DÉJÀ VU (ENCORE): US MARKETPLACE HISTORY

© Leo Haviland, 646-295-8385 October 4, 2015

"It's déjà vu all over again!" Baseball star Yogi Berra

****

CONCLUSION

Via its rhetoric and September 2015 managerial decision to delay a Fed Funds rate increase, the Federal Reserve has battled to halt the S+P 500's decline relative to its May 2015 peak at around ten percent. Hints by the European Central Bank and Japanese policymakers regarding their potential willingness to embark on additional quantitative easing interrelate with this Fed quest. However, the International Monetary Fund head warns: "global growth will likely be weaker this year than last, with only a modest acceleration expected in 2016"; "we see global growth that is disappointing and uneven" ("Managing the Transition to a Healthier Global Economy"; 9/30/15). The World Trade Organization cut its 2015 forecast of global trade expansion from 3.3 percent to 2.8pc, lowering that for 2016 to 3.9pc from 4.0pc (9/30/15). The WTO says risks to this prediction are on the downside.

Worldwide economic growth probably will be feebler than the IMF expects. In today's intertwined international economy, this overall economic weakness, which is not confined to emerging/developing nations, will help to undermine American GDP growth. The S+P 500 will remain volatile, but it probably will continue to decline, eventually breaking beneath its August 2015 low. The broad real trade-weighted United States dollar will stay relatively strong.

Marketplace history for US stocks and other financial domains obviously need not repeat itself, either in whole or in part. A slump in the S+P 500 of roughly twenty percent or more from its spring 2015 pinnacle nevertheless probably would inspire memories of 2007-09. After all, not only is the dollar strong, but also emerging marketplace stocks and commodities "in general" have collapsed over the past few years, and notably since second half 2014.

The strong US dollar, the substantial tumble in emerging stock marketplaces, and the crash in commodities in general reflect (confirm; encourage) global economic weakness (slowing growth). Overall debt levels as a percentage of nominal GDP in America (and many other places) remain elevated despite the economic recovery since 2009. The United States has made no progress in reducing its long run federal fiscal deficit problem. These trends are ominous bearish indicators for the S+P 500. What other variables currently or potentially confirm the probability of economic weakness in the US (and elsewhere)? Let's focus on the US economic and political scene.

FIRST PITCH

The broad real trade-weighted US dollar ("TWD") established a major bottom at 80.5 in July 2011 (Federal Reserve, H.10; monthly average). By September 2015, it had run up to 97.9. Not only does September 2015 exceed March 2009's 96.9 high, attained at the depths of the worldwide economic disaster (and alongside the S+P 500's March 2009 major low at 667). The TWD's 21.6 percent appreciation in its current bull move exceeds the 15.1pc TWD advance during from April 2008 to March 2009. Keep in mind that although the S+P 500's major high in October 2007 at 1576 preceded April 2008's TWD trough, its 5/19/08 final top at 1440 roughly coincided with that April 2008 TWD low.

The rally in the TWD that began in July 2011 started not long after key peaks in emerging marketplace stocks (MSCI Emerging Stock Markets Index, from Morgan Stanley, "MXEF") on 4/27/11 at 1212 and the broad Goldman Sachs Commodity Index on 4/11 and 5/2/11 at 762. The broad GSCI collapsed over fifty percent from its 6/23/14 interim high at 673 to 8/24/15's low at 334, the MXEF withered about 31.0pc from its final top at 1104 on 9/14/14 to 8/24/15's 763 depth.

The S+P 500's peak on 5/20/15 at 2135 coincided with the 5/15/15 minor low at 112.8 in the nominal TWD (which has daily data). Its subsequent 12.6 percent downturn to its 8/24/15 low at 1867 fits with the broad TWD's advance from June 2015's 94.1 level. China's Shanghai Composite cratered 44.9 percent from 5178 on 6/12/15 to 2851 on 8/26/15.Note that June 2015's TWD height surpassed the key October 2008 level of 93.9 (a jump from September 2008's 88.8); recall the S+P 500's collapse in 2008 after September 2008.

****

See "Marketplace Twists and Shouts: As the World Turns" (9/10/15), "Wall Street Marketplace Violence" (9/1/15), "Shakin' All Over: Marketplace Fears" (8/13/15), "Playing Percentages: Stock Marketplace Games" (7/13/15), "Marketplace Fireworks" (7/6/15), "Marketplace Party Tantrums" (6/15/15), "US Inflation Signals" (6/7/15), and earlier essays.

