Late Stages of US Bull Markets

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In this report we examine US economic conditions in the 24 months preceding the peak of an equity bull market.

We compare the last 24 months to previous "blow-off" rallies.

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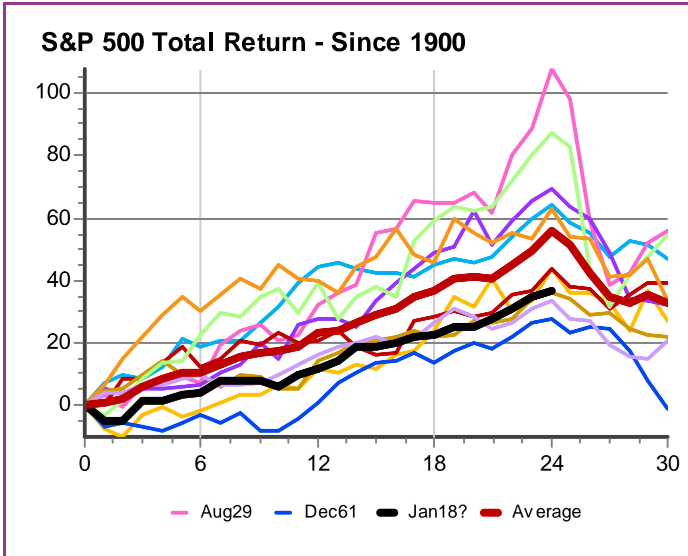
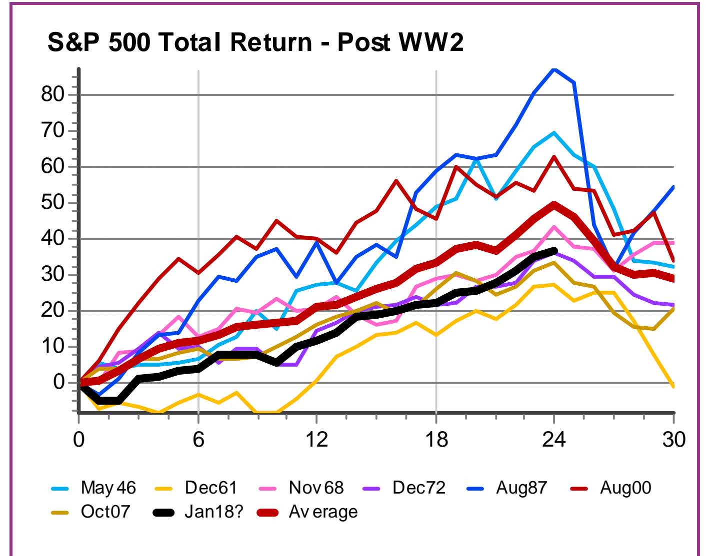
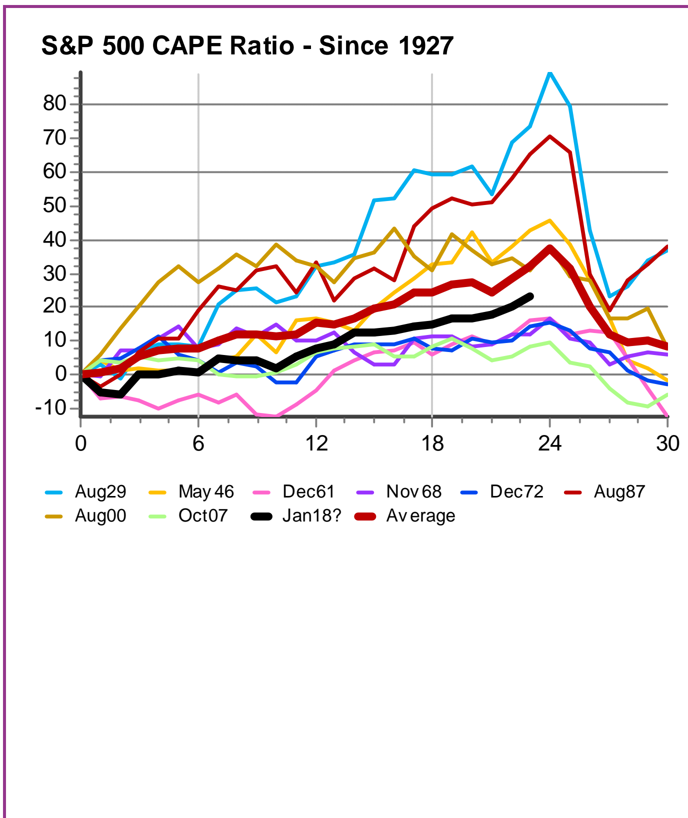
1. S&P 500 Total Returns





