Assembly Committee on Jobs, Economic Development and the Economy February 26, 2019

Economic and Market Overview

John Rothfield, Lead Economist CalPERS Investment Office

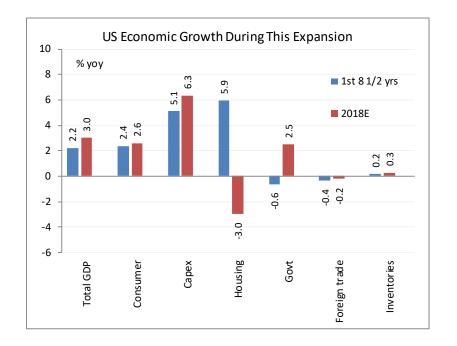


Trending

Positives tend to be more backward looking

Positive	Same Trend	Negative
- US jobs market	- US leverage	- Soft US consumer, housing and credit, no capex uplift
18: labor supply kept up with strong demand. Less involuntary part time and more quitting for better jobs.	US non financial debt is stable at ~ 250%/GDP, right through the expansion	Activity clearly slowed in Winter (GDP growth halves?). Stocks say its an abberation, bonds not so sure.
- US productivity	- External imbalances	- Late cycle behavior
Productivity this cycle has been volatile but the 2018 trend was improving.	Stable US external deficit (2 to 2.5%/GDP) broadly matched by combined surplus of Euro area, Japan and	US cycle close to record 10 years, Japan at post WW2 record 75 months. U-rates low everywhere.
- US GDP growth accelerated		- World Trade, PMIs etc
3.1%E during 2018 vs expansion average of 2.2%. Importantly supply side indicators improved too.		World trade was boosted pre tariffs but falling off and correlated with PMIs, trucking activity etc
- US consumer: spending, cushion, sentiment		- US debt trajectory and debt ceiling
Stable at 5% growth, with only small drop in savings ratio. Lower personal taxes gave one-time support.		Going into a 2020 election year there are fiscal cliff and debt ceiling problems that will be hard to resolve
- Small businesses remain determined to build		- QEnd
To expand and hire despite difficulties in finding qualified workers.		QE unwind meets still-rising debt, especially in EM and some DM (US corporates, \$bloc/Scandi housing).
- Resilient US corporate earnings and sales		- Negative sum game trade wars
2018 saw +5% sales, +8% profits S&P500 ex Fin/Energy. Not too far below 8%/12% during 2017.		Significant misunderstanding of trade imbalance drivers ignites policies where everybody loses.
State and Local on the improve		- Disruptive geopolitics
7 year high in state revenue growth supported improved		Nationalism and bloc realignments create uncertainty
S&L construction and hiring.		that bleeds into the economic sphere.

2018 was a good year for the US



Consumer – one-time impact from lower personal taxes but possible bleed into 2019.

Capex – acceleration has been underwhelming.

Housing – reasons for its smaller role in this cycle.

Government – S&L/ defense lead the way and has momentum into 2019 (TCJA17 then BBA18).

Foreign trade – a drag due to desynchronized growth and pre-tariff goods flows.

US GDP grew by an estimated 3.1% during 2018, vs the expansion average of 2.2%. The chart above shows the contributions to what is expected to be a temporary uptick in growth.

"So What" for Markets



Why?

- **Crowding Out**
- □ CB takes away the Punchbowl
- Markets are forward looking
- Don't forget Rest of World
- "High-pressure" growth could compress business cycle

Topic: Have Administration policies compressed or extended the US expansion?

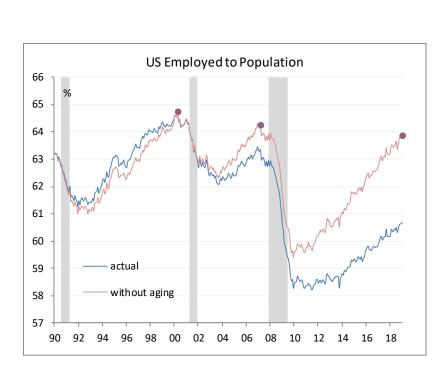
Demand vs Supply.

Given the second second

□ 2018 was a good year for supply side.

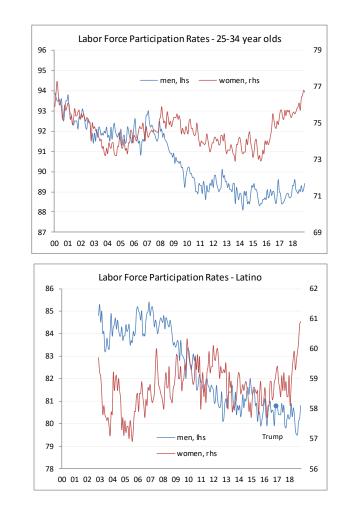
UWatch ...

