

All SuperIndex components are registering negligible odds of recession. Since none of the Leading SuperIndex, co-incident SuperIndex, Diffusion Index, Syndrome Diffusion Index, Headwinds Index nor Anxiety Index are flagging recession, the Recession Forecasting Ensemble (RFE) remains at 0 (DEFCON-5) implying a 100% equity allocation.

NOTE : We are considering replacing the co-incident SuperIndex in the RFE with a combination of the robust NBER Model and the quarterly GDPi model. For now it would be prudent to view either of these two models as the "go-to" models for co-incident recession risk in the RFE (whichever fires a recession signal first.)



NOTE2 : WE ARE NOW TRACKING THE WLinr TOGETHER WITH THE SUPERINDEX IN THE FIRST TWO CHARTS BELOW, LEFT. WLinr TRACKS 50 WEEKLY PUBLISHED DISCRETE ECONOMIC & FINANCIAL TIME-SERIES AS OPPOSED TO THE SUPERINDEX WHICH IS A WEEKLY UPDATE OF 9 MOSTLY MONTHLY PUBLISHED COMPOSITES. THE ADVANTAGE WITH WLinr IS THAT IT CLOSELY TRACKS THE SUPERINDEX, BUT HAS A TRUE WEEKLY UPDATE CYCLE (AS OPPOSED TO THE SUPERINDEX WHICH IS PSEUDO-WEEKLY.) IN THEORY THEN, WLinr SHOULD OFFER MORE TIMELY SIGNALS TO THE SUPERINDEX. WLinr IS ALSO NOW AVAILABLE ON THE NEW CHARTS MENU IN THE MACRO TAB, UPDATED EVERY FRIDAY.



NOTICE : THE GOOGLE RECESSION INDICATOR HAS BEEN UPDATED. THE WLEI IS NOW AVAILABLE ON THE CHARTS MENU AND UPDATED EVERY THURSDAY EVENING.



For best reading, select
VIEW-->ZOOM-->FIT VISIBLE
(or hit Control-3 on keyboard)

THERE IS 1 NEW RESEARCH NOTE

[CLICK HERE TO GO DIRECTLY THERE](#)
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THERE WERE 1 POSTINGS MADE TO
"REFLECTIONS"

[CLICK HERE TO GO DIRECTLY TO THEM](#)

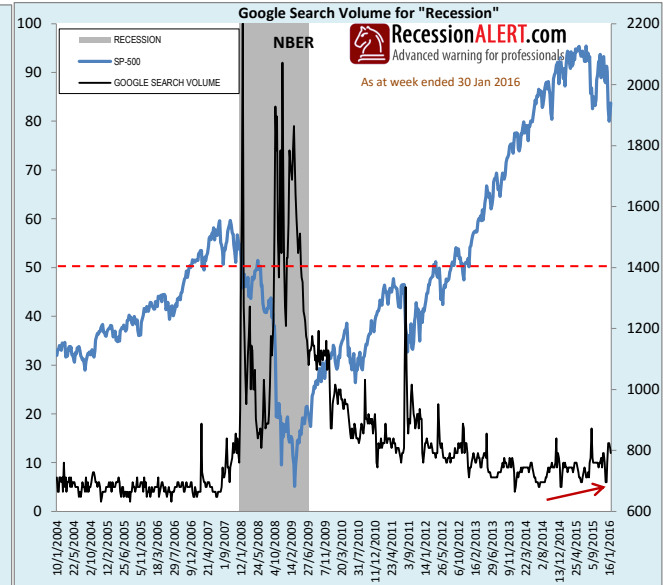
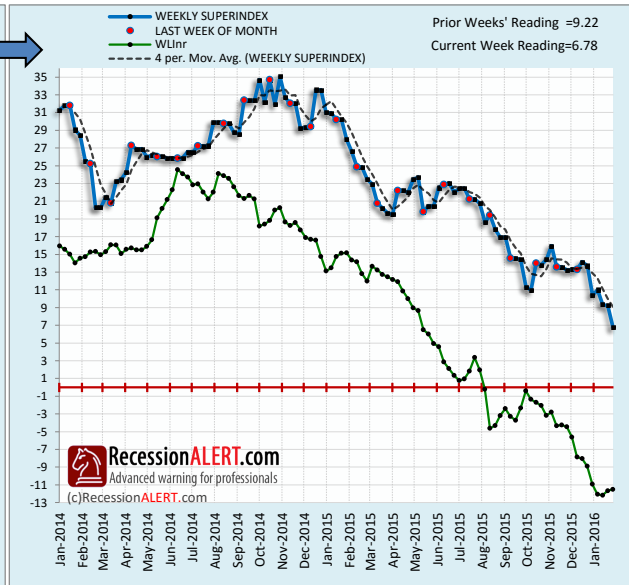
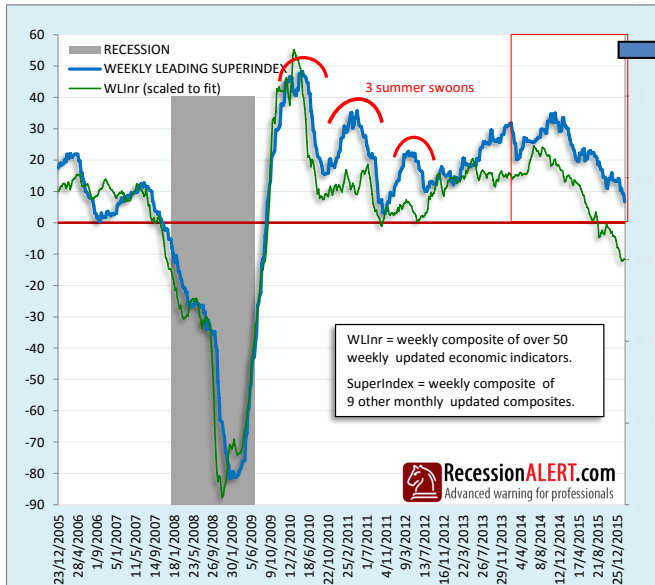
Judging from low search & publication volume for "recession" (as at 20 Nov 2015) on Google, there seems to be little concern about the economy. Remarkably, the Google Fear index hardly reacted to the stock market "summer swoon" last July and at the height of the stock market correction it actually plumbed new post-recession lows.

GDP UPDATE : The GDPi model (seperate report) is not showing cause for alarm yet.

We are 79 months into the expansion, against an average of 45 months for expansions since 1900.

DO NOT CONFUSE WEAKENING GROWTH WITH RECESSION : We continue to struggle to find overwhelming evidence of recession in the short term. However the Long Leading Index (USLGI in seperate report) appears to have peaked and the short leading data is not looking pretty at all.