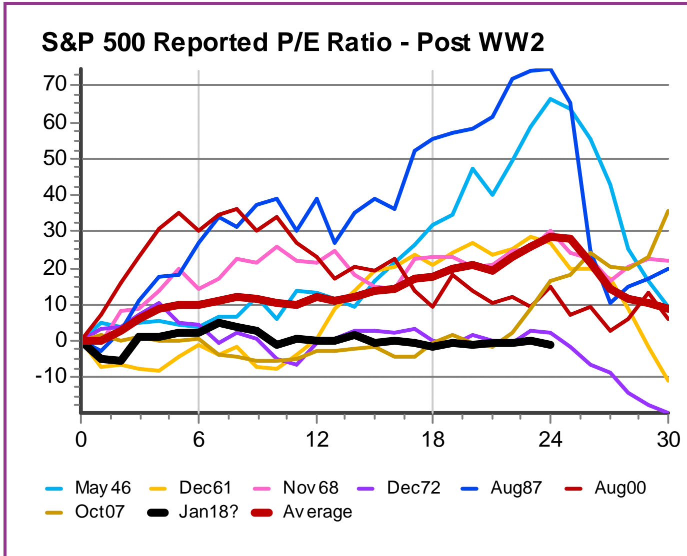


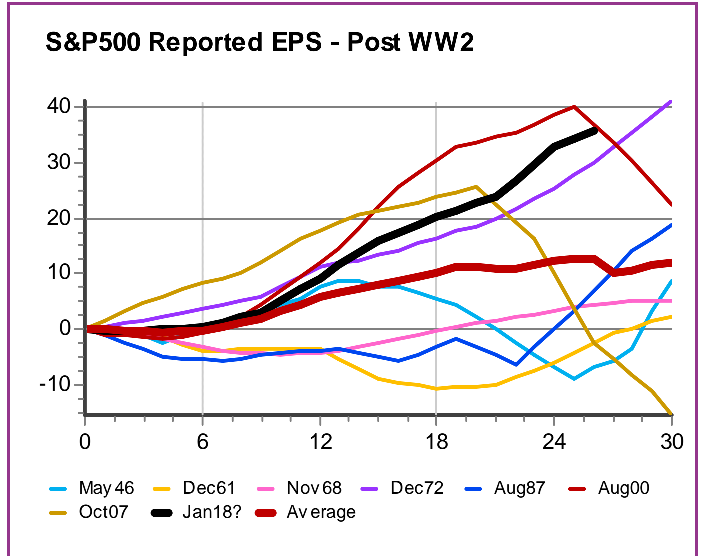
- Lately we have been reading a lot of commentary on the possibility of a late-stage"blow-off" rally in US equities.
- We thought the best way to put this into perspective was to examine past stock market melt-ups. **NOTE: We're not calling January 2018 as the top of the bull market. We just thought it would be insightful to compare.** The charts show time in months on the X-axis (where 0 represents 24 months prior to the bear market) and the % gain/loss from the beginning of the period is on the Y-axis.
- We have defined a late-stage bull market as the 24-months prior to a market peak (i.e. just before a market fall of 20% or more). This definition results in 11 bull market observation since 1900[1].
- **The average total return on the S&P 500 was 55% over the 24-months prior to the market peak.**
- The best late-stage bull market was 1929, with a prior 24-month return of over 100%. The worst was 1961, with a prior 24-month return of just over 25%.
- The total return on the S&P 500 is a touch over 35% over the last 24 months. That is less than the average "melt-up" but it is better than 1961, 1972 and 2007.

