IR&M

Macro research

Kieger Macro Update

Ineichen Research & Management ("IR&M") is an independent research firm focusing on investment themes related to absolute returns and risk management.

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Executive summary

- **GDP growth** is around 2.5% and this growth rate is rising. The outlook for the world economy as a whole is positive and estimates average around 3.4% for 2017 and 3.5% for 2018.
  The US economy grew at a rate of 2.2% in Q2 2017. Not only is the leading economy growing, the growth has been accelerating. Annual growth was 1.3% in Q2 16. The Atlanta Fed Nowcasting model suggests that Q3 2017 growth will be at 2.5% at the time of writing in early October.

- **Business sentiment:** Global average business sentiment is stable. From the 21 indicators, 11 have risen over the quarter, while 8 have fallen from June to September. Strongest rises were in France and Switzerland, sharpest falls in the UK and New Zealand.

- **Leading economic indicators** (LEI): OECD's main leading economic indicator continued to rise very mildly over the past quarter.

- **Purchasing managers' indices (PMI)** are above 50 and are rising. From the 16 PMI indicators, 14 have risen over the quarter. Only two, those of Spain and Australia, have fallen marginally. The strongest rise was in the United States. The last time that this measure was as high was in 2003. In Europe, PMI indicators for Switzerland, the Eurozone, Germany, France, and Italy are at multi-year highs too.

- **Consumer sentiment**: Average consumer sentiment has been rising since February and continues to do so. From the 22 indicators, 15 were higher than three months ago, and only four were lower. The strongest rises were in Italy, Mexico and Greece.

- **Notable:** Global consumer sentiment is in the 94th percentile (100th =best) since 1985. This level was last reached in May 2007. (The peak of the S&P 500 Index was in October of that year.)
  Three regime tests imply that all is well for risky assets.

Content

The macro perspective

"Since the U.S. economy continues to bump along, growing moderately, there's no reason to expect a recession anytime soon."
—Howard Marks (b. 1946), American investor, 7 Sept 2017

GDP growth: positive and rising

Global economic growth is positive at around 2.5% and this growth rate is accelerating

Average real GDP is positive at around 2.5% and this growth rate seems accelerating. Prior to this it has been stable at around 2.2% for many quarters. Table 1 shows real year-on-year GDP (seasonally adjusted) for a range of economies. We have colour-coded the data to show i. highs (green) and lows (red), ii. the correlation among economies, and iii. the past and current trend. The arrows show the direction of the latest move. The average for the world is equally weighted.

Table 1: Global real GDP, SAAR (seasonally adjusted annual rate)

Q3 2007 to Q3 2016	Q4 16	Q1 17	Q2 17	△	
	2.1	2.2	2.5	↑	**Average**
					Americas
	1.8	2.0	2.2	↑	USA
	2.0	2.3	3.7	↑	Canada
	-2.5	-0.4	0.3	↑	Brazil
					Europe
	1.6	1.8	1.5	↓	UK
	0.6	0.6	0.3	↓	Switzerland
	1.9	2.0	2.3	↑	Eurozone
	1.8	2.0	2.1	↑	Germany
	1.2	1.1	1.8	↑	France
	1.0	1.3	1.5	↑	Italy
	3.0	3.0	3.1	↑	Spain
					Asia and RoW
	1.7	1.5	1.4	↓	Japan
	6.8	6.9	6.9		China
	0.3	0.5	2.5	↑	Russia
	7.0	6.1	5.7	↓	India
	2.4	1.8	1.8		Australia
	2.4	2.9	2.7	↓	South Korea
	2.9	2.5	2.9	↑	Singapore

Source: IR&M, Bloomberg.

- All growth rates in Table 1 are positive. The ratio of positive vs negative changes in Q2 2017 was 10:5, i.e., a positive bias. This positive-negative ratio was 10:6 in our last update from July 2017.
- The US economy grew at a rate of 2.2% in Q2 2017. Not only is the leading economy growing, the growth has been accelerating. Annual growth was

1.3% in Q2 16. The Atlanta Fed Nowcasting model suggests that Q3 2017 growth will be at 2.5% at the time of writing in early October. Elsewhere in the Americas, Canada surprised with growth rates in excess of 3% while Brazil is, for all practical purposes, out of recession.

- In Europe, growth statistics for the Eurozone were good. GDP growth rates in the four countries shown as well as for the Eurozone as a whole, were higher in Q2 when compared to Q1 2017. The European Central Bank is growing increasingly confident that inflation will rise back to its target, but patience is still needed to make sure the recovery lasts according to President Draghi.

