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Asset Management

Q4

Quarterly  
Economic  
Report 2017



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# Thoughts from the desk

## U.S. macroeconomic outlook

U.S. economic activity increased by 3.1 percent in the second quarter, a significant ramp up over Q1 GDP of 1.2 percent and the fastest acceleration since 2015. Increase in private inventory investment, personal consumption expenditures, federal government spending and a deceleration in imports contributed to the strong growth.

On the labor front, the private sector continued to add, on average, 173,000 jobs per month in H117 with a substantial drop off to 85,000 per month in Q3 due to worker dislocation from hurricanes Harvey and Irma. However, most economists expect a substantial rebound in Q417 and Q118 as rebuilding efforts in the hurricane-affected areas take form. To put the recent hurricane season into perspective, according to AIR Worldwide, a catastrophe modeling consulting service, this season marked the first time ever that two Category 4 or higher hurricanes came at the same time.

With economic growth and labor markets supporting tightening of monetary policy, inflationary readings remain below the Fed's 2 percent target. Despite tepid core inflation, the FOMC remains committed to gradually lifting the federal funds target rate, reducing their \$4.5 trillion balance sheet while addressing current financial conditions.

## Global macroeconomic outlook

Economic growth was synchronized as the global economy expanded about 3.2 percent year to date. Growth has been led by emerging markets, showing expansion of 4.9 percent. Developed markets are expanding at a more moderate 2.1 percent pace, although a sharp reversal from previous pessimistic forecasts. In the Eurozone, economic activities picked up to 2.3 percent year on year with expectations of continued momentum stemming from favorable business and consumer surveys.

Economic rebound in the Eurozone provided more fuel to the euro currency rally as it closed at US\$1.18 at the end of Q3; the euro/dollar was near parity at the start of the year. While the rise in the euro is viewed as a drag on inflation — in a region where inflation is barely above 1 percent — market expectations for tapering of the ECB's quantitative easing program picked up in Q3.

Similar to the euro, the Chinese renminbi appreciated to its highest level in recent years against the dollar — perhaps easing concerns of excess debt levels in the region. Also, the recent rally in commodity prices may indicate that demand in China is picking up, as the Chinese remain the world's largest consumer of these goods. However, short- to medium-term growth will be dictated by the Chinese government, as President Xi Jinping will unveil his new leadership team.

# Overview



## Domestic economy

- ▶ Economic activity increased by 3.1 percent in the second quarter, a significant pickup over Q1 GDP of 1.2 percent and the fastest acceleration since 2015. The strong GDP number supports the Fed's interest rate move in June, when it cited the Q1 slowdown as transitory.
- ▶ The increase in real GDP was accounted for by an increase in private inventory investment, personal consumption expenditures, federal government spending and a deceleration in imports. The increases were partially countered by lower residential fixed investment, a slowdown in exports and decreased state and local spending.
- ▶ The pace of consumer spending picked up in Q2 to 3.3 percent, the biggest increase in almost a year.
- ▶ In Q3 the U.S. economy added 274,000 jobs. The labor market remains healthy despite a distortion in recent data due to the hurricanes.
- ▶ September experienced the first contraction in jobs in seven years due to effects of the storms. In addition, the unemployment rate fell to a 16-year low of 4.2 percent, and the participation rate increased to 63.1 percent.
- ▶ Recent inflation data has been mixed. Headline inflation rose 0.4 percent in August and 1.9 percent on a year-over-year basis. However, core PCE, the Fed's preferred measure of inflation, continues to decline at 1.3 percent on a year-over-year basis.



## Central bank monetary policy

- ▶ Hawkish comments reverberated across central banks. Recent projections from the Federal Reserve imply one additional rate hike of 25 basis points in 2017 with three more to follow in 2018. This caused Treasury yields to break out of their recent trading range.
- ▶ Favorable economic conditions in the United States and abroad have created a tightening bias for monetary policy, either through a scaling back of stimulus programs or projections for rate increases.
- ▶ Uncertainties still remain, such as domestic fiscal policy, rising geopolitical tensions, the composition of the Federal Reserve and effects from recent natural disasters. However, the Fed appears to be committed to normalizing monetary policy.

# Overview



## Markets and performance

- ▶ U.S. investment grade credit spreads tightened into quarter-end against the backdrop of strong technicals and record highs in U.S. equities.
- ▶ At the rating level, BBB continued to outperform its low-beta counterparts as spreads tightened due to a rebound in communications and technology sectors.
- ▶ In U.S. high yield, the rally in the energy sector showed no signs of slowing as oil prices reached five-month highs, outperforming its investment grade counterparts.
- ▶ Corporate credit fundamentals remain solid overall, particularly among larger and higher-quality companies. Credit metrics remained little changed from the previous quarter across all sectors.



## Global economy

- ▶ Growth abounds in most corners of the world, with the global economy expanding about 3.2 percent thus far in 2017, led by emerging market growth of 4.9 percent. Developed markets are expanding at a more moderate 2.1 percent pace.
- ▶ China continues to lead growth among the world's largest economies, while Brazil lags.
- ▶ Eurozone growth is being led by the Netherlands and Spain. While political troubles could slow growth in the latter country, the Eurozone is stable enough for the ECB to begin ending some of its stimulative measures.
- ▶ A rebound in the energy sector, solid consumer spending, strong employment and accommodative fiscal policy have propelled the Canadian economy and its currency.



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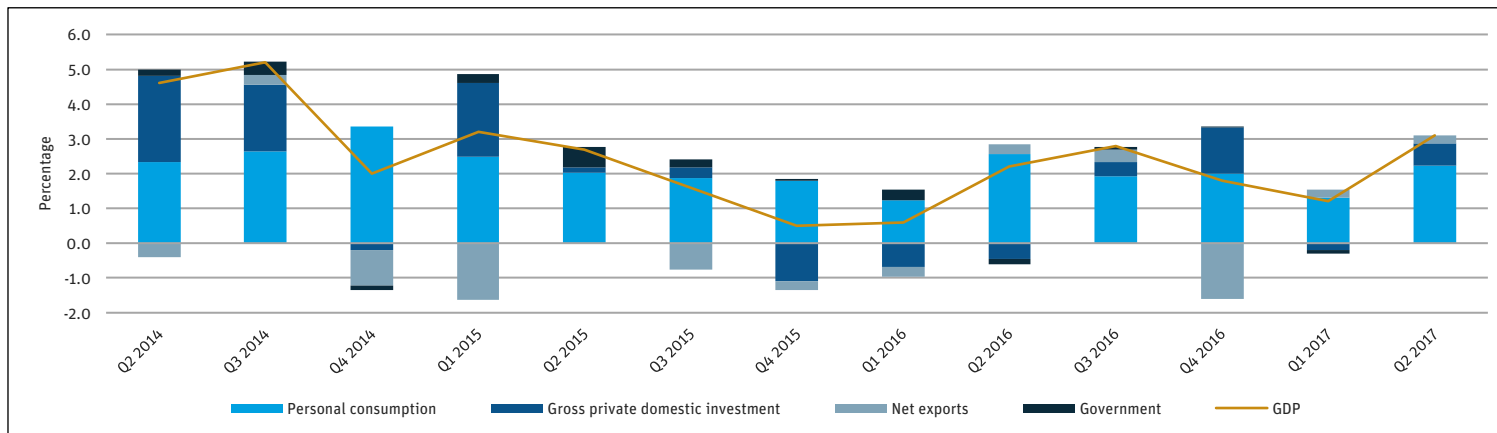
Domestic economy



# GDP: Consumer and business investment fuel growth

- ▶ Economic activity increased by 3.1 percent in the second quarter, a significant pickup over Q1 GDP of 1.2 percent and the fastest acceleration since 2015. The strong GDP number supports the Fed's interest rate move in June, when it cited the Q1 slowdown as transitory.
- ▶ The increase in real GDP was accounted for by an increase in private inventory investment, personal consumption expenditures, federal government spending and a deceleration in imports. The increases were partially countered by lower residential fixed investment, a slowdown in exports and decreased state and local spending.
- ▶ Q2 GDP illustrates that the consumer continues to fuel the economy and business spending has picked up.
- ▶ The hurricanes in 2H are likely to temporarily affect the strong momentum from Q2 GDP.