THE BOND BIG LEAGUES: WATCHING YIELD PATTERNS

"Always calculate the percentages on every play." Ty Cobb, baseball great

****

Review Moody's Baa index of corporate bonds (this signpost includes all industries, not just the industrial sector; average maturity 30 years, minimum maturity 20 years; Federal Reserve, H.15). Despite the Fed's continued unwillingness to raise the Federal Funds rate, such yield repression in recent months has not prevented the modest yet rather steady rise in medium-grade US corporate debt yields. In addition, the yield spread between that corporate debt index and the 30 year US Treasury bond has widened. Although these rate moves have not shifted as dramatically as they did during the worldwide financial crisis, they likewise warn of (confirm) US (and global) economic weakness.

From January 2015's 4.45pc low (monthly average), the Baa index walked up to 5.20pc in July 2015 (5.19pc August 2015) and about 5.34pc in September 2015. On a daily price basis, the high yield is 9/16/15's 5.45pc.

Compare history from the Goldilocks Era and the worldwide economic crisis period. The Baa index touched bottom in February 2005 at 5.82pc. Thereafter its yield in general climbed steadily, reaching 7.31pc in September 2008. It spiked to the November 2008 summit at 9.21pc. Recall the rally in the TWD and the S+P 500 collapse (beyond a 20 percent fall from its 10/11/07's major high at 1576) around that time. The Baa index remained lofty until April 2009's 8.39pc average; remember the S+P 500's climb began 3/6/09, accelerating as corporate bond yields slipped.

For the Moody's Baa index less US Treasury 30 year spread (using weekly data, at Friday), underline several lows in May and June 2014 around 1.37 percent (137 basis points). These spread lows occurred near in time to the broad GSCI's 6/23/14 high at 673. The initial spread widening period following that trough occurred not far from the MXEF's 9/14/14 top. The

Baa/UST 30 year spread widened to 203 basis points by 1/23/15. It did not step above that level until 7/3/15's 207 basis points. Note the spread's decisive advance over 2.00pc in July 2015 alongside the broad TWD appreciation. After its May 2015 pinnacle at 2135, the S+P 500 made slightly lower highs on 6/22/15 (at 2130) and 7/20/15 (at 2133) before plunging. The spread high so far is 8/28/15's 2.42pc, close in time to the S+P 500's late August 2015 low. The September 2015 Baa index less the UST 30 year was about 239 basis points (monthly average).

What's the box score from seven to eight years ago for that Baa/30 year UST spread (weekly data)? An important low occurred 2/23/07 at 144 basis points (compare the 137 basis point start of May/June 2014). The spread edged up in ensuing months, advancing over the 200 basis point threshold in late November 2007. The S+P 500 major high was in October 2007. The spread soared following 9/12/08's 281 basis point level, peaking at 563 basis points on 12/5/08. Everyone remembers the S+P 500's related nosedive after around mid-September 2008. The bond spread stayed fairly wide for a few months, not declining much until after 4/3/09's 4.88pc (3/6/09 S+P 500 major bottom).

****

Note that the move to higher Baa corporate yields since around June 2015 occurred as US Treasury 30 year (and 10 year) yields were falling slightly (H.15; monthly averages). Because the S+P 500 was beginning to slide around that time (note also the stumble in emerging marketplace equities), the modest rally in UST prices since June probably in part represents a flight to quality, and thus fears about economic recovery (and deflation/too low inflation). The UST 30 year yield high declined from 3.11 percent in June 2015 to 2.86pc in August 2015, but edged up to around 2.95pc in September 2015.

A large fall in the UST 30 year yield occurred during late 2008 as Baa yields were moving upward. Of course the overall UST yield decline from June 2007's 5.20pc and August 2008's 4.50pc to December 2008's 2.87 trough (as the worldwide economic crisis emerged and charged forward) obviously was far more massive than that since June 2015.

The UST 10 year yield high was 2.36 percent in June 2015 (monthly average), but fell to 2.17pc in August (and September) 2015. The Baa less 10 year spread widened from 2.50pc in March 2015 to 3.17pc in September 2015. The 10 year UST yield was 5.10pc in June 2007 and 3.89pc in August 2008, cratering to 2.42pc in December 2008.

****

Widespread trends toward higher yields for sovereign and corporate debt of emerging marketplaces probably would warn of slowdowns in (dangers to) economic growth not only in developing nations in general, but also in advanced countries.