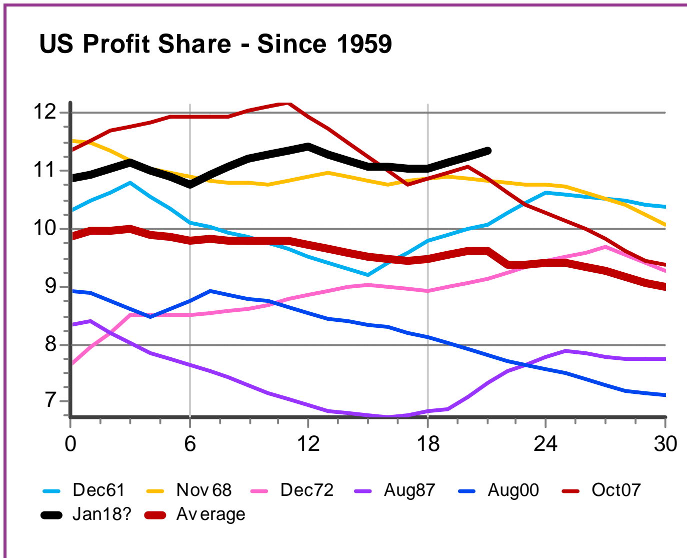
- Measures of long-term valuation, such as the cyclically-adjusted price to earnings ratio, or Shiller CAPE, have increased on average by over 35% in the 24-months prior to the peak.
- Over the last 24-months, the CAPE ratio has expanded by just under 25%.

[1] September 1906, November 1916, October 1919, August 1929, May 1946, December 1961, November 1968, December 1972, August 1987, August 200 and October 2007.