**WE ARE ON
DEFCON-5 FOR
THE ENSEMBLE
(LOWEST RISK)**



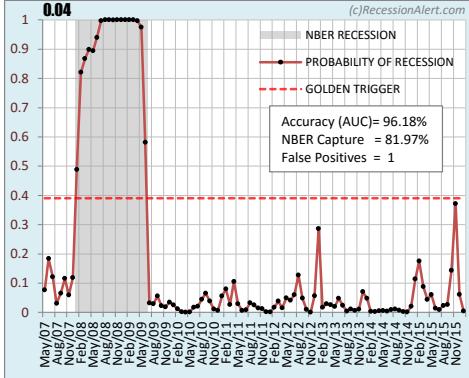
Probability of U.S recession	4-Dec	11-Dec	18-Dec	25-Dec	1-Jan	8-Jan	15-Jan	22-Jan	29-Jan	5-Feb	12-Feb	19-Feb	Prob chart	INDEX DATA	15-Jan	22-Jan	29-Jan	5-Feb	12-Feb	19-Feb
Now	1.18%	3.22%	3.18%	2.18%	0.83%	2.37%	3.12%	2.20%	2.79%	2.45%	1.18%	1.18%		Leading SuperIndex	10.41	11.01	9.34	9.22	6.78	6.78
In 3-4 months time	6.52%	7.33%	7.30%	7.25%	7.34%	8.01%	8.38%	7.79%	9.08%	9.54%	10.05%	10.05%		Coincident SuperIndex	9.29	10.62	9.71	10.20	12.95	12.95
In 6 months time (Headwinds)*	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%	19.0%	19.0%	19.0%	19.0%	19.0%	19.0%		Headwinds Index	4	4	4	4	4	4
GDP Growth Forecast	2.29%	2.12%	2.11%	2.22%	2.50%	2.20%	2.12%	1.98%	1.90%	1.94%	2.15%	2.15%		Super Diffusion Index	1	1	1	1	1	1

PROBABILITY CHARTS : The charts below track each of the indexes/surveys 'individual probabilities of recession according to single-factor statistical Logit models. The horizontal lines in the individual recession probability charts below are the "golden ratios" for which the particular model provides the best performance on calls to the start and end of recessions. It is the value for which the model captures the most recession months (NBER capture rate), for which it makes the least amount of false positives(false alarms) and the least amount of false negatives(failed to flag recession for a month when there was one) and maximises the Area-Under the Curve (AUC) values for the respective probability models (this is the % of the 550 months since 1968 that the model correctly categorised as a recessionary or non-recessionary month.)

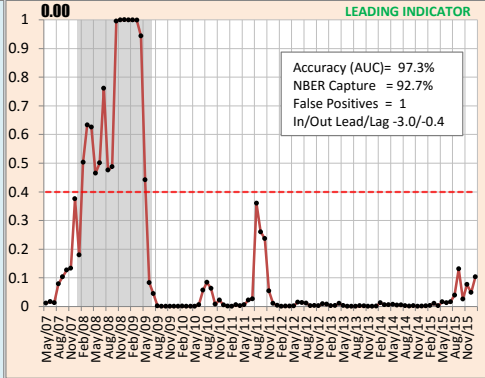
The 9-factor models capture 97-100% of all recession months, had zero false positives and have AUC figures above 97%. A hard model is shown for each of the 9 components that is a binary on/off switch and the soft model shows more fluctuations and in-between readings.

The DIFFUSION INDEX shows how many of the 9 models were above their respective golden ratios at the time(i.e. making recession calls). When the diffusion is 4 or more you are virtually guaranteed a recession is in play.

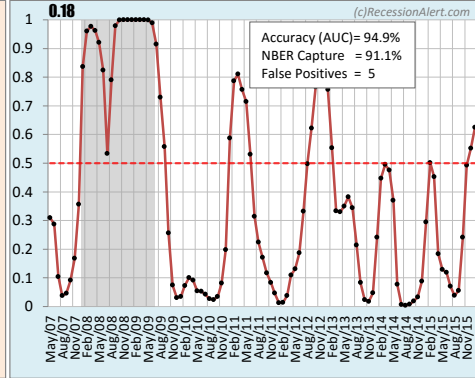
ADS RECEPTION PROBABILITY MODEL (1-WEEK LAG)



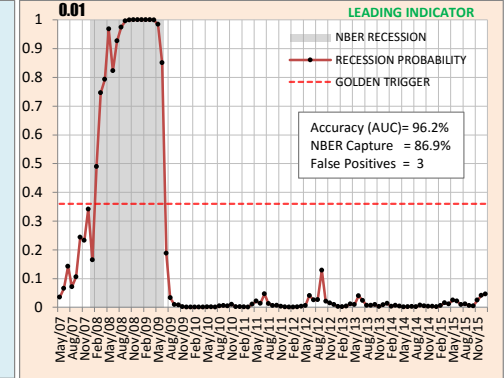
eLEI RECEPTION PROBABILITY MODEL (1 WEEK LAG)



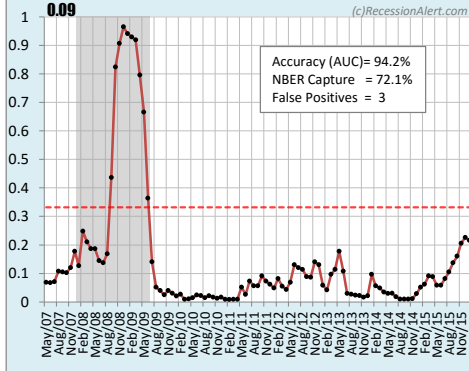
GDP RECEPTION PROBABILITY (2 WEEK LAG)



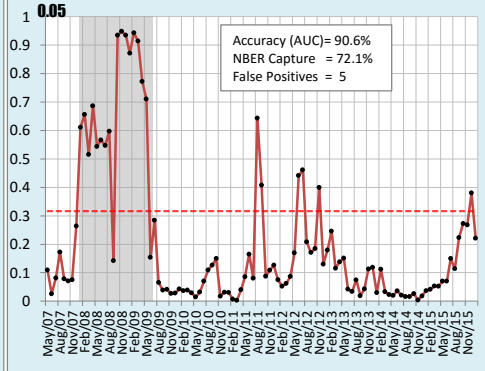
EMPLOYMENT RECEPTION PROBABILITY MODEL (1 MONTH LAG)



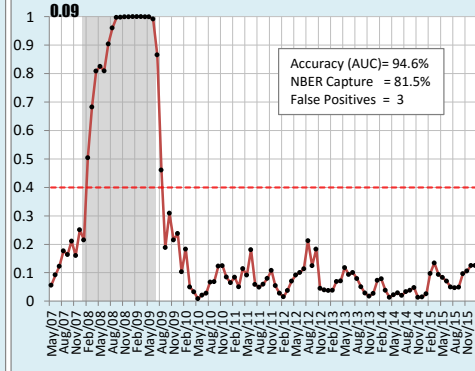
MANUFACTURING RECEPTION PROBABILITY MODEL (1 MONTH LAG)



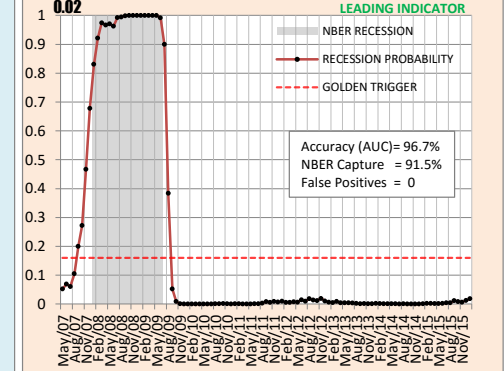
BOS RECEPTION PROBABILITY MODEL (1 MONTH LAG)



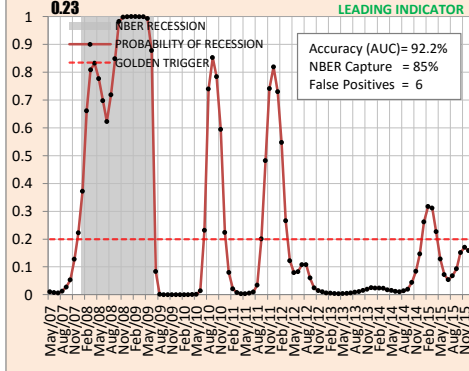
CFNAI RECEPTION PROBABILITY MODEL (2 MONTH LAG)