- 1. Labor force participation;
- 2. Productivity;
- 3. Fed "flexibility".



(a) Labor force participation

Adjusted for demographics, upside in US labor force may be limited

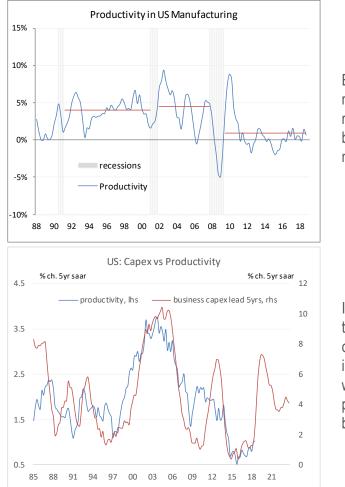


Participation by males continues to lag

(b) Productivity



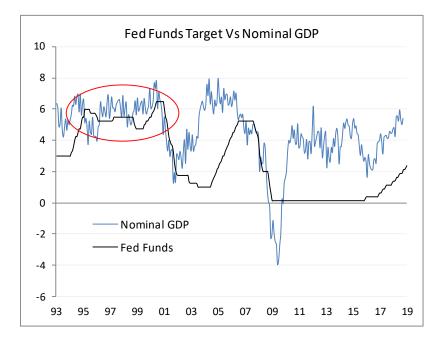
The current economic expansion is characterized by low measured productivity growth.



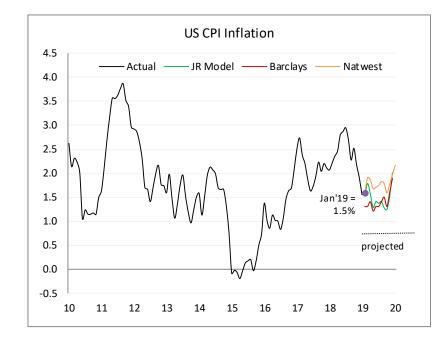
Early stage of manufacturing rebound has been hiring new workers.

It's *possible* that past capex improvement will deliver a productivity boost

(c) Fed flexibility



Greenspan's Fed was able to cut rates twice during the 1990s tightening cycle in both '95 and '98



Benign inflation, if realized, would help Fed's flexibility on rates

Wage inflation unlikely to 'alarm' Fed



Wages growth in the economy is finally accelerating as the jobs market tightens. That said, employee income as a share of the economy is still very low

Challenging backdrop for economies/ markets

Ageing business cycles

- US expansion is within months of a record 10 years.
- Japan's expansion just reached post-WW2 record 74 months.
- Euro Area's expansion is a relatively short six years to date. But the current slowdown is not in the PIGS, but the Big 3. Europe can no longer rely on US growth as a catalyst for its own growth.
- China growth slowdown appears deeper than the official data show.
- There is less runway for policy calibration

Trade engagement, US debt trajectory and pockets of leverage concern, QEnd policy errors, European populism, pockets of leverage in certain markets.

Challenge: Ageing Business Cycles

US Business Cycle assessment

Labor Market	Early	Late	%
Want A Job per Job Offer			98%
Unemployment Rate			95%
Small Business Hard to Fill			100%
KC Fed Labor Market Conditions			12%
Emp/Pop ex aging		_	83%
Activity	Early	Late	%
National Activity Index			34%
Personal Savings Ratio		-	61%
Consumer confidence			76%
Real Personal Disp. Income			35%
US Yield Curve (2yr vs 10yr)			82%
Quarterly	Early	Late	%
Profit share of GDP			25%
Current Account/GDP			40%
Leverage less core CPI YoY	_		31%
Net Worth/DI			100%
Housing affordability			57%

United States			
Mid	Late	Recession	
Chicago Fed NAI	Fed tightening		
Real Disp. Income	Employed to Pop		
Personal Savings Ratio	Job Offers vs Pool		
Small Business Plans	Unemployment Rate		
Profit share	SBOI Hard to Fill		
Leverage + External	Consumer Confidence		
Household formation	Net Worth/ DI		
Late-mid	Output gap		
Housing Affordability	Yield Curve		
Labor Market Conditions			
Credit cycle			
Plans to Buy Home			
China	Japan	Europe	
SOFT/ EASING	LATE	MID+	
<u>Elevated</u>	Mid	Mid	
Li Keqiang index	Economy Watchers	Credit growth	
Steel output	Unemployment rate	Output gap	
Cargo, rail, electricity	BoJ Policy	Consumption	
Consumer confidence	Late	Employment	
CNY TWI, SHIBOR	Output gap	U-rate	
Decelerating	Tankan Factor Ut'n	ECB taper (Apr'17)	
Fixed Asset Invest.	ESRI Leading Index	Late-mid	
Exports, imports/ PMIs		Cap U	
Monthly flows		H/H deposit growth	
CPI, PPI		Unemployment	
M2, TSF growth		Consumer Confidence	
Flat to Neg.		Late	
Residential		Markit PMIs	
Car sales		Bus. Limiting factors	
		EU ESI	