2. P/E, Earnings and Profitability

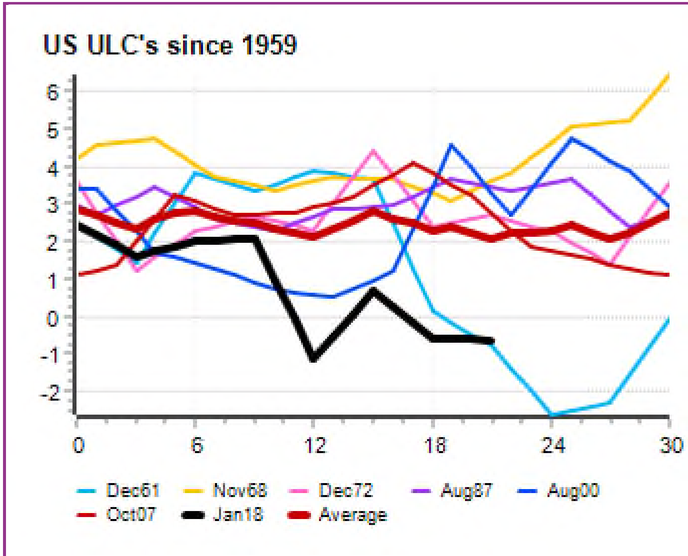


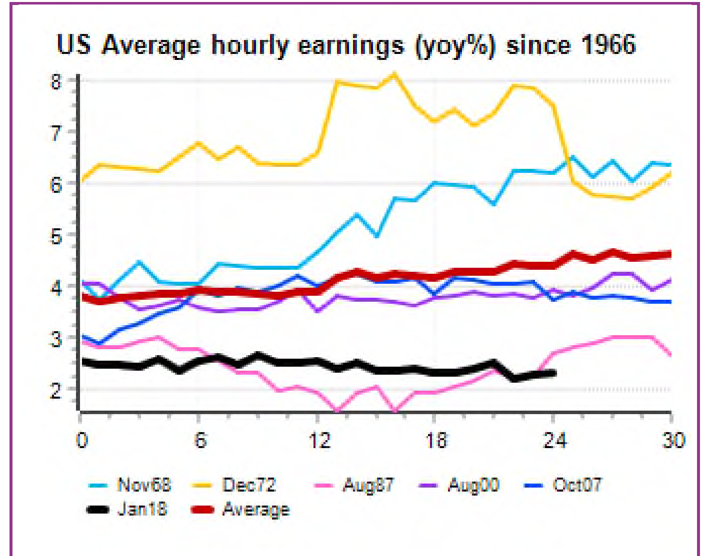


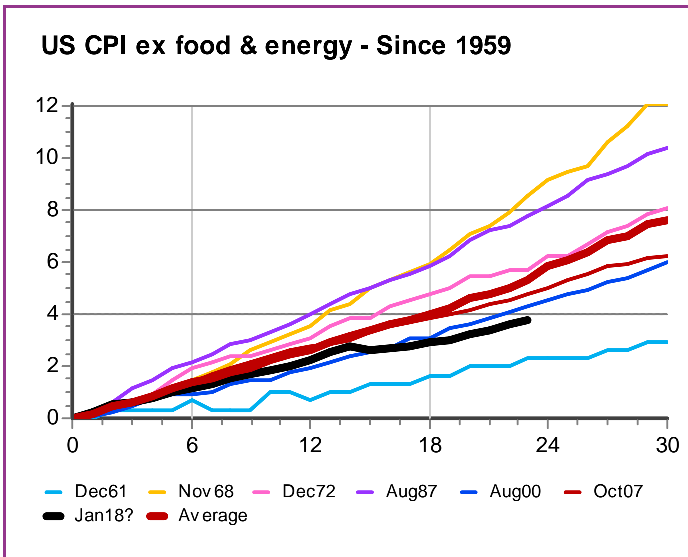


- It is not unusual to see strong improvement in earnings leading up to a market peak.
- Reported P/E ratio (trailing 12 months) has been relatively flat over the last 24 months.
- The S&P 500 has rallied higher on the back of strong earnings per share growth.
- The improvement in EPS over the last 24-months has been very strong, much stronger than the average "melt-up".
- We believe that this is driven by higher profitability. US profit share (courtesy of the BEA) is currently higher than it has been in any "blow-off" rally. In recent lead-ups to market peaks profit share has been declining.

