PLAYING PERCENTAGES: STOCK MARKETPLACE GAMES © Leo Haviland, 646-295-8385

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Mr. Roberts, in the movie "Body and Soul" (Robert Rossen, director): "You know the way the betting [on a boxing match] is Charlie. The numbers are in. Everything is addition and subtraction. The rest is conversation."

OVERVIEW AND CONCLUSION

In a given marketplace, many people often share a similar viewpoint, method, and course of action. However, the numerous players in the stock, interest rate, currency, and commodity games represent a variety of different and sometimes competing subjective perspectives. Individuals can and do evaluate, take, manage, and hedge price risk according to reasonable viewpoints (opinions) that nevertheless are not the same for everyone. They select between and analyze marketplace variables in a variety of different fashions. Consequently, as these very numerous participants possess different personal perspectives regarding a given marketplace (and regarding relationships between marketplaces), they differ in their assessments of that playground's opportunities, risks, and rewards. Wall Street traders (including investors) "evaluate the odds" and "play the percentages" in assorted ways, thinking and acting based upon their opinion regarding how to look at and respond to apparently relevant variables. The same holds true for other marketplace watchers such as central bankers, economists and other analysts, politicians, the financial media, and Main Street.

Thus manifold fundamental marketplace strategies and their assorted applications generate heterogeneous outlooks regarding probabilities (percentages, odds) and a range of behavior (which can include inactivity) in any given arena, whether in the S+P 500, the 10 year US Treasury note, the US dollar, or Brent/North Sea crude oil. Technical methods display similar diversity in both theory and practice. Visual approaches to marketplace data are not universally shared. Even statistical measures such as means and standard deviations, when applied to a given marketplace, can vary, often dramatically, depending upon the time horizons chosen for review. This variety likewise applies to views about relationships between marketplace domains (sectors, types) and between instruments (spreads).

However, it can be helpful in assessing risks regarding and making marketplace bets on one or more financial marketplaces by taking a subjective look at (and comparing) their given percentage price moves in historical perspective.

Between mid-April and mid-June 2015, an assortment of major stock marketplace benchmarks around the globe attained important highs. From these tops, the slumps have varied in percentage terms.

Of course these playgrounds are diverse; supply/demand considerations regarding each of them are not necessarily identical or even closely similar. Also, for any given stock marketplace, head coaches, players, and those on the sidelines create a great number of competing perspectives and pronounce diverse opinions regarding past, current, and future price levels and trends for a battlefield such as the S+P 500. In establishing and managing their actual marketplace wagers, these observers likewise display a panorama of positions regarding the relationship of a particular

stock marketplace to particular economic variables, including other stock, interest rate, currency, and commodity domains.

Nevertheless, in today's interdependent global economy, this relatively close timing linkage since spring 2015 between the S+P 500 and many other stock signposts probably warns that further declines in them probably (and roughly) will occur together from the timing standpoint. "Marketplace Party Tantrums" (6/15/15) stated: "The S+P 500's long and monumental bull march following the dreary final days of the global economic disaster (major low 3/6/09 at 667) may persist, but it currently looks rather tired and seems to be ending."

Since the ending of the joyous Goldilocks Era, through the dreadful worldwide economic disaster of 2007-09, and up to the present, the widely-adored Federal Reserve Board has embraced highly accommodative monetary policies to spark and sustain economic strength. Their easy money measures have included Federal Funds rate cuts, sustained yield repression, and quantitative easing (money printing). The Fed obviously has not acted alone. Many central banks, such as the European Central Bank, Bank of England, Bank of Japan, and China's central bank promote lax policy schemes. Don't forget politicians' deficit spending in the United States and elsewhere.

The Fed often repeats its allegiance to its interpretation of its legislative mandate regarding stable prices (two percent inflation) and maximum employment. However, its marketplace interventions in recent years often reflect its determined effort to propel US stock marketplace (and real estate) prices higher. This not only improves America's household balance sheets (thereby inspiring more spending--and borrowing), but also boosts consumer and business confidence. For many Americans, "high" and advancing US stock marketplace prices to some extent reflect overall American prosperity and the success of the American Dream.