- The UK and Switzerland went the other way. Not only was GDP growth in Q2 lower, previous quarters were revised downwards quite substantially. In the UK, growth for Q4 2016 and Q1 2017 were revised downwards from 2.0% and 1.9% to 1.6% and 1.8% respectively. The British Chambers of Commerce said the weak pound is failing to boost U.K. growth, and that inflation will outpace wage growth until 2019, squeezing real income. In Switzerland, the revisions took GDP growth from 1.3% and 0.7% to 0.6% for both Q4 2016 and Q1 2017.

- In Asia Pacific, China is holding steady at GDP growth just below 7%. No negative surprises are expected prior or during the 19th National Congress of the Communist Party of China which will be opening on 18th October and typically lasts a week.
  Chinese debt continues to boom. Most of the increased debt is servicing existing debt, making the growth extremely low quality, and with productivity falling, unsustainable.

- Growth in Japan is stable with little impact on inflation. The most recent Tankan survey, a quarterly survey that is perceived as the most representative, implied continued positive economic momentum. Both business conditions as well as forecasts exceeded expectations. Prime Minister Abe called a snap election for the 22nd October. He wants to proceed with the plan to raise the sales tax to 10% in 2019, but use the extra revenue on education and other things rather than paying down debt.

- Indian Q2 real GDP growth slowed to 5.7%, the lowest level for three years. Whilst the demonetisation and introduction of sales tax were initially blamed for the weak economic growth, some market observers argue that the underlying problem remains the debilitating corporate debt. More than 20% of large companies did not earn enough to pay the interest on their loans, while the pace of new loans fell to the lowest since 1954.

- Russia remained out of recession for the third quarter in a row. Consumer price inflation fell 0.5% m/m, the first decline since 2011. In annual terms, it slowed to 3.3% from 3.9%, its slowest since the fall of the Soviet Union, prompting the central bank to cut rates by 50 basis points to 8.5%.

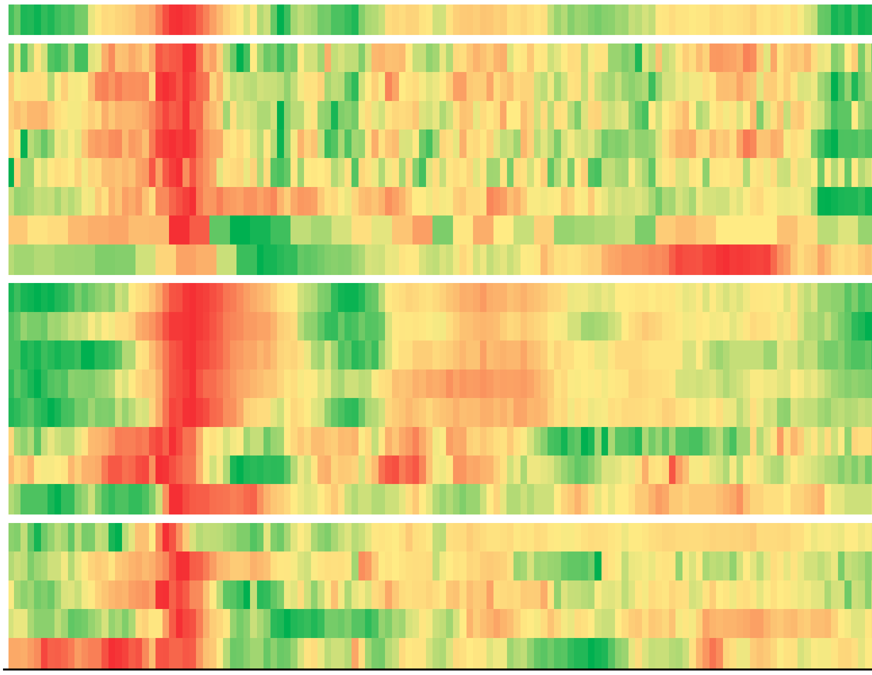
- Australian Q2 GDP grew 0.8% q/q and 1.8% y/y, supported by a surge in public investment, which contributed 0.8 percentage points to the growth, with household consumption contributing 0.4 percentage points.

Business sentiment: stable

Table 2 shows a selection of indicators for business sentiment. The average is measured as average percentile of the indicators shown in the exhibit. A 6-point move of the average represents one standard deviation. Changes that are larger than one standard deviation are marked with a green (positive change) or red dot.

