2015 even as the Brazilian stock market was rising.

### Demographic effects

Consumer sentiment recorded similar overall trends for all age groups since the beginning of the series of political crises the country has faced in recent years -- though with more volatility for the 50-64 year old group in the sample. Younger Brazilians do not seem to have reacted differently from their older countrymen to the economic difficulties despite the fact that, for many of them, the recession was their first adult experience with a serious crisis after growing up in an increasingly prosperous country.

This would be counterintuitive, and perhaps points to a younger age cohort whose worse job prospects at the moment were balanced by an expectation that they would eventually find work. However, it could be explained by the expectation that Brazil, as a developing country, would recover before they advanced too far in their career. This would correspond to the far higher sentiment of future financial situation than current financial situation according to the Thomson Reuters / Ipsos data.

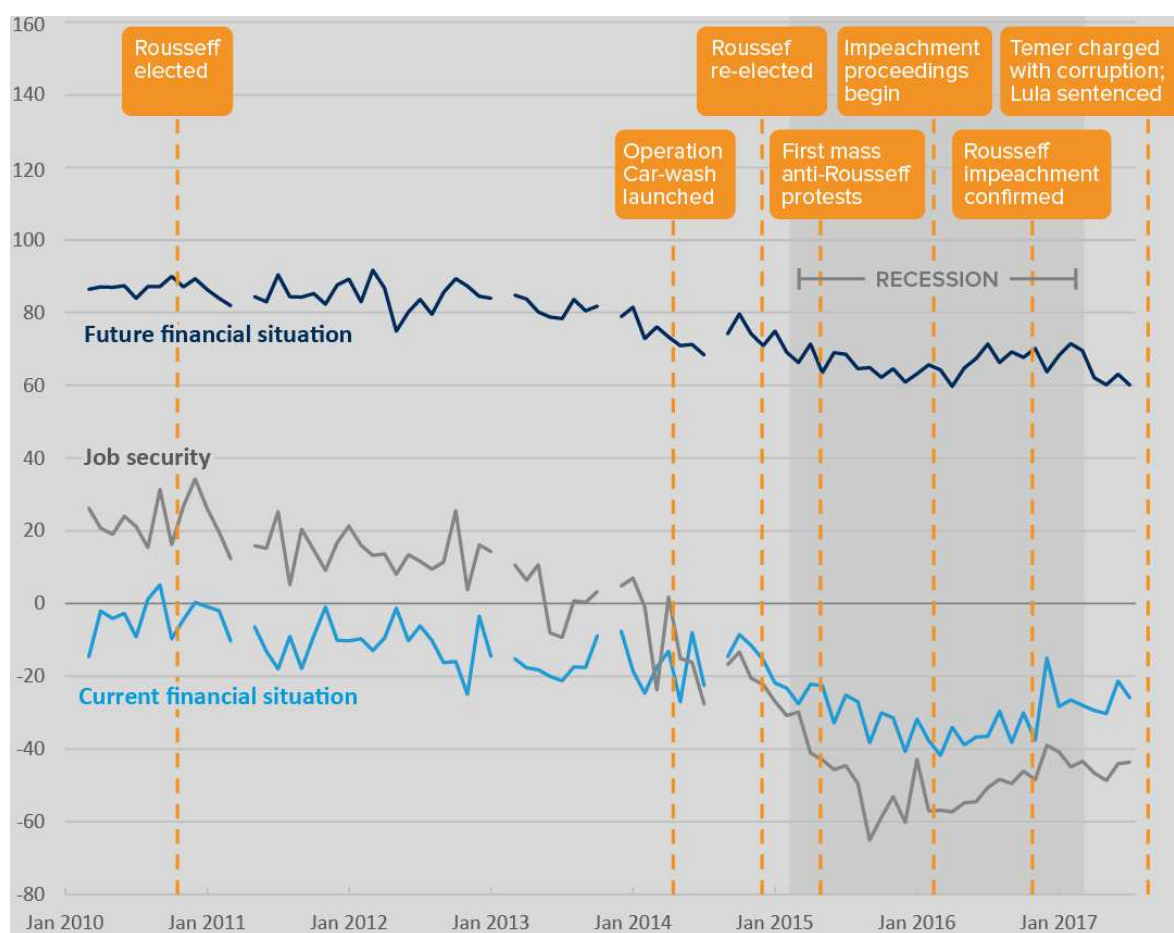


## Politics against economics?

Recent economic improvements, although modest, have led a number of commentators and policymakers to assert that the economy has finally decoupled from politics. While the economic cycle does seem to have finally turned, this is a dangerous assumption. Facing corruption accusations, President Michel Temer has recently lost support in Congress; there are increasing doubts over his ability to ensure the passing of the controversial pensions reform that the government sees as key to improving Brazil's dire fiscal situation.