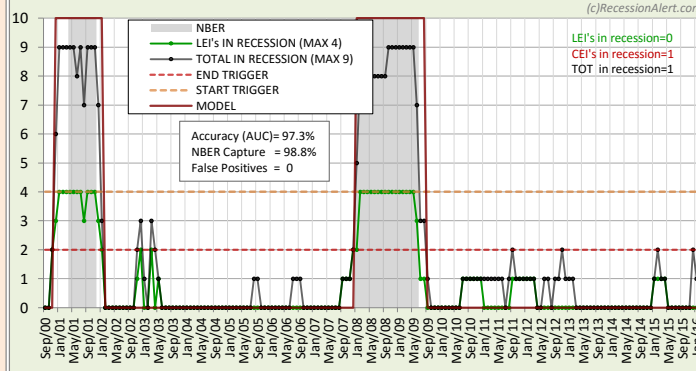
MONTHLY LEADING ECONOMIC INDEX (1 MO LAG)



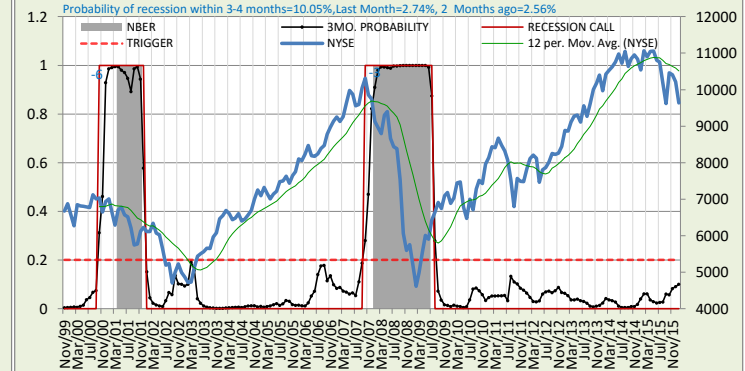
WEEKLY LEADING INDEX PROB MODEL (2 WEEK LAG)

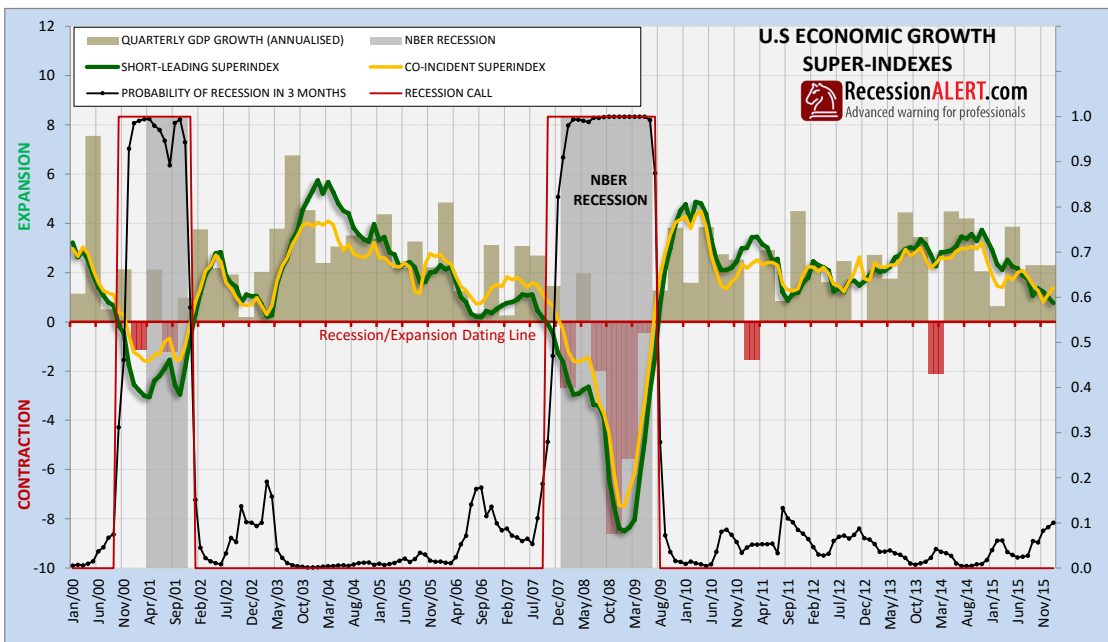


RECESSION DIFFUSION INDEX (WEEKLY)



SHORT-LEADING SUPERINDEX RECEPTION PROBABILITY MODEL





ABOUT THE U.S ECONOMIC GROWTH SUPERINDEXES

Our U.S Composite Economic Growth SuperIndexes are constructed from 9 other indicators and surveys according to various weightings that optimise the performance of the resulting multi-variate Logit recession probability dating models for 1 and 4 month lead times on NBER respectively. As all data is 1-month in arrears, this gives a lead of 0 (co-incident) and 3 months respectively to the outside real-time observer of these charts. Recession is flagged for the models when the respective SuperIndex falls below zero.

They represent *rate of change* of U.S economic growth, thus when it is above zero, the economy is expanding and when it is below zero it is contracting and in NBER recession. The 2 SuperIndexes we track are normalised and scaled in this chart to allow comparison to annual year-on-year percentage change of U.S monthly GDP estimates to show you the lead they provide on GDP direction.

The SuperIndexes are constructed from varying weightings of the underlying 9 components, and no individual factor is more than 40% of the weighting. The weightings we use to construct the various SuperIndexes are obviously proprietary to us.

The probability of recession numbers shown in the heading of this chart represents that of the 4 month leading index (i.e. probability of recession within 3 months for the real-time observer.)

When we have recession signals we generally want to be out the stock markets as there is no way of forecasting how long a recession will last and stock markets perform poorly in the 1st 50-70% of recessions. Note stock markets bottom before the end of recessions, and you can use the SuperIndex turning points in recession to time your re-entry into the stock markets.

The only useful SuperIndex from a stock market timing standpoint is the "short-leading" 3-month leading which presages, on average, a 28% drop in the US stock markets in 6 out of the last 7 occurrences. For the rest, the recession signals are useful for dating NBER recession start and end dates up to 8 months before NBER make their proclamations. The 2 indexes are also used to confirm each other when analysing probabilities of recession. Please read our "Recession : Just how much warning do you need anyway?" paper on the best way to use these indicators from a market timing perspective.

Jan/Feb	INDEX	MODEL COMPONENT INDICATOR/SURVEY DESCRIPTION	CHANGE
Thu 21	ADS	Initial Jobless Claims (for week ending 1/17/2015)	WORSE
Thu 21	BOS	Manufacturing Business Outlook Survey (January)	BETTER
Thu 21	GDP	Monthly GDP (Dec 2015, 2nd estimate)	WORSE
Fri 22	CFNAI	Chicago Fed National Activity Index (CFNAI) Dec 2015	WORSE
Fri 22	WLEI	Weekly Leading Index (for 14 Jan 2016)	WORSE
Fri 29	ADS	Initial Jobless Claims (for week ending 1/24/2015)	BETTER
Fri 29	ADS	Real GDP (fourth quarter 2015, advance release)	WORSE
Fri 29	WLEI	Weekly Leading Index (for 21 Jan 2016)	BETTER
Mon 01	MAN	Manufacturing Conditions (Jan 2016)	BETTER
Mon 01	ADS	Real Personal Income Less Transfer Payments (for Dec 2015)	BETTER
Mon 01	ADS	Real Manufacturing & Trade Sales (for November 2015)	BETTER
Wed 03	eLEI	e-Forecasting Monthly LEI (for Jan 2016)	WORSE
Thu 04	ADS	Initial Jobless Claims (for week ending 1/30/2016)	WORSE
Fri 05	ADS	Payroll Employment (for January 2016)	WORSE
Fri 05	WLEI	Weekly Leading Index (for 28 Jan 2016)	WORSE
Mon 08	GDP	e-Forecasting Monthly GDP (Jan 2016, 1st estimate)	WORSE
Wed 10	EMP	Leading Employment Index (Jan 2016)	WORSE
Thu 11	ADS	Initial Jobless Claims (for week ending 2/6/2016)	BETTER
Fri 12	ANXIOUS	Survey of Professional Forecasters -Recession Probability 1Q16	WORSE
Fri 12	WLEI	Weekly Leading Index (for 4 Feb 2016)	UNCH

SCHEDULE OF COMPONENT UPDATES

A very unique aspect of the US Economic Growth SuperIndexes is that they are "real-time" and are updated up to 21 to 24 times per month according to a fixed schedule as shown on the left when the underlying data becomes available.