The IMF's October 2015 "Global Financial Stability Report" (chapter 3, pp83-85) coaches audiences: "Corporate debt in emerging market economies has risen significantly during the past decade. The corporate debt of nonfinancial firms across major emerging market economies increased from about $4 trillion in 2004 to well over $18 trillion in 2014." The average emerging market corporate debt-to-GDP ratio has increased by 26 percentage points over that decade, though there are notable differences across countries. "Accommodative global monetary conditions can encourage leverage growth in emerging markets through several channels…A key risk for the emerging market corporate sector is a reversal of postcrisis accommodative global financial conditions…Furthermore, interest rate risk can be aggravated by rollover and currency risks."

MAJOR LEAGUE LEVERAGE LEVELS (MARGIN DEBT) IN US STOCKS

"All ballplayers should quit when it starts to feel as if all the baselines run uphill." Babe Ruth, baseball hero

****

Many stock marketplace participants are fans of leverage. NYSE margin debt has tended to peak alongside S+P 500 major highs; it likewise often establishes lows near in time to important bottoms in the S+P 500. NYSE margin debt peaked at $507.2 billion in April 2015 and $505.0bb in June 2015, thus surrounding the S+P 500's 5/20/15 summit at 2135. As of August 2015, margin debt fell to $473.4bb. It peaked in July 2007 at $381.4bb, not long before October 2007's major high in the S+P 500. The 2000 experience was similar. March 2000's margin debt top was $278.5bb; the S+P 500 major high was 3/24/00's 1553.

WINNING STREAKS: US CORPORATE PROFITS

"It ain't over till it's over." Yogi Berra

****

All else equal, rising (and sustained high) US corporate profitability generally tends to assist US stock marketplace bull moves; falling (low) corporate profitability tends to spark or sustain equity bear moves. There indeed are numerous methods by which to define, measure, and assess corporate profit levels and trends. Much talk focuses on earnings per share. Since the S+P 500 of course is not the only corporate ballpark, the S+P 500 field does not completely measure United States corporate profitability. In the United States, stock marketplace players (especially "investors"), many other money managers, and media cheerleaders nevertheless pay considerable attention to S+P 500 profits (or earnings per share).

In any case, given the majestic bull move in US equities from March 2009 (the S+P 500's trough) up into calendar 2015, why not stare at long run corporate history and ask if US corporate profits ever sustain slumps? Will they droop, at least for a while, from current lofty levels?

If US corporate profits subside from current levels, that will tend to encourage (confirm) the end of a major bull run in the S+P 500.

****

Articles in the Financial Times (see 9/30/15, p1; 10/3/15, p13) suggest that for the S+P 500, US quarterly earnings per share will decline between 4.6 percent (according to "analysts") to 5.0pc (referencing Factset) year-over-year in third quarter 2015. A percentage fall in earnings per share is not necessarily identical with a percentage drop in absolute after-tax profits; the number of shares outstanding, not just total corporate profits, can change over time. Nevertheless, a given percentage decline in earnings per share suggests there may be a roughly comparable percentage reduction in corporate profits, particularly as history shows that absolute nominal after-tax profits frequently have fallen on a calendar year-on-year basis.

****

Suppose we take a very long run look at nominal after-tax corporate profits (without inventory and capital consumption adjustments) of US corporations as reported by the Federal Reserve Board (Z.1) and the Bureau of Economic Analysis. These figures are not in per share terms. The

statistics are not restricted to S+P 500 firms. Also, scan these nominal after-tax profits ("ATP") in relation to nominal GDP.

The average year-on-year increase of US after-tax corporate profits ("ATP") from 1946 through 2014 is about 8.8 percent. However, year-on-year profits declined in nominal terms 22 times (nearly one-third of the time) over the post-World War Two period. Profits are not destined to keep rising, right? Even an outstanding major league baseball team does not win every game; winning sixty percent of them makes for a very good year.

Indeed the blessed Goldilocks Era saw skyrocketing profits, with notable year-on-year gains from calendar 2002 through calendar 2006 (they reached nearly thirty-one percent year-on-year in both 2004 and 2005). However, recall the eventual bear move in the S+P 500 as ATP fell about 5.5pc year-on-year in calendar 2007 versus calendar 2006, and 17.6pc in calendar 2008 relative to 2007. Calendar year 2000 also saw the advent of a significant S+P 500 bear move. Corporate after-tax profits fell five percent in 2000 relative to 1999; they rose only 1.1pc in 2001. For those enthusiastic about the S+P 500's bull move after calendar 2012 (and optimistic regarding its ability to sustain the May 2015 highs), note that total profits rose merely .6pc year-on-year in 2013, and a puny .1pc (about flat) in calendar 2014 relative to 2013.