The political crisis is far from solved, and the recovery still seems incipient and fragile -- as do recent gains in consumer sentiment, which could evaporate in a scenario in which unemployment fails to keep a downward trend in the coming months.

**Figure 21: Brazil sentiment from Dilma's election with relevant events highlighted**



## Japan: Lessons from an ageing society?

Japan's population peaked in 2008 at just over 128 million people, and has been falling since. Long-term projections suggest that it will fall further, to 117 million by 2030, and further still after that. In Japan, consumption is the largest component of GDP, accounting for 60% of economic output. As the population drops and the working age population shifts towards greater savings to support itself in retirement, we would expect consumption to drop. However, sentiment may show that a shrinking population does not follow these trends on a country-wide basis.

### Forecasting consumption

We have used consumer sentiment to predict future consumption using Thomson Reuters / Ipsos data. Principal components analysis summarized the 187 variables (11 questions and 17 demographics) into four main new variables that are independent of each other, but that capture most (80%) of the information in the original data set. Then, we estimated changes in the relationship over time to test whether the demographic drivers of consumption may be changing.

The prediction equation used summary responses to five of the main questions: future financial situation, recent job loss, current local economy, future local economy, and major purchase sentiments. Figure 22 shows the official monthly consumption index and our forecast. The projections follow both the trend and shape of the official figures, although they differ by several tenths of a percent month by month.

Forecasts made with principal components were quite similar to those using the main survey questions. The variables most closely associated with the principal components predicting household consumption were job security, job loss, and future purchase plans. The year-ahead forecast is also shown in the figure. Again, the projected consumption pattern is quite close to the actual, showing that, to date, sentiment is an accurate predictor of consumption and that aging has not skewed headline sentiment from its usual indicator levels.

### Projecting aging patterns

With the aging of Japan, household consumption patterns may shift. In the past, Japan was notorious as a high-saving nation. Although those past savings rates subsequently tumbled, the question now is whether older cohorts will maintain earlier habits or, instead, draw down their savings built up over previous decades in order to support current consumption. To answer this question, we used the responses to the current financial conditions question, broken down by the three age demographics: under 35, 35-49, and 50-64. In addition, to test possible changes over time, we calculated new variables that multiplied the age cohort responses by a time variable. In that way, it is possible to see if the coefficients are shifting over time.

The younger cohort under 35 did not show major influence on household consumption; this group includes many workers with unstable job conditions and lower pay. Mid-career respondents had the largest current impact on consumption, but their influence declines over time. Older group see their consumption fall on a per-year basis, but that is changing. Projecting forward five years, by 2022, the older group will have the same effect on consumption as the mid-career cohort has today.