## GDP and components

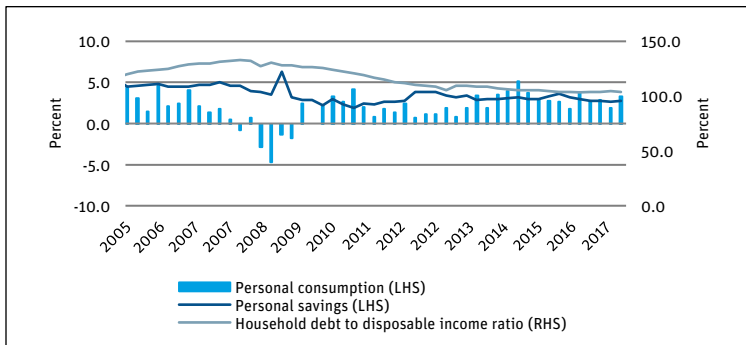


Source: Bureau of Economic Analysis (BEA), Congressional Budget Office (CBO) and SVB Asset Management. Data as of 9/30/17.

Note: GDP values shown in legend are % change vs. prior quarter, on an annualized basis.

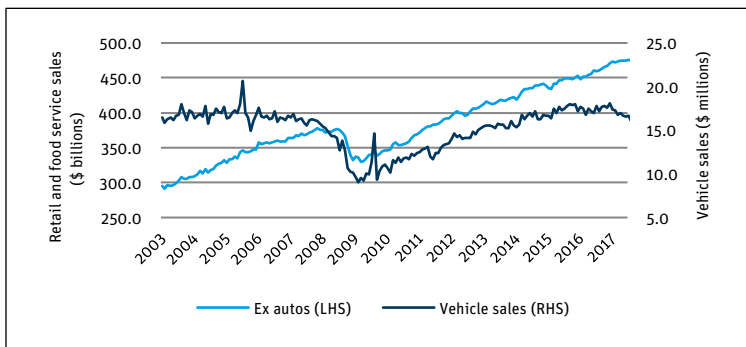
# Consumption: Acceleration in spending

## Consumption overview

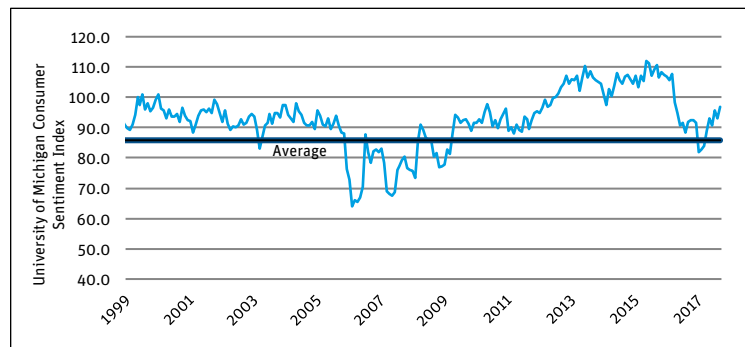


- ▶ The pace of consumer spending picked up in Q2 to 3.3 percent, the biggest increase in almost a year.
- ▶ The personal savings rate has been steady at 3.6 percent the last couple of readings and is expected to stay in this range.
- ▶ U.S. retail sales dipped in recent months due to decreases in apparel, electronics and autos. The last quarter of the year is likely to rebound as households replace and rebuild after the storms.
- ▶ Consumer sentiment picked up in August and then slipped slightly in September due to the hurricanes.

## Retail and food service sales



## Consumer sentiment

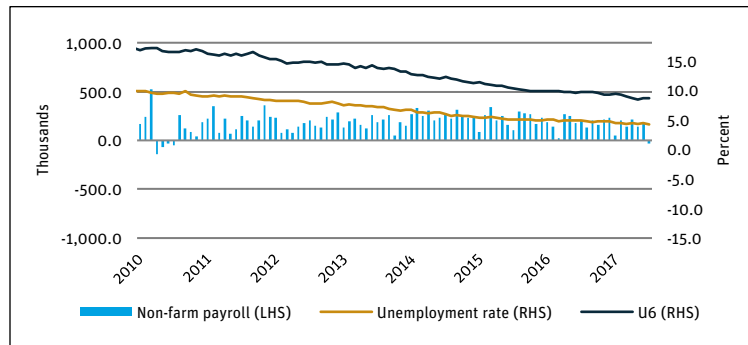


Source: Bloomberg and SVB Asset Management. Data as of 9/30/2017.

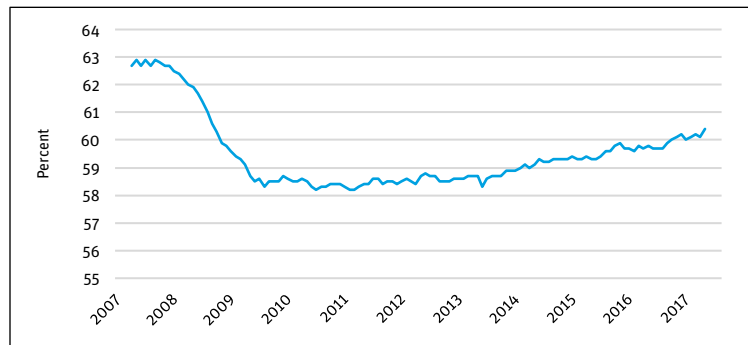


# Employment: Chugging along

## Employment landscape



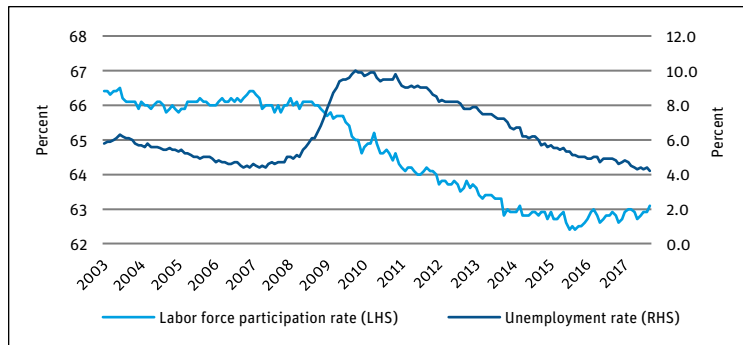
## Employment to population ratio



Source: U.S. Bureau of Labor and Statistics (BLS), Bloomberg and SVB Asset Management. Data as of 9/30/2017.

Note: The underemployment rate U6, defined as persons marginally attached to the labor force, counts those who currently are neither working nor looking for work but indicate they want and are available for a job and have looked for work in the past 12 months.