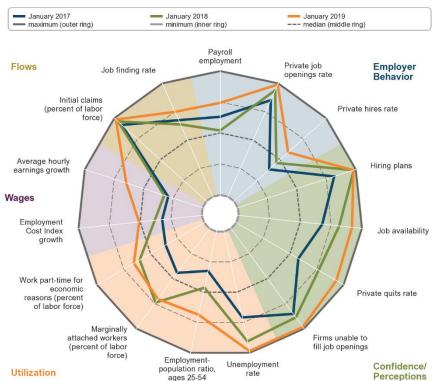
External Manager Business Cycle assessment

US	EU	UK	JN	China
4	5	6	N/A	N/A
5	4	5	5	4
5	4	4	3	6
4	3	3 (4)	3	5 (4)
4	4	5 (4)	5 (4)	N/A
5 (4)	5	5	5	7
5	3	5	5	5
4	3	4	4	6

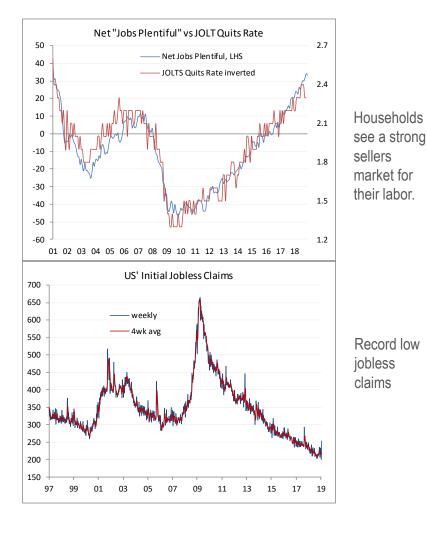
Challenge: US labor market constraints

Labor Market Distributions Spider Chart

Data since March 1994

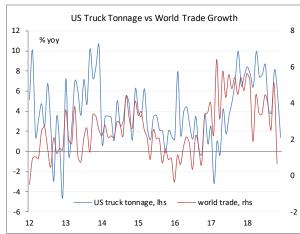


Some labor market indicators are pushing against post 1994 maximums.



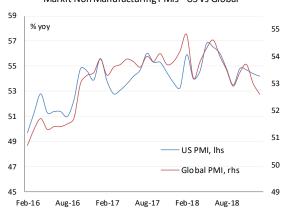
Challenge: Trade wars are a US own-goal





Boost to US from global trade faded into year end





US divergence from rest of world has held up .. In manufacturing

Challenge: China slowdown

Broad measures show pronounced slowing



Official data show smooth soft landing to 6.4% but proprietary aggregations show much slower

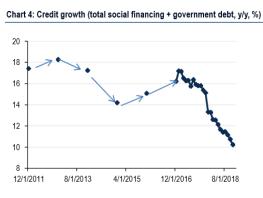
Policy response has been incremental



Fiscal expansion accelerates

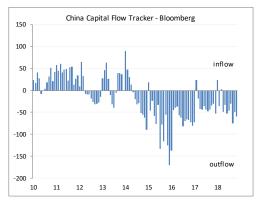
Impossible Trinity:

- Can China control capital outflows as it pulls policy levers?
- '14 reversal took two years

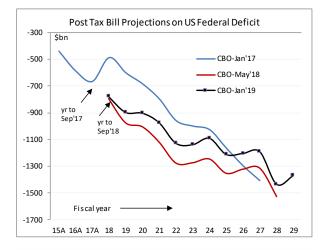


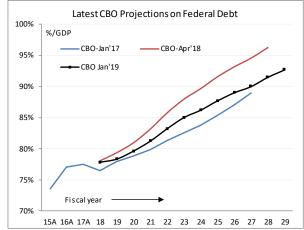
Source: BofA Merrill Lynch Global Research

...and more room to accelerate credit



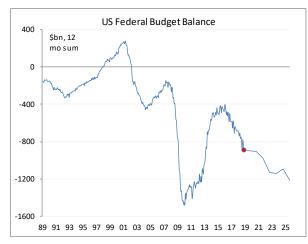
Challenge: US debt trajectory

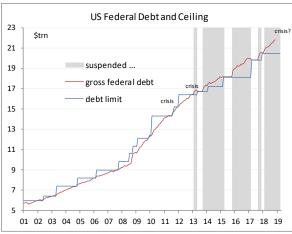




US tax packages (Tax Cuts and Jobs Act 2017 and Bipartisan Budget Act 2018 sharply increased prospective deficits