Rhetoric of and actions taken by other central banks, political generals, corporations, and Main Street intertwine with the Fed's and thus influence US stock and other marketplace patterns.

"Poker's good if you like watching people." Jesse May's novel, "Shut Up and Deal"

For predicting (and explaining) price action and trends and other marketplace phenomena, appraising and playing the odds often requires judging probabilities regarding the statements and actions of relevant marketplace participants. Focus on the S+P 500. Suppose the S+P 500 continues to slump from 5/20/15's all-time high of 2135. Obviously the Fed will look at more than US stocks in making policy decisions. But what do the Fed's actions since the advent of the worldwide financial crisis in 2007, and in light of its probable view regarding current and near term economic conditions, suggest this guardian will do if faced by this equity downturn?

Some marketplace players pay close attention to arithmetic travels, as in ten or fifty S+P 500 points up or down. Other fortune-seekers monitor percentage moves relative to a starting point. Arithmetic and percentage shifts from allegedly key levels (major highs, major lows, and so forth), whether up or down, are not scientific probabilities or outcomes.

However, in the stock game and elsewhere, some percentage moves are widely watched by quite a few players. On the bear front, think of declines such as five, ten, twenty, twenty-five, thirty-three, fifty, and sixty-six percent. On the bull side, similar percentages often capture attention, with moves of 100 percent, 200pc, and so forth exciting great fascination.

A five percent tumble from the S+P 500's May 2015 peak to around 2028 probably would not prompt Fed easing action. A ten percent slide to about 1922 probably would significantly upset the bullish stock crew (especially investors), producing widespread cries for help. The 10pc fall likely would induce heartwarming Fed wordplay aiming to steady prices, and it probably would delay the Fed's plan to take any next upward step in the Federal Funds rate. It is a close call as to whether a ten percent loss in US stocks would change Fed policy more significantly than this. However, the Fed might move more dramatically (such as via another round of quantitative easing) if it also seriously feared economic weakness in America and around the globe.

A decline of around 20 percent or more in the S+P 500 to around 1708 or lower probably would confirm a "tantrum" in stocks. In stocks, a sustained 20pc fall satisfies many definitions of a bear trend. Most audiences (particularly in America) label bearish stock trends as "bad". Most stock bulls (especially the praiseworthy "investment" teams and their devoted friends) would be angry at or terrified by such substantial price plummeting. Thus a majority of US stock investors and other fans of rising stock prices surely would want significant steps taken to stop the fall and restart the S+P 500's marathon bull trend. Many politicians would be fearful, the financial media loud and agitated. This turmoil and talk probably would stretch beyond America.

In any case, suppose around a 20pc stock fall occurred, and that it looked likely to be sustained. Such widespread fears and demands, given the Fed's devoted allegiance to and pursuit of its statutory mandate, probably would inspire frantic Fed action to rescue and rally the stock marketplace. The greater the fall beneath 20pc, the more determined the Fed's efforts will become. Their actions at some point could include another round of quantitative easing.

Nowadays, would Fed intervention after stocks declined 20 percent (or more) succeed? Much depends on whether success means merely stopping the decline, or if it implies sending prices near to or higher than the prior peak. The Fed since the major low in March 2009 indeed has succeeded in arresting declines of approximately that amount in 2010 (17.1pc) and 2011 (21.6pc) and propelling the S+P 500 to new bull heights. However, marketplace history is not marketplace destiny. In addition, during the worldwide economic disaster, it did not stop the cratering from 2007's summit at 20pc. Past success in marketplace games does not necessarily win future victories, even if the Fed may be more determined to use weapons such as money printing than it was in the early stages of the financial crisis. In any case, it is conjectural whether the Fed could stop a S+P 500 decline at 20pc as easily as it did in 2010 and 2011. And even if the Fed is able to steady S+P 500 prices at around 20pc (or lower), it probably will be more difficult than it was after the 2010 and 2011 slumps to rally the index to new highs anytime soon thereafter.