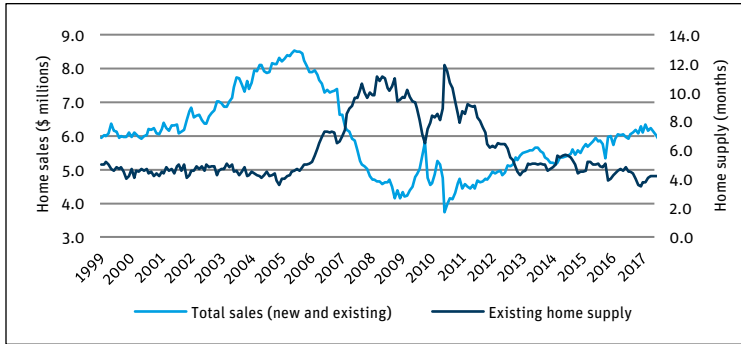
## Labor force participation rate



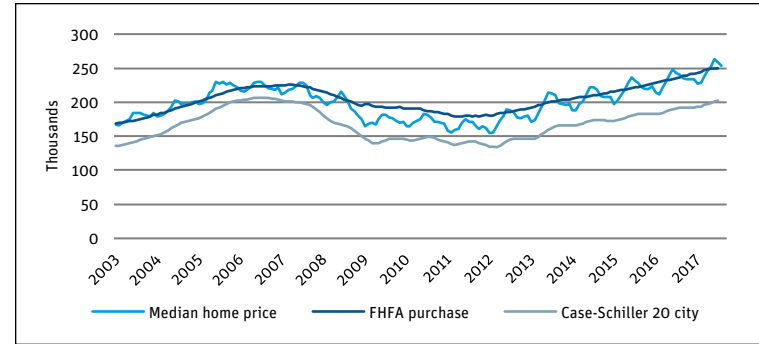
- In Q3 the U.S. economy added 274,000 jobs. The labor market remains healthy despite a distortion in recent data due to the hurricanes.
- September experienced the first contraction in jobs in seven years due to effects of the storms. In addition, the unemployment rate fell to a 16-year low of 4.2 percent, and the participation rate increased to 63.1 percent.
- Wages jumped to 2.9 percent in September. The increase is likely to be another distortion due to the storms.

# U.S. housing: *Stable grounds*

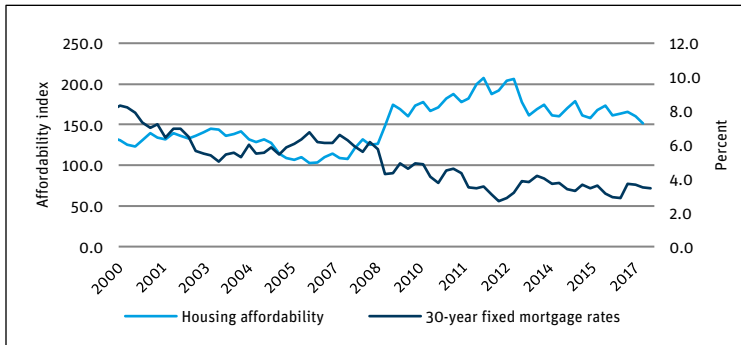
## Home sales and supply



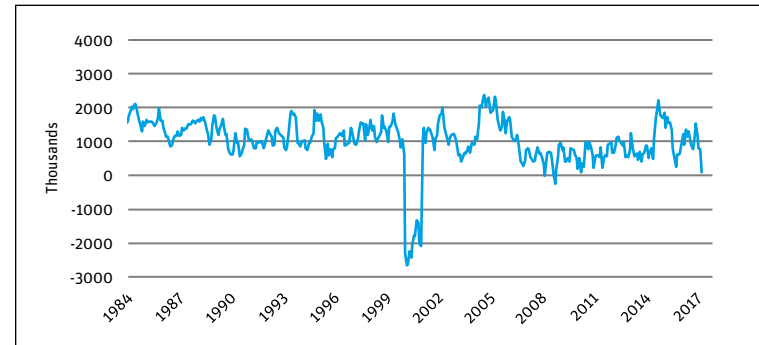
## Home prices – indexed to 100



## Housing affordability



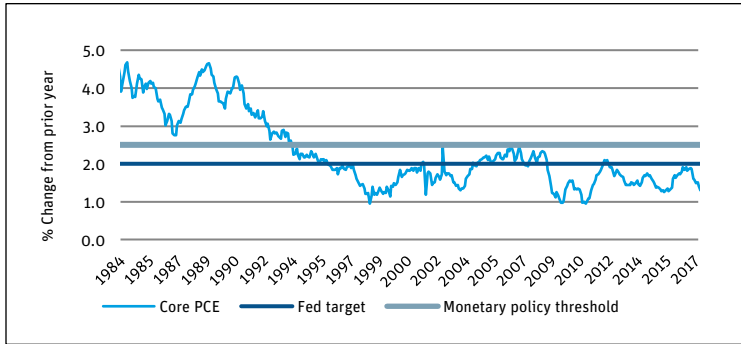
## Household formation



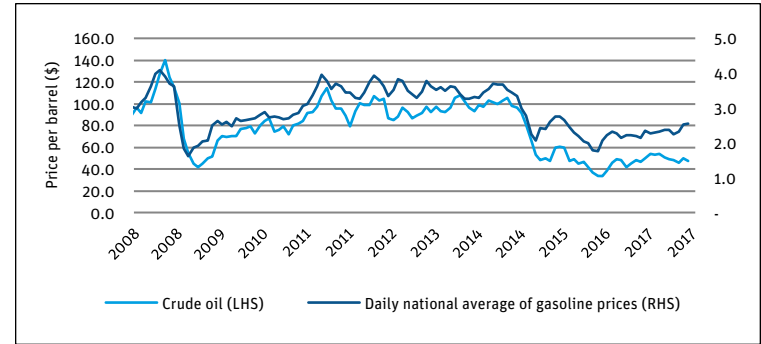
Source: Bloomberg and SVB Asset Management. Data as of 9/30/2017.

# Inflation: *Mixed signals despite wage growth*

## Core PCE — % change from prior year



## Crude oil and gasoline prices



## Wage growth



- Recent inflation data has been mixed. Headline inflation rose 0.4 percent in August and 1.9 percent on a year-over-year basis. However, core PCE, the Fed's preferred measure of inflation, continues to decline at 1.3 percent on a year-over-year basis.
- Crude oil prices climbed in response to the storms; however, toward the end of the quarter prices eased as the United States added oil rigs in an effort to expand supply.
- The upward trend in wage growth continues and is expected to materialize in future inflation numbers.

Source: Bloomberg and SVB Asset Management. Data as of 9/30/2017.

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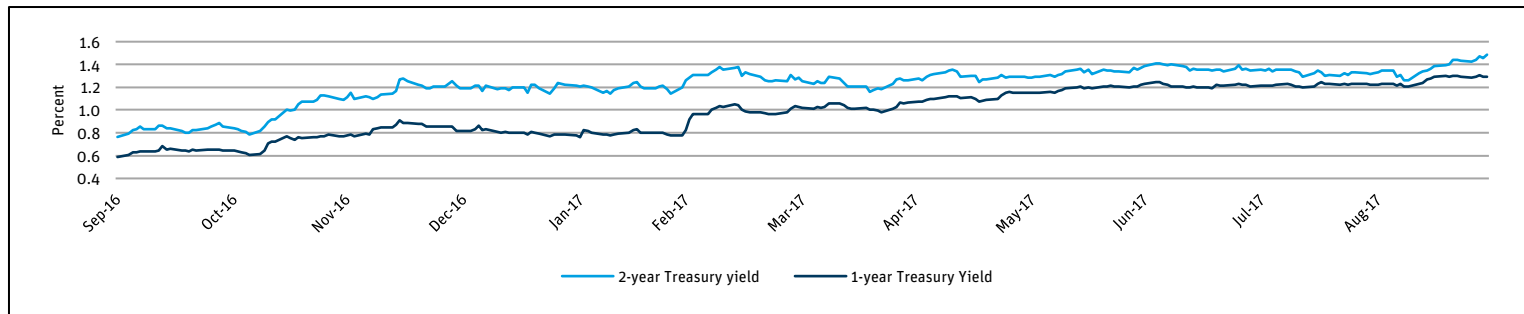
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Central bank monetary policy