Table 2: Business sentiment

Dec 2006 to Jul 2017



	Aug	Sep	Oct	△	SD
Average	67.3	69.7	n.a.	↑	
US: Empire State Fed	25.2	24.4	n.a.	↓	
US: Philadelphia Fed	18.9	23.8	n.a.	↑	
US: Richmond Fed	14.0	19.0	n.a.	↑	
US: Dallas Fed	17.0	21.3	n.a.	↑	
US: Chicago Fed	-0.3	n.a.	n.a.	↓	
US: NFIB small biz opt.	105.3	n.a.	n.a.	↑	
Canada: BoC	31	31	n.a.		
Brazil: CNI	52.6	55.7	n.a.	↑	🟢
Eurozone: EC	1.08	1.34	n.a.	↑	🟢
Germany: IFO	115.9	115.2	n.a.	↓	
France: INSEE	111	110	n.a.	↓	
Italy: ISEA	108.5	110.4	n.a.	↑	
Belgium: NBB	-2.1	-3.5	n.a.	↓	
UK: Lloyds	17	23	n.a.	↑	
Switzerland: CS/CFA	25.0	28.0	n.a.	↑	
Russia: FSSS	-2.0	-3.0	n.a.	↓	
China: CFLP	51.7	52.4	n.a.	↑	
Japan: Small biz (SCB)	49.0	49.4	n.a.	↑	
Australia: NAB Conf.	5.1	n.a.	n.a.	↓	🔴
South Korea: BoK	78	83	79	↓	
New Zealand: NBNZ	18.3	0.0	n.a.	↓	🔴

Source: IR&M, Bloomberg. Notes: The average is equal weighted and is calculated from percentiles. △=Direction of latest change. SD=Latest change that exceeds one standard deviation is marked with a green or red dot.

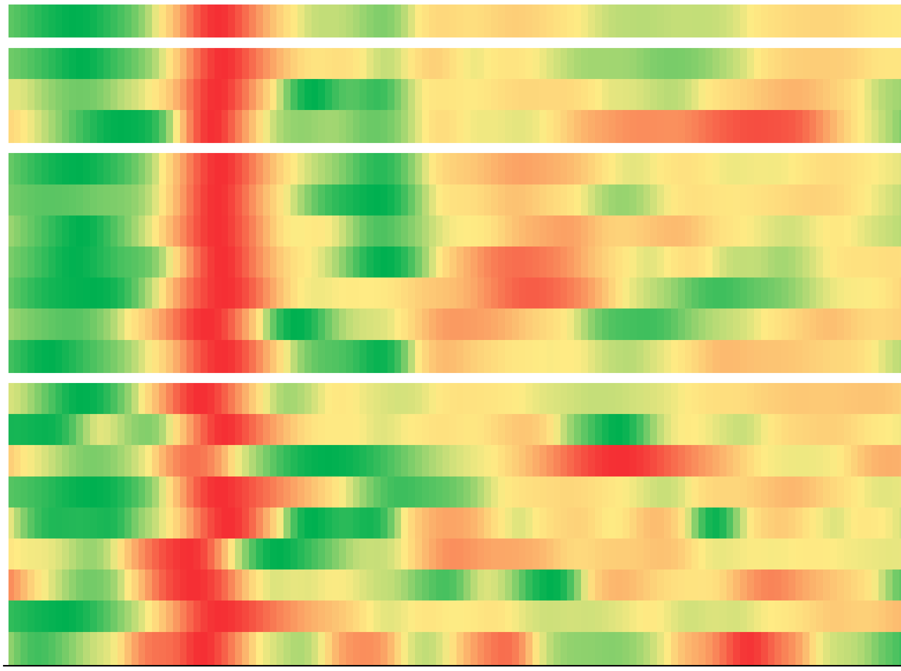
- The average shown in the table was 69.7 at the time of writing early October which compares to 68.6 in March, based on revised figures. This means business sentiment has been stable over the quarter. In our last update from July we used nearly the exact sentence. This goes to show how things are progressing: slowly with little indication of an abrupt, negative change. The average has peaked in April at 71.2, i.e., the overall fall since then has been miniscule.
- From the 21 indicators shown in the table, 11 have risen over the quarter, while 8 have fallen from June to September.
- The strongest rises since last shown in July 2017 were in France and in Switzerland.
- The sharpest falls were in the UK and New Zealand.

