

# CAMRI Global Perspectives

Monthly digest of market research & views

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## Globalization brings synchronization

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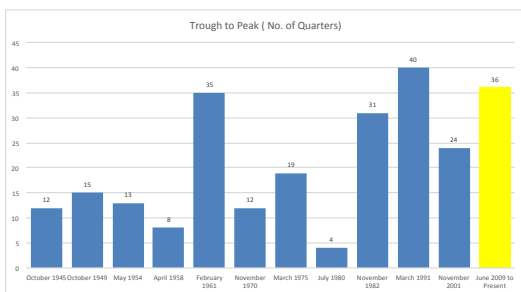
### The US expansion has become very old

The present US business cycle expansion is now 36 quarters old making it the second longest business expansion in the post WW2 era. As one can see from the chart below, the length of business cycle expansions vary quite significantly - from as short as 4 quarters in the policy-induced recession of 1980, to the longest expansion of 40 quarters in the golden decade of the 1990's. By most expert projections this expansion is predicted to eclipse that record this time next year.

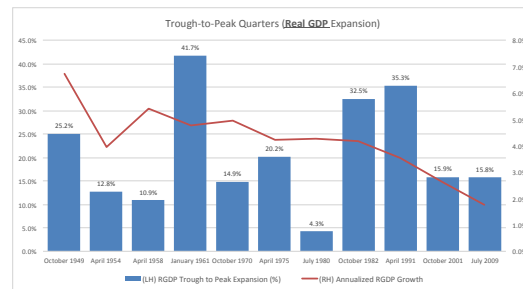
### Not all cycles are the same

Not only do business cycle expansions vary considerably in length, but they also differ significantly in vigor. The next chart reveals two important details of business cycle expansions. First, it shows the extent of real GDP growth in each expansion from its previous cycle trough. The varying robustness of real GDP growth among expansions is quite striking. Second, and more salient than the variety of strength in past expansions, is the very obvious downward-sloping trend of growth among the expansions from past to present.

US Business cycle Expansions in # of Quarters

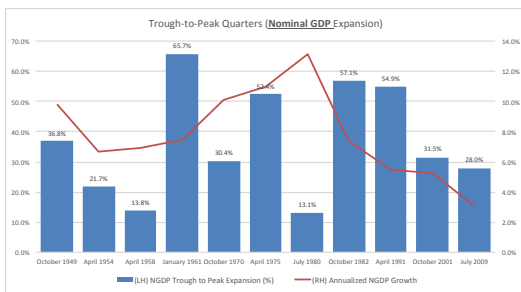


Real GDP growth in each Expansion



The secular decline in the average annual rate of growth in each expansion is more pronounced in nominal terms. This strong evidence of the secular decline in past expansions' robustness fuels the belief in the long-term deterioration in potential US economic growth.

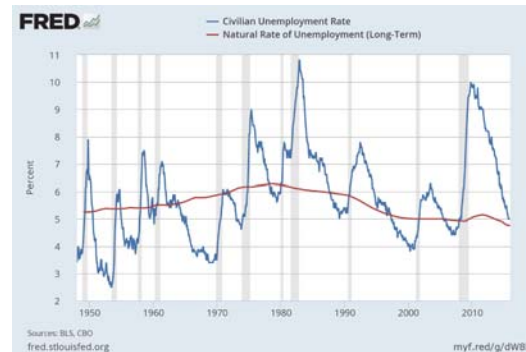
US: Growth of Nominal GDP in Business Cycle Expansions



### Expansions don't just expire

Mature expansions inevitably create the corrosive conditions that instigate a public policy response, nearly always from the Federal Reserve, that eventually bring the expansions to an end. In general we can consider three such causes: first, is labor shortages; second is some other critical commodity shortage, such as oil or energy, and third, is a frenzied display of optimism in financial markets or in real estate that produces significant distortions to credit markets. In each situation the Fed acts to 'take away the punch bowl' before the party gets out of control; that is mainly to control excessive exuberance and dampen demand.

### Overly tight labor markets



Probably the most frequent expansion-ending condition begins from a shortage of available labor. As the chart above in this series depicts, the unemployment rate usually dips below its estimated full employment rate, as the expansion ages, and forces labor costs to soar. This cost-push cause of inflation quickly spreads and creates outages of some essential products and thus promotes second rounds of inflation.