# Historical interest rates: *Path to normalization*



Q4 2016	Q1 2017	Q2 2017	Q3 2017
Following a period of low volatility, interest rates break out of trading ranges and head higher on the heels of the presidential election — given prospects for greater fiscal spending.	Treasuries remain range-bound throughout most of the quarter, as investors weigh the normalization of monetary policy and inflation growth against geopolitical concerns.	Treasuries yields hit highs in March after the FOMC decision to raise the federal funds target rate. The Treasury curve movement was much more muted after the June decision to raise rates though, as Treasury yields remain in a tight range quarter over quarter.	Treasuries broke out of their recent trading range as hawkish comments reverberated across central banks. Recent projections from the Federal Reserve imply one additional rate hike of 25 basis points in 2017 with three more to follow in 2018.
Continued strength in economic data — specifically, the decline in the unemployment rate to a nine-year low, inflation hovering around the Fed's 2 percent target and expectations for greater inflationary pressures — prompts the Fed to raise the target range for the federal funds rate at year-end.	The economy continues to grow at a moderate pace with solid job gains while the unemployment rate is little changed. Inflation has increased in recent months and is moving close to the FOMC's 2 percent goal, which has resulted in consecutive federal funds rate increases.	The U.S. economic expansion remains on track, as GDP expanded at an adjusted rate of +1.4 percent in Q1. Inflation expectations for this year are lower than original projections but forecasted to rise to the official 2 percent target by 2018. Despite this, central bank forecasts have not changed between meetings.	Economic data in the United States has been mixed with recent strength in the labor market, GDP and consumer spending. In spite of this, inflation continues to trend below target. Furthermore, economic data is expected to show hurricane-related distortions in the coming quarter.
OPEC agrees to cut production, sending oil prices higher and creating more inflationary pressure.	The Federal Reserve's dot plot shows that policymakers expect at least two more rate increases in 2017 as economic conditions evolve and warrant gradual increases.	The Federal Reserve's dot plot shows that policymakers expect one additional rate increase in 2017. Further to this, the FOMC outlined plans to shrink their \$4.5 trillion balance sheet through decreased maturity reinvestments.	Uncertainties still remain, such as fiscal policy — specifically tax reform, rising geopolitical tensions, the composition of the Federal Reserve and effects from recent natural disasters. However, the Fed appears to be committed to normalizing monetary policy.

Source: Bloomberg and SVB Asset Management. Data as of 9/30/2017.

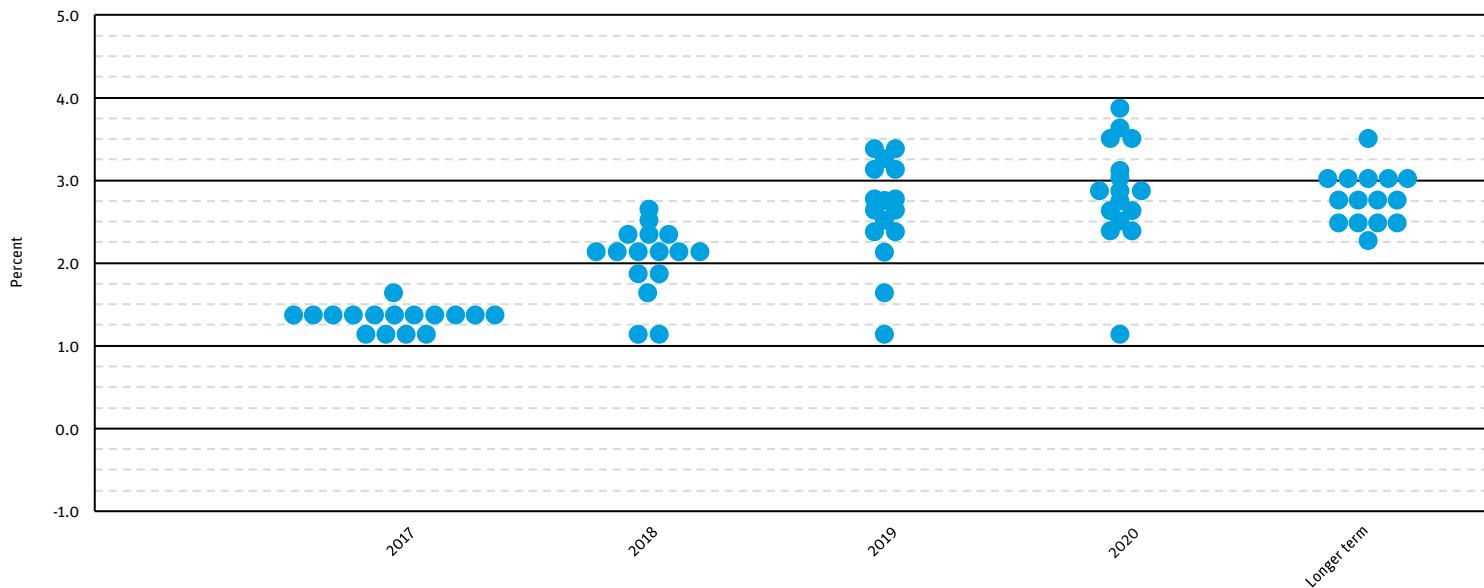
# Central bank economic projections: *Brighter outlook*

	2016	2017	2018	2019
<b>Economic projections: United States</b>				
Change in real GDP	1.5%	2.4%	2.1%	2.0%
Unemployment rate	4.9%	4.3%	4.1%	4.1%
Core PCE inflation	1.8%	1.5%	1.9%	2.0%
<b>Economic projections: Eurozone</b>				
Change in real GDP	1.8%	2.2%	1.8%	1.7%
CPI inflation	0.2%	1.5%	1.2%	1.5%
Unemployment rate	10.0%	9.1%	8.6%	8.1%
<b>Economic projections: China</b>				
Change in real GDP	6.7%			
CPI inflation	2.0%			
Unemployment rate	4.0%			
<b>Economic projections: Japan</b>				
Change in real GDP	1.1%	1.8%	1.4%	0.7%
Core CPI inflation	-0.2%	1.1%	1.5%	2.3%

Source: Federal Reserve, European Central Bank, National People's Congress of China, Bank of Japan. Data as of 10/16/2017.

Forecasts are not available for all periods.







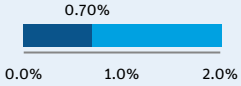
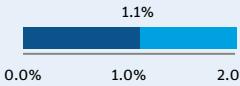
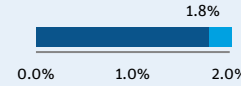
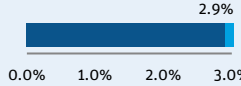
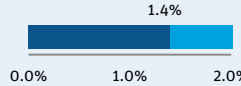
# Federal Reserve rate projections: *Rising expectations*



<b>FOMC dots median</b>	1.375	2.125	2.688	2.875	2.75
<b>Fed funds futures — latest value</b>	1.355	1.715	1.85		
<b>OIS — latest value</b>	1.346	1.67	1.759	1.787	

Source: Bloomberg and Federal Reserve.  
Data as of 9/20/17. Percentages below the chart reference the median forecasted rate at the end of each period.