Leading economic indicators: rising mildly

Table 3 shows a selection of leading economic indicators (LEI) for the past eleven years. While these leading indicators are often lagging indicators, they do serve a purpose as they often trend continuously in one direction. This means these trending indicators are useful for confirming an existing economic trend, even if the turning points only become apparent slowly.

The OECD composite leading indicator is rising mildly

Table 3: Selection of leading economic indicators



Aug 2006 to Apr 2017	May 17	Jun 17	Jul 17	△	
	100.1	100.1	100.1	↑	**OECD Composite**
	99.7	99.7	99.7		**United States**
	100.4	100.5	100.5	↑	**Canada**
	102.1	102.4	102.8	↑	**Brazil**
	100.4	100.5	100.5	↑	**Eurozone**
	100.7	100.8	100.9	↑	**Germany**
	100.5	100.6	100.6	↑	**France**
	100.1	100.1	100.2	↑	**Italy**
	99.9	99.7	99.6	↓	**Spain**
	99.6	99.6	99.5	↓	**United Kingdom**
	100.9	101.0	101.0	↑	**Switzerland**
	99.5	99.8	100.0	↑	**China**
	100.2	100.2	100.2	↑	**Japan**
	99.4	99.5	99.7	↑	**India**
	100.7	100.7	100.7		**Russia**
	100.2	100.2	100.3	↑	**Australia**
	100.6	100.6	100.6	↓	**South Korea**
	100.9	100.9	100.8		**Indonesia**
	99.2	99.2	99.2		**South Africa**
	101.9	102.1	102.4	↑	**New Zealand**

Source: IR&M, Bloomberg, OECD.

- The OECD Composite Index as well as the measure for the US have been abnormally stable, rising only when examining second decimals.
- In Europe, from the seven measures shown in the table, four were higher than three months ago. While France was unchanged, the measures for Spain and the UK fell. It is also these two countries that have dominated the headlines lately, the UK in relation to Brexit and Theresa May's internal difficulties, as well as Spain in relation to its breakup.
- From the nine measures in the Asian Pacific bloc, six have improved over the past three months. So overall, there is a positive bias. The measures for China and Japan both rose slightly.

PMI: above 50 and rising

When viewed over one quarter, the average of a selection of PMIs is above 50 and is rising. Table 4 shows a selection of global Purchasing Manager Indices (PMI) for the manufacturing sector. The PMIs are diffusion indices and oscillate around 50 between 0 and 100. A reading of above 50 means that more survey participants observed an improvement, a figure below 50 means that there were more survey participants who reported a deterioration. A reading of exactly 50 implies neither positive nor negative change. A colour-coding is applied to show a rising or falling trend but also to distinguish regions with economic strength from those with economic weakness.

On average, the PMI indices are above 50 and rising

Table 4: Purchasing Manager Indices (PMI)

3-year High	3-year Low	Oct 2014 to Jul 2017	Aug	Sep	△	
56.2	47.5		55.0	55.1	↑	**World average**
						Americas
60.8	47.9		58.8	60.8	↑	USA (ISM)
55.9	47.5		54.6	55.0	↑	Canada (Markit)
52.0	41.6		50.9	50.9		Brazil (Market)
						Europe
57.2	48.4		56.7	55.9	↓	UK (Markit)
61.7	47.3		61.2	61.7	↑	Switzerland (CS)
58.1	50.1		57.4	58.1	↑	Eurozone (Markit)
60.6	49.5		59.3	60.6	↑	Germany (Markit)
56.1	47.5		55.8	56.1	↑	France (Markit)
56.3	48.4		56.3	56.3		Italy (Markit)
55.8	51.0		52.4	54.3	↑	Spain (Markit)
						Asia Pacific
53.3	47.7		52.2	52.9	↑	Japan (Markit/JMMA)
51.9	47.2		51.6	51.0	↓	China (Caixin)
54.7	47.6		51.6	51.9	↑	Russia (Markit)
54.5	47.9		51.2	51.2		India (Markit)
59.8	44.2		59.8	54.2	↓	Australia (AIG)
51.1	46.1		49.9	50.6	↑	South Korea (Markit)

Source: IR&M, Bloomberg.

A key feature of the PMI surveys is that they ask only for factual information. They are not surveys of opinions, intentions or expectations and the data therefore represent the closest one can get to "hard data" without asking for actual figures from companies.