At present, 2Q15's ATP of about $1845 billion (annualized) is quite a jump from 1Q15's $1735bb. It also leaps from full calendar year 2012's $1683bb, 2013's $1693bb, and 2014's 1694bb. So one should question as to how long the 2Q15 ATP height will persist without some retracement. With 3Q14 corporate after-tax profits about $1761 billion, suppose they drop only three pc in 3Q15 (not the five pc derived from earnings per share estimates cited in the Financial Times). That puts 3Q15 ATP at around $1708bb, roughly that for the three 2012-2014 years.

As a percentage of nominal GDP, after-tax profits averaged about 6.5 percent from 1946-2014. Second quarter 2015 ATP of about $1845 billion are about 10.3pc of 2Q15 nominal GDP of $17.914 trillion (annualized). So from the post-WW2 historical perspective, the 2Q15 profits look high.

Of course, many will argue that much has changed in recent years. The 2Q15 ATP relative to nominal GDP fall short of 2012's 10.4 percent and stand close to 2013's 10.2pc. Yet 2Q15's 10.3pc appears somewhat elevated relative to a span that includes the Goldilocks Era. The 2004-2014'sATP/nominal GDP average is 9.2pc.

In any case, the bottom line is that the S+P 500 probably is vulnerable US corporate profit decline.

(What will the final score be for nominal US GDP in 3Q15? In any case, if nominal GDP grows .6pc from 2Q15's annualized level, 3Q15 output will be about $18.02 trillion. If 3Q15 ATP are around $1708 billion, the ATP/nominal GDP level is about 9.5pc. And looking forward, will US productivity grow rapidly?)

****

Let's detour into the topic of share buybacks by US corporations. These probably encouraged the towering bull move in US stocks in recent years. See "US Share Buybacks: Off to the Races" (5/3/15). The Financial Times says that in 2014, companies bought back almost three percent of the S+P 500's equity (netting out the firms' equity issuance (9/25/15, p16). What if the buyback rate of US shares slows significantly?

What well tend to happen to US stock prices if total corporate profits deteriorate alongside a declining buyback rate?

PLAYING PERCENTAGES: THE STOCK MARKETPLACE GAME

"Each big leaguer is a study in human nature under high pressure." Ty Cobb

****

Now focus on noteworthy percentage declines in the S+P 500 with pictures of 2007-09 in view. Ten and twenty percent moves in the S+P 500, especially when interpreted alongside Federal Reserve policy, currently are particularly important.

A five percent decline from 5/20/15's peak at 2135 is 2028 (for some related chart points, see 7/7/14's low at 2044, a price gap around 2035 from 8/20 to 8/21/15, and 9/17/15's retracement high of 2021).

A ten percent tumble from the May 2015 summit gives 1922. Recall the12.6pc slump from 5/20/15's 2135 to 1867 on 8/24/15; remember as well the 9.8 percent drop from an interim high achieved during the long bull move, from 2019 on 9/19/14 to 1821 on 10/15/14. Federal Reserve (and other central bank) wordplay aimed to arrest these two drops. The US central bank nowadays does not talk or act alone. Note also recent murmurings from the European Central Bank as well as from a Japanese economic adviser to the Prime Minister (Financial Times website, 9/29/15) regarding potential additional quantitative easing.

The S+P 500's Goldilocks Era major high occurred on 10/11/07 at 1576. This benchmark fell 10.8 percent to 11/26/07's 1406, but it rapidly rose to 1524 on 12/11/07. However, it subsequently collapsed, hitting lows of 1270 on 1/23/08 and 1257 on 3/17/08. The fall from 1576 to 1257 was 20.2 percent. In response, the Fed slashed the Federal Funds rate by 75 basis points on 1/22/08 (to 3.5pc), 50bp on 1/30/08 (to 3.00pc), 75bp on 3/18/08 to 2.25pc), and a further 25 basis points on 4/30/08. The S+P 500 marched up to its final high on 5/19/08 at 1440 (incidentally, compare the 5/20 calendar date of 2015's important top). Yet as the Fed and some other marketplace players probably recall, the S+P 500 failed to hold its 10pc decline level (1418) from the October 2007 peak.

