

Newsletter – 2012 Predictions (Results)

My name is Max Rudolph. I consult with companies on enterprise risk management and strategic planning topics. I live in Omaha, Nebraska, USA, am credentialed as an actuary and hold a CFA charter. I write a monthly newsletter, covering a variety of topics, and each January I post my predictions for the year. Check back late in the year when I analyze what actually happened. Coverage is mostly related to risk management and investments. Some are written at a high level, dealing with the general economy, and some cover very specific topics. Most cover issues that I am stewing over and need to do a brain dump. The newsletters are educational in nature and do not constitute investment advice. They are released publicly at www.rudolph-financial.com about 6 months after they are released to subscribers (predictions are released soon after they are written).

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Financial Predictions for 2012 (and results)

Please remember that these predictions are for fun. If I really knew what was going to happen, I would not share that information with you! You must make personal decisions regarding your unique financial circumstances and not hold others, especially me, responsible for your own financial planning. Enjoy!

General happenings.

Politics, regional conflicts and sovereign economic policies have a great impact on the worldwide economy, take years to play out and have unintended consequences.

Economic variables are mean reverting, cycling from low to high and back again. Bubbles and their opposite occur regularly, although they are often hard to identify until after the fact. Some of these can be recognized in advance, and the risk manager who considers two for each one that occurs has added value. Bubbles forming today are not as obvious to me as in some past years, so keep a look out. Interactions between risks and correlations should be considered in advance. How would these events impact you if they occurred in 2012? Consider higher order impact as well as unintended consequences.

- Cyber-terrorism causes ATMs to fail
- Space junk hits the space station
- An earthquake hits San Francisco or Mount Rainier becomes active
- Fracking is declared illegal due to environmental impact
- China erupts in civil war
- Greece leaves Eurozone
- Venezuela erupts in violence, shutting down their oil industry
- A disease (perhaps tuberculosis or influenza) develops drug resistance and becomes transmissible by air

Results: While none of these specific events happened in 2012, many were in the news. Cyber-terrorism continues to increase each year, with large financial corporations and government agencies targeted. A meteor was identified that will pass closer to the earth than the moon. Fracking made impressive gains this year in the US but remains illegal in Europe for safety reasons. Barack Obama, green President, could also be referred to as the fracking President. China withstood natural disasters and its leadership transition seemed more stressed than in the past, but their economy began to rebound. Greece continues in limbo with no real solution in sight. Venezuela, with Chavez dying from cancer and with unsustainable budgets, is entering a period of instability that could spill over to neighboring countries (Argentina is especially primed, with inflation underreported). Several novel viruses appeared this year but are contained so far.

These predictions were made in January 2012.

- Politics: Prediction – Romney/Gingrich (need someone from the south who isn't crazy) over Obama/Clinton (Hillary). The economy will improve in 2012 but continues to add jobs at a lackluster pace. Both parties will fight for independent moderate votes during the fall. Perry and Santorum will implode. Huntsman is running for 2016 and could be the next Romney type candidate. He would be an interesting VP nominee but does not balance the ticket with Romney. Health care reform can't be implemented at the same time as austerity programs, and Dodd-Frank is dead on arrival until the next recession. If we follow the 1930s pattern and it is severe then we would get far-reaching legislation and regulations. Watch for tensions to increase in Venezuela and Russia, with North Korea another obvious concern. Syria will fall to the Arab spring, Egypt will become pro-Iran and Iraq becomes influenced by China. I continue to worry about the mayhem unleashed when King Abdullah of Saudi Arabia dies. The Tea Party lost their chance at national prominence but remains strong in some far-right conservative areas. A third party candidacy (e.g., Ron Paul) would give the election to the Democrats. Europe is likely to finally make some decisions in 2012, and will kick out Greece but no one else. Over the next several years Greece will be at risk of colonialization-like efforts by China and others. The risk of unintended consequences in Greece is high. The risk of China experiencing an economic hard landing is increasing. This could have major consequences, everything from an