- PMI indicators have been rising over the quarter. The average shown here rose from 54.3 in June to 55.1 in September. Like in our last quarter, there are no indicators below 50 from the selection we have chosen for this exhibit.
- From the 16 PMI indicators shown in the table, 14 have risen over the quarter. Only two have fallen marginally. Spain has fallen from 54.7 to 54.3, arguably a trivial fall, but a fall nevertheless. Australia fell from 55.0 in June to 54.2 in September.
- The strongest rise was in the United States where the main PMI rose three full points from 57.8 to 60.8. The last time that this measure was above 60 was in 2003.
- In Europe, PMI indicators for Switzerland, the Eurozone, Germany, France, and Italy are at multi-year highs, same as in the United States.

Consumer sentiment: rising

Consumer sentiment is rising

Table 5 shows a selection of consumer sentiment indicators for the past eleven years. The table allows comparing a trend of a region or country separately (horizontal view) but also allows a comparison between different economic entities (vertical view). The arrows indicate the direction of the most recent change. A red or green dot means that the change was larger than +/-1 standard deviation. This measure of magnitude allows us to assess how meaningful the most recent change is.

Table 5: Consumer sentiment

Nov 2006 to Jul 2017	Aug	Sep	Oct	△	SD	
	74.4	75.6	n.a.	↑		Average
	96.8	95.1	n.a.	↓		US: UoMichigen
	120.4	119.8	n.a.	↓		US: Conf Board
	101.1	101.0	n.a.	↓		Canada: OECD
	80.9	82.3	n.a.	↑		Brazil: FGV
	88.5	89.2	n.a.	↑		Mexico: INEGI
	-1.5	-1.2	n.a.	↑		Eurozone: EC
	10.8	10.9	10.8	↓		Germany: GfK
	103	101	n.a.	↓	●	France: INSEE
	111.2	115.5	n.a.	↑	●	Italy: ISTAT
	-0.2	-1.1	n.a.	↓		Spain: EC
	26	23	n.a.	↓		Netherlands: CBS
	7.6	7.3	n.a.	↓		Denmark: DNB
	102.9	105.8	n.a.	↑		Ireland: IIB
	-57.0	-53.7	n.a.	↑		Greece: EC
	-10	-9	n.a.	↑		UK: GfK
	1.53	n.a.	n.a.	↑		Switzerland: UBS
	101.0	101.8	n.a.	↑		Sweden: NIER
	114.7	n.a.	n.a.	↑		China: NBSC
	43.3	43.9	n.a.	↑		Japan: ESRI
	95.5	97.9	n.a.	↑		Australia: Westpac
	109.9	107.7	n.a.	↓		South Korea: BoK
	126.2	129.9	n.a.	↑		New Zealand: ANZ

Source: IR&M, Bloomberg. Notes: The average is equal weighted and is calculated from percentiles. △=Direction of latest change. SD=Latest change that exceeds one standard deviation is marked with a green or red dot.

- Consumer sentiment continues to rise. The average shown in the table rose from 73.6 in June to 75.6 in September.
- The all-important US consumer is stable, despite Irma and Harvey. The first of the two measures for the United States is unchanged at 95.1 over the quarter. The second measure rose marginally from 118.9 in June to 119.8 in September.
- From the 22 indicators shown in the table, 15 were higher than three months ago, and only four were lower. The strongest rises were in Italy, Mexico and Greece.
- The four fallers were France, Spain, Sweden, and South Korea. The sharpest falls over the quarter were in France and South Korea.