Data age ranges from a mere 2 weeks old (weekly claims component of ADS, WLEI) or 1-month old for most of the rest. ADS uses quarterly GDP which is the "most stale" information used, but this is countered with the use of the monthly GDP estimates as a separate component.

The schedule to the left changes on a monthly basis depending on weekends, holidays etc. The table gets updated in the last week of the month. Lightly shaded components have been published and included into all the relevant models. The important **leading indicators are highlighted in orange**.

The **CHANGE** column highlights the change the respective factor/indicator has imparted on the SuperIndexes compared to the prior reading. WORSE means it has pulled the SuperIndexes down, raising the probability of recession. BETTER means the component had a positive effect on the SuperIndexes, lowering the probabilities of recession. UNCH means the sub-component made virtually no change.

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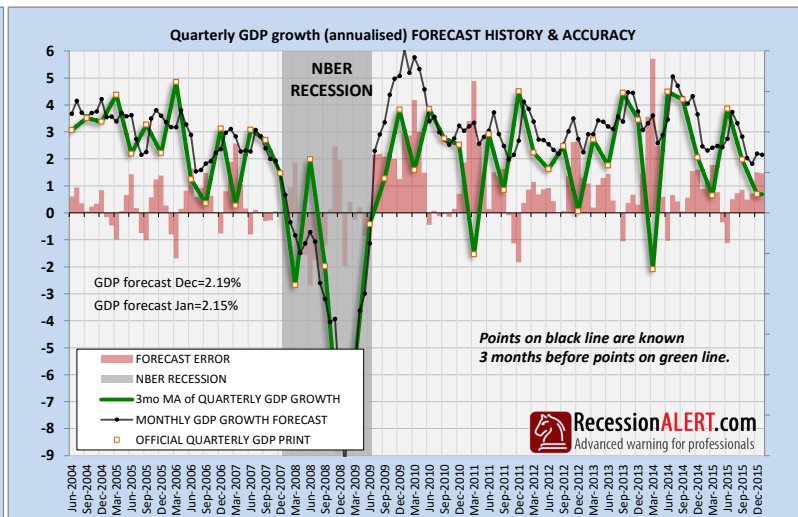
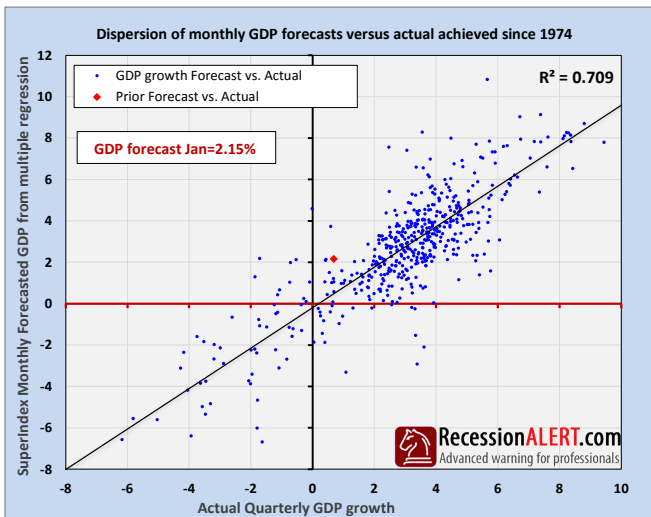
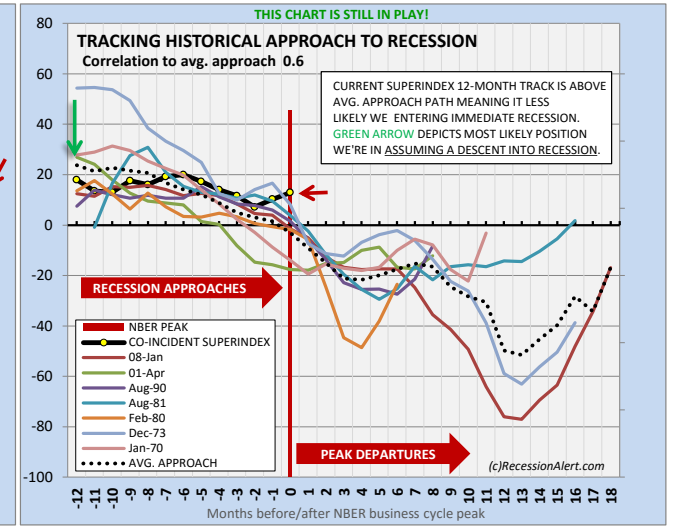
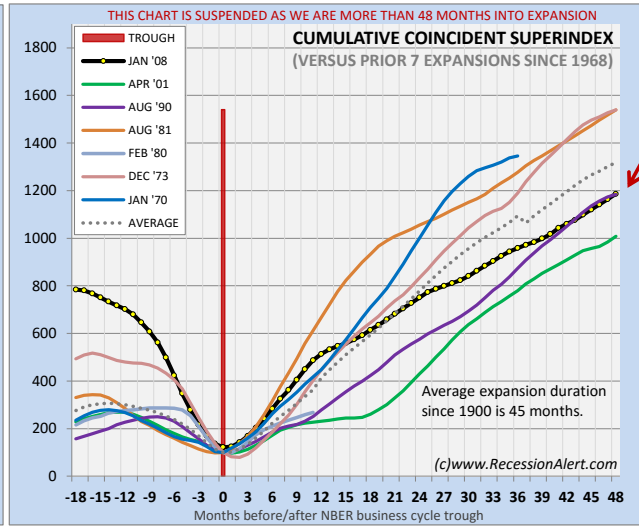
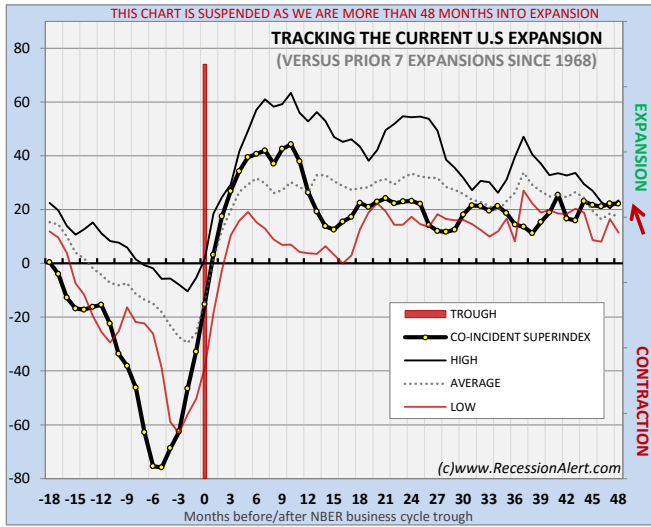
COMPARING THIS EXPANSION TO THE HISTORICAL RECORD (FIRST 2 CHARTS BELOW) AND ASSESSING THE RISK WE ARE APPROACHING A BUSINESS CYCLE PEAK (THIRD CHART BELOW TO THE RIGHT)

The chart to the extreme left depicts the current growth progress of the expansion in relation to x-months before or after the NBER cycle business trough. This allows us to compare the current expansion to the 7 prior expansions dating back to 1968. Plots to the left of the vertical red line are months before the business cycle trough (representing contraction) and those to the right represent expansion following the trough. We depict the all-time high, the all-time low and the average of prior expansions for each month before/after the business cycle trough so we can compare the current expansion in relation to past ones. Whilst the current expansion got off to an above-average start for the first 11 months of the recovery (it was above the green line for the 1st 11 months of the expansion), we can see that currently it is near the all-time low (bottom grey dotted line) of the last 7 recessions, meaning this expansion is currently near the lowest ever since 1968 after 29 months into the recovery.