A fifteen pc fall equals 1815 (for a chart point prior to the May 2015 top, see the 1821 low on 10/15/14).

Many marketplace broadcasters define a bear market as a sustained drop of at least twenty percent from a noteworthy high. Twenty percent down from 5/20/15's 2135 gives 1708. A 33pc collapse from the May peak is 1422.

With the lows of 1270 on 1/23/08 and 1257 on 3/17/08 prior to the May 2008 final top in view (1261 is a 20 percent fall from 1576), underscore 8/11/08's interim high at 1313 as well as 9/2/08's at 1303, both of which failed to surpass the ten percent decline level 1418 (and May 2008's 1440 elevation). After this failure to sustain a significant rally, the S+P 500 inched out another interim high to around the 20pc decline from the peak level before its murderous collapse (9/19/08 high 1265, 9/26/08 close 1213).

What about the post-March 2009 period? The S+P 500 broke down 17.1 percent from its 4/26/10 high at 1220 (QE1 ended March 2010) to its 7/1/10 low at 1011; the move to 8/27/10's 1040 attacked that floor. The Fed reacted rather swiftly, leaving its dugout to relieve this treacherous situation rather swiftly. It unveiled QE2 at end August/November 2010. QE2 ceased in June 2011; the S+P 500 declined sharply, 21.6pc, from 5/2/11's 1371 to 10/4/11's 1075 (9/22/14 low was 1114, an 18.7pc tumble). The Fed announced its "Operation Twist" 9/21/11.

****

Would further noteworthy declines in the S+P 500 be surprising? The Greek debt problem and China's growth slowdown issue have not vanished. What other potential surprises lurk out there? Recall the Lehman Brothers 9/15/08 bankruptcy stunned many players. So did the subprime real estate disaster itself. Suppose US corporate earnings descend more than just a little bit from their recent lofty elevations, or that the broad real trade-weighted dollar eventually ascends beyond its September 2015 height. What if China is not able to reverse its economic growth slowdown trend?

Or. suppose the European Central Bank, Bank of Japan, or (even) the Federal Reserve loudly threaten or actually engage in additional (a new round of) quantitative easing. In the current marketplace arena, will such money printing warnings or realities necessarily stop significant S+P 500 and related stock marketplace declines "once and for all", or merely slow them?

AMERICAN POLITICS: AT THE CIRCUS

"Hegel remarks somewhere that all great world-historical facts and personages occur, as it were, twice. He has forgotten to add: the first time as tragedy, the second as farce." Karl Marx, "The Eighteenth Brumaire of Louis Bonaparte"

****

In general, the US political game, as it often involves competing interests and objectives, always has been fiercely competitive. Yet on the national playground, both in the recent past as well as currently, the significant ideological and practical hostility and conflict between the Democratic President and Republican Congress (especially the House of Representatives) nevertheless has been noteworthy. Recall fiscal spending, health care, immigration, and Iran nuclear deal debates. Within the Republican camp, many conservative partisans often quarrel heatedly with their party comrades. Note the House Speaker's late September resignation. The NYTimes speaks of "the gridlock that has become business as usual in Washington" (10/2/15, pA15). On 9/30/15, the last day of the 2015 fiscal year, Congress avoided a government shutdown by enacting a temporary spending measure. However, the legislation keeps federal agencies operating only through 12/11/15. The NYTimes headlines: "Government Set to Default Weeks Earlier Than Forecast"; the Treasury Secretary warns that America will exhaust its ability to borrow around 11/5/15 unless it increases the legal borrowing limit.

This highly adversarial US national political scene, particularly as the 2016 election campaign season is underway, not only makes it difficult to resolve current or emerging economic challenges (or harmful financial surprises). It also tends to reduce public confidence in its lawmakers.

****

Many American citizens these days are frustrated with and angry at (and distrust) Washington and its politicians. The notable popularity of many so-called "outsider" Presidential candidates

early in the 2016 campaign process partly reflects this widespread dismay regarding the national political scene.