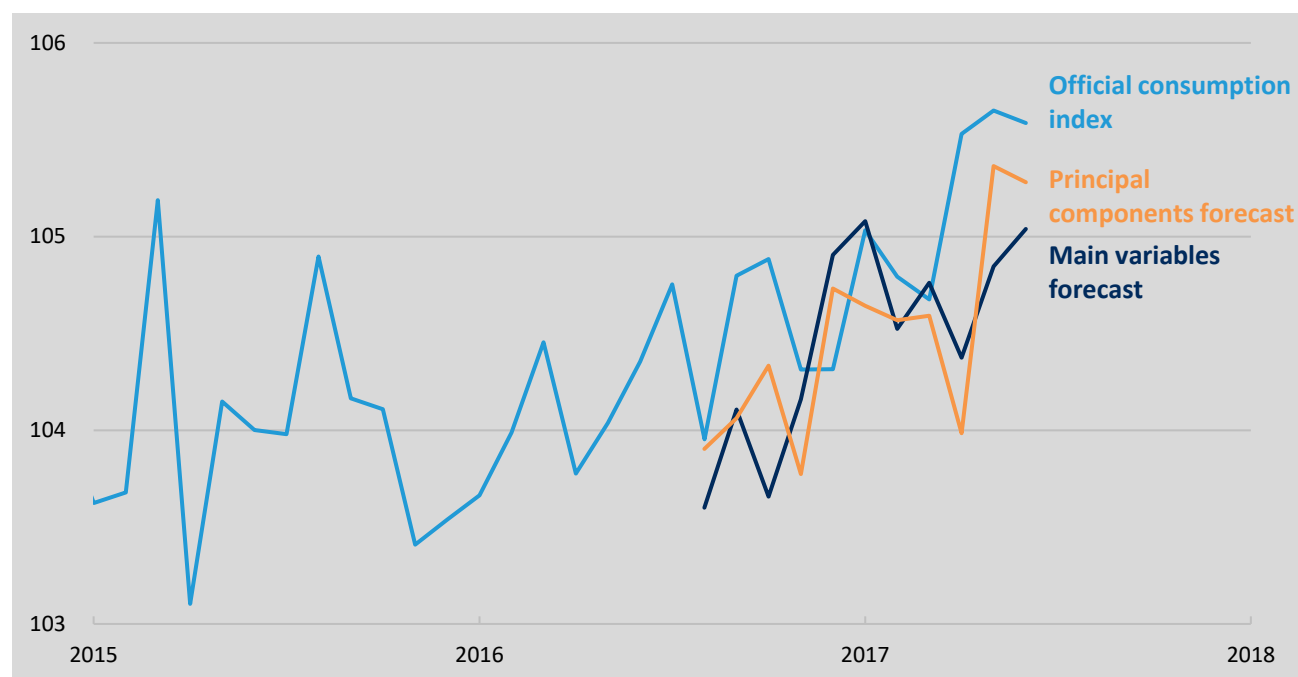
In order to investigate whether this projection is plausible, we looked at the Japanese government's family income and expenditure survey. This annual survey reports income and consumption by 10-year age groups. Therefore, if we look at 2005 and 2015 data, we can trace the evolution of people as they age from one group to the next. In particular, we examine the 50-59 year olds in 2005 and the 60-69 groups in 2015. Over the decade, average income of this group fell by one-third as many workers retired completely or accepted lower paid, post-retirement jobs. However, their propensity to consume rose from 50.5% to 66.4%, almost making up for the loss of income. More than that, as shown in figure 23, the oldest group of 70 and over now accounts for the largest share of consumption in Japan, jumping from 15% of total consumption in 2005 to one-quarter in the latest survey.

The source of the spending surge is the retirement of the baby boom cohort. Not only is this group large, they are also big spenders. At each age, this cohort has spent more of its disposable income than those coming before or after. Retirees, in general, consume a greater share of their income than workers; however, when those born after 1943 stop working, their spending rates are even greater. Since 2000, the proportion of the population older than 65 jumped from 17% to 27%. That share will continue to grow slowly to a little more than 30% and remain near that level through the 2030s. Consequently, Japan's current consumption and savings rates will persist for many years.