The 1-month leading SuperIndex represents economic growth, and so the middle chart below depicts the SUMMATION Index which is the prior months' summation plus the leading index reading for the month. The summation is normalised so that the business cycle trough represents a reading of 100. This chart gives an idea of how cumulative economic growth has progressed in the expansion versus prior expansions. Dates shown in the legend on middle chart refer to start dates of prior NBER classified recessions.

The chart to the extreme right compares the last 12 months progress of the 1-month (coincident) SuperIndex to the historical 12-month approach paths to the 7 prior NBER business cycle peaks. This is an attempt to see if we are following the typical approach to a peak just before we tip-over into recession. The most important comparison is to the average of the last 7 approaches (dotted line). If the SuperIndex is way above the average and even better, tracking in the opposite direction, then there is a very low risk we are tipping into recession. The 6-month correlations of the last 7 approaches and the historical average approach have all been very high namely 0.99, 0.78, 0.99, 0.93, 0.95, 0.76 and 0.93 (for an average of 0.90). We therefore also measure this correlation for the last 6 months of the co-incident SuperIndex to obtain a quantifiable measurement of the risk we are tipping into recession. Anything below 0.5 is considered low risk and anything between 0.5 and 0.8 is considered medium-risk and above 0.8 is considered high risk.

IMPORTANT OBSERVATION : The first chart shows we are still in a *sub-par recovery* meaning we are at elevated risk from external shocks not built into the probability models, namely a steep & protracted Euro-area recession, an EU member sovereign default or credit event, hard landing in China, failure by congress to reach agreement on deficit reductions, further U.S credit rating downgrades, Iran tensions/conflicts & oil-price shocks. The models just look at what we are seeing in the US economy itself and do not take into account these external factors (since in our view, this would be speculation and we just want to deal with hard real numbers.) Should these external shocks come to light, they will certainly show up in the US economy somewhere and then be detected by our models, but until then we do not speculate on the probability of these external risks.



GDP FORECASTING WITH SUPERINDEX COMPONENTS

A multifactor non-linear regression of all 9 SuperIndex components is highly correlated with actual quarter-on-quarter GDP growth prints since 1974.

With GDP growth only being released every quarter, we can use these high SuperIndex regression correlations to forecast monthly GDP "reasonably accurately" from the "real-time" weekly SuperIndex readings.

The "implied growth" figure in the first regression chart (indicated by the bright red dot) is forecasting quarterly annualised GDP growth for the current month, even though figures for GDP may not be released for another 1-3 months. The upward slanting horizontal line in the dispersion chart is a simple linear regression of forecast versus actual GDP prints.

The chart on the right shows the forecasting accuracy and forecasting track record for the last 10 years. Forecasting accuracy is around 72% (there is a 0.72 correlation between the forecasted GDP series and the actual series.) This may appear "modest" but actually far exceeds the 50% accuracy achieved by economist consensus forecasts!

The dates the real quarterly GDP growths are announced and become known are highlighted by bright squares on the thick green line. The green line represents the 3-month moving average of official quarterly GDP prints. The forecasts for subsequent months are shown by the dotted lines to the right of the bright squares representing official GDP prints. It is important to remember that the data in the black line is known 3 months before the data in the green line.

LONG-TERM HISTORICAL SIGNAL CHARTS : The charts below show 44 years of historical plots of the 2 SuperIndexes and their diffusion index together with NBER recession dating. The thin black lines are the "soft" 9-factor recession probability models of the respective SuperIndex and the solid dark-red lines are the "hard" or "binary" rule-based recession calls made by the respective models. Grey shaded areas are dates tagged by NBER as recessions (they proclaim these dates 12-18 months after the fact!) starting the month following the business cycle peak and ending in the month of the business cycle trough.

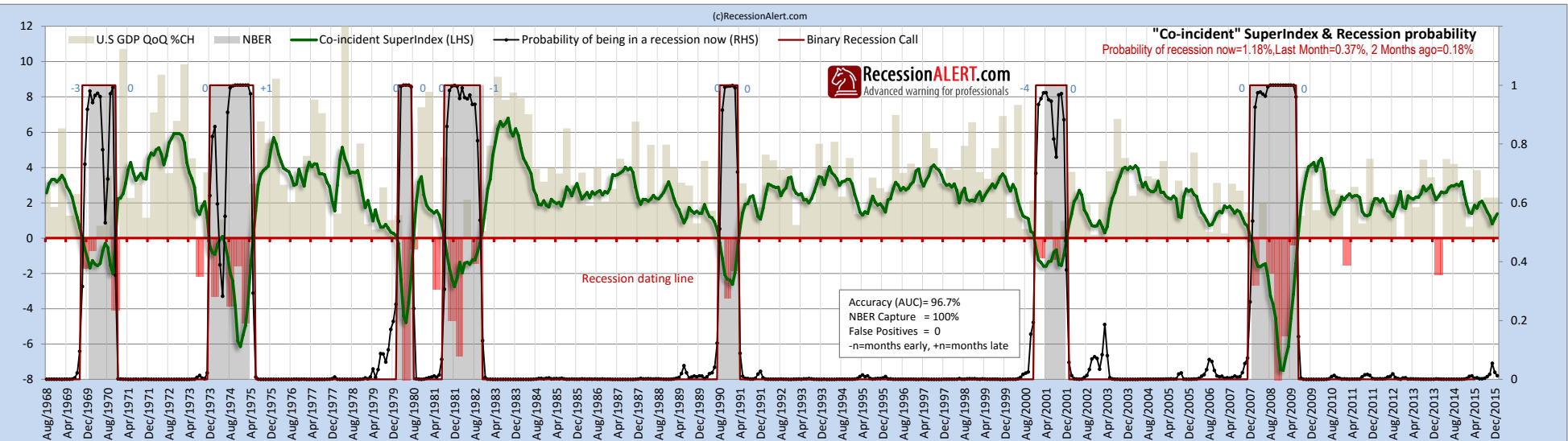
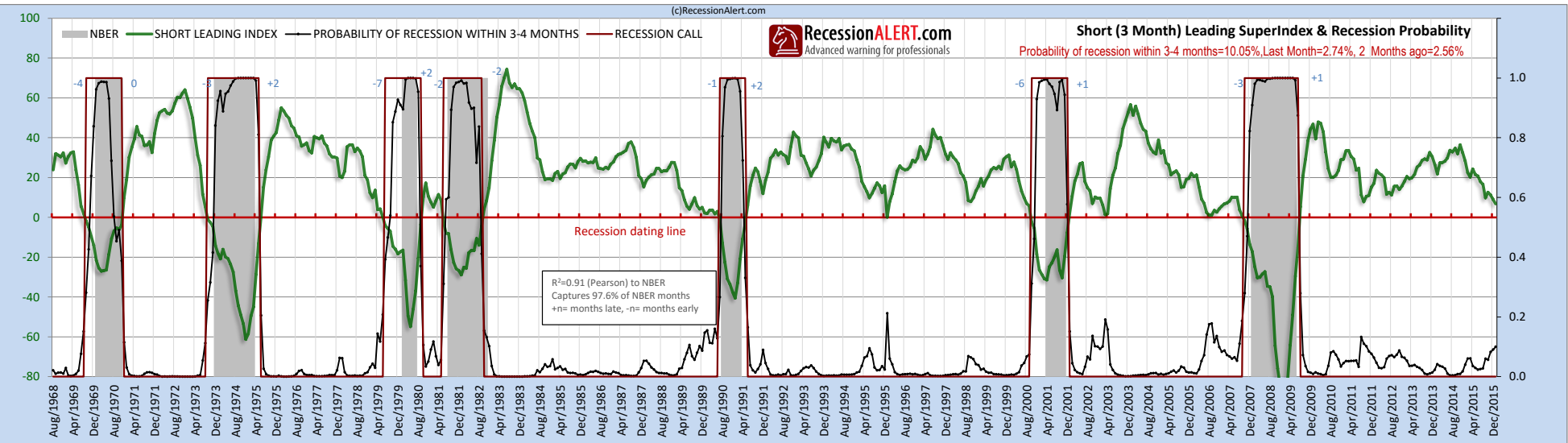
In most cases, the "soft" recession probability always starts rising to reflect economic stress before the onset of a recession. When this happens it is a warning to you that markets may begin selling-off for "fear of a recession". **When any SuperIndex falls below the recession dating line, we initiate a recession call and likewise when it rises above it, we flag the end of recession.**