Suppose the S+P 500 managed to achieve new highs above the 2135 level. The Fed probably would respond in the fashion described if faced with such five, ten, and twenty (or more) percent descents.

AT THE STOCK TABLES

Kenny Rogers sings in "The Gambler":
"You've got to know when to hold 'em
Know when to fold 'em
Know when to walk away
Know when to run

You never count your money When you're sittin' at the table".

Survey the recent track record of several important stock price benchmarks around the world. All dates in the tables are for 2015 unless otherwise indicated.

USA

"'I don't see that there is much risk,' said the Squire, at length. 'The timber is worth than the mortgage; and if that coal seam does run there, it's a magnificent fortune.'...The Squire was like everybody else; sooner or later he must 'take a chance.'" "The Gilded Age", a novel by Mark Twain and Charles Dudley Warner

	<u>S+P 500</u>	Dow Jones Industrial Avg	Nasdaq <u>Composite</u>	Wilshire <u>5000</u>	<u>Apple</u>
Recent High	2135	18351	5164	22537	134.54
J	(5/20/15)	(5/19)	(6/24)	(6/22)	(4/28)
Recent Low	2044	17466	4902	21597	119.22
	(7/7/15)	(7/7)	(7/8)	(7/7)	(7/9)
Percent Fall	4.3pc	4.8	5.1	4.2	11.4

The Wilshire 5000's initial high occurred about a month before and almost at the same price as its 6/22/15 one (5/20/15) at just under 22537, rounding up). It thus aligns closely with those in the S+P 500 and DJIA.

Apple is a very large, profitable, and widely-watched corporation currently seen by many as a stock marketplace trend leader. Therefore its earlier as well as greater percentage fall than those in the broader indices arguably warns of greater declines to come in the S+P 500 and other stock indices. Other recent Apple highs, which border the 4/28/15 one, include 2/24/15's 133.60 and 5/22/15's 132.97 (about same day as S+P 500 and DJIA tops).

[The Nasdaq's June 2015 summit neighbors the prior record peak (major resistance) at 5133 on 3/10/00.]

OTHER STOCK MARKETPLACE PLAYGROUNDS

In the film "Casino", the famed gambler and casino operator gambler Sam "Ace" Rothstein declares: "In Vegas, everybody's gotta watch everybody else." (Martin Scorsese, director)

Let's next review the current box scores of seven other notable stock marketplace realms around the globe. In the table below, "SXXP" is the STOXX Europe 600 European Stocks Index. "SPTSX" is Canada's S+P/Toronto Stock Exchange Composite Index. The "MXEF" is the MSCI emerging stock markets index (from Morgan Stanley).

	Europe 600 SXXP	German <u>DAX</u>	UK <u>FTSE</u>	Canada <u>SPTSX</u>	Japan <u>Nikkei</u>
Recent High	415.2 (4/15/15)	12391 (4/10)	7123 (4/27)	15685 (9/3/14)	20953 (6/24/15)
Recent Low	371.3 (7/8/15)	10653 (7/8)	6430 (7/8)	14276 (7/9)	19115 (7/9)
Percent Fall	10.6	14.0	9.7	9.0	8.8
	MXEF	China Shanghai Co	<u>omposite</u>		
Recent High	1104 (9/4/14)	5178 (6/12/15)			
Recent Low	900 (7/8/15)	3374 (7/9)			
Percent Fall	18.5	34.9			

Canada's key summit in early September 2014 preceded the spring 2015 ones in the United States, Europe (SXXP, DAX, FTSE), and Japan. However, its second top, 4/15/15's 15525, occurred alongside European (especially) and American marketplaces.

Moreover, compare the time of Canada's stock pinnacle on 9/3/14, with the MXEF's key one on 9/4/14.

The MXEF made a second lower high on 4/27/15 around 1069. This second plateau's timing thus occurred near in time to the spring 2015 ones in many advanced nations and China. Further roughly simultaneous retreats in emerging and advanced nation stock benchmarks would be an ominous sign to equity bulls.