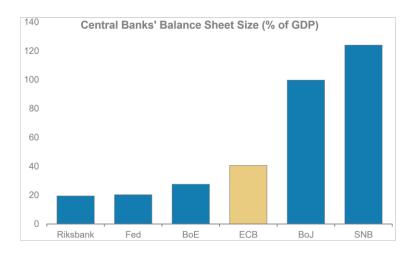
... although the January 2019 CBO update favorably modified future spending on emergencies and debt interest

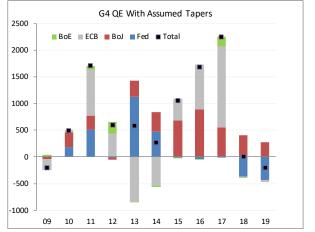




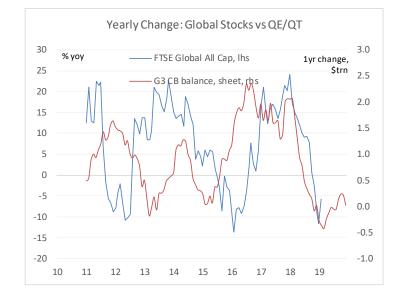
Setting up focus this year on the US debt ceiling

Challenge: Central bank liquidity withdrawal





Central banks have begun to end QE or to start QT



It may already have had some impact on global assets pricing.

Challenge: European populism

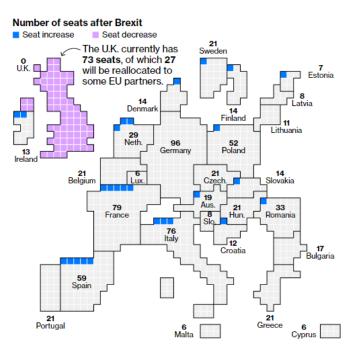
May EU Parliament Elections

- The EU Parliament traditionally has split center-left/ center-right and pro/anti-EU.
- The anti-EU faction has had little power and ability to maneuver.
- However, if the UK leaves the EU; France, Spain, and Italy gain seats in the next EU Parliament.
- All three countries have non-mainstream parties that are more skeptical of the EU-project.
- Germany, while does not gain seats, has a more anti-EU balance of power, with AfD now the third largest party in the Bundestag
- Risk for the elections: The elections become a vote around the future to Europe or its priorities.

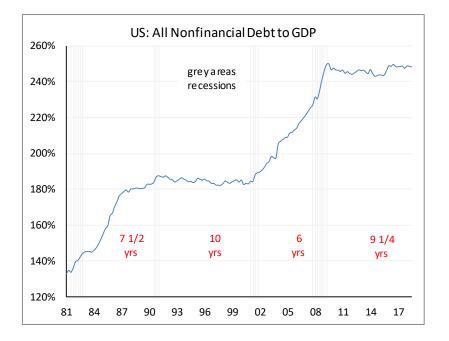
Risks

If anti-populist parties gain traction:

- Parliament becomes fragmented; policies are blocked (e.g. migration and the budget); and forward movement is curtailed.
- League of Leagues may emerge (anti-populist parties form a coalition).

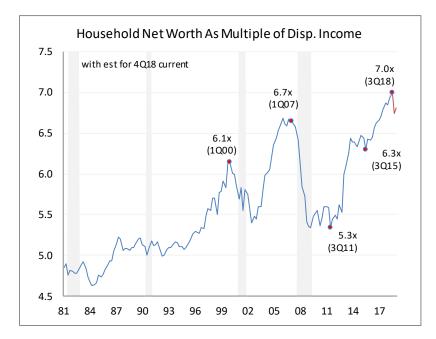


Challenge: Leverage and Valuation



Specialized risk

FOMC (Nov 7-8): "vulnerabilities from leverage in the nonfinancial business sector elevated and ... a pickup in the issuance of risky debt and the continued deterioration in underwriting standards on leveraged loans."



Higher risk

FOMC (Nov 7-8): "vulnerabilities associated with asset valuation pressures continued to be elevated"

Scenarios

DOWNSIDE (45%)	CENTRAL (40%)	UPSIDE (15%)	
"Valuation and policy risks"	"Shaking off distractions"	"Positive Synchronicity"	
US' disruptive engagement threatens global upswing and balance of payments recycling.	Modest rise in US potential growth sustains expansion for now.	Self reinforcing acceleration in US productivity, helping tax reform to partly 'pay for itself'.	
'Virtuous' cycle of balance sheet repair and spending unwinds.	Momentum in global economy levels out but does not fall away.	US and China realize mutual interest in backing off confrontation	
China's kitchen sink approach to stimulus fails to rally that economy.	China and US corporates can manage the downside from trade disruptions.		
"Free lunch" in early stage of fiscal stimulus gives way to pre-election tactical chaos.	Well signaled (and flexible) removal of stimulus here and abroad.		