Economic risk assessment

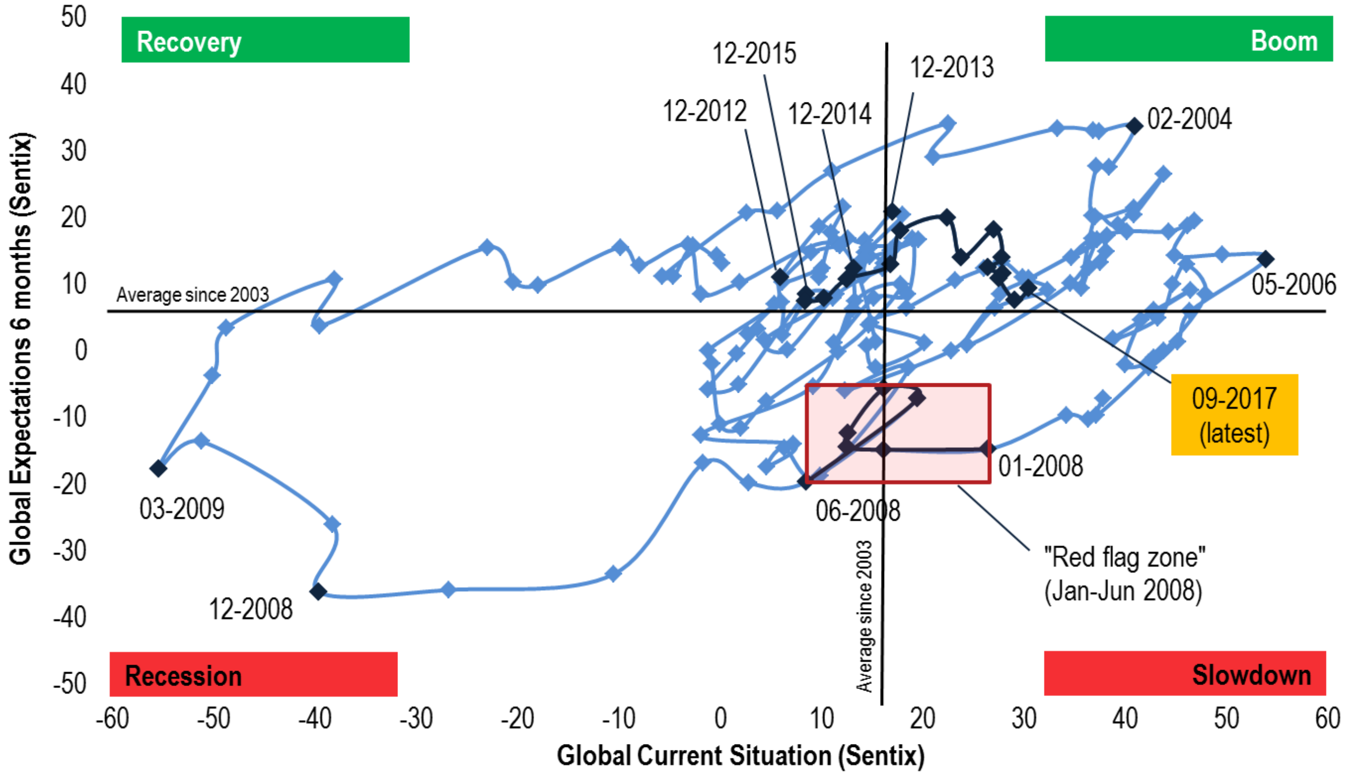
Currently there are very few alarm bells going off regarding the global economy. Figure 1 contrasts a global current situations indicator on the horizontal axis with a measure for economic expectations for the next six months. In an expanding economy, the path should point towards the upper right hand cover. In a contraction the path points towards the lower left hand corner. The expectations component often moves first.

MSCI World (Jan 2003 -)		
Global Current Situation:	**Return, pa***	**Tenure, %**
rising (12M average)	12.8%	49
falling (12M average)	-0.5%	51
Global Expectations:	**Return, pa***	**Tenure, %**
above 7 (long-term average)	12.5%	62
below 7	0.5%	38
No 2 sd fall(s) within 4M	11.6%	87
2 sd fall(s) within 4M	-18.2%	13

* Annualised average monthly return in subsequent month

The insert on the right shows three regime tests. A positive regime is marked in green, a negative one in red. The annualised average monthly return of the MSCI World equities index in the subsequent month is shown when a certain condition is given. We use equities as a proxy for risky assts. All three regime tests are positive at the moment. This means the twelve-month average of the current situations index is rising, the expectations index is above 7, its long-term average, and over the past four months, there were no falls that were worse than two standard deviations.

Figure 1: Global economy



Source: IR&M, Bloomberg, Sentix. Notes: Based on Sentix Economic Indices Global Aggregate (Current Situation and Expectations). Full "path" since 2003 is shown. "Red flag zone" refers to H1 08 that should, if history rhymes, give investors ample time to fasten their seatbelts.

- Currently, the global economy is nowhere near the "red flag zone," i.e., the area in the exhibit from the first half of 2008. The broader trend is towards the upper right hand cover, even if the expectations component is off its peak from a couple of months ago.
- No red flag results from this analysis.

Outlook: positive

World economic growth is expected to grow at an annual rate of around 3.4% in 2017 and 3.5% in 2018. Table 6 shows an economic outlook for a selection of countries for the years 2017-2019 including a measure as to how the forecasts for 2017 and 2018 were revised since our last update from July this year. We applied a colour-coding to both forecasts and revisions to highlight the extreme values.