What's the bottom line? Reviewing these various US and diverse international stock marketplace scorecards together, spring 2015's similar time for highs followed by price declines is noteworthy.

[The SXXP's recent top pierced its 2007 Goldilocks Era major high, 7/13/07's 401, but it has not sustained a move over it. That July 2007 SXXP crest occurred alongside the initial summit in the S+P 500 (7/16/07's 1556); the final top that year in the SXXP, 10/11/07's 391, coincided with the S+P 500's 10/11/07 major high at 1576. The SXXP's major bottom was 3/9/09 around 155, the S+P 500's 3/6/09 at 667.

The S+P 500's May 2015 high at 2135 stands about 3.20 times above its 3/6/09 major low at 667. The SXXP's 2015 plateau rests about 2.67 times its March 2009 trough. Japan's stock realm stands far beneath its major top near 39000 on 12/29/89. However, its 6/24/15 high is about three times its 6995 major low on 10/28/08. Thus the Nikkei's major bull move since late 2008 parallels in distance (and duration) those in benchmark US and European indices.

The MXEF's recent low near 900 low rests close to important support around 875 (878 bottom 6/25/13, 877 low 6/4/12; see also 5/25/10's 850 and 10/4/11's 824). Underscore that the MXEF has never exceeded its 11/1/07 Goldilocks Era peak at 1345 or 4/27/11's 1212 height.]

FEDERAL EASING AND S+P 500 DECLINES: PLAYING PERCENTAGES

"Ragz to riches or so they say Ya gotta keep pushin' for the fortune and fame It's all a gamble when it's just a game." "Paradise City", a song by Guns N' Roses

Of course, unlike 2007-08, the Fed Funds rate is now on the ground floor. Everyone knows the Fed currently intends to boost it sometime, when conditions supposedly justify doing so. Most weathervanes believe a small rate hike will occur sometime in the next several months.

Yet going forward relative to today, the Fed obviously may choose to act differently when confronted by United States economic weakness and S+P 500 declines than it has from the ending of the Goldilocks Era in mid-2007 up to the present. Moreover, rhetoric is always a Fed option. But the Fed may deem dramatic action necessary, if its opinion about probable current and future circumstances changes due to renewed grave concerns regarding US economic growth (the fulfillment of the Fed's mandate) and S+P 500 feebleness. The central bank could resume quantitative easing, move policy rates beneath zero, or find other clever ways to become more and more accommodative.

The Fed's policies of course have intertwined with decisions made by politicians and other central banks. However, let's concentrate primarily on the Fed's actions alongside those of the S+P 500 and its noteworthy declines. Also, although other international stock marketplaces, as well as key interest rate, currency, and commodity fields interconnect (influence) in various ways and extents to the S+P 500 (and Federal Reserve decision-making), let's generally keep them on the sideline as well.

Everyone recalls the Fed's dramatic quantitative easing action (money printing, round one) in November 2008 and March 2009. Recall the S+P 500 lows around 840 in October 2008 (840 on 10/10, 845 on 10/28), 741 on 11/28/08, 804 on 1/21/09, and the final bottom at 667 on 3/6/09. Relative to the 10/10/07 major high at 1576, a collapse of fifty percent or more in stocks displays the capacity of the Fed for extraordinary action.

Nowadays a 50 percent S+P 500 crash looks very unlikely to the majority of marketplace all-stars. But history shows the Fed may intervene when the S+P 500 drops much less than 50 percent.

What about a five percent drop? A roughly five percent fall probably will not induce any notable Fed policy action. In 2007, the S+P 500 made an initial high at 1462 on 2/22/07. It fell 6.7 percent to 1364. The Fed remained quiet. During the S+P 500's rally since its major low in March 2009, there have been numerous five percent slips (which did not last long in time) from what turned out to be an interim top. Yet the Fed did not act. For example, recall these modest falls: 5/22/13 at 1687 to 6/24/13 at 1560 (7.5pc), 8/2/13 at 1710 to 8/28/13 at 1627 (4.9pc), 4/4/14 at 1897 to 4/11/14 at 1814 (4.4pc), 7/24/14 at 1991 to 8/7/14 at 1905 (4.3pc), 12/9/14 at 2079 to 12/16/14 at 1973 (5.1pc), and 12/29/14 at 2094 to 1981 on 2/2/15 (5.4pc). When such decreases in the S+P 500 occur, the Fed may talk about remaining accommodative (or say that it is not troubled), but at most it probably will engage in a little jawboning (at most only slight threatening of easing action). Nowadays, if the fall stayed around roughly five percent, the Fed probably would not mind the party in US stocks "calming down a little bit for a while".