You will see that the 1-month SuperIndex has the highest correlation to NBER proclaimed dates, since it is the most accurate timer of NBER start and end dates, being on average 0.85 months early in calling NBER start dates (0.15 months late for the real-time observer) and 0.28 months late in calling end of NBER recession (1.28 months late for the real-time observer.)

Although the 1-month "co-incident" SuperIndex it is the most accurate time-keeper of NBER recession dates, it does not give the outside observer much warning to the onset of recession and is therefore more of a confirmation signal of NBER recession having actually started than a market timing tool. As it is the most "co-incident to NBER" of all the SuperIndexes we also use it to track the expansion as shown in the charts right before this section.

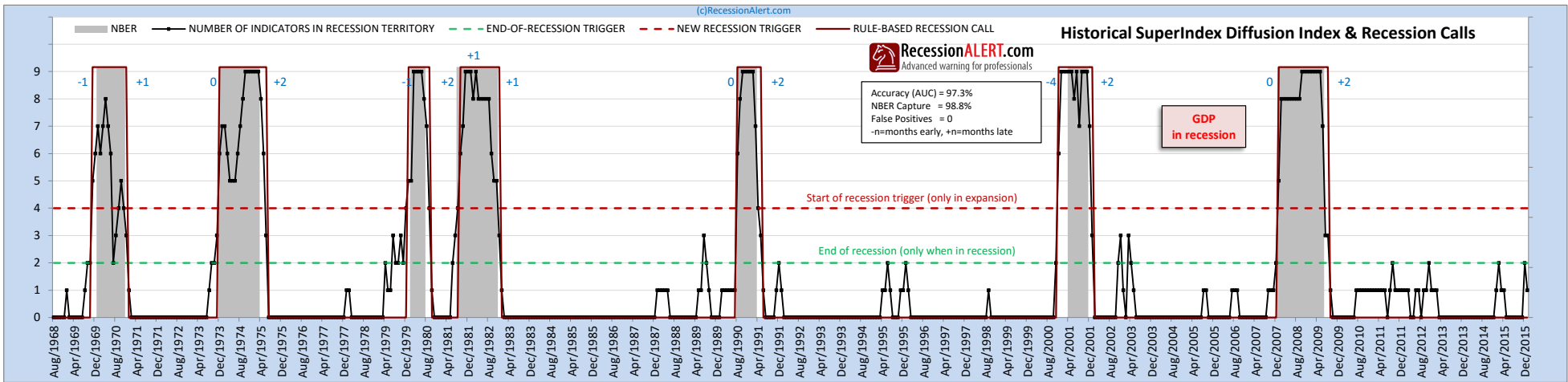
Stock market participants will more than likely prefer to use the "3-month leading" SuperIndex to time their exits from the stock markets, since this index gives on average 4 months warning (3 months for the real-time observer since the indexes are a month post-dated) for the onset of recession. This is actually a very nice warning period for stock market exits, as these signals have presaged on average a 28% drop in the stock markets (from signal date to the absolute stock market trough) in 6 out of 7 cases in the past.

Since the short-leading SuperIndex looks for probability of recession 4 months in advance, it typically shows much higher recession probabilities at any point in time than the co-incident SuperIndexes.



SUPERINDEX DIFFUSION INDEX (DI) : measures each month how many of the 9 SuperIndex components are in their respective recession territories. Each SuperIndex component needs to exceed its "golden threshold" to enter its respective recession territory. The "golden threshold" is that measure for which the respective component provides the best recession forecasting and dating capability. When 5 or more SuperIndex components are flagging recession, then the Diffusion Index makes a recession call. It then calls the end of the recession when the diffusion index falls below 2.

These rule-based recession dating calls provide on average 0.5 months lead going into recession and 1.7 months lag coming out of recession. It is thus more useful for dating starts than ends of recession. The Diffusion Index is used as a risk reduction from "model risk" and thus provides an alternative methodology to dating recessions than the probability model approach we use for the SuperIndexes. It is something additional we wish to consult when assessing calls being made by the probability models. Using multiple models (Superindex, Diffusion, Headwinds) diversifies us from the risk that any one model "loses its mojo" or is beset by major revisions that "throw us off course".



SUPERINDEX RECESSION SYNDROME DIFFUSION INDEX (RSDI) : The RSDI is the third diversified approach to using the 9 SuperIndex components to forecast recession. The first is the Superindex Leading and Co-incident indices that are weighted composites of the 9 index components (a methodology known as "linear pooling".) The second is the straight Diffusion Index (DI) in the previous chart that shows how many SuperIndex components have their individual recession probabilities above their "golden ratios" and are thus flagging recession.

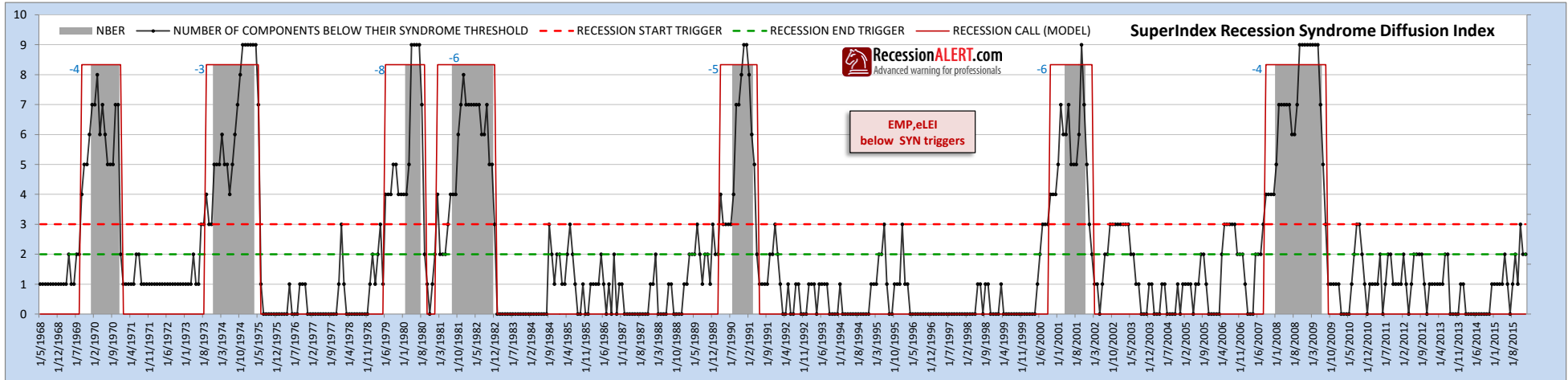
Similarly, the Employment Index must fall below -11 to trigger a traditional recession call (a value associated with its probability of recession exceeding its "golden ratio") and yet if it is below +5 it already starts contributing to the overall "recession syndrome". For Manufacturing to contribute to the syndrome it must virtually collapse to a reading of -28 before contributing to the SDI and yet it only has to fall below +4 before its individual recession model makes a recession call. The reason it has to fall so far before contributing to the recession syndrome probably has something to do with the fact that it has a high degree of false positives.