# Central banks: *Ending the easing*

	 Japan	 Eurozone	 China	 United Kingdom	 United States
Central bank	Bank of Japan	European Central Bank	People's Bank of China	Bank of England	Federal Reserve
Benchmark rate	-0.10%	0.0%	4.35%	0.25%	1.00-1.25%
Current policy					
	Maintaining current easing program, which includes 10-year rates near zero and commitment to push inflation above 2 percent.	Maintaining an expanded QE program with no rate change. Removed easing bias at June meeting.	While the benchmark rate has been steady since February 2016's rate cut, the PBOC hiked other borrowing rates in March 2017.	2 of 9 members voted for a rate hike at September's meeting, though the majority agreed removing the Bank's current stimulative policy is appropriate in the upcoming months.	Considering additional rate hikes after announcing plans to reduce its balance sheet at its September meeting.
Inflation	 <p>0.70%</p>	 <p>1.1%</p>	 <p>1.8%</p>	 <p>2.9%</p>	 <p>1.4%</p>
Unemployment	2.8%	9.1%	4.0%	4.3%	4.2%
Analysis	No material policy changes expected for 2017 even as consumption improves and growth marginally accelerates. Bias towards tightening over medium term.	The ECB is poised to announce plans to scale back its QE program before the end of the year, even as the recent strength in the euro currency shakes inflation confidence.	Financial regulations have been increased this year, which have acted as a tightening of financial conditions. Near-term PBOC rate action not expected, though skewed towards tightening.	With the BOE now expecting inflation to be at least 3 percent in October, interest rates are poised to rise in November.	The Fed is poised to raise interest rates 25 basis points at its December 2017 meeting.

Source: Federal Reserve, European Central Bank, Bank of England, The People's Bank of China, Bank of Japan, Bloomberg, SVB Asset Management.



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Markets and performance



# Fixed income returns: *Overview*

	Basic statistics			Spread change		Total return %		Excess return %	
	Spreads (bps)	Yield	Duration	QTD	YTD	QTD	YTD	QTD	YTD
1-3yr Treasuries	N/A	1.49	1.88	N/A	N/A	0.24	0.67	N/A	N/A
1-3yr agencies	11.00	1.58	1.78	2.00	-1.00	0.29	0.86	0.04	0.21
0-3yr MBS	15.00	1.95	2.31	1.00	-23.00	0.36	0.80	0.08	-0.06
1-3yr ABS	48.00	1.86	1.29	-2.00	-20.00	0.43	1.36	0.18	0.77
1-3yr IG corporates	57.00	2.05	1.91	-8.00	-31.00	0.61	1.92	0.37	1.28
3-5yr IG corporates	75.00	2.54	3.65	-9.00	-29.00	0.94	3.43	0.62	2.07
5-10yr IG corporates	110.00	3.27	6.41	-8.00	-22.00	1.43	5.26	0.96	2.72
1-5yr high yield	412.00	5.82	2.16	-27.00	-98.00	1.66	6.07	1.38	5.12
<b>1-3yr corporates by rating</b>									
AAA	20.00	1.65	1.72	-6.00	-14.00	0.46	1.26	0.20	0.58
AA	37.00	1.85	1.86	-8.00	-25.00	0.53	1.60	0.28	0.96
A	50.00	1.98	1.93	-8.00	-28.00	0.57	1.77	0.33	1.13
BBB	74.00	2.24	1.91	-10.00	-41.00	0.70	2.26	0.46	1.62
<b>1-3yr corporates by sector</b>									
Financial	59.00	2.08	1.92	-8.00	-34.00	0.62	2.00	0.38	1.36
Industrials	54.00	2.03	1.92	-9.00	-30.00	0.60	1.86	0.36	1.22
Utility/Energy	64.00	2.10	1.77	-10.00	-29.00	0.65	1.89	0.41	1.26

Spread is based on option adjusted spread. Duration is based on modified duration. Data as of 9/30/2017.

Source: Bloomberg, BofA Merrill Lynch and SVB Asset Management.

# Total return comparisons

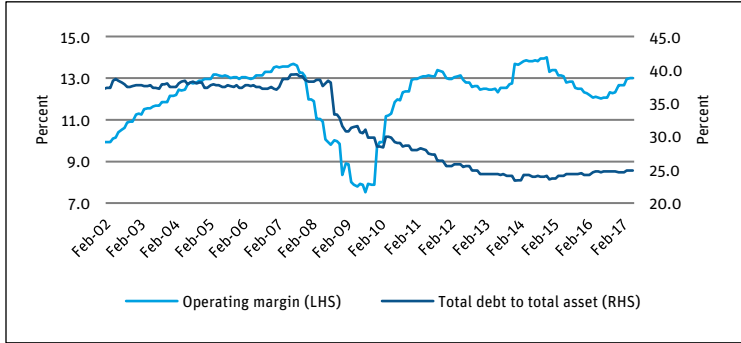
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 YTD
U.S. Treasury 6.67%	Crude Oil 78.00%	Gold 29.67%	Gold 10.23%	REIT 16.47%	Wilshire 33.06%	REIT 28.24%	S&P 500 1.40%	Crude Oil 44.80%	Crude Oil 12.30%	
Gold 5.53%	Wilshire 28.29%	REIT 26.97%	Crude Oil 8.15%	Wilshire 16.05%	S&P 500 32.39%	S&P 500 13.69%	REIT 1.30%	Wilshire 13.40%	Wilshire 4.60%	
FI Credit 0.30%	S&P 500 26.46%	Wilshire 17.18%	REIT 7.48%	S&P 500 16.00%	Crude Oil 7.32%	Wilshire 12.70%	FI Credit 0.85%	S&P 500 12.00%	S&P 500 4.50%	
S&P 500 -37.00%	REIT 26.27%	Crude Oil 15.10%	S&P 500 2.11%	Gold 6.96%	FI Credit 1.45%	FI Credit 1.12%	Wilshire 0.70%	Gold 8.60%	Gold 3.40%	
Wilshire -37.23%	Gold 23.96%	S&P 500 15.06%	FI Credit 1.75%	FI Credit 3.69%	REIT 1.26%	U.S. Treasury 0.63%	U.S. Treasury 0.56%	REIT 7.10%	FI Credit 1.93%	
REIT -39.05%	FI Credit 11.59%	FI Credit 4.15%	U.S. Treasury 1.55%	U.S. Treasury 0.43%	U.S. Treasury 0.36%	Gold -1.51%	Gold -10.50%	FI Credit 2.38%	U.S. Treasury 0.67%	
Crude Oil -53.52%	U.S. Treasury 0.80%	U.S. Treasury 2.40%	Wilshire 0.98%	Crude Oil -7.08%	Gold -28.26%	Crude Oil -45.76%	Crude Oil -30.50%	U.S. Treasury 0.89%	REIT 0.60%	

All returns above are on total return basis. 2017 returns are on a periodic basis up to 9/30/17. FI Credit refers to BofA/ML US Corporate Bonds 1-3 year Index; Treasury refers to BofA/ML US Treasuries 1-3 year Index; Gold refers to S&P GSCI Gold Spot; Crude Oil refers to Spot West Texas Intermediate Crude Oil; Wilshire refers to Wilshire 5000 Total Market Index; REIT refers to MSCI US REIT Index; S&P 500 refers to S&P 500 Index. Source: Thomson Reuters, Barclays Live, BofA Merrill Lynch and SVB Asset Management.