Maybe Republican Donald Trump ("Make America Great Again!"), despite his entertainment (and marketing) talent and political acumen, will not win the Republican nomination. But suppose significant elements of his proposed tax plan became part of the Republican platform. Imagine that in 2016 the Republicans capture the White House and retain control of the Senate and House. Some estimate that Trump's scheme will reduce federal revenues by over $10.0 trillion dollars over ten years. See the analyses by Citizens for Tax Justice and the Tax Foundation, as well as articles in the New York Post (9/30/15, p6) and the NYTimes (9/29/15, pA15). The NYTimes stresses: "While the text of Mr. Trump's plan says it is 'fiscally responsible' and will not increase the deficit, the math of the plan does not make that possible." Enactment of the Trump plan (or a similar big deficit scheme), or fears that it will become law, may help to usher in a financial crisis.

****

Suppose the present-day global economic slowdown begins to worsen (and that the Fed and other leading central bankers fail to arrest that weakness). Or, suppose that challenges analogous to 2007-09's subprime housing/mortgage-backed securities crisis developed or intensified. Besides, debt and leverage problems of the global economic disaster have not been solved. Perhaps misfortune will plague lower-grade debt obligations, whether in emerging marketplaces or in advanced nations such as the US. Many applaud Greece's staying in the Eurozone and signs of progress in its debt negotiations. But is Greece's debt situation genuinely fixed yet? What about China's property and local government borrowing troubles? Japan's government debt is gigantic. What happens if the broad real trade-weighted US dollar rallies substantially from current levels? What if the S+P 500 declined around twenty percent (or more) from its May 2015 peak?

Of course not every important economic (and political) difficulty around the world does or will severely burden the US. However, this current American political infighting (logjam) and widespread public distrust of its lawmakers probably will make it very difficult for the nation to respond to significant economic problems. In any case, although one does not expect the Democratic and Republican parties and members within them to always agree on important topics, how much of a team are the President, the major parties, and the Congress as a whole nowadays?

***

How competent does the present-day overall US national political leadership appear in comparison to that of the 2007-09 crisis era? Is it a relatively strong and unified team?

Anyway, recall election year 2008. The Fed and America's political leadership failed to stop the monumental S+P 500 decline until after a percentage price fall well in excess of twenty percent. On 9/20/08, the Treasury Department submitted draft legislation to Congress for authorization to purchase troubled assets. Yet on 9/29/08, the House of Representatives shocked Wall Street and many others by rejecting this draft legislation. Even though Congress finally passed and the President signed the gigantic $700 billion Troubled Assets Relief Plan ("TARP") legislation on 10/3/08, this did not arrest the precipitous S+P 500 crash.

SCANDALS

Financial scandals involving Wall Street and other corners of the US and overseas economic world are not unique to recent years. However, the rather substantial ones of recent years to some

extent undermine faith in Wall Street and many of its marketplaces, as well as in other capitalist enterprises.

Recall not only the subprime housing disaster and the mortgage-backed securities debacle of 2007-09. Remember allegations of rigging foreign exchange marketplaces; in November 2014, banks paid $4.3 billion in fines to settle claims. Don't forget the notorious Libor interest rate manipulation scheme which surfaced in 2012, resulting in substantial fines for several banks. A British bank was fined in 2014 in regard to the London gold price fix. More recently, "Swiss [competition authority] launch probe into precious metals pricing" (Financial Times, 9/29/15, p22). "Lawsuits pile up as investors claim the market for [US] Treasuries is rigged"; the US Department of Justice and NY State banking regulators are investigating potential manipulation in that marketplace (Financial Times headline, 9/29/15, pp15, 22).

What about on the corporate front? Look at the Volkswagen diesel emission cheating scandal that erupted in September 2015. Presidential contender Hillary Clinton and others recently attacked "outrageous" price gouging in the pharmaceuticals industry.

Especially in a time of weak or fractured American political leadership, such history and related doubts regarding marketplace and corporate integrity may make it difficult to quickly and successfully resolve current notable and potentially upcoming US and international economic challenges.

****

This essay is furnished on an "as is" basis. Leo Haviland does not warrant the accuracy or correctness of this essay or the information contained therein. Leo Haviland makes no warranty, express or implied, as to the use of any information contained in this essay in connection with the trading of equities, interest rates, currencies, or commodities, or for any other use. Leo Haviland makes no express or implied warranties and expressly disclaims all warranties of merchantability or fitness for a particular purpose. In no event shall Leo Haviland be liable for any direct, indirect, special, incidental, or consequential damages (including but not limited to trading losses or lost profits) arising out of or related to the accuracy or correctness of this essay or the information contained therein, whether based on contract, warranty, tort, or any other legal theory.

All content copyright © 2015 Leo Haviland. All Rights Reserved.