- internal revolt to a selloff in US Treasuries to an armed conflict. The next major wars will start in cyber-space, but the Middle East remains tense and any ground troops would likely be used there.
- **Results: More right than wrong.** Later in the year I predicted that Obama would win if the unemployment rate was below 8% (it was, mainly due to workers dropping out of the potential workforce, but nevertheless Obama was victorious), but in January my prediction did not anticipate all the stupid things Romney would do to lose momentum. Ryan was a logical VP choice but ignored the politics necessary to balance the ticket. He did not even carry Wisconsin. I was right about the Perry and Santorum implosions and Huntsman's focus on 2016, along with the Tea Party's reduced significance. The economy did improve, and the job market is more stable today. The uncertainty surrounding the fiscal cliff is discouraging businesses from hiring. From a political standpoint it seems to be posturing, but businesses will wait until there is a deal struck before expanding. Regional tensions increased in the regions suggested, but nothing has drawn in other countries yet. The growing risks are South America and Korea, while the Middle East remains at a high threshold. Greece continues to coast while other EU countries go downhill (e.g., Spain and France). Some think having Germany leave the Euro would be a better solution, leaving the rest of the union able to devalue the Euro. A strong German currency would also provide the US with currency flexibility. China remains at risk but enjoyed a relatively calm year as they transitioned to a new leadership team.
 - **Stocks:** Although the US will do better than other developed countries, stocks won't explode. We remain in a trader's market, with regularly surging volatility. Small caps will do as well as large caps in 2012. I would be surprised to see below -5% or above 15% for the S&P500 but my best guess would be toward the upper end of that range (this assumes that contagion from Europe is contained). Over the next 10 years stocks will outperform both cash and especially bonds. Bonds at low interest rates are hard to get excited about as we prepare to enter an era of higher inflation. There is a slight chance of hyperinflation in the United States. It will take a few years to develop before suddenly appearing. Why are utilities guaranteed 10% returns in today's low interest rate environment? Good companies to buy now are ones that can pass on their inflationary cost increases to their customers like those in the transportation (e.g., railroads) and energy sectors. Based on my filters here are a few companies that appear to be undervalued based on publicly available information (not recommendations, just ideas for further analysis) and year-end prices: Peabody Energy BTU 33.11, Xerox XRX 7.98, Walter Industries WLT 60.56, Tidewater TDW 49.3, HanesBrands HBI 21.86, Cummins CMI 88.02 and Johnson Controls JCI 31.26. The S&P500 closed 2011 at 1258. Full disclosure: my family owns shares in each of these 7 companies. None are controlling positions. ☺
 - **Results: Right.** Large cap stocks are set to return low double digit returns while small caps are up about 15% as Europe has deferred the endgame scenario for now. The "fiscal cliff" has not spurred major sell-offs in the markets, partly due to the low yields on alternatives like bonds. Specific company names performed

- inconsistently, with those specifically tied to energy doing poorly (BTU, WLT, TDW), XRX performing below expectations and HBI, CMI and JCI doing well.
- Unemployment: The world slows early in 2012 due to the end of the positive stimulus that followed the Japanese tsunami, then picks back up with slightly below normal growth (but still positive) in the US and lower elsewhere as the sovereign debt crisis keeps uncertainty high. Private employers are starting to hire in the US, but unemployment will remain sticky. If it gets below 8.0% this will help the incumbent democrats. Structural employment provides a floor of about 6% now, and public employers are not done with their staff reductions. Older workers will continue to struggle at the same time they know they have to work longer before retiring. The municipal market is still at risk of perceptions that drive spreads up, and some states and municipalities will default (I could be early on the states but it will happen eventually). This could have a positive impact on casualty insurers due to their concentrated exposure to these bonds. Certainly this is an unintended consequence of tax policy. I'd like to see the state run pension plans be consolidated either into Social Security (at least for new employees) or into a bigger pool that is more transparent. It also seems like companies have a lot of cash on their balance sheets right now. If they go on a buying spree for small and mid-sized corporations that would pay off the owners who could then go about creating new firms. These are the entrepreneurs that will eventually create jobs. The Washington uncertainty is keeping this natural process from occurring.
 - **Results: Right.** The unemployment rate fell to 7.7% during 2012. At the time of the November elections the rate was just below 8%, at 7.9%, driven by unemployed workers suspending their job search. Several municipalities defaulted and others remain on the brink. Others are bringing up the idea that frictional unemployment has risen. I'm no longer the only one with that on my radar.
 - Residential home market: we're not completely through the housing bust, and foreclosures will continue, but regional improvements will continue in 2012 for all but the highest end homes. Apartments and home rentals will continue to grow as economic reality takes hold. Not all markets will move together as regional diversification returns to the marketplace and it begins to loosen. Population will start to move to where the jobs are, for example away from Illinois and toward the Dakotas. Fannie and Freddie should enter the Presidential debates, but with no good ideas the candidates will try to avoid the subject. The trend of young and old moving in with empty nesters will continue, much to their dismay.
 - **Results: Right.** I pretty much nailed this one, although the candidates managed to completely avoid the Fannie/Freddie discussion. This remains an issue that needs to be solved.
 - Volatility has itself been volatile over the past couple of years. Too many investors are looking at VIX as a predictor of the future and there are too many big risks, both known and unknown, that should increase this statistic. Although I have not proven good at predicting VIX I think it should be in the 20-25 range but will continue to range from 15 to potentially as high as 40 or 50 if Europe blows up. At year-end 2011 it was 23.