# Credit cycle: *Corporate credit health remains resilient*

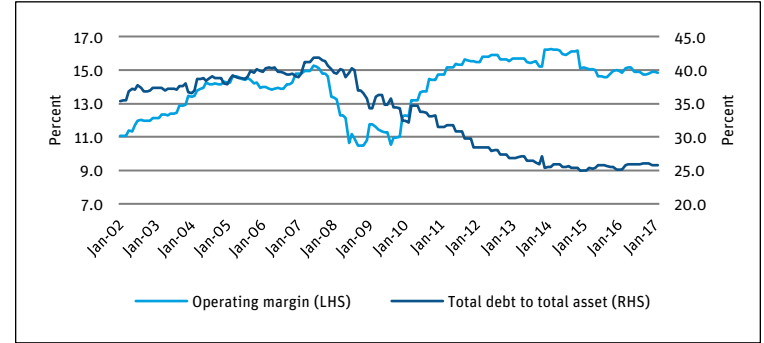
- Leverage has stayed near historic lows.
- Operating margin, though lower than the 2014 peak, remains elevated.

## S&P 500



Source: Bloomberg. Data as of 9/30/17.

## S&P 100

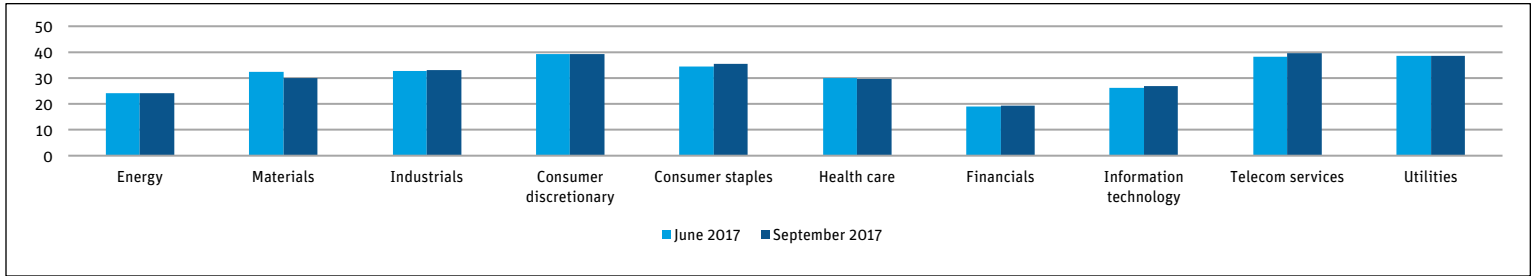




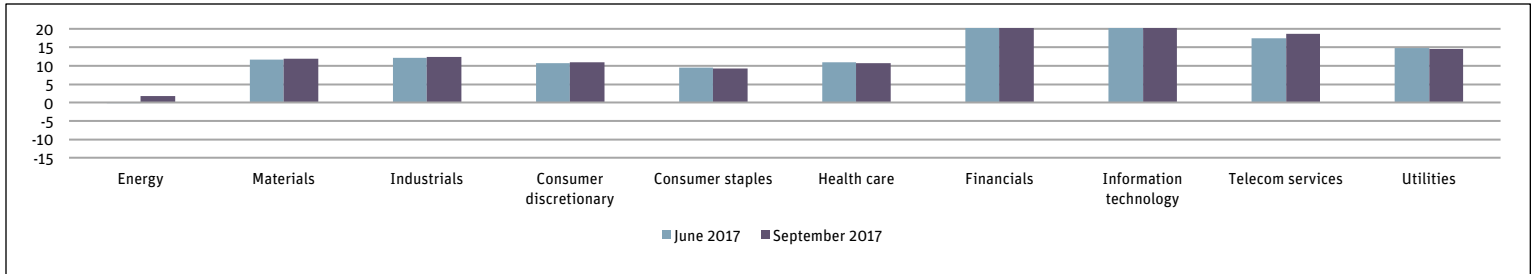
# Credit cycle: *Corporate credit fundamentals hold steady*

- › Across all corporate sectors, credit metrics showed little change sequentially from the previous quarter.
- › Energy sector continued improvement in operating margin, swinging to the positive territory.

## S&P 500 debt to assets by sector



## S&P 500 operating margin by sector



Source: Bloomberg. Data as of 9/30/17.

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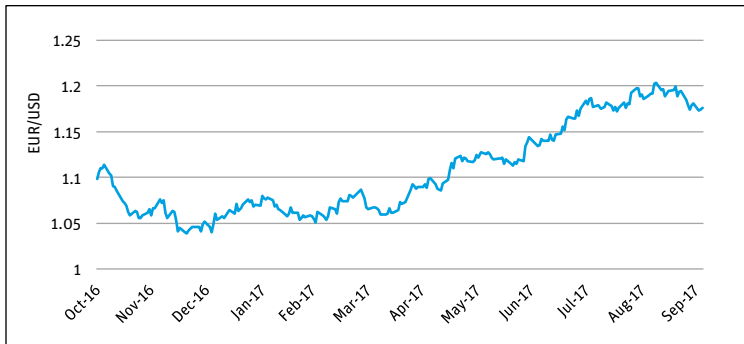
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Global economy

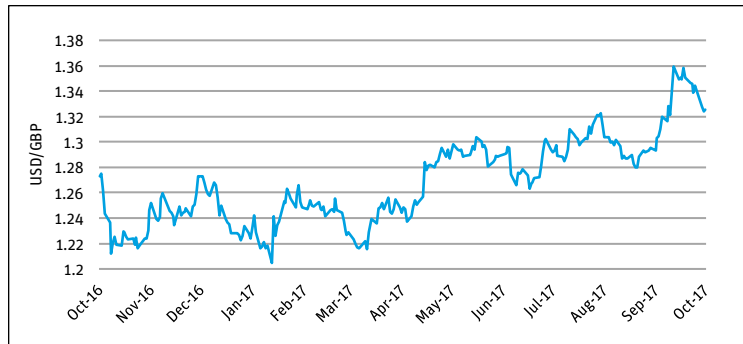


# United States: *Has the dollar found a floor?*

## Euro currency (EUR currency)

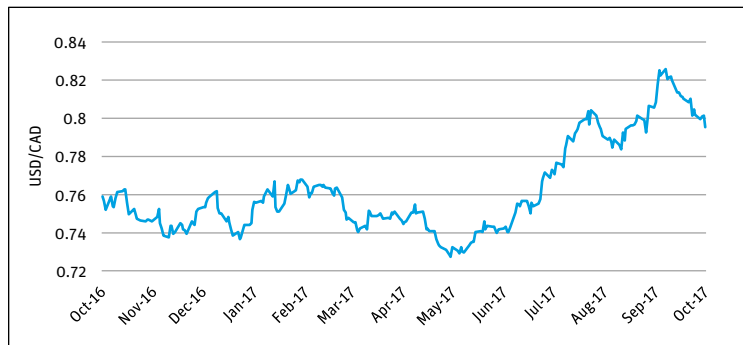


## British pound (GBP currency)



- ▶ After sliding for the last two quarters, the U.S. dollar may have found a bottom against the other major currencies. Despite two rate increases so far this year, there has been little conviction to boost the greenback.
- ▶ However, the FOMC paved the path for a potential rate hike at year-end during its September meeting. The bullish sentiment sparked a rally in the U.S. dollar that has been severely oversold.
- ▶ Solid economic data continues to support a stronger dollar, with GDP expected to expand at 2.5 percent in 2H 2017. Employment is robust, and the only ambiguous metric remaining is inflation. However, heightened political or deficit concerns may undermine dollar strength.