World economic growth is expected to grow at an optimistic rate that is higher than 3%

Table 6: GDP forecasts and revisions

	Real GDP (y/y, %)	Consensus forecasts			Change GDP forecast since 31 Jul 2017	
	2016	2017	2018	2019	2017	2018
World	n.a.	3.40	3.50	3.30		
Americas						
United States	1.60	2.19	2.30	2.07	-0.01	
Canada	1.30	3.00	2.00	2.00	0.35	
Brazil	-3.50	0.65	2.35	2.40	0.15	0.35
Europe						
United Kingdom	2.00	1.50	1.30	1.60	-0.10	
Switzerland	1.40	1.30	1.70	1.70	-0.10	
Eurozone	1.70	2.10	1.80	1.50	0.10	0.10
Germany	1.85	2.10	1.80	1.50	0.20	0.10
France	1.10	1.70	1.60	1.46	0.20	0.05
Italy	0.90	1.40	1.20	1.10	0.20	0.20
Spain	3.20	3.05	2.50	2.30	0.15	0.10
Asia Pacific						
Japan	1.00	1.50	1.10	0.80	0.20	0.10
China	6.70	6.70	6.37	6.10		0.07
India	6.90	7.10	6.80	7.50		-0.50
Russia	-0.50	1.75	1.70	1.70	0.45	0.20
Australia	2.40	2.30	2.70	2.85		
South Korea	2.70	2.80	2.70	2.70		

Source: IR&M, Bloomberg. Based on consensus forecasts.

- The changes since our last update were minor. The largest change was in India where forecasts for 2018 were reduced by 50 basis points from 7.3% to 6.8%. The second largest change was in Russia, where 2017 forecasts were raised by 45 basis points from 1.30% in July to 1.75%. Forecasts for the Eurozone have risen further. (They were already rising in our last update.)
- This table doesn't change much from one quarter to the next. For many years this table has been positive and confirming the prevailing economic trend, which in many of the shown economies was mildly positive. This table, therefore, works well for a confirmation of the prevailing trend, which is a strong force behind the economists making these forecasts. The changes on the right of the table allow an assessment as to which economies were upgraded or downgraded relative to their peers.
- The economists making these forecasts depicted in Table 7 find it easier to extrapolate the present into the future, than to forecast an economic turnaround. We expect other data in this report to signal the next turnaround. One important harbinger for the next turnaround in the United States has already occurred: the Federal Reserve shifting its monetary policy from an easing to a tightening stance in December 2015. Historically the best recession predictor is the inversion of the yield curve. The yield curve already narrowed, but has not yet inverted.