- **Results: Right.** VIX expanded to over 20 late in 2012 as the fiscal cliff neared, but spent much of the year between 15 and 20. Its lowest close during 2012 was 13.45 on August 17, and its high was 26.66 on June 1.
- **Oil:** Oil is currently at \$99.75, toward the middle of my long-term mean reversion rate of \$80-120 range, but volatility continues to make short term predictions very risky. If oil prices fall below \$50, political instability in Russia and South America will quickly follow. As the world economy improves the price of oil should increase. Watch Venezuela for problems. As the technology to derive oil from shale increases supply, tensions in the Middle East, Russia and South America pull prices up. Shale results in a higher floor for the lowest prices but we could easily see a spike this year due to uncertainty and posturing as the US reduces its presence in the Middle East.
- **Results: Mostly right.** The US is suddenly well on its way to energy independence due to its sudden reliance on fracking, but this could quickly change if the perception of environmental risks increases. The current price at the end of 2012 is just over \$90. Tensions in Iran over nuclear ambitions caused brief spikes, but the price also fell below \$80 to \$75 for a few days in 2012.
- **Credit risk:** there is not enough transparency to know how close we are to yet another blow up, but signs are abundant that credit risk is growing again. Liberal covenants, personal loans, and insurance guarantees are increasing credit risk. Municipal bonds, Fannie and Freddie could all have strong impact in 2012. Valuation methods for defined benefit pension plans allow off balance sheet liabilities to grow without transparency.
- **Results: Early.** Default risk continues to grow but there were no major credit events in 2012. Pension plans continue to realize they have big problems and several sold their risk to insurers at what is likely to be considered in hindsight to be exactly the wrong time.
- **Financial Services Consolidation:** Bank consolidation will continue, with mid-sized and smaller banks merging to gain economies of scale and consumer trust. Bank of America will implode at some point in the next few years. Fire sale prices for their portfolio might add a lot of value for someone with cash available. Expenses at insurance companies are too high and industry overhead needs to be reduced. Insurance consolidation will accelerate, with household names and smaller firms being merged out of existence. In the long run I still expect to see a federal charter put in place, at least as an option, but a research project I recently completed showed the benefits of multiple regulators (regulatory concentration risk).
- **Results: Early.** Bank mortgage divisions continue to hold their parent hostage, but many large banks have started to build up their dividend payouts again. Insurers have not consolidated, but the opportunity remains.
- **Currency/Inflation:** Currency trends will be driven by supply and demand for oil over the next several years. The next great threat to dollar dominance is a resurgent German led Europe or China, and both are several years away. China could partner with Middle Eastern states and move toward a regional or broader

war, but that is not imminent. Resource shortages (food, water) will drive regional conflicts. At YE2011 the Eur/USD exchange rate was 1.28.

- **Results: Right.** The exchange rate in late December is 1.32, similar to a year ago. The dollar will not fall further until another currency shows itself strong enough to support it, which could be a while, and there are signs it could strengthen over the next several years.
- Fed policy: low rates will continue through the election, encouraging leverage. While consumers have trouble accessing it, private equity firms have no concerns about borrowing. The US continues to be very susceptible to a large catastrophe, financial disaster, or armed conflict.
- **Results: Right.** While there has been no specific event, it all remains true and the Fed anticipates low rates for several years.