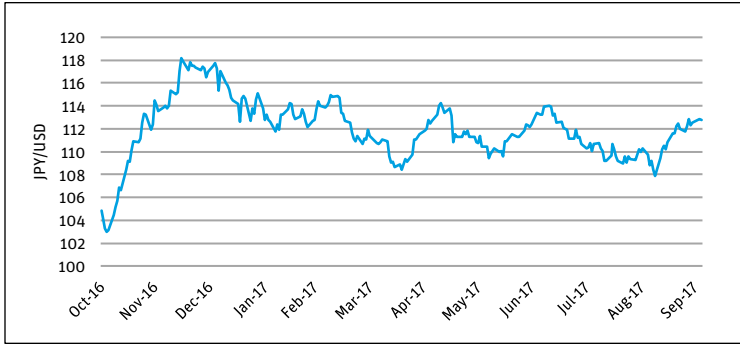
## Canadian dollar (CAD currency)



Sources: Bloomberg, Silicon Valley Bank, SVB Asset Management. Data as of 9/30/17.

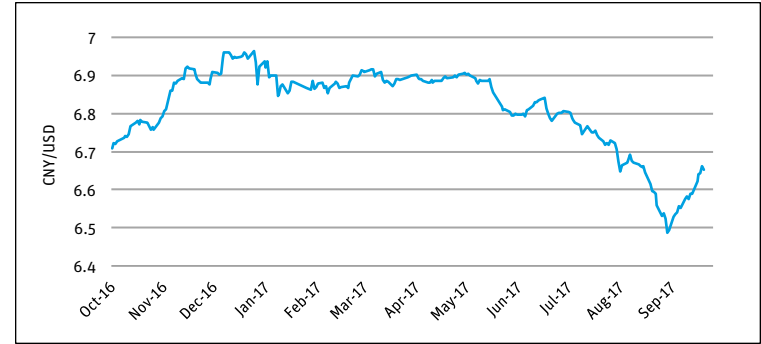
# Asia Markets: *Rattling the saber*

## Japanese yen (JPY currency)

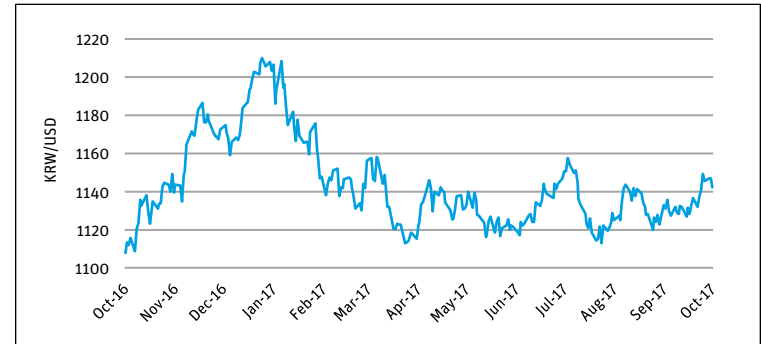


- ▶ Geopolitical tensions in Asia over North Korea kept markets in the region on edge. Contentious comments from both sides escalated existing strains, putting additional pressure on the local currencies.
- ▶ Traders flowed out of the region, taking the yen down over 3 percent in September. The yuan and won were both lower as well, as investors looked for safer havens.
- ▶ Despite the recent volatility, equity markets in Asia continue to post solid returns for the year. The growth prospects remain positive, and consumer optimism continues to help draw new investments.

## Chinese yuan (CNY currency)



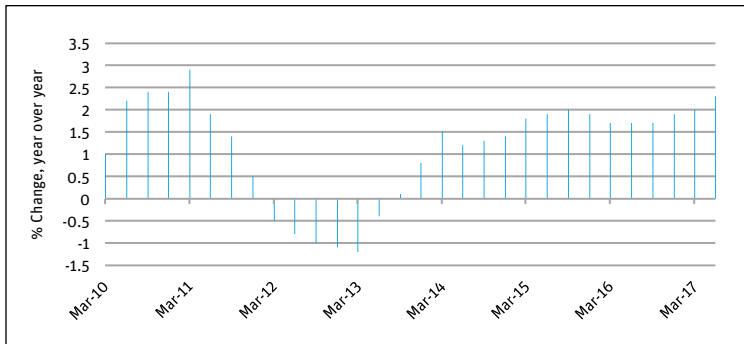
## Korean won (KRW currency)



Sources: Bloomberg, Silicon Valley Bank, SVB Asset Management. Data as of 9/30/17.

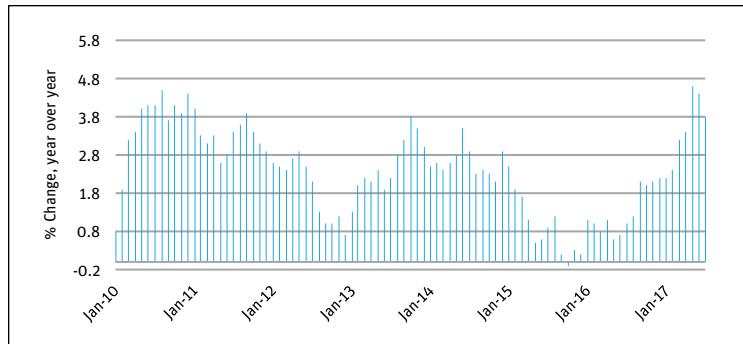
# Global Growth: *Economies on the move*

## Euro GDP



- ▶ The Eurozone is finally seeing some improvement with growth now that many of the major elections are over and the anxiety over Brexit has subsided.
- ▶ The ECB's recent hawkish undertone may convey a tightening bias, but market participants don't expect any outright interest rate movement for another year. Regardless, there is speculation that asset purchases will begin being scaled back in early 2018.
- ▶ Like in the United States, inflation remains weaker than forecasted and will be a barrier against any rapid change to the current monetary policy position.

## Canada GDP



- ▶ Over the past year, Canada's economy has been running at an impressive pace at almost four percent over 2016. The above-average growth has steadily soaked up excess capacity, pushing unemployment to an eight-year low.
- ▶ In light of robust domestic growth, the Bank of Canada has hiked rates twice this year to one percent. Correspondingly, the local currency has been one of the strongest performers, dropping from CAD/USD 1.37 to 1.22 over the past six months.
- ▶ Growth is expected to cool in the second half, and any further tightening will be managed with a softer tone by the central bank.

Sources: Bloomberg, Eurostat, Statistics Canada, Silicon Valley Bank, SVB Asset Management. Data as of 9/30/17.



svb >

Asset Management

Portfolio management strategy



# Portfolio strategy: *Macro overview*

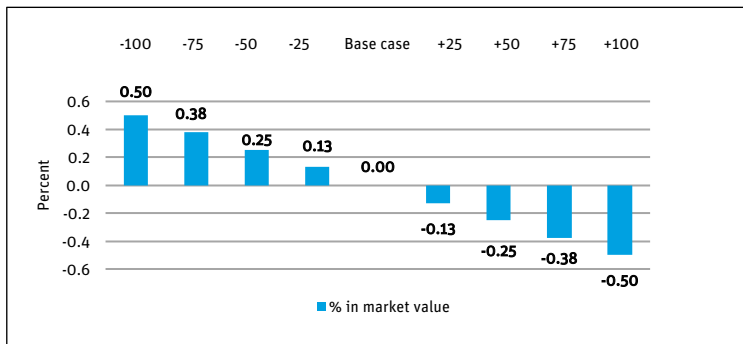
<b>Economy</b>	<b>Stable data</b>	<ul style="list-style-type: none"><li>› Q2 2017 GDP: 3.1 percent, personal consumption +3.3 percent</li><li>› Unemployment rate: +4.2 percent — 16-year low</li><li>› Weekly jobless claims average (YoY): 248,000, below 300,000 since March 2015</li><li>› Inflation below Fed's two percent target</li></ul>
<b>Rates</b>	<b>Directionally higher / flat yield curve</b>	<ul style="list-style-type: none"><li>› The rate outlook is for yields to move directionally higher, largely based on stable economic data and the FOMC focused on normalization of federal funds rate</li><li>› Yield curve has flattened in 2017: the difference in yield between 18- and 24-month Treasuries is five basis points</li><li>› Our focus will be to balance more attractive current income from the short end of the yield curve with anticipated interest rate volatility</li></ul>
<b>Duration</b>	<b>Defensive</b>	<ul style="list-style-type: none"><li>› Short and intermediate benchmarks: long duration vs. benchmark as coupon income should offset price volatility</li><li>› Intermediate-plus benchmarks: stay neutral to benchmark</li><li>› Long benchmarks: shorter to manage price fluctuations and maximize reinvestment opportunities</li></ul>
<b>Sector</b>	<b>Overweight spread product</b>	<ul style="list-style-type: none"><li>› Favor corporate bond, commercial paper and asset-backed securities. Diversify by security type, sector and issuer concentration</li><li>› As rates rise, spread product will help protect bond prices due to higher income accruals</li></ul>

Source: SVB Asset Management and Bloomberg. Data as of 10/6/17. Past performance is not a guarantee of future results. The above is not to be construed as a recommendation for your particular portfolio.