3. Labour Costs, Wage Growth and Inflation

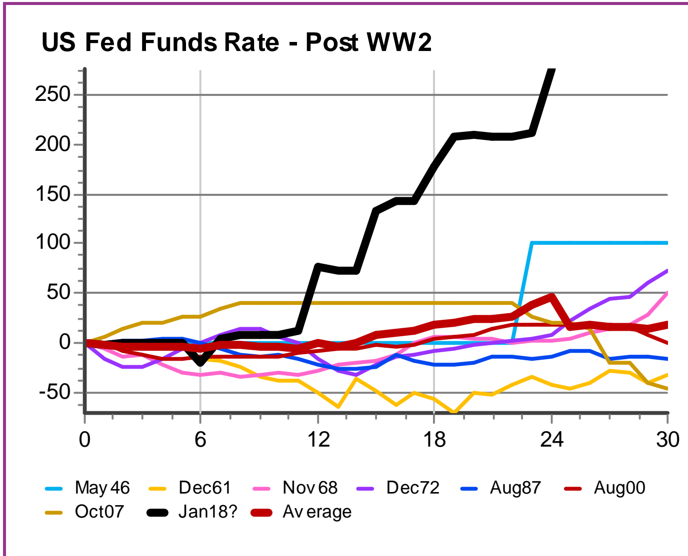


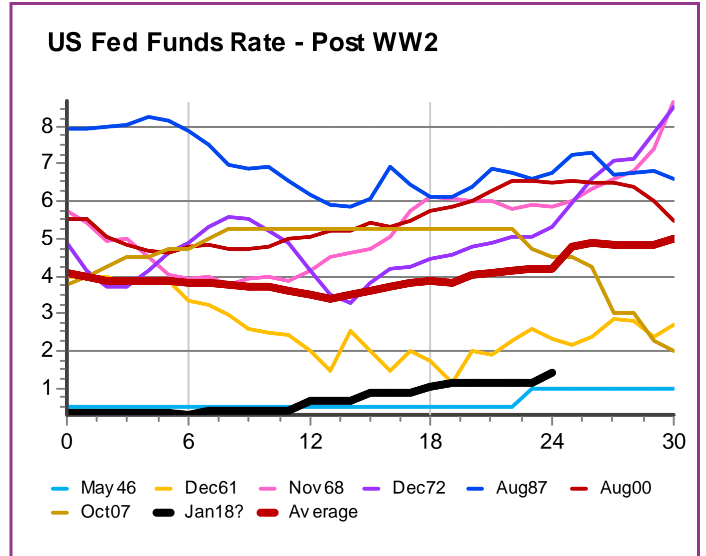


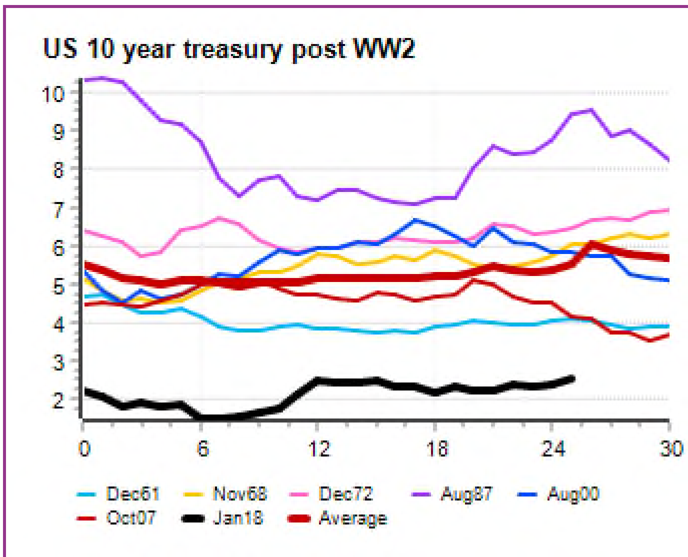


- What is behind the current high-level of profitability? Lower labour costs and slower wage growth are two contributing factors. Typically, unit labour costs have been 2.5% and rising (except in 1961). Wages growth generally been higher.
- **Inflation has also been noticably subdued over the last 24-months in** contrast with every other post-1959 melt-up with the exception of 1961.
- **Low wage growth is keeping corporate profitability high, earnings high, inflation low (high inflation negatively affects P/E ratios) and interest rates low, all of which have supported US equities.**

4. Fed Funds Rate and US 10-y Treasury Yield

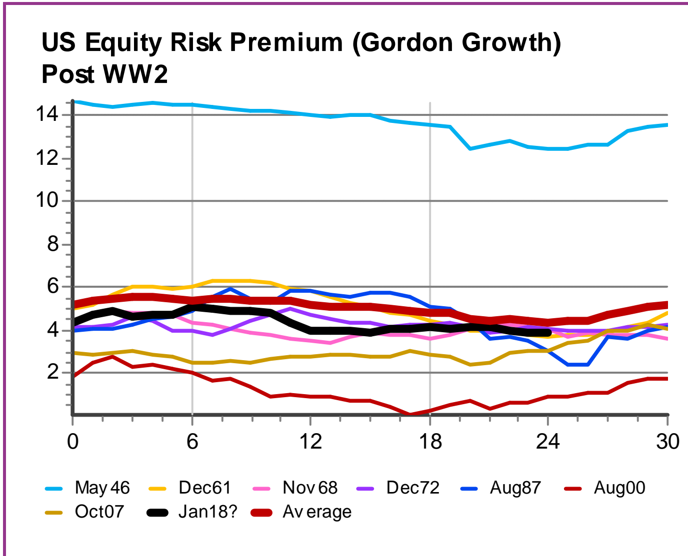


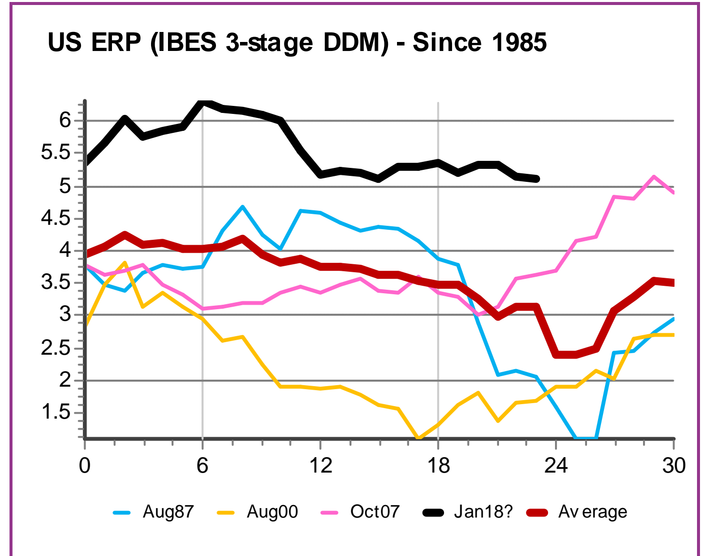




- In percentage terms the increase in the US Federal Reserve funds rate is the largest ever seen in a late-stage bull market since World War Two (WW2). The Fed funds rate has usually fallen over the first 12-months (i.e. stimulatory interest rate policy) and risen (i.e. contractonary interest rate policy) over the 12-months immediately preceeding the peak.
- **However, this increase in the Fed funds rate is off an extremely low base. The Fed fund rate remains at the second-lowest level for any blow-off rally since WW2.**
- It is the same story for the US 10-year Treasury Bond yield. The current yield is extremely low compared to previous “melt-up” periods. The rise to date has been modest.

5. US Equity Risk Premium





- Finally we take a look at the US equity risk premium (ERP). The long-term ERP[2] is currently slightly below the late-stage US bull market average.
- The ERP (IBES) is nowhere near the lows that it reached prior to the top of the tech bubble in 2000.
- **When compared to more recent blow-off rallies[3], the current ERP is materially larger.**

[2] ERP calculated using a Gordon Growth (or perpetuity) model with GDP growth and dividend yields as inputs.
[3] ERP calculated using a 3-stage dividend discount model. Source IBES.