Emerging Risks - Concerns

- Levees in California, earthquakes/volcanos, water poisoning of NYC, cyber hackers – all potential issues to develop contingent plans for. I am becoming more aware of the cyber security threat and worry that the “cloud” may not be as secure as users think. I am getting tired of receiving a new credit card every few months because the old numbers have potentially become public. Everyone should have a stash of cash they can easily gain access to in case the retail banking sector goes down for a week.
- **Results:** The “cloud” seems to become less secure every day.
- Infectious disease - increased resistance to antibiotics (e.g., tuberculosis, staff infections or pneumonia).
- **Results:** we continue to move closer to a “Spillover” event, and several novel viruses appeared this year. It appears that seasonal flu may be especially strong this year but not overwhelming.
- Global warming – unexpected side effects like new viral/bacterial attacks, along with coastal flooding, increased hurricane activity and shifting weather patterns that impact farming.
- **Results:** drought in the U.S. Midwest, regional wildfires, melting polar ice caps and Hurricanes Sandy and Irene all created havoc. A very mild winter in early 2012 led to early crops that stopped receiving moisture after May and shriveled on the stalk. Hurricane Sandy could have been worse, but citizens of New Jersey and NYC are glad it wasn't. A false alarm with Irene earlier in the year left many residents unprepared. If you live in the path of hurricanes you should always assume the worst because eventually a monster storm will appear. Recent evidence points to increasing outlier weather events in all geographic locations.
- Earthquakes and hurricanes – the US is overdue for a major quake on the west coast and other areas not normally thought of for seismic activity due to long dormant periods (e.g., Seattle, Yellowstone, St. Louis, New York City) are well into their cycle. The US is also due for a strong hurricane season.
- **Results:** we got the strong hurricanes but earthquakes were mild. Atmospheric rivers feeding into California (and the west coast of other continents) have now

been “discovered”. Apparently every couple of centuries it rains in San Francisco for a month or more. In 1861 it rained for 43 straight days as the pineapple express created an extreme outlier event.

- Malthus – too many people, not enough food – will good intentions of the rich to save lives in the 3rd world lead to increased systemic risk for society (mass starvation and unstable regions) in the longer term?
- **Results:** The Gates Foundation seems to ignore the systemic risk it creates by changing the historical way of life in a geographic region.
- Concentration risk – this will be a hot topic over the next few years much as emerging risks have become. Whether it is power at the top of an organization, short term liquidity, geographic focus or silo risk focus, too much concentration in too few entities or people is a great risk. Eventually it will take you down. This should be a focus during strategic planning efforts.
- **Results:** In late 2012 Nassim Taleb released *Anti-Fragile: Things That Gain from Disorder*, detailing the downside of concentration risk and the stability inherent in small random events.

Top Actuarial Issues

- Defined benefit plan valuation – needs to reflect marketplace economics, mean reversion and conservatism. Valuation methods have led defined benefit plans to be little more than an off balance sheet Ponzi scheme, relying on inflation to reduce the value to the retiree and the expense to the employer. The liabilities should balance every year economically. Actuaries and investment professionals from other disciplines should be welcomed, along with those from outside the profession. Focus should be on cash flows rather than regulatory requirements.
- **Results:** this all continues to be true. A defined benefit pension plan should be valued using conservative assumptions until the plan is closed or the parent firm is winding down. Perhaps a stochastic valuation with high CTE levels in the early years of a plan would make sense. The ESG (Economic Scenario Generator) recently approved by the NAIC (with the original Mean Reversion Parameter formula and updated historical equity results) should be used by pension actuaries to value these liabilities.
- Product design – designing products that are economically sound to both policy owner and company. Variable annuity writers seemed to have learned and adjusted with their new products, but have reverted back to features that make no sense to me. Why is it conservative to force asset allocations toward bonds in a low interest rate environment? Have insurers considered a hyperinflation scenario? They should.
- Obesity – how will the various drivers of mortality and morbidity interact (some good, some bad)?
- **Results:** some good news was reported in December 2012, as some urban areas said child obesity had been reduced.

Scenario Planning

What follows are a base set of scenarios that companies/individuals could use to plan for the next few years. Some analysis will reflect quantitative tools but all should look at the risks on a qualitative basis first. When models are used for extreme scenarios they do not perform very well.

- Higher interest rates and inflation: grade 3% per year until you get to 12%
- Qualitatively consider a 20% inflationary environment
- Flat equity markets combined with higher inflation
- Falling dollar – could combine with high interest rate scenario
- Global climate change – how will this impact your business
- New for 2012 Liquidity risk – consider your largest markets and what would happen if they dried up. Have you accepted risks that you thought were mitigated?
- New for 2012 - scenario where no diversification is allowed between risks

Results: I suggest including a combination of several deterministic scenarios to consider realistic exposure levels. Climate change scenarios should be considered by financial firms.

Predictions from 2007

Since I started posting my annual financial predictions in 2007, we now have 5 years of history to look at. In the results letter each year I will look back 5 years and share any interesting comments I made that seem accurate in hindsight.

- Credit risk will increase – note especially junk bond spread widening and ARM/junk home mortgages going into default
- Global warming – unexpected side effects like new viral/bacterial attacks, along with coastal flooding and increased hurricane activity
- Can an internal CRO be strong enough to stand up and be counted, or will fears for their job keep them “in line”

Hopefully these annual letters look at things from a slightly different perspective than you see from others and make you think. That is my goal.

Happy New Year!

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