The "Syndrome" methodology takes an entirely different tack to the prior two approaches and finds optimal values (syndrome thresholds) for each of the 9 component indexes, below which the component must fall to contribute toward a "recession syndrome". The component falling below this threshold tells us nothing on its own, but when combined with other components falling below their syndrome thresholds it becomes an extremely powerful forecasting tool. Each SuperIndex component falling below its recession syndrome threshold contributes 1 point to the RSDI (i.e. a diffusion index.)

The syndrome threshold is a value that only means something when combined with the syndrome thresholds of other components. When 4 or more SuperIndex components fall below their syndrome thresholds they create a "Recession Syndrome" that allows us to trigger a recession call with an average 5 months lead warning. Similarly, when we are in a recession call and the number of components below their syndrome thresholds falls to 2 or less, we call the end of recession.

The syndrome threshold is not to be confused with the indicators' actual recession threshold - they are two completely different things. The syndrome threshold can be much higher or lower than the actual recession threshold for a SuperIndex component. As an example, ADS must fall below -1 before we trigger a traditional ADS recession call but it must fall below -7 before it contributes to the recession syndrome.

A remarkable feature of this methodology is that it not only provides for an average 5 months lead to recession, but the leads are VERY CONSISTENT with a low standard deviation. Furthermore, there are zero false positives.

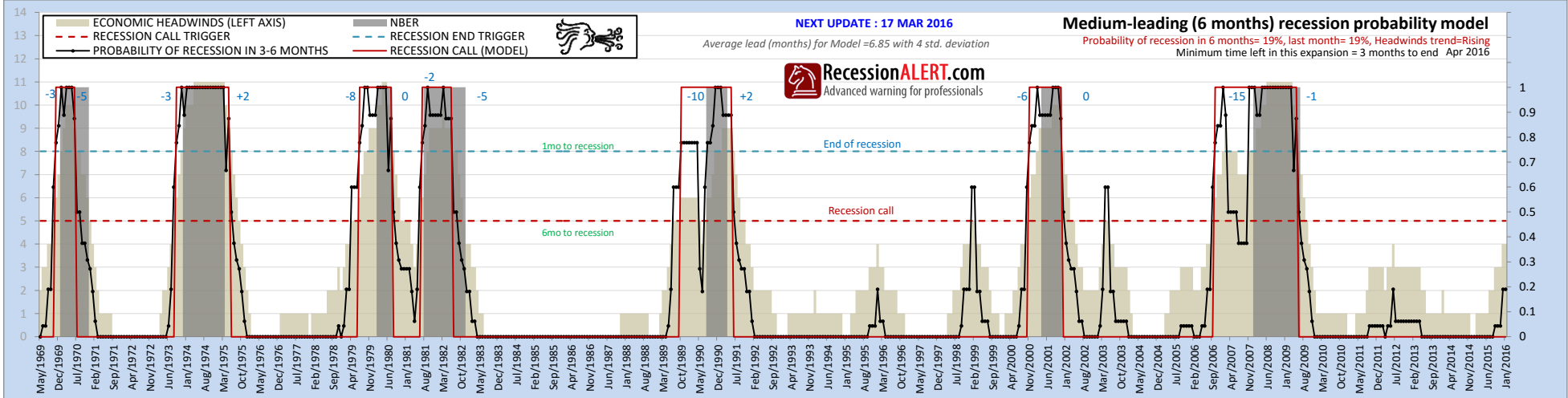


ECONOMIC HEADWINDS MEDIUM-LEADING RECESSION MODEL : This model uses the Monthly Leading Index directional behaviour (looking only at if it rose or fell) to derive how much "headwinds" the economy is accumulating and produces a "Headwinds index". It only considers directional movement of the index and does not look at levels or growth rates as is traditionally the norm. It then uses a regime-changing probability model to determine implied probabilities of recession in 6 months based on the level and trend (rising or falling regime) of the headwinds indicator. The model is startlingly accurate and produces a phenomenal lead to recession of 6.85 months on average, with a 4 months standard deviation.

It would appear that once headwinds reach a certain critical threshold (level -5) the economy can never get its head back above water to overcome the drag and initiates a decline into eventual recession. Very much like the critical fertility threshold for human populations, below which the population never manages to regain growth and enters perpetual decline (Europe and Japan). As it is a completely different approach to the SuperIndexes and most other recession forecasting methodologies, and is not dependant on levels or growth rates, it provides a good diversification for us from "model risk". The SuperIndexes only provide co-incident and short-leading (3-4mo) recession warning, but the HEADWINDS model forms the basis of our MEDIUM-TERM recession warning methodology.

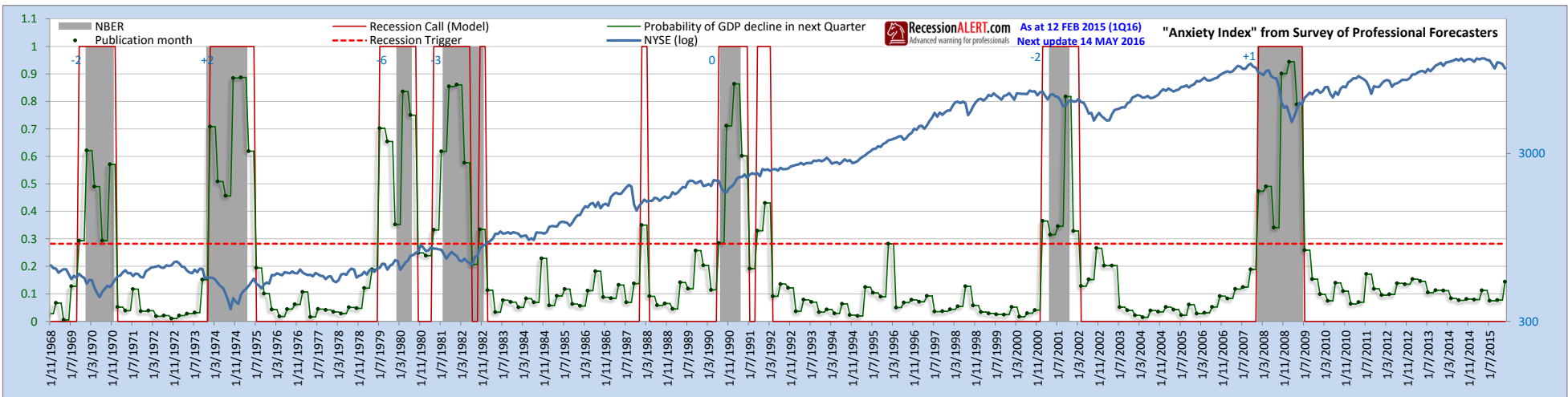
There is no leading index derived from the probability model. The model is focussed on the headwinds indicator, recession probability and making recession calls only. Between 5 and 8 the headwinds indicator in rising regimes provides average lead times to recession on of 6.9, 4.6, 3.3 and 1mo respectively as shown on the chart below in green text. A unique feature of the model is its ability to forecast the minimum time left in the current expansion or recession based on stylized facts of the behaviour of the headwinds indicator during these two regimes.