Exhibit of the quarter: global consumer sentiment

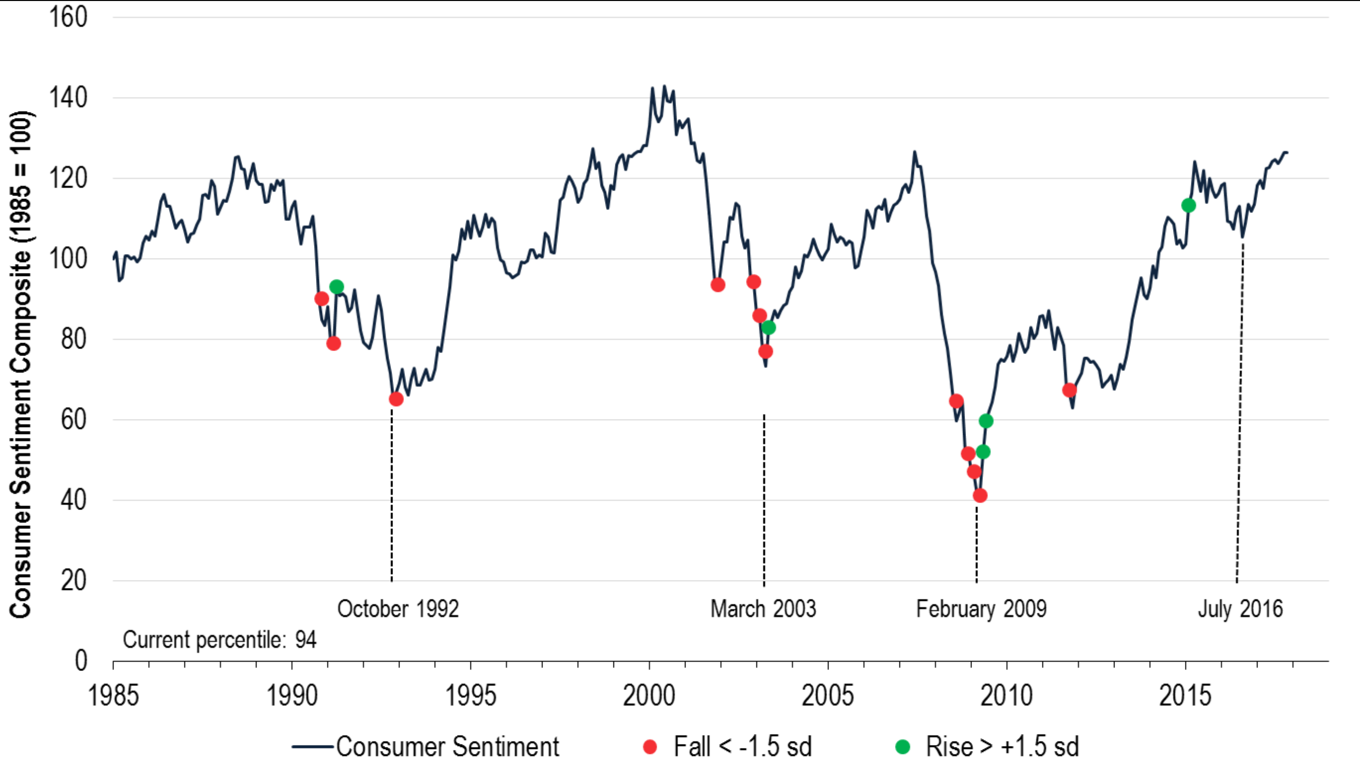
MSCI World (Jan 1985-)		
Global Consumer Sentiment	Return, pa*	Tenure, %
rising (12M average)	11.3%	58
falling (12M average)	3.4%	42
above 80	10.3%	80
below 80	2.6%	20
No 1.5 sd fall(s) within last 4M	13.3%	76
1.5 sd fall(s) within last 4M	-5.3%	24

* Annualised average monthly return in subsequent month.

Global consumer sentiment has been rising since March 2009 with only two brief interruptions. Figure 2 below is a global consumer sentiment composite index whereby 1985 has been set to 100. The composite is an equal weighted average of consumer sentiment in the United States, Japan, the UK, and the Eurozone.

The insert in the upper right hand corner consists of three regime tests. The annualised average monthly return of the MSCI World equities index in the subsequent regime is shown when a certain condition is given. We use equities as a proxy for risky assts. All three regime tests are positive at the moment. This means the twelve-month average of the global consumer sentiment index is rising. This was the case in 58% of the months since 1985. The global consumer sentiment index is also above 80, where returns for risky assets were higher on average. Furthermore, over the past four months, there were no falls that were worse than 1.5 standard deviations. These negative outliers were able to warn of average negative returns in the past.

Figure 2: Global consumer sentiment



Source: IR&M, Bloomberg. Composite: equally-weighted average of consumer sentiment in US (Conference Board), Japan (ESRI), UK (GfK), and Eurozone (EU). *Annualised average monthly return in subsequent month. Concept courtesy of consumer sentiment composite: Ned Davis.

- Global consumer sentiment is in the 94th percentile (100th =best) since 1985. This level was last reached in May 2007. (The peak of the S&P 500 Index was in October of that year.)

About IR&M and Kieger AG

IR&M

Ineichen Research and Management (“IR&M”) is a research boutique focusing on investment themes related to risk management, absolute returns and thematic investing. IR&M was founded by Alexander Ineichen in October 2009, has an institutional investors’ orientation, and is domiciled near Zug, Switzerland.

Kieger AG

Kieger is an independent wealth and asset manager. Kieger offers bespoke investment solutions for clients with a long term investment horizon. The team has been managing and implementing multi-asset solutions for institutional investors for almost 15 years and the firm seeks to build long-term partnerships. Kieger’s Headquarter is based in Zurich (FINMA regulated) with a branch office in Lugano and its subsidiary in Luxembourg (CSSF regulated) manages a broadly diversified portfolio of investment funds for its investors.
Kieger develops and manages investment solutions that encompass all major traditional and alternative asset classes including a dedicated Health Care Fund management business.