What about a fall of around ten percent? Nowadays, this probably would induce significant Fed warnings, and perhaps renewed easing action. Much will depend on the overall international situation.

Recall the growing number of subprime housing problems as 2007 moved forward. On 7/16/07, the S+P 500 attained an interim high at 1556. It thereafter nosedived 11.9 percent to 1371 on 8/16/07. On 8/17/07, the Fed cut the discount rate 50 basis points to 5.75pc. On 9/18/07, the Fed slashed the Federal Funds rate 50 basis points to 4.75pc.

What about the recovery/S+P 500 bull move era starting in March 2009? Although the S+P 500 fell 9.1pc from 6/11/09's 956 to 7/8/09's 869, QE1 was underway, the Funds rate was near zero, and the S+P 500 rally from its March 2009 bottom had been fierce. So the Fed waited. But when the S+P 500 slumped 9.8 percent from 9/19/14's 2019 to 10/15/14's 1821, central bankers began to growl rather loudly. See the St. Louis Fed President's interview on Bloomberg TV (10/16/14) and the speech by the Bank of England's Chief Economist (10/17/14).

However, the S+P 500 fell 10.9pc from 4/2/12's 1422 to 6/4/12's 1267, and it also slipped later that year, from 8.9pc from 9/14/12's 1474 to 1342 on 11/16/12. On 9/13/12, the Fed declared QE3, offering further policy guidance (QE4) on 12/12/12. The timing of QE3 and the December guidance strongly suggests the Fed does not want a ten percent fall S+P 500 to occur (unless it deems that marketplace to be very "overvalued" or in a "bubble" situation).

[In the mid to late 2012/early 2013 time context, and arguably up to the present, other central bank easing action probably helped reduce the risk of a ten percent or greater S+P 500 decline. Recall that the European Central Bank issued its "whatever it takes" speech on 7/26/12 and unveiled its Outright Monetary Transactions policy on 8/2/12. Japan's "Abenomics" began after that nation's December 2012, with its 4/4/13 Quantitative and Qualitative Easing scheme being especially noteworthy. The announcement of the initial stage of the European Central Bank's quantitative easing program occurred 9/4/14. The ECB thereafter hinted at and eventually announced (1/22/15) its expanded money printing plan involving the buying of government securities.]

How about a decline that threatened to reach or exceed twenty percent? Watch closely for Fed action. Not only should one keep in mind the money printing via QE3 and QE4 (policy) guidance that occurred with tumbles nearing ten percent.

Remember 2007 and 2008. The S+P 500's major high occurred on 10/11/07 at 1576. Although the index fell 10.8pc to 11/26/07's 1406, it rapidly rose to 1524 on 12/11/07. But it then 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 reduced 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.

What about the post-March 2009 period? The S+P 500 broke down 17.1pc from its 4/26/10 high at 1220 (QE1 ended March 2010) to its 7/1/10 low at 1011, and that depth was challenged by the move to 8/27/10's 1040. The Fed did not remain motionless. 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).

SHOCKING MOVES

"I can tell the Queen of Diamonds by the way she shines Come to daddy on the inside straight, Well I got no chance of losin' this time". The Grateful Dead song, "Loser"

How long are marketplace memories? The absence of a decline of ten percent or more in the S+P 500 since the 10.9pc fall from 4/2/12's 1422 to 6/4/12's 1267 probably has encouraged widespread marketplace opinions that a slump of that magnitude probably will not occur "anytime soon", or at least will not be sustained for "too long". The enthusiastic chant "buy the dips" is widely repeated. Besides, with policy rates (Federal Funds) still quite low, shouldn't enthusiastic financial pilgrims continue to hunt for good opportunities (returns, yields) in US stocks?