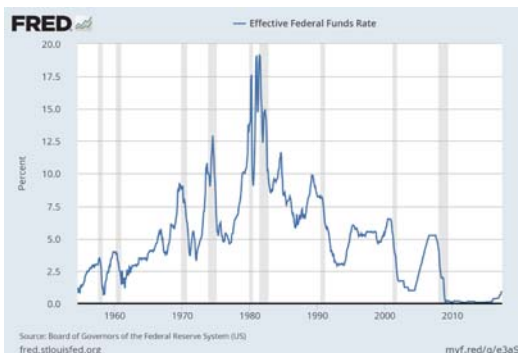
### Above desired rates of inflation brings on the Fed



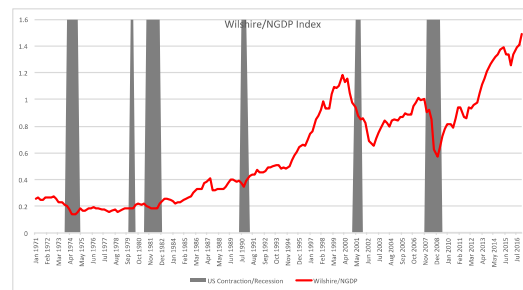
Whatever the cause behind the cumulative increase in inflation, the Fed always responds. Critics may bicker over the timing of the Fed’s restrictive response, but the end result is always the same: significantly higher interest rates, tighter credit market conditions, and an eventual collapse in aggregate demand.

In the past several decades, soaring energy prices were the major culprit driving the general price level above the Fed’s tolerance limits. Initially, policy makers chose to focus on core price indexes, eliminating direct measures of energy and food prices. However, higher energy costs seeped into nearly all other goods and service costs, since nearly every good or service had to use energy for production or distribution.

accused of acting too late to ‘remove the punch bowl’. Part of their slow response could be blamed upon the Fed’s actions in 1987 when the Fed raised interest rates before economic conditions justified tighter monetary policy. The stock market immediately crashed and the Fed quickly reversed its policy actions. The stock market recovered soon thereafter, but it left a lasting imprint upon future Fed decisions, and made the Fed respond cautiously to perceived excessive exuberance in financial markets. Thus, the ‘dotcom bubble’ of the late 1990’s and the housing market bubble of 2008 materialized with full disruptive force. The Fed eventually did respond to these market bubbles, and the respective expansions collapsed.



Stock Prices relative to economy rise sharply before end of expansion



**Excessive exuberance in financial markets belatedly brings in the Fed**

In recent decades the stock market, and most recently the real estate market, went through dangerous bouts of animal spirits that propelled prices above their fundamental values. The Fed typically was

**The end is coming**

Besides being a very mature expansion and a disappointingly slow growing cycle, are there signs of an imminent end to the present expansion? The quick answer is: some, but probably not sufficient to produce the end in the next couple of quarters. The first troubling sign is the present condition of

the labor market. The unemployment rate is at, or maybe through its natural estimated full employment level. Currently, labor costs have not been meaningfully boosted by the present absorption of excess labor.

As seen in the following chart, labor costs are mildly high than earlier in the cycle. However, with current demand exceeding available supply, labor costs are soon to rise and this should boost inflation.



### The Fed is on the move

Second, the general price level is around the Fed’s long-term target of 2%. Although the Fed’s President Yellen has stated that the FOMC would tolerate higher than target inflation for a while, there is no evidence to determine how long they will maintain this approach. The good news is that energy costs appear to be stable and therefore they are not becoming an added source of inflation. Nevertheless, the Fed is raising interest rates; four times in the past 18 months. And, the Fed is committed to raise rates higher in the near future.