### Political projections

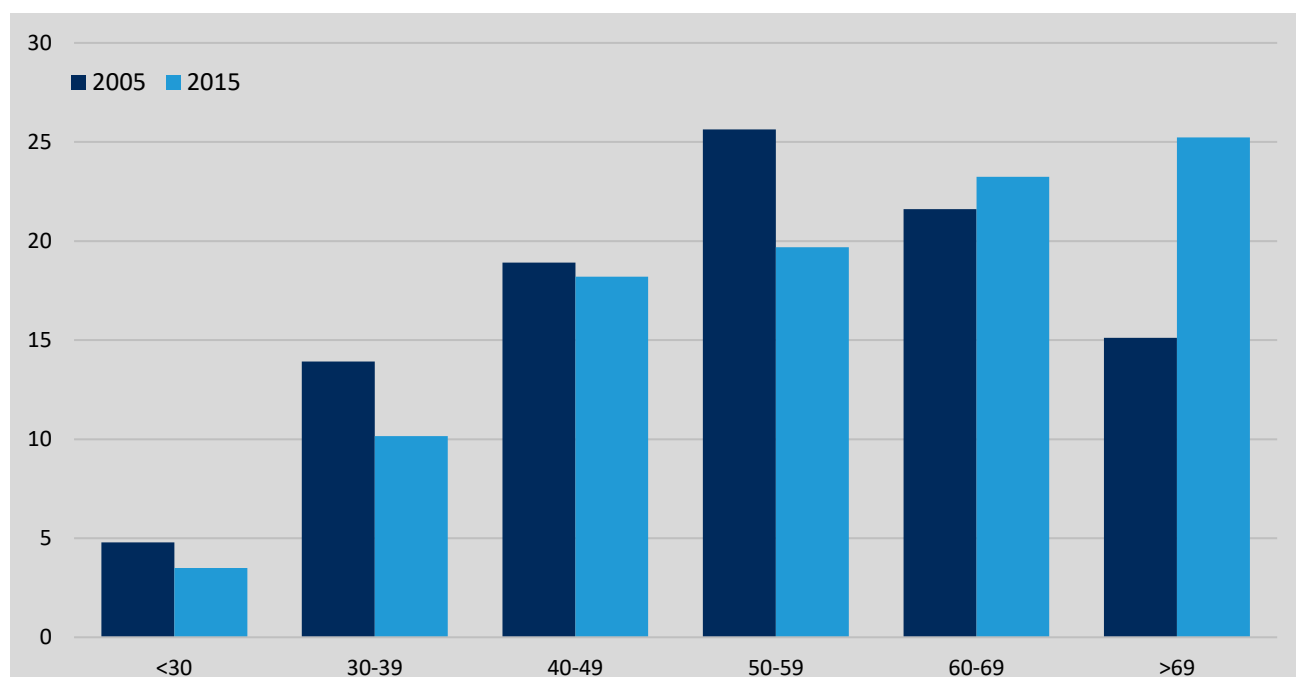
Consumer sentiment surveys can project political trends in Japan. We have applied the demographic breakdown from responses to the future financial conditions question to predict the Japanese government's approval rating. All the variables were lagged one month, allowing currently available survey data to project one month forward. Gender, age, employment, marital status, income, and education variables contributed to the estimation.

Prior examination of the approval data indicated that Japanese prime ministers tended to begin their terms with high approval, which then declined over succeeding months. To model this phenomenon, we introduced a time trend into the estimates. Figure 24 shows that the forecast using the consumer sentiment data follows the trend closely and projects the decline in Prime Minister Shinzo Abe's popularity in the past year. Although there is considerable month-to-month volatility in both the voter surveys and in the computed projections, the sentiment-based forecasts trace out the main trends. Thus, consumer sentiment could be a useful political analytical tool for Japan, despite the aging population meaning that a greater share of the population will be retirees and not has directly influenced by economic trends.

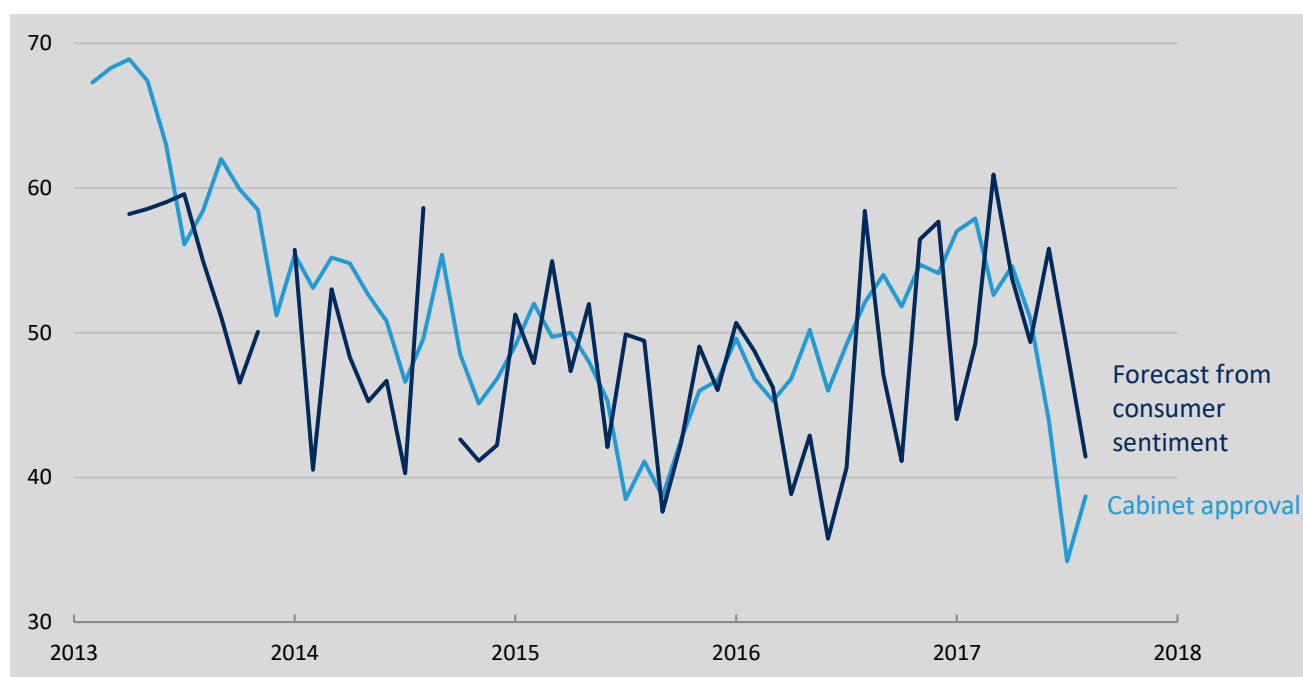
**Figure 22: Official monthly real consumption index and 12-month ahead forecasts (2011=100)**