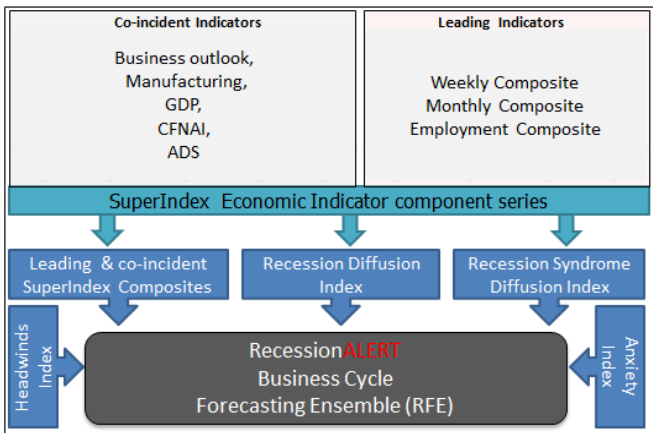
Due to the "step-laddered" shape of the recession probabilities (a by-product of the binary nature of the make-up of the Headwinds Index) the granularity of implied probabilities is not as fine as what you have become used to in the SuperIndexes, but it is no less effective. To this end the 3-month SuperIndex can report a probability of recession within 3 months of around 5.3% whilst the Headwinds index could report zero percent probability of recession in 6-10 months' time when Headwinds are at 2. However you can see from the chart below that economic headwinds in a rising trend and sitting at 2 has never before been witnessed in a NBER recession (hence the implied probability of zero) but it stands to reason that risk of recession when headwinds are 2 are more than when headwinds are at 1.



ANXIOUS INDEX : One of the best kept secrets in the recession forecasting business is taken from the *Survey of Professional Forecasters* that is managed by the Philadelphia Fed. A U.S recession forecasting model dubbed "The Anxious Index" has been created from this survey to be incorporated into our Recession Forecasting Ensemble (RFE). The Survey of Professional Forecasters is the oldest quarterly survey of macroeconomic forecasts in the United States. The survey began in 1968 and was conducted by the American Statistical Association and the National Bureau of Economic Research. The Federal Reserve Bank of Philadelphia took over the survey in 1990. The survey asks panellists to estimate the probability that real GDP will decline in the quarter in which the survey is taken and in each of the following four quarters.

To create it, a variety of forecasters are surveyed, including Wall Street economists, corporate economists, independent economists and academics. Yet, what makes this survey most beneficial is that the forecasts are anonymous. The anxious index is a more accurate and reliable warning for recessions than individual economists' forecasts. But what we really like about this index is that like surveys, the data is NEVER REVISED and thus we can build a true "real-time" prediction model based on real-time outside observations. The downside is that the survey is only conducted quarterly and data published the month following the start of the new quarter. It typically forecasts recession 1 quarter ahead, but given the time and publishing lags, the real-time expectation is of the order of 6-weeks warning.





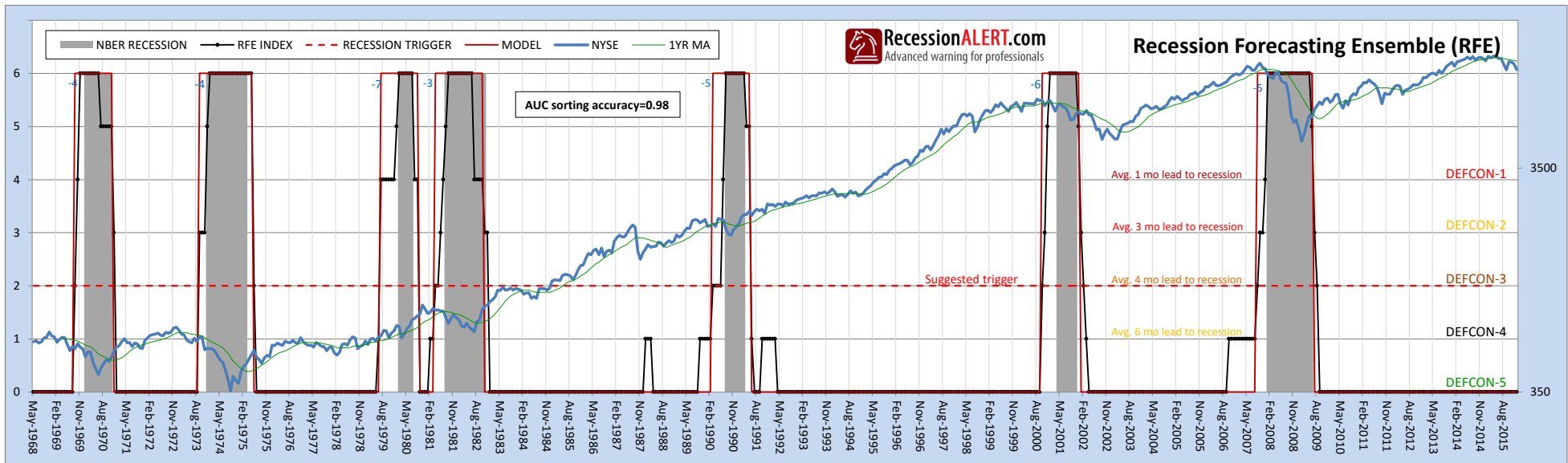
BUSINESS CYCLE FORECASTING ENSEMBLE: This is where it all comes together. The RFE shows how many of the diversified recession models we track are currently flagging recession. This weekly report you have been reading tracks six systems as shown on the schematic to the left. Clicking on the schematic takes you to a detailed description of the RFE mechanics and how it can be deployed for macro market timing for 3 times the performance of the SP-500 buy-and-hold strategy.

The RFE is a collection of diversified recession forecasting methodologies that differ in data, approach and theory to offer us an over-arching recession dating and forecasting approach that is resilient to "model risk". Recession forecasting is an art and not a science. There is no "one size fits all" model that performs well in the past and is guaranteed to perform well into the future. Every recession is different.

Since recession calls are "high stakes" events, with costly consequences for either calling a recession when there is none (as with the recent ECRI call that cost investors who heeded it 28% in stock market gains) or failing to call a recession and getting caught in the storm, we need to be very sure when we make a call. The only way to do that is by consulting multiple robust models that are not too correlated with each other in makeup or methodology.

The RFE Diffusion Index shown below charts the number of models (0 to 6) that are in recession territory. THE MORE SYSTEMS IN RECESSION TERRITORY AND HENCE THE HIGHER THE DIFFUSION INDEX, THE MORE CONFIDENCE YOU HAVE IN THE RECESSION CALL. The same applies to calling the end of recessions. The more the RFE falls (declines) the higher the probability that recession has ended.

The RFE allows you to manage a delicate balancing act between early warning and accuracy. It is an ideal mechanism to represent and manage recession risk. The optimal balance is to make a recession call when the RFE reaches 2 or more. One may then elect to steadily phase into cash with each rise of the RFE up until the point it is reading 5 or more, when you should be 100% hedged or in cash.



	STATUS	PROB.*
1.CO-INCIDENT SUPERINDEX	EXPANSION	1.18%
2.LEADING SUPERINDEX	EXPANSION	10.05%
3.NBER CO-INCIDENT MODEL	EXPANSION	6.70%

*PROB=Probability of recession within avg lead of respective model

	STATUS	READING
4.SUPERINDEX DIFFUSION	EXPANSION	1
5.SUPERINDEX RECESSION SYNDROME	EXPANSION	2
6.LONG-LEADING U.S INDEX PROB.*	EXPANSION	3.96%

*PROB=Probability of recession within avg lead of respective model

	STATUS	PROB.*
7.ECONOMIC HEADWINDS INDEX	EXPANSION	19.05%
8.ANXIETY INDEX	EXPANSION	14.38%
9.LEADING LABOUR-MARKET INDEX	EXPANSION	4.51%

*PROB=Probability of recession within avg lead of respective model