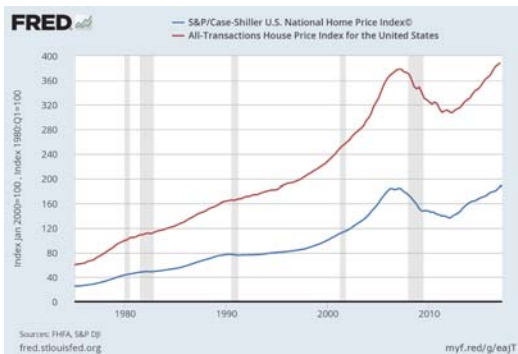
One of the most infallible business cycle indicators through the past 65 years has been the slope of the Treasury yield curve. Whenever it steepens it portends more and stronger economic growth ahead. When it flattens, usually when the Fed begins to tighten credit conditions, it threatens an end to the expansion. As the accompanying chart indicates, the yield curve has been flattening since the Fed began raising interest rates at the end of 2015. .



### Market prices are high

Third, stock market prices are high relative to typical benchmarks, like historical price-earnings ratios and the ratio of broad stock market indexes to the economy. However, there hasn’t been an unusual rush to buy stocks that propelled prices quickly higher, as in 1989, and imply that an impending bubble is underway. Very low interest rates have increased the demand for stocks, and forthcoming higher interest rates should diminish enthusiasm for high-priced equity assets.

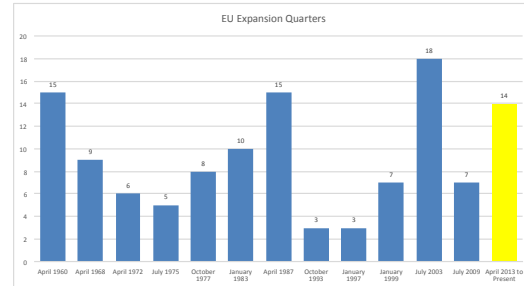
Real estate prices are also on the rise as seen in the next chart. They have climbed above their previous peak although the rate of climb is not as steep as in the previous decade. Tighter monetary policy will also become a deterrent to further increases in home prices and real estate activity. Therefore, the real estate construction sector of the economy will soon begin to fade.



### Business expansions in the EU and in Japan

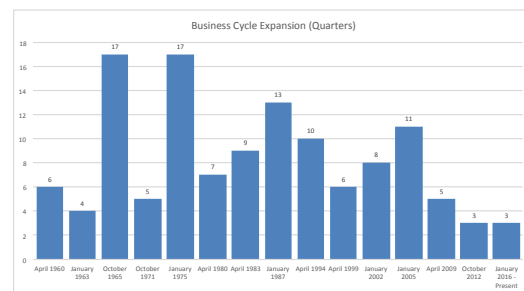
In many respects business cycle development in Europe and in Japan in the post WW2 period have progressed similarly to that of the US. The expansions have been quite varied as to length and vigor. And importantly economic growth in both economic zones has successively slowed as time drew closer to the present.

### Expansions in the EU # of quarters



The deceleration of economic growth in all of the developed economic centers throughout the Post War era indicates a gradual economic maturing to a slower natural rate of growth. And because of it, the rise in living standards in the developed world will dissipate, while the less developed world catches up.

### Expansions in Japan # of quarters



### Globalization interconnects economies

By definition globalization of the world's economies interconnects them. In past decades there was far less interconnectedness. The economic treaties, and economic unions in Europe, North America, and ASEAN created over recent

decades have all brought greater trade and higher dependence upon external markets for all economies. Consequently, when one of these broad economic units stumbles from expansion to contraction, it is probable that the effects from one will more quickly be distributed to all of the other economic sectors much faster than in the past.

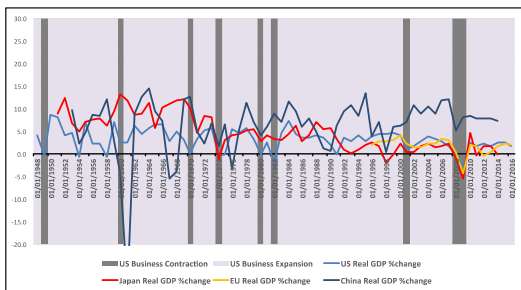
As shown in the following chart, business contractions in the US had spread to other developed economies in the world quite quickly. At present there isn't sufficient data to statistically validate the conclusion that cycles will be more synchronized than they were before, and that they will be spread more thoroughly throughout the world's economies than they were before because of greater globalization. However, in nearly all previous cycles China did not follow the US into recession until the 2008 contraction that started in the US. China's increased connectedness with the developed and nearly developed economies over the past decade strongly imply that they too will endure a recession along with the rest of the world the next time.