Source: Consumption: Economic and Social Research Institute, Cabinet Office; forecasts: Thomson Reuters / Ipsos Primary Consumer Sentiment Index (PCSI)

Note: Main variables forecast based on five summary responses to PCSI; principal components forecast based on three components summarizing 187 variables.

**Figure 23: Share of Total Consumption by Age (%)**

Source: Annual Report on the Family Income and Expenditure Survey, Statistics Bureau, Ministry of Internal Affairs and Communications

**Figure 24: Cabinet approval (%) and forecast from consumer sentiment survey**

Source: Cabinet approval: Japan Macro Advisors; forecasts: Thomson Reuters / Ipsos Primary Consumer Sentiment Index (PCSI)

## Conclusion: How to read consumer sentiment for politics

**While this report no more than scratches the surface of the possibilities created by the consumer sentiment data set, it does pose some interesting findings and guidance for future research.**

### **Consumer sentiment is best when seen as a deficit or excess**

Most of the variation in consumer sentiment can be explained by underlying 'hard' economic and financial variables, such as incomes, prices, unemployment, and stock markets. Therefore, the most valuable information is when sentiment deviates from these variables into a confidence excess or confidence deficit. In those times, consumer sentiment is picking up an opinion in the country that does not reflect the underlying economy, but popular attitudes to something else. Understanding what that 'something else' is - and why it matters - provides an insight into the political drivers of a country.

### **Separate election noise from signal**

Despite headlines after the Brexit referendum that confidence dropped, data shows that the decline was well within the bounds of normal monthly variation. However, when confidence spiked in South Korea after its 2017 election, that truly was anomalous. It is important for journalists to give a sense of how clear it can be that a surprise election shocks consumers and when that shock may translate into spending.

### **Confidence can take time to get hit**

While political results are usually announced on the night of the election, their effect on the confidence on a population is not always immediate. For example, in the United Kingdom, the major effect of Brexit on confidence has been a slow stagnation in the year since the referendum. Therefore, it is important to look at the data for the months following an election to see how the population adjusts to the new order.

### **Confidence is shaped by election campaigns, not just the votes themselves**

Sentiment data from the United States shows confidence deviating from underlying data beginning in late 2015, around when the lengthy presidential campaign began in earnest. For the unemployed investing in their future, confidence began cratering as the presidential candidates competed to portray a bleaker picture of the country and warn of the dangers of the other being elected. Election campaigns and observers can use sentiment information to identify the groups in society are most affected by the rhetoric of the campaign.

### **Demographic categories are more informative than total results**

Headline confidence results can mask considerable variation in the groups of respondents polled and the questions asked. This is to be expected: because the subgroups are by definition smaller sample sizes, there will be a larger margin of error for any questions. However, sustained differences and significant trend movement can be the most informative part of the data. Which groups in society are more optimistic or pessimistic than would be expected can show which political messages and candidates are most likely to resonate, such as whether populists could find fertile ground among younger voters in Spain and Italy.