In addition, many US stock marketplace owners (investors and others) likely have faith that the Fed will emphasize its commitment to a highly accommodative policy if the S+P 500 drops by ten percent or more. This talk hopefully should rally prices, right? And especially if the S+P 500 withers around twenty percent or more, many US stock bulls believe the Federal Reserve (perhaps assisted by other central banks or political action) will intervene and probably will rescue the situation, thus eventually reversing some (or all) of the unfortunate price decline. Also, many stock players bullish on US equities believe that the "long run" trajectory of US stocks is upward. Has the Fed indeed taken much of the bearish risk out of the stock marketplace game?

Although the Fed and its allies have been playing an easing game for the global economy and its marketplaces for a very long time, they obviously are not the only player. Should people continue to place strong faith in their ability to manage economic outcomes, including rising S+P 500 prices?

Marketplace history for US stocks and other financial domains of course need not repeat itself, either in whole or in part. Nevertheless, at present the probability of a sustained decline of at least ten percent (or even twenty percent) from the S+P 500's May 2015 top (or any high made above this) is probably quite a bit greater than most marketplace observers believe.

Why? Recall 2007-09's US stock and other marketplace history, keeping in mind not only the present era's epic Greek crisis and the recent Chinese stock marketplace crash. Note signs of slowing worldwide GDP growth, the current still-substantial debt/leverage (creditworthiness) issues facing America and many other nations, significant bear trends in emerging marketplace stocks (MXEF) and weakness in commodities "in general". Compare the bull move in and levels of the broad real trade-weighted US dollar in recent times (particularly since August 2014) with its rally from spring 2008 to first quarter 2009. Also, the bull climb in US and German government note prices ended in recent months (some would say their bubble popped). The S+P 500's bull trip of more than three times the March 2009 bottom lasting over six years is a remarkably long voyage. There has been increasing talk about "bubbles" in US and stock and housing marketplaces in recent weeks.

The S+P 500, after establishing its major high on 10/11/07 at 1576, made a 5/19/08 interim top at 1440 (1418 is a 10 percent drop from 1576). However, particularly note also 8/11/08's high at 1313 and 9/2/08's at 1303; 1261 is a 20 percent fall from 1576 (9/19/08 high 1265, 9/26/08 close

1213). Why care about this seemingly distant epoch? Because the S+P 500 "shockingly"/"surprisingly" cratered from around those late summer plateaus partly due to rather shocking/surprising events, and because the Fed and the US political leadership failed to stop the decline until about six months (and a big percentage price fall) later.

Would further noteworthy declines in the S+P 500 be surprising? Recall the Lehman Brothers 9/15/08 bankruptcy shocked many players. Moreover, so did the US House of Representatives' initial rejection of draft legislation to purchase troubled assets. 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 stunned Wall Street and many others by rejecting this draft legislation. Wasn't the renewed emergence several months ago of the Greek debt disaster a surprise to many observers? How about the recent murderous decline in China's stock marketplaces?

Would a rejection by the Greek Parliament of the most recently offered bailout terms (see the EuroSummit's 7/13/15 agreement, described on the NYTimes website), which might well result in Greece's Eurozone exit, be akin to that US House rejection in late September 2008? Alternatively, suppose the current Greek debt disaster is "resolved" for the time being (if only by creatively kicking the can down the road) by implementing this massive bailout agreement. Some experts estimate Greece may need another €82-86 billion more. Greece's debt history warns that even if Greece agrees to the follow the terms demanded on 7/13/15, its economic problems probably will persist. And just because China has implemented remedies to rally its stock marketplace, such assistance may provide only a temporary cure for that monumental decline. China's marvelous economic growth story was wearing thin well before the big bull spike in the Shanghai Composite.

In any case, recall what happened when the US achieved an apparent debt solution in 2008. 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 fall.

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