# Portfolio strategy: Duration and interest rate risk management

	Short duration 3 month T-bill	Short duration 3-6 month T-bill	Intermediate duration 6 month T-bill	Intermediate-plus duration 9 month T-bill	Long duration 1 year Treasury
Benchmark duration	0.25	0.375	0.50	0.75	1.0
Portfolio duration target	-30% Neutral +30%	-30% Neutral +30%	-30% Neutral +30%	-30% Neutral +30%	-30% Neutral +30%

## Duration (price sensitivity) analysis



\*Sample portfolio with duration of 0.5 years

Source: SVB Asset Management and Bloomberg. Data as of 9/30/17.

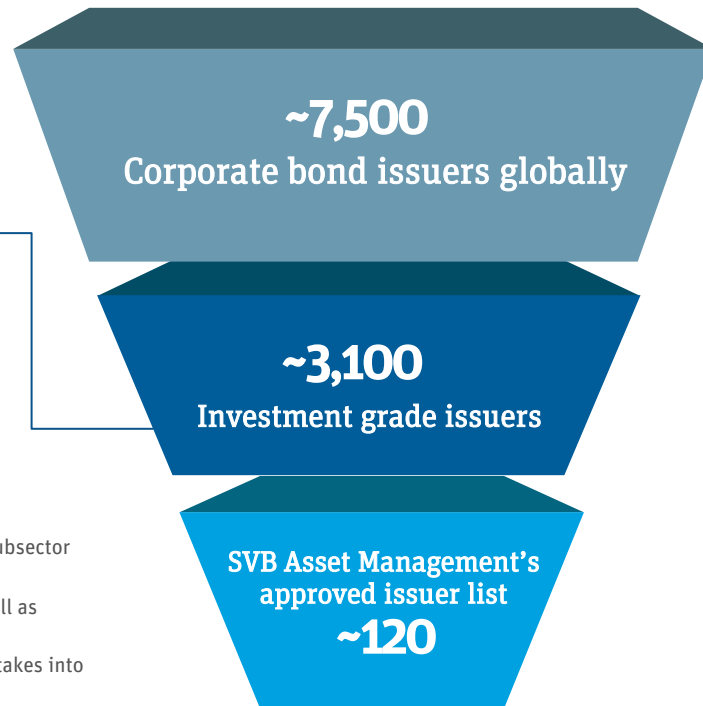
Past performance is not a guarantee of future results. The above is not to be construed as a recommendation for your particular portfolio, as individual portfolio durations will vary.

- We exercise a disciplined benchmarking approach to manage portfolio duration where we position duration in a +/- 30 percent band around the appropriate benchmark.
- In a rising rate environment where a portfolio is more susceptible to unrealized losses, we mitigate this risk by managing average duration relative to the benchmark and by limiting exposure to longer-dated investments. This allows for greater reinvestment opportunity to take advantage of higher anticipated rates.

# Portfolio strategy: *Credit risk management*

S&P	Moody's	Fitch	Rating description
AAA	Aaa	AAA	Highest credit quality
AA+	Aa1	AA+	High credit quality
AA	Aa2	AA	
AA-	Aa3	AA-	
A+	A1	A+	Upper-medium grade
A	A2	A	
A-	A3	A-	
BBB+	Baa1	BBB+	Medium grade
BBB	Baa2	BBB	
BBB-	Baa3	BBB-	

Investment grade

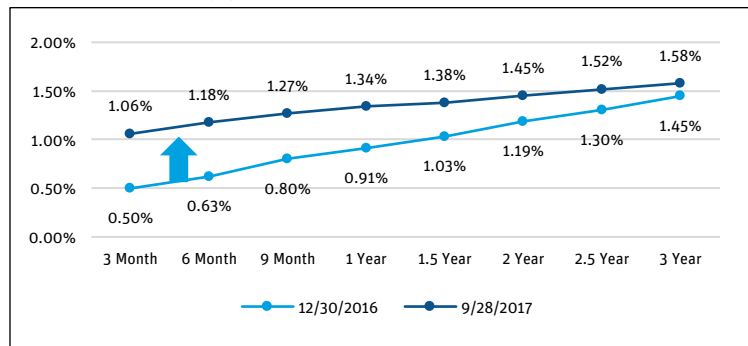


- ▶ We are highly selective in our security selection process and look to diversify by sector, subsector and issuer concentration.
- ▶ Our dedicated credit research team performs a rigorous examination of every issuer as well as ongoing credit monitoring of all investments.
- ▶ The credit analysis incorporates a proprietary scoring system to analyze issuers and also takes into account trading factors such as market liquidity, market depth and headline risk.

Source: SVB Asset Management and Bloomberg. Past performance is not a guarantee of future results. The above is not to be construed as a recommendation for your particular portfolio.

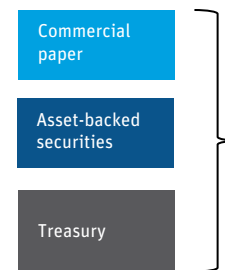
# Portfolio strategy: *Relative value curve analysis*

## Front-end Treasury yield curve



- ▶ In 2017, Treasury yields have risen across the curve led by the front end causing the curve to flatten.
- ▶ Similar to the prior quarter, the six-month part of the curve is the only tenure with double-digit yield pickup.
- ▶ The difference in yield between 18- and 24-month Treasuries has averaged around five basis points during the quarter.

	Treasury	CP	ABS	AA Ind	A- Ind	AA Fin	A- Fin
90D	1.06	1.20	1.36	1.14	1.20	1.18	1.26
180D	1.18	1.30	1.46	1.21	1.28	1.28	1.36
270D	1.27	1.41	1.54	1.34	1.40	1.40	1.47
1Y	1.34		1.60	1.44	1.49	1.48	1.57
1.5Y	1.38		1.70	1.52	1.58	1.58	1.64
2Y	1.45		1.80	1.61	1.70	1.68	1.84
2.5Y	1.52		1.86	1.71	1.77	1.86	1.93
3Y	1.58		1.93	1.83	1.96	1.97	2.10



- ▶ Front end Treasury yields have risen approximately 40 to 50 basis points in 2017.
- ▶ Commercial paper and ABS yields have held steady relative to Treasuries. For example, 180-day CP yields have risen 20 basis points while ABS rose 38 basis points in 2017. 180-day Treasury yields rose 56 basis points during the same period.
- ▶ In a rising rate environment, spread product will help protect bond prices due to higher income accruals.

Source: SVB Asset Management and Bloomberg. Data as of 9/28/2017. Past performance is not a guarantee of future results. The above is not to be construed as a recommendation for your particular portfolio.



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