**Conclusion: the end, not yet!**

The US has enjoyed a long, but historically slow expansion for the past nine years. Most of the rest of the developed economies of the world are also presently expanding at historically slow rates of growth. There are some signs in the US that this expansion's maturity is creating the conditions that usually end expansions. For now, present labor shortages, rapidly rising stock and real estate prices, a flattening of the Treasury yield curve, and tighter monetary policy have not created sufficient conditions necessary to end the present expansion in the US; at least not yet, but they will and most likely soon.

Because of globalization the world's economies are more integrated than ever before. Thus, a contraction in one of the major economies will certainly create similar conditions throughout the rest of the world. A synchronized global recession could magnify the effects from the recession making it more intense, costly and possibly longer than previous recessions.

Japan and EU follow US into Recession, China didn't



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KEY INDICATORS TABLE (AS OF 31 MAY 2017)								
INDEX	LEVEL (LC)	%1MO (LC)	%1MO (USD)	%1YR (LC)	%1YR (USD)	INDEX	LEVEL	%1YR
S&P500	2411.80	1.41%	1.41%	17.46%	17.46%	3MO LIBOR	1.21	76.44
FTSE	7519.95	4.91%	4.43%	25.53%	11.48%	10YR UST	2.20	19.34
NIKKEI	19650.57	2.36%	3.06%	16.21%	16.22%	10YR BUND	0.30	119.28
HANG SENG	25660.65	4.75%	4.56%	27.76%	27.38%	10YR SPG	1.55	5.43
STI	3210.82	1.90%	2.91%	19.32%	18.75%	10YR SGS	2.08	-7.20
EUR	1.12	3.20%		1.01%		US ISM	54.90	7.65
YEN	110.78	-0.64%		0.05%		EU PMI	57.00	10.68
CMCI	1111.86	-1.62%		5.28%		JP TANKAN	10.00	42.86
Oil	48.32	-2.05%		-1.59%		CHINA IP	6.50	8.33

Source: Bloomberg

## APPENDIX

### GLOSSARY OF KEY TERMS (Source: Bloomberg, with tickers in parenthesis. In US\$ where applicable)

**S&P500:** capitalization-weighted index of the prices of 500 US large-cap stocks (SPX)

**FTSE:** capitalization-weighted index of the prices of the 100 largest LSE-listed stocks (UKX)

**NIKKEI:** capitalization-weighted index of the largest 225 stocks of the Tokyo Stock Exchange (NKY)

**HANG SENG:** capitalization-weighted index of companies from the Hong Kong Stock Exchange (HSI)

**STI:** cap-weighted index of the top 30 companies listed on the Singapore Exchange (FSSTI)

**EUR:** USD/EUR exchange rate: 1 EUR = xx USD (EUR)

**YEN:** YEN/USD exchange rate: 1 USD = xx YEN (JPY)

**CMCI:** Constant Maturity Commodity Index (CMCIPI)

**Oil:** West Texas Intermediate prices, \$ per barrel (CLK1)

**3MO LIBOR:** interbank lending rate for 3-month US dollar loans (US0003M)

**10YR UST:** 10-year US Treasury yield (IYC8 – Sovereigns)

**10YR BUND:** 10-year German government bond yield (IYC8 – Sovereigns)

**10YR SPG:** 10-year Spanish government bond yield, proxy for EU funding problems (IYC8 – Sovereigns)

**10YR SGS:** 10-year Singapore government bond yield (IYC8 – Sovereigns)

**US ISM:** US business survey of more than 300 manufacturing firms by the Institute of Supply Management that monitors employment, production inventories, new orders, etc. (NAPMPMI)

**EU PMI:** Purchasing Managers' index for the 17 country EU region (PMITMEZ)

**JP TANKAN:** Bank of Japan business survey on the outlook of Japanese capital expenditures, employment and the overall economy, quarterly index (JNTGALLI)

**CHINA IP:** China's Industrial Production index, with 1-month lag (CHVAIOY)

**LC:** Local Currency

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